Final Report on Focused Audit of NUI Corporation and its Affiliates Docket No. GA03030213

Presented to the:

Division of Audits
New Jersey Board of Public Utilities

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Chapter One: Introduction

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A. Audit Background

On March 20, 2003, the New Jersey Board of Public Utilities (BPU or NJ BPU) directed its Staff to initiate a Focused Audit of NUI Corporation (NUI or the Company) and its subsidiaries. NUI owns three natural gas utilities, including Elizabethtown Gas Company ("ETG" or "the Utility") in New Jersey, through its NUI Utilities, Inc. subsidiary. NUI sold its gas utility operations in New York, Pennsylvania, and North Carolina in 2002. NUI also owned a number of other, non-utility subsidiaries at the time of the direction to commence this audit. NUI has since sold some of them. Most of these non-utility businesses have operated under a first-tier NUI subsidiary known as NUI Capital, Corp. ("NUI Capital"). They conduct a variety of non-utility operations. A number of more recently acquired operations in Virginia (gas utility, storage and transportation businesses) operate as first-tier subsidiaries of NUI Corporation. NUI's non-utility operations at the time of the commencement of this audit included natural gas storage and pipelines, wholesale energy portfolio management, retail energy sales, telecommunications, and customer information and field operations for utility businesses.

The BPU asked for this audit after three downgrades of the senior unsecured debt of NUI and NUI Utilities, Inc., negative credit rating agency comments, and concerns raised by a competitive services audit of the Utility. As this report addresses, additional downgrades by Moody's Investor Services and Standard&Poors' occurred during the course of the audit. These factors created the need for an immediate and in-depth review of NUI's collective financial practices to ensure the integrity of the gas utility and its continuing ability to provide safe, adequate and proper service at reasonable rates to the utility's New Jersey customers. The Board issued an April 2003 Request for Proposals (RFP) to secure consulting services necessary for the conduct of this audit. The BPU selected The Liberty Consulting Group (Liberty) to perform this audit, as part of a competitive process. This report presents the results of Liberty's audit.

NOTE ABOUT FINANCIAL INFORMATION: The books of NUI and its subsidiaries have not been closed for fiscal 2003, which ended on September 30, 2003. All fiscal 2003 financial information included or forming the basis of conclusions in this report is unaudited. Fiscal 2003 financial information is subject to change for a number of factors, including but not limited to the completion of an investigation being conducted by Stier Anderson LLC for the NUI board of directors and any BPU actions taken in relation to issues addressed in this audit report.

B. Audit Objectives

Before this audit began, NUI and NUI Utilities suffered four separate rating-agency credit downgrades. Moody's issued downgrades of NUI and NUI Utilities on September 9, 2002. Moody's issued further downgrades on February 3, 2003. Approximately five weeks later, on March 10, 2003, Moody's lowered the debt ratings of NUI Utilities, Inc. senior unsecured debt to Baa3 and of NUI's parent company senior unsecured debt to Ba2, noting a continuing watch for further possible downgrades. Moody's cited:

- Weak NUI financial conditions caused by underperformance in its non-utility businesses, including substantial write-downs in prior financial quarters
- NUI's recent disclosure of defaults on a $60 million note purchase agreement.

These actions were accompanied by significant indicators of weaknesses in internal financial controls, which Moody's cited, and which came into question as part of the Board's recently completed Audit of Competitive Service Offerings of Elizabethtown Gas Company (NJBPU Docket No. GA02020099). Moody's further downgraded NUI and NUI Utilities on May 7 and October 6, 2003, to levels well below investment grade for both the parent company and the regulated utilities.

Recognizing these events, the BPU sought an audit that would assist it in answering the following specific questions:

- Whether the operation of NUI or any non-utility affiliate has adversely affected the financial integrity or financing capability or flexibility of ETG
- Whether the rates paid by ETG customers have been used to subsidize the operations of the non-utility businesses
- Whether transactions between NUI or affiliates and ETG have been at arms length
- Whether resources have been appropriately allocated to ensure that the mission of ETG will continue to be to provide safe, adequate and proper service at a reasonable cost
- Whether that mission is and will remain achievable.

C. Initial Audit Scope

The audit scope as initially proposed included the examination of:

- Issues affecting the quality of the companies' internal financial controls, financial integrity, and corporate accountability
- Concerns about the causes of poor performance of investments outside NUI's utility expertise and their possible effects upon the Utility
- The adequacy of separation between the Utility and the holding company for the purpose of ensuring that ETG is insulated, so that that its customers are not exposed to any consequences of NUI's non-utility holding company relationships and activities
- The existence of any inappropriate activities, such as commingling of funds, improper sharing of utility resources, or over-reliance on the utility to support the parent's condition
- Any compromise to Utility financial integrity due to NUI diversification efforts or other actions, and if so, what action the Board should take
- The potential for or existence of actual or potential negative financial impacts on utility financial integrity and capital costs due to failed holding company diversification efforts or due to a lack of financial controls to protect the utility.

The specific focus areas established for this audit included:

- Corporate Governance
- Strategic Planning
- Financial Structure and Interaction
- Affiliate Transactions
- Accounting and Property Records
- Executive Compensation.

D. Changes in Audit Scope and Work Requirements

Liberty's audit work began in June 2003. The audit has taken substantially longer than anticipated to complete. The primary factors have included:

- Early delays in securing requested information, which slowed early audit progress, but which were largely resolved by September 1, 2003. [1]
- The intercession of significant liquidity problems (becoming apparent at the beginning of September 2003), which created a need for the introduction of significant audit work associated with assuring that short-term cash flow requirements would not exhaust available company cash and credit lines.
- The abrupt resignation of the NUI and NUI Utilities CEO on September 25, 2003, and the significant changes in NUI board structure and NUI Utilities board of directors membership that occurred shortly thereafter, which, coming after substantial field work had been conducted, caused the need for significant additional work.
- The decision to sell NUI Corp., announced also on September 25, 2003, which created the need for assuring that utility operations and resources would remain stable and sufficient during the transition period pending sale.
- The introduction of outside resources, principally the firm of FTI Consulting, Inc., to help in preparing NUI for sale and in securing financing, forecasting liquidity, establishing budgets, establishing new inter-company charging and allocation structures, and reducing job positions and other expenditures. Each of these required additional audit work addressing potential impacts on utility financial health and operations continuity.
- Substantial and unforeseen efforts and difficulties in determining the timing and sources of inter-company balances involving large amounts payable from non-utility to utility entities, which required very significant audit efforts and the need for assessing the plans for and likelihood of their payment and the resulting impacts on utility financial structure and strength.
- The pendency of fundamental NUI cash-management systems changes intended to provide separation of utility and non-utility resources, which created the need to examine and test new systems, procedures, and controls as they were being developed.

The events that have expanded the work necessary to address the BPU's objectives and needs for this audit have also included:

- Discontinuation of the operations of TIC
- Discontinuation of the operations of NUI Environmental
- Discontinuation of the operations of NUI Ventures/International
- Announcement of the sale of NUI EB and NUI Telecom
- Company assertions and proposals that short-term liquidity needs would likely necessitate financing requiring pledge of utility assets/stock
- Completion of principal systems, procedures, controls changes regarding separation of utility cash management
- Commencement of contingency efforts to secure short-term liquidity financing of $50 million

[1] Delays or incompleteness remained problems in particular areas, for example, in examining the activities of NUI EB, detailed in Chapter 6 of this report.

- Establishment of a weekly BPU liquidity, collateral call, gas purchasing monitoring program
- Resignation of NUI CEO
- Announcement of NUI sale process commencement
- Completion of PricewaterhouseCoopers audit of NUI Utilities on a stand-alone basis for fiscal 2002
- Fortress Liquidity Financing
- Major ($405 million) refinancing in November 2003 of NUI and NUI Utilities debt, syndicated by Credit Suisse First Boston
- Retention of Credit Suisse First Boston and Berenson LLP to serve as financial advisors assisting in management of the bidding process for the sale of NUI
- The discovery of the potential for significant misconduct on the part of NUI EB and of the successive commissioning of NUI efforts, first PricewaterhouseCoopers and then the Stier Anderson law firm, to conduct internal investigations
- The sudden increase and continuation of collateral calls by gas and gas transportation suppliers to NUI Utilities and NUI EB
- The elimination of a significant number of NUI executive and other positions and the restructuring of NUI resources dedicated to providing corporate and administrative support to NUI Utilities/ETG
- The severe curtailment of NUI EB's trading business
- The sale of NUI Telecom and the pending sale of UBS
- The creation of an agreement by which NUI Utilities will continue to receive customer billing services after the sale of UBS to a third party
- The termination of NUI EB as the manager of certain of NUI Utilities' gas supply operations, and the solicitation of a third party to replace this affiliate.

E. Formation of the Holding Company

At the beginning of calendar year 2000, NUI filed with the New Jersey, Maryland, New York, North Carolina, Maryland, and Pennsylvania utility regulatory commissions a petition seeking authorization to establish a holding company. The BPU approved NUI Corporation's petition to form a holding company in an order dated February 20, 2001, ("the Holding-Company Order"). Before the holding company's formation, NUI Corporation was the corporate entity through which gas distribution utility operations were conducted in New Jersey, Florida, New York, Pennsylvania, North Carolina, and Maryland. NUI Corporation also owned NUI Capital Corporation ("NUI Capital"), through which it conducted a variety of non-utility businesses. NUI Capital conducted these businesses through a number of its own, first-tier subsidiaries, which included:

- NUI Energy, Inc.
- NUI Energy Brokers, Inc.
- Utility Business Services, Inc.
- NUI Environmental Group, Inc.
- NUI Energy Solutions, Inc.
- NUI Telecom (originally purchased as International Telephone Group and augmented through the purchase of additional businesses, such as Norcom, Inc. and Telcorp)
- NUI International, Inc.

- Sales Management, Inc. (holder of NUI's interest in TIC Enterprises, LLC; originally 49 percent and later increasing to 100 percent).

As a result of the formation of the holding company, the entity that was NUI Corporation became the entity providing utility services. This utility-services entity came to be called NUI Utilities, Inc. ("NUI Utilities"). It would operate as a first-tier subsidiary of the newly formed holding company. The new parent took the name of NUI. NUI Utilities now would contain the resources dedicated to utility operations. Both before and after the Holding Company Order, NUI Utilities business units, which have not been separate corporate entities, have conducted the NUI gas-distribution operations in New Jersey, Florida, New York, Pennsylvania, North Carolina, and Maryland.

A second first-tier subsidiary of the new parent, NUI Capital, included the entities listed above, that conducted non-utility activities. The holding company would consist of chief executive, financial, legal, and administrative support officers and other personnel who would serve in common the holding company, NUI Utilities, and NUI Capital. In general, these personnel served in roles similar to those performed prior to holding company formation.

Thus, the Holding Company Order led to two principal changes:

- To make the parent no longer the corporate entity from which NUI provided direct utility operations activities
- To remove non-utility operations from the direct ownership of the corporate entity that also conducted utility operations activities.

The Holding Company Order expresses what may be described as the two overriding objectives:

- Assuring that such formation would not "adversely affect the utility … or the provision of safe, adequate and proper utility service"
- Continuing maintenance of corporate books and records "in accordance with the appropriate Uniform System of Accounts as prescribed by the Board".

The Board imposed a number of specific conditions on its approval of the holding company. The following table summarizes them.

Table I.1. NUI Holding Company Order Conditions

Category	Condition
1. Notice	Provide date of holding company formation
2. Taxes	Provide tax returns of ETG and all affiliates with whom consolidated
3. Books/Records	Access to books/records of HC and all subsidiaries, including non-utilities
4. Books/Records	a. Continue ETG regulatory accounting unless change approved b. Maintain ETG books/records per BPU-approved USOA
5. Allocations	a. Allocate HC costs to and from utilities as authorized by the BPU b. Record allocated costs so as to permit BPU analysis and rate setting
6. HC Costs	a. Distinctly identify HC costs for "below-the-line" ratemaking treatment b. Specifically identify HC corporate expenses included in base rates
7. Transaction Costs	Preclude transaction costs from rate recovery
8. Separate Accounting	Maintain financial, statistical, accounting records to permit stand-alone evaluation of ETG

9. Management Attention	Devote "highest level of management oversight" to non-utility activities
10. Affiliate Transactions	a. Secure BPU prior to contracts for administrative support services to ETG b. Report utility/affiliate transactions/allocations exceeding $25,000 annually in aggregate
11. Financial Reports	a. File quarterly financial reports that allow review of consolidated/segment results b. Provide BPU same quarterly reports NUI directors get on NUI Capital investments
12. Utility Financial Health	a. Maintain investment policy and level ensuring safe, adequate, proper utility service b. Provide BPU prompt notice of significant events that could affect holding company health
13. "Non-New Jersey" Costs	a. Continue BPU authority to review utility capital structure and costs to insulate ETG from effects of "non-New Jersey operations and events" b. Prohibit recovery of costs related to utility operations in other states or to non-utilities
14. Advisory Board	Maintain an advisory board of directors for ETG
15. Non-Utility Books/Records	Produce books and records as provided for by New Jersey statute
16. Asset Pledges	Preclude pledging ETG assets to support financing of other divisions or NUI subsidiaries
17. Limits on BPU Approval	Disclaim BPU approval of any value or consideration related to holding company creation
18. Affiliate Standards	Require compliance with Affiliate Relations Standards
19. Employee Continuity	Maintain all ETG employees in current positions
20. Regulatory Compliance	Require that ETG remain subject to all BPU regulatory requirements
21. No Limits on BPU Action	Do not infer any limits on future BPU action involving ETG
22. Asset Transfer Approval	Require that ETG assets remain subject to statutory sale approval requirements
23. Cash/ Credit Commingling	a. Prohibit commingling of NUI Utilities and NUI Capital cash b. Require external NUI Capital funding to be non-recourse, exclude cross-default, and be free of credit support from NUI Utilities
24. Headquarters Move	Require ETG to seek approval to move headquarters from New Jersey

F. Overall Summary of NUI Businesses: 1998 - 2003

NUI Corporation, the parent company at the close of the company's 1998 fiscal year, was incorporated in 1969 in New Jersey. In fiscal 1998, NUI served approximately 366,000 natural gas distribution customers, approximately 67 percent of which were served by ETG. The following table lists NUI's utility operations.

Table I.2. History of NUI's Utility Operations.

Operation	State	Acquired	Sold
ETG	New Jersey	pre 1998	
City Gas of Florida	Florida	pre 1998	
North Carolina Gas	North Carolina	pre 1998	September 2002
Elkton Gas	Maryland	pre 1998	
Valley Cities Gas	Pennsylvania	pre 1998	November 2002
Waverly Gas	New York	pre 1998	November 2002
Virginia Gas*	Virginia	Mar 2001	

*Not operated under the direction of NUI Utilities

The following table briefly summarizes the chronology of NUI's non-utility operations.

Table 1.3. Summary of NUI Non-Utility Operations

Subsidiary	Nature Of Operations	Year Begun
NUI Energy, Inc. ("NUI Energy")	Retail gas sales and related	pre 1998
NUI Energy Brokers, Inc. ("NUI EB")	Wholesale energy brokerage and related services	pre 1998
NUI Energy Solutions, Inc. ("NUI ES")	Energy project development and consulting	pre 1998
NUI Environmental Group, Inc. ("Environmental")	Environmental Project Development	pre 1998
Utility Business Services, Inc. ("UBS")	Customer account management; field operations systems	pre 1998
TIC Enterprises, LLC ("TIC")	Sales and marketing outsourcing	pre 1998
NUI Telecom, Inc. ("Telecom")	Full-service telecommunications company	Nov 1999
Virginia Gas Storage Company and Virginia Gas Distribution Company ("Virginia Gas")	Natural gas pipeline and storage operations	Mar 2001

ETG represents approximately two-thirds of NUI's gas distribution business by customer numbers, and about three-quarters by volumes of gas sold or transported. It has represented these proportions of the business for some time. The following table summarizes the customer numbers and volumes of NUI's utility operations. Volumes are in Mcf, and include firm sales, interruptible sales, unregulated sales, and transportation.

Table 1.4. Operating Statistics for NUI LDC Operations

Operation	1998	1999	2000	2001	2002	1998 Share	2002 Share
ETG							
Customers	243,814	247,651	251,197	254,911	257,881	66.7%	67.4%
Volumes	82,207	66,415	68,824	69,472	64,232	77.2%	75.5%
City Gas							
Customers	98,110	99,802	100,601	101,273	101,881	26.8%	26.6%
Volumes	15,257	9,376	9,861	9,475	9,702	14.3%	11.4%
No. Car. Gas							
Customers	13,800	13,800	13,700	14,200	14,200	3.8%	3.7%
Volumes	4,400	3,800	3,600	3,700	3,600	4.1%	4.2%
Elkton							
Customers	3,800	4,000	4,300	4,600	5,000	1.0%	1.3%
Volumes	761	849	895	935	830	0.7%	1.0%
Valley/Waverly							
Customers	6,200	6,300	6,400	3,200	3,200	1.7%	0.8%
Volumes	3,900	3,300	3,400	6,500	6,500	3.7%	7.6%
VirginiaGas							
Customers					300		0.1%
Volumes					239		0.3%
TOTALS							
Customers	365,724	371,553	376,198	378,184	382,462		
Volumes	106,525	83,740	86,580	90,082	85,103		

The following table shows consolidated financial information for NUI Corporation from 1996 through 2002. Under ordinary circumstances, NUI's 2003 10-K financial and operations information would already be available. However, the filing of that form has been delayed pending the completion of an internal investigation by the Company of the potential financial statement impacts of issues involving the performance of affiliate NUI EB for NUI Utilities in managing ETG's gas supply portfolio. NUI has not provided a projected date for a filing of its Form 10-K for fiscal 2003.

Table I.5. NUI Consolidated Financial Information

ITEM	2002	2001	2000	1999	1998	1997	1996	1995
Operating Revenues (1)	$556,468	$659,866	$498,744	$435,333	$441,759	$469,499	$376,884	$405,240
Cont. Ops Income (1)	$16,159	$27,356	$20,643	$23,322	$12,244	(2)	(2)	(2)
Net Income (Loss) (1)	($15,888)	$16,313	$25,558	$24,560	$12,314	$19,649	$14,896	$5,517
Cont. Ops Income/Share	1.08	2.05	1.60	1.83	0.98	(2)	(2)	(2)
Net Income (Loss)/Share	(1.06)	1.22	1.59	1.93	0.98	1.75	1.52	0.60
Dividends per Share	0.98	0.98	0.98	0.98	0.98	0.94	0.90	0.90
Total Assets (1)	$1,041,292	$1,146,391	$911,268	$844,226	$776,847	$803,665	$677,662	$610,165
Cap Lease Obligations (1)	$10,743	$3,188	$4,191	$2,599	$8,566	$9,679	$10,503	$11,114
Long-Term Debt (1)	$309,017	$308,989	$268,947	$268,911	$229,098	$229,069	$230,100	$222,060
Common Equity (1)	$288,252	$274,727	$250,896	$237,318	$222,992	$218,291	$179,107	$140,912
Shares Outstanding	15,990	14,938	12,929	12,750	12,680	12,429	11,086	9,201

(1) Thousands (2) Not Reported

G. Overall Summary of Operations through 1998

NUI's Form 10-K publicly reported only NUI-consolidated balance sheets, income statements, and statements of cash flows for fiscal 1998. These forms, however, do contain some information bearing on the individual financial performance of its subsidiaries. NUI Energy produced net losses in the 1996, 1997, and 1998 fiscal years, according to NUI's 1998 Form 10-K. This report did not report revenues or expenses. In order to curb these losses, this affiliate sold a number of "non-strategic" accounts involving customers outside the areas where NUI provided gas utility distribution services. The Company formed NUI EB in 1996 to conduct wholesale energy trading, brokering, and risk management activities. NUI's Form 10-K reported positive NUI EB margins from $1.6 to $3.6 million in the 1996, 1997, and 1998 fiscal years, again with no separate reporting of this affiliate's revenues or expenses.

UBS was at this time providing customer information systems and geographic information systems to utilities and third-party suppliers of gas, water, and wastewater services. Form 10-K did not separately report UBS revenues, expenses, or margins. The primary services of UBS relied on its system, called WINS, which UBS used to provide water and wastewater entities with customer information, billing, and payment processing services.

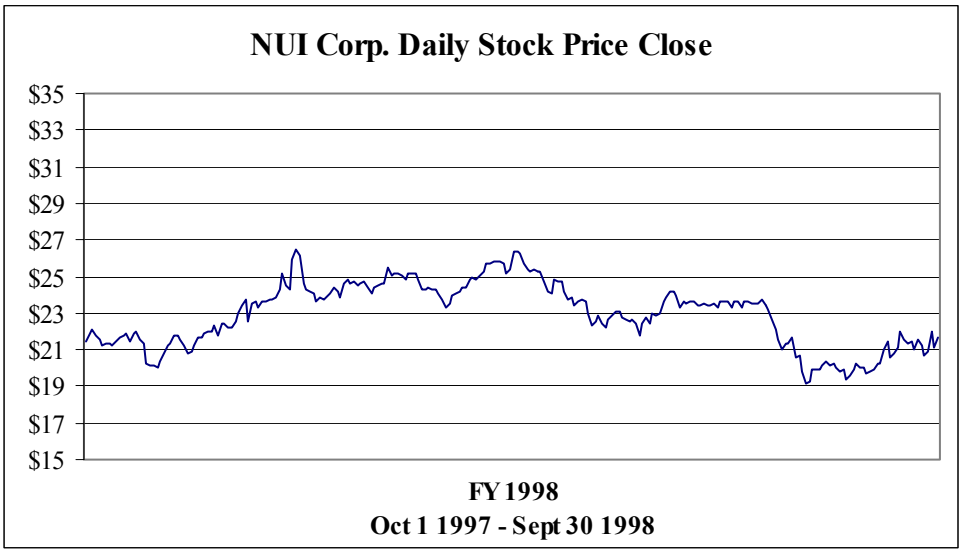
NUI formed NUI Environmental in 1996 for the specific purpose of developing a solution to silting problems in the New York/New Jersey harbor. In December of 1998, the State of New Jersey selected NUI Environmental to perform a "Sediment Decontamination Demonstration Project" that would identify new technologies for harbor dredging. The 1998 Form 10-K reported no separate revenues, expenses, or margins for Environmental.

NUI took a 49 percent ownership in TIC in May of 1997. The purchase agreement provided an option for NUI to purchase the remaining 51 percent interest in TIC; NUI exercised that option, and acquired the remaining 51 percent on May 8, 2001. It paid $22.0 million for that interest. This amount reflected an excess of $20.6 million over NUI's share of the net assets of TIC. TIC's business was to provide a sales and marketing force for other businesses. NUI reported that it expected TIC to provide benefit in selling and marketing telecommunications services, office equipment, and energy. The 1998 Form 10-K reported no separate revenues, expenses, or margins for TIC.

NUI formed NUI ES in fiscal 1998 to provide customers with energy management and consulting services. NUI reported that NUI ES suffered a loss in 1998. Its Form 10-K reported no revenues, expenses, or margins for this subsidiary.

NUI's stock price showed little net movement during the 1998 fiscal year, after experiencing a significant gain during the first half of the year.

Table I.6. NUI Stock Prices for Fiscal 1998



H. Major Structure and Operations Changes in Fiscal 1999 and 2000

The 1999 Form 10-K described NUI's operations as falling under three business segments:

- Distribution Services
- Energy Sales and Services
- Customer Services.

Form 10-K information for fiscal 1999 and 2000 generally did not report detailed financial information at the subsidiary or business segment level.

NUI defined its Distribution Services segment as regulated natural gas distribution in all six states. NUI agreed on October 5, 2000 to sell the assets and customer accounts of Valley Cities Gas and Waverly Gas. NUI expected sale closing late in fiscal 2001. Actual closure came in

November 2002. NUI excluded from this segment off-system sales by utilities. In New Jersey, such sales continued to be treated largely as an above-the-line activity for ratemaking purposes.

The Energy Sales and Services segment consisted of NUI Energy, NUI EB, and NUI ES. This segment also included, starting in fiscal 1999, utility off-system sales made by NUI EB on behalf of NUI's LDC operations. When NUI made this change for public reporting purposes, it restated prior year utility sales. This restatement had the effect of showing lower utility (*i.e.*, Distribution Segment) sales for prior years. For future years, the assignment of these utility revenues to this non-utility business segment also had the effect of reducing reported utility sales (for Form 10-K purposes). It also caused the sales of this non-utility segment to appear correspondingly higher. NUI EB was a cornerstone portion of the NUI Energy Sales and Services segment. It produced a reported, positive margin of $8.3 million in fiscal 1999 and of $12.8 million in 2000.

The $8.3 million margin reported for fiscal 1999 was more than three times higher than the average reported for the prior three fiscal years, according to the NUI Form 10-K. NUI also reported a 1999 margin of $4.1 million and a 2000 margin of $2.4 million for NUI Energy. NUI reported a fiscal 1999 loss for NUI Energy Solutions and a positive 2000 operating margin of $1 million.

The third business segment, Customer Services, consisted of UBS and the appliance business. NUI reported in the fiscal 1999 year that UBS had introduced a gas version of its WINS customer information system. UBS had previously used WINS to serve water and waste water service providers. NUI reported that three of its utility divisions began to use the new system. The remaining utility divisions, including ETG, expected to convert to the new system during fiscal 2001. NUI reported UBS margins of $3.7 million for 1999 and $3.9 million for 2000.

NUI reported that TIC contributed $1.2 million in equity earnings in fiscal 1999 and $1.3 million in 2000. NUI reported TIC to be serving as sales and marketing representatives for Nortel Networks, Nextel Communications, Qwest Communications, AT&T, and the United States Postal Service by fiscal 2000. TIC services for the Postal Service included marketing expedited delivery services. TIC became the exclusive United States distributor for certain Nortel business products and services, at which time it terminated an agreement to serve as the exclusive supplier for a competitor's equipment. NUI observed that this change gave TIC access to a small- and medium-size business market more than 12 times the size of its previous market. NUI reported that this increase could create an expansion (in the first full year of operation under the new arrangement) of $60 to $200 million in revenue.

NUI made another acquisition in November 1999. It purchased for $3.8 million International Telephone Group, Inc. ("ITG"). This business provided local, long-distance, cellular, internet, and data communications services. The purchase price was significantly above ITG's approximately $0.3 million in net assets. Moreover, NUI was obliged to pay an additional $1 million, provided that ITG achieved specified earnings targets by the end of calendar 2003. NUI changed the name of ITG to NUI Telecom, Inc. The fiscal 2000 Form 10-K included the operations of NUI Telecom, Inc. in the Customer Services segment. NUI reported fiscal 2000 revenues of $5.2 million, but reported no expense or margin information.

NUI reported appliance business revenues of $11.7 million for fiscal 1998, $12.3 million for 1999, and $14.6 million for 2000.

NUI reported NUI Environmental and TIC Enterprises as "Other Operations" in fiscal 2000. NUI reported no revenue, expense, or margin information for NUI Environmental for fiscal 1999 and 2000.

The 2000 Form 10-K also reported NUI's entry into a merger agreement with Virginia Gas Company, noting an expected closing date in early 2001.

The following tables show NUI stock prices across the 1999 and 2000 fiscal years.

Table I.7. NUI Stock Prices for Fiscal 1999

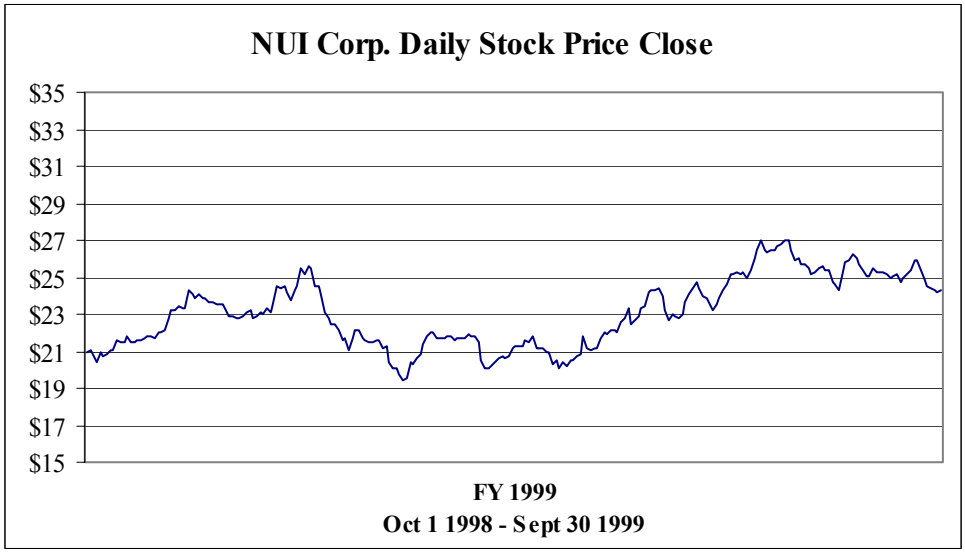


Table I.8. NUI Stock Prices for Fiscal 2000

I. Major Structure and Operations Changes in Fiscal 2001

NUI's 2001 Form 10-K again noted the anticipated sale of Valley Cities and Waverly Gas. NUI reported a sale price of $15 million, with an additional $3 million to come due in the event of the achievement of specific revenue targets. NUI noted an expected closing early in calendar 2002.

Unrecovered purchased gas costs increased dramatically in fiscal 2001, reaching $55 million, after averaging $4.4 million for the preceding four years. NUI noted that the deferral of the collection of these costs, which came about due to unprecedented increases in gas supply costs, resulted in the need for increased short-term borrowing.

NUI renamed its Energy Sales and Services segment, calling it Wholesale Energy Marketing and Trading in its fiscal 2001 10-K. This non-utility energy segment included NUI EB and Virginia Gas, and it continued to include off-system utility sales. The Form 10-K reported a movement of NUI Energy and NUI ES to another segment, which this report discusses immediately below. As it had in the prior fiscal year, NUI again reported a large increase in the margins generated by NUI EB, stating that they rose from $12.8 million in 2000 to $19.8 million in 2001.

NUI described Virginia Gas, which it acquired for approximately $29 million on March 28, 2001, as a natural gas storage, pipeline, and propane and natural gas distribution company. NUI sold the propane and marketing assets of Virginia Gas for $3.8 million. NUI reported that sale of the propane and marketing and the distribution portions of Virginia Gas would allow for a focus on the remaining portions' fit with existing NUI businesses. The Company also announced an intention to sell Virginia Gas Distribution Company. NUI has never followed through on that announced intention. NUI purchased on October 4, 2001 the remaining 50 percent interest in the Virginia Gas storage and distribution companies for $1.5 million and 72,324 shares of NUI stock. NUI reported in its 2001 Form 10-K that Virginia Gas contributed margins of $2.3 million since its acquisition.

NUI also announced a joint venture with Duke Energy Gas Transmission (DEGT) to develop a natural gas storage facility at Saltville, Virginia. NUI intended to hold its interest under Virginia Gas. Initial development called for Virginia Gas to contribute storage assets valued at $16 million. DEGT's obligation was to fund the first $16 million needed to expand the facility for storage purposes. The expansion would bring storage capacity from 1.1 to 12 billion cubic feet, which would be connected to DEGT's East Tennessee Natural Gas pipeline system. NUI's operations objective was to provide an energy-trading hub for NUI EB, on which to capitalize in serving Gas LDCs and expected new electricity generating stations in the region.

NIU also renamed its Customer Services segment. It began to be called Retail and Business Services in the fiscal 2001 10-K. NUI Energy and NUI ES, formerly in the business segment that included NUI EB, moved to this segment during fiscal 2001. This segment continued to include UBS, NUI Telecom, TIC, and the appliance business. NUI reported a margin of $5.6 million for NUI Energy and a loss of $0.1 million for NUI ES for fiscal 2001. NUI reported a margin of $3.3 million for UBS for fiscal 2001. The Form 10-K no longer reported a plan to convert ETG to a UBS customer-information system. NUI reported NUI Telecom revenues of $15.9 million for 2001, as compared with $5.2 million for fiscal 2000, but no margin information. NUI provided in 2001 a different acquisition price for ITG, as compared with what

it reported in the fiscal 1999 Form 10-K. The fiscal 2001 10-K reported a purchase price, not of $3.8 million, but of $5.8 million. This form also reported that the additional payment of $1 million to the former shareholders (in the form of NUI stock) had also become due, because earnings targets were reached. NUI reported the excess of the purchase price over fair value of net assets to be $5.5 million.

NUI reported acquisition of the remaining 51 percent interest in TIC on May 15, 2001. NUI paid about $16 million. The 2001 Form 10-K reported $12.5 million in TIC revenues since that acquisition. NUI reported TIC's equity income for prior years, when NUI had held a minority interest. The following table summarizes that report. The figures are net of the amortization of good will, which comprised the vast majority of NUI's purchase price. NUI's purchase price for all of TIC exceeded the fair value of its net assets by approximately $39 million.

Table I.9. TIC Income Summary 1997-2000

Year	Income	Loss
1997	$1.3 million	
1998		$0.1 million
1999	$1.2 million	
2000	$1.3 million	

NUI reported that TIC began to experience losses of $2 million per month in November 2000; *i.e.*, early in fiscal 2001. NUI reported that the losses arose from an economic downturn and a poor market for telecommunications equipment. Increased operating expenses also caused two difficulties. First, TIC's change in equipment brands sold, from Lucent to Nortel, required it to retrain and increase personnel simultaneously. Second, TIC found itself in the midst of a ramp-up to sell US Postal Service services. Losses in the range of $2 million per month continued until the May 2001 acquisition of the remainder of TIC. By September of 2001, TIC was still losing money each month, but, according to NUI's Form 10-K, was near a break-even position.

NUI also reported appliance business revenues of $15.6 million, but did not report any margin information. The fiscal 2001 10-K did not report any revenue or expense information about the individual businesses that comprised its Retail and Business Service Segment. NUI again reported NUI Environmental under other operations; it provided no revenue, expense, or margin information. NUI Environmental completed its work on the harbor pilot study.

The following table shows NUI stock prices across the 2001 fiscal year. The Company experienced a significant decline across the year, with early September prices approaching those of the end of fiscal 1998. Consequently, on the eve of September 11, 2001, NUI stock had essentially lost the sizeable value gain that it has experienced through fiscal 1999 and 2000.

Table I.10. NUI Stock Prices for Fiscal 2001

The following table shows NUI stock prices across the 2002 fiscal year. The stock regained lost value on a fairly steady pace until late in the fiscal year, when it experienced a precipitous drop in the wake of emerging public knowledge of its financial problems. By the end of the fiscal year, the price did climb back to about the level it reached at the start of the fiscal year.

Table I.11. NUI Stock Prices for Fiscal 2002

J. Major Structure and Operations Changes in Fiscal 2002

The Wholesale Energy Marketing and Trading segment continued to include the same operations. Operating revenues fell to $107.1 million, from $132.1 million in fiscal 2001. Fiscal 2002 operating revenues comprised 19 percent of NUI's total operating revenues. The following table shows reported margins for each of the segment's business areas for fiscal 2002.

Table I.12. Wholesale Energy Fiscal 2002 Margins

Business Area	2002	2001	2000
Energy Brokers	$19.5 million	$19.3 million	$12.8 million
Virginia Gas	8.3 million	2.6 million	Not owned
Off-System Sales[1]	1.6 million	0.9 million	1.5 million
Segment Total	*29.4 million*	*22.8 million*	*14.3 million*

[1]Sales of utility gas portfolio assets conducted by Energy Brokers

The components of the Retail and Business Services segment remained largely the same. NUI did, however, cease operations of the two major business lines of TIC; *i.e.*, telecommunications equipment and US Postal Service express delivery services. Two remaining lines of TIC business, network services and wireless, moved to NUI Telecom. NUI did not report the results of TIC operations separately, but combined them with those of Telecom. Segment operating revenues for fiscal 2002 represented 11 percent of total NUI operating revenues. NUI's Form 10-K reported that the Retail and Business Services segment businesses produced operating margins shown in the following table.

Table I.13. Retail and Business Services Margins

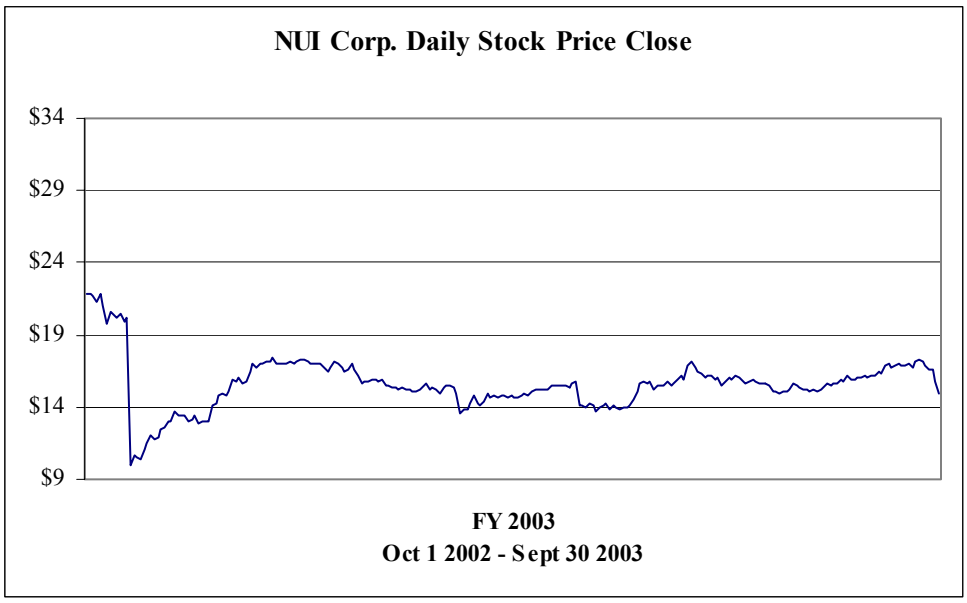
	2002	2001	2000
Segment Total Operating Revenues	$58.1	38.2	24.1
NUI Energy			
Operating Revenues			
Margins	2.5	5.8	2.8
NUI Telecom			
Operating Revenues	36.9	14.6	5.2
Margins	12.2	5.1	0.8
UBS			
Operating Revenues	4.5	4.6	3.9
Margins	2.9	3.3	2.5
Appliance Service Business			
Operating Revenues	14.4	13.3	12.3
Margins	5.2	4.0	3.6

Millions of dollars

NUI used an additional segment classification this year; *i.e.*, "Other." It classified only NUI Environmental to this segment. NUI reported no revenues, expenses, or margins, but observed that it was awaiting completion of the State of New Jersey's review of a $2 million contract for the phase following the pilot study; *i.e.*, the demonstration phase. NUI also reported that it had put Environmental up for sale in September 2002, preferring not to commit the capital resources necessary to deploy its technology in building a decontamination facility. NUI began at this time to list Environmental under discontinued operations.

The following table shows NUI stock prices across the 2003 fiscal year. The stock lost significant value, although it did show some recovery from a precipitous drop early in the period.

Table I.14. NUI Stock Prices for Fiscal 2003



K. Appliance Business Operations

NUI reported appliance business service and leases under different segments recently. It removed them from its utility segment in 1999. The following table shows revenues since fiscal 1997 and margins for fiscal 2002, the first year that NUI reported them.

Table I.15. Appliance Business Revenue and Margin Summary

Year	Revenues	Margins	Year	Revenues	Margins
1997	$12.8 million	Not Reported	2000	$12.3 million	$3.6 million
1998	11.7 million	Not Reported	2001	13.3 million	4.0 million
1999	12.3 million	Not Reported	2002	14.4 million	5.2 million

L. Employment Summary

The following table shows overall changes in NUI employment at the business segment level.

Table I.16. NUI Employment Summary

Year	Distribution	Energy Sales & Service	Customer Service	NUI Corp	Total
1998	Not Reported	Not Reported	Not Reported	Not Reported	1,081
1999	Not Reported	Not Reported	Not Reported	Not Reported	1,049
2000	684	42	197	155	1,078
2001	722	96	604	177	1,599
2002	660	78	250	156	1,144

NUI Corporate resources have existed primarily to provide shared services for other business segments. Energy Sales and Services and Customer Services were restructured and renamed, respectively, Wholesale Energy Marketing and Trading and Retail and Business Services in fiscal 2001. Their numbers, therefore, are not directly comparable to those of the prior year.

M. Recent BPU Orders Affecting NUI

1. October 30, 2003 Order

As Liberty's audit progressed, the BPU made several orders to address issues brought to its attention by Liberty or by the Company. Liberty made an oral report to the BPU in late October 2003. Liberty issued a public, written interim report some six weeks later. Liberty's oral report noted a number of issues facing NUI in the fall of 2003. They included:

- Severance agreements for executives already departed or expected to depart
- Consideration of significant job reductions
- Securing a refinancing of debt agreements scheduled to expire in early 2004
- Transfer of key NUI executive functions to an outside consultant
- Plans for the sale of NUI
- A pending outside-auditor examination of possible irregularities in ETG gas purchase and sale activities by NUI EB for ETG
- Continuing difficulties in development of a cash flow model
- Determination of intercompany balances and development of a firm plan for repaying them

The BPU decided to seek information about a number of these issues. On October 30, 2003, the BPU ordered NUI to:

1. Provide information about deferred compensation, change in control agreements, retention bonuses, and any impact of them on its pension program or funding
2. Provide notice of any job-position eliminations and a detailed plan identifying and justifying all planned eliminations at ETG or any affiliate serving ETG
3. Provide assurances that NUI would promptly finalize plans to assure fulfillment of ETG's short-term liquidity needs
   a. Complete the successful development of an effective and accurate cash-flow forecast immediately
   b. Provide BPU Staff immediate and continuing access to the results of that model in order to verify the adequacy of utility resources
   c. Provide advance notice to BPU Staff of any financing agreements directly or indirectly involving ETG, in order to assure:
      i. No inappropriate constraints on utility financing
      ii. That the proceeds of any further financing appropriately considered utility needs, including the repayment of intercompany balances.
4. Provide access to employees and contractors necessary to assure the sufficiency of post-retirement benefits plan funding before and after consideration of the effects of recent and future executive and management severance agreements
5. Provide continuing and immediate reports of progress and results of the outside auditor's procedures employed in examining issues regarding NUI EB's services for ETG
6. With respect to NUI's agreement with the outside consultant providing financial services:
   a. Structure the agreement to make clear that the consultant's role excluded responsibility for restructuring, down-sizing, or operating ETG
   b. Limit the agreement to:
      i. Addressing liquidity concerns
      ii. Developing an effective cash flow model

iii. Supporting efforts to secure a refinancing
c. Requiring the filing with the BPU of a copy of the agreement and any amendments
7. Provide for the selling of NUI:
a. A transparent, independent, and timely process
b. A description for the BPU of the selection criteria and justification for the selection of an investment-banking firm to act as lead financial advisor on the sale
8. Advise the selected investment-banking firm of:
a. The BPU's determination that the public interest calls for a utility corporate structure that provides maximum financial and credit insulation for ETG
b. The need for reflecting this BPU preference in examining all proposals to purchase NUI
9. Present to the BPU within 10 days a detailed plan and schedule for:
a. Preparing NUI for sale
b. Operating it pending sale
c. Conducting sale activities
d. Working with BPU Staff to:
i. Identify sale process activities that require monitoring
ii. Commit to cooperating with Staff to provide for timely and effective monitoring
10. Perform financial reporting and cash flow management by:
a. Complying with all industry, regulatory, and professional standards
b. Continuing to implement cash segregation procedures
c. Remaining subject to and comply with the BPU's Holding-Company Order
11. Refrain from adopting the recommendations or advice of any consultants or advisors proposing any action affecting ETG without prior BPU Staff review
12. Provide timely sharing of information with the BPU and Staff on all corporate actions taken until completion of the NUI sale
13. Provide the BPU, with respect to the intercompany balances:
a. Full disclosure the circumstances leading to their amount
b. A plan for full reimbursement of ETG's share of those balances:
i. In the event of a sale of NUI as currently planned
ii. In the event of a material delay in such a sale.

2. December 11, 2003 Order

Concerns about NUI EB performance for ETG grew in the following weeks. The PBU decided that it had become appropriate for ETG to cease its arrangement with NUI EB. The BPU also remained concerned about dilution of ETG's cash resources during the coming winter season, as NUI corporate outflows continued. The BPU issued a December 11, 2003 order requiring NUI to:

1. Cease NUI EB purchasing of NUI Utilities and ETG gas and submit an alternate plan for such purchases by January 2, 2004, for BPU review and approval by January 8, 2004
2. Submit for BPU approval all executive compensation and severance agreements the costs of which were or were to be paid for in whole or part by ETG
3. Preclude payment by ETG of any allocated costs for any agreements for consultants and other professionals retained in connection with Liberty's focused audit of the financial difficulties of NUI without BPU approval

4. Refrain from issuing any special dividends or increasing regular dividends without BPU approval.

3. December 18, 2003 Order

NUI raised objections to providing for BPU review certain information about bids to be received in connection with the sale of NUI. There were also continuing concerns about utility liquidity and the quality of NUI information addressing it. The BPU ordered NUI on December 18, 2003 to:

1. Provide the BPU Staff with a copy of all indicative bids received for the sale of NU, in order to assure an adequate opportunity for Staff review and analysis
2. Provide BPU Staff with real-time access to the analyses performed by the financial advisor who assisted NUI in the evaluation of those indicative bids
3. Provide BPU Staff with real-time access to the analysts who prepared those analyses
4. Refrain from proceeding to the next round of bidding for NUI until after BPU approval
5. Provide a current update of NUI's 13-month cash-flow forecast and an analysis of the effects of higher-than-forecasted natural-gas prices on that forecast.

4. January 14, 2004 Order

NUI submitted its plan for moving gas-portfolio services from NUI EB to a third party, New Jersey Resources. After review of that plan, the BPU Ordered NUI on January 14, 2004 to:

1. Not transfer to NUI Utilities any NUI EB person without BPU Staff approval
2. Preclude with respect to any person engaged in NUI Utilities gas supply:
   a. Any direct or indirect reporting to NUI EB
   b. Any NUI EB involvement in compensation determination
   c. Any common office locations with NUI EB
3. Provide for NUI EB cooperation with New Jersey Resources to ensure a smooth transition of gas supply responsibilities
4. Provide monthly reports of various gas supply, storage, and transmission actual and forecasted information
5. Provide immediate access to information necessary to assure arm's-length dealing and market competitiveness of transactions affecting ETG.
6. Allow the return to ETG of the Transco WSS storage contract for utility use
7. Provide the information needed for New Jersey Resources to provide services to ETG
8. Maintain sufficient controls to limit New Jersey Resources communications and information to items necessary for the provision of gas-portfolio services.

Chapter Two: Planning and Resource Allocation

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A. Background

This chapter addresses how NUI has conducted strategic planning and aligned its resources to assure that it has continued to meet the public services needs and responsibilities of ETG, principally through the development and use of budgets. Liberty's examination focused on the processes that the Company has used, and it addressed some of the key decisions that the Company has made and the results of the actions it has taken.

B. Early Growth Strategy: Pursuing LDCs

In 1988, NUI made its first successful acquisition of a utility - City Gas of Florida (CGF) - as part of a gas-utility-centered growth strategy. NUI continued to seek acquisitions of additional utilities. NUI pursued the strategy of buying more utilities in multiple states, in order to establish a foothold for growth. By the end of 1994, NUI's utility businesses included the following:

- ETG
- City Gas of Florida
- Elkton Gas Service (in Maryland)
- North Carolina Gas Service
- Valley Cities Gas Service (in Pennsylvania)
- Waverly Gas Service (in New York).

ETG was significantly larger than the other NUI gas distribution operations. NUI also owned UBS, which provided ETG and other utilities with a variety of billing and payment services. Chapter Three of this report addresses the operations of UBS in detail. NUI also had an emerging business called Natural Gas Services, Inc., which provided gas-supply services in Florida.

NUI did establish multi-state footholds, but the strategy did not succeed as planned because the prices for the other utilities that NUI might have bought later were too high. In addition, NUI wanted LDCs in areas where there was growth and the opportunity to connect with several interstate pipelines. In the case of the North Carolina LDC, there was no growth and it was connected to only one pipeline. NUI would sell the Pennsylvania, New York, and North Carolina operations much later, in 2002. The Pennsylvania and New York operations particularly lay in economically depressed areas that had few industrial customers and pipeline interconnections. NUI also found that its foothold companies, while small, still required significant management attention and focus on the differing regulatory requirements of multiple states.

In contrast, NUI viewed CGF as being well-positioned for growth. The plans for CGF have included construction of the East-West pipeline across Florida. CGF took responsibility for the first phase of that installation, which cost $17 million; it has not produced the margins expected. The region has not witnessed the installation of the planned gas-fired electricity generating stations that formed much of the reason for expecting the first phase of the pipeline to be profitable. A number of new gas-fired electricity generating plants remain planned, but

none are expected to come on line in CGF's territory before mid-2005. NUI Energy Brokers (NUI EB; discussed more fully in Chapter VII of this report), NUI's energy trading subsidiary, now has responsibility for pipeline development beyond the first phase, which continues to be the responsibility of CGF. NUI has recently announced the next phase, which will include the development of storage at one end of the pipeline and an extension of the pipeline's operating length. NUI does not plan to use its own capital for this phase, but to rely upon capital from other sources.

CGF and Florida have remained part of NUI's future vision, but its other small gas LDC acquisitions have not. By the period of 1992-1994, management was already counseling NUI's board of directors not to expect significant new opportunities of this type, because of the lack of financial attractiveness of acquisitions for the buyer. NUI made no LDC acquisition after 1994. It did buy Virginia Gas in 2001. That acquisition, however, was driven by an interest in pipeline and storage assets; its several hundred end-use customers did not form a material part of NUI's interest in that case.

C. Expanding Horizons and the Drive for Earnings Growth

NUI was a relatively simple gas-utility holding company before starting on the non-utility phase of its growth program. NUI decided in 1994 that the future portended major changes for it, declaring that:

> *The gas distribution industry is changing, and management believes that utilities can no longer rely upon a stable revenue stream. The traditional local gas distribution company no longer enjoys a competition-free environment. As a result, management believes that local gas companies must offer a greater variety of services at more competitive prices or risk losing business to competition. In view of the foregoing and the Company's dividend payout levels compared to earnings during the periods since 1988, when the Company spun-off all of its non-utility subsidiaries ..., the Company declared, on October 26, 1994, a quarterly dividend at a rate of $0.225 per share. The rate in prior quarters had been $0.40 per share.*

In its Form 10-K for 1994, NUI laid out plans to address this change. The Company cited plans to use an early-retirement program to reduce its headcount by about 75 employees, to increase the activities of Natural Gas Services, to reduce capital expenditures, and to add to margins through other activities. The final sentence in the "Outlook and Business Plan" section in the 10-K was:

> *If the Company is unable to accomplish its plans described above, a trend of lower net income is expected to continue.*

Liberty wanted to review the plan that NUI laid out when it first decided to seek non-LDC growth opportunities. NUI responded that it no longer had a copy of the five-year plan that it adopted in 1995. Liberty found this to be outside its experience with other companies, who are generally able to locate such plans of comparable vintage. NUI did provide a group of

presentation slides showing some basic parameters of its strategy as it existed a few years after 1995. Company objectives for 1997-2000 included three aggressive goals:

- 15 percent per year growth in earnings per share
- 15 percent return on equity
- Revenues of $1 billion per year.

NUI's CEO remembers that NUI's goal to reach $1 billion in revenues or 1 million customers had been in place since 1995. He considered the goals for 1997 achievable at the time, given the businesses that NUI was in and the state of the economy. He noted that NUI's planned level of success in the TIC business, if accompanied by similar success in other growth areas, would have achieved the return-on-equity goal. Chapter Three of this report discusses the operations of TIC in detail.

At the annual meeting of NUI's shareholders in January 2002, executive management told the audience that NUI had achieved revenues of $1.1 billion, which was consistent with the plan on which the Company had started in 1996. NUI had nominally achieved that revenue level, but later had to revise that figure down by several hundred million dollars. A change in accounting rules no longer allowed NUI to report the gross value of its energy-trading and energy-services activities, thus ending a practice that was used by a number of diversified utility holding companies in those businesses.

At the end of the 1990s there was some reason to have confidence that NUI's management could perform to the expectations it set for itself, as the following three tables show.

Table II.1. NUI's Earnings per Share vs. Targets

	1995	1996	1997	1998	1999
Budget	0.99	1.40	1.74	2.00	1.91
Actual	1.21	1.52	1.74	1.74	1.93

Table II.2. Annual Returns to Shareholders (%)

	1995	1996	1997	1998	1999
NUI	-3.3	20.1	29.2	1.9	27.4
LDC Peer Group	12.0	20.1	17.1	12.5	11.3
S&P Utilities	27.6	7.5	14.4	30.0	12.5
S&P 500	29.6	20.3	40.4	9.1	39.8

Table II.3. Cumulative Returns to Shareholders (%)

	1994	1995	1996	1997	1998	1999
NUI	100	97	116	150	153	195
LDC Peer Group	100	112	135	158	177	197
S&P Utilities	100	128	137	157	204	229
S&P 500	100	130	156	219	239	334

A January 2000 utility-industry newsletter reported on an interview with NUI's CEO. The article described how NUI's strategy was not to be like Enron, in that it would not focus on marketing commodities, but instead would serve as a consultant or agent to end-users. The article noted that NUI was working with six or seven combination utilities to manage 10 to 20 percent of their energy needs. NUI was examining the provision of electricity, natural-gas, and telecommunications services as a portfolio-management business. The Company's aim was to "maximize the value of that portfolio."

The article described what would become a cornerstone of NUI's non-utility expansion plans. It said that NUI was developing other businesses that grew out of services NUI provided for itself, such as billing for utilities. NUI reportedly had started down this path in 1995, as it saw industry restructuring and "deregulation" coming. In other words, NUI's plan was to provide in the third-party marketplace the kinds of services that it considered similar to those it provided for itself in conducting utility operations. It likened the energy trading and sales and telecommunications resale activities NUI pursued to the management of its gas-supply portfolio.

This same January 2000 article reported that all businesses had contributed positively to net income in 1999, and that the CEO held special enthusiasm for TIC Enterprises, whose revenues had tripled since NUI bought it in February 1997. TIC's president reportedly planned on ultimately adding almost 600 sales representatives. This target of 600 was notable for a company of NUI's size. It would, for example, exceed the number NUI was dedicating to utility service, which constituted its core and dominating business both then and now.

The article further described that International Telephone Group (ITG-a predecessor to Telecom) was taking advantage of long-term contracts with other carriers to make attractive offerings to customers. The CEO described it as "working out great." At the end of the article the CEO was quoted as saying that NUI's biggest challenge was "continuing to increase earnings at 10% a year," noting that NUI had geared its incentive-compensation program to growth. NUI had only regulated-utility operations in 1995, when it began to pursue non-utility activities aggressively. The CEO noted that operating income from non-utility operations had grown to 10 percent by 1999, and that he wanted it to be as much as four times bigger (30-40 percent) in only three more years. The article quoted the CEO:

> *And that's the only way we are going to be able to live up to the commitment we've made to our shareholders … we're rated a buy by everybody that covers us. If you look at how we trade in comparison to our peer group, it's really frustrating because we trade at a discount to the peer group even though we're producing a superior growth number … a lot of people still don't believe….*

NUI had already bought TIC in furtherance of the strategy of taking its core competencies in new directions made possible by the opening of the energy and telecommunications marketplace to competition. TIC's business was providing sales services, to take advantage of the opening of retail choice for utility services. NUI's strategy for the acquisition was to recognize that utilities did not have the sales skills needed for growth of this type, but entities like TIC did. TIC was largely a commission-based seller of telecommunications equipment

and US Postal Service expedited-delivery services. NUI first tested the idea with TIC, and decided that it worked well.
NUI saw parallels between selling telecommunications services and the opportunities that had begun to develop in the natural-gas industries in the 1980s. NUI viewed Telecom, which resold to end-users telecommunications services it was acquiring from primary carriers in the local, long-distance, and wireless markets, as another strong candidate for supporting the Company's growth goals. NUI saw synergies between the telecommunications marketing and sale of competitive equipment and services and similar developments that it was forecasting for the energy industry. NUI tested the market and then bought ITG and started to build that business.

NUI's goals were lofty; it tried to transform itself from a small company focused on running a small group of LDC businesses into one with greatly increased operational breadth and financial size. NUI began to define itself as the diversified energy company it wanted to be, rather than the LDC company that it essentially remained in terms of operations and financial contribution. Even its executive-compensation program used diversified energy companies and companies larger than itself as a comparison base.

NUI worked to change its corporate culture as it was making acquisitions in new areas. NUI brought in many new executives. Most of them have since left the Company, generally in the past year or so. NUI also hired an organization-development consultant to help it with its *Mission-Vision-Values* project. The consultant won an award in 2001 from the Organization Development Institute for its work. The objective of the work was, according to NUI's CEO, "to reaffirm our core values and redefine the company's spirit and direction following several years of change." The project included developing new mission and vision statements and 10 two-day sessions with all employees. NUI dedicated 18,000 hours of employee time to these sessions. NUI attributed increased sales, improved scores for customer satisfaction, reduced costs, and increased employee morale to the project.

D. Accelerating the Growth Strategy: 2001 and 2002

Spring retreats by NUI directors, senior NUI management, and business-unit heads formed important Company planning elements. Liberty reviewed the presentations that NUI executives made to the Company's board of directors at strategic-planning retreats held in March 2001 and May 2002. The presentation materials comprised several hundred pages in total, and included substantial exposition of NUI's vision and plans.

The March 2001 retreat reflected NUI's continued targeting of an aggressive rate of growth. The participants in the retreat considered a *Strategic Planning Interim Report* describing the Company's *Corporate Value Creation Goal* to "[c]reate value by using our core competencies to realize growth opportunities while managing risk to shareholders." The targets were to double the economic value of NUI in five years and to provide returns to stockholders that would exceed the rate of return of the S&P 500 companies.

Liberty's chapter on executive and director compensation in this report puts the latter target in context about how achievable it was likely to be. In September 2001 NUI's executive

compensation-consultant (PM&P) commented on NUI's strategic plans. PM&P reported that only 10 percent of S&P 500 companies beat median total shareholder return every year for three years, and only five percent did so for five years. In addition, NUI's goal of earning two percent above its cost of capital meant that it would have to earn returns of 8 to 10 percent. PM&P's data showed, however, that:

- Only half of the S&P 500 earned a return on invested capital of 10 percent for one year
- A third did so for three years
- Only a quarter of S&P 500 companies were able to earn a return on invested capital of 10 percent for five years.

Thus, extraordinary performance would be required for NUI to reach the financial goals it set for itself.

The *Strategic Planning Interim Report* also described an expectation of return on invested capital for *growth stage* (new) businesses of 25 percent per year on average over 5 years. NUI incorporated an exit strategy that would include an option of selling or spinning off developing businesses. This option contemplated the need for businesses to reach $150 million per year in revenue (for commodity sales or trading businesses this benchmark applied to margins, not total revenues) and $20 million per year in pre-interest and pre-tax earnings before this exit strategy would become feasible. NUI expected mature businesses (presumably the gas-distribution utilities) to earn on invested capital a return of two percent more than their cost of capital.

The report described how NUI should build on its *core competencies:*

- Execute each year three transactions with a five percent or greater effect on Company financials
- Execute each year, through financing by outside investors, one transaction with a five percent or greater effect on Company financials
- Maintain access to capital markets at reasonable cost (defined as preserving an investment-grade debt rating), in order to sustain the capability to fund investments
- Balance NUI's investment-risk profile to moderate shareowner risk.

Individual business-unit *Strategic Planning Interim Reports* supported the 2001 retreat presentation of overall strategy at the corporate level. Two examples of these business-unit reports (those for Environmental and UBS) proved particularly interesting. The presentation on NUI Environmental included the following strategic steps:

- Building and operating a regional dredged-material management facility and securing contracts to process a minimum of 500,000 cubic yards per year
- Expanding NUI dredged-material management to one additional harbor per year
- Forming environmental-services strategic alliances
- Developing three new-product applications for waste materials.

These steps called for dramatic growth by any standards. NUI Environmental's lack of a significant operating track-record at the time made them more so. NUI Environmental

succeeded in receiving only one contract to work on processing dredged material in the seven years in which it was trying to develop a business. Even that was a pilot study. Environmental did have an opportunity to secure another contract, but even it would be a demonstration-level one.

The presentation for UBS included similarly aggressive goals. It described financial targets by 2006 of:

- $135 million in revenue (fiscal 2000 had seen revenues of $10 million, which meant that it would have to grow by 80% per year on a compound basis)
- Earnings before interest and taxes (EBIT) of at least $25 million (fiscal 2000 had seen EBIT of $1 million, which meant that it would have to grow by more than half each year on a compound basis)
- At least 60 percent of revenue and income from acquisitions to be made in the future (UBS had made no acquisitions to date, and Liberty saw no indication of specific targets for acquisition during audit field work).

At this time, NUI was getting information from a consultant that bore substantially on the realism of these goals. The consultant's evaluation of UBS that said:

> *It is not difficult to imagine UBS spending a minimum of $10 million enhancing the product and preparing the organization to participate in other markets. ...* [T]*he entire UBS organization and the WINS product will require significant investment if it is to be a viable solution and primary competitor in the CIS* [customer-information system] *market.*

The consultant also said that the functionality and completeness of UBS's WINS CIS product was low. The consultant advised:

> *Prepare for a long-term commitment and investment. Don't expect the solution to be an overnight success. UBS must recognize this is a difficult and lengthy process. The WINS solution provides UBS with a solid baseline however, it is a competitive, risk averse and unpredictable market. Every vendor has unrealistic expectations of the market.*

NUI conducted its 2002 retreat in May. The session started with a presentation by senior executive management. It contained some dramatic slides, the contents of which are presented verbatim, in part, below.

Table II.4. Excerpts from of 2002 Planning Materials

- *Reaching for the stars*
  - *We are a player now*
    - *Large energy companies want to partner with us on assets we own*
    - *Large telecom companies are partners with us on wholesale deals*
  - *We are on the brink of tremendous growth*
  - *Total energy hub assets we have a unique ability to secure and build ~ $500 million*
- *Stars are aligning in our favor*

  Energy company partners coming to us:
  - *Blue Atlantic (El Paso) brings huge supply through our territory*
    - *Makes ETG a much larger trading hub*
  - *Gulfstream (Duke, El Paso) pipeline adds tremendous value to our Mississippi and Florida projects*
    - *Alternative supply for the first time in Florida*
    - *Arbitrage against FGT [Florida Gas Transmission]*
  - *Patriot and Greenbrier (Duke, Dominion, Piedmont) pipelines in Va. both depend on local storage*
  - *LNG projects in Bahamas (El Paso) make our pipeline and storage critical in FL*
- *Stars are aligning in our favor*

Great timing in the telecom marketplace
  - *Telecom competitors are disappearing*
  - *Big telcos are raising retail prices*
  - *Congress and the courts are enforcing open access*
  - *SMBs [small- and medium-sized business] still get ignored*
  - *Some attractive opportunities in wholesale*
- *Challenging ourselves*
  - *New goals that reach beyond our comp targets*

Market cap $400 million → $1 Billion
- *Wholesale Energy Trading Hubs*
  - *Northeast*
    - *LDC with multiple supply*
    - *Key market location*
    - *Expansions underway*
  - *Mid-Atlantic*
    - *12 Bcf storage*
    - *$67 Million Investment*
  - *Florida*
    - *16 Bcf storage*
    - *110 Mile Pipeline*
    - *$189 Million Investment*
  - *Southeast*
    - *10.5 Bcf storage*
    - *$85 Million Investment*

Liberty found the telecommunications presentation to be particularly telling. The presentation listed enforcement of "open access" as providing a business opportunity for NUI. There was, to the contrary, great uncertainty and significant litigation about the "enforcement" of open access at this time. Moreover, it was clear that crucial network-access and pricing issues were far from stable. Competitors were dropping from sight. Many of those that remained were cutting back their operations. These survivors included carriers much larger, more sophisticated, and more mature than NUI Telecom. Their fading from the marketplace or the

retrenchment in their plans did not confirm the creation of open space in a stable market. They evidenced an already evident shrinking of the marketplace and a lack of optimism about near-term prospects for growth and financial success. Equipment suppliers, such as Lucent and Nortel, had experienced precipitous stock-price declines since early 2001. The same was true for many competitive carriers. Even major carriers had seen a significant loss in market value by the first half of 2002.

The 2002 retreat included a *Strategic Overview 2002-2005*. It showed very large growth in capital expenditures. A slide addressing *Capital Investment* showed a chart of stacked bars made up of the large projects in Florida, Mississippi, and Virginia, and the NUI Utilities business unit. The following table shows NUI's forecast of capital expenditures.

Table II.5. Capital Expenditures Forecast

Year	Utilities	Others	Total
2002	$40	$2	$42
2003	$44	$70	$144
2004	$46	$50	$96
2005	$84	$62	$148
2006	$62	$24	$86

Millions of dollars

NUI therefore faced a near tripling of capital investment for the coming four years. Such a dramatic increase invites questioning and interest about how it would be financed. Liberty did not find, however, any substantial discussion about how NUI would or could finance such expenditures. This lack of focus on finding the capital resources to support such strong growth extends beyond this particular NUI session. Liberty did not discover a structured examination of the issue in any of the years it examined, which go back to the 1995 plan, and its lack of documentation.

E. Collapse of the Growth Strategy

NUI bought 49 percent of TIC, and later found that the market was not working out as it had hoped. NUI tried to turn TIC around. In June 2001 the managements of NUI and TIC were meeting to discuss how to secure improvement. NUI said in July 2001 that TIC was making "great progress." NUI decided to solve the problem by buying the rest of the company in May 2002, by adding new products, and by trying to sell the company through a public offering. Lacking sufficient success, NUI shut down most of TIC's operations only months later.

Even in hindsight, NUI's CEO considered the initial strategy to be correct. He believed that it did not work because of the slow progress in opening utility markets to retail choice and the collapse of the market in telecommunications equipment, which formed a core component in TIC's offerings.

TIC did not prove to be NUI's only disappointment. After working to change its culture to help it adapt to the transformation taking place in the natural gas-distribution industry and the new businesses into which it had entered, NUI met with disappointment on many fronts. In

only a few years, NUI's entries into major new businesses, including telecommunications, retail sales of energy services (both TIC and NUI Energy), and a new pipeline (the East-West project in Florida), has not produced expected returns, for a variety of reasons.

Liberty found NUI's entry into its telecommunications businesses to be late in the cycle, coming after other entrants were already experiencing substantial problems. Other energy utilities also entered telecommunications businesses before NUI. They too did not realize the success that they had anticipated. The difference between the other utilities and NUI was the relative size and timing of their commitments. NUI made a big investment when compared to the size of the rest of the Company. NUI also made it relatively late by comparison.

NUI did not fare much better in the retail energy market. The Company sold its competitive retail energy supplier, NUI Energy, in early 2003. It had generated operating losses of $3 million after taxes in the first half of fiscal 2003. NUI's combined experiences with TIC and NUI Energy proved very disappointing financially. Telecom fared somewhat better, but this venture also failed ultimately to contribute substantially to the earnings growth that NUI was seeking and projecting. Its positive operating margins consistently became economic losses. Telecom will also produce very sizeable losses (compared with the amount of investment made) after its final disposition.

At generally the same time, NUI pursued a number of international and environmental ventures. None has succeeded even in producing consequential revenues, let alone contributions to earnings. Their losses too have produced a great drain on NUI. The Company felt that the personal contacts of its Board chairman and the Company's knowledge of the restructured natural-gas industry in this country positioned it well. NUI particularly believed that it had a strong enough position to allow it to employ other parties' capital to capture opportunities as markets in Eastern Europe started to open. This self-appraisal proved to be wrong. These ventures experienced significant and repeated financial losses across the years of their operation.

Harbor dredging comprised the environmental venture to which NUI committed substantial financial resources. NUI tried to create a technology that would solve a long-standing impediment to continued operation of the New York harbor, and then find other partners to advance the capital necessary to implement the solution. NUI found instead that, as in the case of its international ventures, others expected NUI to contribute more than its contacts, concepts, and technology solutions. Those others also looked to NUI to contribute money. After spending considerable sums trying to put together salable international and environmental business ventures, NUI:

- Produced almost no sales or revenues at all from them
- Found no partners willing to take all the capital risks
- Managed to lose sizeable sums even without making major capital commitments
- Eventually found no buyers when it decided to employ the "exit" portion of its strategy.

Because of these problems NUI decided in the past year to return to its core businesses (distributing natural gas, and related services) because tightened credit markets made it necessary to make the Company more transparent to investors and give greater assurance to banks, investors, regulators, and credit agencies.

F. Planning and Budgeting Processes

The business-planning process centers on revenue and expense budgeting. NUI business planning starts in March and April with a revenue forecast. The process proceeds through June toward the development of a forecast of expenses and margins. The process involves iterations, and applies both top-down and bottom-up approaches.

Capital budgeting uses a five-year time horizon. The capital-budgeting process starts in June. Business units begin it with an Excel spreadsheet that corporate planning personnel give them to use for assigning priorities to projects. Business-unit personnel must also complete a form to provide justifications for requests for capital. The corporate planning department compiles a list of projects for all business units. The list and other, related documentation then goes to the Capital Management Committee (CMC), which is described below. CMC discussions with business-unit leaders lead to a final list that goes to the board of directors. Approved projects are assigned project numbers for expenditure tracking.

A large set of detailed forms guide budget preparation (capital and revenue/expense) and business planning. These forms address financial and operational issues, include a calendar of key dates for submissions of documents, and provide a listing of assignments of responsibility.

NUI's objective for NUI's business planning is not to maximize cash generation. The measures of financial performance that NUI has used in the recent past have been margin and direct EBIT or operating contribution; *i.e.*, earnings before interest, taxes, and allocations from the NUI (shared services) functions.

NUI has recently been using Deloitte & Touche (D&T) on a contract basis to perform its internal-auditing function. One of D&T's recent internal-audit reports addressed NUI's business-case process for new ventures and acquisitions. The auditor performed the fieldwork in December 2002. D&T finished the report by the end of April 2003. The audit addressed budgeting, project initiation and approval, project management, *post-mortem* analysis, and the responsibility of the CMC.

D&T's audit report assigned its lowest rating, which was "needs improvement" to NUI's performance in this area. D&T's extensive findings demonstrated significant weaknesses in NUI's controls on new ventures and acquisitions. Examples include the following:

- The capital and O&M budgeting process used by one major area of non-utility expenditures, NUI Ventures, was not "stringent."[1] Management could not adequately reconcile budgeted and actual capital spending for fiscal 2000 to November 2002.
- Some projects had budgeted amounts, but no actual costs.
- Other projects had neither budgets nor actual costs.
- Capital projects remained open after completion.
- There existed no formal, documented sign-off to reject or approve a project.
- NUI used no formal criteria for project selection.
- There existed no project-performance expectations and milestones, which D&T said should be reviewed monthly.
- NUI had no policy that required managers to ask for additions to approved capital budgets. (Liberty subsequently learned that NUI is designing forms to remedy this weakness.)
- Controls on expenditures were lacking. A re-audit caused some capital charges to be recategorized as expenses, which caused Ventures to exceed its fiscal 2002 operating budget by many times ($5.4 million, which exceeded the budget by $4.3 million.)
- New projects did not have responsibility centers assigned to them. For example, D&T found expenses for a Moscow compressed natural gas (CNG) project charged to a wholly distinct and inactive fuel-cell project.
- The directors had never approved the Moscow CNG project; however, NUI's CEO did.
- Capital-budget information did not enter the accounting system in a timely manner. (NUI explained the delay as related to the extraordinary workload imposed by ETG's rate case.)
- Budget revisions did not find their way into the accounting system.
- The Company embarked on a field-force automation (FFA) project, even though its internal rate of return of 6.5 percent fell significantly below the hurdle rate of 8 percent.
- NUI's board of directors did not approve the FFA project.

D&T's audit report described the CMC. Management formed this body in March 2002 to make recommendations to NUI's COO/CFO on proposed capital expenditures greater than $250,000. NUI's finance and operations functions had representation on the CMC. The CMC also had responsibility for improving the execution of capital projects and the containment of spending.

D&T found that the CMC did not have a process for monitoring capital expenditures, saying that the "CMC does not monitor capex [capital expenditures] projects either during the interim stage or at completion." NUI management later explained to Liberty that the CMC was relatively new, and that it was monitoring capital expenditures at the business-unit or project level. NUI's management agreed to implement all but one of D&T's eleven recommendations by June 30, 2003. It set the other for completion by September 30, 2003.

[1] NUI Ventures was a department largely focusing on international opportunities, and was also responsible at time for UBS and NUI Environmental. Chapter Three of this report discusses these businesses in detail.

G. NUI Utilities and ETG Budgets

1. Utility Capital Budgets Prior to Fiscal 2003

An approximately $28 million budget for ETG capital expenditures has been fairly typical in recent years. ETG's management believes that its performance against budget in the past few years has been good. Management cited exogenous factors, such as the effects of the recent recession and the terrorist attacks in 2001, as the principal causes of variances. The capital budgets for the two years preceding fiscal 2003 approached the norm: $29.4 million in 2001 and $28.1 million in 2002. The capital budget for 2001 ended up being lower; it was cut back to $19.6 million during that fiscal year. The major source of the cutback was for new business. By the time of the request for a cutback, ETG had already been under-spending its budget for new business by almost $6 million. In 2002 ETG under-spent its budget by less than $2 million. Lower expenses for vehicles and for special projects caused the bulk of the variance.

2. Utility Capital Budget for Fiscal 2003

NUI Utilities and ETG capital budgeting for fiscal 2003 and 2004 have been anomalous. The ETG capital expenditures base level of about $28 million per year and capital needs of approximately another $10 million for other utility needs generate a base NUI Utilities total capital budget that is generally in the range of $38 million. In August 2002, the NUI Utilities VP & General Manager prepared a total NUI Utilities 2003 capital budget of this magnitude. ETG's share represented a fairly typical level; *i.e.*, $27.4 million.

There was, however, a contingency in that budget. It related to the pending ETG rate case. Specifically, that case included a request for a $14.5 million system-improvement adjustment clause and $5 million for development of a new customer-information system. This $19.5 million was over and above the base amount of $27.4 million. Access to it depended upon BPU treatment of ETG's rate case, then pending.

The ETG Advisory Board reviewed and approved the ETG base amount of $27.4 million at its August 2002 meeting. This approval included the proviso that the amount could increase to reflect the additional $19.5 million, should the BPU approve certain capital-expense rate-recovery mechanism proposed in the ETG rate filing. The BPU eventually did not do so. The additional $19.5 therefore never became relevant thereafter. The ETG Advisory Board did not have responsibility for the remaining portions of the NUI Utilities budget. Nevertheless, the understanding of NUI Utilities personnel was that a total NUI Utilities' budget of approximately $38 million, including $27.4 million for ETG, would be presented to the NUI directors at their meeting the following month.

The NUI Utilities VP & General Manager did not present the NUI Utilities capital budget at the NUI board meeting the next month. An NUI finance executive did. At that September 2002 meeting the NUI Utilities VP & General Manager first heard, from the NUI COO/CFO, that the amount recommended for NUI Board approval was $27 million for all of NUI Utilities. This change reflected an $11 million reduction from what NUI Utilities

management expected. The 29 percent reduction from $38 million would clearly not support the $27.4 million ETG capital amount approved by the ETG Advisory Board.

The NUI directors approved the $27 million for all of NUI Utilities at the September 2002 meeting. Management did not discuss with NUI directors what had been presented to or approved by the ETG Advisory Board, or that the amount approved represented as much as an $11 million reduction. Clearly, therefore, there was no discussion of where the cuts would come from to support this significantly reduced level of spending.

The NUI COO/CFO and the NUI treasurer reported to the NUI Utilities VP & General Manager that the reason for the reduction was to demonstrate that NUI could keep total capital spending within levels fundable through internal resources. Credit access difficulties had emerged at that time. Chapter Four of this report discusses them in detail. The NUI Utilities VP & General Manager continued spending at the annual NUI Utilities rate he had originally proposed. That amount was $38 million total and $27.4 million for ETG, which was consistent with what the ETG Advisory Board had approved. He did so on the understanding given him by the NUI COO that additional resources would be available to cover the $11 million difference.

Near the end of fiscal year 2003, NUI transferred to NUI Utilities $3 million in capital dollars from the budget of Virginia Gas. The NUI board of directors at its July 2003 meeting approved the remaining $8 million needed to cover the $11 million of added expenditures. One of NUI's directors described increases of this sort as not unusual. He appeared mistakenly to believe that the board was not merely covering $8 million already spent, but adding an additional $8 million to normal expenditures.

NUI told Liberty that the approved NUI Utilities fiscal 2003 capital budget was $27.4 million. NUI called this a "conservative spending plan, supported by internally generated cash flows, consistent with rating agency benchmarks regarding funding of capital expenditures." NUI said that the CFO informed the NUI directors that there would likely be a request for an increase. NUI board members have reported that they never approved a lower budget for NUI Utilities than the one proposed utility operations management. Neither did the NUI board think it ever approved an NUI Utilities budget with an ETG amount different from what was reviewed with and approved by ETG's Advisory Board.

None of the outside NUI board members recalls a concern about the adequacy of the baseline amount of the NUI Utilities budget. At least two board members recall that there was an NJBPU contingency for NUI Utilities fiscal 2003 budget. They could not recall the details, but the only contingency that Liberty could, from the information available, find to match the numbers at issue is the one described above. In any event, however, this contingency did not affect the baseline NUI Utilities budget, but would have added $19.5 million above normal requirements. It did not relate to the $11 million reduction. The recollection of NUI's CFO/COO was that the cuts were for discretionary expenditures, which would leave enough in the budget for all of the capital necessary for "maintaining" utility service at existing levels. Up through that time, however, it was not customary for the capital budget to be segregated by project for board review.

NUI Utilities personnel cannot remember preparing for NUI director review any material that would support a line-item review of utility capital budgets. NUI Utilities personnel present at the September 2002 NUI board meeting also do not recall a discussion of specific NUI Utilities capital projects. They recall mention of $27 million as being NUI Utilities' portion of the total proposed NUI budget of $53 million. They recall no presentation of specific project information that would allow an informed reduction from the approximately $38 million proposed by NUI Utilities management to $27.4 million.

There also was no contemporaneous review of the reduced amount by the ETG Advisory Board. At least two NUI directors would, absent explicit reporting and explanation of any changes, expect that what management presented to them as the NUI Utilities budget would be consistent with the numbers reviewed with and approved by the ETG Advisory Board. There were no such changes noted at the October 23, 2002 NUI Board meeting.

NUI Utilities personnel indicate that they never received information about where changes should be made to reflect the difference between the $38 million approved by the ETG Advisory Board and the $27 million presented to and approved by the NUI board. Nor did they provide any analysis for NUI Utilities, NUI management, or board members to use in making line-item budget reductions. They did not even load the detailed capital project information into PeopleSoft (NUI's accounting system) for use in managing to their budget. The reason is that they would need project-based data to do so. There was no information given by NUI, where the change occurred, identifying where specifically the $11 million change should be taken at the capital budget line-item level. They did not load the information until after the NUI board provided the final $8.1 million authorization (in July 2003) it took to bring the NUI Utilities budget back to the $38 million level originally proposed by NUI Utilities management. The amount they loaded was the $38 million that had originally been approved by the ETG Advisory Board.

Budget reports presented by NUI show that NUI Utilities' expenditures through April compared as follows against budget:

Table II.6. NUI Utilities 2003 Capital Expenditures

NUI Budget for NUI Utilities	$27,404,160
YTD through April	$22,889,592
Remaining Budget	$4,514,568
YTD Budget	$18,099,662
YTD Overrun	$4,789,931
Actual Current Month	$3,032,665
Projected Remaining [(1)]	$15,163,265
Projected FY Total	$38,052,917
NUIU Proposed Budget[(2)]	$38,000,000

[(1)]Amounts Liberty projected through FY 2003 end, based on latest month actual.
[(2)]Actual YTD through April plus Projected Remaining.

Liberty asked for the all presentations made to the NUI board of directors about capital budgets for 2002 and 2003. All the information that NUI provided in response consisted of summary-level, overhead-type presentation materials. NUI provided about 10 slides for each year. This information showed consolidated capital expenditures for the entire corporation. The only capital budget information shown consisted of a single chart. It showed $61.0 million for NUI total for FY 2002 and $53.6 million for 2003.

The following table shows fiscal 2002 and 2003 capital budgets for NUI.

Table II.7. NUI Capital Budgets for 2002 and 2003

Entity	2003 Budget	2002 Budget	2002 Actual
Elizabethtown Gas	Not Reported	$28,097	$28,483
City Gas of Florida	Not Reported	$10,286	$11,080
Elkton	Not Reported	$558	$701
Total Distribution Services	$27,404	$38,941	$40,264
Wholesale Energy Market & Trading	$2,144	$4,901	$854
Retail and Business Services	$3,483	$2,961	$5,448
Corporate and Other[(1)]	$20,606	$11,150	$7,681
Discontinued Operations[(2)]	$0	$3,005	$1,423
TOTAL CAPITAL EXPENDITURES	$53,637	$60,958	$55,670

Thousands of dollars
[(1)] Includes $20 million reported separately for Saltville in 2003.
[(2)] Includes sold LDCs in 2002 and 2003 and TIC and NUI Environmental in 2003.

3. Utility Capital Budget for Fiscal 2004

NUI did not prepare fiscal 2004 budgets according to schedule, either for utility or non-utility operations. The fiscal year began without them. The NUI Utilities VP & General Manager presented capital and expense budgets to the ETG Advisory Board in August 2003. They were not, however, approved. The Board members requested more detail. The NUI Utilities VP & General Manager presented additional detail on the capital budget at the October 14, 2003 meeting of the ETG Advisory Board. The Board did accept the budget at this meeting. The NUI Utilities VP & General Manager planned to present the details underlying the fiscal 2004 O&M budget at the November 2003 ETG Advisory Board meeting. Fiscal 2004 began on October 1, 2003; management of utility operations continued to commit resources in accord with the capital and O&M budgets reviewed with the ETG Board in August, but without specific direction from NUI until after the fiscal year began.

4. Utility Operating Budget for Fiscal 2004: Personnel Eliminations

September 2003, NUI's normal budget-approval month, loomed as another critical one for NUI. By the beginning of that month, it had become clear that the Company faced the need for new loans to support short-term liquidity. Several months earlier, NUI reported to Liberty that a run-up in gas prices to the $6 per Mcf level would create a potential need for additional, short-term financing. By September, however, it had become clear that loans would be necessary even if gas prices did not approach this "concern" level. Moreover, NUI had just learned that the Fleet-syndicated bank group already providing short-term financing under the 364-day revolving credit agreements would not roll over its loans or increase the available amount without receiving pledges of utility assets and stock as loan security. At that time,

NUI had only one plan for solving its need for NUI Utilities' short-term liquidity as the heating season fast approached. That was to enter new credit agreements with the Fleet group. These agreements would have given the bank group much more control over or security in the utility. Liberty expressed significant concern about those new agreements, and asked NUI what alternatives it had considered. There were none, as described in detail in Chapter 4.

NUI planned actions to meet investment-community expectations through apparent cost savings at NUI Utilities, as it had in the midst of similar problems with liquidity and financing the previous fall. However, this time the focus was more on operating and maintenance expenses. Also in contrast to the prior year, the September 2003 efforts did not include only NUI Utilities. Now, the non-utility sector also came under examination for cost cuts. In this time period, NUI had already decided to jettison much of its non-utility operations. This change from the prior year made this expansion of areas subject to cost reductions an obvious one at this time.

The NUI CFO/COO determined to commission the cost reduction work with the support of a consultant at the end of August 2003. The CFO/COO assigned the CAO/General Counsel to manage the effort. The steering committee established to guide these efforts consisted of NUI's three most senior officers: CEO, CFO/COO, and CAO/General Counsel. NUI also created a working group, which consisted of the members shown in the following table.

Table II.8. Staffing Reduction Working Group

NUI CAO/General Counsel	Vice President - Human Resources
VP & General Manager NUI Utilities (Southern Division)	VP - Finance and Treasurer
VP & General Manager NUI Utilities	Director, Corporate Financial Planning and Analysis
Director of Administration - NUI EB	VP of Operations NUI Utilities Northern Area
VP & Chief Information Officer	3 consultants

A significant set of organization restructuring and personnel reductions came from this effort. Members of the NUI finance group and the heads of the NUI corporate support functions worked with the consultant to develop the recommendations. Broader-level meetings with a broader NUI working group were scheduled to begin in mid-September. The bulk of these meetings, however, never took place. The CAO/General Counsel described the work of this consultant/NUI team as a multi-layered one. He said that he asked the consultant to determine what changes would have to take place under the strictly hypothetical assumption that the earnings forecasts were to be met and to create an organization and staffing that would make NUI resources consistent with the first quartile (*i.e.*, the best-performing) peer companies.

The documentation of the effort creates another view of its purposes. For example, the consultant's September 17, 2003 presentation described a recently-begun restructuring project, being led by the consulting firm. The purpose of this project was to accomplish the

following objectives in recognition of the change in NUI strategic direction to "concentrate on the core utility business, exit non core businesses and reduce operating costs:"

- Assess shared services and individual business operations (the latter of which included NUI Utilities generally and ETG specifically)
- Identify areas where efficiency could be improved
- Secure cost reductions.

This description does not speak of a hypothetical effort to find out where NUI stood, but of a firm plan and actions to make cost reductions. The presentation also makes clear that meeting the investment community's earnings per share projections for NUI drove the project. The September 17, 2003 presentation began with a statement of basic financial targets and estimates for NUI. They included:

- Currently forecasted fiscal 2003 NUI earnings per share of $0.83
- A likelihood of earnings below $0.83 in fiscal 2004, due to incremental financing costs
- Analyst expectations that far exceeded what the preceding 2003 and 2004 information would support, *i.e.*, fiscal 2004 earnings per share of $1.33 at NUI
- The need for NUI Utilities to produce earnings per share of $1.31, in order to support its current $0.98 per share dividend to the parent; this ratio implies a payout of 75 percent of NUI Utilities as a dividend to the parent.

The presentation proceeded to identify the gaps that caused fiscal 2003 EPS to be lower and the amount of cost reductions necessary to meet analysts' fiscal 2004 expectations:

- The 2003 earnings gap was $23.5 million
    - Combined effects of lower margins from non-utility businesses (Energy, Telecom, and UBS) accounted for most of the gap; *i.e.*, $15.2 million
    - Combined effects of increased non-utility O&M expenses (NUI Energy, Environmental, and Appliance Business) accounted for another $3.1 million; along with the lower margins, non-utility operations thus caused over 75 percent of the earnings gap
    - NUI Headquarters expenses increased $0.8 million
    - Utilities expenses increased $4.4 million ($3.9 million for ETG and $0.4 million for CGF), thus accounting for less than 20 percent of the gap
- The 2004 gap was in the same range; *i.e.*, $20-26 million
    - An O&M budget shortfall accounted for $13 million
    - Incremental financing costs were projected to account for the remainder; *i.e.*, $7 to 13 million.

The presentation then proceeded to identify cost reductions that would close the gap. This presentation contains two particularly striking features. First, it demonstrates that, even as NUI faced mounting and difficulties in finding the resources needed merely to continue to exist, it was preparing to embark on actions that would sustain its perceived position in the financial marketplace. Second, the vast percentage of the earnings gap came from non-utility activities, but plans resulting from this cost-reduction effort would place a strong focus on utility resources. In fact, the actions to be recommended looked significantly to utility

operations as the source for finding drastic cost reductions. The target that the presentation set was to reduce fiscal 2004 costs by the full $26 million necessary to meet analysts' earning expectations. The following table breaks expected savings down by area.

Table II.9. Summary of Fiscal 2004 Cost Savings Projections

Area	Amount	Area	Amount
Organizational Structure	$19.5 million	Pension & Benefits	$1.3 million
Real Estate Consolidation	$1.3 million	IT Re-engineering	$2.6 million
Insurance Reassessment	$1.3 million	***TOTAL***	***$26 million***

The Organizational Structure category meant essentially job reductions, which would take a restructuring of corporate services, and which the presentation noted would consider the importance of maintaining "safe, reliable and efficient operations." The presentation actually put the question and the answer much more dramatically. It stated:

> *What do we need to do to meet $1.31 EPS?*
> *In FY 2004, we need to address:*
> - *unforeseen costs for audit, legal fees, etc.*
> - *intercompany receivables*
> - *credit repayments*
> - *cost of implementing change*
> - *delays in realizing the benefits from cost reductions*
>
> *So we really need to target approximately $40M in cost reductions*

The initial work under the project benchmarked NUI Utilities employee numbers against the first quartile of "similar utilities." It projected possible personnel reductions of 22-59 percent. These reductions created a budget-reduction target of $27.7 to 52.3 million, out of total costs of $66.8 million. Specific goals included three reductions directly related to ETG and three that affected other portions of NUI. Together they were designed to reduce full time equivalent personnel to the first quartile (*i.e.*, the best-performing) of the selected peer companies, and to reduce costs by $26 million. The following table summarizes reductions identified by the NUI team.

Table II.10. Summary of Proposed Personnel Reductions

Area/Timing	Area	Reductions
ETG-Related		*171*
November 2003	Corporate Shared Services	60
May 2004	Utilities North[(1)]	58
October 2004	Corporate Shared Services	53
Other		*41*[(2)]
By September 2003	Discontinued Operations	[(2)]
February 2004	Other Businesses	11
July 2004	Utilities South	30

[(1)] ETG, Elkton, and New Jersey Appliance Business
[(2)] Estimated or unclear from the available information

The following table shows the sources of the net reduction of 58 positions in fiscal 2004 for Utilities North.

Table II.11. Personnel Reduction Summary

Sub Group	Budget	Target	# Cut	% Cut
ETG	440	390	50	11
Elkton	16	14	2	13
NJ Appliance	53	47	6	11
Total	*509*	*451*	*58*	*11*

Liberty reviewed this information with the CAO/General Counsel. He continued to maintain that there never was a forced NUI goal to meet earnings expectations. He observed that the reductions set forth in the documents reflected the results of the "hypothetical" exercise intended all along. He further observed that, upon first review of these numbers, he knew that they were not obtainable. He said that NUI made no effort or commitment to making them. He also said that the significant short-term "goal" set forth in the presentation by the consultant (71 job cuts by February of 2004) was not NUI's goal, but must have been one identified solely by the consultant. NUI had not specified any specific goals, other than to design an organization and resource levels consistent with providing safe and reliable service. The CAO/General Counsel said that he shut down the work on September 24, 2003, when it became clear that a major management change was set to take place. The CEO resigned the next day.

On the morning of September 22, 2003, NUI Utilities had terminated its participation in the effort on the instructions of the NUI Utilities VP & General Manager. NUI Utilities personnel had attended one meeting on the project. On September 23, 2004, the NUI human resources vice president had agreed to develop a communications plan, and to identify separation package options within one week. The notes of the group also indicate that risks to the project included a lack of executive commitment to implementing it and the lack of involvement of the working group in developing the resulting NUI organization.

The NUI CFO/COO described the job-cut analysis somewhat differently than did the CAO/General Counsel. The NUI CFO/COO presented to Liberty on September 11, 2003, NUI's proposal for repaying the intercompany receivable. UBS and Telecom sale efforts were already underway. NUI planned to apply the proceeds from those sales to the balance. Now, NUI also intended to sell additional assets.

The CFO/COO also identified $10 million dollars from expense reductions as being available on a short-term basis to apply to the balance. This level of expense reductions corresponds to the timing and amounts of reductions shown in the same documentation that contains the significant utility personnel reductions. The CFO/COO reported the estimates to be preliminary and subject to verification. He expressed a belief, however, that significant job reductions were possible. He also noted that analysis of them was currently underway. He declared a need and intent to have "something in place" before the end of calendar 2003. His

description of actions underway indicated much more than a hypothetical examination of potential efficiency gains. It demonstrated a plan to take significant action by a certain date.

5. Actual Utility Expenditures

On at least two occasions NUI has made or come to the verge of making nominal budget cuts that are not consistent with actual operations or intentions. The first case involved the fall 2002 actions related to the fiscal 2003 NUI Utilities capital budget. The second case involved the job-reduction plans of September 2003. Liberty has examined actual expenditures, in order to determine their general consistency with utility needs. The scope for this audit did not include a management and operations examination. Such an examination should precede the reaching of substantial conclusions about the quality and efficiency with which an LDC delivers utility services. Therefore, Liberty can express no firm opinions about the adequacy of particular expenditure, staffing, or activity levels.

Liberty did, however, consider it appropriate to examine trends that would disclose any apparent reason for believing that the emergence of financial problems at NUI induced the Company to make changes that could have the effect of reducing the quality or reliability of service from whatever baseline level it had been achieving. In other words, while Liberty did not examine the appropriateness of the levels of service ETG provided, it did determine whether it evidenced a deteriorating trend as NUI's corporate financial problems grew.

Liberty looked at three trends – two internal and one external. The first internal trend was to compare budgeted levels of expenditure over time and then to compare budgeted with actual expenditure levels. The multi-year budget information would show reductions in expenditures over a longer period, while the intra-year comparisons of budgeted to actual expenditures would provide an indicator of any short-term response to financial difficulties. The second internal trend was to examine year-over-year staffing changes, because personnel comprise a principal, controllable driver of utility costs. The external trending was to compare ETG expenditures over time with the other two gas-only New Jersey LDCs. Liberty recognizes that different utilities are affected differently by the fundamental drivers of their costs, even if they operate in the same vicinity. However, as a general indicator of trends over time, examining the relative rate of change in key expenditure categories can offer at least general insight into the level of commitment management is making to utility operations.

Through September 2003 ETG had continued to keep its capital and O&M expenditures about even, and expected to continue to that practice. The following table shows this trend.

Table II.12. O&M Expense

	2004 Budget	2003 Estimated	2002 Actual
O&M total	*57.9*	*55.7*	*47.8*
Labor and benefits	32.7	31.1	29.2
Outside services	8.4	8.9	7.9

Millions of dollars

Table II.13. Capital Expenditures

	2004 Budget	2003 Estimated	2002 Actual
New business	11.7	11.4	11.6
Maintain existing plant	12.1	12.4	11.9
System improvement projects	6.3	1.9	2.5
Systems and technology	2.4	3.6	2.1
Total	*32.5*	*29.3*	*28.1*

Millions of dollars

NUI Utilities has recently operated at lower than expected levels of operating income:

- For the 11 months of fiscal-year 2002 ETG's earnings before interest and taxes (EBIT) were $37.6 million, a negative variance of $8.4 million; the year included unusually warm weather
- For the same period the appliance-service business unit also ran $1.3 million under budget for EBIT
- Through the first 8 months of fiscal-year 2003, ETG's operating income was $2.3 million under budget
- For the same period ETG and CGF appliance-service business unit operating income ran $1.5 million under budget.

When a parent experiences extreme financial distress, there is pressure to mitigate such negative results through artificial cost reductions in utility operations. Liberty, however, found no evidence that NUI actually did so.

ETG's capital budgets have been stable in the recent past at just under $30 million. Liberty found, however, indications of recently added projects. ETG has a large inventory of projects that it has developed to improve the reliability of its delivery system. The System Improvement Adjustment Charge (SIAC) that ETG proposed in its 2002 rate-case filing was not made part of the BPU's settlement. Nevertheless, ETG has started on the $40 million of capital projects that it proposed to finance using the SIAC.

ETG has also undertaken a program to install on customers' meters equipment that will allow it to remotely read meters inside customers' premises. The original schedule for the program planned for completion in 15 years. ETG has shortened that period to10 years or less. ETG started incurring costs ($763 thousand) for the remote meter-reading units in fiscal 2001, as it began to build its inventory of equipment. ETG then spent $1.5 million in fiscal 2002 and $1.2 million through June of fiscal 2003. These new expenditures include only the cost of the units. Labor and the new meters to which they are attached require added expenditures. ETG's commitment to new programs also demonstrates no apparent reduction in ETG spending, even while NUI had growing financial problems.

Liberty also reviewed ETG's performance against specific measures of customer-service and gas-operations effectiveness. The data indicate that ETG's performance has either been steady or has improved over the last few years. ETG collects data on several measures of customer-service performance that have to do with its ability to answer customers' calls and the revenue

cycle. These measures include the number of calls answered, the average length of calls, and number of calls abandoned. Call abandonment occurs when customers hang up after calling because, for instance, they get tired of being on hold. On all of the measures having to do with answering customers' calls, ETG's performance has improved.

With respect to the revenue cycle, many ETG customers have meters inside their premises. This factor creates for ETG a particularly significant meter-access problem. ETG started the project to add remote meter-reading capability on those meters to address this problem. Because of the access problem the number of estimated bills that ETG sends to its customers is high and has remained significantly unchanged. ETG has recently started to improve on the measure of successful meter reads compared with total attempted reads.

ETG does not keep data on its performance in meeting service appointments with customers. It will have this capability when its field-force automation system (described below) is operational. It does have information on leak management. Its data reports numbers of leaks repaired, leak backlog, and average response time by class of leak. ETG's data show that the total number of leak calls has declined, and response times have not changed, but average dispatch times have increased. Dispatch time is duration from receipt of call to dispatching of job to field personnel. Response time is time from receipt of call to field personnel arriving on the scene.

The most serious leaks are in class 1. This category consists of leaks that require immediate corrective action. NUI provided Liberty with monthly data on leaks from calendar-year 1998 through June 2003. There was an error in the report. The data for December 1999 are identical to the data for December 1998. The result of this error is that the actual results for the year 1999 are probably better than reported, because performance improved between 1998 and 1999. The trend shows that the number of class 1 leaks has been level after correcting for the effect of the cold weather of 2000. The Union division has the majority of the Company's old, cast-iron, pipe. This type of pipe is more prone to the problems that lead to leaks. The following table shows Class 1 leak trends.

Table II.14. Class 1 Leaks

	1998	1999	2000	2001	2002	2003
Union Division	383	396	530	351	363	202
Northwest Division	62	76	79	78	77	41

2003 figures are though June

Over the past three years NUI's staffing level has decreased by about a third, primarily because it has sold companies or shut down subsidiaries. The apparent variance of the employment levels of CGF and ETG resulted from two factors:

- Changes in the business unit used to record call-center employees
- Over 50 NUI HQ personnel who reported to NUI's former vice president for marketing transferred to ETG.

The following table summarizes recent changes in utility employment levels.

Table II.15. Utility Employment Summary

	9/30/01	9/30/02	7/31/03	Forecast YE 03
Appliance FL	38	32	41	41
Appliance NJ	81	45	52	52
Appliance NC	5	5	D	D
CGF	219	140	220	220
Elkton	16	15	17	17
NCGAS	44	43	D	D
ETG	372	497	444	444
Valley Cities	25	23	D	D
EB	26	28	33	33
NUI Energy	20	25	7	D**
NUI Environmental	2	2	1	D**
NUI HQ	178	145	117	117
NUI Telecom	25	38	44	D**
TIC*	304	45	13	D**
NUI Ventures	3	3	3	D**
UBS	43	42	40	D**
OAS	16	16	13	13
Virginia Gas	71	52	55	55
Total	1488	1196	1100	992

D=discontinued operations.
D**=assumes units sold or shut down by December 31, 2003.
2001 data for TIC is estimated because it had its own payroll system.

Liberty further analyzed trends in the staffing of ETG. Headcount has generally been constant since NUI conducted a program to reduce its staffing level in fiscal-year 1999. This observation requires two adjustments to the raw numbers:

- Correcting for an error in how call-center personnel were recorded
- Reflecting a transfer of marketing personnel who were formerly in NUI HQ but were doing work for ETG.

The following table shows recent changes in ETG staffing.

Table II.16. Recent ETG Staffing Changes

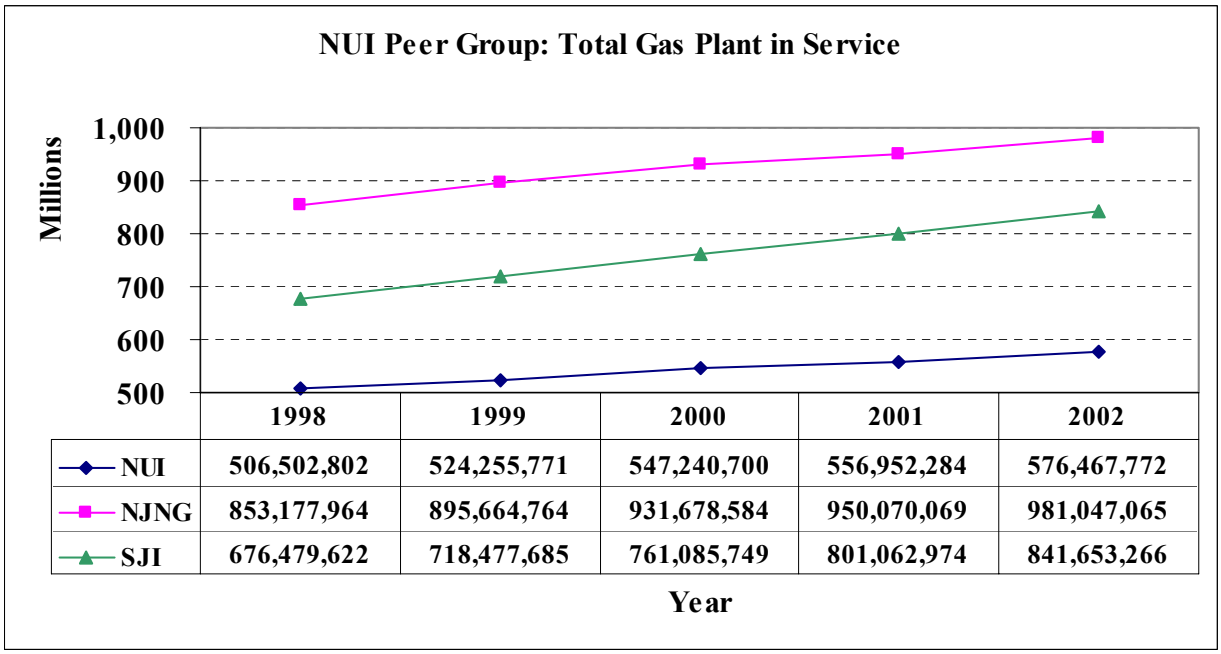
	1997	1998	1999	2000	2001	2002	2003
ETG as recorded*	538	529	465	373	372	498	460
NJ appliance service				77	77	57	52
Responsibility-center error						-56	
Total ETG corrected	538	529	465	450	449	499	512

All numbers are year end, except for 2003, which is July 31

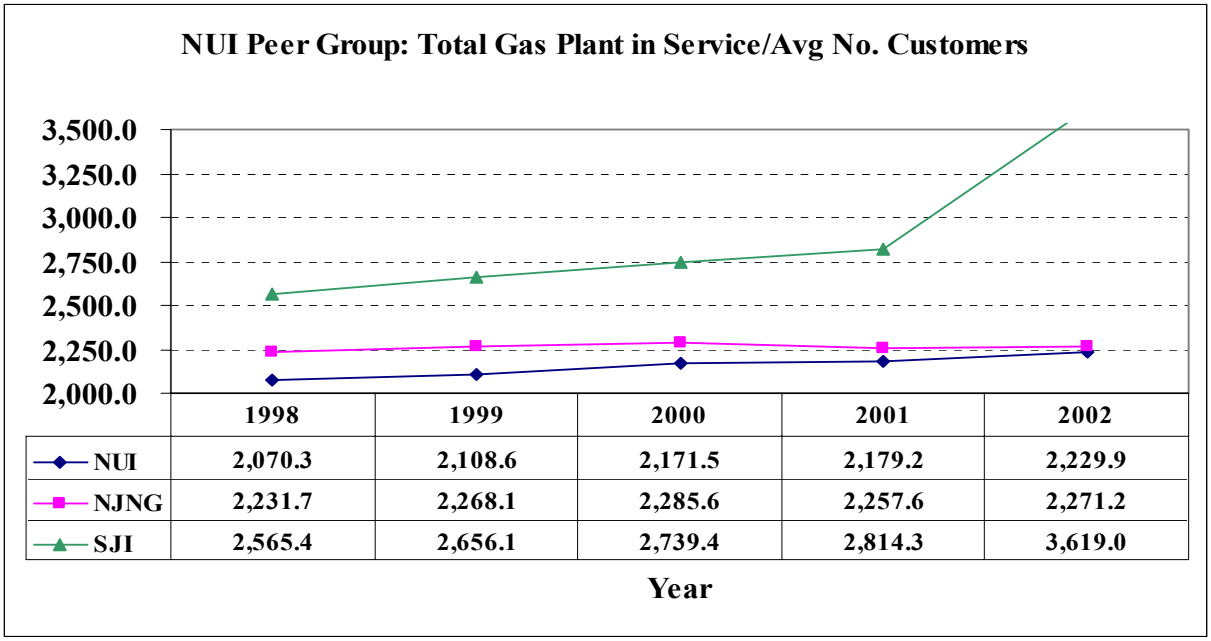
The ETG 2001 entry reflects the transfer of 49 marketing personnel to ETG. The ETG 2003 entry reflects 17 people added in new RC 571, Distribution Services Accounting. Expenses for labor and associated overheads comprise principal drivers of utility capital expenditures and O&M expenses. The stability in employment shows that NUI's resource commitment to ETG did not change as NUI was having financial problems.

The following table shows the results of Liberty's comparisons of ETG expenditures with those of New Jersey's other two gas-only LDCs. This information does not identify any apparent anomalies at ETG, particularly considering the relative age of its facilities. An older system generally means lower total capital costs for installed facilities.

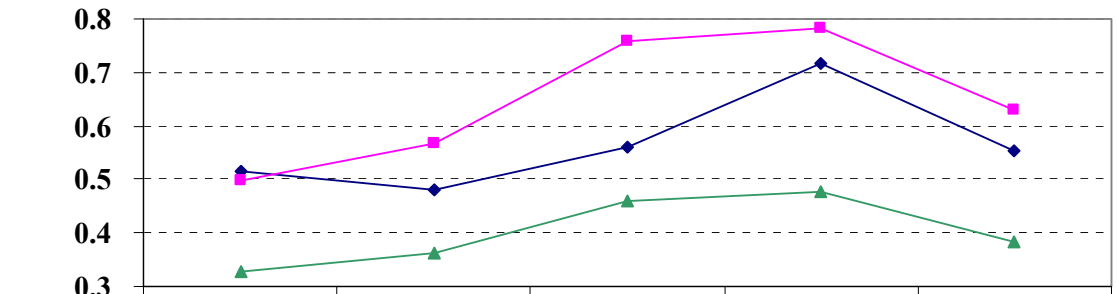
Table II.17. Comparative System Expenditures



	1998	1999	2000	2001	2002
NUI	506,502,802	524,255,771	547,240,700	556,952,284	576,467,772
NJNG	853,177,964	895,664,764	931,678,584	950,070,069	981,047,065
SJI	676,479,622	718,477,685	761,085,749	801,062,974	841,653,266

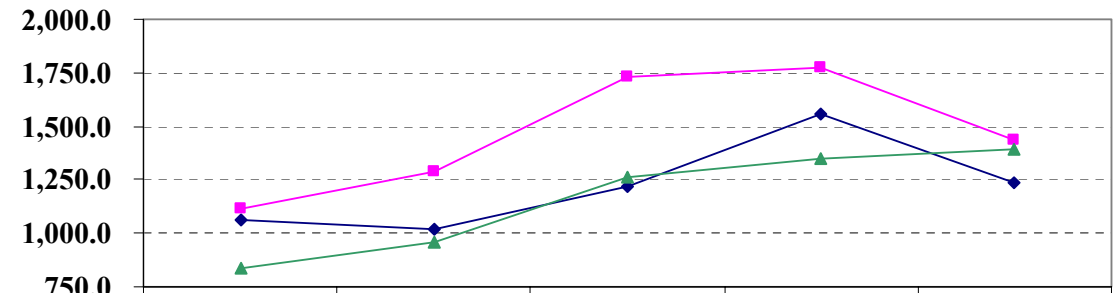


	1998	1999	2000	2001	2002
NUI	2,070.3	2,108.6	2,171.5	2,179.2	2,229.9
NJNG	2,231.7	2,268.1	2,285.6	2,257.6	2,271.2
SJI	2,565.4	2,656.1	2,739.4	2,814.3	3,619.0



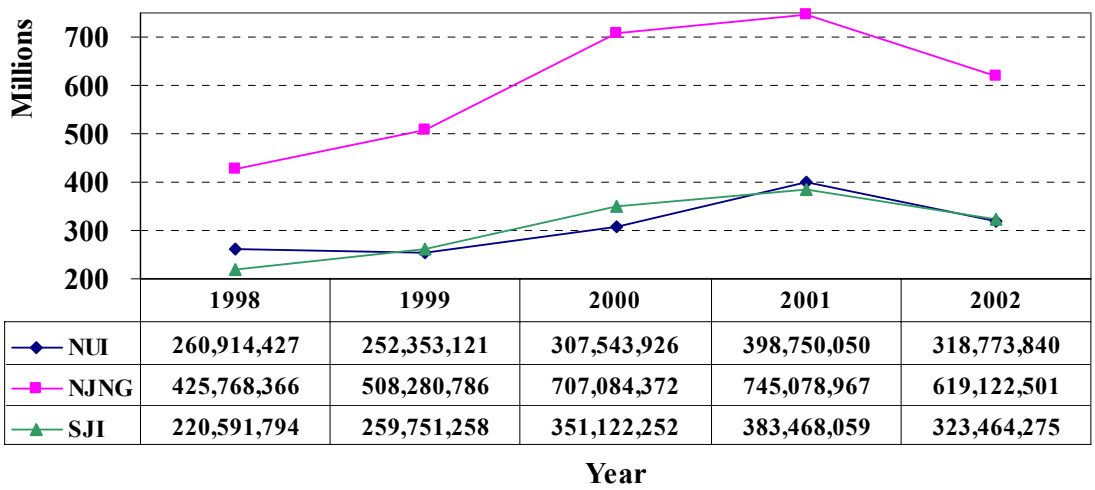
	1998	1999	2000	2001	2002
NUI	0.5	0.5	0.6	0.7	0.6
NJNG	0.5	0.6	0.8	0.8	0.6
SJI	0.3	0.4	0.5	0.5	0.4

Year



	1998	1999	2000	2001	2002
NUI	1,066.5	1,015.0	1,220.3	1,560.2	1,233.1
NJNG	1,113.7	1,287.1	1,734.6	1,770.5	1,433.3
SJI	836.5	960.2	1,263.8	1,347.2	1,390.9

Year



	1998	1999	2000	2001	2002
NUI	260,914,427	252,353,121	307,543,926	398,750,050	318,773,840
NJNG	425,768,366	508,280,786	707,084,372	745,078,967	619,122,501
SJI	220,591,794	259,751,258	351,122,252	383,468,059	323,464,275

6. Immediate Future, Incremental Utility Capital Needs

ETG's largest, near-term need for incremental capital above the typical yearly base amount of $28 million is for a new billing system. The Company had previously expected a system to cost as much as $10 million. ETG would like to start on that project in 2004/2005. The Union and Elizabeth High-Pressure Uprating looms as the other major incremental capital expenditure in the near term. That enhancement, which is underway, will enable ETG to serve larger industrial loads. It will cost about $6 million. ETG did not move ahead earlier on a new billing system for two reasons:

- It was giving UBS time to develop a system (See the discussion of this work under the UBS section of Chapter Three of this report)
- It became apparent that a new system was likely to prove much more expensive than originally expected.

ETG is now in the middle of the previously-mentioned, multi-year program to install a radio-frequency automated-meter-reading system to help it overcome the problem of not having ready access to meters that are inside of homes. The program started in 2001, and should be finished in 2007. ETG is also finishing the implementation of a program called field-force automation, which will cost more than $2 million, whose aim is to enable ETG's gas operations management to communicate with field technicians through computer terminals.

H. Conclusions

Conclusion II-1. NUI took or planned arbitrary and unsupported actions with respect to ETG capital and operating expenses and personnel, as part of an investor-community driven approach to managing the corporation; these actions exposed ETG to risks that were both inappropriate and unrelated to the operations and needs of ETG.

The facts surrounding the 2003 NUI Utilities capital budget and the September 2003 personnel reduction planning dramatically underscore the NUI senior management approach of focusing decisions unduly on financial community expectation and reaction. It contravenes good utility practice to require that utility spending deliberately exceed approved levels, even in times of financial health. When such decisions are made at a time of significant liquidity concerns and significant levels of employee anxiety, spending at rates above approved levels creates much more serious concerns. Primary among them is whether and from where the added funds will be secured. To expose utility operations to such uncertainty for the purpose of supporting the financial needs of non-utility operations is even more problematic.

The failure to adopt 2004 budgets until after the start of the fiscal year stands as another example of the uncertainty imposed on ETG by reason of its interconnection with NUI's non-utility operations. That there was a need under the circumstances to impose a delay may be understandable for NUI, given the turmoil surrounding NUI and its management. That this need was imposed by non-utility performance is not excusable. That NUI's non-utility problems continued to impair effective and prudent treatment of utility needs is also inappropriate. The ability to proceed in a timely and rational manner to adopt utility budgets would and should have remained unimpaired, despite holding-company problems, provided that NUI had acted reasonably to separate utility and non-utility finance.

NUI faced significant financial constraints in the fall of 2002. These constraints substantially increased the difficulties of securing a roll-over of its revolving credit facility, and that of NUI Utilities. There proved to be a need for a temporary extension of credit while negotiations continued. An apparent reduction of $11 million in capital spending, whether or not intended actually to take effect, would provide potential lenders and debt rating agencies with a basis for believing that liquidity concerns were less.

The facts support the conclusion that, within NUI, there was no intent to make an $11 million reduction in capital spending at NUI Utilities. Internal reports clearly show that the NUI Utilities spending rate was not consistent with such a reduction, but rather was entirely in line with the $38 million that NUI Utilities management had proposed, and that the ETG Advisory Board had approved (insofar as it approved an ETG-alone capital budget of $27.4 million), which was the principal component of the $38 million.

What is less clear is how NUI can square what it was doing with what it was reporting to outsiders. For example, presentations to investment community representatives through August 2002 show an estimated NUI budget of $63 million at the total corporate level. These amounts are consistent with an NUI Utilities budget of $38 million. These presentations

predated the budget approval process by just weeks, in the case of the ETG Advisory Board. Presentations after that date, from December 2002 through March 2003, however, show a total amount of $53.6 million, which is consistent with the reduction that the NUI Board approved in September 2002. By March the clear pattern of capital spending at NUI Utilities showed an effective budget of $38 million. By April spending at the rest of NUI (*i.e.*, excluding NUI Utilities) was within $500,000 (one percent) of the budget for the portion of the fiscal year that had already passed.
These facts demonstrate that, for internal purposes, NUI was operating in accord, not with the externally communicated budget of $53.6 million, but rather in accord with an actually in effect and internally communicated budget of $63 million. Otherwise, one would have expected to see reductions in other areas to compensate for what was a known and permitted expenditure of an additional $11 million by NUI Utilities. Again, note that this is not $11 million more than what NUI Utilities would normally spend in a fiscal year. Instead this $11 million is the amount needed just to bring NUI Utilities back to what is a typical year of capital spending.

Much more serious even are the concerns raised by the September 2003 efforts to identify and put into place substantial staffing reductions. The facts support a conclusion that NUI was preparing to make or at least to announce substantial staff reductions, estimated (from the best available information) to amount to one of every four people working directly for ETG, Elkton, and the New Jersey appliance business. The cuts at the NUI corporate level (where common services are provided to utility and non-utility operations) were even more drastic. These cuts, scheduled to begin within two months at the NUI corporate level, were not driven by any analysis of NUI's workforce, but by a fairly simplistic comparison to levels at a small sample of other utilities. The cuts anticipated a movement to the first quartile (*i.e.*, best performers) of the sample group within one year.

Were the plans not driven by financial community pressure, they would seem hasty, inadequately supported, and potentially very disruptive to utility operations. That they were influenced by the goal of meeting investment-community earnings expectations for the fiscal year beginning virtually immediately makes them entirely unsupportable as a sound way to conduct utility business.

Particularly troubling are attempts to describe the efforts as "hypothetical." Several facts noted in NUI's documents belie this description. None of these facts is likely to accompany an early-stage and hypothetical study. Instead, all are consistent with a plan for specific actions proceeding under a schedule that has specific and immediate-term milestones:

- Departure of utility membership on the working group
- Drafting a communications plan
- Specifying separation package options
- Lack of executive support.

There is no plausible reason why utility personnel refused to participate in an effort to identify how NUI compared with a peer group in staffing. It is, however, understandable why those personnel would not continue participation in an effort to cause or to appear to cause patently

unreasonable reductions in utility resources. There is also no plausible reason why immediate efforts would be made to draft a plan for communicating outside NUI the existence of a merely hypothetical exercise. Communications plans were prepared to deal with actions that would have significant public consequence. Similarly, separation package options would be necessary for actual cuts, but not for a hypothetical comparison of NUI personnel levels to those of a peer group. Finally and compellingly, there is no fathomable reason why there would be a lack of executive support for a hypothetical examination of staffing-level comparability. Moreover, it is known that the effort being undertaken did have the support of the most senior NUI executives. It is understandable, however, that there would be senior-level opposition to making unrealistic, short-term cuts, or to announcing them, whether or not they were actually intended.

Also troubling is the observation by those involved in the effort that, despite this stage of the project, there was a risk of a lack of involvement by the working group. Had it conducted its expected meetings, this group would have consisted of the people who manage the utility and corporate support functions where the cuts would be made. The steering committee included only the NUI CEO, CFO/COO, and CAO/General Counsel.

> ***Conclusion II-2. NUI showed an inappropriate lack of appreciation for the role and the actions of the ETG Advisory Board, whose existence the Holding Company Order mandates, in connection with the fiscal 2003 budget.***

The BPU's Holding-Company Order does not mandate any particular role or function for the ETG Advisory Board. The Order merely compels its existence and imposes requirements on its composition. However, it is clearly inappropriate for management to make a capital budget presentation to the Advisory Board, and then recommend just a few weeks later to the NUI directors a budget entirely inconsistent with the one presented and approved. Management should have returned to the ETG Advisory Board with changes it proposed to make to the NUI directors. It did not do so.

Failing that, management should at least have noted to the NUI directors that what management was presenting to it was drastically different from what had just been proposed to, and approved, by the ETG Advisory Board. This management also failed to do. NUI board members agree that they should be notified of such changes. They pointed with pride to Liberty the fact that they had always approved what management proposed and that they considered it to be consistent with what the ETG Advisory Board had reviewed and approved.

What NUI management did failed to comport with any reasonable conception of the ETG Advisory Board's role, as Liberty would define it in light of the Holding-Company Order, and as the NUI board members evidently understood it.

Conclusion II-3. NUI management failed to present the NUI Board of Directors with sufficient information about budgets when it asked for approval; it is not always possible to determine from available records what budgets the Board actually reviewed and what budgets they actually approved.

Chapter Seven of this report addresses in detail the subject of corporate governance. Liberty found that the documentation presented to the board and retained in the files does not allow for a clear determination of what budgets were approved. Moreover, the D&T audit found what Liberty viewed to be major deficiencies in controlling (at the board of director level) commitments to and expenditures on new ventures. The D&T findings related to the budget and to other planning and control elements.

A particularly striking example of the lack of director knowledge is the fact that at least one director felt that an $8 million budget item just approved constituted additional funding for unanticipated utility needs, rather than a covering of funds already spent. Similarly problematic is the failure of the NUI board even to understand that it approved a fiscal 2003 budget far less than what the ETG Advisory Board had approved. Not only is the NUI board's action inconsistent with what the ETG Advisory Board actually did: it is also inconsistent with what the NUI directors say is of some importance to them; *i.e.* that they should know if there is inconsistency between what comes to them and what the ETG Advisory Board has approved.

Conclusion II-4. Liberty found no evidence of insufficient investment in the utility business, but NUI has exercised insufficient control over capital budgeting and reporting for its non-utility investments.

Liberty reviewed NUI's approved capital and expense budgets for fiscal years 2002 and 2003, the year-end variance reports for 2002, and the variance reports for 2003 through May. These reports showed trends and variances that raise questions mostly about how well NUI has controlled its capital expenditures.

NUI's actual capital expenditures for 2000 were about $53 million, and increased to $72 million for 2001. The budget for 2002 was $55 million, but actual capital expenditures were $61 million in 2002. The budget for 2003 was about $54 million. The capital budget for 2003 was lower than actual expenditures in 2002, at least through May (three-quarters of the year). The Distribution Services business segment was $5 million in excess of the budget while investments in non-regulated businesses were almost $8 million under budget. The three tables presented below show more detail about these trends. Liberty took the numbers in the tables from bar graphs. The components therefore do not always add to the total.

Table II.18. 2002 Capital Expenditures

Category	2002 Budget	2001 Estimated	2000 Actual
New Business	21	15	23
Maintain Existing Plant	12	13	12
Information systems	11	4	5
Other	15	22	13
Total	60	55	53

Millions of dollars

Table II.19. 2003 Capital Expenditures

Category	2003 Budget	2002 Estimated	2001 Actual
New Business	11	28	39
Maintain Existing Plant	11	16	11
Information systems	9	10	8
Other	3	5	7
Virginia Gas	20	3	9
Total	54	61	72

Millions of dollars

Table II.20. Capital Spending Analysis Fiscal 2003

Category	Actual YTD	Budget YTD	Variance	Total Budget
Distribution Services	22.9	18.1	(4.8)	27.4
Energy Asset Management	0.3	0.9	0.6	1.0
Retail and Business Services	1.9	2.9	1.0	3.5
Saltville	8.8	15.7	6.9	20.0
Total Continuing Operations	34.5	38.9	4.3	53.6

The numbers in the preceding table may not add up because they include expenditures for business units that are no longer considered by NUI to be continuing operations. Assuming that these figures are accurate, at least two conclusions can be made from the data. First, while the Company was having financial problems it continued to invest in the distribution services (utility) business segment, possibly even at levels that it could not afford. Second, the variances against budgets were great, suggesting some combination of lack of realism in the budgets and inadequate project management and controls for assuring adherence to budgets. This latter conclusion fits with those of the internal audit that D&T conducted. That audit exposed significant weaknesses in the Company's inadequate controls over its processes for approving and tracking capital expenditures.

In the face of serious financial problems NUI could have cut back on deferrable capital expenditures for ETG. Examples include the field-force automation and remote meter-reading projects. Deferring all of them would have conserved cash for NUI. ETG, however, continued them all.

Conclusion II-5. NUI's management apprised the Board of Directors of the plans it had for the non-regulated subsidiaries but not of the Company's financial problems as they were developing.

NUI's management generally kept the Board informed of its plans and budgets for the non-regulated businesses. There were two important exceptions, however, to this practice. First, there was no evidence that the presentations made clear that NUI had to borrow from Utilities and ETG, by accumulating a payable to it, to preserve the ability to fund aggressive non-utility growth plans. Second, NUI's management did not ask for Board approval of what ultimately became at least $11 million in expenditures for NUI Ventures, a considerable sum for a company of NUI's size.

Chapter Seven of this report addresses in detail the NUI directors' knowledge of developing financial problems. In addition, Liberty found in its examination of planning that executive management and the board failed to focus on the question of where NUI could or would secure the resources to finance its aggressive non-utility growth program. The scale of the growth projected made the need for such inquiries self-evident. Liberty's review of the available planning information and its interviews with directors found no indication that such questions received substantial attention.

Conclusion II-6. NUI's subsidiaries produced plans through an adequate process, but NUI's planning for non-utility businesses was unrealistically optimistic.

Liberty found that NUI's managers prepared comprehensive plans, used established processes, and appropriately employed structured retreats to focus on strategic planning. There were no evident gaps from the process or from the plan structure perspectives. The problems observed by Liberty occurred at a higher level. Those problems occurred in the:

- Integration of all the specific plans into a corporate one
- Consideration of financial feasibility, in the realism of assumptions
- Recognition of what consequences would result if circumstances varied from those projected to occur.

The documents that Liberty reviewed suggest a tacit assumption that financing would always be available. Certainly, the subject did not receive significant attention.

NUI's strategic planning for non-utility growth became unreasonably aggressive in the late 1990s. It incorporated goals of growing at rates far faster than general industry growth. These goals failed to be sustained by clear, concrete means for reaching them. NUI's aggressive assumptions about a number of its prospective growth engines did not have analytical foundations. In at least one case, those assumptions ran contrary to the clear advice being received from its own consultant. In particular, much of NUI's expectations for growth depended greatly on success in the telecommunications sector into which NUI entered late in its cycle and with investments that were too large compared to the rest of NUI.

NUI failed to achieve what it set out to do when it started on its program to grow: balance its risks. It may have been motivated to add new business because of pressures from *Wall Street* to grow faster to help keep the price of NUI's stock up, and even increase it. If there was such pressure, it was not an adequate excuse for seeking growth opportunities that would put ETG, its most important asset, at risk.

Looking at the statistics that NUI's compensation consultant compiled in 2001 and disclosed to the Company's directors and executives—for a different purpose—shows that NUI's goals for financial performance at the time were, at the least, aggressive. When judged objectively, they were, even then, unrealistic unless NUI was able to do something that few companies had achieved. Given NUI's lack of experience in non-utility businesses, the goals of the Company should have caused NUI directors and executive management great concern and hesitance about the wisdom of the path they chose to follow. Liberty observed neither in the documents at the time and in the current recollections of directors and executives when they discuss the commitments that led NUI to its current state.

NUI's leadership had insufficient concern about financial risks, and in particular, about the financial consequences of problems and the potential effects of lack of financial flexibility. Some of the risk factors were not identifiable at the time: the terrorist attacks in 2001 and the problems that occurred in wholesale energy markets after the failure of Enron are examples. Nevertheless, the U.S. economy has often witnessed recessions and busts after booms. The economy was then on one of its longest-ever growth cycles. That extraordinary length should have been as much a source of concern as of optimism. It is therefore true that NUI was in part a victim of some events beyond its control. Still, it acted too aggressively in simultaneously pursuing business in environmental remediation, selling telecommunications services, and international venture capitalism. NUI had little in the way of experience and assets in the new areas. It nevertheless simultaneously expanded into many of them, and in a financially aggressive fashion.

The CEO's presentation at the retreat on May 2002 is emblematic of the problem of not reconciling management's hopes and the associated capital requirements. The contrast of that presentation with the CEO's letter to employees less than five months later is dramatic:

> *On several occasions this year you have heard me liken a number of conditions we have faced this year as coming together like a 'perfect storm.' That analogy couldn't be more accurate. We have faced four very challenging conditions, (1) the warmest winter on record; (2) a weak economy; (3) meltdowns in the telecom and energy trading sectors; and (4) a deterioration in the equity markets.*

Yet, he continued:

> *While current conditions may cause many other companies to abandon their strategies, we are confident in ours and have built a strong base with our businesses that will lead to long-term value creation.*

Meltdowns and a *perfect storm* may well have hurt NUI in its bold moves into new businesses. Even so, NUI's executive management, and the board of directors to whom it reported, failed to rein in plans and commitments when circumstances called for a major change in direction. A larger company might have been able to weather the problems, and also might have had more resources to apply to acquisitions and development of new businesses. The flaws in NUI's strategy included:

- Over-optimism about new businesses
- Its lack of understanding of its limited range and resources
- Its decision to reach out in so many new directions simultaneously
- Failure to create basic controls over expenditures for new businesses before NUI started them.

The large variances against budgets are a robust indicator of lack of rigor and realism in planning and budgeting. While the controls would not have prevented NUI from having problems, some might have been avoided, and others could have been mitigated.

> ***Conclusion II-7. As NUI's non-utility financial problems grew, there was no apparent lessening of utility expedenditures or degradation in service performance.***

Despite the major and continuing financial problems of its non-utility ventures, NUI did not make any evident curtailments in utility spending or resources, and experienced no noticeable degradation in service quality. Liberty's audit scope did not include performing the management and operations reviews necessary to determine the efficiency and effectiveness with which ETG has delivered service. However, examination of a number of relevant trends gave no reason to suggest that ETG's baseline level of service delivery cost or effectiveness has changed materially as NUI found itself in increasing financial difficulty. Service-performance metrics, while limited, have not shown any sign of deterioration. Moreover, the rates of change in key areas of expenditure at ETG over the past several years are consistent with the experience of New Jersey's two other gas-only LDCs.

ETG was behind the utility industry in implementing the field-force automation and automated-meter-reading systems, but that is not surprising given ETG's small size. Liberty did not find that NUI unduly restricted ETG capital expenditures or that customers suffered bad service. ETG came in second in a recent JD Power survey of 15 residential gas utilities in the Eastern region.

NUI's senior management and board of directors paid less attention to ETG than it did to its new, often-troubled non-utility businesses. ETG is a mature operation that did not need as much operational attention from NUI. However, NUI's senior executives and directors failed to preserve the Company's access to capital at reasonable rates. Liberty found the failure of both groups to provide that attention to represent a major failure to meet good-utility practice and applicable standards of prudence. Chapters Four, Five, and Seven address this performance breakdown in detail.

I. Recommendations

Liberty's conclusions reflect fundamental weaknesses and important management and director failures in the planning and resource allocation area. However, the circumstances of NUI make recommendations inappropriate, for a number of reasons:

- The senior NUI executive managers responsible for the development and pursuit of the overly aggressive non-utility growth strategy have left the Company.
- NUI has abandoned non-utility growth plans.
- NUI's financial straits effectively preclude the use of any material level of resources for non-utility purposes.
- Changes in the composition of the NUI Utilities board of directors provide for much more effective oversight from the perspective of utility experience than was the case when the NUI board provided the only outside directors overseeing NUI Utilities' business. Chapter Seven of this report discusses governance changes in detail.
- Including NUI Utilities' directors in the meetings of the NUI board's special committee also provides an important source of real-time concern and focus on utility needs and the impacts of NUI actions on utility service. This change fills what Liberty observed to be a major gap in the prior operation of the NUI. board
- NUI has appointed a new CEO who has very significant gas LDC experience, which strengthens this enhanced "utility" perspective. It provides a new source of gas-LDC experience as a filter through which decisions at the NUI corporate level will be examined.
- NUI's direct influence over NUI Utilities' operations has otherwise been substantially diminished by the strengthening of utility executive structure, removal of gas supply from the control of a non-utility affiliate (NUI EB, which Chapter Six of this report addresses in detail), and the placement of a number of former shared services from NUI within NUI Utilities
- NUI should soon be sold. The BPU's approval of the sale will certainly consider the utility experience, the corporate governance structure, and the utility operations focus of any potential buyer.
- NUI has agreed to close and real-time monitoring by the BPU of its resource levels, both utility and non-utility, during the period prior to completion of the expected sale of the Company. This monitoring process includes the need for prior approval of any reduction in resources dedicated to utility operations and finance. This monitoring process also includes strong limitations on ETG payment of outside costs associated with any corporate activity not necessary and appropriate for utility operations.

These measures are sufficient to prevent the continuance or recurrence of the problems occasioned by the past actions of NUI executive management and its board of directors. Only should the sale process fail to reach fruition or be delayed would it be necessary to visit the need for changes to the NUI planning and resource allocation processes.

Chapter Three: General Affiliates Issues

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A. Background

NUI has acquired or developed a number of non-utility operations over a period of more than a decade. The pace of non-utility investment and operations growth has substantially increased since 1998. Most of the non-utility operations predate the BPU holding company order of February 2001. The failure of the non-utility ventures to perform to expectations would eventually bring NUI to crisis during the two years preceding this report. Before this time, NUI had generally reported significant and growing operating margins for its non-utility businesses. A closer examination, however, shows that:

- NUI Utilities operations and lines of credit served as the principal source of funding for the acquisition and development of non-utility operations
- Those margins did not come close to providing for a reasonable return on the capital NUI had committed to them
- NUI has not been rigorous in assuring that non-utility operations paid a full share of common overhead and support costs
- These non-utility operations have been engaged in activities or involved in agreements with affiliates under circumstances where NUI should have, but did not, make filings with the BPU as required by the holding company order.

Some NUI non-utility operations have focused on the energy business; others span a wide variety of non-energy operations. This chapter discusses general issues associated with transactions of these affiliates. It also addresses the history and issues associated with affiliates that have not focused on energy products and services. Chapter Six of this report addresses the details of the operations of NUI's energy-business affiliates.

B. General Affiliates Issues

1. Background

NUI provides corporate administrative functions, such as accounting, human resources, legal, and information technology to subsidiaries. The auditor that conducted the most recent ETG competitive-services audit found a number of shortcomings in NUI's cost allocation procedures. The two most significant problems were:

- Use of a general allocator to allocate the costs of shared corporate functions
- Lack of full allocation of costs from business units to departments.

The auditor in the competitive-services audit prior to that also raised similar concerns.

2. Use of a General Cost Allocator

NUI uses a three-factor formula to assign most of the costs incurred to provide shared overhead and support services. This factor consists of the equally weighted average of relative subsidiary labor, plant, and customers. The prior two competitive services auditors found it to be an unreliable and inappropriate method for assigning the costs of the services that a subsidiary actually consumed. Liberty's detailed examinations of NUI

subsidiaries and the challenges and needs that they have imposed support concerns about overuse of the three-part allocator and its impacts on costs borne by ETG.

No single general allocator is most appropriate. The concern is not how NUI structured the allocator, but that it substantially overused it. Accordingly, the fact that the BPU has previously addressed the allocator's structure is not material to Liberty's concern.

General allocators provide at best an indirect indicator of cost causation. NUI engaged in aggressive non-utility expansion efforts. It created a large, expensive administrative team to support those efforts. The substantial growth in headquarters staff and costs did not materially improve NUI Utilities' operations. Nevertheless, utility operations paid for the majority of the added support costs, because of the overuse of the three-part allocator.

NUI should have undertaken efforts to directly charge significantly more administrative and support costs to its non-utility operations. Doing so would have been consistent with the existence of the three-part allocator, its long-use at NUI, and any explicit or implicit BPU approval of the formula. There has been no BPU requirement for NUI to use the allocator almost exclusively, but it has done so to the exclusion of direct charging methods. To the contrary, good utility practice, even where such general allocators exist, favors more direct means of charging or allocating when use of a general allocator does not sufficiently correspond to cost causation. In addition, NUI did not revise its yearly allocation percentages to reflect material changes in operations during that year. The failure to do so allowed significant new or changed operations arising during the year to escape responsibility for their share of costs allocated by use of the three-part allocator.

In similar audits of New Jersey's electric utilities that Liberty conducted for the Board, Liberty set forth certain criteria that it uses to evaluate a company's cost charging methods. They remain valid here and they are especially pertinent, given the wide-ranging nature of NUI's non-utility operations, the significant resources that NUI added at the corporate level to support non-utility growth, and the difficulty that NUI has experienced in managing their performance. These criteria include:

- General allocators should not be used where they do not have a direct and significant relationship to the entities and factors that cause costs to be expended
- General allocators should be tailored to the cost causation factors
- Over-reliance on a single simplistic formula is not favored
- General allocators should not be used when where are reasonably efficient alternatives, such as direct charging, that would be demonstrably more effective in assuring that utility customers do not subsidize non-utility customers
- There should be adequate time reporting procedures to assure that costs directly attributable to a given affiliate are charged to that affiliate.

Overusing a general allocator for the majority of corporate services costs allows non-utility affiliates, which have significantly more variable operations requirements, to make more use of corporate services than is reflected in charges allocated to them.

Liberty made a similar finding in its audit for the Board regarding Orange & Rockland (O&R). Liberty was critical of an analogous method by which Consolidated Edison Company of New York (CECONY) billed costs for shared services to O&R and other utility affiliates using a three-factor formula. Unlike NUI, however, CECONY did not use a three-factor formula for charges to its non-utility subsidiaries. Instead, it used direct charges based on hourly rates including salaries, fringe benefits, office space and office supplies and expenses. Liberty did not find CECONY's methods to be optimum, but did observe that those methods made at least a substantial attempt to capture actual usage (in hours), of corporate services used by non-utility affiliates. CECONY also billed O&R for certain extraordinary items such as professional membership fees and software licenses directly; the allocated charges did not include charges of this type. Thus, CECONY/O&R did tie at least some charges directly to the affiliate incurring the cost.

Another company that Liberty audited, Conectiv, made greater use of direct charges for its shared corporate services than did CECONY. Conectiv's corporate-services subsidiary used direct charging for specific activities that it performed on behalf of Atlantic City Electric (ACE) and others. The company calculated these direct charges by applying standard rates (reflecting both direct and overhead costs). For those costs that it did not charge directly, Conectiv used a variety of allocation factors to apportion costs (such as number of employees, labor dollars, or O&M costs, depending upon the cost being allocated) to affiliates. Therefore, even where it relied upon allocators, it undertook greater efforts to design them to match the nature of the activities and costs involved.

3. Development of Cost Loaders

ETG's most recent competitive-services auditor also found that NUI did not fully allocate all the costs attributable to business units to the departments in those business units. NUI typically used costs at the department level as the basis for allocating most common costs. In many cases NUI failed to charge the true cost of the shared services to the benefiting business units. Liberty agrees with the competitive-services auditor that NUI's method for allocating corporate services has not reflected fully loaded costs, which makes the method unsuitable for preventing cross-subsidization.

4. Allocated Facilities Costs

The most recent competitive-service auditor also identified problems in NUI allocations for costs of buildings that it owns and leases. A more significant problem identified was NUI's lease of the Union building. The lessor group included the Chairman of the NUI Board of Directors. The NUI Chairman did not participate in lease negotiations. In 2000, NUI extended by 15 years the term of the lease for the Union, NJ building where ETG's principal offices are located. The change reduced the rental rate and gave the lessee control over operating expenses, but required the lessee to increase its leased space to 100 percent of the building. This change increased the amount rented from 160,000 to 200,000 square feet. Annual costs to NUI in total fell by about $660,000 per year, and the reduction could reach $1.1 million if lessee(s) can be found for now-vacant space.

The most recent competitive-service auditor concluded that NUI spends approximately $2.3 million more per year for the Union facility than it would if it had limited its rental cost to the space it can effectively use (approximately 77,000 square feet) at market rates (the price NUI currently charges to third-party tenants). The auditor's first concern was that NUI paid considerably more per square foot for the space it assigns to its own units versus what it has been able to charge other tenants. The auditor's second concern was that NUI had too much space at the Union building for the number its employees based there. The auditor noted that NUI was effectively providing at Union nearly twice the square footage per employee that it provides at other facilities.

The most recent competitive-service auditor also noted that NUI could not support allocations of office space to itself and its other business units; namely ETG, UBS, NUI Ventures, and NUI Environmental. The auditor found that the office space actually being used by UBS was roughly twice what it had been assigned and charged during 2002.

Liberty conducted an examination of lease renegotiation and charges to NUI Utilities and to ETG for occupancy at the Union Plaza building at 1085 Morris Avenue. This space provides the principal location of NUI Utilities personnel serving ETG needs. ETG signed an August 17, 1987, 20-year lease for approximately 160,000 gross rentable square feet out of 200,000 in a building to be constructed. Liberty Hall Joint Ventures (LHJVGP), a New Jersey general partnership, would construct, lease, and manage the building. The Company sought Board approval of the lease in 1987 in BPU Docket No. G087081011. The Board determined that no approval was required.

LHJVGP consisted of Cali Liberty Hall Associates, a general partnership, and Enjay Realty, LLC. A Kean family trust entered a 1987 joint venture with the Cali Organization, a commercial developer. The trust contributed land in exchange for a half interest in the venture. Cali constructed, managed, and leased the property. NUI's current chairman inherited the family trust interest in the trust, and then placed it into Enjay.

By early 2000, NUI was well into its plans for significant expansion into non-utility businesses. NUI's overall employee base had grown significantly as a result. NUI had placed many of its non-utility personnel and an expanded NUI staff at a corporate headquarters location building in the Bedminster area. NUI Utilities has paid substantial amounts for space there as well, in the form of loaders on the costs of the executive and A&G personnel who conduct business at this other location.

ETG completed renegotiating the original Union lease in April 2000. The primary term had seven years left. The parties to this agreement were Liberty Hall Joint Ventures, LLC (LHJVLLP) and NUI. LHJVGP, the lessor under the original lease, conveyed its interest in the premises and in the 1987 lease to LHJVLLC under the new lease. NUI was the successor by merger to ETG, which now operated as an NUI operating division. The original lease that ETG signed in 1987 supported construction of the building. ETG became NUI Corporation, which in turn became NUI Utilities. The current lessee is NUI Utilities. The lease has never been amended to reflect the change in name to NUI.

The primary term of the renegotiated lease runs for 22 years. This term extended NUI obligations by 15 years. The lengthened lease also provides for two, 10-year extensions. NUI Utilities took over lease responsibility for the entire 200,000 square feet of the Union building, making it responsible for carrying vacant space above the original 160,000 square feet leased, but also giving it the benefit of any rental income derived from third-party lessees. With the renegotiation of the lease, the Cali interests no longer managed the building; NUI contracted with GVA Williams to serve as building manager.

The Company has stated that Cali Liberty Hall Associates conducted all negotiations for the lessor; Enjay, in which the NUI chairman had an interest, took no role. NUI told Liberty that the arms'-length nature of the relationship between lessor and lessee, despite the interest of the chairman, is further demonstrated by the existence of a contractual dispute, subject to binding arbitration, between the original lessor, LHJV, and NUI Utilities. The lessor has made a claim of about $100,000 dating to the time of the renegotiation; NUI has counterclaimed, seeking damages of approximately $1 million.

The renegotiated lease reflected give and take between the lessor and the lessee. Each gained a number of advantages:

- Lessor advantages
  - Extended term by 15 years (2007 to 2022)
  - Transfer of property management responsibility to the lessee
  - Increased lessee space obligation to 100%; removed risk of vacancy
- Lessee advantages
  - Control over O&M costs: the original lease made the lessee responsible for 80 percent of the operating costs of the building while having no control over the level of those costs; by leasing the entire building, NUI became responsible for the building management costs
  - Decreased rental rate: the rent was renegotiated to $15.95/sq. ft. annually, compared to 20.33 under old lease
  - Decreased escalator: the escalation factor under the new lease dropped from 13 percent every five years to 7 percent
  - Right to the proceeds of rent from other lessees.

The Company provided Liberty with a summary of its actual annualized costs for 2000, and an approximation of costs for 2002. This summary used projected rental income for 2002 to show a net annual savings of $1.1 million. A forward projection of the cost differential between the two leases for six years goes through fiscal 2008, which is the end of the original lease's term.

The Company's analysis across this period shows a total savings of $3.95 million, or approximately $659,000 per year. This projection does not include rental income for 13,500 square feet currently available for lease on the second floor. Renting the 13,500 square feet, which were vacant at the time of this report, at an approximate market rate of $27/sq. ft. would the produce added income of $364,500.

On the other hand, as the following table demonstrates, the lessor will receive approximately $80 million dollars without taking any risk of rental income uncertainty.

Table III.1. Lease Costs under Renegotiated Lease

Years	Rate/Yr.	Sq. Ft.	Years	Annual	Extension
2000-2005	$ 15.95	200,000	5	$ 3,190,000	$ 15,950,000
2006-2010	$ 17.07	200,000	5	$ 3,414,000	$ 17,070,000
2011-2015	$ 18.26	200,000	5	$ 3,652,000	$ 18,260,000
2016-2020	$ 19.54	200,000	5	$ 3,908,000	$ 19,540,000
2021-2022	$ 20.91	200,000	2	$ 4,182,000	$ 8,364,000
Totals			22		$ 79,184,000

The most recent competitive services auditor found that the cost per square foot charged to NUI affiliates in the Union Building was approximately $45. The Company argued that it is only paying $30 per square foot. Liberty believes that the auditor correctly calculated the rental, by dividing the net costs of the building (lease, maintenance, utilities, less rents collected from third parties in the amount of $3,485,223) by the square footage used by NUI entities (77,619). This method produces a result of $44.90. The difference in the two rates results predominantly from the fact that all excess and unoccupied space Union Building costs have been charged to NUI entities.

The allocation procedure for fiscal 2003 for the Union Building costs differed from the 2002 procedure. NUI entities have been charged a base rent of $28/sq. ft., which is then grossed up by 20 percent to account for common area space. This method produces a loaded rental rate of $33.60/sq. ft. The $28/sq. ft. figure includes the lease rate of approximately $16/sq. ft. and approximate building management costs of $12/sq. ft. The Company instituted the change to a market rate charge to reflect the ability of business units or departments to leave the building if they chose to seek better rates. NUI initially retains the actual costs of the building, less rents collected from all tenants from affiliates and from third parties.

This amount, approximately $800,000-$1,000,000, then gets allocated as a headquarters operating expense by Corporate to all NUI business units under the three-factor allocation method. About 60 percent of the costs get allocated to ETG this way, which produces a cost to this utility division of $477,000-$596,000. Corporate also allocates space costs for shared services (at the $33.60 rate). The following table compares budgeted allocations by entity for fiscal 2002 and 2003.

Table III.2. Direct and Allocated Space Costs – Union Building

Department	2002 Sq. Ft.	2002 Rent @ $44.90/sq ft	Unit	2003 Sq. Ft.	2003 Rent @ $33.60/sq ft	Unit
Shared Svc & Unoccupied	54,794	$ 2,460,251	NUI HQ	55,244	$ 1,856,198	NUIHQ
Accounting - Distribution	2,025	$ 90,923	ETG	675	$ 22,680	ETG
Accounting - Ta (sic)				675	$ 22,680	NUIHQ
Gas Control	2,250	$ 101,025	ETG	2,250	$ 75,600	ETG
Credit & Collection	900	$ 40,410	ETG	900	$ 30,240	ETG
Customer Care	1,575	$ 70,718	ETG	1,575	$ 52,920	ETG
Cash Processing	2,500	$ 112,250	ETG	2,500	$ 84,000	UBS
Executive E-town	1,000	$ 44,900	ETG	1,000	$ 33,600	ETG
Revenue Dept	1,575	$ 70,718	ETG	1,800	$ 60,480	ETG
IT - Jerry O's group				500	$ 16,800	NUIHQ
UBS - 4th Floor	8,250	$ 370,425	UBS	7,750	$ 260,400	UBS
NUI Ventures	1,375	$ 61,738	Ventures	1,375	$ 46,200	Ventures
NUI Environmental	1,375	$ 61,738	Environ	1,375	$ 46,200	Environ
Total NUI Space	77,619	$ 3,485,093		77,619	$ 2,607,998	
Total NUI HQ*	54,794	$ 2,460,251		56,419	$ 1,895,678	
Total ETG	11,825	$ 530,943		8,200	$ 275,520	
Total UBS	8,250	$ 370,425		10,250	$ 344,400	
Additonal alloc to ETG**						
Shared Svc & Unnocupied		$ 1,299,012			$ 1,078,641	
Excess Building Costs		$ -			$ 523,000	
Total		$ 1,299,012			$ 1,601,641	
Total ETG		$ 1,829,955			$ 1,877,161	
*Allocated to business units by 3-factor						
**Estimated by Liberty						

The direct allocation to ETG for 2003 amounted to about half the 2002 allocation. The reduction came from the decreased rental rate and the corrections in the physical allocation of space. For example, note that NUI charged 2,500 square feet for the Cash Processing department, a UBS function, to ETG in 2002, but made a correction to charge it to UBS in 2003. NUI also made a change in space allocated to distribution accounting, from 2,025 sq. ft. in 2002 to 675 sq. ft. in 2003. The corrections in the space assignments of these two departments alone, if taken back to fiscal 2002, would have decreased ETG's facility costs by over $170,000.

Despite these reductions, however, the total estimated 2003 amount charged to ETG varied only slightly from 2002's level. This lack of substantial net change occurred because NUI allocated out the costs that it had been including in the affiliates' Union building space costs before it changed the rental basis for 2003. NUI's allocation of excess building costs to the utility requires NUI's utility operations to bear responsibility for the Corporation's inability to rent out space to others. The following table shows the NUI calculation for space allocations in the Union Building.

Table III.3. NUI Space Allocation – Union

NUI Square Footage Allocations		Defined NUI Space	Sq. Ft.
		Accounting - Distribution	675
Floor 1	63,710	Accounting - Ta	675
Floors 2-5	160,000	Gas Control	2,250
Total	223,710	Credit & Collection	900
NUI Shared Conference Space	(20,000)	Customer Care	1,575
Leased	(77,381)	Cash Processing	2,500
Common area 1st Fl.	(48,710)	Executive E-town	1,000
NUI Space	77,619	Revenue Dept	1,800
NUI Defined Areas	(22,375)	IT - Jerry O's group	500
Shared Services and Unoccupied	55,244	UBS - 4th Floor	7,750
		NUI Ventures	1,375
		NUI Environmental	1,375
		Total	22,375

The preceding table shows that NUI considers 77,619 square feet of the Union Building space to be assigned. However, the next table supports Liberty's opinion that the actual number is in the range of 57,000 square feet. Liberty determined this amount by an examination of the building and an estimation of square footage.

Table III.4. Liberty Estimate of NUI Square Footage - Union

	Sq. Ft.	Common Area*		Remaining	Used by NUI	NUI Units
Floor 1	63,710	48,710	per LC 514	15,000	15,000	ETG, NUI, UBS
Floor 2 E	20,000	2,000	10%	18,000	18,000	ETG, NUI, NUIU, UBS
Floor 2 W	20,000	2,000	10%	18,000	none	(See Note 2)
Floor 3 E	20,000	See Note 1				
Floor 3 W	20,000	See Note 1				
Floor 4 E	20,000	See Note 1				
Floor 4 W	20,000	See Note 1				
Floor 5 E	20,000	2,000	10%	18,000	18,000	NUI, NUIU
Floor 5 W	20,000	2,000	10%	18,000	6,000	UBS(OAS) (Note 3)
	223,710			87,000	57,000	

*Includes stairwells, hallways, elevator area, restrooms, etc.
Note 1: Fully leased to 3rd party
Note 2: 3100 sq. ft leased to third party; available space
Note 3: 12,000 sq. ft. leased to various third parties
Floor 1 E: NUI Utilities, IT Group, Conf Rm B, Large AV Conf Rm
1 W: UBS Cash Processing and Bill Printing, Data Processing Distribution
2 E: Gas Control, Payroll, Utility IT, Purchasing & A/P, UBS Billing Group
5 E: NUIU Executive Offices, including Legal Conf Rm, Law Library, Board Rm, Offices
5 W: OAS Group of UBS

The preceding table shows that a more appropriate space allocation for NUI in the Union Building is 20,000 square feet less than the amount currently charged/allocated. This reduction reduces direct and allocated expenses by $672,000. The next table shows that

recalculating the table using 57,000 square feet as NUI's total share and eliminating excess building costs produces savings to ETG of some $900,000.

Table III.5. Recalculated Direct and Allocated Space Costs – Union Building

Department	2003 Sq. Ft.	2003 Rent @ $33.60/sq ft	Unit	
Other Shared Service	34,625	$ 1,163,400	NUIHQ	
Accounting - Distribution	675	$ 22,680	ETG	
Accounting - Ta (sic)	675	$ 22,680	NUIHQ	
Gas Control	2,250	$ 75,600	ETG	
Credit & Collection	900	$ 30,240	ETG	
Customer Care	1,575	$ 52,920	ETG	
Cash Processing	2,500	$ 84,000	UBS	
Executive E-town	1,000	$ 33,600	ETG	
Revenue Dept	1,800	$ 60,480	ETG	
IT - Jerry O's group	500	$ 16,800	NUIHQ	
UBS - 4th Floor	7,750	$ 260,400	UBS	
NUI Ventures	1,375	$ 46,200	Ventures	
NUI Environmental	1,375	$ 46,200	Environ	
Total NUI Space	57,000	$ 1,915,200		
				From Table 2
Total NUI HQ*	35,800	$ 1,202,880		$ 1,895,678
Total ETG	8,200	$ 275,520		$ 275,520
*Allocated to business units by 3-factor				
Additonal alloc to ETG**				
Shared Svc & Unnocupied		$ 684,439		$ 1,078,641
Excess Building Costs		$ -		$ 523,000
Total		$ 684,439		$ 1,601,641
Total ETG		$ 959,959		$ 1,877,161
Cost Difference from current method (Table 2)		$ (917,202)		
**Estimated by Liberty				

5. Conclusions

Conclusion III-1. NUI failed over the past years to capture adequately and allocate fully the costs that its non-utility operations have imposed, which has resulted in the allocation of excess costs to ETG.

Overuse of the general allocator allowed non-utility growth to come at the expense of utility operations. New businesses impose special needs even with smooth development. NUI's non-utility experience has not been so. Its ventures experienced significant problems. Liberty's audit disclosed no circumstances at ETG that caused a significant expansion in the corporate-level work necessary to support its operations. ETG has operated in a reasonably steady state across the past several years.

NUI should have undertaken significantly greater efforts to assign and allocate costs through more direct means. This approach would have limited the use of the three-part allocator to a narrower and more appropriate range of costs.

Non-utility operations imposed incrementally greater new requirements. They also increased the base across which NUI could spread corporate costs. Therefore, the growth in total costs was mitigated by the reduction in the percentage of those costs that ETG was required to bear. It is difficult to measure the net effect of the increase in total costs versus the reduction in ETG's percentage. Accordingly, Liberty did not generally conclude that ETG's last base rate filing relied upon unrepresentative information. There is one notable exception, however. It is clear that the recent retrenchment in non-utility activities increases the percentage of total corporate costs that ETG must bear. It is not appropriate for utility costs to be so directly tied to changes in the size and nature of non-utility operations and support needs. Increasing the use of more direct assignment and allocation methods would provide for the delinking that is necessary.

The exception to Liberty's finding of no impact to customers arises from the fact that, once set at the beginning of the fiscal year, NUI's allocation percentages do not adjust to account for significant operations changes during the year. As Liberty describes in following discussions of the operations of specific non-utility affiliates, this failure to adjust has caused customers to bear significant additional costs in base rates.

Conclusion III-2. As its competitive services auditor found, Liberty concluded that NUI paid insufficient attention to developing proper overhead rates for its charges among affiliates.

As part of its prior affiliate audits of New Jersey electric companies, Liberty expressed specific criteria for overhead pools:

- Overhead pools should add only costs associated with the underlying direct costs
- Where different activities required different types or levels of support activity, distinct pools or percentages of the same pools should be developed
- Overhead rates should be uniformly and consistently applied to all activities to which they logically apply
- Sound documentation should exist to support the calculation of all overhead rates.

Conclusion III-3. ETG has borne responsibility for substantial rental costs that should be allocated to non-utility operations; this burden will grow.

NUI Utilities and ETG have not had growing space requirements; NUI's expansion into non-utility operations has caused the need for added office space. That expansion directly produced a number of additional subsidiary employees, many of whom have been housed at Bedminster. The recent collapse or sale of NUI non-utility businesses has caused significant additional space to be rendered excess.

Non-utility expansion efforts indirectly produced an enlarged NUI staff. Most work at Bedminster. Many added personnel have left the Company in recent months. If substantial lengthening of the Union facility lease, even at reduced annual costs, was prudent, it clearly had to be justified by an expectation of long-term maintenance and even growth of direct non-utility employees and indirect support of them. It is not reasonable to assign to NUI Utilities and to ETG rental costs that should be properly attributed to space needs associated with non-utility operations. It is also not reasonable to require remaining NUI entities, of which utility operations form an ever-increasing share, to bear the consequences of reductions in non-utility activities.

NUI charges already include costs of occupying the Bedminster facility; utility operations should not also bear costs for empty Union space. With non-utility operations and NUI support resources contracted significantly, the situation worsened.

Renegotiating the Union Building lease and leasing additional space at Bedminster to house many NUI personnel in another facility created risks that are not appropriate for assignment to utility customers. Yet that is the effect of NUI's approach, which is to transfer to remaining operations the costs that departing or shrinking ones no longer bear.

The Company considered excess and unoccupied space as legitimate to maintain headquarters office space. Such expense should not include placing commercial real estate venture risks on utility customers. NUI also justified allocating excess space because any needed relocation to Union could be made quickly. Banking space this way is not consistent with good practice. The real issue is that the combination of new space at Bedminster and a decline in employment directly and indirectly associated with non-utility operations have caused excess space and will cause the situation to worsen.

The Bedminster space occupied by NUI entities has increased – coincidentally – by exactly the amount of space previously allotted to the now-discontinued TIC subsidiary. Lease costs associated with a failed unregulated subsidiary should be borne by shareholders, and those costs have no place in an allocation that will impact ETG ratepayers. Similarly, if the space allotted to NUI Energy and Telecom is abandoned, those costs should not be allocated to utility operations. In the Union Building, a similar situation would apply with the sale or discontinuance of UBS, Ventures, and Environmental.

NUI sublet almost 20,000 square feet in the Bedminster Building through December 2002. It did not include the rental income in the 2003 budget. NUI charged the space to shared services. The costs thus were allocated to affiliates. At an average rate of $30.23 per square foot, the shared services allocation increased by about $600,000 because of the failure to successfully replace the lost rent in the allocation calculations.

6. Recommendations

Recommendation III-1. Confirm that continued overuse of general allocators and the failure to calculate proper overhead rates are not acceptable following the sale of NUI.

Liberty believes that direct charges to affiliates, both utility and non-utility should be maximized, except where the costs of doing would exceed the benefits to be gained. Properly capturing employee time spent providing services to affiliates is essential for moving toward a higher percentage of direct, rather than allocated, charges. NUI has not taken material action to respond to similar conclusions by its recent competitive services auditors. NUI has downplayed the benefits of capturing actual usage of corporate services. NUI should undertake significant changes to correct this deficiency. NUI should also be using overhead rates that meet appropriate criteria.

These two changes will take significant effort. The pending sale of NUI undermines the value of making this change in the short term. There is not likely to be sufficient time to recoup the costs involved. Moreover, the eventual purchaser will have its own methods, which, if they meet the applicable criteria, will moot the need for change. However, it should be clear that in the post-sale environment, that an adequate time recording system supporting direct-charging and allocation methods will be required.

Recommendation III-2. Require NUI to return to customers excess real estate costs for the first year that new base rates were in effect.

NUI changed in 2003 to a market-based rate for affiliate space occupation (including NUI Utilities) in the Union building. The building also contained vacant space and space occupied by third-party lessees. NUI allocated to affiliates (again including NUI Utilities) the total costs for portions of the building not occupied by affiliates, net of the rentals received from third parties. The net result is that affiliates, including NUI Utilities, pay a market rate for the space they do occupy and, on top of that, a share of NUI's unrecovered costs for the remaining building space, which they do not occupy.

The charges to ETG beyond those attributable to the space it occupies are in the range of $500,000per year, as Liberty calculated them. The recent competitive services auditor reached a somewhat higher amount of excess costs; both its method and Liberty's provide fair approximations of excess annual costs historically incurred.

C. Utility Business Services, Inc. (1987)

Utility Business Services, Inc. (UBS) provides print and mail services (billing), payment processing, use of a propriety customer information system (WINS CIS), and data center services for utilities. Water and wastewater utilities comprise the largest UBS customer segment. UBS has also performed billing and payment processing for NUI Utilities' ETG, CGF, and Elkton operations. Operations Applications and Services (OAS), a unit that has been part of UBS, performs geographical mapping and tracking of utility distribution property. OAS classifies its services as database maintenance processing,

system modeling, operations support, electronic information access (through their FieldBook application) and conversion and map construction. NUI announced in July of 2003 that it would begin to market UBS for sale. NUI planned, however, to retain the OAS business unit. At the time of this report, NUI was in final negotiations for a sale of UBS. The OAS business unit returned to NUI Utilities, which decided to limit third-party offerings to utilities already purchasing services.

1. UBS Background

UBS arose from an entity called Computil, which NUI began in 1969. Computil had existed as an entity separate from the utility. Its primary work was to track and bill for parking violations for municipalities. NUI sold Computil in 1987, but retained the billing-services business line, which it operated under UBS. This subsidiary had approximately 10 employees by 1995. UBNS was then providing customer-information system (CIS) services to water and wastewater utilities. UBS had developed its own proprietary system, known as WINS CIS, to support this business. UBS did not provide any services to ETG at that time. UBS used the NUI/ETG mainframe computer and billing/inserting equipment for its operations, under an agreement with ETG.

The ETG CIS is a customer service support system (CSS). The ETG CSS was separate from UBS's WINS. The ETG CSS has always been a utility asset and the Corporate IT group has supported its operation. NUI began to investigate a new utility CSS in 1998. The option pursued was to modify the UBS water utility system, the WINS CIS system, to enable it to replace the existing ETG CSS. To expedite this process, NUI decided to consolidate all utility billing activity under UBS, in anticipation of its development, implementation, and operations of a new CSS for ETG. UBS therefore took over utility bill production in 1998. Two other small NUI utility companies, Valley Cities and North Carolina, did not use CSS. Their low functionality requirements made it fairly easy to migrate them to the existing UBS WINS CIS. Under this arrangement, NUI Utilities was responsible for paying UBS costs for developing a CIS that would meet gas utility needs.

When UBS took over the utility bill production, a group of employees from Corporate IT transferred with the utility billing function to UBS in October 1998. This employee group, classified as UBS RC (responsibility center) 644, continued, as they had when they were part of NUI Corporate IT, to have responsibility for application support of the ETG, CGF, and Elkton CSS. UBS had been using NUI Corporate IT equipment for its operations for a number of years before it took over the CSS support function (the RC 644 personnel) in 1998. UBS paid for the use of that equipment through a facilities management fee under a contractual agreement. It stopped paying that fee when UBS took over the utilities' billing functions and the RC 644 group came to UBS, even though UBS continued to use the corporate equipment (computer and inserting/mailing equipment) for both affiliate and non-affiliate client work.

The head of UBS initially described the equipment-related issue as an asset transfer to UBS. Liberty asked for transfer documentation. NUI provided mutually inconsistent explanations; *i.e.*, that there was no transfer of ownership, but only of day-to-day use, and that the equipment was fully depreciated and had no economic value. NUI did not

provide any historical documentation evidencing transfer of any of the assets involved. At the time of the transfer of the IT group, NUI's mainframe computer required additional investment in order to become Y2K compliant and to remain functional. UBS bore the additional costs of these upgrades; these costs are reflected on UBS's books.

Work began on the modification of WINS CIS for gas utility use in 1998. The transferred group (RC 644) continued performing CSS application support, but did not work on the WINS CIS conversion project. The conversion work was not covered by a written contract between the utility and UBS. The parties therefore executed no written agreement to cover this development work or to address who would own the rights to market it to third parties, should development prove successful.

The UBS work on converting WINS CIS for gas use consisted of business analysis, functional matching, identifying functionality gaps, preliminary database modification design, and preliminary design on new functionality. UBS charges to NUI Utilities for the conversion work came through journal entries for the last six months of fiscal 1999 and the first two months of 2000. For the remaining ten months of fiscal 2000, UBS issued invoices to NUI Utilities. UBS charged NUI Utilities for this project phase by applying a flat unit rate to each utility CSS account. The three NUI utilities involved (ETG, Elkton and CGF) had a total of approximately 340,500 accounts among them at the time. NUI Utilities expensed all of these costs. UBS indicated that the business analysis performed as part of the conversion project should significantly reduce the resources required as part of any subsequent effort by NUI Utilities to replace its CSS.

The UBS group classified as RC 636 performed development work to convert WINS to gas use. This unit continues to function under UBS. A decision that the conversion effort would not be successful occurred around July 2001. UBS transferred CSS support employees (RC 644) back to NUI Corporate IT in August 2001. These employees have since operated as part of an NUI Utilities programming unit. They provide programming support for NUI Utilities' CSS and other systems, including Field Services System, Field Force Automation, Work Order Management, Degree Days, Time Entry for Union and Hourly Employees, Leak Management, Meter Management, and FieldSheets.

At the end of 1999, NUI reportedly retired the corporate processing and receipt equipment UBS had been using and for which it paid a fee until the transfer of RC 644 to UBS in 1998. Y2K concerns provided the primary reason for retirement. UBS purchased new equipment, which appears on an Asset List provided to Liberty. Additional, significant assets for RC 641 were acquired in 2000. According to UBS, it retired the NUI mainframe and purchased a replacement in August 2000. NUI could not identify the replacement assets from a UBS asset list that it presented during an interview. A recently provided document offers a conservatively high estimate for the remaining value of the equipment of about $200,000 as of the transfer date.

The UBS server now hosts NUI Utilities' CSS, and UBS prints and mails NUI Utilities customer bills with equipment that UBS acquired. These assets serve affiliated and non-

affiliated CSS and WINS CIS customers. NUI uses a Unix-based server hosting PeopleSoft; it does not have the capability to support the existing NUI Utilities CSS.

2. OAS Background

The group that formed OAS was part of NUI Utilities' engineering group, until certain resources were transferred to UBS in July 1998. From an operating standpoint, UBS and OAS both operated under NUI Ventures. UBS, however, later moved out from Ventures into a direct reporting relationship to NUI Capital, while OAS remained under Ventures.

Utility-specific engineering resources (*e.g.*, field engineering, design engineering, and standards) remained with the utility. However, the geographic information system (GIS) and facilities-mapping group moved to UBS, which classified them under RC 648, where all OAS costs are collected. The goal of the move was to promote greater efficiency at NUI and to develop a third-party market for products and services by developing technology, increasing economies of scale, and developing a business plan to support them. This change meant that what had been performed strictly as a utility function was now being performed by personnel who served the utility and who were seeking third-party customers for similar services or systems.

ETG had already converted many of its maps to computer files before the engineering group moved to UBS. The OAS unit thereafter updated and maintained those files for NUI Utilities. FieldBook, a viewing tool for gas-related physical assets, had been in use by NUI Utilities since the late 1990s in a rudimentary form. OAS has continued to upgrade and incorporate improved functionality into the program. OAS secured the first subscription sale of FieldBook to an outside client in July 2001.

OAS will not be part of the sale of UBS. NUI filed incorporation papers for a new entity, OAS Group, Inc. in July 2003. The current OAS group did not move to that entity, but continued for a time to operate functionally as a department of UBS. NUI since decided to return it to NUI Utilities and to cease offering services to new, third-party customers.

3. UBS Customer Base and Revenues

UBS has offered four services in various combinations to its clients. They include:

- Use of WINS CIS
- Data Center Services
- Print/Mail Services
- Payment Processing

The following table details services provided to affiliates and to third parties.

Table III.6. UBS Client Services

Customer	A: Wins CIS	B: Data Services	C: Print/ Mail	D:Paymnt Processing
ETG		X	X	X
CGF		X	X	X
Elkton		X	X	
NUI Energy		X	X	X
NUI Telecom				X
3rd Party Group A	X	X	X	X
3rd Party Group B	X	X	X	
3rd Party Group C			X	X
3rd Party Group D			X	

The UBS budget expected slightly more than half of its revenues and costs of sales from affiliated clients in fiscal 2003. In a different response, UBS indicated that affiliate revenues have declined from 58% of total revenue in 2000, to 56% in 2001, 45% in 2002 and 35% in 2003 (YTD through June 30).

4. OAS Customer Base and Revenues

The following table shows services that OAS offers to affiliates and third parties.

Table III.7. OAS Client Services

Service	ETG	NUI Utilities	3rd Party
Database Maintenance Processing	X	X	X
Database Management	X		X
FieldCard Correction	X		X
FieldCard Data Entry	X		X
Update Plate Maps	X	X	X
Update Corrosion Grids	X	X	X
Update Network Analysis Model	X	X	X
Updating of Manuals in FieldBook	X		
Daily Updating of Meter Routing	X		
Maintenance & Updating of WinDOT Program	X	X	
Meter Routing (New Accounts)	X		
Calibrate Network Analysis Model	X	X	X
System Modeling			
Network Analysis – New Business	X	X	
Network Analysis – System Improvements	X	X	
Network Analysis – Emergency	X	X	
Network Analysis – Pit Replacement Study	X	X	
Network Analysis – Low Pressure Studies	X	X	
Operations Support			
Print Plate Map Books (printing cost extra)	X	X	X
Facility Record Reporting	X	X	X
Database Queries and Reporting	X	X	X
System Wall Maps	X	X	X
Cast Iron Books	X	X	X
Drip Books	X		
ROW Clearing Map	X		
MAOP Maps	X	X	X
Transmission Line Drawings	X	X	X
Curtailment Plan	X	X	X
Sectionalization Plan	X	X	X
Distribution Valve Plan	X	X	X
USDOT Annual Report Preparation	X		
Facility data for NJBPU Annual Report	X		
Preparation of Monthly Division Reports	X		
Preparation of Plant Asset File	X		
Custom Facility Related Reports	X	X	X
Field Force Automation Project	X		
NPMS Transmission Line Submission	X	X	X
Pipeline Integrity Mgmt HCA Calculation	X	X	X
FieldBook – Valve Inspection System	X		
FieldBook – FieldSheets System	X		
Electronic Information Access			
FieldBook – FieldCards	X		X
FieldBook – Maps	X	X	X
FieldBook – Model	X	X	X
FieldBook – Manuals	X		
FieldBook – Drip Pumpage	X		
FieldBook – Outage Management	X	X	X
FieldBook – Construction Drawings	X		X
FieldBook – Daily Valve Section Calculation	X	X	X
FieldBook – Daily Network Model Calculation	X	X	X
FieldBook – Easement Index	X		X
Conversion and Map Construction			
MAP Conversion			X
Database Construction			X
Network Model Construction			X

OAS has had a limited customer base of gas, electric and water utilities, apart from NUI Utilities. That base has produced revenue growth, however. For fiscal years 1999-2002, the percentage of total revenues from affiliates declined steadily from over 80 percent to

around 50 percent. During that same period, revenues from affiliates increased by approximately 50 percent. OAS charged approximately 57 percent of all time (hours) to NUI affiliates in fiscal 2002.

OAS used a cost- based billing model for all its customers; it marks up costs to reflect indirect costs, overheads and profit. As an application service provider (ASP), OAS charged its clients for the WINS FieldBook Viewer subscription, as well as for data storage/backup/disaster recovery services, and for use of additional modules. OAS has not charged NUI Utilities for the use of the base WINS FieldBook application or for any additional modules that NUI Utilities used.

The bulk of OAS third-party revenue comes from map and data conversion and network model building. Revenues from affiliates come from special projects, such as field force automation, meter rerouting, and from the services listed in the preceding table listing OAS offerings. OAS has performed three special projects for affiliates: development of the FieldSheets module, development of the Meter Reroute module, and Field Force Automation. Utility personnel say that the utility bid out the last two projects, but could not find the bid documents to verify that statement.

5. Employees

UBS had approximately 10 employees in 1995. The acquisition of the printing/mailing and payment processing functions from NUI Utilities caused those numbers to increase rapidly. Liberty requested information on employee headcount for five years, but was provided only the years 2001 – 2003, which excludes the period during which UBS housed utility CSS support and WINS CIS conversion for NUI Utilities use. These three years show a declining headcount. OAS figures also indicate a declining headcount for the three years provided. The following table summarizes the available information.

Table III.8. UBS and OAS Employees

	1995	1998	1999	2000	2001	2002	2003
UBS	10	23	n/a	n/a	46	42	40
OAS	n/a	11	11	15	16	16	13
Total		34			62	58	53

The creation of OAS with utility engineering staff also meant the transfer to a contractor of a significant portion of the utility engineering function. At its inception, OAS charged 100 percent of its staff costs to NUI Utilities. By fiscal 2002, it charged 10.25 of 16 employees (64 percent) to NUI Utilities. The amount charged to Utilities for fiscal 2003 and 2004 declined to 42 percent. Transfer of control of an important utility engineering function to a contractor created risk and it also produced a transfer of significant intellectual capital and skills from Utilities to OAS. NUI Utilities received no compensation for either. It is true that OAS has not charged ETG for use of the FieldBook system; however, NUI Utilities originally developed it at utility expense.

6. Transactions with Affiliates

UBS and OAS have gained substantial portions of their revenues from affiliates. UBS also bears an allocation of corporate costs. NUI and NUI Utilities have provided assets to OAS (in the form of employees with marketable skill sets and the core of a system that OAS has sold to third parties) and to UBS (employees and equipment), which have allowed these two businesses to begin or develop non-utility businesses.

Liberty requested annual summaries of transactions among all affiliates for the last five years. The response, at least with regard to UBS/OAS, was not complete. For example, the Company classified all intercompany sales from UBS to affiliates as billing/printing services for fiscal 2000-2003. The Company classified all intercompany sales for fiscal 1999 as programming services. The following discussion clearly shows that UBS and OAS provided significant other services.

All responses from UBS and NUI to data requests state that there have been no transfers of assets to or from UBS since 1995. UBS management characterizes the use of utility-owned computer hardware and bill print/insert/mail equipment by UBS for its operations as taking over the day-to-day use of an asset that had been fully depreciated and had no economic value. There is no record of any form of transfer to UBS of ownership or use of those assets. Before the transfer, whatever its nature, UBS had previously paid for the use of those assets as part of an annual facilities management fee of $900,000.

UBS has borne substantial corporate allocations, which the following table summarizes. UBS allocations include amounts for OAS.

Table III.9. Summary of NU Corp. and Utilities Charges to UBS

Item	2000	2001	2002	2003*
Corp Acctg Alloc	$54,553	$75,281	$100,491	$72,433
Corp AP Alloc		$10,296	$8,205	$5,240
Corp Corp Develop Alloc		$5,818	$10,386	$4,636
Corp Corp Secy Alloc		$16,077	$23,437	$13,737
Corp Deprec Alloc		$55,514	$67,431	$63,927
Corp Exec & Other Alloc	$156,353			
Corp Exec Alloc		$41,648	$46,346	$31,666
Corp General Taxes Alloc		$27,472		
Corp HRD/Benefits Alloc	$612,735	$421,467	$431,016	$743,825
Corp Insurance Alloc	$9,048	$11,296	$8,725	$40,637
Corp Internal Audit Alloc		$6,750		
Corp Investor Relats Alloc		$14,640	$10,842	$12,365
Corp IT Alloc	$90,001	$390,607	$200,426	$134,748
Corp Legal Alloc	$20,398	$31,265	$36,473	$46,873
Corp Mktg Admin Alloc			$13,660	
Corp Public Affairs Alloc		$12,166	$13,939	$7,656
Corp Purchasing Alloc			$13,031	$7,411
Corp Real Estate Alloc	$580,315	$766,085	$ 439,280	$322,415
Corp STD Interest Exp Alloc	$122,099	$229,620	$ 176,508	$107,185
Corp Treasury Alloc	$12,431	$29,757	$31,856	$76,212
Total Chgs from Corp to UBS	*$1,657,933*	*$2,145,759*	*$1,632,052*	*$1,690,966*
Utility Transportation Alloc	$ 3,987	$4,156	$3,983	$3,208
Total Chgs to UBS	**$1,661,920**	**$2,149,915**	**$1,636,035**	**$1,694,174**

* Fiscal 2003 amounts through first nine months, are unaudited, and are subject to change

Excluding OAS revenue, UBS received from affiliates the amounts shown in the following table. Liberty examined the UBS support for its charges to NUI Utilities. UBS presented clear and complete invoices for services that it has provided.

Table III.10. UBS Revenues from Affiliates

FY	RC 636 Programming	RC 641 Print/Mail	RC 642 Cash Proc.	RC 644 Computer Ops	RC 644 CSS Support	Total
2003	$1,462	$558,982	$614,220	$1,257,702	n/a	$2,432,366
2002	$84,263	$793,585	$536,580	$1,438,675	n/a	$2,853,103
2001	$154,815	$1,034,710	$597,816	$1,780,762	$1,553,317	$5,121,420
2000	$647,226	$911,970	$487,284	$2,098,339	$750,575	$4,895,394

Fiscal 2003 amounts through first nine months, are unaudited, and are subject to change

The charges under RC 636 include the costs associated for attempting to adapt the UBS WINS CIS program to a gas utility system for use by ETG. That effort began in 1998 when UBS took over billing production for Utilities and the CSS computer support group (RC 644) transferred to UBS. This unsuccessful adaptation effort ended in July of 2001. The RC 644 employees transferred back to the NUI Corporate IT group in August 2001. UBS charged ETG for the programming unit employees that worked on the conversion project. These personnel consisted of a project manager and five system design

professionals. NUI Utilities retains the results of the business analysis performed during the project.

OAS provided a variety of services for its clients, including many exclusively for ETG. OAS estimated the cost of performing "agreed upon" work, but entered no written agreements limiting scope or cost. OAS discussed estimated costs with utility personnel during budget development. Together the parties arrived at a fixed cost, which OAS invoiced monthly. OAS used a standard template to develop costs, to which it applied a markup. OAS based pricing for all services, except FieldBook, for third parties and NUI Utilities on the same standard template for estimating the cost of providing services. OAS estimated effort hours for each class of labor and it multiplied hourly rates for average direct salary costs, rent and workstations by the effort hours to compute a base cost. To direct labor costs, OAS added materials and outside services. A multiplier was then applied to cover indirect costs, overhead and profit. OAS intended its mark-up to capture indirect and overhead costs not included in the direct hourly cost value.

OAS did not charge NUI Utilities for use of the WINS FieldBook application. OAS did charge third-party clients annual fees for 1) number of concurrent users, 2) number of named users, and 3) disk storage/backup/disaster recovery. OAS also charged third parties additional fees for advanced FieldBook modules. OAS made these modules available to NUI Utilities at no charge.

Invoices for OAS work do not describe the work performed; they use the simple description "OAS ETG Intercompany Charges." There was no apparent method for verifying what work was performed, or for applying an invoice adjustment should a plan of work be deferred or otherwise not completed. Liberty found no indication of any true-up between estimated and actual OAS costs for providing services to NUI Utilities.

OAS acknowledged that there had been a "loose" relationship between OAS and the utilities up to the time of Liberty's fieldwork. At that time, however, OAS suggested that future work would proceed from a firmer, more complete description of the scope of services. OAS had been charged with developing agreements with NUI Utilities for fiscal 2004. The need for completing this task should be obviated by the return of OAS personnel to the direct control of NUI Utilities.

OAS also provided special projects services for ETG. OAS developed three FieldBook system modules especially for ETG: FieldSheets Module, Wireless Data Entry Module, and Meter Reroute Module. The FieldSheets and Meter Reroute work constituted special projects. OAS also performed another special project, Field Force Automation. These special projects include the work for which NUI has been unable to find the bid documents noted earlier in this portion of Liberty's report. NUI Utilities paid the direct salary cost, plus indirect costs, of the project engineers assigned to these projects.

The Company provided the scope document for FieldSheets, a project that was not bid. There is no scope document for the Field Force Automation project "because OAS [wa]s only supplying labor." There was no document for the completed meter reroute project.

7. Financial Results Summary

Approximately one year ago, NUI separated the management and operation of UBS and OAS. UBS moved out from under Ventures into a direct reporting relationship to NUI Capital. OAS stayed under Ventures, and in July 2003, NUI filed incorporation papers to make it a separate subsidiary. The two groups, however, remained combined as one business unit from an operational and accounting perspective. Financial information reported by NUI combines their results; therefore, segregating them is not possible. Affiliates account for approximately 50 percent of combined UBS and OAS revenues.

Table III.11. UBS Income Statements 1998-2003

ITEM	2003	2002	2001	2000	1999	1998
Operating Revenues	$8,543	$8,667	$ 11,044	$9,690	$3,657	$3,651
Cost of Sales	$4,159	$3,565	$ 1,275	$1,389	$1,061	$1,154
Total Operating Margins	$4,384	$5,102	$ 9,769	$8,301	$2,596	$2,497
Total Other Operating Expenses	$3,494	$4,601	$ 7,955	$7,190	$1,782	$1,544
Net Operating Income	$ 890	$ 501	$ 1,814	$1,111	$ 814	$ 953
Total Interest and Other Income (Expense)	$ 59	$ 177	$ 264	$ 118	$ 18	$ 13
Income before Income Taxes	$ 831	$ 324	$ 1,550	$ 993	$ 796	$ 940
Income Tax Expense	$ 340	$ 133	$ 633	$ 406	$ 325	$ 386
Net Income	491	191	917	587	471	554

Thousands of dollars; FY 2003 is for first nine months and is unaudited and subject to change

The following table shows the UBS/OAS balance sheets, which are notable in their treatment of the intercompany receivables question. Specifically, the line (not shown below) for "Notes Payable to Associated Companies" shows zeros, but there is an entry under "Notes Payable to Banks." These businesses have not had their own credit line with banking institutions; this line actually represents their intercompany payable. On a combined basis, UBS and OAS have contributed an average of about $800,000 per year in pre-tax profits to NUI for the past five years. Since 1998, their combined share of the intercompany payable balance grew from $800,000 to $3.9 million, until NUI liquidated it with the use of proceeds from the November 2003 NUI refinancing. The subsidiary's balance sheets showed the balance amount as notes payable to banks, which it was not, rather than as a debt to affiliated companies, which it was. Chapters Four and Five of this report address in detail intercompany balance and financing issues.

Table III.12. UBS Balance Sheet 1990-2003

	2003	2002	2001	2000	1999	1998
Assets						
Current Assets	$1,700	$3,579	$1,024	$1,014	$1,159	$1,448
Utility Plant (net)	$7,074	$7,169	$6,712	$4,777	$1,642	$646
Other Assets	$783	$632	$0	$0	$0	$0
Total Assets	$9,557	$11,380	$7,736	$5,791	$2,801	$2,094
Liabilities						
Current Liabilities	$549	$664	$464	$326	$295	$40
Notes Payable to Banks	$3,872	$5,584	$4,407	$3,390	$953	$794
Total Current Liabilities	$4,421	$6,248	$4,871	$3,716	$1,248	$834
Other Liabilities	$2,715	$2,910	$439	$212	$37	($21)
Capitalization	$2,419	$2,222	$2,426	$1,863	$1,517	$1,282
Long-Term Debt	$0	$0	$0	$0	$0	$0
Total Liabilities/Equity	$9,555	$11,380	$7,736	$5,791	$2,802	$2,095

Thousands of dollars; amounts may not match due to rounding; Fiscal 2003 amounts through first nine months, are unaudited, and are subject to change

The amounts under "Other Liabilities" include approximately $2 million in 2002 and 2003 listed as "Other Deferred Credits." The growth in net plant reflects UBS investments in computer hardware and printing/inserting machinery after the retirement of the assets whose control UBS received in 1998 from NUI Corp.

8. Sale of UBS

NUI hopes soon to complete a sale of UBS to a third party. This sale will produce substantially less than the Company estimated in 2003, when it was first planning alternate ways of paying the large intercompany receivable, and then arranging for alternate financing pending a sale of NUI. The new owner will supply services to NUI Utilities of the same nature and scope as those UBS has been providing.

The following chart shows the rates of change in charges from UBS to NUI Utilities across the past two fiscal years, and as proposed under the agreement pursuant to which UBS proposes to charge NUI Utilities after its sale to a third party.

Table III.13. Increases in UBS Charges to NUI Utilities

Service	2002	2003	2004	2005	2006
Print Mail (PM)	Base	6.67%	12.50%	5.56%	5.26%
Payment Processing (PP)	Base	47.37%	0.00%	3.57%	3.45%
Data Center (DC)	Base	20.00%	2.78%	2.70%	2.63%
PM + DC	Base	15.56%	5.77%	3.64%	3.51%
PM + PP	Base	29.41%	4.55%	4.35%	4.17%
PM+PP+DC	Base	25.00%	3.75%	3.61%	3.49%

The table shows a very substantial increase in fiscal 2003 charges. NUI has not presented a sound analysis showing that UBS cost increases have occurred in these levels or that the reasons for any increase result from changes in services or costs involving NUI Utilities. In fact, UBS in fiscal 2003 was making significant changes in its systems and

operations to serve a very large water utility customer, whose business it won. Those changes have nothing to do with service to NUI Utilities. It is therefore reasonable to limit UBS charges to 3 percent annual increases from 2002 levels through the end of its services to NUI Utilities.

NUI has chosen not to reduce the fees that will come to the new UBS owner under this agreement. To the extent that the increases are not so limited, it should be clear that costs in excess of this amount cannot be recovered through ETG rates for service to New Jersey customers.

This new agreement under which UBS will serve NUI Utilities is intended to provide for services until a sale of NUI is completed, at which time the parties contemplate that the new owner will otherwise provide for the services itself. The agreement is, however, out of line with that assumption because it provides for a term ending on March 31, 2007, which adds service for a number of years beyond any reasonable termination date. In addition, the agreement requires NUI Utilities to pay, should it elect to terminate the agreement, roughly half of the remaining amounts that would be due through March 31, 2007. In contrast to these provisions, all NUI Utilities needs from UBS is continuation of the agreement for a term sufficient to allow it to price and secure other services, whether through those provided by a new owner after a sale or through solicitation of outside services.

The parties have been willing to work in the past without a fixed term or termination payments. Moreover, UBS needs to make no new investments or staffing changes to continue serving NUI Utilities. It is appropriate under the circumstances to provide for a term no longer than necessary for NUI Utilities to examine and provide for other outsourced opportunities. It is, therefore, unreasonable to provide UBS with a virtually certain payment, the effect of which is to inflate the price that NUI will receive on the sale of UBS, while saddling ETG with an unnecessarily costly legacy. While those costs will not find their way into rates absent BPU approval, it is important to establish that there is no potential for recovery of any such legacy costs from ETG customers.

NUI provided the agreement for review by Liberty. It contained no clear performance-standard clause that obligates UBS to provide services of the same nature and quality it has provided historically. There was a declaration of intent in the scope-of-services section of the agreement that quality be the same as existed previously. The agreement also contained fee adjustment provisions for a set of specific performance metrics. These provisions, however, were not sufficiently comforting given that a third party will own UBS. NUI Utilities will be seen as a short-term customer of the new owner. Liberty concluded that the agreement required a stronger declaration that performance must be of the scope and quality experienced during the recent course of UBS performance for NUI Utilities.

9. Conclusions

Conclusion III-4. UBS and OAS have produced consistent, moderate operating profits; their operations have been funded by NUI Utilities and ETG through inter-company payables balances.

Since fiscal 1998, UBS and OAS have combined to produce positive pre-tax profits of about $800,000 per year. During this time, their intercompany payable grew from about $800,000 to a 2003 level of about $3.9 million. Chapters Four and Five of this report address generally Liberty's conclusions and recommendations about intercompany balances.

Conclusion III-5. UBS received from an affiliate the transfer of the beneficial use of equipment for which it had previously made annual payments, without documenting any formal asset transfer and without continuing to pay appropriate fees therefor.

The failure to charge UBS the equipment-related portion of the facilities management fee (which had totaled $900,000 per year) beginning in 1998 was inappropriate. UBS received at least the beneficial use, if not the legal ownership, of assets for which it had previously made payment. UBS should have paid the replacement cost of the assets used for the period from October 1998 through August 2000, when it ceased (at the latest) use of the assets. NUI recently presented an estimate of $200,000 at the value of the equipment at the time of the transfer. This estimate, while rough, appears reasonable.

Conclusion III-6. UBS has provided services to NUI Utilities with no written agreement, which constitutes a violation of the holding company order, and which makes it impossible to independently establish responsibilities, pricing, term, or other material conditions.

There is no written contract or agreement between UBS and NUI Utilities. It is inappropriate for an affiliate to provide services of this type and magnitude without adhering to an arms'-length standard. The absence of any specification of material terms of service clearly violates this standard. Moreover, the failure to adopt a formal agreement, to provide notification of, and to seek BPU approval for the administrative services it covers violates the condition of the holding company order, which provides as follows:

> *10. NUI Utilities shall seek Board approval in accordance with N.J.S.A. 48:3-7.1 prior to implementing a contract for the provision of administrative support services to Elizabethtown Gas Company. All transactions and allocations exceeding, in the aggregate, $25,000 annually between Elizabethtown Gas Company and NUI Holding Company's other divisions and subsidiaries shall be reported annually by NUI at the time of the filing of its annual report to the Board.*

Conclusion III-7. NUI did not fully address the needs of NUI Utilities in planning for the continuation of services after the sale of UBS.

Liberty raised concerns about the level of protection to be afforded to NUI Utilities – ETG in particular – upon the completion of the sale of UBS. In particular, NUI had not developed a written agreement detailing pricing and services. When asked to detail how NUI Utilities planned to protect its interest and those of its customers with the potential sale of UBS, NUI Utilities responded:

> *NUI Utilities management will participate in NUI's review of offers by prospective buyers of UBS to provide the Company with its evaluation of the terms upon which those buyers propose to provide NUI Utilities with billing and payment processing services upon the close of the sale. As part of that evaluation, NUI Utilities will identify any concerns it has to NUI regarding each prospective buyer's proposal and its capabilities to provide adequate and cost-effective service.*

NUI Utilities gave a similar response about the role it would play in negotiations regarding the sale of UBS:

> *NUI Utilities management will provide NUI with input and recommendations regarding its requirements for post-closing billing and payment processing services.*

Liberty expressed its view that NUI Utilities needed to protect its customers by immediately preparing a written agreement with UBS to provide price and service protection for as long as it might take to explore other CSS options and to conduct an independent process to assure that the post-sale prices to be charged by UBS were market competitive. NUI proceeded to draft such an agreement, and provided it for Liberty's review. Liberty recommended a significant number of technical corrections, which NUI accepted. Liberty also made comments about performance standards, agreement duration, early-termination fees, and price escalation in the agreement. NUI has since addressed the performance standards issue in a manner that Liberty concluded to be reasonable, assuming that the particular language agreed to by NUI Utilities is incorporated into the final agreement, which NUI Utilities plans to file with the BPU for review and approval.

NUI chose, however, not to make material changes in the termination fee and price escalation provisions. Their position has the effect of increasing the value to be gained from the purchaser, with whom negotiations were well advanced. Liberty understands the hesitance to complicate negotiations by introducing value changing terms after the parties had come to at least a general meeting of the minds on value. However, Liberty concludes at the same time that completion of an agreement with terms that are overly generous from the perspective of utility operations should not be read as an implicit grant of approval that all costs under the contract are appropriate for inclusion in rates.

The agreement addresses operations costs; therefore, the absence of a rate case for an extended period may make the question of rate impacts moot. Nevertheless, Liberty believes it is important for the BPU to make NUI's eventual purchaser aware that its financial calculations of business value should not falsely assume that the escalated rates of the UBS contract or the potential termination fees could be treated as above-the-line rate recoverable expenses.

Conclusion III-8. The services of UBS for NUI Utilities were provided without the benefit of any analysis of marketplace alternatives.

NUI Utilities never examined other outside vendors for calculating bills, sending bills, and processing payments of utility customers. No solicitation of the marketplace alternative preceded the decision to use UBS for this function. UBS has calculated its costs and an associated margin, and presented a fixed per-bill price to the utilities when the budget for the upcoming fiscal year is being prepared. There is reportedly a UBS study demonstrating that UBS prices for billing services are lower than those of competitive service providers. That study has not been provided. In addition, the per-bill price that UBS charges to NUI Utilities is equal to or lower than what it charges any of its non-affiliated customers. However, this comparison does not demonstrate that UBS is the most cost effective supplier of the service, but only that it does not charge NUI Utilities more than it charges others.

NUI's sale or termination of non-utility businesses and its pending sale make it extremely unlikely that further efforts of this type will occur.

Conclusion III-9. NUI inappropriately permitted NUI Utilities to fund the development of a customer information system intended for sale in the open market.

UBS used its connection with NUI Utilities to perform what amounted to R&D work on a new system; *i.e.*, the WINS CIS modified for gas utility use. Had that development been successful, UBS would have had a system salable to third-party customers with no obligation to make payments to NUI Utilities, despite utility underwriting of the principal costs of the development effort. Without the protection of a written agreement, NUI Utilities would have had no claim to any profits resulting from a system for which it paid development costs and for which it bore the principal risk of failure. In essence, UBS was able to assign to NUI Utilities the development risk while retaining all of any marketplace opportunity that would have resulted.

Conclusion III-10. OAS was permitted to appropriate without compensation utility-created intellectual property that it used as a basis for services sold to third parties.

The transfer of OAS personnel and the decision to allow them to market products and services developed with utility resources suffered from the same form of cross subsidization as would have occurred had the modification of WINS CIS for gas-utility

use proven successful. The difference is that OAS did succeed in making a successful entry into the open marketplace on the basis of efforts undertaken, costs borne, and intellectual property developed by NUI Utilities personnel. OAS certainly continued work on its own, and made enhancements that were important to serving the third-party marketplace. However, it has never recognized the value it received from NUI Utilities through compensation for the transfer.

Conclusion III-11. Resources that NUI Utilities used to provide engineering services at cost were transferred to OAS non-utility operations, after which pricing inappropriately changed to cost plus a mark-up to provide a profit margin.

It was inappropriate to change the personnel transferred from NUI Utilities from a cost center to a profit center. NUI Utilities used to have access to the same personnel at cost. There is no apparent value gain to NUI Utilities in having the same personnel charged at marked-up rates.

The lack of written agreements covering OAS work raises a separate concern. There should have been agreements in place and they should have required that invoicing be detailed, specific, and cost-based. Estimated costs should at least yearly have been reconciled to actual costs, with any differences credited or charged to NUI Utilities. NUI Utilities should also have routinely bid out all projects and retained bid evaluation documents.

10. Recommendations

Recommendation III-3. Acknowledge the failure to credit NUI Utilities with a proper share of the value that UBS should have paid for the IT equipment it acquired and the intellectual property that OAS acquired without formal transfer of payment.

Liberty has not been able to secure from NUI information from which to place a value on the IT equipment involved. It likely has had little effect on the establishment of ETG rates. Even had UBS continued the annual fee payments, they would have stopped before the beginning of the test year that ETG used to support its most recent base rate filing. There is an argument that ETG capitalization would be improved today if it had not been deprived of its share of cost reductions that would have taken place, had NUI received continuing payments between the time when UBS stopped making them and the retirement of the equipment. However, the small value involved suggests that this issue not be pursued in the event that ETG's capitalization should remain at the levels it used to justify rates in its last base rate filing with the BPU. The same is true for the benefits that OAS received. OAS margins, while not distinguishable from those of UBS in the data that NUI provided, appear to have been sufficiently small to compel a similar approach to that recommended for the UBS IT equipment.

Recommendation III-4. Clarify that prudent and reasonable ETG utility operating costs exclude significant UBS price increases or termination fees; verify that acceptable performance standards language exists in any agreement submitted for BPU approval.

Liberty believes that it is not proper to conclude that price increases above three percent per year, measured against fiscal 2002 charges by UBS to NUI Utilities, can be justified. Liberty also believes that payments in excess of 90 days of normal charges can be justified as reasonable and prudent termination fees for the new owner of UBS.

Liberty also recommends that the BPU verify the incorporation of acceptable performance-standards language into the agreement under which NUI Utilities will receive service from UBS after its sale to a third party. NUI Utilities counsel has provided language that Liberty believes will meet the need. Its inclusion into the final agreement will therefore fulfill this recommendation.

Recommendation III-5. Account for the excess WINS development costs included in ETG Rates.

The test year that ETG used to address revenue requirements in its most recent base-rate case before the BPU used a test year beginning June 1, 2001. It therefore included two months during which ETG bore RC 636 costs associated with the conversion of WINS to gas-utility use. UBS should have borne those costs, in order to match development risk with development opportunity. Liberty asked NUI to provide the portion of test-year RC 636 costs at issue. It has not been able to do so. The trend in RC 636 costs makes it clear that fiscal 2001 showed at most only a small effect from this development effort. The bulk of the conversion costs clearly came in fiscal 2000. Liberty infers that, at most, fiscal 2001 costs were only about $60,000 higher due to the conversion work. This inference comes from assuming that all of the difference in RC 636 charges to affiliates between fiscal 2001 and 2002 comes from the conversion effort. This may not be a correct assumption, but NUI has not been able to provide other information. It is not likely that conversion costs in the test year exceeded this nominal amount. Therefore, Liberty concludes that ETG's rate case is not likely to have had a different outcome had NUI properly assigned WINS conversion costs to UBS in the test year.

Recommendation III-6. Terminate the practice of margin-based pricing by OAS for utility services.

NUI Utilities has reported plans to return OAS to the utility engineering group. Should it do so, and should it revert to cost-based pricing for utility services, the need to address the inclusion of margins, the lack of agreements and price reconciliation, the lack of bids or bid documentation, and the poor invoice detail should be mooted. NUI Utilities should confirm the date by which such a reversion has occurred and it should be made clear that the costs of prior work, to the extent that they exceed actual costs, cannot be deemed proper for inclusion in rates.

D. NUI Environmental Group, Inc. (1996)

1. Background

NUI Environmental Group, Inc. (NUI Environmental) is a New Jersey corporation headquartered in Union, NJ. This subsidiary of NUI Capital was an environmental project development subsidiary. NUI discontinued its operations on September 30, 2002. NUI Environmental's sole project involved the decontamination of sediment dredged from the NJ/NY harbor area. NUI Capital formed NUI Environmental in fiscal 1996 to develop a solution to the rapidly decreasing accessibility of the New York/New Jersey Harbor to international commercial shipping traffic. Harbor dredging had stopped for about 10 years, because there remained no place to put the dredged sediment. International shipping interests began threatening to cease operations due to channel depth problems.

NUI Environmental focused on developing technology and sites for handling dredged material. NUI Environmental was selected on December 23, 1998 from a group of sixteen firms that responded to a request for proposal by the State of New Jersey to participate in a *Sediment Decontamination Demonstration Project*. The State intended this project to identify new technologies for decontamination of the dredged harbor material. The state's program involved two phases: a *Pilot Study* and a full-scale *Demonstration Project*.

NUI Environmental completed in fiscal 2001 work on the first-phase, $485,000 pilot study to demonstrate the effectiveness of its technology for the treatment of dredged material. NUI Environmental owns a proprietary process for which a patent has been filed and is currently pending. NUI Environmental received a draft contract from the State of New Jersey for the Demonstration phase in December 2002. The draft contract had a funding level of $2.0 million. All parties, including the State of New Jersey Department of Transportation and Office of Maritime Resources signed it in July 2003. The purpose of the demonstration phase was to prove the efficiency and effectiveness of the NUI Environmental sediment processing technology on dredged material from the Port of NY and NJ. Under the contract, NUI Environmental would treat approximately 7,500 cubic yards of dredged material. The contract had a term of 12 months from the date of execution. The contract made NUI Environmental responsible for, among other things:

- Analytical testing of dredged material and processed material
- Processing of dredged material using NUI Environmental technology
- Disposal of generated wastes or debris, including proper deposition or sale of decontaminated dredged material.

In September 2002, NUI began to seek a buyer for NUI Environmental. NUI has stated a belief that it has demonstrated the effectiveness of the technology, but prefers not to commit the capital resources necessary to fully deploy it in the form of building a decontamination facility. As of September 30, 2002, NUI began to report NUI Environmental financial results as discontinued operations. An interview with the

executive in charge of NUI Environmental indicated that no further costs were being incurred, and that the entity stopped operations as of June 30, 2003.

2. Customer Base and Revenues

NUI Environmental has had only one external source of revenue, *i.e.*, the State of New Jersey. The only revenue recorded consists of the proceeds from the $485,000 pilot project contract with the State. Liberty found that the financial information provided by NUI, which is discussed in more detail below, did not report this revenue.

3. Employees

NUI Environmental had two employees in fiscal 2001 and 2002. They consisted of the executive in charge of the project and a project administrator. NUI Environmental had only one employee in fiscal 2003.

4. Transactions with Affiliates

NUI Environmental did not work with or for affiliated NUI entities. The Company stated that in March 2002, NUI transferred to NUI Environmental $0.8 million of costs for equipment and technology development associated with sediment processing. NUI defined the transaction as an asset transfer made at cost. The NUI Environmental financial information provided to Liberty showed corporate-cost allocations, but no other transactions between NUI Environmental and NUI affiliates in response to data requests. The following table provides NUI Environmental operating expenses, which include intercompany allocations.

Table III.14. NUI Environmental Operating Expenses

	1998	1999	2000	2001	2002	2003
Corp non-cash items	$0	$50,421	$3,987	$8,598	($6,804)	$14,686
Accounting	$0	$0	$0	$5,576	$5,031	$3,689
Allocations		$49,580	$50,552	$0	$0	$0
AP	$0	$0	$0	$763	$656	$289
Corp Develop	$0	$0	$0	$431	$989	$228
Corp Secy	$0	$0	$0	$1,191	$2,232	$776
Executive	$0	$0	$0	$3,085	$4,414	$1,595
HR Dept/Benefits	$17,348	$5,761	$59,801	$24,308	$4,792	$1,496
Insurance	$0	$2,661	$2,654	$989	$3,301	$4,612
Internal Audit	$0	$0	$0	$500	$0	$0
Investor Relations	$0	$0	$0	$1,084	$1,033	$589
IT	$0	$0	$0	$13,048	$19,088	$6,867
Legal & Reg Affairs	$4,945	$41,717	$15,534	$24,772	$27,652	$9,518
Mktg Admin	$0	$0	$0	$0	$1,093	$0
Public Affairs	$0	$0	$0	$901	$1,327	$392
Purchasing	$0	$0	$0		$1,042	$377
Real Estate	$0	$0	$0	$31,545	$68,718	$41,792
Treasury	$0	$0	$0	$2,204	$3,034	$4,297
Other	$0	$145	$0	$0	$0	$490
Admin - NUI Env.	$104,704	$32,689	$2,522,892	$1,170,674	$1,875,492	$862,733
Totals	$126,997	$182,974	$2,655,419	$1,289,670	$2,013,090	$954,426
% Admin - NUI Env	82%	18%	95%	91%	93%	90%

Fiscal 2003 amounts through first nine months, are unaudited, and subject to change

Except for the first two years, corporate allocations have represented between 5 and 10 percent of total operating expenses.

5. Financial Results Summary

The Company stated in filings with the SEC that NUI Environmental has not generated any operating revenues to date. Its income statements show negative net income in each year of existence. NUI Environmental's annual losses have run from one half million to one and a half million dollars since fiscal 2000. The original data for the following summary income statement did not show a separate line item for corporate allocations.

Table III.15. NUI Environmental Income Statements 1998-2003

Item	2003	2002	2001	2000	1999	1998
Operating Revenues	$0	$0	$0	$0	$0	$0
Cost of Sales	$0	$0	$0	$0	$0	$0
Total Operating Margins	$0	$0	$0	$0	$0	$0
Total Other Operating Expenses	$852	$2,019	$1,308	$2,655	$183	$127
Net Operating Income	($852)	($2,019)	($1,308)	($2,655)	($183)	($127)
Total Interest Expense	$154	$142	$113	$154	$68	$15
Income before Income Taxes	($1,006)	($2,161)	($1,421)	($2,809)	($251)	($142)
Income Tax Expense	($411)	($885)	($624)	($1,133)	($88)	($49)
Net Income	($595)	($1,276)	($797)	($1,676)	($163)	($93)

Thousands of dollars; fiscal 2003 amounts for first nine months, are unaudited, and subject to change

The data from the preceding tables came from Company responses to two different data requests. Liberty cannot explain the differences in the values provided by the Company.

The NUI Environmental balance sheet, which the following table presents, is, like that of Ventures, notable in its treatment of intercompany receivables. Specifically, the line (not shown below) for *Notes Payable to Associated Companies* shows zeros, but there is an entry under *Notes Payable to Banks*. NUI Environmental does not have its own credit line with banking institutions; this line actually represents its intercompany payable. NUI Environmental had an intercompany payables balance that grew from zero in September 1997 to about $6.5 million at June 30, 2003. NUI liquidated this balance with proceeds from the November 2003 refinancing of NUI and NUI Utilities debt. NUI Environmental has shown this amount as notes payable to banks, which it was not, rather than as an amount payable to affiliates, which it was. Chapters Four and Five of this report address the issues of intercompany balances and corporate and utility financings.

Table III.16. NUI Environmental Balance Sheet 1998-2003
(Amounts may not match due to rounding)

(Thousands)	2003	2002	2001	2000	1999	1998
Assets						
Current Assets	$0	$0	$1	$0	$0	$7
Utility Plant (net)	$14	$19	$4	$11	$1,324	$539
Other Assets	($9)	$0	$0	$0	$0	$0
Total Assets	$5	$19	$5	$11	$1,324	$546
Liabilities						
Current Liabilities	($741)	($2,253)	($1,513)	($1,075)	($54)	($60)
Notes Payable to Banks	$6,494	$6,255	$4,244	$3,026	$1,619	$706
Total Current Liabilities	$5,753	$4,002	$2,731	$1,951	$1,565	$646
Other Liabilities	($1,150)	$20	$1	($8)	$13	($7)
Capitalization	($4,599)	($4,004)	($2,729)	($1,932)	($255)	($92)
Long-Term Debt	$0	$0	$0	$0	$0	$0
Total Liabilities/Equity	$4	$18	$3	$11	$1,323	$547

Thousands of dollars; fiscal 2003 amounts are for nine months, are unaudited, and subject to change

NUI Environmental included the fiscal 1998 and 1999 amounts categorized as *Utility Plant* are listed under the line item *Construction Work in Progress*, or CWIP. Entries for CWIP generally move to other categories as work is completed; therefore, they continue to appear on the balance sheet, along with associated depreciation. The Utility Plant amounts that NUI Environmental showed through 1999, however, disappear from the balance sheet after 1999. Liberty also notes that the March 2002, $0.8 million asset transfer, discussed above in this report, does not appear on the balance sheet either.

6. Conclusions

Conclusion III-12. NUI Environmental has produced steady losses since its creation; its operations as a subsidiary of NUI Capital have been funded through the corporate cash concentration account, and ultimately NUI Utilities, for a cumulative total of $6.5 million.

Chapters Four and Five of this report address the consequences of NUI's failure to provide for adequate separation of the financial operations of its non-utility affiliates.

Conclusion III-13. NUI Environmental did not have material transactions with affiliates, other than those addressed by the general allocators used to account for support services from NUI Corporate.

This affiliate did not engage in substantial transactions with utility affiliates, either directly or indirectly. The affiliate-transaction-related concerns it has occasioned are limited to three-party allocator, and have already been addressed earlier in this chapter of the report.

7. Recommendations

Liberty has no separate recommendations regarding NUI Environmental. NUI discontinued this affiliate's operations. Recommendations set forth earlier in this chapter of Liberty's report address concerns with the overuse of the three-part allocator by NUI.

E. TIC Enterprises (1997)

1. Background

NUI Capital formed Sales Management as its wholly owned subsidiary. Sales Management existed for the purpose of acquiring NUI's original 49 percent investment in TIC in February 1997. TIC Enterprises, LLC (TIC) operated as a non-utility sales and marketing firm for NUI various businesses. NUI also had the option to purchase the remaining 51 percent of TIC, for approximately $30 million, in the event that TIC met certain financial targets.

By 2000, it had become obvious that TIC would not meet these targets. Nevertheless, on May 15, 2001, Sales Management acquired the remaining 51 percent of TIC, in order to secure operational control of the business. NUI paid the majority owner $5 million in cash, issued a $3 million note payable, and assumed the outstanding debt of TIC to acquire the remaining 51 percent. The $3 million note was payable at January 2, 2002.

TIC later notified the former owner of offsetting claims against the note, and made no payment on it. The former owner filed suit against TIC in April 2002, claiming $22 million for breach of contract. NUI filed a counter claim, alleging violations of the asset purchase and operating agreements under which NUI Capital's subsidiary, Sales Management, acquired its interests in TIC. Both parties' claims remain in litigation.

NUI's two-stage acquisition of TIC produced $34.1 million that NUI Capital carried as an asset classified as good will. This asset resulted from the fact that the purchase price far exceeded the tangible assets of TIC.

2. Customer Base and Revenues

TIC provided sales and marketing services to businesses in the telecommunications and expedited delivery industries. TIC created and managed sales teams that sold telecommunications equipment, local and long-distance telecommunications services, cellular telecommunications services, and network services. TIC also provided outsourced sales force services to the United States Postal Service (USPS). TIC marketed the use of Priority, Express and Global Priority Mail services, for which the USPS paid it commissions. TIC experienced a significant drop in business in fiscal 2003.

Commissions from the USPS averaged more than $1 million per month for the last half of calendar 2001, but revenues fell sharply in January 2002. They continued to decline steadily, until the program was ended in August 2002. NUI stated that changed USPS leadership, which did not believe in marketing, caused sales to falter. Liberty derived customer numbers from data used in the NUI cost allocation model. This process showed 2,145 customers for fiscal 2002 and 377 customers for fiscal 2003.

NUI Capital changed accounting for revenues after it acquired operating control of TIC. It began to classify revenues by the categories of *Commissions*, *Equipment Sales*, *Telecom Services*, *Wireless*, *Network Activation*, *Training*, *USPS* products, and other minor categories through June 2003 (the latest date for which NUI provided TIC information). The following table shows TIC revenues by product line for each of the fiscal years under full NUI ownership.

Table III.17. TIC Revenues by Product Line

	Commission	Equipment	Telecom	Wireless	USPS	Network Activation	Training	Total
FY 2001	$136		$2,051	$2,735	$5,015	$920	$96	$10,953
FY 2002	$74	$885	$4,296	$6,566	$4,944	$1,089	$75	$17,929
FY 2003		$267		$3,258		$1,012		$4,537
Total	$210	$1,152	$6,347	$12,559	$9,959	$3,021	$171	

Thousands of dollars; not all revenue categories included, fiscal 2003 revenues are through June, are unaudited, and subject to change; 2001 revenues begin in May

The Company announced in March 2002 a plan to seek buyers for TIC. Third quarter results continued to show significant operating losses. NUI received no significant offers for TIC. The Company announced on July 22, 2002 a discontinuation of operations. However, the Company opted to continue the operation of TIC's Wireless and Network Activation product lines, which it moved to NUI Telecom, a separate subsidiary, whose operations this report addresses below. The agreements under which NUI Telecom continued to make commissioned sales have since expired. Discontinuing remaining TIC

operations caused an $8 million write-down of the net assets to fair market value, including $3.5 million of the goodwill amounts. Those operations consisted in major part of the telephone equipment and USPS product lines.

3. Employees

TIC expressed January 2000 expectations to hire 240 sales representatives for the initial USPS rollout in 10 market areas. This statement came before NUI acquired operational control of the company. The president expected more than 300 additional employees to be required for the second phase of the USPS program. These plans never came to fruition. TIC had its own payroll system through fiscal 2001; therefore, employee numbers have been estimated. NUI showed an estimated 304 employees in fiscal 2001, 304 in fiscal 2002, and 13 in fiscal 2003. TIC's last employees left as of August 1, 2003.

4. Transactions with Affiliates

TIC sold telecommunications equipment and maintenance services, totaling $1.32 million to NUI entities. NUI paid $1.28 million, almost all in the two months of September 2000 and January 2001. TIC did not sell any services (voice, data network or expedited mail) to NUI or to NUI Utilities. NUI Telecom, Inc. paid approximately $5,000 to $6,000 per month in commissions to TIC from February 2002 through December 2002 for TIC sales efforts on its behalf. TIC also provided $12,500 of marketing services to Virginia Gas during fiscal 2002. TIC did not provide any of its products or services to affiliates under a written agreement, but individually negotiated each purchase with management.

NUI transferred to TIC $1.2 million in March 2002 for developing a web portal and for computer equipment used in the USPS business line. Remaining transactions included allocations to NUI. After NUI acquired the remaining interest in TIC in May 2001, no corporate allocations were made for the remainder of the 2001 fiscal year. The following table shows fiscal 2002 and 2003 allocations. NUI applied the three-factor allocation method to assign costs to TIC. TIC received allocations of 6.5 percent of Corporate and shared services costs in 2002, and 1.1% in FY 2003. TIC's loss of payroll, plant, and customers from fiscal 2002 to 2003 contributed to the reduction.

Table III.18. Summary of NUI Charges to TIC

Cost Item	2002	2003
STD Interest Expense	$1,416,432	$0
Depreciation	$208,716	$31,964
Accounting	$208,139	$31,964
IT	$620,366	$67,374
Legal	$0	$23,437
HR/ Benefits	$(224,989)	$189,413
Investor Relations	$33,560	$6,182
Corporate Development	$32,146	$2,318
Corporate Secretary	$72,542	$6,689
Executive	$143,453	$15,833
Public Affairs	$43,143	$3,828
Real Estate	$198,336	$50,913
Insurance	$18,558	$28,961
Treasury	$98,602	$38,106
Accounts Payable	$0	$2,620
Purchasing	$0	$3,706
TOTAL	**$2,869,004**	**$507,761**

NUI allocated to TIC in 2002 a portion of the interest on senior notes used to finance purchases of TIC and Virginia Gas. NUI retained this interest on the parent books in 2003. TIC purchased medical benefits directly for its employees; therefore, it did not get allocations for such costs. The negative charge in 2002 reflects both the lack of those cost and the creation of credits to pension expense for that year.

5. Financial Results Summary

NUI accounted for the investment under the equity method of accounting during the period of NUI Capital's minority ownership. The following table shows equity losses for fiscal 2000 through 2003.

Table III.19. TIC Income Statements 2000-2003

Item	2003	2002	2001	2000
Operating Margins				
Revenue-Non-Affiliates	$4,523	$17,491	$11,867	
Revenue Affiliates	$18	$73	$0	
Operating Revenues	$4,550	$17,564	$11,867	
Cost of Sales	$2,372	$10,291	$8,852	
Total Operating Margins	$2,178	$7,273	$3,015	
Total Other Operating Expenses	$5,784	$19,065	$11,688	
Net Operating Income	$(3,606)	$(11,792)	$(8,673)	
Other Income/(Expense)				
Equity in TIC Earnings/Losses			$(6,620)	$(1,309)
Other	$(3)	$(7,746)		
Total Other Income/Expense	$(3)	$(7,746)	$(6,620)	$(1,309)
Income before Interest and Taxes	$(3,609)	$(19,538)	$(15,293)	$(1,309)
Total Interest Expense	$5	$1,442	$197	
Income Before Income Taxes	($3,614)	$(20,980)	$(15,490)	$(1,309)
Income Tax Expense	$(1,270)	$(7,343)	$(3,444)	$(535)
Income from Continuing Operations	$(2,344)	$(13,637)	$(12,046)	$(774)
Effect of Accounting Change		$(17,642)		
Net Income (Loss)	$(2,344)	$(31,279)	$(12,046)	$(774)

Thousands of dollars; fiscal 2003 data is through June, unaudited, and subject to change

The listing of equity in earnings or losses of TIC in the preceding table represents the NUI share of net TIC losses prior to acquiring operating control of TIC on May 15, 2001. The affiliate revenues provided by the Company apparently include only the commissions paid to TIC. However, TIC also billed NUI entities $1.32 million from October 1999 through July 2002. TIC's "other operating expenses," above and beyond the cost of sales, are extraordinarily high relative to revenues and operating margins.

The following table shows the TIC balance sheets, which are notable in their treatment of intercompany receivables. Specifically, the line (not shown below) for *Notes Payable to Associated Companies* shows zeros, but there is an entry under *Notes Payable to Banks*. TIC has not had its own credit line with banking institutions; this line actually represents its intercompany payable. An intercompany balance was established when TIC first borrowed $6.0 million from the corporate cash management account, with NUI Utilities as the ultimate lender, in May 2001. The balance due by TIC to NUI Utilities increased to $16.8 million at September 30, 2001, and peaked on June 30, 2003 at $21.2 million. It dropped to $14 million by the end of fiscal 2003, and was later paid from proceeds of the NUI CSFB financing undertaken in November 2003. TIC financial statements showed these amounts as notes payable to banks, which they were not, rather than as debts due to affiliates, which they were. Chapters Four and Five of this report address intercompany balances and NUI financings in detail.

Table III.20. TIC Balance Sheet 1990-2003

Item	2003	2002	2001
Assets			
Total Current Assets	$1,150	$847	$6,251
Net Utility Plant	$13	$51	$2,711
Total Other Assets	$(72)	$3,485	$32,453
Total Assets	$1,091	$4,383	$41,505
Liabilities			
Current Liabilities	$1,612	$(5,312)	$2,549
Notes Payable to Banks	$21,217	$27,036	$16,832
Total Current Liabilities	$22,829	$21,724	$19,381
Other Liabilities	$(10,195)	$(8,143)	$43
Capitalization			
Paid-In Capital	$27,508	$27,508	$27,508
Unappropriated Retained Earnings	$(39,052)	$(36,706)	$(5,425)
Total Capitalization	$(11,544)	$(9,198)	$22,083
Total Liabilities	$1,090	$4,383	$41,507

Thousands of dollars; fiscal 2003 is through June, unaudited, and subject to change

The amounts listed under *Other Assets* for fiscal 2001 and 2002 represent goodwill associated with the purchase of TIC. *Other Liabilities* consisted primarily of deferred federal income tax.

6. Conclusions

Conclusion III-14. TIC's very poor performance has been a major contributor to the financial problems of NUI.

TIC has produced steady losses since its creation, totaling $46.4 million since 2000. Acquisition of the remaining 51 percent of TIC by NUI Capital served to increase materially the financial risk to which NUI was exposed and, ultimately, the financial losses that it suffered. TIC produced operating losses of between $12.0 and $13.6 million in fiscal 2001 and 2002. It experienced an additional $17 million loss in 2002 due to an accounting change that required the write-off of goodwill that NUI had booked to account for the acquisition premium it paid in its two-stage acquisition of TIC.

Conclusion III-15. TIC's acquisitions and operations were substantially funded through the corporate cash concentration account and ultimately NUI Utilities and ETGs.

TIC's share of the intercompany receivable owed to NUI Utilities peaked at $21.2 million at June 30, 2003. It fell to $14.0 million by the end of fiscal 2003. NUI paid the remaining balance as part of its liquidation of all intercompany receivables owed to NUI Utilities. A major refinancing in November 2003 of NUI made this liquidation possible. Chapters Four and Five of this report address the issue of intercompany receivables and financings in detail.

Conclusion III-16. NUI failed to make adequate allocations of corporate costs for TIC.

The three-factor allocator that NUI has used, which averages payroll, plant, and customers, means that NUI made no allocations to TIC during the period of its minority ownership. Given the difficulties that TIC experienced prior to the purchase of the remainder of TIC ownership, this failure caused other NUI operations, including ETG, to absorb significant extra costs. Moreover, even after NUI Capital's subsidiary acquired the remaining ownership in TIC, NUI failed for four months to allocate any NUI costs to TIC.

This latter failure resulted because NUI was not in the custom of making changes within a fiscal year to its overall allocation percentages once it had set them at the start of the year. NUI failed to do so even where, as in the case of TIC, major changes occurred during the fiscal year.

Under the circumstances, NUI should have assigned costs to TIC throughout fiscal 2001. Had it done so, TIC likely would have absorbed substantial costs that ETG ended up having responsibility for paying. NUI's failure to make such allocations meant that NUI Utilities and ETG bore excess costs for 2001 that amount to about $300,000 in the test year that ETG used to justify rates in its last base-rate filing with the BPU. The following table shows Liberty's calculation of the excess amount. The table demonstrates that the effect of the failure to allocate on the test year falls in the months of June through September 2001.

Table III.21. Excess ETG Costs From Lack of TIC Allocations

Item	Amount
Annual Allocation in fiscal 2002, excluding interest	$1,452,572
Fiscal 2001 monthly allocation amount	$121,048
FY 2001 Months for which TIC received no allocation	4
June through September 2001	
Total additional TIC allocation for test year	$484,191
ETG fiscal 2001 allocation factor	62.5%
ETG share of allocation for missing test year months	$302,619

Conclusion III-17. NUI failed to require TIC to operate its business with affiliates in compliance with the holding company order and in a manner that permits verification of the reasonableness and prudence of the need for and costs of goods and services provided.

TIC did not provide equipment and services to NUI under written agreements. This failure makes it impracticable to determine the degree to which purchases were necessary and competitive with other options. TIC did not provide unique products or services. It served NUI as a reseller of products and services of other carriers. Liberty found no evidence of competitive bidding. NUI allocated its costs to utility operations primarily under the three-part formula. NUI's TIC equipment purchases, which were subject to

such allocations, amounted to $1.3 million, which makes it unlikely that ETG ended up bearing substantial excess costs. Nevertheless, it represents a departure from good utility practice for a parent to make purchases from an affiliate in the absence of sound documentation that will verify that conduct has been at arm's-length.

The BPU Holding Company Order contains a condition requiring the filing of agreements. Specifically, it provides that:

> *10. NUI Utilities shall seek Board approval in accordance with N.J.S.A. 48:3-7.1 prior to implementing a contract for the provision of administrative support services to Elizabethtown Gas Company. All transactions and allocations exceeding, in the aggregate, $25,000 annually between Elizabethtown Gas Company and NUI Holding Company's other divisions and subsidiaries shall be reported annually by NUI at the time of the filing of its annual report to the Board.*

NUI did not file the agreement under which TIC provided equipment maintenance services for NUI, which NUI used to provide services to ETG. Moreover, NUI did not file the transaction for equipment purchases, under which ETG's share exceeded the $25,000 limit.

NUI has taken the position that TIC merely operated solely as a commissioned sales agent for a third party, Nortel, and the services should be deemed as provided by Nortel. NUI accounting records, however, show TIC as the party billing NUI. Direct billing by TIC evidences a role greater than that of a mere sales agent. Neither is the logic of NUI's argument compelling in any instance, given the purposes of the Order's condition requiring notice to the BPU of significant agreements involving affiliates. The potential for transactions at less than arm's-length exists even in the circumstances postulated by the Company.

7. Recommendations

Recommendation III-7. Require ETG to refund to customers the $300,000 by which ETG's allocations of NUI costs were inflated due to the failure to make allocations to TIC.

NUI's failure to revisit allocation factors, once set for the fiscal year, ignored the burdens placed on the company by its non-utility operations. Those operations were increasing substantially during the test year on which ETG based its most recent claim for a base rate increase. NUI should have disclosed the forward-looking effects of its non-utility growth. As the test year included the increased costs of NUI so should it have included recognition of the causes of that cost growth. The change was clearly known and measurable. It involved months at the beginning of the test year.

Requiring a return of one-year's worth of cost offsets that should have been built into rates on a recurring basis represents a moderate approach to addressing the imbalance created by NUI's use of its general allocator. This chapter of Liberty's report makes

similar recommendations to address failures to allocate test-year costs to two other non-utility affiliates.

F. NUI Telecom, Inc. (1999)

1. Background

NUI Telecom, Inc. (Telecom) is a wholly owned, Bedminster-based subsidiary of NUI Capital Corp. Telecom provides non-facilities-based telecommunication services as a competitive telecommunications provider. It serves end-use customers primarily through the resale of services that it acquires from primary local-exchange, long-distance, and wireless carriers. NUI began in June 2003 actively to seek a buyer of Telecom. NUI neared completion of the sale of Telecom at the time of this Liberty report.

Telecom began as International Telephone Group (ITG) in 1994. NUI acquired ITG in November 1999, and subsequently changed the name to NUI Telecom, Inc. ITG then had 12 employees, and operated primarily as a long-distance reseller along the East coast. The purchase price totaled $3.8 million, including 113,200 shares of NUI stock; NUI paid the remainder in cash. The purchase agreement called for the previous owners of ITG to receive an additional $1.0 million in NUI stock, provided that the enterprise met certain earnings targets. The previous owners received another 47,136 shares of NUI stock in December 2001, because Telecom met those earnings targets.

Telecom has provided local-exchange service throughout the Verizon and Bell South regions, inter-LATA and intra-LATA switched and dedicated long distance (outbound 1+ dialing) and toll-free (inbound 800 number) service, and cellular/wireless service. The primary carriers from which Telecom has procured services for resale include MCI, Sprint, and AT&T. Telecom has also provided Internet and web-page-design services, data services (local area and wide area networks, frame relay, and private point-to-point connections), calling cards, conference calling and consolidated billing.

Telecom acquired in March 2002 certain assets of Norcom, Inc., a provider of telecommunication services in the Northeast and Southeast U.S. The acquisition included about 4,000 customer accounts. Telecom paid approximately $4.2 million, which included the issuance of 216,039 shares of NUI stock. Telecom assumed management control of Norcom, and consolidated its own and Norcom revenues and expenses as of March 1, 2002. Telecom entered into another agreement with Norcom Agency Sales, Inc. (NAS) at the same time it acquired Norcom, whose owners had recently created NAS. Telecom believed that NAS could help it to build a second client base. Under this second agreement, Telecom was to purchase (with NUI common stock) the client base after a settle-up period ending in October 2003. Telecom immediately began to manage the NAS accounts and receive the revenue. Telecom projected that by the settle-up month, NAS will have produced about $600,000 in new revenue during the term of the agreement.

Telecom also entered into a five-year partnership with WorldNet (an MCI reseller) in the spring of 2002. Telecom undertook the management of WorldNet's billing and customer

service. Telecom made another acquisition at about the same time. In May 2002, it agreed to acquire certain assets of Telcorp, Ltd., a non-facilities-based reseller that provides advanced voice and data services. Telecom assumed management control of Telcorp effective April 1, 2002. It consolidated the revenues and expenses of Telcorp into Telecom as of that date. The acquisition was completed in September 2002, for an initial purchase price of $3.4 million cash. Telecom paid Telcorp a post-closing adjustment of $3.8 million in April 2003, in order to complete the acquisition of Telcorp. Telecom has combined the Telcorp customer accounts with its own.

After the June 2003 decision to sell the business, NUI began to report Telecom financial results as discontinued operations. The Company recorded a write-down of $11.6 million related to the carrying value of the goodwill from the acquisitions of ITG and the other companies, and $4.8 million for intangible assets relating to customer relationships. NUI expects to close in the near term on a sale of Telecom to a group led by the executive who led ITG when NUI first bought it. In the fall of 2003, NUI had estimated a likely purchase price for Telecom, as part of efforts to make plans for reducing the intercompany balance. The price that NUI will now receive is about one-half that estimate. The execution of the sale will in essence return to former ITG management not only all of what it sold to NUI, but also the significant additions made thereafter, and all at a price that is in the range of what NUI paid for ITG in the first place.

2. Customer Base and Revenues

Telecom offers all of its services and products to third parties and to affiliates alike. The market segment Telecom has pursued comprises small to medium sized businesses that have substantial telecommunication needs, but are too small to be well served directly by the large carriers. The majority of Telecom revenues have come from the long-distance services that have been its core business since NUI acquired the enterprise. The following table shows NUI shows revenues by year by category.

Table III.22. Telecom Revenues by Category

Calendar Year	2001[1]	2002	2003[2]
Percent of Revenues			
Long Distance	74.4	73.3	74.3
Local	22.2	24.5	23.8
Wireless	3.4	2.3	1.9

[1] Nine months beginning April 1
[2] Five months beginning May 31

ITG had approximately 700 customers when NUI acquired it. Organic growth and business acquisitions have caused this number to grow to approximately 11,000 business and commercial customers. Telecom issues approximately 14,000 invoices per month to customers.

3. Employees

ITG had 12 employees in late 1999. The number grew in 2001 to 23, in 2002 to 38, and in 2003 to 46. Telecom also uses more than 250 agents to sell its services. The agents are not classified as Telecom employees and are not engaged in any other NUI work.

Telecom has outsourced its billing and collections functions. It has made no use of NUI resources to provide these services. Dedicated Telecom employees handle other Telecom functions, such as customer service, provisioning, trouble calls, regulatory and financial reporting, and management functions. Telecom does not have field service/repair employees. The primary carriers whose services it resells to end users provide that function.

Telecom has had significant employee growth, but there have been only two instances of employee movement between NUI affiliates and Telecom. A provisioning representative transferred from NUI in December 2000, and an accountant transferred from NUI Utilities in January, 2003. There have been no transfers from Telecom to NUI Utilities.

4. Transactions with Affiliates

Telecom began providing services to NUI at the time of ITG's acquisition. Such work began with a review of all NUI telecommunication billings, after which NUI began migrating to those products and services that Telecom decided it could provide more effectively or cost efficiently. Telecom also began to consolidate all Telecom and third-party charges onto a single invoice to NUI. As part of these billing consolidation and management services, Telecom reviewed invoices for incorrect charges, unused or redundant services. Telecom did not charge NUI separately for billing consolidation and management services. Telecom reported to Liberty that the going rate for such billing and third party service management is approximately 50 percent of any savings obtained. Telecom believes this review process has saved NUI about $1 million a year, particularly in data services, long distance, conference calling and wireless.

In consolidating its charges and those of third parties who continued to serve NUI, Telecom applied no markups. Telecom simply passed third-party charges through to NUI. Telecom no longer consolidated third-party charges after May 2003. Third-party suppliers began to bill NUI directly after this time. NUI telecommunications personnel requested this change for several reasons:

- NUI was continuing to review the invoices themselves, and saw no material value being added by a separate Telecom review
- The delay built into the process meant that it was more difficult to predict the monthly flow of expenses
- NUI wanted to be able to resolve any problems directly with the third party provider, without the intervention of Telecom.

NUI has allocated charges for Telecom services using the three-factor method for landline charges and direct charging to an individual responsibility center (*i.e.,* department or work group) for wireless services whenever possible. The following table

shows the amounts charged for Telecom services for fiscal 2002 and the first nine months of fiscal 2003.

Table III.23. Telecom Charges to Affiliates

Unit	2002	2003
Appliance Services Fla	$89,058	$51,853
Appliance Services NC	$3,050	$19
City Gas Fla	$377,141	$343,000
Elkton Gas	$13,725	$14,443
ETG	$1,171,254	$914,027
NC Gas	$53,553	$0
Energy Brokers	$52,638	$40,884
NUI Energy	$33,244	$37,512
NUI Energy Solutions	$1.685	$0
NUI Environmental	$7,316	$3,688
NUI Corporate	$42,304	$16,598
Telecom	$55,387	$30,644
NUI Ventures	$5,033	$5,768
UBS	$41,718	$31,123
TIC	$99,125	$12,503
VA Gas	$99,125	$48,021
TOTAL	*$2,108,756*	*$1,550,083*
TOTAL Telecom Revenue	*$30,070,000*	*$35,642,000*
Affiliate Share of Total	*7.0%*	*4.3%*

Fiscal 2003 is through June, unaudited, and subject to change

The preceding table demonstrates that revenue from affiliates comprises a very small portion of Telecom's total revenues. NUI has nevertheless been the first or second largest single customer of Telecom, for the period for which records were provided to Liberty; *i.e.*, beginning with April, 2001. NUI and an entity identified as NUI Wireless both rank among Telecom's ten largest customers.

The auditor that performed the most recent Competitive Services Audit for ETG expressed concern that the billings from Telecom did not provide the information necessary to support direct charges for landline services. Liberty found the invoices provided by Telecom to be unwieldy and without substantial value in identifying the direct users of the charges involved. The invoice for May 2003, for example runs for 2,584 pages, detailing total monthly charges of $63,766.05. The invoice portion that does list the responsibility-center codes needed for direct charging begins several hundred pages into the almost 2,600 page invoice. The invoice's *Summary of Current Charges* does not break out information by physical location. Moreover, the summary of individual location charges does not tie back to where the invoice is totaled. The location charges are buried in a large mass of detailed information, including, for example the items that the following table lists.

Table III.24. Telecom Billing Detail Example

Local monthly recurring charges	Longest duration outgoing calls
Combined detailed line summary	Outgoing calls daily summary
Outgoing interstate area code summary	Outgoing time of day summary
Outgoing intrastate area code summary	Outgoing duration distribution
Outgoing state and area code summary	Calling card daily summary
Location outgoing call summary	Calling card time of day summary
Calling card summary	Calling card duration distribution
International calls	PIN number summary
Frequently called numbers	

The preceding example addresses five phone lines at the ETG offices at 1085 Morris Avenue, which go by the identifier *Location 0071*. Telecom indicated that its invoices can only offer a breakdown to a service location level for trunk lines. NUI would have to provide the additional information from which to identify the responsibility center associated with individual lines.

NUI telecommunications personnel were working during Liberty's audit fieldwork to develop a product that can identify how often an extension is used. The goal was to allow NUI better to identify phone usage by responsibility center. The Company has not used long-distance codes to identify callers, nor does it plan to do so.

NUI transferred much of its telecommunications business to Telecom without evaluating other alternatives. Telecom reported to Liberty that only the largest business customers use bids for telecom services, and that Telecom refuses to participate in structured, competitive bidding for its services. There exist no written agreements to govern Telecom services. There also exist no documentation that provides a pricing structure or sets a minimum term for services provided. The only contractual documentation that NUI provided in response to Liberty data requests was a copy of a July 14, 1999 agency agreement authorizing ITG to implement changes to local and long distance telephone services. Such agreements are very narrow in scope and are not designed to broadly govern supplier/customer relationships.

Telecom's largest third-party customers also do not have written agreements; Telecom provided agency agreements or simple order forms for those customers as well. Telecom considers its failure to require term agreements to constitute a competitive advantage. Telecom's marketing materials highlight the fact that it requires no contractual commitment from its customers.

Telecom, like all NUI affiliates, bears a share of allocations for NUI costs for common overheads and support. The following table summarizes them. NUI acquired the company that became Telecom in November 1999, which was early in fiscal 2000, but made no allocations to it until fiscal 2001. According to the allocation models used by NUI, Telecom received 1.9% of most corporate allocations for 2001, 1.7% for 2002, and 2.5% for 2003.

Table III.25. Summary of NUI Charges Allocated to Telecom

Cost Item	2000	2001	2002	2003
STD Interest Expense	None	$119,014	$266,040	$467,019
General Taxes		$19,332	$0	$0
Depreciation	None	$39,066	$54,587	$72,645
Accounting	None	$52,976	$63,994	$82,310
IT	None	$123,959	$162,250	$153,123
Marketing Administration	None	$0	$11,474	$0
Legal	None	$22,001	$30,637	$53,265
HR/ Benefits	None	$179,918	$444,153	$790,594
Investor Relations	None	$10,302	$8,777	$14,051
Corporate Development	None	$4,094	$8,408	$5,269
Corporate Secretary	None	$11,313	$18,973	$15,611
Executive	None	$29,308	$37,519	$35,984
Internal Audit	None	$4,750	$0	$0
Public Affairs	None	$8,561	$11,284	$8,700
Real Estate	None	$33,503	$224,949	$223,705
Insurance	None	$6,379	$7,583	$43,731
Treasury	None	$20,940	$25,788	$86,605
Accounts Payable	None	$7,245	$6,892	$5,954
Purchasing	None	$0	$10,946	$8,422
Total Allocations	*$0*	*$692,661*	*$1,394,254*	*$2,066,988*
Total Telecom Revenue	*$5,242,000*	*$13,824,000*	*$30,070,000*	*$35,642,000*
Allocations/Revenue	*0.0%*	*5.0%*	*4.6%*	*5.8%*

5. Financial Results Summary

Through organic growth and the acquisition of other small telecommunications service providers, Telecom succeeded in increasing its operating revenues from $5.2 million in 2000 to $35.6 million in 2003. Its operating margins grew from less than $1 million to $11.5 million in this same time period. Very large increases in operating expenses, however, caused Telecom to suffer a loss before income taxes in each of these years. Yearly losses averaged somewhat over $2 million.

Telecom's acquisitions of new businesses increased expenses for the back-office functions, such as customer service, provisioning and finance, required to support the customer additions. During the second half of fiscal 2002 and into fiscal 2003, Telecom implemented various information systems improvements, and integrated its new businesses to streamline functions. This explanation, however, does not explain the very high O&M expenses shown in the following table, which summarizes Telecom income statements.

The income statement for fiscal 2003 includes a non-cash charge under "Loss from Discontinued Operations." In reclassifying Telecom to discontinued operations in June 2003, the Company recorded a write-down of approximately $11.6 million related to the carrying value of the Telecom goodwill. Telecom also recorded in June 2003 a write-down of approximately $4.8 million on the carrying value of the acquired intangible assets for customer relationships of Telecom. Both write-downs came as part of the decision to sell Telecom. These two items account for the largest part of the non-cash charge.

Table III.26. Telecom Income Statements FY 2000-2003

Item	2003	2002	2001	2000
Operating Margins				
Revenue-Non-Affiliates	$34,051	$27,963	$10,995	$5,242
Revenue Affiliates	$1,591	$2,107	$2,829	$0
Operating Revenues	$35,642	$30,070	$13,824	$5,242
Cost of Sales	$24,147	$22,116	$10,501	$726
Total Operating Margins	$11,495	$7,954	$3,323	$726
Other Operating Expenses				
O&M	$12,955	$10,873	$4,160	$1,247
Other	$545	$506	$631	$272
Total Other Operating Expenses	$13,500	$11,379	$4,791	$1,519
Net Operating Income	$(2,005)	$(3,425)	$(1,468)	$(793)
Interest Expense	$460	$266	$119	$86
Income Before Income Taxes	($2,465)	$(3,691)	$(1,587)	$(879)
Income Tax Expense	$(996)	$(1,474)	$(652)	$(306)
Income from Continuing Operations	$(1,469)	$(2,217)	$(935)	$(573)
Discontinued Operations				
Income/Loss	$(20,700)			
Income Tax Expense/Benefit	$2,625			
Net Income (Loss)	$(19,544)	$(2,217)	$(935)	$(573)

Thousands of dollars; fiscal 2003 amounts are for first nine months, unaudited, and subject to change

The following table shows the Telecom balance sheets.

Table III.27. Telecom Balance Sheet 2000-2003
(Amounts may not match due to rounding)

Item	2003	2002	2001	2000
Assets				
Total Current Assets	$5,167	$10,975	$5,596	$3,283
Net Utility Plant	$3,310	$1,744	$328	$93
Other Assets				
Net Goodwill	$0	$7,585	$4,982	$4,239
Deferred Charges and Other	$1,971	$6,025	$0	$4,462
Total Other Assets	$1,971	$13,610	$4,982	$
Total Assets	$10,448	$26,329	$10,906	$7,838
Liabilities & Divisional Equity				
Current Liabilities	$(960)	$1,724	$2,036	$941
Notes Payable to Banks	$22,110	$16,111	$5,703	$2,840
Total Current Liabilities	$21,150	$17,835	$7,739	$3,781
Total Deferred Credits & Other Liabilities				
Paid-In Capital	$13,271	$12,242	$4,630	$4,630
Unappropriated Retained Earnings	$(23,273)	$(3,728)	$(1,510)	$(574)
Total Capitalization	$(10,002)	$8,514	$3,120	$4,056
Total Liabilities	$10,448	$26,329	$10,905	$7,837

Thousands of dollars; fiscal 2003 is for first nine months, unaudited, and subject to change

Telecom's balance sheet information is notable in its treatment of the intercompany receivables question. Specifically, the line (not shown below) for *Notes Payable to Associated Companies* shows zeros, but there is an entry under *Notes Payable to Banks*. Telecom has not had its own credit line with banking institutions; this line actually represents its intercompany payable. Also notable are the *Paid In Capital* figures, which include amounts that funded the acquisitions of Norcom and Telcorp. Like NUI's other non-utility operations, Telecom has seen a substantial growth in its intercompany balance. Telecom's balance sheets show these amounts as notes payable to banks, which they were not, rather than as amounts due to affiliated companies, which they were. The balance ran at about $2.8 million in its first year under NUI ownership. It grew to $22.1 million by June 30, 2003. NUI liquidated the balance with the proceeds of its November 2003 refinancing of NUI.

The large 2002 increase in *Current Assets* came primarily in accounts receivable, due to the acquisitions of Norcom and Telcorp. Goodwill has been written off in 2003, as has the $4.8 million of "intangible assets" for customer relationships associated with the acquisitions that had been included in "Deferred Charges and Other" in 2002.

6. Conclusions

Conclusion III-18. NUI failed to require Telecom to operate its business with affiliates in compliance with the holding company order and in a manner that permits verification of the reasonableness and prudence of the need for and costs of goods and services provided.

Telecom reports that it has produced substantial savings in NUI telecommunications costs. However, it is also clear that NUI has not undertaken any focused examination that would show Telecom to be the most efficient and economical supplier. All NUI can demonstrate is that it was more economical than the providers it displaced. NUI should not have undertaken substantial agreements with affiliates without demonstrating that those agreements have been reached through an arms-length process. Moreover, the provision of services without any form of agreement is troublesome in the face of Telecom's pending sale. Prior to Liberty's expression of concern, NUI appeared to be taking no action to examine its options or to protect its interests following the sale of Telecom.

The BPU Holding Company Order contains a condition requiring the filing of agreements. Specifically, it provides that:

> *10. NUI Utilities shall seek Board approval in accordance with N.J.S.A. 48:3-7.1 prior to implementing a contract for the provision of administrative support services to Elizabethtown Gas Company. All transactions and allocations exceeding, in the aggregate, $25,000 annually between Elizabethtown Gas Company and NUI Holding Company's other divisions and subsidiaries shall be reported annually by NUI at the time of the filing of its annual report to the Board.*

NUI did not file the agreement under which Telecom provided services for NUI that NUI used to provide services to ETG. Moreover, NUI did not report the costs Telecom charged, of which ETG's share exceeded the $25,000 limit.

Conclusion III-19. Telecom has produced losses since its creation; its operations as a subsidiary of NUI have been substantially funded by the corporate concentration account, and ultimately NUI Utilities and ETG.

Even as it grew substantially since 2000, Telecom has produced steady and increasing operating losses, beginning with about $600,000 for fiscal 2000, growing to $2.2 million in 2002, and reaching $1.4 million to date in 2003. During this same time, its intercompany payable grew from $2.8 million to $22.1 million. NUI paid the remaining balance as part of its liquidation of all intercompany receivables owed to NUI Utilities. Chapters Four and Five of this report address the issue of intercompany receivables and financings in detail.

Conclusion III-20. NUI failed to make adequate allocations of corporate costs for Telecom.

The three-factor test that NUI has used, which averages payroll, plant, and customers, means that NUI made no allocations respecting Telecom during fiscal 2000, even though NUI owned the company for at least ten months of that year. This failure caused other NUI operations, including ETG, to absorb significant extra costs. It was appropriate under the circumstances for NUI to assign costs to Telecom for the portion of fiscal 2000. Had it done so, using the 2001 amount as a proxy and reducing it somewhat for the partial year and for the growth that Telecom experienced, relative to the formula's factors, Telecom would likely have absorbed costs that instead were borne in substantial part by ETG.

Similarly, Telecom's significant expansion late in fiscal 2002 came without a change in allocation factors. NUI should have reflected the significant change in Telecom's size in revised allocation factors. Doing so would have saved ETG significant costs in the test year that ETG used to justify rates in its last base rate filing with the BPU. Allocating costs to Telecom for the last month and a half of the test year would have reduced ETG test-year costs by about $30,000.

7. Recommendations

Recommendation III-8. Require ETG to refund to customers the amount by which ETG's allocations of NUI Corp. costs were inflated due to the failure to make allocations to Telecom.

NUI's failure to revisit allocation factors, once set for the fiscal year, ignored the burdens placed on the company by its non-utility operations. Those operations were increasing substantially during the test year on which ETG based its most recent claim for a base rate increase. NUI Corp. should at the least have included one and a half months worth of allocations to Telecom, which would have reduced test year expenses by $30,000.

Requiring a return of one-year's worth of cost offsets that should have been built into rates on a recurring basis represents a moderate approach to addressing the imbalance created by NUI's use of its general allocator. This chapter of Liberty's report makes similar recommendations to address failures to allocate test-year costs to other non-utility affiliates.

G. NUI International, Inc. (1998)

1. Background

NUI formed NUI Ventures (Ventures) in 1996, as a department of NUI, not as a separate subsidiary. NUI intended for Ventures to centralize the development of projects and new business opportunities, and to take peripheral businesses out of ETG and NUI Utilities. A single vice president headed Ventures; NUI did not replace the incumbent on his retirement in late September 2003. Ventures had a close association, but no direct ownership connection, with NUI International, Inc. (International). NUI Capital organized International, which NUI Capital also owns, to explore international business opportunities. NUI shut International and Ventures down in September 2003. International was headquartered in Bedminster, NJ. Very little information on the entity is available from SEC filings or other public sources. International had three subsidiaries:

- NUI Hungary, Inc., a Delaware corporation; International owns 99 percent and NUI Energy Brokers owns 1 percent; NUI Hungary, Inc. has two subsidiaries:
    - Hungarian Portfolio Management and Trading LLC (HPMT), a Hungarian LLC, which is wholly owned by NUI Hungary, Inc.
    - KFT
- NUI Ukraine, Inc., a Delaware corporation
- NUI/Caritrade International, LLC, which is 90% owned by International.

In addition to operational supervision of International, Ventures also held responsibility for two other subsidiaries of NUI Capital, *i.e.*, NUI Environmental and UBS. Ventures also had responsibility for a fuel-cell project. NUI reported separate financials for NUI Environmental and NUI UBS. This chapter of Liberty's report addresses those two subsidiaries earlier. Here, Liberty reports Ventures financials as being an approximation of International's financials. Some other business activities, such as the fuel-cell project are included in and not separable from this financial information provided by NUI.

NUI started taking an interest in international opportunities in 1998, focusing on Russia and several other Eastern European economies. The Company considered industry restructuring in Europe to be on a course substantially behind that of the United States. NUI believed that its contacts, primarily those of its chairman of the board, could allow it to take advantage of lessons learned in this country as marketplace development grew in Eastern Europe. NUI's first international project involved an association with Gazprom, which claims 94 percent of the aggregate gas production in Russia. Gazprom is responsible for essentially all transmission and distribution of gas in Russia, and is a major exporter of gas to European countries.

NUI's contacts led it to conclude that the Russian company could benefit from NUI's contacts in fostering relationships to further its gas export goals. NUI International also became involved in a fiber-optic project with Gazprom. NUI recruited Nortel to install a cable from Moscow to Tokyo. NUI did not seek to become a significant cash investor or financier. NUI limited its role to project development, which allowed it to seek to use the capital of other entities. NUI International intended to limit its outlays to employee time and travel expenses. Nortel eventually pulled out of the project.

NUI International also became involved in a compressed-natural-gas (CNG) vehicle project in Moscow. Natural gas costs approximately one-half of what gasoline does in Russia. NUI International sought again to parlay its expertise and contacts into an equity position with the company, with the necessary cash and debt to be provided by a third-party investor and international banks. The business plan for the CNG Project showed NUI International as a 51 percent owner, who was expected to secure financing, provide technical expertise, supply specialty technical equipment, provide management expertise and discipline, and serve as one of two key partners in a Joint Venture to be established upon obtaining funding commitments.

The plan anticipated a total investment of $22 million and the conversion of 4,250 vehicles to CNG over a three-year period. NUI International found, however, that third parties expected NUI financial commitments and loans. NUI International therefore discontinued the project in early July 2003.

NUI International also explored opportunities to become involved in gas trading in Europe. NUI has since transferred that project to NUI Energy Brokers. NUI continues to believe that NUI Energy Brokers could become successful in gas trading in Europe, depending upon when the markets there open more to competition.

2. Customer Base and Revenues

NUI International has had no customers or revenues.

3. Employees

Ventures had three employees in fiscal 2001, 2002, and 2003. The Vice-president of Ventures stated that International has no employees.

4. Transactions with Affiliates

NUI International did no work with affiliates; therefore, it shows no affiliate transactions, apart from allocations for NUI overheads and general support. The Company provided Ventures operating expenses, which show the NUI allocations, and provide some detail on International's projects. After its first year of operations, NUI allocations have represented between 10 and 20 percent of Ventures' total operating expenses.

Table III.28. NUI Ventures Operating Expenses

Dept Desc	1998	1999	2000	2001	2002	2003
Corp non-cash items		$3,905	$3,987	$0	($6,565)	$101,566
Accounting	$0	$0	$0	$5,576	$5,031	$7,378
Allocations		$49,580	$50,522			
AP				$763	$985	$579
Corp Develop				$431	$989	$456
Corp Secy				$1,191	$2,232	$3,913
Executive				$3,085	$4,414	$3,190
HR Dept/Benefits	$0	$23,044	$36,654	$28,472	$6,905	$2,993
Insurance				$875	$353,301	$6,306
Internal Audit				$500		
Investor Relations				$1,084	$1,033	$1,179
IT	$0	$0	$0	$13,048	$19,088	$13,734
Legal & Regulatory Affairs		$2,799	($2,799)	$71,879	$57,057	$104,216
Mktg Admin					$1,639	
Public Affairs				$901	$1,327	$784
Purchasing					$1,564	$754
Real Estate	$0	$93,561	$87,680	$91,043	$68,718	$45,084
Treasury				$2,204	$3,034	$8,594
Other	$0	($187)	$0	$0	$0	$979
Admin - Ventures	$324,491	$831,087	$1,770,476	$1,563,515	$3,387,609	$979,028
International - Hungary						$217,355
NUI Fuel Cell Ventures	$26,136	$162,987	$118,681	$124,892	$146,639	$585
Total	$350,627	$1,166,776	$2,065,202	$1,909,460	$4,055,000	$1,498,672

Fiscal 2003 is through June, unaudited, and subject to change

5. Financial Results Summary

No Ventures or International projects, apart from UBS and Environmental, produced any revenues. Ventures lost money in each of its six years of operation. These losses have averaged somewhat over a million dollars per year. The following table provides a summary income statement for this department of NUI.

Table III.29. NUI Ventures Income Statements 1998-2003

	2003	2002	2001	2000	1999	1998
Operating Revenues	0	0	0	0	0	0
Cost of Sales	0	0	0	0	0	0
Total Operating Margins	0	0	0	0	0	0
Total Other Operating Expenses	1,415	4,061	1,938	2,065	1,168	351
Net Operating Income	(1,415)	(4,061)	(1,938)	(2,065)	(1,168)	(351)
Total Interest Expense	202	168	146	133	49	8
Income before Income Taxes	(1,617)	(4,229)	(2,084)	(2,198)	(1,217)	(359)
Income Tax Expense	(661)	(1,724)	(873)	(895)	(497)	(121)
Net Income	(956)	(2,505)	(1,211)	(1,303)	(720)	(238)

Thousands of dollars; fiscal 2003 amounts are through June, unaudited, and subject to change

NUI provided the data for the detailed operating expenses and the detail for the income statements for the two preceding tables in two different data requests. Liberty cannot reconcile the differences in the values for 2002 and 2003.

The following table shows the Ventures balance sheets, which are notable in their treatment of the intercompany receivables question. Specifically, the line (not shown below) for *Notes Payable to Associated Companies* shows zeros, but there is an entry under *Notes Payable to Banks*. Ventures has not had its own credit line with banking institutions; this line actually represents its intercompany payable. Ventures accumulated an $8.5 million receivable. Its balance sheets show this amount as a note payable to banks, which it was not, rather than as an amount due to affiliates, which it was.

Table III.30. NUI Ventures Balance Sheet 1998-2003

	2003	2002	2001	2000	1999	1998
Assets						
Current Assets	75	70	164	0	0	0
Utility Plant (net)	21	26	67	22	4	0
Other Assets	(14)	0	0	0	0	0
Total Assets	82	96	231	22	4	0
Liabilities						
Current Liabilities	(1,013)	(2,118)	(674)	(611)	(111)	0
Notes Payable to Banks	8,526	7,873	4,401	2,935	1,126	238
Total Current Liabilities	7,513	5,755	3,727	2,324	1,015	238
Other Liabilities	(440)	375	33	15	2	0
Capitalization	(6,990)	(6,033)	(3,527)	(2,317)	(1,013)	(238)
Long-Term Debt	0	0	0	0	0	0
Total Liabilities/Equity	83	97	233	22	4	0

Thousands of dollars; fiscal 2003 amounts are through June, unaudited, and subject to change

The Ventures intercompany payables balance began at $24,500 in October 1997. It increased monthly thereafter, in generally small amounts. Ventures funded its operations from the NUI cash concentration account, and ultimately NUI Utilities and ETG. The cumulative balance reached $8.5 million by June 2003. NUI eventually liquidated it with funds received from the November 2003 refinancing of NUI.

6. Conclusions

Conclusion III-21. Ventures has produced steady losses since its creation; its operation have been funded through an inter-company payables balance.

Ventures funded its operations from the NUI cash concentration account, and ultimately NUI Utilities and ETG. The cumulative balance reached $8.5 million by June 2003.

The express terms of the BPU Holding Company Order impose a number of limitations (*e.g.*, resource commingling) on NUI Capital, but not expressly on NUI itself. Nevertheless, it is clear that the structure NUI presented to the BPU in the holding

company proceeding contemplated that NUI would divide its operations under two first-tier subsidiaries:

- Non-utility ventures would fall under NUI Capital
- Utility operations would fall under NUI Utilities.

Therefore, Liberty construes as immaterial, for holding company order purposes, a decision by NUI to vary from the structure it proposed, *i.e.*, by choosing to place non-utility operations directly under NUI, rather than under NUI Capital.

Conclusion III-22. Ventures did not have material transactions with affiliates, other than those addressed by the general allocators used to account for support services from NUI.

7. Recommendations

Liberty has no separate recommendations involving Ventures or International. Liberty addresses the general issues of intercompany balances and corporate financings in Chapters Four and Five of this report.

Chapter Four: Finance

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A. Financial Results

1. Income

ETG has provided the bulk of net income and dividends for NUI as a whole. NUI prepared income statements and balance sheets for the individual NUI Utilities' divisions in response to Liberty data requests. The following table shows net income for each of the operating divisions of NUI Utilities from fiscal 1998 through fiscal 2003. The 2003 information is not audited, and does not include any income effect of Liberty's audit recommendations or the Stier Anderson investigation.

Table IV.1. NUI Utility Net Income By Division

	1998	1999	2000	2001	2002	2003
Elizabethtown Gas	$12,812	$19,201	$21,138	$19,907	$15,098	$ 18,856
City Gas of Florida	$1,187	$1,662	($3,673)	$746	$1,783	$ (1,014)
Elkton, Maryland	$229	$527	$398	$567	$71	$ 220
North Carolina	$342	$415	$889	$608	($373)	$ (347)
Valley Cities	($80)	$316	$95	($101)	$1,410	$ (128)
Waverly	($67)	($52)	($34)	($40)	($424)	$ 22
NUI South (1998,1999)	($235)					
Appliance Business (2000-)			$3,580	($675)	($333)	$ (450)
NUI Utilities						$ (362)
Utilities Total	$14,188	$22,069	$22,393	$21,012	$17,232	$ 16,797

Amounts are in thousands; 2003 amounts are not audited.

During this same period, NUI invested heavily in its non-utility businesses. NUI met with poor results in its non-utility ventures. The following Table shows the net income results that NUI reported to Liberty, by non-utility venture. The 2003 information is not audited, and does not include any income effect of Liberty's audit recommendations or the Stier-Anderson investigation.

Table IV.2. NUI Non-Utility Income Summary ($000)

	1998	1999	2000	2001	2002	2003
NUI Energy	($1,524)	$853	($669)	$1,315	($1,551)	($9,824)
NUI Energy Brokers	($125)	$2,347	$4,419	$7,562	$6,864	$2,685
NUI Telecom	-	-	($574)	($936)	($2,218)	($26,082)
TIC	-	-	-	($5,425)	($31,281)	($3,997)
Energy Solutions	($60)	($51)	($237)	($24)	($63)	($31)
NUI Capital	$864	$902	$1,111	($5,188)	-	-
UBS	$554	$471	$587	$917	$191	$528
NUI Ventures	($238)	($720)	($1,303)	($1,210)	($2,506)	($1,209)
NUI Environmental	($92)	($163)	($1,677)	($797)	($1,275)	($1,352)
Virginia Gas	-	-	-	$108	($401)	($487)
Saltville Storage	-	-	-	-	-	$109
TOTAL	($621)	$3,639	$1,657	($3,678)	($32,240)	($39,660)

Amounts are in thousands; 2003 amounts are not audited.

NUI's net cumulative equity investment reached about $165 million through June 30, 2003. It fell to $140 million at the end of fiscal 2003. In addition to about $75.5 million in operating losses from 2001-2003, NUI has also experienced net income losses of $23.3 million due to accounting-related write-offs related to non-utility operations. The total losses of $98.8 million over a three-year period represent a loss of over one-third of the equity capital of NUI to non-utility business debacles.

2. Dividends

ETG and CGF have provided the vast majority of subsidiary dividends to NUI from fiscal 1998 through June 30, 2003. The following table lists the regular quarterly dividends paid by subsidiaries and business units to the parent holding company. This table also shows the total amount of dividends paid by NUI to its shareholders during the same time period.

Table IV.3. Summary of Dividends to Parent and Shareowners

	1998	1999	2000	2001	2002	2003
ETG	($8,578,986)	($8,300,555)	($7,969,391)	($8,204,658)	($9,266,375)	($10,300,997)
CGF	($2,854,309)	($2,725,369)	($3,294,183)	($2,874,913)	($3,161,986)	($3,695,777)
Other Utility	($780,580)	($665,861)	($772,865)	($827,030)	($614,831)	($172,994)
UBS	($72,871)	($236,448)	($240,729)	($354,442)	($395,248)	($393,168)
NUI Capital	($22,232)					
Energy Brokers		($174,224)	($177,379)	($367,569)	($512,358)	($456,074)
VA Gas					($688,025)	($707,702)
To Parent	($12,308,978)	($12,102,457)	($12,454,547)	($12,628,612)	($14,638,823)	($15,726,712)
To Shareowners	$12,350,974	$12,444,611	$12,670,183	$13,127,454	$14,638,822	$15,726,711

NUI determined business unit contribution to dividends from the 1996 through 2002 fiscal years by applying the three-factor general allocator to the total dividends to be paid by NUI to its shareholders. This application yielded each subsidiary's or business unit's expected share of responsibility for the parent's dividend payments to shareholders. The application of this factor made ETG responsible for between half and two-thirds of the total NUI dividends during the period.

NUI does not have formal dividend policies. NUI and its board of directors, however, have operated under a guideline of maintaining a parent dividend flow that reflects the size of the earnings being produced by those subsidiaries and business units that operate in the types of business sectors where investors typically expect dividends. NUI Utilities constitutes the only NUI sector that qualifies under NUI's application of this guideline. NUI has recently applied a target payout ratio of 70 to 75 percent of NUI Utilities' earnings. NUI has applied a second dividend payout target as well. It consists of 45 to 50 percent of NUI's consolidated earnings from continuing utility and non-utility operations.

ETG did not remain current with the payments indicated by this guideline. It paid only about 48 percent of its earnings in dividends to the parent company from 1996 through 2002. ETG augmented these payments, however, with a "special dividend" in 2003. Liberty discusses that dividend in the next section of this report.

3. Capital Structure

The earnings of and dividends paid by ETG, NUI Utilities, and NUI, like those of any business, affect their capital structures on an ongoing basis. Nonrecurring financial management events and activities have a similar affect. Examples of such events and activities include the issuance and allocation of long-term debt instruments, the sale of common equity and its allocation among entities, and special dividends or capital distributions.

The following table shows the historical permanent capital structures for ETG, CGF, the other NUI Utilities' units, and NUI Utilities at fiscal year-end. The table shows that ETG's common equity percentage at fiscal year-end ranged from 43.3 percent to 47.0 percent from 1998 to 2002. ETG's equity percentage increased significantly, to 52.4 percent, in 2002. It was 49.7 percent at fiscal year-end 2003.

Table IV.4. NUI Utilities Equity Percentages

	1998	1999	2000	2001	2002	2003
ETG						
Common Equity	$141,231	$152,131	$164,671	$176,313	$219,438	$196,398
Percentage	47.0	43.3	45.3	47.0	52.4	49.7
Long-Term Debt	$159,098	$198,910	$198,946	$198,987	$199,017	$199,053
Percentage	53.0	56.7	54.7	53.0	47.6	50.3
CGF						
Common Equity	$42,512	$41,508	$38,772	$36,643	$35,265	$30,255
Percentage	41.9	41.3	39.7	38.3	41.4	37.7
Long-Term Debt	$59,000	$59,000	$59,000	$59,000	$50,000	$50,000
Percentage	58.1	58.7	60.3	61.7	58.6	62.3
Other Utilities						
Common Equity	$15,064	$15,603	$16,158	$8,812	$15,426	$1,781
Long-Term Debt	$11,001	$11,001	$11,001	$11,001	$0	$0
Utilities Total						
Common Equity	$198,867	$209,243	$219,600	$228,704	$270,126	$228,434
Percentage	46.5	43.8	44.9	46.0	52.0	47.8
Long-Term Debt	$229,099	$268,911	$268,946	$268,982	$249,017	$249,053
Percentage	53.5	56.2	55.1	54.0	48.0	52.2

Dollars are in thousands; 2003 figures unaudited.

The changes to the reported capital structures of NUI Utilities have resulted from a number of financial management actions and decisions during this period. Regular net income and dividend changes to the capital structures have also been a factor. The management actions and decisions include:

- $39.8 million of rate gas facility revenue bonds issued by NUI Utilities in 1999. NUI allocated 100 percent of these bonds to ETG.

- A reduction in long-term debt due to the maturity of $20 million of medium-term notes at NUI Utilities in 2002. Previously, NUI allocated $9 million of this debt to CGF and $11 million to other smaller utilities, mostly North Carolina and Valley Cities.
- Issuance of common equity by NUI in 2002 and allocation of 100 percent of the net proceeds of $37.2 million to ETG.
- A "Special dividend" of $31.9 million in June of 2003 by ETG to NUI. Management explained that it recorded a special dividend in June 2003, in order to produce a 75 percent dividend payout for the combined fiscal years 1996 to 2002. Management noted that this 75 percent ratio is what would have transpired, had the Company followed its normal guideline during the period. Dividends actually paid by ETG to NUI during this period had only totaled 48 percent of net income in aggregate. The 2003 special dividend of $31,910,000 accounted for the difference between the actual dividends recorded during this period and 75 percent guideline.
- A "Special dividend" of $12.6 million from the North Carolina and Valley Cities utilities in the fourth quarter of 2003. According to NUI management, this $12.6 million represented liquidation dividends for these two utility operations, which NUI sold about a year earlier. Management transferred the net equity in these companies, following the payment of all liabilities and debts, to the parent in the fourth quarter of 2003. (This special dividend is not included in the table.)
- An NUI Utilities' reduction in shareholders' equity of $61.386 million to present the inter-company receivable of NUI Utilities from NUI in accordance with generally accepted accounting principles. PricewaterhouseCoopers did not accept retaining this inter-company receivable as an asset on the books of NUI Utilities, because the auditor did not find a clear intent, plan and ability to repay by NUI. The lack of such a plan and a questionable ability to repay this inter-company payable by NUI, as of September 30, 2002, caused management to record a charge against NUI Utilities equity. (The $61.36 million equity adjustment is also not included in the table.).

ETG filed for a rate increase with the NJBPU in 2002. ETG's' request sought an increase of $33.4 million on an annual basis. In November 2002, the NJBPU granted a rate increase of $14.2 million, effective on November 22, 2002. The following table depicts the pro forma capital structure that ETG filed in support of its rate increase request.

Table IV.5. ETG Rate Case Capital Structure

ETG Pro Forma Capitalization	Projected	% Of Capital Structure	Cost	Weighted Cost
Long-Term Debt	$197,123	46.07%	5.90%	2.72%
Customer Deposits	$6,121	1.43%	4.42%	0.06%
Common Stock Equity	$224,679	52.50%	11.75%	6.17%
Total	$427,923	100.00%		8.95%

Thousands of dollars

ETG's rate case filing included a common equity level of $224,489,000. NUI had recently issued common stock in the amount of $37.2 million. NUI allocated 100 percent of the net proceeds of the parent's March 2002 common-stock issuance to ETG. The $224.5 million equity amount set forth in the rate filing includes those proceeds; this inclusion is problematic from a rate setting perspective.

NUI's 2002 rate filing includes the common equity levels that ETG's financial statements reflected at the time of the rate case. NUI, however, did not make known to the NJBPU, however, that NUI and its non-utility businesses owed very substantial sums to NUI Utilities, and, therefore, to ETG. Chapter 5 of this report discusses the large balances owed by affiliates to NUI's utility units, beginning in December 2001. Those balances grew substantially and NUI did not liquidate them until November 24, 2003. NUI used a portion of the proceeds from its major, $255 million refinancing (discussed later in this chapter of the report) to pay those debts to its utility units.

Over the 24 months since December 2001, the average inter-company balance owed to NUI Utilities amounted to $93.0 million. ETG represented about 70 percent of NUI Utilities, which made its share of this average balance $65.1 million. For the 12-month period that began with the November 2002 effective date of ETG's rate increase, ETG's share of the amount that NUI owed to NUI Utilities averaged about $87.4 million.

NUI accounted for the amounts it owed to NUI Utilities/ETG as cash and equity capital on the books of NUI Utilities. Those accounting entries did not, however, have all the critical attributes of assets. In particular, ETG did not have access to them to support utility operations. The non-utility affiliates, who had far more critical cash needs, had already used them. NUI senior executive management allowed those non-utility affiliates to gain access to these funds through the common cash concentration account. Chapter Five of this report also discusses this account in detail. NUI Utilities had no cash, but merely an account receivable from NUI to represent a major portion of the equity resources that the Company told the BPU were necessary for and available to ETG.

The net result is that NUI's rate filing did not properly reflect ETG's available equity percentages either before or after the rate case. More significantly, ETG did not have, in any meaningful sense, the use of a substantial portion of the equity capital included in the rate filing for purposes of cost-of-capital recovery from ETG New Jersey customers.

NUI financial personnel have asserted that this conclusion is not correct. Their position focuses on the fact that the obligations underlying the intercompany balances constituted short-term debt. The capital structure used to set returns in New Jersey does not include such debt. Liberty found this argument to be disingenuous. The issue is not the source of the resources at issue, but the accuracy of what ETG's filing represented to be its equity amount. NUI's outside auditors have recently found the Company accounting for the intercompany balance owed to NUI Utilities to be unsupportable.

A central finding of the PricewaterhouseCoopers' audit of NUI Utilities for fiscal 2001 and 2002 was that management needed to make a downward adjustment to NUI Utilities' fiscal 2002 year-end equity capital in the amount of $61.4 million. This reduction in equity capital reflected the conclusion that the inter-company payable from NUI to NUI Utilities at year-end 2002 could not be treated as an NUI Utilities asset. It also confirmed that the inter-company balance needed to be reflected as an effective reduction in equity capital for Utilities and ETG from December 2001 until NUI obtained the capability to repay the balance. That capability did not arise until the major November 24, 2003 financing. This refinancing through Credit Suisse First Boston (CSFB) produced sufficient cash for NUI to repay the inter-company balance to NUI's utility units. This repayment mooted the need for a continued NUI Utilities equity reduction for fiscal 2003.

The CSFB refinancing also, for the first time, brought ETG's equity to a level matching that asserted to be the case in the 2002 rate filing. ETG's rate case filing did not reflect the amount of the inter-company balance owed from the parent and the non-utility entities in the test period. These funds were not available to ETG during the rate case test period, or during the first 12 months that increased rates were in effect. In addition, the ETG "special dividend" in June 2003 had caused a further reduction in the equity capital from the levels of the rate case filing.

The argument that short-term debt is not relevant to setting return rates in New Jersey was not the only one asserted by NUI to Liberty. Financial personnel also cited the fact that the debt was owed to NUI Utilities, not to ETG. Liberty found this argument to be unpersuasive. NUI Utilities has no operations beyond those of the utilities it operates. Those operations are the source of the ability to secure credit. It is disingenuous to argue that debt secured on their strength and then lent out by the shell entity that holds them produces an asset (the receivable) in which the utility has no interest. The observation of financial personnel falls far from establishing that the receivable was not a matter for ETG concern. Rather, it tends more to indicate the financial obscurity created by structuring the third-party and intercompany debts in a way that made it much more difficult for regulators as well as other stakeholders to locate and assess for themselves the impacts to ETG. In short, the effective resource transfer that NUI created to the financially weaker non-utility entities from financially stronger utility operations was not only wrong under standards of good utility practice and the BPU Holding Company Order, it was also made much more difficult to find by NUI's accounting practices.

4. Credit Ratings

The credit ratings of both NUI and NUI Utilities have declined precipitously since September 2002. Moody's Investor Service has lowered the ratings of both NUI and NUI Utilities five different times between September 2002 and October 2003. Moody's now rates the holding company and NUI Utilities well below investment grade. This decline has caused NUI and NUI Utilities severe financial distress and extraordinarily high debt rates. It has also caused NUI Utilities problems in purchasing natural gas for utility use.

The Moody's downgrades that began in September 2002 constituted a reversal in course. Moody's rated as A3 the senior unsecured debt ratings of NUI Utilities only two months earlier. Moody's also assigned a new credit rating of Baa1 to NUI's Senior Notes at the same time. Moody's noted that its June 2002 rating reflected steady improvement in utility credit measures. Improved profitability had brought increased cash flows, while fixed charges had remained steady, producing slightly declining leverage. NUI Utilities had carried an A3 credit rating on its senior unsecured indebtedness, while Standard & Poor's rated NUI Utilities as a BBB credit as of July 2001.

NUI has used a target credit rating of BBB/Baa2 for both NUI and NUI Utilities since at least the summer of 2000. NUI's presentation to the rating agencies in August 2000 specified a BBB target rating for each of the entities. The Company's rating agency presentations in 2001 noted a goal of achieving a holding company rating of BBB/Baa2 by the end of fiscal 2002. This target credit rating would translate to a rating of BBB+/ Baa1 at NUI Utilities. NUI rating agency presentations in 2002 targeted a credit rating for both NUI and NUI Utilities of a BBB/Baa2. NUI also targeted a debt-to-total-capital ratio of 50 percent for the holding company. However, NUI's non-utility businesses have produced catastrophic financial results during the past two years.

The precipitous credit ratings declines made NUI target ratings unattainable. Moody's Investor Service placed NUI and NUI Utilities on credit watch with negative implications in June 2002. Moody's began shortly thereafter its series of credit rating downgrades. First, on September 9, 2002, Moody's downgraded NUI Utilities senior unsecured debt to Baa1 and the senior unsecured debt of NUI to Baa2. Moody's explained the reasoning for these one-notch ratings downgrades as follows:

> *Earnings and cash-flow pressures at NUI caused by warm winter weather and a lackluster economy have yielded weaker credit and fixed charge coverage measures when compared with its LDC peers. The impact of warm weather and the poor economy is evidenced in NUI Corp.'s recently announced earnings before interest and taxes ("EBIT") which were down 16 percent and 98 percent, respectively, for the nine months and three months ended June 30, 2002. Credit measures have been weakening over the past 18 months with poor business conditions, affecting revenues in all segments of NUI Corp. except for NUI Virginia Gas and NUI Telecom. These credit measures are not expected to materially improve in the near future. NUI hopes to remedy its earnings sensitivity to warm weather largely through an updated weather normalization clause that was filed with the Board of Public Utilities in April of this year, although a decision is not expected until towards the end of this year.*
>
> *In the meantime, unfavorable conditions in the energy trading market have resulted in a lower third quarter EBIT for the Company's Wholesale Energy Marketing and Trading segment. Low trading volumes and reduced credit quality of trading counterparties have resulted in lowering*

> *earnings. While the Company's Richton, Mississippi Gas Storage Field has received positive results from its open season expressions of interest, it will be sometime before the gas storage facilities are able to generate revenues and income as various options for financing the capital expenditures are considered.*
>
> *In the case of TIC Enterprises, the Company is in the process of shutting down unprofitable product lines and transferring the more promising portions of the business, primarily network and wireless services, to NUI Telecom for management supervision and integration. The Company has completed the transfer of the profitable operations to NUI Telecom and expects to complete the closing of all unprofitable operations by September 30, 2002.*
>
> *As the Company recently announced, an expected additional write-down relating to the closing of these operations of up to $1 million will be taken in the current quarter. The uncertain conditions in the energy trading market, the unknown effects on NUI's Wholesale Marketing and Trading segment and the high state of flux in the general business environment are the reasons behind Moody's decision to maintain a negative outlook on the Company.*

This downgrade led to an increase in borrowing costs. NUI reported in its SEC Form 10-K for 2002 that NUI's borrowing costs under its short-term credit facilities had increased by 12.5 basis points, or 0.125 percent. NUI Utilities suffered an increase of 10 basis points, or 0.10 percent.

Moody's acted again, on February 3, 2003, to lower the debt ratings of NUI and Utilities an additional one notch. Moody's explained this rating action as follows:

> *Moody's rating action reflects the impact of negative results from most of NUI Corp.'s unregulated businesses on its financial condition. In October 2002, the Company announced lower earnings expectations that included disclosure of the need for accounting re-audits on prior fiscal years and the charges sustained by certain lines of non-regulated businesses. Management still has to make some strategic decisions concerning the future handling of the underperforming non-regulated businesses.*
>
> *NUI Utilities' financials and operations are closely integrated into those of NUI Corp., as they are centrally managed as one corporate entity, with the free flow of funds across business lines, the sharing of central services and the reliance on the non-regulated energy trading operations for managing a substantial portion of gas utility hedging requirements. NUI Corp. also relies on the cash flow generating ability of NUI Utilities to help service the parent's corporate debt. . .*

> *While New Jersey's Board of Public Utilities recently approved a rate increase of approximately 5 percent for ETG (NUI's LDC), which should help provide improved annual cash flows, the mixed results of NUI Corp.'s non-regulated operations of fiscal 2002 will continue to pose concerns regarding the Company's future performance. The losses from discontinued operations in fiscal 2002 ($22.3 million pretax) and downward revision to earnings from changes in accounting ($17.6 million) were all concentrated in the parent's non-regulated businesses. UBS and Energy Brokers were profitable in fiscal 2002 but unprofitable operations in 2002 included NUI Energy, NUI Telecom and NUI Environmental. Until the underperforming non-regulated businesses experience definitive turnaround, and costs (including O&M, pension, medical and insurance) are demonstrably reduced, or the lagging segments disposed of, these operations will distract management attention and divert corporate resources away from the more stable and predictable regulated business of NUI as a regulated utility.*
>
> *In its continuing review, Moody's will assess the progress being made by management to (1) either demonstrate unequivocal turnaround in its underperforming non-regulated businesses, accomplish substantial cost reductions, or exiting them altogether; and (2), renew its committed bank credit facilities that expire in the near term in sufficient amounts to cover its projected needs as well as to provide a contingency reserve for potential unforeseen events.*

NUI reported in its March 31, 2003 10-Q that the February 2003 downgrades caused further debt-cost increases. NUI's cost of borrowing under its short-term credit facilities had increased by 37.5 basis points, or 0.375 percent. The cost of borrowing for NUI Utilities had increased by 25 basis points, or 0.25 percent.

Moody's third downgrade came on March 10, 2003. Moody's lowered the ratings of NUI Corp and Utilities one more ratings notch. Moody's explained this third rating decrease as follows:

> *Moody's rating action on NUI Corp. reflected its weak financial condition due to the underperforming, unregulated businesses, as reported in previous quarters, that led to substantial write-downs. NUI Corp.'s recent disclosure of the technical defaults contained in the $60 million Note Purchase Agreement, dated August 20, 2001, which prevailed for all of 2002, also raises fundamental questions as to the quality of their internal financial controls. Moody's has assumed in this rating action that the bank lenders and note purchase investors will amend their respective agreements to eliminate certain contradictions and grant the necessary waivers to enable continuance of financial support. In addition, the internal controls and operating procedures necessary to ensure that these*

> *issues do not recur have yet to be fully formulated or implemented. In the meantime, management has yet to define and implement its strategic decisions concerning the future handling of the underperforming non-regulated businesses that have led to poor financial results. . .*
>
> *While NUI Corp. has made use of NUI's operating cash flows in the past to help service the debt at the parent company level and to fund its own non-utility operating needs, there is no indication that this reliance on NUI Utilities has abated in the latest reporting cycle. Moody's notes that the recent cold weather experienced in NUI's service territories is expected to result in material earnings improvement for the Utilities.*

Moody's noted in its continuing review that it would assess the progress being made by NUI management to:

- Procure the continued support of its bank lenders and senior noteholders
- Demonstrate unequivocal turnaround in its underperforming, non-regulated business, accomplish substantial cost reduction or exiting them all together
- Further improve internal accounting, legal and financial controls.

NUI's cost of borrowing under its short-term facilities after this downgrade increased by an additional 62.5 basis points, or 0.65 percent. The cost of borrowing for NUI Utilities remained unchanged.

On May 7, 2003, Moody's lowered the ratings on NUI and NUI Utilities, for the fourth time. The change brought by this drop proved more dramatic. Each rating fell by two ratings notches. Moody's explained these two-notch downgrades as follows:

> *In Moody's opinion, the B1 rating more properly reflects the reduced financial flexibility at NUI Corp. due to underperformance at some of its unregulated businesses, as well as the effective subordination of NUI Corp.'s debtholders to those of NUI Utilities. NUI Corp.'s debtholders rely primarily on the dividends being upstreamed by the operating subsidiaries, of which NUI Utilities represents the largest and most stable share. Moody's notes that management has taken the positive step of identifying certain underperforming businesses that it would like to sell, such as NUI Environmental and NUI Energy. While these transactions could take sometime to be effective, they could result in significant cash being returned to the Company that would help to stabilize its credit profile.*
>
> *Moody's rating action on NUI Utilities reflects the continuing reliance of NUI Corp. on the Utilities' operating cash flows in order to support its operating needs and debt service requirements as it evaluates long-term strategy regarding the non-regulated businesses. Presently, cash is centrally managed at the corporate level, in one cash pool, with funds*

> *flowing from NUI Utilities and the non-regulated operations of NUI Corp., thereby maintaining NUI (Utilities)'s close linkage to Corp.'s internal services and operations. This systems and operations linkage has the effect of tying NUI Utilities' credit more closely to that of NUI Corp. Moody's notes that the Company is in the process of implementing separate bank account structures for both NUI Utilities and NUI Corp. They should be operational during the fourth quarter of fiscal 2003.*
>
> *Moody's also notes that NUI Corp. was recently successful in obtaining bank and noteholder amendments that enable continued access to its bank facilities. Moody's further notes that the Company continues to make progress in improving its internal controls. Successful implementation of this important project, which must be in place by fiscal year-end 2003, in order to comply with Section 404 of Sarbanes-Oxley, will be necessary to stabilize the rating outlooks.*

Moody's announced a fifth downgrade of the credit ratings of NUI and NUI Utilities on October 6, 2003. Moody's for the second consecutive time lowered the ratings of both entities by two additional ratings notches. NUI Utilities fell to Ba1, which is three rating notches below investment grade. NUI continued to lag the NUI Utility rating by falling two notches to B3. Moody's noted that the outlook for both entities was *developing*. Moody's noted the following regarding the additional downgrades:

> *Moody's September 26, 2003 action placed both entities under review with direction uncertain following NUI's announcement that their board of directors had placed the entire corporation up for sale. Moody's action reflects the difficult business conditions affecting NUI Corp., as well as the limited progress achieved to date in selling non-Corp. assets. These factors have significantly limited the Company's financial flexibility. The ratings downgrades also take into account the financial relationship between NUI Corp. and NUI Utilities.*
>
> *Currently, NUI Corp. owes NUI Utilities a significant sum as a result of inter-company transactions. The lower rating for NUI Corp. reflects the structural subordination of its debt relative to that of NUI Utilities. Moody's notes that NUI Utilities is seeking a $50 million seasonal and temporary line of credit. If obtained, we would view this line favorably. Moody's believes it will take some time to identify a creditworthy buyer, as the assets are diverse and are located in various states necessitating multiple regulatory approvals from regulators having different jurisdictions. In the meantime, the Company will continue to incur rising O&M expenses as it employs an array of outside advisors and consultants to help manage day-to-day operations while it searches for a suitable buyer, even as it searches for other ways to cut costs. Over the near term,*

we will monitor the Company's reported position as well as its progress in selling non-Corp. assets.

While Moody's has frequently downgraded NUI and Utilities during the past year, Standard & Poor's rating service, which rates NUI Utilities, has not taken the same actions. Standard & Poor's rating on NUI Utilities senior unsecured debt has been BBB from 1995 until recently. Upon the announcement of the sale of the entire NUI Corporation, Standard & Poor's reduced its credit rating to BBB- for NUI Utilities.

5. Conclusions

Conclusion IV-1. ETG and NUI Utilities have been consistently profitable for at least the past six years.

ETG and NUI Utilities as a whole have both had strongly positive net income for each of the past several years. ETG has provided the largest share of profits for NUI Utilities. It has accounted for 94 percent of the net income of NUI Utilities from fiscal 1998 through 2003. The other NUI Utilities' operations have been only marginally profitable. They have provided about 6 percent of NUI Utilities' net income for this period. Overall, NUI utility operations have contributed almost $114 million of net income in the past six fiscal years. No aspect of the performance of NUI Utilities/ETG on a stand-alone basis contributed materially to NUI's mounting and ultimately disastrous fiscal distress.

Conclusion IV-2. NUI's non-utility businesses have recorded crippling financial losses starting in 2001.

The performance of NUI's non-utility sector stands in sharp contrast. Non-utility businesses have recorded losses in net income of $75.5 million in the three-year period from 2001 through 2003. In addition to these substantial losses from operations, non-utility ventures have produced losses of $23.3 million in 2002 and 2003 classified as *Changes in Accounting Regulations*. They represented mandatory write-downs of previous investments in non-utility businesses.

Conclusion IV-3. NUI applied an unreasonable allocation of the proceeds of its 2002 common-stock issuance, assigning 100 percent of it to ETG, which was about to undergo a base rate proceeding in New Jersey; therefore, the rate case filing cannot be reconciled with the Company's equity levels before or after 2002.

ETG's common equity as a percentage of permanent capital structure at fiscal-year end ranged from 43.3 to 47.0 percent for the years of 1998 through 2001. An NUI common-stock issuance netted $37.2 million in net proceeds in March 2002. NUI allocated 100 percent of the proceeds of this equity sale to ETG. It curiously allocated no equity to its non-utility businesses or to its other utilities. NUI very shortly thereafter filed an ETG rate case. The filing included 100 percent of the equity increase produced by the sale of

parent stock to the public. This assignment of all of the equity increase to ETG produced for ETG an equity level of 52.5 percent of permanent capital.

NUI did not seek to retain this increased equity in ETG on a long-term basis, however. NUI recorded a "special dividend" of $31.9 million to NUI in June 2003. The explanation of NUI management was that dividends "should have been paid" in higher levels from ETG to NUI from 1996 through 2002. In summary, NUI first added to ETG's equity through the NUI stock issuance before the rate case, then removed an amount approaching it 15 months afterwards. NUI therefore contributed "book equity" to ETG, filed and settled a rate case on the higher resulting amount of equity, and then removed much of the increase in 2003.

> ***Conclusion IV-4. The capital structure offered in the 2002 rate case constitutes an improper basis for establishing rates, and resulted from a confusing reporting structure and failure to disclose circumstances that were relevant to the BPU's consideration of the request for increased base rates.***

Apart from the sudden and sharp swings in equity before and after the rate case, there exists the question of whether the equity levels reported in the rate case were effectively available to ETG for even the short time at issue. Liberty also examined the effects of the intercompany balance on ETG's true, versus apparent, access to equity capital. After examining both the duration and the effective-access questions, Liberty concluded that the rate case filing simply did not portray a complete and useful picture of ETG's actual effective equity at the time of the case, prior to the case, or after new rates were placed in effect.

Liberty concluded that ETG did not have use of the full equity capital included in its 2002 rating case filing. NUI owed NUI Utilities and ETG substantial sums between December 2001 and November 2003. The history of the intercompany balance demonstrates the large magnitude of the debt involved. Chapter Five of this report discusses that balance in detail. In this period of roughly 24 months, the balance due to NUI Utilities averaged $94.1 million. Across the full 24 months, the balance has remained large in not just average terms, but also in its minimum magnitude. Since the March 2002 NUI equity issuance, the inter-company balance owed by NUI to NUI Utilities has not fallen below $54.7 million. This sum is far more than the $37.2 million in proceeds from that stock issuance, for example.

Liberty estimated ETG's share of the balance due to NUI Utilities at 70 percent. This share makes the ETG portion of the balance $65.1 million for the 24 months. For the first year in which new rates became effective in New Jersey, ETG's share of the average balance was actually far greater. It was about $87.4 million.

NUI financial management classified NUI's debt owed to NUI Utilities as NUI Utilities equity at that time. Liberty would not agree that this designation has meaning for

ratemaking purposes. The reason is that this paper "asset" did not represent one that NUI Utilities or, more narrowly, ETG had access to in any tangible way. What that asset represented was the "IOU" left after NUI financial management took cash assets out of the common cash-concentration account for use by non-utility affiliates.

Other chapters of this report show how and why those non-utility affiliates had much greater need for the cash that NUI was generating, in major part through utility operations, utility loans, and the parent stock issuance. NUI Utilities ended up without the effective use of those assets, whatever their contribution to them or corporate allocations of them. All ETG was left with was an account or note receivable.

Management recorded a charge against the equity capital in the full amount of the receivable due from NUI at fiscal-year end. Management reacted to the PricewaterhouseCoopers finding that the plans and cash situation of NUI did not include or permit paying back the receivable. This result confirms that NUI Utilities/ETG should not for ratemaking purposes be deemed to have had the use of the equity funds related to the inter-company balance. Moreover, the failure to disclose the circumstances surrounding the balance cannot be excused.

> ***Conclusion IV-5. Actual and potential write-down of NUI Utilities' equity due to the intercompany balance problem exposed NUI Utilities and ETG's equity levels to a substantial risk of failing to meet acceptable levels for an extended time period.***

NUI Utilities and ETG had indicated equity levels respectively of about $256 million and $204 at June 30, 2003. However, these equity positions later decreased substantially, and were at great risk of decreasing further. The reasons were several. First, NUI Utilities' equity fell by $12.6 million to reflect its contribution to the parent of residual equity remaining after the sales of North Carolina and Valley Cities, net of any liabilities and debt. A second and more critical change in NUI's equity capital came as a result of PricewaterhouseCoopers' audit of NUI Utilities for the fiscal years of 2001 and 2002. Previously, NUI had not asked auditors to perform audited financials of NUI Utilities. NUI received audited results only on a consolidated basis. The PricewaterhouseCoopers' audit came at NUI's request. NUI was receiving requests for NUI Utilities audited financial statements from the banks involved in its revolving line of credit and from credit rating agencies.

Management responded to the PricewaterhouseCoopers' audit by reflecting a downward adjustment of $61.4 million to NUI Utilities' equity capital. This reduction in equity capital reflected that the intercompany payable from NUI to NUI Utilities at year-end 2002 could not be treated as an NUI Utilities asset. NUI reported that the intercompany balance payable to NUI Utilities as having grown from $61.4 million at the end of fiscal 2002 to about $85 million at year-end 2003. Absent a major change to NUI financing, application of the same principle at the end of the 2003 fiscal year would have decreased NUI Utilities' equity by an additional $24 million.

Applying the 2002 and 2003 equity reductions related to the intercompany balance and the special dividend due to the North Carolina and Valley Cities sale, the equity capital NUI Utilities' reported as of June 30, 2003 would have fallen an additional $98 million. Such a drop would have reduced NUI Utilities' equity to approximately $158 million at fiscal year-end 2003, offset by eventual NUI Utilities' reported fourth quarter earnings and dividends. Such a reduction would have left ETG with a permanent capital structure containing only about 38 percent equity capital. Such levels of equity capital are clearly too low to attain investment grade credit ratings on a forward-looking basis. NUI senior management created this exposure by clearly failing to segregate utility and non-utility financing, and by continuing to invest in non-utility ventures past the point of acceptable risk to ETG.

Management opened grave risks to corporate survival, both under existing covenants and in attracting future lenders. The magnitude of these risks dramatically underscores the potentially catastrophic consequences their actions produced for ETG. These circumstances also highlight the reasons why the financing that NUI and NUI Utilities eventually secured in November 2003 came at such high rates. They are self-evidently exorbitant for a utility enterprise that has been run in accord with good utility practice and acceptable standards of prudence. They are also beyond what NUI or NUI Utilities can absorb for any material length of time. The toll these high rates exact on NUI and NUI Utilities make clear the need for a sale of the company to close promptly. Rehabilitation of NUI Utilities' credit is theoretically possible. Remedial efforts should proceed, but their ability to succeed alone in returning NUI Utilities to a tolerable level of borrowing costs cannot be deemed certain.

> ***Conclusion IV-6. NUI Utilities' credit rating declines to below-investment-grade level were due to financial problems at NUI's non-utility entities and NUI's financial management.***

The decline in NUI Utilities' credit rating is clearly due to the financial difficulties and reduced credit rating at NUI. Profound problems with the parent's non-utility ventures dragged the credit rating of Utilities down, along with its own. Moody's dropped NUI Utilities' credit rating all the way from the A3 to the Ba3 level. This drop of six total ratings notches came in five separate ratings downgrades. They took little more than a year to happen, since the first downgrade in September 2002.

Moody's has left no doubt about its reasons for these decreases. Specifically, Moody's has noted that its NUI Utilities' ratings actions reflect the integration of NUI Utilities' financials and treasury operations into those of NUI and the central, common management of them. Moody's several times cited the free flow of funds across business lines and the sharing of central services. Moody's also specifically stated in its latest downgrade of Utilities that it recognized the significant sum owed by NUI to NUI Utilities under the inter-company balance.

NUI Utilities has posted consistently solid financial results during the period of these downgrades. ETG even secured a significant rate increase in the same general period. NUI Utilities' downgrades have therefore clearly resulted from the financial crises caused by non-utility businesses and the free flow of funds from healthy utility operations to those non-utility businesses.

Conclusion IV-7. NUI Utilities would have a strong investment grade credit rating if it were effectively insulated from NUI.

NUI Utilities' financial results and credit ratings statistics have remained strongly at investment grade levels throughout NUI's overall financial struggles. The credit rating agencies rely heavily on four key credit-rating ratios for statistical analysis in evaluating the financial strength of entities that they rate. These four credit rating statistics are:

- Total debt to total capital percentage
- Pre-tax interest coverage
- Funds flow from operations as a percentage of total debt
- Funds from operations interest coverage.

The table below shows the historical financial results for Utilities for 1998-2002 in these four categories.

Table IV.6. NUI Utilities Performance Against Credit Rating Criteria

	1998	1999	2000	2001	2002
Total Debt/ Total Capitalization					
S&P BBB range 53-61%	61.4%	59.3%	60.1%	59.1%	47.2%
S&P A range 47.5-53%					
Pre-tax Interest Coverage					
S&P BBB range 1.8X - 2.8X	2.41	3.17	3.32	2.88	2.94
S&P A range 2.8 - 3.4X					
Funds Flow Opers/Total Debt					
S&P BBB range 14-20%	15.4%	19.6%	18.4%	18.1%	23.2%
S&P A range 20-26%					
FFO Interest Coverage					
S&P BBB range 2.1X-3.1X	2.70	3.52	3.85	3.20	3.77
S&P A range 3.1X-3.9X					

The table shows NUI Utilities' credit ratings statistics and the ranges that support specific ratings levels. Standard & Poor's provides these target ranges as a guide to attaining credit levels, for utilities with a business environment rated, like New Jersey's, as a "3." NUI Utilities has met the "BBB" criterion from 1998 through 2001 for the total-debt-to-total-capitalization measure. It meets the "A" criterion for 2002. NUI Utilities pretax-interest-coverage statistics have met the "A" criterion from 1999 to 2002. NUI Utilities statistics under the funds-from-operations-to-total-debt metric met the "BBB" criterion from 1998 through 2001. Performance moved upward to the "A" range in 2002. NUI

Utilities' funds-flow-from-operation-interest coverage has solidly satisfied the "A" requirement since 1999.

B. Cash Management and Short-Term Credit

1. Background

The cash management and working capital operations of NUI changed substantially with the growth of NUI's non-utility businesses and the formation of a holding company. Prior to late 2001, NUI borrowed short-term funds for all of its businesses, then down-streamed the funds to subsidiaries, as needed. This approach changed with the creation of a separate revolving line of credit for NUI Utilities in December 2001.

NUI operated one cash pool at NUI for the holding company and all subsidiaries and affiliates prior to August 2003. ETG and other utility revenue receipts flowed into a single pool, or concentration account. NUI and non-utility receipts flowed into this same, single pool. Disbursements to employees, vendors, and lenders of all NUI companies also came from the single, common NUI account. NUI allowed funds to transfer freely from one NUI affiliate to the other. The Company established no loan or similar documents or agreements to govern such transfers. NUI explained the operation of its cash pooling as follows:

> *Since 1990, NUI Corporation has acted as an agent for the business units and coordinated both the daily receipt and disbursement of cash in aggregate. NUI processes all accounts payable, including benefits, taxes, payroll, gas purchases and payments. NUI, through UBS, also processes cash collections. NUI, through an accounting process, accounts for cash receipts and disbursements. Cash is disbursed on behalf of the business units upon presentment of proper authorized bills for payment. All cash was centrally pooled and not tracked by business unit or cash management.*

NUI management considered NUI to be the regulated utility entity prior to holding company approval in 2001. Before then, NUI maintained one set of lines of credit, one cash pool, and one cash-management system for the entire corporate family of businesses. Prior to the late 1990s, NUI did not have substantial non-utility activities. NUI EB comprised its principal non-utility business. NUI's pre-2001 practice was to down-stream capital infusions of equity to its non-utility businesses, generally in amounts of $5 million to $10 million at a time. NUI also down-streamed capital infusions of equity for utility operations as needed to support their capital needs.

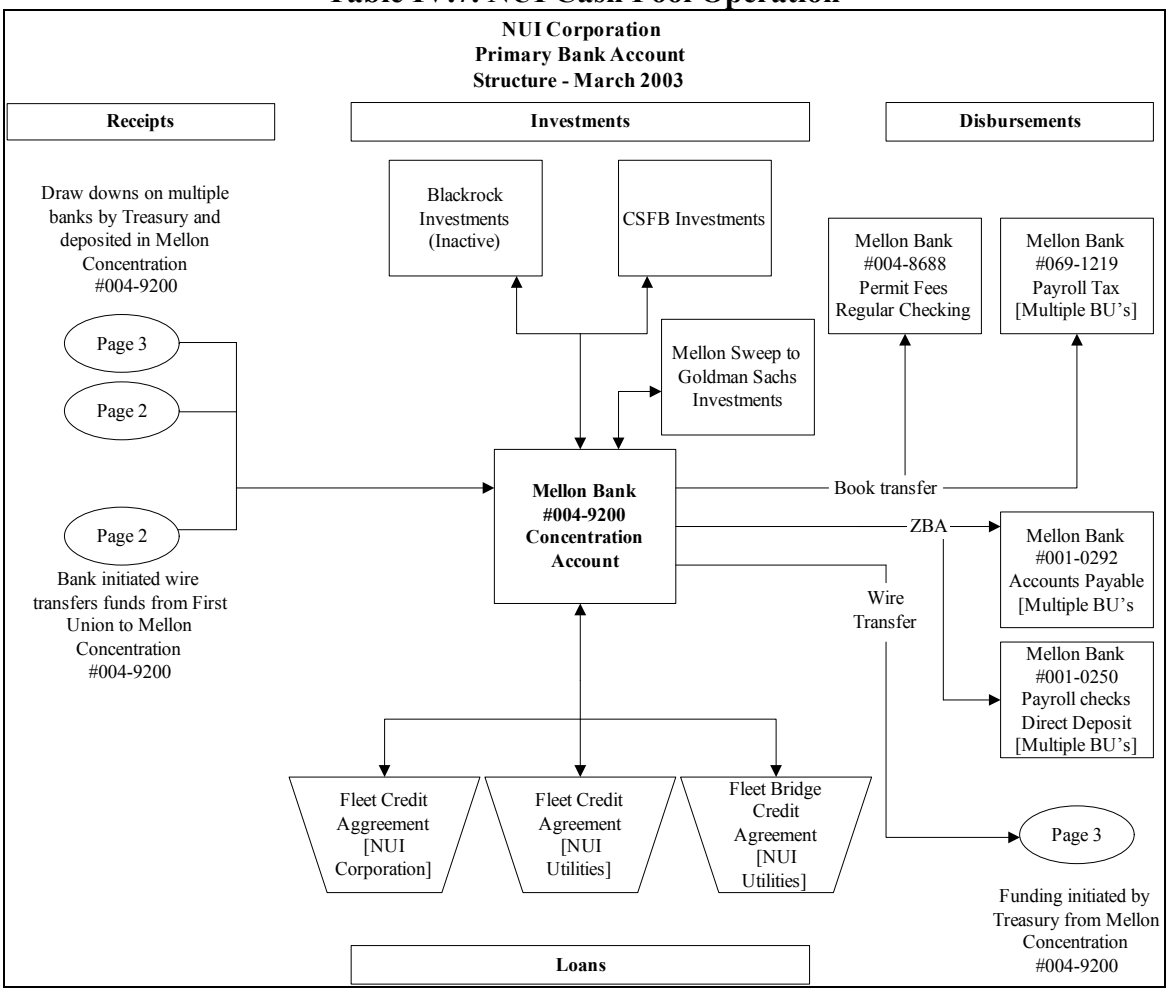
NUI financial management first negotiated separate credit facilities for NUI and NUI Utilities in December 2001. These separate credit facilities for NUI Utilities and NUI did not, however, lead to a corresponding change in cash management. NUI continued to operate a single, common cash management system and cash pool. Utility funds flowed

into and out of this pool, along with those of the parent and the non-utility subsidiaries. NUI management continued to operate in this fashion and without consideration of the need for any changes to segregate utility cash management until early 2003.

Liberty found to be crucial one particular aspect of the decision not to segregate utility cash management systems and activities. Any affiliate could use proceeds from the two separate revolving lines of credit for NUI and NUI Utilities, set up in late 2001. Whether the affiliate was a utility or non-utility business did not limit access. For instance, NUI borrowed against the NUI Utilities revolving line of credit, placed the funds in the single corporate cash account, and used that account routinely and often to make disbursements for non-utility operations or ventures. NUI also did not use separate lenders to provide the distinct NUI and NUI Utilities revolving lines of credit. Fleet syndicated identical bank groups, which provided both sources of credit. NUI management told Liberty that the common bank group knew of the single cash pooling arrangement, but sought no change to it before early 2003. NUI management confirmed that no written documentation for the cash pooling arrangements among NUI, NUI Utilities and interrelated business units has been in place.

NUI provided Liberty a schematic of the accounts for the single cash pool concentration account and the inflow of receipts and outflow of disbursements from this common account. The following table shows these flows. The operation's central feature consists of a Mellon Bank concentration account that NUI used as the single cash pool for all NUI entities.

Table IV.7. NUI Cash Pool Operation



The NUI board's audit committee chairman told Liberty that the directors did not consider the need for changing internal controls and segregating cash management between utility and non-utility entities as the latter businesses grew. The committee chairman said, rather, that the focus of the board and audit committee was on assuring adequate resources to finance the new businesses. The audit chairman did not recall any discussions regarding cash segregation. His first clear indication that a single cash pool might be inappropriate came in late 2002. PricewaterhouseCoopers and the Fleet syndicate of banks raised the issue then. The NUI directors only then became aware and convinced of the need to segregate cash management to provide for proper separation of utility and non-utility operations.

A February 2003 NUI credit agreement included a provision mandating cash segregation between NUI Utilities and other NUI entities. Section 4.12 of the February 12, 2003 agreement states:

> *On or about November 12, 2003, the borrower shall cause all of its receivables and other revenues to be collected, deposited into and maintained in a segregated account or accounts of the borrower (the new collection system) and proceeds of such receivables and other revenues shall not be commingled with the funds of NUI Corporation or its other subsidiaries and shall only be used to pay out of such account or accounts obligations of the borrower and to make dividends and for other uses to the extent expressly permitted thereunder.*

NUI began reengineering its cash management systems in April 2003, in order to provide for the segregation of funds between the utility and non-regulated businesses.

2. Cash Operations through 2001

Prior to December 2000, NUI used discretionary bank lines of credit to borrow funds for the parent and all subsidiaries. Borrowers may use such uncommitted credit lines upon request to and at the discretion of the bank. The bank has no contractual commitment to make a loan of funds. The banks with which NUI had discretionary lines of credit between 1998 and 2000 included: Mellon Bank, First Union, Fleet Bank, PNC Capital Markets, and Allomon Funding Corporation. The following table presents short-term debt balances outstanding at each month-end from January 1998 through December 2000.

Table IV.8. NUI Short-Term Debt Balances from 1998-2000

	1998	1999	2000
January	(45,809,478)	(87,785,000)	(90,820,000)
February	(34,029,478)	(69,235,000)	(72,260,000)
March	(24,529,478)	(50,685,000)	(49,244,480)
April	(13,979,478)	(27,240,000)	(47,124,000)
May	(24,734,478)	(37,155,000)	(54,717,000)
June	(36,850,478)	(42,055,000)	(62,178,000)
July	(43,394,478)	(48,640,000)	(77,610,000)
August	(57,689,478)	(56,140,000)	(83,473,000)
September	(65,014,478)	(73,615,000)	(96,699,000)
October	(76,569,478)	(77,880,000)	(117,732,000)
November	(77,734,478)	(93,380,000)	(124,150,000)
December	(106,380,000)	(98,570,000)	(140,000,000)

NUI changed to the use of committed lines of credit in December 2000. It secured a $132.5 million committed line of credit for December 2000 through December 2001. The lending group included PNC Bank, Fleet Bank, Mellon Bank, and Citizens Bank. NUI, however, also continued to maintain uncommitted lines of credit with a number of banks. These discretionary lines of credit could add a total of about $100 million in credit capacity. This calculation assumes that the banks would agree to loan requests up to the maximum amount. NUI management used these discretionary lines of credit for additional gas purchases in the 2000-2001 winter, whose conditions produced an extraordinary demand for gas. The next table shows NUI's committed short-term lines of

credit, the discretionary bank lines of credit, and monthly peak borrowing during the 2001 calendar year.

Table IV.9. NUI Short-Term Borrowings for Calendar 2001

Month	NUI Corporation			NUI Utilities		
	Credit Facility	Peak Borrowing	Peak Date	Credit Facility	Peak Borrowing	Peak Date
Jan	$132.5 at 12/22/00 plus discretionary lines	$157	01/25/01	NA	NA	
Feb	"	$165	02/26/01	NA	NA	
Mar	"	$175	03/29/01	NA	NA	
Apr	"	$176	04/25/01	NA	NA	
May	"	$198	05/25/01	NA	NA	
June	"	$211	06/25/01	NA	NA	
Jul	"	$216	07/25/01	NA	NA	
Aug	"	$211	08/02/01	NA	NA	
Sep	"	$193	09/25/01	NA	NA	
Oct	"	$191	10/09/01	NA	NA	
Nov	"	$233	11/30/01	NA	NA	
Dec	$80.0 at 12/19/01 and discretionary lines	$233	12/01/01	$145.0 as of 12/19/01	$145	12/20/01

The extraordinary gas demands and prices occasioned by the winter of 2000/2001 caused NUI Utilities to experience a $55 million deferral of gas costs, which reflected the difference between currently-allowed rate recovery and current costs. The incremental financing requirements occasioned by this deferral financing were accompanied by needs for other substantial new capital outlays, which included NUI's acquisition of Virginia Gas in March 2001 and additional investments in other non-regulated businesses during 2001. Factors such as these caused NUI's short-term borrowings to grow to $232.5 million as of early December, 2001. NUI had issued $60 million of senior notes in August 2001, which helped to moderate this increase.

3. The Enron Deferred Payment Gas Supply Contract

NUI has generally filled storage gas facilities for ETG from April to October of each year. NUI used available cash and the parent's short-term credit lines to make ETG gas purchases for storage injection before 2001. As it entered the spring of 2001, NUI faced the prospect of insufficient credit capacity and liquidity to finance its gas distribution and its expanding non-utility investment plans. The preceding heating season had been especially cold and expensive for NUI Utilities. ETG had to carry approximately $55 million of un-recovered gas costs from this winter until at least the next winter season. NUI anticipated making major investments in Virginia Gas and TIC in early- to-mid 2001. NUI's committed lines of credit were $132.5 million in the spring of 2001. The

parent's uncommitted, discretionary lines of credit could add as much as about $100 million. NUI Utilities did not have its own line of credit at this time.

NUI's peak borrowing level for March 2001 was $174.7 million. It was, therefore, already using all of its committed lines of credit and over $40 million (about 40 percent) of the maximum amount available under its discretionary lines. NUI, already financially extended, faced the prospect of significant additional financing needs for:

- Filling ETG's gas storage from April to October, then waiting months for recovery of the expense in rates
- The purchase of Virginia Gas
- The purchase of the remaining 51 percent of TIC.

NUI considered two alternatives for buying ETG storage gas at this time:

- Contracting for asset management services with a third party
- Buying storage gas with deferred payments.

NUI rejected the asset management option because it did not want to lose operational control, particularly of its storage assets. NUI decided to pursue the deferred-payment option. The goal was to identify gas suppliers willing to defer the payment for the storage gas until and after December. ETG heating-season revenues by then would improve its cash situation. The NUI COO/CFO and the VP and general manager of NUI Utilities requested the NUI Utilities gas supply manager to make inquiries of suppliers. The manager of gas supply in turn requested Energy Brokers to perform a telephone solicitation of potential suppliers. Energy Brokers determined that Enron, then NUI EB's largest trading counterparty, might be interested in a deferred payment arrangement.

Negotiations with Enron began in late March 2001. NUI and Enron initially agreed on March 30, 2001 to a delivered price of $5.40/Dth for gas delivered in April, 2001. This one-month agreement began to get gas flowing into storage. The parties began negotiation of terms for subsequent months in the meantime.

NUI management asked the president of NUI EB to examine concepts and strategies that would help structure an arrangement that would meet cash flow considerations. Following some analysis, the NUI EB president identified a swap transaction as a means for meeting supply and cash flow objectives. He felt that gas prices were more likely than not to decrease from the $5.40/Dth then current in the marketplace. A swap agreement would set an agreed-upon fixed price level for deliveries through October at specified transportation hubs. This fixed-price level considered market risk for the coming months and delivery location. The fixed price levels agreed upon with Enron included:

- $5.579/Dth for 30,000 Dth/day for May-October deliveries at TransCo Station 65
- $5.477/Dth for 10,000 Dth/day for May-October deliveries at East Louisiana.

The swap agreement provided for NUI EB to swap the fixed-rate prices agreed upon for the actual *Inside FERC* index price for each respective month in the relevant delivery zone. Such a fixed-for-floating rate swap provides for the monthly payment by either the

fixed rate party (Enron in this case) or the floating rate party (NUI EB in this case) of the difference between the agreed-upon fixed rate and the actual index floating rate. If the fixed rate were to fall above the actual rate that eventually reported by the index, Enron would pay NUI the difference. If the actual rate were to be higher than the fixed rate, then NUI would pay Enron the difference.

The described swap agreement was entered into between Enron and NUI EB as of April 2, 2001. The NUI EB president signed the deal confirmation. This swap agreement, however, clearly relates to the May-October 2001 agreement under which Enron sold gas for ETG storage. As is reportedly typical, no consideration changed hands for the entry of the swap.

The swap agreement provided NUI with floating rate pricing for the storage gas, but it did not address the desire to defer storage gas payments until heating season revenues would commence. ETG and Enron subsequently signed, on April 20 and April 24, 2001, respectively, a "Transaction Agreement." This agreement specified the identical volumes and delivery points of the swap agreement. It also included the April deliveries. The Transaction Agreement did address the deferred-payment objective. It provided for payments in five equal installments from December 2001-April 2002. It also set a fixed price higher than the one provided in the earlier agreement for April deliveries. The price increased from $5.40/Dth to $5.8169/Dth for all volumes at both delivery points. This increase reflects consideration for the deferral of payments.

NUI's prognosis that gas prices would be coming down following the agreements proved to be correct. The swap terms eventually required Enron to pay $15.96 million to NUI from May to October. These amounts were eventually credited to ETG customers in the BGSS mechanism.

NUI also met its goal of providing temporary financing mechanisms through the swap and deferral agreements. NUI effectively raised $49.8 million in temporary financing from Enron:

- $33.84 million for storage gas payment deferrals at floating rate prices
- $15.96 million in payments from Enron due to the swap arrangement.

ETG also arranged for storage gas purchases with payment deferrals in 2002 and 2003, mainly through Occidental. None of these deferral arrangements included swap features, however.

NUI's capability to finance all of its utility needs and non-utility investment plans would have been at substantial risk during the summer of 2001, if it had not been for the Enron transaction. Short-term debt would have reached $236 million in July 2001 under normal gas-payment arrangements. NUI would, at best, have exceeded its existing credit lines by about $3.5 million. This scenario assumes that it would have been successful in getting 100 percent of the funding potentially available under its uncommitted, discretionary lines of credit. As it was, NUI continued to experience credit capacity and liquidity problems

in late 2001, even with the $49.8 million of temporary financing from Enron and the issuance of $60 million of Senior Notes by NUI in August 2001. Short-term debt outstanding reached $190 million in October 2001.

4. The Enron Settlement

Enron found itself in extreme financial difficulty in late 2001. It had an obvious interest in finding ways to get its counterparties to make payments for delivered gas. ETG was "sitting on" close to $50 million in gas for which it had yet to begin making payment under the April 2001 deferred-payment agreement.

An Enron representative called the NUI EB president in November 2001 to discuss the $49.8 million that ETG owed Enron for that gas. Enron was also a buyer from certain NUI entities, to a total of about $5.45 million. Enron owed Energy Brokers about $4.0 million, NUI Energy $0.8 million, ETG $0.5 million, and CFG $0.1 million. NUI EB personnel involved in the ensuing negotiations observed that the main consideration in negotiating with Enron was to protect the recovery of the $5.45 million receivable from what they expected to be a soon-to-be-bankrupt Enron. The NUI EB personnel involved read Enron's situation correctly. Enron lost its investment-grade rating from both Standard and Poors' on November 28, 2001, and filed for bankruptcy on December 2, 2001, two days after the settlement.

The ETG payable of close to $50 million to Enron provided very substantial negotiating leverage to recover the receivables from Enron. The leverage was strong enough to make it likely that Enron would also offer additional value. NUI EB's president negotiated a settlement with Enron on November 30, 2001. The settlement was to net out all of the NUI and Enron obligations for a payment of $42.9 million to Enron. The settlement took into account the ETG payable to Enron and all receivables from Enron. It also included a targeted profit of about $1 million to EB for negotiating the settlement.

The settlement with Enron effectively let NUI EB step into Enron's shoes vis-à-vis ETG. Specifically, ETG still owed a payable of $49.8 million on the existing schedule after the Enron settlement. The difference was that ETG now owed it to NUI EB instead. The $42.9 million settlement produced by NUI EB, however, represented a net payment of about $6.9 million less than this amount. A total of $5.45 million of this $6.9 million difference can be explained as representing the total of the receivables from Enron. They were netted out by the settlement.

NUI EB prepared a settlement worksheet itemizing the settlement amounts, including the $5.45 in amounts that Enron owed NUI entities collectively. NUI reported that the funding to pay Enron the settlement amount of $42.9 million on November 30, 2001 came from two primary sources:

- $20.0 million borrowed by NUI from PNC Bank
- $25.7 million borrowed by NUI Utilities from First Union under a loan agreement that had been arranged on August 19, 2001.

NUI deposited the funds from these sources in the single, NUI concentration account, NUI financial personnel paid Enron in the name of NUI EB. With the payment of the settlement to Enron, NUI short-term borrowings outstanding reached $232.5 million at November 30, 2001. NUI faced the expiration of its committed lines of credit on December 20, 2001. NUI obviously faced substantial liquidity difficulties at this time.

5. Establishment of Separate Utilities Revolver: December 2001

ETG, CGF, and the other NUI utilities divisions operated directly under NUI prior to the establishment of the holding company in March 2001. NUI Utilities did not exist at that time. NUI Corporation funded utility operations from various lines of credit, down-streaming funds to the utilities. This credit structure changed on December 19, 2001. NUI established a $145 million revolving line of credit for NUI Utilities. NUI contemporaneously replaced its $232.5 of short-term parent borrowing with a much smaller, $80 million, revolving line of credit. The same group of banks provided the new NUI Utilities and NUI parent lines of credit. The new utility and parent facilities produced an NUI-wide net reduction of $7.5 million in credit facilities. The changes included:

- Eliminating the then-existing $232.5 million of short-term debt financing at NUI
- Replacing it with a total of $225 million
    - $145 million in the name of NUI Utilities
    - $80 million in the name of NUI.

NUI financial management immediately drew down all $145 million of NUI Utilities' available credit. The borrowed funds went to the single NUI cash pool. NUI financial management then immediately used these utility funds to pay down NUI short-term borrowings. No cash from the short-term borrowings moved between NUI and NUI Utilities. Effectively, the NUI short-term debt was "reassigned" to NUI Utilities by the establishment of the NUI Utilities revolving credit and the concurrent extinguishment of $145 million of short-term debt at NUI.

This reassignment reversed the intercompany payables situation for NUI Utilities. At September 30, 2001, NUI Utilities had a payable balance to NUI of $61.6 million. The December 2001 financings and use of funds caused the application of the NUI Utilities' immediate $145 million borrowing to be applied against its balance. What had been a net payable of $61.6 million for NUI Utilities then became a net receivable of $40.1 million. The amount payable from NUI to NUI Utilities steadily increased thereafter. It reached a month-end peak of $190.1 million at February 28, 2003. NUI began reducing the balance thereafter. The balance reached about $85 million by November 2003. NUI paid the remainder from proceeds of its major November refinancing. Chapter Five of this report addresses the inter-company payables balance from NUI to NUI Utilities in detail.

6. Credit-Agreement Responses to Financial Problems in 2002

Four different amendments occurred to each of the NUI Utilities and NUI revolving credit agreements between December 2001 and November 2002.

First Amendment: This amendment to the credit agreements, dated February 26, 2002, provided relief on the maximum debt ratio covenants. The banks noted:

> *NUI Corp. and NUI Utilities have informed us of the possibility they may not be in compliance with their leverage ratios. . . The companies have requested that credit agreements be amended to provide that the Leverage Ratio requirements of .70:1.00 remain in effect and not be reduced to .65:1.00 until the earlier of March 31, 2002 or the date on which the companies consummate the planned equity issuance.*

Second Amendment: Another amendment to the credit agreements occurred at August 9, 2002. NUI secured approval from the banks to lift restrictions on hedging transactions. The amendment allowed hedging transactions in an amount not to exceed $75 million.

Third Amendment: An October 2002 amendment to each of the credit agreements made far more significant changes. These changes to the NUI and NUI Utilities credit agreements coincided with the restatement of NUI's consolidated financial statements for 2000 through 2002. PricewaterhouseCoopers performed re-audits of NUI's consolidated financial statements (previously audited by Arthur Andersen) for the years ended September 30, 2001 and 2000. The October 2002 changes:

- Increased interest rates and the facility-fees in both credit facilities
- Removed the requirement to maintain a minimum credit rating
- Added provisions providing for increases in the interest rates and facility fees payable should credit ratings fall to or below those previously required to be maintained
- Reduced the minimum fixed charge coverage ratio required in the NUI agreement from 1.75 times to 1.50 times for quarters ended on or after September 30, 2002
- Allowed the borrowers under both credit agreements to enter into up to $50 million aggregate of sale/leaseback transactions, in order to permit ETG to consummate after BPU approval a possible sale/leaseback of gas meters and related equipment in the amount of $33 million
- Modified the NUI credit agreement's fixed-charge-coverage-ratio test to allow for the add-back of certain, one-time, predominantly non-cash charges associated with NUI's implementation of SFAS-144 and SFAS-142 in connection with NUI's investment in TIC.

Omitting these add-backs prior to the amendment put NUI into technical default under the credit agreement during fiscal 2002. The amendments cured this default.

Fourth Amendment: Both credit agreements changed again, on November 13, 2002. The amendment extended the term, reduced lender commitment, and increased pricing. The credit facilities of both NUI and NUI Utilities were extended from December 18, 2002 to February 12, 2003. This amendment significantly reduced the available credit level of NUI. It fell from $80 million to $55 million. NUI Utilities' available credit dropped

slightly, from $145 million to $140 million. Extending the credit agreements caused significant increases in the facilities fees and interest costs under both credit agreements.

NUI attributes the fourth amendment to the inability of the Company to complete its financial reporting process according to the planned timing. The completion of the financial reporting process was delayed by approximately two months. This delay necessitated an extension of both credit facilities. They were scheduled to expire on December 18, 2002. The extension allowed completion of the financial reporting process, and permitted the banks a due diligence opportunity on the renegotiation of credit lines.

The next table shows the borrowings of NUI and NUI Utilities during 2002.

Table IV.10. NUI and Utilities Calendar 2002 Borrowings

	NUI Corporation				NUI Utilities		
Month	Credit Facility	Peak Borrowing	Peak Date		Credit Facility	Peak Borrowing	Peak Date
Jan	$80.0MM at 12/19/01 plus discretionary lines	$93.0	01/25/02		$145.0MM as of 12/19/02	$145.0	01/01/02
Feb	"	$78.5	02/01/02		NA	$145.0	02/01/02
Mar	"	$84.4	03/08/02		NA	$125.0	03/01/02
Apr	"	$55.0	04/01/02		NA	$88.0	04/01/02
May	"	$61.7	05/28/02		NA	$60.6	05/24/02
June	"	$77.1	06/25/02		NA	$62.0	06/27/02
Jul	"	$65.0	07/01/02		NA	$60.9	07/01/02
Aug	"	$70.2	08/20/02		NA	$79.1	08/26/02
Sep	"	$73.0	09/24/02		NA	$92.0	09/25/02
Oct	"	$65.0	10/01/02		NA	$72.7	10/25/02
Nov	"	$65.0	11/01/02		NA	$111.9	11/27/02
Dec	$55.0MM at 12/18/02	$65.0	12/01/02		$140.0MM at 12/18/02	$127.2	12/10/02

7. Corporate and Utilities Lines of Credit in 2003

On February 12, 2003, NUI and NUI Utilities each entered new revolving credit facilities that replaced their previous ones. NUI's 2003 credit facility consisted of an agreement allowing it to borrow up to about $38.1 million. This change brought another significant reduction in the amount of credit that lenders would make available at the parent level. The NUI facility of a year ago provided $55 million in available credit. NUI Utilities' 2003 credit facility originally consisted of a revolving credit agreement and a 364-day bridge loan. These sources allowed NUI Utilities to borrow up to an aggregate of $141.9 million. The bridge loan portion of the NUI Utilities revolving line of credit facility was converted to become part of the revolving credit agreement later in 2003. NUI Utilities' credit availability therefore remained largely unchanged from the $140 million provided in the November 2002 facility.

The new credit agreements set a termination date of February 11, 2004. These 2003 agreements contained covenants that limit the ability of both NUI and NUI Utilities to:

- Incur future indebtedness
- Make capital expenditures above $75 million
- Enter into sale/leaseback transactions above $50 million
- Pledge or sell assets, make acquisitions
- Merge
- Pay dividends on common stock
- Create guarantees other than those in the normal course of business.

The NUI Utilities agreement set a number of additional restrictions specifically applicable to NUI Utilities:

- NUI Utilities dividends to the parent were restricted to the lesser of $100 million or retained earnings
- NUI Utilities could not create any encumbrances or liens
- The Leverage Ratio and fixed charge coverage ratios were the same as previous credit agreements
- NUI Utilities acquisitions and sales of assets were prohibited
- NUI Utilities capital expenditures were limited during the credit agreement to $75 million
- NUI Utilities additional indebtedness was limited to $15 million
- NUI Utilities sale and leaseback of assets was limited to $70 million
- The NUI credit agreement was required to remain in full force and effect with a total commitment of not less than $38.1 million.

The next table summarizes NUI and NUI Utilities credit facilities peak borrowings for 2003.

Table IV.11. NUI and Utilities 2003 Short-Term Borrowing

	NUI Corporation			NUI Utilities		
Month	Credit Facility	Peak Borrowing	Peak Date	Credit Facility	Peak Borrowing	Peak Date
Jan	as of 12/18/02	55.0	1/31/2003	as of 12/18/02	140.0	1/21/2003
Feb	$38.1MM as of 2/12/2003	55.0	2/1/2003	$96.9MM plus $45.0MM	141.9	2/12/2003
Mar	"	38.1	3/1/2003	"	141.9	3/1/2003
Apr	"	35.0	4/1/2003	"	140.3	4/1/2003
May	"	20.3	5/23/2003	"	141.6	5/23/2003
Jun	$38.1MM as of 6/27/03	37.0	6/24/2003	$141.9MM as of 6/27/03	138.2	6/24/2003
Jul	"	35.7	7/24/2003	"	140.4	7/24/2003
Aug	"	26.7	8/28/2003	"	141.9	8/22/2003
Sep	"	36.7	9/11/2003	"	137.9	9/1/2003
Oct	"	38.1	10/7/2003	$141.9MM as of 6/27/03 plus $50.0MM as of 10/10/03	141.9	10/7/2003
Nov	$255.0 MM as of 11/24/03	255.0	11/24/2003	$50.0MM Term plus $50.0MM Revolving plus $50MM Delayed Draw as of 11/24/03	141.9	11/1/2003
Dec	"	255.0	12/1/2003	"	80.0	12/1/2003

8. 2003 Cash Management Changes

A provision of the 2003 NUI Utilities revolving line of credit agreement required that the cash management system for Utilities be segregated from that of NUI by November 12, 2003. NUI began restructuring its cash management system in April 2003, in order to provide for this segregation NUI set forth in April 2003 the following project goals for the reengineering of its cash management system:

- Separate cash management for NUI Utilities and NUI Corporation
  - Solicit and select new bank vendors
  - Simplify the bank accounting structure
  - Separate NUI Utilities actions from other NUI actions
  - Re-engineer the cash processes and procedures
- Ensure cash security control and timely recording into the general ledger

  - Tighten depository control of cash
  - Ensure control of cash by the unit
  - Improve internal controls
  - Coordinate cash accounting efforts through completing timely bank-to-book reconciliation
  - Reconcile the general ledger to sub-ledgers
- Develop cash flow forecasts and models by business unit
  - Develop effective liquidity forecasts
  - Separate NUI and NUI Utilities forecasts.

NUI completed principal work on the segregation of its cash management systems in September and October 2003. Liberty performed a review and analysis of the progress made by NUI, and tested the separation of the cash pools against the following three overall standards:

- Separate cash management for NUI Utilities and NUI
- Ensure cash security control and timely recording into the general ledger
- Settle intercompany accounts payable and receivable balances on a timely basis.

Liberty also examined the NUI Corp. and NUI Utilities cash pools. Liberty tested the cash balances for August 2003. The year-end closing process then underway made August the last month for which books had been closed at the time of Liberty's test work.

NUI chose Fleet Bank as the primary cash management bank for both NUI and NUI Utilities. The bank accounts have been reengineered and structured in a distinct and deliberate manner to capture both the corporate and business unit structures within each of the two cash pools.

9. NUI's 2003 Liquidity Position

One of Liberty's primary concerns in the early stages of the focused audit was NUI's liquidity position. A critical aspect of this concern centered on the ability to purchase gas for ETG's coming winter season. Liberty requested a special meeting with the NUI CFO and treasury management on July 8, 2003 to discuss these issues. NUI assured Liberty at this time that the existing lines of credit were adequate for the summer storage filling season. Management also noted that it was pursuing an additional line of credit to cover all winter season contingencies, including higher gas prices for the coming winter. Management predicted that this credit facility would be in place before the end of July.

A utility's cash forecast provides an important tool for efficient financial management. A sound cash forecast becomes critical on a day-to-day basis for a utility experiencing financial and credit problems like those that NUI was having. NUI was not using any meaningful forecast at the outset of Liberty's audit. NUI senior management indicated that it had not had a cash forecasting model in operation within the memory of then-current financial management. The absence of cash forecasts became increasingly problematic for NUI as the company neared its borrowing limits in the summer of 2003. The summer is normally the period of lowest borrowing requirements for a gas LDC.

Reaching borrowing limits at that time of year would therefore be anomalous for an LDC operating in normal circumstances.

NUI did include the development of segrgated cash forecasts for NUI and Utilities as part of its project to re-engineer and segregate the company's cash management system. The development of segregated cash forecasts, however, was the last major item to be addressed by NUI in this project. The development of the cash forecasts eventually proved to be quite problematic, as Liberty's observation of progress during the audit demonstrated on numerous occasions.

NUI management reported that the June 2003 borrowing peak for NUI consolidated had reached $175 million, and for July 2003 about $176 million. With a total consolidated borrowing limit of $180 million at that time, NUI was nearing its borrowing limits in the middle of summer. This situation was of great concern, as NUI Utilities' borrowing needs would be expected to rise significantly as the utility began to pay for gas purchases in the September-January period.

NUI provided Liberty with internally developed liquidity analyses for the period from July 30 through September 19, 2003. These "developmental" versions of the cash forecast indicated that NUI could exceed its $180 million credit limit when monthly peak-day borrowing occurred, as early as September or October 2003. These initial liquidity forecasts indicated that NUI's much-delayed liquidity line of credit (earlier predicted by NUI management to be in place in July) could be needed immediately.

NUI eventually proposed to manage around its September and October peak borrowing days by carefully scheduling receipts and disbursements on the monthly gas-settlement day. Borrowing typically reaches its peak level on this day in any given month. The cash forecasts produced in September also included an immediate phasing down of the business of NUI EB. This gas trading affiliate required substantial credit availability to operate. Even that phase-down did not eliminate potential problems, however. Collateral calls by counterparties even under existing, longer-term NUI EB's transactions can be substantial.

NUI Utilities finally closed on a $50 million liquidity line of credit with Drawbridge Special Opportunities Group in October 2003. Drawbridge provides capital to distressed companies. Its fees and interest rates to NUI Utilities were exceedingly expensive by normal LDC standards.

On or about October 1, 2003, NUI brought in "corporate recovery" consultants to manage the financial operations of the company. The consultant brought in a small team, headed by a person who served as the interim NUI CFO. A first priority of the consulting team was to develop a 13-week liquidity forecast to provide accurate cash information. Such information is crucial in managing a financial crisis and turnaround. The consultants described their work as requiring a substantial recreation of much of the data and analysis previously gathered in NUI's attempts to develop a cash forecast. The consultants' work

determined that information in the previously released forecasts was not reliable. Liberty's own observations of earlier forecast runs had already produced a similar observation.

The consultants shared their new liquidity forecasts with Liberty in late October 2003. The new forecasts indicated that NUI Utilities would have ample credit availability during the 2003/04 winter with the new $50 million Drawbridge facility. That conclusion held under assumed average weather, as measured over the past 10 years. NUI uses such average weather in preparing its budgets and forecasts. The conclusion also held under more extreme conditions. It would take the coldest winter in the last 50 years to make the existing credit lines insufficient, according to NUI's consultants.

Liberty had concerns fairly early in audit fieldwork about NUI managements' understanding of and actions in response to what Liberty saw to be serious financial problems. By early September 2003, Liberty's concerns had risen to the level of material and substantial doubts about the ability and resolve of NUI's existing management to protect the financial viability of the utility operations. The following issues exemplify the basis for such doubts:

- *Liquidity Issues:* As described above, NUI management had initially reported that an additional liquidity line of credit for Utilities of $50 million would be in place in July 2003. By early September, this line of credit was still not in place, because NUI was having obvious difficulty in finding interested lenders. NUI's own liquidity forecasts, which were still being developed, indicated that the company would exceed its existing lines of credit in September, October, or December, depending on the version in circulation.

- *Operations Curtailment:* NUI's liquidity forecasts also indicated that one of the actions taken to reduce its overall borrowing needs was to drastically curtail the operations of NUI EB. This affiliate had been one of NUI's few profitable non-utility operations. Its sudden demise was likely to be taken in the financial marketplace as an additional indicator of serious distress.

- *Inter-company Balance Repayment*: Liberty believed that NUI's oft-communicated plan for the repayment of the inter-company payable to NUI Utilities was clearly not feasible. The sales of UBS and Telecom and NUI Energy's accounts receivable collections comprised $51 million of NUI's repayment plan. Those estimates appeared to Liberty to be highly optimistic.

- *Inability to Use Proceeds from Sales of Non-Utility Businesses:* Moreover, NUI's revolving credit agreement specifically required that the proceeds of sales of equity or assets in NUI's subsidiaries (except for Utilities and Virginia Gas) were to be used only to pay down the parent revolving credit facility. Therefore, whatever proceeds these sales might produce did not seem likely to be available for payment of the amount owed to NUI Utilities. According to NUI

management, the company had asked Fleet Bank to waive this provision. However, Fleet did not provide this approval, and would only provide it as part of the overall refinancing plan.

- *Questionable Assumptions about Available Cash:* NUI also proposed to use $20 million in "cash on hand" to pay down the inter-company balance. However, NUI's liquidity forecasts at that time did not indicate that sustained cash would be available in the immediate future. In addition, until the cash management systems were segregated and audited, it would be uncertain whether such cash belonged to NUI or whether it already belonged to NUI Utilities.

- *Projected Payments with No Identified Source:* NUI did not provide a source for the final $27 million of its projected final repayment in 2004. This repayment also seemed improbable, because NUI planned to sell or shut down UBS and had already substantially curtailed NUI EB operations, its primary sources of non-regulated income.

- *Inappropriate Refinancing Plans*: NUI's refinancing plans as presented to the NJBPU would have inappropriately securitized NUI Utilities assets and otherwise further tied utility financial fortunes to its failing non-utility ventures. NUI was also willing to go along with Fleet's approach for further shackling NUI Utilities to non-utility ventures without even having solicited the marketplace to determine if better alternatives were available. Reliance on Fleet as the sole-source solution showed a failure by leadership to seek aggressively to work through Company problems without further burdening its utility sector.

10. NUI Sale and Interim Financing

The NUI CFO acknowledged in an interview on September 10, 2003 that NUI was working with an investment banking advisor in analyzing the potential sale of parts or all of NUI. Liberty found this acknowledgement to be management's first recognition of the futility in pursuing its prior possible plans for dealing with the great financial difficulty in which it had put NUI Utilities. On September 25, 2003, at the same time that its CEO departed, NUI announced that NUI in its entirety would be offered for sale.

The announcement of the sale of NUI gave the company an opportunity to obtain interim financing for the entire company that would meet all projected funding needs until the closing of the sale. The closing of the corporate sale, allowing for the sales process and all required regulatory approvals, is expected to require 9 to 15 months from the hiring of advisors to handle the sale.

NUI entertained proposals from a large number of financial advisors interested in managing the sales process. They included a strongly representative and capable group from among the firms who perform such services. NUI also discussed with these firms and other funding sources potential financing arrangements that could be in place until closing of the sale. NUI selected Credit Suisse First Boston to co-manage the sale of

NUI, along with Berenson LLP, NUI's existing financial advisor. Credit Suisse First Boston also proposed a major refinancing through a syndication of lenders. On November 24, 2003, NUI and NUI Utilities closed on a $405 million package of credit facilities with CSFB. The credit facilities provide maximum financing levels of $255 million to NUI and $150 million to NUI Utilities for 364 days, extendable for two 180-day periods.

Credit Suisse First Boston's "interim financing package" will provide funding for the entire NUI holding company at levels that would meet all projected funding and financing needs until the closing of the sale of the company. The anticipated monetization of the equity value of NUI through the sale of the company provides Credit Suisse First Boston's expected future and final source of repayment for the debt it has agreed to fund. The following discussion summarizes the key components of this refinancing.

NUI – $255 million Term Loan: NUI entered into an unsecured Term Loan with Credit Suisse First Boston for $255 million with an initial term of 364 days. NUI has the option to extend the term loan for two 180-day periods for a 50 basis point fee for each extension. NUI must pre-fund the estimated interest payments for the first 364 days in an escrow account from a portion of the financing proceeds. If the term loan is extended, the estimated interest during the extended period must also be placed in escrow. The proceeds of the term loan are expected to be used by NUI as follows:

- Repayment of NUI Revolving Credit Agreement: $38 million
- Repayment of NUI Senior Notes and prepayment premium: $72 million
- Funding of 12 months of interest on term loan: $20.4 million
- Repayment of Inter-company Balance to NUI Utilities: $85.0 million
- Payment of fees and "General Corporate Purposes:" $39.6 million.

NUI paid Credit Suisse First Boston a 3 percent arrangement fee at closing. The interest rate on the term loan is the Euro-Rate with a 2 percent floor plus 6 percent (or an alternate base rate plus 5 percent). The initial interest rate on the facility is 8 percent. This combination of costs produces an initial total cost of financing of over 11 percent.

The key provisions of the NUI credit agreement with Credit Suisse First Boston are as follows:

- The ratio of total indebtedness (short and long term) to total capitalization for NUI cannot exceed 75%
- NUI's ratio of EBITDA/Interest expense cannot be less than 1.75:1
- NUI may keep (*i.e.*, not be required to apply to loan repayment) up to $20 million of net proceeds from sales of assets such as UBS or NUI Telecom
- NUI can dividend up to $20 million total to its shareholders, unless an event of default is caused, or a governmental rule (such as an NJBPU Order) is violated
- A default is caused by any fines or penalties in connection with Liberty's focused audit in an aggregate amount of $25 million or more.

NUI Utilities - $150 million: NUI Utilities entered into a three-part credit agreement with Credit Suisse First Boston, for a total of $150 million. The credit agreement includes a $50 million unsecured term loan and a $50 million revolving line of credit. Each has an initial term of 364 days. NUI Utilities also has options to extend these two facilities for two 180-day periods. Each extension would require a 50-basis-point fee. The proceeds of the term loan and an $85 million repayment of the inter-company payable from NUI would roughly allow the payoff and termination of the existing NUI Utilities revolving line of credit with Fleet. The new revolving credit facility replaces the recently arranged Drawbridge $50 million liquidity line of credit to finance the working capital and gas purchasing needs of NUI Utilities. Moody's has issued a rating of Ba3 on these financings. This rating reflects a total of six ratings levels lost in five separate ratings actions since September 2002.

A third, $50 million financing facility is called the Delayed Draw Term Loan. This term loan may be drawn before November 22, 2004. It may be used solely for the purpose of paying the maturity of NUI Utilities' $50 million of Medium Term Notes on February 1, 2005. A 50 basis point fee must be paid to exercise this option.

NUI Utilities has paid an arrangement fee to Credit Suisse First Boston of 3 percent at closing. A commitment fee of 0.625 percent on the unused portion of all three of the financing pieces also will apply. Interest rates on the NUI Utilities financings are either the Euro-Rate with a 2 percent floor plus 5 percent or an alternate base rate plus 4 percent. Either alternative would result in an initial 7 percent interest rate. This combination of costs will produce an initial total cost of borrowing of over 10 percent annually. By comparison, an investment-grade utility would have been able to borrow working capital funds for about 2.0 percent as of the November 24, 2003 closing date.

The key provisions of the NUI Utilities credit agreement with Credit Suisse First Boston are as follows:

- The ratio of total indebtedness (short and long term) to total capitalization for NUI Utilities cannot exceed 70%
- NUI Utilities' ratio of EBITDA/Interest expense cannot be less than 2.25:1
- NUI Utilities can dividend up to $35 million to NUI, unless an event of default is caused, or a governmental rule (such as an NJBPU Order) is violated
- A default is caused by any fines or penalties in connection with Liberty's focused audit in an aggregate amount of $25 million or more.

11. Conclusions

Conclusion IV-8. NUI inappropriately commingled the funds of NUI Utilities and its non-utility affiliates by using a single cash pool that operated without sufficient controls and required NUI Utilities to make to affiliates loans that were unreasonable.

NUI's pooling of all cash operations in one concentration account resulted in an inappropriate commingling of funds between utility and non-utility operations and entities. This commingling violates the terms of the Holding Company Order. The accompanying failure to settle intercompany balances on a regular basis also constitutes a failure to adhere to good utility practice and standards of prudence. NUI management allowed the growth of a very large balance owed by NUI to NUI Utilities. The intercompany payable from NUI to NUI Utilities grew to $190 million by March 2003. This value is immense in relation to NUI Utilities' reported equity capital of about $270 million at the time. NUI financial management allowed this balance to grow for an extended period of time. Only in early to mid 2003 did NUI begin to overtly recognize, document, and begin to settle this large balance. Even then, its actions were instigated by outside pressure, and came after it was too late to avoid major financial harm to NUI Utilities and to ETG. The interest rates that NUI Utilities now pays under the Credit Suisse First Boston financing offer a prime example of that harm. They are at annual effective costs on the order of five times what ETG should pay to acquire working capital.

NUI historically did not track the flow of cash funds between entities. A new NUI controller, who came to NUI early in 2003, encountered a significant struggle even to first understand, and then to document the historical flow of funds and receivables among NUI entities. The actual segregation of the utility and non-regulated cash systems at NUI began about April of 2003, and only neared completion a half-year later, in October.

NUI also failed to meet minimal notions of good-utility practice and prudence in documenting the relationships that effectively created loans between its utility and non-utility sectors. NUI financial management did not write loan or similar agreements to govern inter-company advances. The "lending" affiliates in inter-company transactions therefore did not have even simple lending protections to ensure repayment. NUI offered no loan terms, covenants, or security interests to its utility sector "lenders" to affiliates.

Ironically, this failure to act came even as outside lenders moved dramatically to provide such protections in connection with their loans to NUI. Management's failure to adopt similar, conservative, and appropriate practices and protections in connection with the receivables balances placed NUI Utilities at considerable legal disadvantage, as compared to NUI's outside creditors, in recovering its funds. This disadvantage was more than hypothetical, given the degradation of NUI Utilities credit and the narrowing of its financing options, both of which arose not from its own financial fundamentals, but from problems at NUI and from the failure to take reasonable actions to protect NUI Utilities from the consequences of those problems. That the Credit Suisse First Boston refinancing

allowed repayment of the balance mitigates the prospective harm that NUI financial management caused for NUI Utilities. Two damaging legacies nevertheless remain:

- The Credit Suisse First Boston picked up many of the restrictions on NUI Utilities that NUI had to bear when it negotiated from a position of extreme weakness over the past few years; these restrictions were necessary to get the November 2003 refinancing accomplished, but they are not consistent with the kind of financing flexibility that a well-run, fiscally responsible utility normally has.
- The Credit Suisse First Boston borrowing costs are extremely high; they are competitive considering the state into which NUI financial management put NUI Utilities, but they are five times or more higher than what a well-run, fiscally responsible utility could have secured at the time.
- The NUI Utilities credit rating remains at below investment grade; any subsequent financing by NUI Utilities will impose higher costs until the utility operations are sold or effectively insulated from the remainder of NUI.

NUI should have segregated its cash management systems immediately upon the BPU's approval of the holding company and the creation of NUI Utilities. NUI should likewise have, from the outset, restricted or prohibited inter-company transfers and loans. NUI should also have instituted at the same time a set of specific procedures and rules for the routine, monthly settlement of inter-company balances. The failure to establish systems and safeguards like these constituted a fundamental failure to act prudently, to meet standards of good-utility practice, and to comply with the Holding Company Order. The establishment and accumulation of huge inter-company balances among affiliates was the direct consequence of these failings. This result was a clearly foreseeable consequence of actions taken to use the single cash pool to continue to fund non-utility operations and investments. Placing NUI Utilities in a repayment position subordinate to the claims of outside creditors constituted a substantial abuse of management discretion in light of the declining fortunes of non-utility operations and the fast-diminishing parent resources for returning NUI Utilities' resources appropriated for non-utility use.

Conclusion IV-9. ETG paid interest charges for deferring payments for storage gas in 2001; its inclusion of interest costs in BGSS calculations inappropriately inflated customer rates.

ETG arranged to defer payments for storage-season gas purchases from Enron in 2001. It did the same for 2002 and 2003 storage-season gas purchases from Occidental. Interest costs incurred for deferring these payments should not be treated as costs recoverable from customers through the operation of the BGSS mechanism.

The interest that ETG paid in the Enron transaction can be measured as the difference between the fixed price of the swap agreement and the final fixed contract price for the gas purchase. The weighted average fixed price under the swap agreement was $5.5535/Dth. The final contract price was $5.8169/Dth. Applying this difference to the 8,560,000 Dth volumes purchased produces an interest calculation of $2,254,704.

Analyses provided to Liberty by NUI also show that the Occidental 2002 and 2003 "adders" for payment deferrals amount to $416,427 (2002) and $486,202 (2003). The total interest charged by ETG and its customers for interest-related costs due to the payment deferrals in 2001-2003 therefore amounted to $3,157,333.

> ***Conclusion IV-10: ETG's interests provided the overwhelming source of leverage that produced the Enron settlement agreement in November 2001, but NUI inappropriately assigned the financial benefit of the settlement to NUI EB.***

The Enron settlement agreement in 2001 constituted a strikingly inappropriate NUI transfer of value from ETG to a non-utility affiliate. Moreover, it came on the heels of a financing arrangement that provided temporary financing for NUI at significant additional expense to ETG customers (see the preceding conclusion).

In late November 2001 ETG owed Enron a net total of $49.3 million. Those payments were not, however due yet. The gas purchase agreement made them unarguably due from December 2001 through April 2002. Enron owed NUI EB and NUI Energy $4.8 million at the same time. These Enron obligations came from separate agreements, which had nothing to do with ETG. Enron's mounting financial troubles caused it to lose its investment-grade credit ratings as of November 28, 2001. The downgrade produced collateral calls on many of its energy trades and hundreds of millions of dollars in debt defaults. Clearly, participants in its market knew that Enron's circumstances had become critical. Enron would, in fact, declare bankruptcy three days after November 28.

ETG had title to the gas it purchased from Enron. ETG also had possession of the gas, which it held in storage by this time. A small portion of the gas may or may not have already been used or sold to third parties by this time. The NUI EB manager responsible for credit issues saw no significant risk that an Enron bankruptcy would threaten ETG's ability to control and use the gas to which it had title and of which it had possession. Liberty's understanding of treatment of a bankrupt entity's transactions in the ordinary course of business and of preferences is consistent with this view that risks were minimal. ETG would certainly have to pay Enron for the gas, but it is not clear what theory would require even an advancement of the payments for which it had contracted in the ordinary course of business, and well prior to Enron's financial collapse.

ETG therefore had very substantial leverage. ETG's potential to advance payments of $49.3 million to a company desperately needing cash to meet collateral calls and other creditor claims offered Enron significant value. NUI EB and NUI Energy, in contrast, found themselves facing only exposure from Enron's straits. Enron owed them money; *e.g.*, $4.8 million. Collecting any material portion of that sum would not be possible. However, NUI did not have the benefit of hindsight at the time. What is material is what prudent business managers should have anticipated at the time. Liberty concluded, as it appeared that NUI and NUI EB personnel did at the time, that a very substantial portion of that amount, perhaps all of it, was highly likely to become uncollectible. NUI EB

personnel who pursued negotiations with Enron noted that the recovery of the receivables from Enron was a principal driver for negotiating the settlement. One of them also cited concern about ETG's loss of control over the gas in the absence of a settlement. Liberty did not find this argument persuasive. ETG had bought the gas from Enron in the ordinary course of business. Title and possession had changed hands. The NUI EB manager responsible for credit issues saw no major concern. If anything, entering a settlement with Enron created whatever risk there was. That settlement clearly could be examined for preference issues in any eventual bankruptcy proceeding.

NUI EB negotiated a settlement with Enron that allowed the recovery of 100 percent of the $4.8 million in its and NUI Energy's receivables from Enron. Beyond collecting well more than it would have as an unsecured bankruptcy creditor, NUI EB also kept a net deal margin of $669,000. NUI did not require that any portion be shared with ETG. This margin consisted principally of the reduction that NUI EB negotiated in the total payments owed by ETG under the gas supply agreement. The settlement was not discussed with anyone from ETG until after its completion. The settlement agreement was signed by the former CEO of NUI, representing ETG.

NUI's decision to handle NUI EB's settlement of Enron's request for advance payment on the ETG gas purchase disadvantaged ETG in a number of ways. First, ETG continued to be obligated to pay the full amount of its $49.27 million obligation to Enron. This obligation remained, even though Enron agreed to a lower amount on an upfront basis. NUI credited none of the reduction to ETG, despite the fact that the only thing of value that NUI collectively offered to Enron was ETG's obligation to make those payments.

Second, NUI EB and NUI Energy received from the settlement value equal to the amount by which the payment of 100 percent of the $4.8 million Enron owed them exceeded what NUI EB and NUI Energy would have received as unsecured Enron creditors. That amount has uncertain value when looked at without the benefit of hindsight. Liberty conservatively estimates the low end of that value to be half of the face amount. The collection of Enron transactions settled went both ways. That is, some produced amounts due to Enron and some produced amounts due from Enron. The NUI EB and NUI Energy transactions produced net payables from Enron. That position certainly did not bring leverage or value to the discussions. Again, it was only the very large ETG net payable to Enron that gave the collective NUI side leverage. Liberty considers that at least half of the face value of the $4.8 million should have been credited to ETG.

Third, ETG ended up incurring more than 100 percent of all amounts owed to Enron. It paid NUI EB (through charges against the intercompany balance) interest on a deferred payment plan that was not even followed. NUI financial management recorded for ETG a payable obligation of $49.27 million to NUI EB in December, 2001. Conversely, NUI EB recorded a receivable due from ETG for the same amount. Effectively, this means that the payments were not made from December 2001 through April 2002. They were all made in December 2001. This aspect of NUI accounting thus deprived ETG of the time value of money for which it paid, and for which NUI EB received, as a result of NUI

accounting. What is particularly egregious is that ETG, after already being charged the full amount of the Enron contract, now was also being charged the intercompany interest rate associated with its increased payable to NUI EB.

Fourth, NUI financial management effectively required ETG to pay interest on money that it had borrowed in the first place. Part of the funding to pay Enron came from an NUI Utilities bank loan with First Union. NUI Utilities has little to back its credit apart from its utility operations. ETG constitutes the overwhelming majority of those operations. Suffice it to say, the financial fitness of NUI Utilities, Inc. is provided by ETG.

> ***Conclusion IV-11. NUI used resources from NUI Utilities' revolving credit lines and operating receipts to fund non-utility investments and operations from December 2001 until November 2003.***

On December 19, 2001, NUI replaced its $232.5 million lines of credit with an NUI Utilities $145 million credit line and an NUI $80 million credit line. NUI immediately drew down the full NUI Utilities $145 million. NUI placed the proceeds into the single concentration account. NUI also paid down its previous lines of credit. NUI recorded on November 30, 2001 the $42.9 payment to Enron on the books of ETG. The accounting entry credited or reduced ETG's payment obligation to Enron by $42.9 million. There occurred, however, a corresponding and equally sized entry that created an ETG obligation to NUI. This entry increased the amount owed to NUI by NUI Utilities.

NUI Utilities owed NUI a payable of $61.2 million at November 30, 2001. This sum included the $42.9 million associated with the Enron settlement. In December 2001 this entry was reversed. NUI financial management made a new entry that produced an even higher ETG obligation. This new entry amounted to $49.8 million, which equaled the total price agreed to in the deferred-payment gas purchase agreement with Enron.

NUI's immediate draw of the full NUI Utilities available credit changed this payable to a receivable. That receivable amounted to $40.1 million at December 31, 2001. But for the Enron settlement accounting, it appears that the balance payable by NUI to NUI Utilities would have been as high as $89.9 million at its inception under the late 2001 refinancing. In any event, even as it was accounted for by NUI financial management, the receivables balance owed by NUI to NUI Utilities has not fallen below $54.7 million since the end of 2001. It reached a peak of $190.1 million at the end of February 2003.

There has been little correlation between NUI Utilities outstanding debt and cash needs since December 2001. Only consideration of non-utility funds use causes funds sources and uses to match. The following table demonstrates the close correlation between the receivable due to NUI Utilities and the amount that NUI Utilities borrowed against its revolver. In other words, had there been no substantial intercompany receivables balance, NUI Utilities' working capital needs would have been drastically smaller.

Table IV.12. Correlation Between NUI Utilities Credit Usage and Intercompany Receivable

Month End	Revolving Credit Used	Payable to NUI Utilities	Actual Needs	Affiliate Credit Use
Dec 01	145.0	40.1	104.9	28%
Jan 02	145.0	56.6	88.4	39%
Feb 02	125.0	56.5	68.5	45%
Mar 02	87.0	82.6	4.4	95%
Apr 02	60.0	75.1	-15.1	125%
May 02	57.0	56.6	0.4	99%
Jun 02	60.6	58.7	1.8	97%
Jul 02	52.1	54.8	-2.7	105%
Aug 02	74.8	58.3	16.5	78%
Sep 02	63.7	60.8	2.9	95%
Oct 02	69.7	75.9	-6.2	109%
Nov 02	111.9	113.5	-1.7	101%
Dec 02	110.0	119.1	-9.1	108%
Jan 03	140.0	167.9	-27.9	120%
Feb 03	141.9	190.1	-48.2	134%
Mar 03	140.3	168.4	-28.0	120%
Apr 03	115.5	150.5	-35.0	130%
May 03	126.9	150.2	-23.3	118%
Jun 03	123.9	111.5	12.4	90%
Jul 03	129.9	101.1	28.8	78%
Aug 03	137.9	95.5	42.4	69%
Sept 03	132.4	82.1	50.3	62%
Oct 03	141.9	81.1	60.8	57%

Millions of dollars

Liberty determined that NUI Corp. has clearly been using NUI Utilities funds from its line of credit and operations to fund the holding companies' non-utility investments and operations.

Conclusion IV-12. NUI improperly made working capital access for NUI Utilities dependent on the financial results of NUI by jointly negotiating revolving lines of credit.

Prior to December 2001, the utility operations of NUI relied on the lines of credit of the holding company for working capital. With the establishment of the holding company and the assignment to NUI Utilities of the responsibility for conducting utility operations in 2001, NUI had an opportunity to structure separate lines of credit, lenders and cash management operations for NUI's utility operations and for its far riskier non-utility operations.

Instead of providing for clear separation, however, NUI tied NUI Utilities' lines of credit to those of the parent and its non-utility businesses. NUI made this coupling through the

joint negotiation of parallel credit agreements with common lenders. NUI and NUI Utilities lenders under the December 2001 and February 2003 credit agreements were identical for each respective pair of agreements. The agreements were signed as of the same date and by the same parties. They clearly were negotiated jointly. Each of the four amendments to the December 2001 credit agreements were as of the same day for both NUI and NUI Utilities. Even the November 2003 Credit Suisse First Boston refinancing was jointly conducted for NUI and NUI Utilities. Of course, by the fall of 2003, a realistic alternative no longer existed.

Problems at the NUI non-utility entities and the restatement of the NUI consolidated financial statements following the PricewaterhouseCoopers re-audits caused technical defaults on the parent's Revolving credit agreement. NUI and its lenders simultaneously amended both the NUI and the NUI credit agreements in response. The defaults resulted solely from problems involving NUI's non-utility businesses. Moreover, utility operations and financing had no internal problems that would cause them to be looked at as less than a strong, investment-grade credit risk. Nevertheless, utility operations suffered. These amendments made the NUI Utilities' credit agreement measurably more expensive and restrictive. NUI should not have inseparably linked the capital access of NUI Utilities and non-utility ventures through these linked arrangements with lenders. Had NUI maintained proper separation, the poor performance of NUI's non-utility operations would have caused increased financing costs and lending restrictions to be limited to these operations.

One can expect NUI creditors to attempt to tie access to funds by risky, non-utility businesses to access to funds for utility operations. The superior cash flow and creditworthiness of utility operations entities are attractive to lenders to the non-utility businesses. Creditors are more than happy to attach their claims to utility assets or funds if a borrower allows them to do so.

For NUI to allow NUI Utilities' lines of credit to be tied to the non-utility businesses through jointly negotiating lines of credit represents an inexcusably poor management decision under the standards of the Holding Company Order and of good utility practice. The actions that caused a failure of separation have done severe damage to ETG. NUI has seriously damaged NUI Utilities` access to working capital, and significantly increased its costs by linking the sources and negotiations for regulated and non-regulated funding.

> ***Conclusion IV-13. The sale of NUI's non-regulated businesses, as originally proposed by NUI, was not feasible and would not have provided sufficient funds to pay both NUI creditors and the intercompany balance to Utilities.***

NUI's management recognized an intercompany balance of $112 million owed by NUI to NUI Utilities in a presentation to the NJBPU on July 16, 2003. NUI provided various plans for repayment of this balance to Liberty on a number of occasions during the course of the audit, from July through September of 2003. Management discussed with Liberty a

variety of proposals for securing the resources needed to satisfy the intercompany balance and for restoring financial stability to NUI and to NUI Utilities. These plans focused upon the sale of limited portions of NUI's assets, some of them utility and some of them non-utility in nature. Liberty found these partial sales packages to be unrealistic in terms of the valuations being used and in terms of the execution risks that they presented.

Liberty believed that NUI's earlier communicated plans for the repayment of the intercompany payable to NUI Utilities were not feasible. First, the sales of UBS and Telecom and NUI Energy's accounts receivable collections comprised $51 million of NUI's repayment plan. However, NUI's revolving credit agreement specifically required that the proceeds of sales of equity or assets in NUI's subsidiaries (except for Utilities and Virginia Gas) were to be used only to pay down the NUI revolving credit facility. These projected sums also appeared to be very optimistic in any case.

Secondly, NUI proposed to use $20 million of "cash on hand" to pay down the intercompany balance. However, NUI's liquidity forecasts at that time did not indicate that sustained cash would be available in the immediate future. In addition, until the cash management systems were segregated and audited, it would be uncertain whether such cash belonged to NUI or NUI Utilities.

NUI also did not provide a source for the final $27 million of repayment in 2004. This repayment also seemed improbable, because NUI planned to sell or shut down UBS and Energy Brokers, its primary sources of non-regulated income.

NUI management decided in mid-September 2003 that the solution to NUI's financial predicament and the satisfaction of the needs of all of its stakeholders lay, not in the ineffective options presented before, but in selling the entire corporation. This option, in distinction to the others on which management had been persistently focusing, presented an option with sufficient apparent executability in the time required to monetize the value of sufficient assets in order to pay NUI creditors, deal with the revolving credit facilities, and pay to NUI Utilities the intercompany payable balance.

> ***Conclusion IV-14. A potential liquidity crisis for NUI Utilities in the winter of 2003-2004 was avoided only through extremely high-cost credit facilities.***

NUI senior executive management in July 2003 assured Liberty that existing lines of credit were adequate for the storage-filling season. NUI management also noted that an additional line of credit was being arranged that would cover all winter season contingencies, including higher gas prices for the coming winter. NUI management also indicated that the new credit facility was to be in place in "one or two weeks" after that July 8 meeting. It did not materialize until October.

In August 2003, Liberty learned that NUI was near its borrowing limits in June and July. This situation caused immediate concern, because NUI Utilities' borrowing needs

generally peak in the September through January period. NUI eventually proposed to manage around its September and October peak borrowing days by carefully scheduling receipts and disbursements on the monthly gas-settlement day, when borrowing is at peak levels.

NUI Utilities finally closed on a $50 million liquidity line of credit with Drawbridge Special Opportunities Group in October 2003, for an approximate annual rate of 10 percent. This rate is exceedingly high for a utility.

NUI's outside consultants developed new liquidity forecasts following NUI's apparently failed internal efforts. The consultant's new liquidity forecasts were shared with Liberty in late October 2003. The new forecasts indicated that NUI Utilities would have ample credit availability during the 2003/04 winter with the new $50 million Drawbridge facility. The Drawbridge liquidity facility was terminated and replaced by Utilities' portions of the CSFB financing in November 2003.

The CSFB credit agreement includes a $50 million unsecured term loan and a $50 million revolving line of credit, each of which has an initial term of 364 days. The costs of borrowing on the NUI Utilities financings initially exceed 10 percent annually. By comparison, an investment-grade utility would have been able to borrow working capital funds for about 2.0 percent as of the November 24, 2003 closing date.

> ***Conclusion IV-15: NUI did not have critical cash forecasting tools in place when it faced liquidity crises in 2002 and 2003.***

NUI was not using nor had it been using a structured cash forecasting tool at the outset of Liberty's audit. The absence of cash forecasts became increasingly problematic for NUI as the company neared its borrowing limits in the summer of 2003. The development of the cash forecasts eventually proved to be quite problematic, and outside consultants were brought in to take over the development of this critical tool.

Through the use of an outside consultant, NUI did eventually establish and use cash flow and liquidity status models and forecasts for NUI Utilities and NUI by November 2003. The cash flow forecasting methods and models have been used by NUI effectively to forecast the cash flow and liquidity status of each NUI entity as the Company entered the 2003-2004 winter heating season.

> ***Conclusion IV-16. NUI has re-engineered its cash management systems and controls and established a cash forecasting model that should effectively separate the cash management of NUI Utilities from non-utility operations.***

NUI implemented by October 2003 a cash-management structure and process whose design provides appropriately for the separation of utility and non-utility cash. NUI also

has been operating under this new, segregated cash-management approach. Chapter Five of this report addresses this re-engineering process in detail.

C. Long-Term Debt Financing and Covenants

1. Background

Two NUI entities issue long-term debt financing for NUI and its subsidiaries: NUI and NUI Utilities. NUI Utilities issues long-term debt to provide permanent financing for ETG, CGF, and Elkton. At June 30, 2003, NUI Utilities had $250 million of long-term debt outstanding. NUI issues long-term debt financing for the non-utility affiliates. NUI had $60 million of Senior Notes outstanding at June 30, 2003. NUI has used and continues to make heavy use of short-term borrowings to finance the parent company, non-utility businesses, and NUI Utilities. Section B of this chapter further addresses those short-term borrowings. They consist principally of 364-day revolving credit agreements that NUI and NUI Utilities rolls over annually.

2. NUI Utilities Long-Term Debt

NUI Utilities has not changed its long-term debt financing of NUI Utilities since 1999. NUI Utilities has historically issued unsecured debt to finance NUI's utility operations. NUI prefers unsecured debt, believing that it provides greater options and flexibility for utility debt financing. Local gas distribution utilities commonly use unsecured notes or debentures.

Total NUI Utilities outstanding long-term debt, which includes gas facilities revenue bonds and medium-term notes, comprised $250 million at June 30, 2003. The next table summarizes the long-term debt of NUI Utilities:

Table IV.13. NUI Utilities Long-Term Debt

Gas Facilities Revenue Bonds	
6.35% due October 1, 2022	$46,500
6.40% due October 1, 2024*	$20,000
Variable Rate due June 1, 2026	$39,000
5.70% due June 1, 2032	$54,600
5.25% due November 1, 2033	$40,000
Medium-Term Notes	
8.35% due November 1, 2005	$50,000

Thousands of dollars

Most of NUI Utilities' outstanding long-term debt exists in the form of gas facility revenue bonds. Such bonds get issued in conjunction with governmental agencies. This approach produces a tax exemption for note holders on interest income, which allows a lower interest rate. NUI Utilities had five series of gas-facility revenue bonds outstanding at June 30, 2003. Four series carry a fixed interest rate. One series, for $39 million, has a variable interest rate.

NUI Utilities' $39 million of variable-rate gas facilities revenue bonds contain options that allow the bondholders to "put" the bonds back to NUI Utilities under certain circumstances. NUI Utilities has a standby bond purchase agreement with a bank lender to provide a backup liquidity facility. The lender would purchase the bonds in the event that they could not be remarketed. According to NUI, the various credit downgrades of NUI Utilities in 2002 and 2003 had little effect on the standby bond-purchase agreement with the bank. NUI re-negotiated extensions of that agreement in July and December, 2003. Currently, this agreement expires on June 30, 2004.

NUI has also insured the variable rate bonds. The bond insurance causes this series of NUI Utilities notes to be rated by Standard and Poors' at "AAA," which is the rating of the insurer.

NUI Utilities also has outstanding a series of taxable medium-term notes in the amount of $50 million. These medium-term notes have a maturity date of February 1, 2005.

NUI Utilities added to its long-term financing in August 2002, when it completed a sale/leaseback transaction for its CGF gas meters. The Company recorded this transaction as a capital lease. The sale/leaseback enabled NUI Utilities to raise approximately $9 million, bears interest at 4.98 percent, and will be repaid over 10 years. The proceeds from this transaction were used for the repayment of $20 million of medium-term notes that matured in August, 2002.

3. NUI Long-Term Debt: Senior Notes

NUI issued on August 20, 2001 $60 million of senior notes bearing interest rates ranging from 6.6 percent to 7.29 percent. NUI used the proceeds to repay short-term parent indebtedness that it used in part to acquire Virginia Gas and TIC. The following table summarizes the NUI senior notes outstanding at June 30, 2003.

Table IV.14. NUI Senior Notes

6.60% due August 20, 2006	$5,000
6.884% due August 20, 2008	$15,000
6.884% due August 20, 2011	$7,000
7.29% due August 20, 2011	$33,000
Total	$60,000

At June 30, 2003; thousands of dollars

The NUI senior notes placed numerous restrictions on the Company and its subsidiaries. The principal restrictions include:

- NUI must remain the sole owner of ETG, CGF, and Virginia Gas Company at all times during the term of the notes (Section 9.7)
- The notes require a fixed charge coverage ratio minimum level of 1.75 to 1.00 (Section 10.2 and 10.3)
- The notes require a minimum corporate consolidated leverage ratio of either .65 or .70, depending on the time of year (Sections 10.2 and 10.3)

- Essentially all subsidiaries of NUI, including NUI Utilities, Virginia Gas Company, Energy Brokers, NUI Energy, NUI Telecom, and UBS, comprise "restricted subsidiaries"
- Restricted subsidiaries cannot provide guaranties to other entities (Section 10.6)
- Restricted subsidiaries cannot have their dividends restricted (Section 10.7)
- Sales of the assets of the restricted subsidiaries are limited to 15 percent of NUI's consolidated total assets (Section 10.8)
- Limits are applied to the ability of the restricted subsidiaries to place liens on their property (Section 10.9)
- Limits are applied to the ability of the parent and restricted subsidiaries to enter into sale and leaseback transactions (Section 10.10).

4. NUI Long-Term Debt: January 2003 Default Conditions

By January, 2003, NUI had been experiencing significant financial problems. The company had a structural default on its senior notes, as its covenants directly conflicted with the NUI revolving credit agreement signed on December 19, 2001. NUI was in violation of the senior notes upon executing the revolving credit agreement in late 2001. However, it was not discovered by the company until January 2003. The covenants for which NUI was in violation included:

- Minimum-fixed-charge-coverage-ratio covenant
- Restrictions on the ability to enter into sale/leaseback transactions
- Entering agreements that restricted its subsidiaries' ability to pay dividends to the parent
- Requirement that the company deliver certain financial information and statements of cash flow to the note holders.

On January 24, 2003 NUI obtained from the senior note holders a temporary waiver of the covenant violations. Discussions about curing defaults for the longer term continued. NUI and senior note holders amended the note agreement in February 2003, in order to cure the technical defaults. However, not all NUI financing was being provided under the notes. The preceding section of this chapter discusses the NUI and NUI Utilities substantial use of 364-day revolving credit agreements, which they were in the custom of rolling over annually.

The fault-curing amendment required NUI to increase the rate of interest on the senior notes by 50 basis points, or ½ of 1 percent. This amendment also sought to place all lenders of NUI on an equal footing regarding security interests in NUI. These lenders included both the senior note holders and the lenders under the NUI revolving credit agreement. The fault-curing amendment therefore required approval by the banks participating in NUI's $38.1 million revolving credit facility. The senior note holders and banks lending under the revolving credit agreement reached the necessary accommodation. They signed an inter-creditor agreement, dated April 1, 2003. This agreement effected the change that placed the senior note holders and the bank lenders on

an equal basis, in terms of security. The lenders under NUI's revolving credit facility secured an increase in the interest rate in return for granting this concession.

NUI management told Liberty that the company was not aware of the technical default of the senior notes prior to early 2003. NUI management also understood that the covenants of the senior notes required that:

- No dividend restrictions of NUI subsidiaries take place
- No NUI subsidiaries may guarantee NUI debt.

The NUI 364-day revolving credit agreement, which was executed in December 2001, however, conflicted specifically and directly with both of these provisions. The need for settling this conflict was the subject of three-way negotiations among NUI, the senior note holders, and the banks lending under the 364-day revolving credit agreement. NUI management described the following resolution sequence for curing the default under the NUI senior notes:

- NUI discovered and documented the defaults in January, 2003
- The senior note holders gave NUI a waiver for 30 to 60 days
- NUI approached the lenders under the 364-day revolving credit agreement to seek agreement that the senior note holders move up to an equal security footing with the banks.
- At this time, one of the revolving credit banks left the bank group, and lending commitments needed to be rearranged
- The revolving credit commitment to NUI was reduced from $55 million to $38.1 million during this time period
- The senior note holders required three changes in provisions: a 50 basis point increase in interest rates; the same security as the revolving credit banks; and the negotiation of an inter-creditor agreement that would secure NUI debt equally between the senior notes and the line of credit banks.

5. 2003 Refinancing Plans

NUI explored a variety of refinancing plans for NUI Utilities and NUI during 2003. NUI received presentations from an investment banking group and Fleet, the syndicator of its 364-day revolving credit agreements, during May through July 2003. The presentations explored potential financing structures and vehicles for NUI Utilities and for NUI. NUI's investment banking advisor focused primarily on sales of various NUI non-utility businesses in order to provide cash for the repayment of:

- NUI debt
- The inter-company balance owed to NUI Utilities.

The investment advisor also explored financing vehicle alternatives for NUI. Included in these alternatives for NUI were:

- High yield debt
- The institutional B loan market

- Equity investment or new partnership interests in the Saltville or Virginia Gas projects
- Equity investments in NUI.

NUI also received refinancing presentations from Fleet for NUI Utilities and for NUI. Fleet proposed a variety of financial instruments for NUI. They included high-yield, longer-term debt for NUI and a senior secured revolving credit facility. Fleet's alternatives for NUI Utilities included a secured revolving credit facility and a credit facility secured by the accounts receivable of NUI Utilities. Fleet noted that the security interest for the NUI Utilities' longer-term financings would be a "first lien on all tangible and intangible assets of" NUI Utilities.

This Fleet presentation formed the basis for a later proposal, which NUI and Fleet presented to the NJBPU on August 20, 2003. This later proposal offered a large-scale refinancing of NUI and NUI Utilities' short and long term financing. The presentation noted that:

> *NUI has negotiated a proposal to restructure the financing for NUI Utilities that will provide greater availability, flexibility and stability of financing sources for NUI's utility operations.*

The proposal as it related to NUI Utilities included the following components:

- A $75 million term loan with a three-year maturity and secured by property, plant and equipment to extend the maturity of existing debt and provide additional dollars for capital investment
- $39 million of the $200 million gas revenue bonds would be restructured to take advantage of current lower interest rates
- A $125 million secured revolving credit facility would support utility operating requirements and be secured by NUI Utilities' property, plant and equipment.
- A $50 million accounts receivable securitization at NUI Utilities to support working capital requirements.
- A $50 million interim liquidity facility to satisfy peak winter gas supply requirements of NUI Utilities.

NUI noted that a regulatory filing would be made with NJBPU to seek regulatory approval for this plan in a few weeks following the proposal. The next table summarizes the current and NUI's proposed financing, including both short and long-term financing for NUI Utilities.

Table IV.15. Summary of Fleet's NUI Utilities Refinancing Proposal

Current and Proposed Financing
NUI Utilities

	Current	Interim	Proposed	
Credit Facilities			$50 MM A/R Securitization	Short-Term
	$142 MM Unsecured Revolver	$50 MM Interim Unsec. Liquidity Facility	$125 MM Revolver Secured by PP&E	Short-Term
	$50 MM Medium-term notes		$75 MM Term Loan Secured by PP&E	Long-Term
Subtotal Financing	$192 MM		$250 MM	
Bonds	$200 MM Gas Revenue Bonds		$200 MM Gas Revenue Bonds	Long-Term
Total Financing	$392 MM		$450 MM	

The Fleet proposal also would have substantially restructured NUI financing. Specifically, it included:

- Replacing NUI's then-current $60 million of senior notes and $38.1 million unsecured revolving credit facility with a $75 million structured term loan for three years and a $30 million secured revolving credit facility
- Giving the lender as security the stock of the subsidiaries of NUI, including NUI Utilities.

NUI proposed that the company receive regulatory approval by approximately October 15, 2003, or about a month and a half following the first presentation of the proposal to the NJBPU. However, NUI made no filing of an application setting forth the details that the BPU would have to consider in deciding whether to grant that approval. Liberty later learned from NUI and Fleet, on September 2nd, 2003, that the ability of NUI Utilities to grant security to new lenders in connection with the proposed financing plan would be inhibited by various NUI creditors. In addition, NUI management noted in mid-September 2003 that the solution to NUI's financial predicament was not the refinancing, as presented, but that NUI needed to monetize the value of its assets and

prepay debt instruments in order to remove the restrictive provisions of the NUI senior notes and the revolving credit agreements.

6. Conclusions

Conclusion IV-17. NUI Utilities' financing has been substantially and inappropriately restricted by the covenants of the NUI senior notes.

The NUI note purchase agreement dated August 20, 2001 restricts the financing activities of NUI Utilities significantly. Section 10.9 of this agreement established the ability of NUI creditors to inhibit the ability of NUI Utilities to grant security interests to creditors in connection with Utilities' financing. This provision effectively barred NUI Utilities from issuing secured indebtedness. This restriction harmed NUI Utilities and provided for an inappropriate cross-subsidization of NUI by NUI Utilities. The section included a provision stating:

> *The company will not, and will not permit any capital or restricted capital subsidiary to create or incur or suffer to be incurred or to exist any capital Lien on its or their property or assets, whether now owned or hereafter acquired, or upon any income or profits therefrom, or transfer any property for the purpose of subjecting the same to the payment of obligations in priority to the payment of its or their general creditors.*

Other covenants of the NUI senior notes also restricted the activities of NUI Utilities. Section 10.6 prohibited any restricted subsidiary, including NUI Utilities, from providing any guarantee of any obligations. Section 10.7 of the agreement did not permit ETG or CGF to enter into any agreement that would restrict the ability of these companies to pay dividends to the parent. Section 10.8 of the agreement limited the sale of assets of restricted subsidiaries, including NUI Utilities, to 15 percent of NUI's consolidated total assets.

Liberty found the financing of activities and utility operations of NUI Utilities to be inappropriately restricted by the NUI senior notes. The purpose of these limitations and restrictions was clearly to provide support from NUI Utilities to the credit and financing of NUI. The senior notes were retired with a portion of the proceeds from NUI's $255 million Credit Suisse First Boston financing.

Conclusion IV-18. The default on the NUI senior notes caused significant additional cost for NUI Utilities in the renegotiation of the revolving credit facility in early 2003.

This chapter describes the difficulty that NUI had in renegotiating the revolving lines of credit for NUI Utilities and NUI in late 2002 and early 2003. The structural default on the NUI senior notes contributed to this difficulty. NUI was forced to perform a three-way negotiation with the senior note holders and the bank lenders to resolve the senior notes default. These negotiations produced an increase in the interest rate on NUI's senior notes, additional security provisions for the senior note holders, higher interest rates on NUI and NUI Utilities revolving lines of credit, and more restrictive security provisions in the new credit agreements. The increased costs of short-term financing for NUI Utilities did not, however, get included in ETG's 2002 rate filing.

Liberty concluded that NUI's inattentive management of its outstanding financing agreements and its negotiation of new financing facilities in 2001 caused the default on the senior notes. NUI produced a debt covenant matrix in early 2003. It compares the provisions of existing credit agreements for use in negotiating new agreements. Producing such a tool prior to the default or greater care in assessing the requirements of its credit agreements would have helped to avoid the technical default that occurred.

Conclusion IV-19. The refinancing plan that NUI proposed in August 2003 was inappropriate, would have further used NUI Utilities in support of NUI credit, and demonstrated the harm to NUI Utilities from inadequate separation of utility financing.

NUI's refinancing plan presented to the NJBPU on August 20, 2003 was unacceptable for a number of reasons. First, the proposed securitization of NUI Utilities' assets in order for NUI Utilities to acquire financing should not have been required. Absent the close financing interconnections with NUI, the failure to consider and protect against the effects of poor NUI financial performance on NUI Utilities, and the attendant financial problems of NUI's non-regulated entities, NUI Utilities would have had a solid investment grade credit rating on a stand-alone basis. A stand-alone NUI Utilities would have been able to raise financing based on its own credit at a reasonable rate and without securitizing its assets for the benefit of NUI's existing creditors.

NUI's refinancing plan also proposed that NUI's creditors receive a pledge of NUI Utilities' common stock as security for their loans. Such a pledge of NUI Utilities' common stock would allow NUI's creditors to gain operating control of the utility. Providing access to an operating utility by an entity whose interests focus on debt repayment is clearly contrary to good utility practice and sound regulatory policy.

The relative sizing of the refinancing proposal between NUI and NUI Utilities presented a third problem. The August proposal included $300 million of total financing for NUI Utilities, but only $105 million for NUI. The Credit Suisse First Boston refinancing

eventually consummated in November 2003 contained reversed and more realistic proportions. It included $255 million of financing for the parent and only $150 million for Utilities. The August proposal would have saddled NUI Utilities with excessive debt relative to its needs. Securing the debt by pledges of utility assets to the common parent and NUI Utilities creditors made this problem worse. The August proposal was egregious in its goal of satisfying parent creditor demands by:

- Making NUI Utilities the obligor on financings required by NUI
- Pledging utility assets to secure parent-related financings
- Failing to provide to NUI any funding for the repayment of the intercompany balance owed to Utilities.

The Credit Suisse First Boston refinancing did not suffer these fundamental problems. It also provided $85 for the repayment of the intercompany balance in November 2003.

Liberty's fourth concern about the NUI's proposed, August 2003 refinancing package arose from the lack of NUI management efforts to examine alternatives. It was clear that NUI had sought out nobody but Fleet. Liberty found the lack of effort to explore the marketplace inconsistent with good utility practice and prudent management.

Conclusion IV-20. NUI's debt facilities have not directly encumbered NUI Utilities' assets.

NUI's financings have substantially restricted the operations of NUI Utilities. These financings had the purpose and the direct effect of supporting the credit of NUI. This support came in the form of the willingness of NUI creditors either to lend at all or to lend at more favorable rates to NUI. However, these facilities have not specifically encumbered utility assets. The NUI credit agreements also have not included cross-defaults, material adverse change provisions, or collateral call provisions that would make a default in the financings of NUI cause a default in the financings of NUI Utilities. NUI Utilities has not provided any guaranties or credit-support agreements that offered direct monetary support for the financings or operations of NUI or its non-utility affiliates.

Liberty has generally defined the term "direct credit support" in the context of inter-affiliate debt entanglements to mean a contractual obligation to make monetary payments from a utility affiliate specifically for the purpose of allowing another affiliate to meet its debt covenants. None of the agreements at issue here did so. No provision requires or would have required NUI Utilities to make such payments. No provision provides for a lien or encumbrance on utility assets to NUI lenders. The financing agreements have provided substantial indirect credit support to NUI by provisions that ended up impairing NUI Utilities' own credit and financing activities. None, however, could be construed as a direct credit support, lien or guarantee, as Liberty defines the terms.

D. Recommendations

Recommendation IV-1. Require a rate refund to reflect a reduction in equity levels from December 2002-November 2003, in order to account properly for the receivables balance due to NUI Utilities from NUI.

For the 12-month period starting with the effective date of ETG's rate increase on November 22, 2002, NUI owed ETG an average of about $87.4 million. The tables below show the impact from the removal of this level of equity capital on ETG's cost of capital for the related 12-month period. For the 12-month period, ETG customer rates would have to be reduced by $5.5 million to compensate for the inter-company balance impact on the cost of capital. The following table shows the capital structure and cost that ETG used in support of its rate filing.

Table IV.16. ETG's Filed Rate-Case Capital Structure

	Rate Case Dollars	Percent of Capital Structure	Cost	Weighted Average Cost	Revenue Requirement Cost
Long-term Debt	$197,123	46.065063%	5.90%	2.717839%	2.717839%
Customer Deposits	$6,121	1.430398%	4.40%	0.062937%	0.062937%
Equity	$224,679	52.504539%	10.00%	5.250454%	9.015134%
	$427,923	100%		8.031230%	11.795911%

The following table shows the results of reducing ETG equity to account for the impacts of the intercompany receivable.

Table IV.17. ETG Rate Case Adjustment for Revised Capital Structure

	Rate Case Dollars	Percent of Capital Structure	Cost	Weighted Average Cost	Revenue Requirement Cost
Long-term Debt	$197,123	57.89%	5.90%	3.42%	3.42%
Customer Deposits	$6,121	1.80%	4.40%	0.08%	0.08%
Equity	$137,272	40.31%	10.00%	4.03%	6.92%
	$340,516	100%		7.5259%	10.4164%

The effect of this change is a reduction in annual revenue requirements of about $5.5 million:

- ETG Filed Rate Base $397,154,000
- Revenue Requirement Cost Difference 1.3795%
- Annual Revenue Requirement Reduction $5,478,843.

This calculation would limit ETG's cost of equity recovery to actual accessible equity capital for the 12-month period of reduction, without consideration of its effects on credit ratings over the longer term. Such consideration is generally appropriate in rate case proceedings. What distinguishes the circumstances here is the lack of candor shown by NUI financial management as to the actual state of ETG's financial condition. Should the

BPU chose instead to allow ETG a capital structure at least minimally consistent with maintaining investment grade ratings, Liberty also examined the 12-month effect of reducing equity capital more moderately. Liberty chose a 45 percent equity ratio for this analysis. For the 12-month period, ETG customer rates would have to be reduced by $3.4 million to compensate for this difference between the equity component as filed and an equity component of 45 percent.

In summary, Liberty's analysis produced a one-time revenue requirement reduction of from $3.4 to $5.5 million.

> ***Recommendation IV-2. The NJBPU should require NUI Utilities, ETG and their successors and assigns to implement and maintain within 90 days ring-fencing provisions that seek to re-establish and maintain an investment-grade credit rating based upon stand-alone credit statistics and effective credit insulation.***

NUI has caused serious and potentially irreparable harm to NUI Utilities and ETG credit standing, at least for so long as NUI owns them. It may well be that only the sale of NUI will permit NUI Utilities and ETG to again become perceived by ratings agencies as escaping NUI's risks and be viewed like those of its peers in the industry. For this reason, the completion of the sale of NUI to a party that can bring rationality and financial efficiency is of high importance.

Nevertheless, interim steps to seek a rehabilitation of utility credit standing remain important. Good progress is reportedly being made in advancing the sale process. There is, however, no certainty that a buyer will be found, or that a sale agreement entered will prove acceptable to the BPU, which must review and approve the sale. The first reason, therefore, for current rehabilitative efforts is to provide for some grounds for optimism that a delayed sale execution will not leave ETG indefinitely subject to debt costs that are very far outside the range that a prudently-run, financially well managed LDC should expect.

The second reason for recommending these steps is to communicate the need for entities beyond current NUI management and ownership to understand that there must be protections against a recurrence of conditions like those that have happened here. A new NUI owner should not operate under the assumption that there will be tolerance for continued lack of financial separation or slowness in restoring utility financial health to the condition it should exhibit, and that it would have continued to exhibit, absent the failings of NUI management to preserve and protect it through adherence to Holding Company Order conditions and to the standards of good-utility practice.

The following measures will begin the rehabilitative process and they represent sound principles to establish for communication to prospective purchasers of NUI. Liberty understands that the field of potential buyers may include some who might propose somewhat different means for providing a prompt restoration of ETG's financial health,

and for maintaining it in the long term. This list of measures is not designed to foreclose other alternatives, but to ensure that there is a baseline against which to consider what possible buyers may propose as alternatives.

In summary, this list of measures provides the agenda that Liberty believes that NUI should pursue in the short term. It also provides a reference point to assist potential NUI purchasers in framing their specific provisions for ensuring proper insulation of utility finance. Liberty considers the scope and quality of that insulation to be a material factor for BPU consideration in examining any proposed sale placed before it for review and approval. Liberty also believes that these provisions should have the force of a BPU Order behind them. If they are merely adopted by the Company, subject to alteration or revocation, they are not likely to have substantial impact.

1. Equity Maintenance: NUI Utilities or its successors and assigns should at all times maintain ETG and NUI Utilities equity capital at levels equal to or greater than 45 percent of permanent capital (including equity capital, long-term debt and, if applicable, preferred stock), or equal to or greater than 40 percent of total capital (including permanent capital plus short-term debt). No equity distribution, whether by dividend or other form, should be allowed that would cause the ETG or NUI Utilities equity levels to fall below these minimum levels. Any deviations from these minimum equity levels should be approved in advance by the NJBPU.

NUI Utilities or its successors and assigns should notify the NJBPU of:

- Its intention to transfer more than 5 percent of ETG's or NUI Utilities' retained earnings to the parent company at least 30 days before such transfer occurs
- Its intention to declare a special or un-regular cash dividend from ETG or NUI Utilities, at least 30 days before declaring each such dividend.

2. Cash Management: NUI Utilities or its successors and assigns should at all times maintain separate cash management systems, including receipts, concentration and disbursements systems, for NUI Utilities that are separate and distinct from those of the holding company parent or any non-utility affiliate. At no time should the cash of ETG or NUI Utilities be co-mingled with the cash of the holding company parent or non-utility affiliates.

3. Accounting and Financial Statements: NUI Utilities and its successors and assigns should at all times maintain separate accounting books and records for ETG and each other jurisdictional utility company. Such accounting books and records should include the "push-down" of all assets and liabilities of the NUI Utilities entity to appropriate operating utility entities such as ETG, so that the ETG records include the appropriate share of such assets and liabilities. The accounting books and records should be available for inspection by the NJBPU staff upon a reasonable prior notice. NUI Utilities should provide audited financial statements for both ETG and NUI Utilities to the NJBPU on an annual basis.

4. Inter-company Loans: NUI Utilities and its successors and assigns should cause all receivables and payables for allowed inter-company transactions for goods and services between ETG, the parent company and all affiliates to be settled on a monthly basis. Under no circumstances should such inter-company balances be allowed to accumulate beyond the one-month settlement periods without prior NJBPU approval. ETG should not enter into any loans, loan guarantees or support agreements or money pool agreements with its parent company or any affiliate without the prior approval of the NJBPU.

5. Affiliate Transactions: NUI Utilities and its successors and assigns should cause all agreements for the provision of goods and services or shared services between ETG and any affiliate to be compared to other market alternatives and be negotiated on an arms-length basis. Such agreements should receive prior approval of the NJBPU.

6. Asset Sales and Collateral: ETG assets, financial support or cash flow should not be pledged for the benefit of any entity except ETG. All borrowings of the parent company and all affiliates of ETG should be non-recourse to ETG and NUI Utilities, and should not provide for cross-default to or for credit support from, ETG or NUI Utilities. All asset sales with a value greater that a specified dollar value should receive prior approval from the NJBPU.

7. Corporate Structure and Bankruptcy Protection: NUI Utilities and its successors and assigns should be an incorporated entity with separate, stand-alone management and Board of Directors that are responsible for utility operations, and independent of the management and Board of Directors of the parent company and all affiliates. ETG and NUI Utilities should if possible and practicable enact bankruptcy-proof covenants that protect the utilities in the event of a parent company bankruptcy, and should secure a legal opinion regarding these covenants that they would not invoke any of the "recharacterization" provisions of the Federal Bankruptcy Code.

8. Corporate Costs and Allocation Factors: NUI Utilities and its successors and assigns should ensure that ETG receives fair charges and allocations for shared services and other corporate services and charges. A template of allowed services and charges from NUI to ETG should be developed and agreed upon by NUI and the NJBPU, beginning with the monthly billing for October 2003. NUI Utilities should ensure that maximum levels of direct charging are used to determine shared and corporate costs, and that ETG pays fair and market-competitive rates for all such services.

9. Financing Separation: NUI Utilities and its successors and assigns should cause all securities financings for ETG and NUI Utilities to be negotiated and acquired independently and with no attachment to, nor influence from, the parent company or its non-utility affiliate financing or credit quality.

Recommendation IV-3. Reduce future ETG BGSS recovery by $3,157,333 on gas cost over/under recoveries to reflect those 2001, 2002 and 2003 deferred-payment charges that were recovered from customers.

The total payments made to defer storage gas payments by ETG included in the BGSS were $2,254,704 for 2001, $416,427 for 2002, and $486,202 for 2003. ETG should account for these charges into its reconciliations of gas costs. ETG's BGSS recovery should be reduced by these amounts in the September 2004 BGSS process.

Recommendation IV-4. Reduce future ETG BGSS recovery by $3,097,961 for Enron settlement benefits that NUI inappropriately assigned to non-utility affiliates.

ETG should have been credited with a substantial portion of the NUI EB and NUI Energy receivable that NUI secured only because the payable of ETG provided leverage to apply in negotiations with Enron. The full amount was $4,857,740. Liberty recommends assigning half that amount, or $2,428,870, to ETG. In addition, the profit that NUI EB showed from the settlement should all have been assigned to ETG. That amount consisted of $669,091. Enron concessions on amounts payable by ETG belonged to ETG. This recommendation would still leave NUI EB and NUI Energy with half of the $4,857,740 that they received in the settlement. Their recovery of this much, had ETG not owed Enron a much more substantial amount, was very unlikely under the circumstances. Liberty's reassignment of benefits, as compared with what NUI chose to do, provides these two affiliates with a fair share of benefits.

Recommendation IV-5. Insofar as necessary to produce an equity level of at least 52 percent at ETG, require that NUI pay interest premium charges of $4,001,060 to ETG to compensate the utility for lending its funds to NUI and its non-creditworthy non-utility affiliates.

Liberty found that the intercompany payable from NUI to NUI Utilities was funded primarily by the NUI Utilities line of credit first established in December 2001. NUI used the proceeds "borrowed" from NUI Utilities to invest in its non-utility businesses.

NUI Utilities and ETG received interest credits on their inter-company receivables from NUI and the non-utility affiliates at the weighted average borrowing rate of all NUI short-term debt. This rate was substantially lowered by the significantly better credit standing of NUI Utilities. Use of a symmetrical rate for all affiliates returned too little to NUI Utilities and ETG for the funds that they were forced to lend to the risky non-utility businesses. Similarly, those non-utility entities received access to debt at far lower rates than what the marketplace would have required. These non-utility businesses would have had difficulty raising capital from conventional capital market sources, absent their connection to utility operations, through the holding company.

NUI Utilities and ETG should therefore have received a premium to compensate for the high risk associated with their forced loans to the non-utility affiliates. Liberty recommends that a premium of 3 percent be paid from NUI to ETG to compensate for the high levels of risk entailed in making loans to these risky businesses. Liberty believes that 3 percent is at the lower end of a reasonable range for such a premium. The difference between short-term borrowing for highly-rated corporate credit and a non-investment grade one is a minimum of about 300 basis points, as measured by the difference between A-1 credit commercial paper rates (1.0 percent) and the bank "prime" rate (4.0 percent). Such a premium could be as high as nine hundred basis points, or the difference between bank borrowings for a highly-rated credit (about 2.0 percent) and the effective rate charged to NUI Corp. on the CSFB financing (over 11 percent).

The tables below shows the inter-company balance from NUI to NUI Utilities for the 24 months from December 2001 until the liquidation of the balance in November 2003. The average balance for this 24-month period was $93.0 million for NUI Utilities. ETG represented about 70 percent, or $65.1 million, of the average balance. The table also calculates the 3 percent premium owed to ETG at $4,001,060.

Liberty recommends that NUI pay the premium to ETG only insofar as may be necessary to increase the equity level of ETG to the level that ETG included in its last base-rate filing. Payments above such an amount would merely produce equity likely to be sent back to the parent through dividends. This recommendation does not call for the return of any amounts to customers, because the issue relates solely to managing ETG's capital structure.

The following two tables demonstrate these intercompany balance issues.

Table IV.18. ETG Share of Intercompany Balance

Average I/C balance for 24 months, 12/2001-11/2003	$92,958,216
ETG Share (70 percent)	$65,070,752
Average I/C balance for 12 months, 12/2002-11/2003	$124,867,180
ETG Share (70 percent)	$87,407,026

Table IV.19. Intercompany Balance and Premium Calculations

	Dec. 01	Jan. 02	Feb. 02	Mar. 02	Apr. 02	May. 02
Utilities Receivable	$40,068,664	$56,553,565	$56,455,386	$82,596,189	$75,067,582	$56,602,133
Month Average	$20,034,332	$48,311,115	$56,504,476	$69,525,788	$78,831,886	$65,834,858
ETG Portion	$14,024,032	$33,817,780	$39,553,133	$48,668,051	$55,182,320	$46,084,400
Risk Premium	$35,060	$84,632	$99,182	$122,217	$138,809	$116,411
Cumulative Premium	$35,060	$119,692	$218,874	$341,092	$479,900	$596,311
	Jun. 02	**Jul. 02**	**Aug. 02**	**Sep. 02**	**Oct. 02**	**Nov. 02**
Utilities Receivable	$58,735,546	$54,765,593	$58,293,927	$60,814,858	$75,871,711	$113,531,763
Month Average	$57,668,840	$56,750,570	$56,529,760	$59,554,393	$68,343,285	$94,701,737
ETG Portion	$40,368,188	$39,725,399	$39,570,832	$41,688,075	$47,840,299	$66,291,216
Risk Premium	$102,411	$101,060	$100,927	$106,472	$122,119	$168,551
Cumulative Premium	$698,722	$799,782	$900,709	$1,007,181	$1,129,300	$1,297,851
	Dec. 02	**Jan. 03**	**Feb. 03**	**Mar.03**	**Apr.03**	**May.03**
Utilities Receivable	$119,057,434	$167,872,000	$190,078,232	$168,373,156	$150,469,571	$150,213,765
Month Average	$116,294,599	$143,464,717	$178,975,116	$179,225,694	$159,421,364	$150,341,668
ETG Portion	$81,406,219	$100,425,302	$125,282,581	$125,457,986	$111,594,954	$105,239,168
Risk Premium	$206,760	$254,825	$317,605	$318,838	$284,977	$269,800
Cumulative Premium	$1,504,611	$1,759,436	$2,077,041	$2,395,878	$2,680,856	$2,950,656
	Jun. 03	**Jul. 03**	**Aug.03**	**Sep. 03**	**Oct. 03**	**Nov. 03**
Utilities Receivable	$111,464,797	$101,066,604	$ 95,531,962	$ 82,120,524	$81,070,949	$ 64,856,759
Month Average	$130,839,281	$106,265,701	$98,299,283	$88,826,243	$ 81,595,737	$ 64,856,759
ETG Portion	$ 91,587,497	$74,385,990	$68,809,498	$62,178,370	$57,117,016	$45,399,731
Risk Premium	$236,345	$193,932	$180,476	$164,349	$152,107	$123,194
Cumulative Premium	$ 3,187,001	$3,380,933	$3,561,410	$3,725,759	$3,877,866	***$ 4,001,060***

Chapter Five: Accounting and Controls

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A. Background

A principal focus of NUI's accounting process and financial reporting is the management of resources, cash, and property. Observations about a lack of adequate controls at NUI have formed a major part of the problems that led to downgrades in the credit ratings of the parent and NUI Utilities. The company has recognized the need to address controls weaknesses and NUI's new controller has been guiding programmatic efforts to address them. NUI completed much of its planned efforts after Liberty's audit fieldwork began. Liberty's work focused on identifying the kinds of weaknesses that led to these observations and on the actions being taken to address them.

Liberty examined the account structure and systems, and looked at prior audit work and current company plans and actions to address key accounting systems, including accounts payable and receivable, payroll, work orders, and continuing property records. The BPU asked that this focused audit address all of these areas.

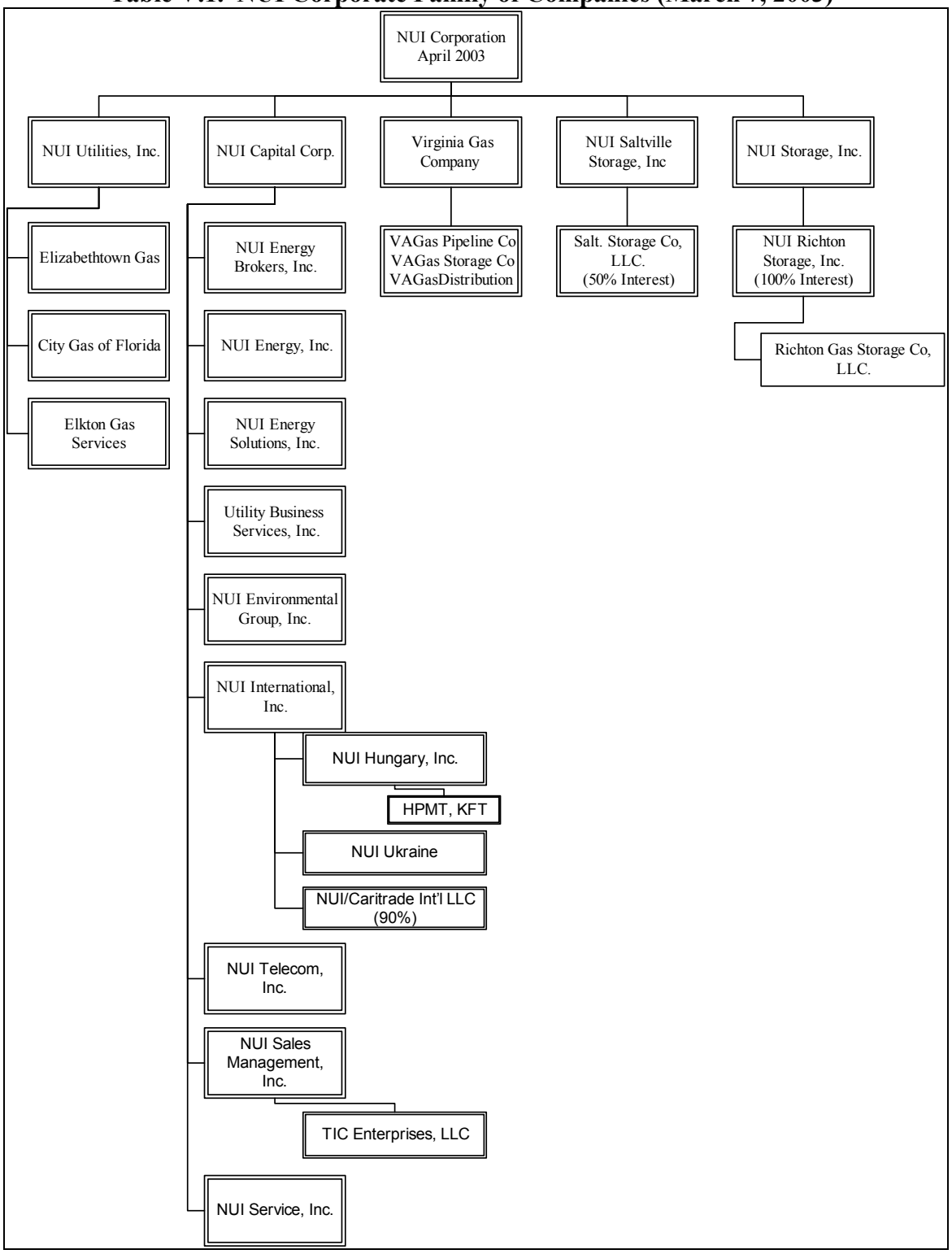
The primary accounting issue of concern that Liberty found was the treatment of intercompany payables and receivables. Chapter Four of this report describes Liberty's examination of credit and finance issues. That chapter addressed how the use of a common cash pool and the failure to segregate the cash and cash accounting of NUI's non-utility businesses and ventures from those of NUI Utilities. The lack of segregation produced extraordinary and inappropriate amounts of money owed by non-utility businesses to NUI Utilities. Liberty's audit work in accounting and controls addressed a related but distinct set of questions; in particular, it examined the degree to which accounting for these balances made them sufficiently visible within the Company and to the BPU.

Accounting records and financial statements must be maintained through a set of processes that can provide an adequate level of comfort about their completeness and accuracy to those who rely upon them. Maintaining adequate internal controls and reporting measures allows those who rely upon the books and records and financial reports to have reasonable assurances that the can use them to form opinions and make judgments about the company in financial, regulatory, and operational contexts.

NUI as the parent owns five first-tier subsidiaries: NUI Utilities, Inc., NUI Capital Corporation, Virginia Gas Company, NUI Saltville Storage, Inc., and NUI Storage, Inc. These five first-tier subsidiaries operate various business entities, some of which comprise separate, additional subsidiaries, and some of which are legally non-distinct business units. In general, the business entities under the control of the operating companies bear a functional relationship to the subsidiary that owns or operates them. For example, those business units whose rates and services come under state public utility regulation fall under NUI Utilities. ETG is a business operating unit of NUI Utilities, but is not a separate subsidiary as NUI Utilities operates it commonly with CGF and Elkton. NUI Utilities does own one non-utility operation; *i.e.*, the New Jersey Appliance business.

The following table shows NUI's overall corporate structure in March 2003. Liberty began its primary audit work a few months later.

Table V.1. NUI Corporate Family of Companies (March 7, 2003)



A significant number of business entities involved in diverse, open market, non-utility operations fall under the control of NUI Capital, which has nine distinct, incorporated subsidiaries. Some of those subsidiaries in turn have their own subsidiaries. Examples of but a few of the type of these non-utility companies have included NUI Telecom, NUI Energy and NUI Energy Brokers. The remaining three first-tier NUI subsidiaries conduct significant but more operationally focused and specific operations. Chapters Three and Six of this report discuss these non-utility businesses in detail.

NUI segregated its various companies and operations somewhat differently from an operational perspective than it did from an ownership one. NUI's business segments have recently consisted of Distribution Services, Retail and Business Services, and Wholesale Energy Marketing and Trading. Chapter One of this report discusses in detail the evolution in these business segment categories over the past several years.

The Distribution Services category has included the business units that provide gas distribution services under state utility regulation. The Retail and Business Services category has captured non-utility retail services such as the appliance business, utility business services, telecommunications, and energy solutions. Wholesale Energy Marketing and Trading has encompassed wholesale trading and gas profile management.

NUI Utilities shows particularly well how the operations of one NUI corporate entity can divide among all three different business segments: ETG, City Gas of Florida and Elkton fall under Distribution Services. The appliance business falls under Retail and Business Services. Utility off-system sales fall under Wholesale Energy Marketing and Trading. Additionally, NUI has assigned business unit codes to the holding company and major subsidiaries. These accounting units do not generate revenue as a separate or standalone business unit. The resources within them provide common services to many or all other NUI entities and units. Their distinct accounting identifiers allow NUI to assign and allocate these support costs. Chapter Three of this report addresses NUI's allocation processes for these corporate services units. The following table depicts the business segments (including corporate services), business entity, and legal affiliations of NUI.

Table V.2. NUI Business Segments

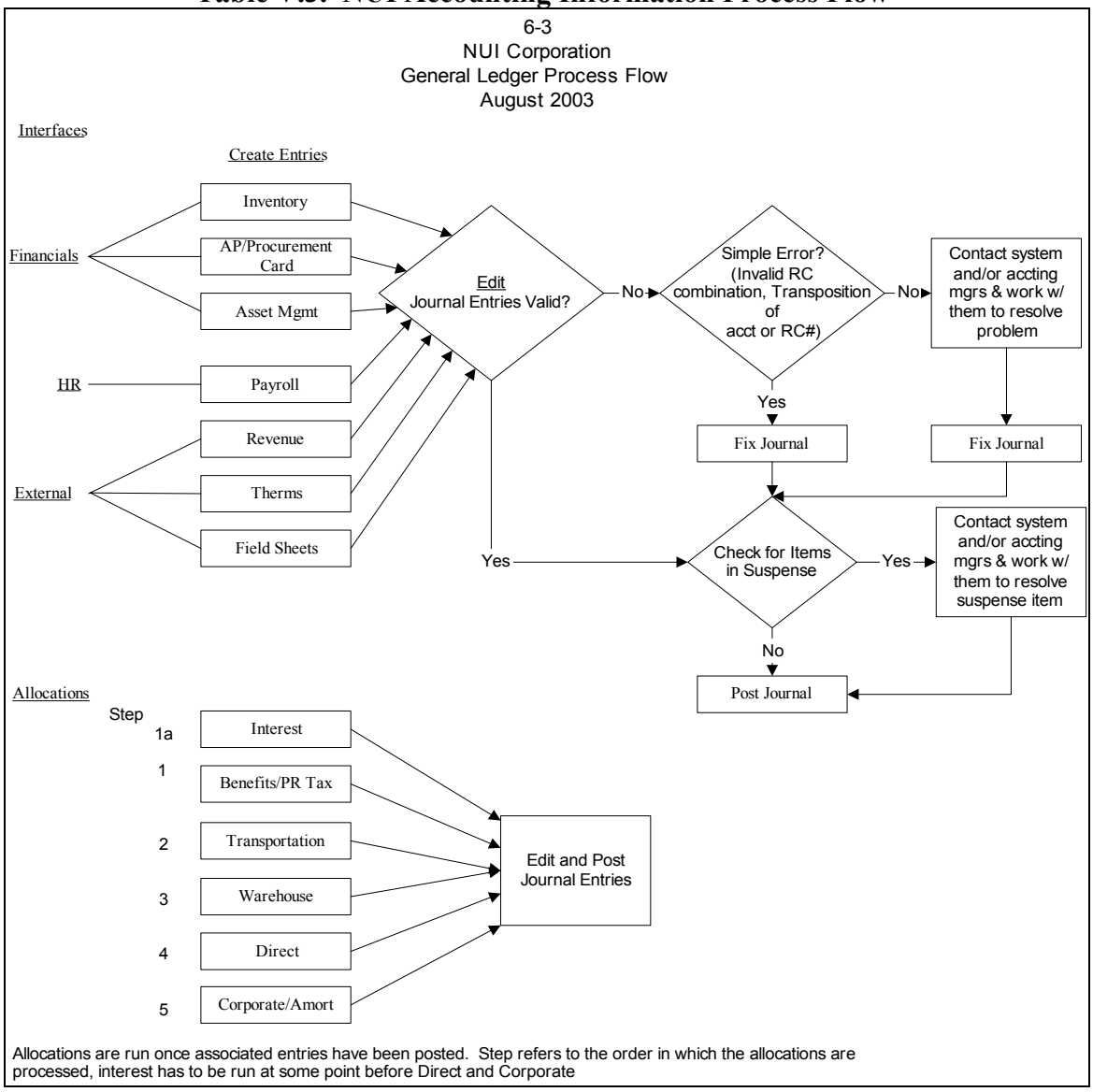
NUI Corporation and Subsidiaries Functional and Legal Organizational Relationships			
Segment	**Business Unit Name**	**Code**	**Controlling NUI Entity**
Distribution Services	Elizabethtown Gas Company	ETGCO	NUI Utilities, Inc.
	City Gas Company of Florida	CGFCO	NUI Utilities, Inc.
	Elkton Gas Services	ELKGS	NUI Utilities, Inc.
	North Carolina Gas Srv--SOLD	NCGAS	NUI Utilities, Inc.
	Valley Cities Gas Srv--SOLD	VCGAS	NUI Utilities, Inc.
	Waverly Gas Services--SOLD	WVGAS	NUI Utilities, Inc.
Retail and Business	Appliance Business NJ Srvs	ABNJS	Elizabethtown Gas Co, NUI Utilities Inc.
	Appliance Business FL Srvs	ABFLS	City Gas Co of Fla, NUI Utilities Inc.
	Appliance Business FL Plumbing	ABFLP	City Gas Co of Fla, NUI Utilities Inc.
	Appliance Business NC Srvs--SOLD	ABNCS	NC Gas Service (SOLD), NUI Corp.
	NUI Telecom--SOLD	NUITL	NUI Telecom Inc, NUI Capital Corp.
	TIC Enterprises	TICCO	TIC Enterprises LLC, NUI Sales Mgmt Inc, NUI Capital Corp.
	Discontinued Operations TIC	TICDO	TIC Enterprises, TIC Enterprises LLC, NUI Sales Management Inc, NUI Capital Corp.
	Utility Business Services	UBSCO	Utility Business Services Inc, NUI Capital Corp.
	NUI Energy	NUIEN	NUI Energy Inc, NUI Capital Corp.
	NUI Energy Solutions	NUIES	NUI Energy Solutions Inc, NUI Capital Corp.
	NUI Environmental Group--Disc	NUIEV	NUI Environmental Group Inc, NUI Capital Corp.
	NUI Ventures	NUIVT	NUI Capital Corp.
	NUI Services	NUISI	NUI Service Inc, NUI Capital Corp.
Wholesale Energy Marketing and Trading	NUI Energy Brokers	NUIEB	NUI Energy Brokers Inc, NUI Capital Corp.
	Virginia Gas Exploration	VGCEC	Virginia Gas Company
	Virginia Gas Storage	VGCSC	Virginia Gas Company
	Virginia Gas Distribution	VGCDC	Virginia Gas Company
	Virginia Gas Pipeline	VGCPC	Virginia Gas Company
	Virginia Gas Propance	VGCPR	Virginia Gas Company
	Saltville Gas Storage Co LLC	N/A	NUI Saltville Storage Inc
Corporate Services	NUI Headquarters	NUIHQ	NUI Corp.
	NUI Utilities Inc.	NUILS	NUI Utilities, Inc.
	NUI Capital Inc.	NUICP	NUI Capital Corp.
	NUI Virginia Gas	VGCHQ	Virginia Gas Company
	NUI Saltville Storage	NUISS	NUI Saltville Storage Inc

B. Account Structure and Systems

The NUI accounting system operates on the basis of collecting accounting information from the NUI business units through various feeder groups. NUI then enters this information into a financial system know as "PeopleSoft." This system performs the

primary information collection process. NUI uses it to develop the necessary routine financial statements, to support special queries for data or analysis, and to generate routine and special reports and analyses. The flow chart in the following table depicts this process.

Table V.3. NUI Accounting Information Process Flow



Not all NUI business units rely upon PeopleSoft as the primary collection facility. NUI EB uses a system it calls EMS to serve as its central collection facility and as the generator of its invoices and reports. Liberty's examinations and NUI audit reports demonstrate that EMS depends primarily on manual recording of sales-transaction data. Administrative personnel then manually transfer the data to EMS. PeopleSoft requires some information from EMS. A manual process transfers this information from EMS to PeopleSoft. The operation of EMS creates additional steps that are time consuming and

subject to entry errors. Chapter Six of this report discusses NUI EB's use of EMS in detail.

NUI has adopted a chart of accounts that is based upon the FERC Uniform System of Accounts (USofA). Earlier NUI business ventures focused on gas LDC operations. This focus made the FERC USofA sound as an accounting framework for the Company. NUI has adapted this chart of accounts, with minor additions, to accommodate its growing businesses, which more recently have focused on non-utility operations.

C. Cash Management Segregation

1. Procedures

Liberty requested copies of the policies regarding cash pooling arrangements among associated companies from 1990 to date. NUI's response revealed that NUI Corporation acted as agent for the business units, including ETG, and coordinated the daily receipt and disbursement of cash since 1990. It did so with no written policy to guide its actions on behalf of all NUI business units. Liberty would have expected to see a formal cash-management agreement that clearly set forth the terms and conditions under which services would be provided. NUI failed to provide documents specifying any of these features of its role in managing the cash pool. The elements that should have been documented, but were not, include:

- Responsibilities for managing receipts and disbursements
- How funds available in excess of those needed to cover expenses would be invested
- A reasonable period of settlement of outstanding balances between associated companies
- Applicable methods for calculating interest rates on inter-company balances
- Restrictions and limits on lending from regulated utilities to non-regulated businesses
- Standard agreements specifying terms and conditions for balances.

UBS has processed cash collections on the behalf of NUI Utilities, including ETG. The balance of the cash receipts and disbursement transactions provided by NUI take place under the cash pooling arrangement and use the normal accounting process. The internal controls within the various accounting functions involved at UBS and NUI provide critical links in assuring sound performance. Liberty found formal policies and procedures to be non-existent during most of the past 10-12 years.

As Liberty's audit progressed, NUI was acting to correct many of these control deficiencies. Bank reconciliations began to be performed monthly. NUI's single cash pool was divided into two cash pools. NUI created separate pools for NUI Utilities and NUI and its non-utility units. NUI also created draft cash management agreements and procedures to submit to regulatory agencies for review and approval.

Liberty conducted a detailed review of the cash separation process, which included a verification of cash-pool separation and an examination of the bank reconciliation process.

2. NUI's Accounting Treatment of Intercompany Balances

Liberty examined NUI's treatment of intercompany balances among its affiliates. Liberty found that when an intercompany balance reflected a positive balance or a net amount due from an affiliate NUI reported it as a temporary cash investment. Conversely, a net intercompany payable balance or an amount due to an affiliate was reported as a note payable. The following table lists the intercompany account codes used by each business unit to report intercompany accounts receivables and payables.

Table V.4. NUI Intercompany Balance Account Codes

Code	Unit Name	Code	Unit Name
231101	Due To/From NUI	231136	Due To/From VGCON
231102	Due To/From ETG	231137	Due To/From CPCON
231105	Due To/From CGF	231138	Due
231106	Due To/From Energy Solutions	231139	Due To/From NUISS
231107	Due To/From NUIEN	231140	Due To/From SSLLC
231108	Due To/From Energy Broker	231141	DUE TO/FROM TICCO
231109	Due to/from NUI Environmental	231142	Due to/from TICDO
231110	Due to/from NUI Ventures	231201	Due to/from NUIHQ
231111	Due To/From NUI Capital	231202	Due to/from ETGCO
231112	Due To/From UBS	231205	Due to/from CGFCO
231113	Due To/From NUITL	231206	Due to/from NUIES
231115	Notes Pyble-Cntra-Cgf Unr	231207	Due to/from NUIEN
231116	Due To/From NUI South	231208	Due to/from NUIEB
231117	DUE/TO FROM ABNJS	231209	Due to/from NUIEV
231118	DUE TO/FROM ABFLS	231210	Due to/from NUIVT
231119	DUE TO/FROM ABNCS	231211	Due to/from NUICP
231120	DUE TO/FROM ABFLP	231212	Due to/from UBSCO
231121	Notes Payable-Contra P&S	231213	Due to/from NUITL
231123	Due To/From Elkton	231217	Due to/from ABNJS
231124	Due To/From North Carolina	231218	Due to/from ABFLS
231125	Due To/From Valley Cities	231220	Due to/from ABFLP
231126	Due To/From Waverly	231223	Due to/from ELKGS
231127	DUE TO/FROM VGCHQ	231227	Due to/from VGCHQ
231128	DUE TO/FROM VGCEC	231229	Due to/from VGCSC
231129	DUE TO/FROM VGCSC	231230	Due to/from VGCDC
231130	DUE TO/FROM VGCDC	231234	Due to/from UTILS
231131	DUE TO/FROM VGCPC	231239	Due to/from NUISS
231132	DUE TO/FROM VGCPR	231240	Due to/from SSLLC
231133	DUE TO/FROM VGCMC	231241	Due to/from TICCO
231134	DUE TO/FROM UTILS	231242	Due to/from TICDO
231135	Due To/From UTCON	231243	Due to/from OASCO

NUI's accounts payable and receivable include invoices and bills among affiliates for directly provided and allocated products and services provided among NUI business units. NUI, however, does not limit intercompany balance recording to what is

traditionally considered to be goods and services. NUI puts into the same accounts the results of transactions related to its single cash pooling arrangement; *i.e.*, financial transactions. For example, assume that ETG collects $1 million in cash from its customers for services provided. NUI procedure would call for that cash to be transferred to the common cash pool under the control of NUI. An illustrative example of the entries on the books of each entity follows:

ETG Account Description	**Debit**	**Credit**
Cash	$1,000,000	
Accounts Receivable Customers		$1,000,000
(to record cash receipts from customers on account)		
Accounts Receivable Associated Co. – NUI	$1,000,000	
Cash		$1,000,000
(to record transfer of cash to associated co. NUI into cash pool)		
NUI Account Description	**Debit**	**Credit**
Cash	$1,000,000	
Accounts Payable Associated Co. ETG		$1,000,000
(to record transfer of cash from associated co. ETG into cash pool)		

This example shows that ETG's starting $1,000,000 cash position changes to a $1,000,000 receivable due from NUI. Conversely, NUI now has $1,000,000 of cash on its books with a payable due to its business entity ETG. Next assume that ETG has incurred $750,000 of outside expenses from vendors. The source of cash for paying those expenses under NUI procedures would be the NUI common cash pool. The entries that result appear immediately below.

ETG Account Description	**Debit**	**Credit**
Accounts Payable – Outside Vendors	$750,000	
Accounts Payable Associated Co. - NUI		$750,000
(to record payment of expenses by associated company NUI from cash pool)		
NUI Account Description	**Debit**	**Credit**
Accounts Receivable Associated Co. – ETG	$750,000	
Cash		$750,000
(to record payment on behalf of associated company ETG from cash pool)		

Let us now assume that a shared-services group at NUI also provided professional services to ETG for $10,000. The following entries show how NUI would record this transaction.

ETG Account Description	Debit	Credit
Professional Services Exp. – Associated Co. NUI	$ 10,000	
Accounts Payable Associated Co. - NUI		$ 10,000
(to record professional services provided from associated co. NUI)		
NUI Account Description	**Debit**	**Credit**
Professional Payroll Expense	$ 10,000	
Cash		$ 10,000
(to record payment of NUI payroll expense from cash pool)		
Accounts Receivable Associated Co. - ETG		
Professional Payroll Expense	$ 10,000	
(to reflect direct payroll provided to associated co. ETG)		$ 10,000

Recognizing that inter-company payable/receivables are reported on a net basis on NUI's consolidated books, the cumulative impact of these three inter-company transactions would appear as follows.

Summary Intercompany Balance ETG Books Acct. Descriptions	Debit	Credit
Accounts Receivable Associated Co. - NUI	$1,000,000	
Accounts Payable Associated Co. - NUI		$750,000
Accounts Payable Associated Co. – NUI		$ 10,000
Balance Accounts Receivable Associated Co. - NUI	$240,000	
Summary Intercompany Balance NUI Books Acct. Descriptions	**Debit**	**Credit**
Accounts Payable Associated Co. – ETG		$1,000,000
Accounts Receivable Associated Co. – ETG	$ 750,000	
Accounts Receivable Associated Co. – ETG	$ 10,000	
Balance Accounts Payable Associated Co. – ETG		$240,000

In summary, ETG would end up with a $240,000 receivable due from NUI. In turn, NUI would show a $240,000 payable due to ETG. As illustrated, expenses for services as well as cash become an integral part of intercompany transactions and balances. When the receivable and payable balances for each entity are combined for NUI's consolidated financial statement purposes, however, they are for all intents and purposes eliminated. In other words, their net effect would be a zero balance.

3. Financial Reporting Requirements

NUI performs external financial reporting on a consolidated basis. Such reporting means that the company excludes intercompany accounts payable and receivable balances from such reports. NUI Utilities, however, operates ETG as a regulated utility under the jurisdiction of the BPU. The BPU requires gas utilities to use the FERC Uniform System of Accounts prescribed for Natural Gas Companies subject to the provisions of the Natural Gas Act. ETG must file with the BPU an annual report similar to the FERC Form 2. This report captures a wide variety of financial and operational statistical activity for the current reporting year and the one immediately preceding it.

NUI's financial statements and SEC reports provide consolidated NUI information. This information includes the financial results of all NUI subsidiaries and business units. The statements and reports also provide certain business segment information; *i.e.*, with groups of business units combined. These public financial statements do not generally

distinguish each NUI business unit on a stand-alone basis. Several utility units, *e.g.*, ETG, are not even distinct legal entities. NUI's LDCs do provide regulated utility retail gas distribution services, however. They must therefore provide financial information and supporting data to the various state utility regulatory bodies that have jurisdiction over their rates and service. The FERC establishes base reporting requirements for gas companies. FERC's Form 2 is the principal source of these requirements. The NJBPU, like many other utility regulatory authorities in the country, has adopted FERC Form 2's format and content for state reporting purposes. The BPU also imposes the standard reporting requirements contained in the FERC USofA for gas utilities.

4. NUI's Failure to Routinely Reconcile Intercompany Balances

Liberty reviewed sub-ledger balances for NUI's units for fiscal 1997 through the first nine months of fiscal 2003. NUI did not report or perform monthly or other routine reconciliation of balances among business units. The accounts payable/receivable balances for any given business unit should agree with corresponding amounts for the other business units involved. Moreover, the cumulative amounts of all intercompany balances, when aggregated, should cancel each other completely. Liberty's review demonstrated that the fiscal year-end and monthly balances were routinely out of balance. The variances in some fiscal year ends were as high as $1.4 million while an analysis of the months in the current fiscal year approached a high of $4.5 million dollars, as the following tables show.

Table V.5. Intercompany Fiscal Year Receivables Reconciliation

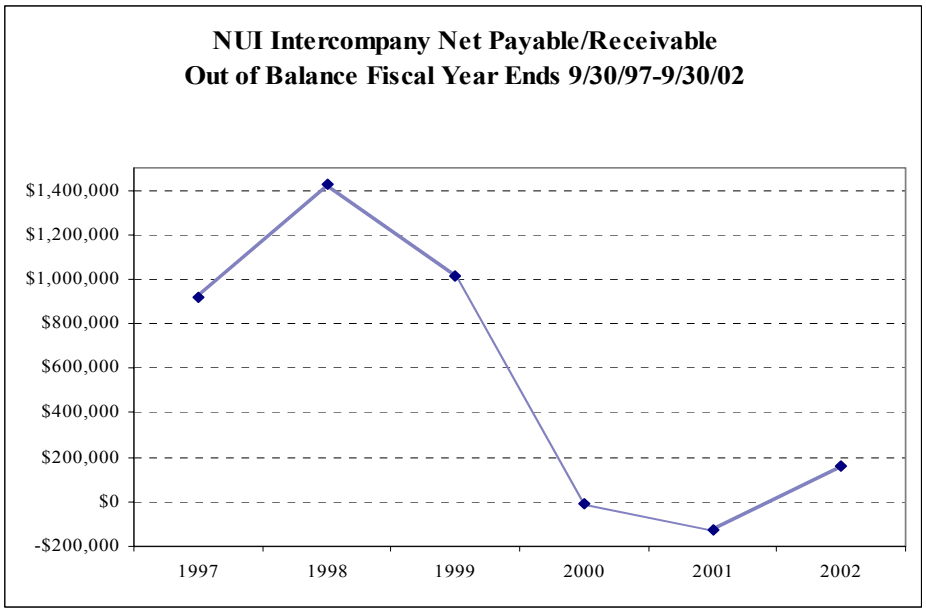
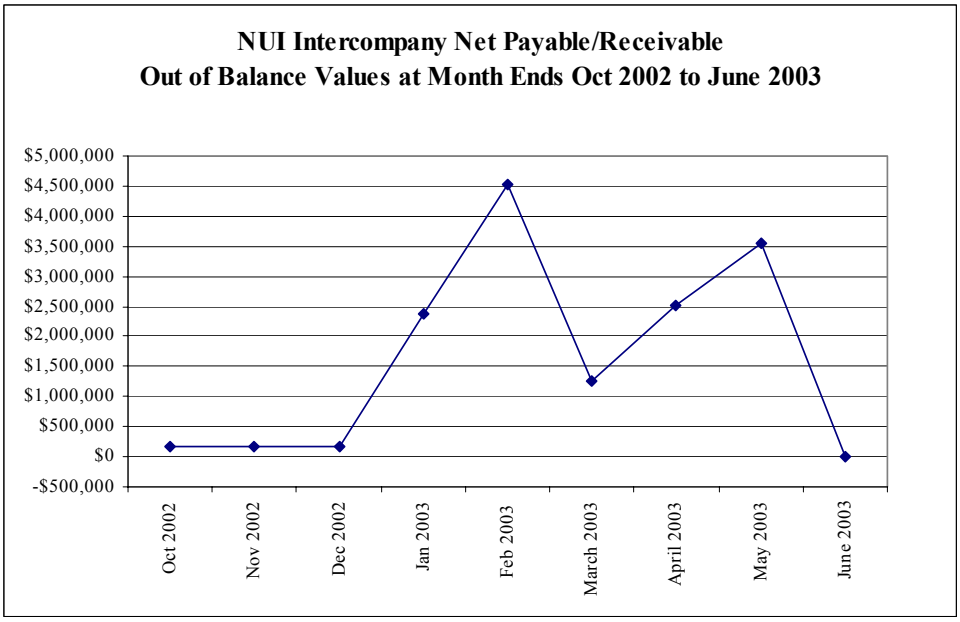


Table V.6. Intercompany Current Period Receivables Reconciliation



NUI told Liberty that it could not provide any documentation to explain or reconcile these unexpected imbalances. NUI's failure to perform routine monthly reconciliations here, and in other areas, such as bank reconciliations, has persisted for a number of years. Only recently has NUI begun to correct these significant accounting function shortfalls. NUI's internal auditors also have reported problems with NUI's internal controls. Currently there is a programmatic NUI effort underway to correct them. NUI has been reconciling balances monthly since June 2003, after which there have not been significant imbalances. Liberty has also performed test activities to examine whether the cash segregation actions that NUI has already taken are proving effective to correct deficiencies. Liberty's work has demonstrated the existence of significant improvement within this area.

5. Significant Consolidation Accounting Policies

From a cost accounting perspective, affiliate transactions and the sum of any monies payable to or receivables from each of the business units must be accounted for and appropriately reported. Of particular note is NUI's use of a single cash pool arrangement. All of its business units participated in that pool. The operation of this pool allowed debt funding arranged in the name of individual units, such as NUI Utilities, to become available for the use of all. Chapter Four of this report discusses this phenomenon in detail. Concurrently, there must exist comprehensive, accurate, and timely accounting for such transactions and the amounts payable to or receivables from each of the business units. A company such as NUI also needs to maintain accounting control and reporting adequacy for the accounts payable and accounts receivable processes that relate to these transactions.

Reporting results on a consolidated basis eliminates all intercompany or affiliated transaction balances. NUI's consolidated financial statements therefore did not provide information on intercompany balances.

NUI did not make regular financial statement reports of subsidiary or business-unit results prior to a recent audit by PricewaterhouseCoopers of NUI Utilities on a stand-alone basis for fiscal 2001 and 2002. Such stand-alone audits partly mitigate the opacity that intercompany balance netting tends to produce when one seeks to examine performance at the unit level. For example, a consolidated NUI Utilities financial statement would still zero out intercompany balances among utility business units, e.g., ETG, CGF, and Elkton. Despite this remaining lack of granularity, however, it would display intercompany balances between NUI Utilities, on the one hand, and non-utility business units such as NUI, NUI Capital, Virginia Gas, and NUI Saltville, on the other hand. It would take separate financial statements for ETG to show intercompany balances separated among ETG, CGF, Elkton, and non-utility business units. Absent such individual financial statements and associated reporting, one would remain unable to determine ETG's share of an NUI Utilities balance with NUI, NUI Capital, Virginia Gas, and NUI Saltville.

6. Accounting Standards and Guidance for Intercompany Balances

Liberty reviewed ETG's books and records and received confirmation from NUI in a data request that such intercompany balances involved intercompany or associated company accounts payable and accounts receivable. The USofA addresses accounting for such items:

> *Definition 14*
> *Transactions with associated companies. Each utility shall keep its accounts and records so as to be able to furnish accurately and expeditiously statements of all transactions with associated companies. The statements may be required to show the general nature of the transactions, the amounts involved therein and the amounts included in each account prescribed herein with respect to such transactions. Transactions with associated companies shall be recorded in the appropriate accounts for transactions of the same natures. Nothing herein contained, however, shall be construed as restraining the utility from subdividing accounts for the purpose of recording separately transactions with associated companies.*
>
> *Definition 5*
> *A. Associated (affiliated) companies means companies or persons that directly or indirectly, through one or more intermediaries, control, or are controlled by, or are under common control with the accounting company.*
>
> *B. Control (including the terms "controlling," "controlled by," and "under common control with") means the possession, directly or*

indirectly, of the power to direct or cause the direction of the management and policies of a company, whether such power is exercised through one or more intermediary companies, or alone, or in conjunction with, or pursuant to an agreement, and whether such power is established through a majority or minority ownership or voting of securities, common directors, officers, or stockholders, voting trusts, holding trust, associated companies, contract or any other direct or indirect means.

7. Intercompany Balance Growth

Liberty attempted to gather and analyze relevant data that would have shown on a detailed basis how the intercompany balance accounts were initiated and have grown over time, and the particular uses to which NUI has put the funds involved. In particular, Liberty wanted to know the dates and amounts of any major investments made in or for the non-utility affiliates by using ETG or NUI Utilities cash resources. Liberty raised this issue in many interviews and data requests. The following NUI response to one Liberty inquiry best typifies the problem that Liberty encountered:

> *These intercompany payable balances on the books of the non-regulated companies were generated over many years of the operations of these companies. They generally represent funds advanced for working capital needs and to finance capital expenditures.*

This response suggests that NUI consciously allowed ETG/NUI Utilities funds to be advanced to fund non-utility investments and cover non-utility losses. However, no detailed tracking of funds flow was possible at the time that the balances were initiated and growing (prior to March 2003). On the other hand, there was a recent, substantial reduction in the balance due NUI Utilities. It fell from $190 million at February 2003 to about $85 million by the time NUI paid the remainder in November 2003. Chapter Four of this report discusses these balance changes in detail. The 2003 balance reductions prior to full repayment reflect a host of general ledger entries. Some of the very largest entries, which are in the tens of millions of dollars, have no significant description beyond "other." NUI recently provided additional supporting details that described the balance changes, and highlighted some of the major transactions. That information confirmed that substantial portions of the NUI Utilities funds placed in the common cash pool were used to finance the investment needs of the non-utility business entities.

Liberty obtained intercompany payable and receivable balances for all of the business units since fiscal 1997. Liberty examined in detail ETG's accounts payable and receivable balances with all of NUI's remaining business units, in order to determine trends with regard to balances among the various business units. ETG's total net position from 1997 to 2001 was a net payable. Since fiscal 2002, however, ETG has held a net receivable. The balance was $26.59 million as of September 2002, and decreased to $5.29 million by June 2003. The balance appeared to be decreasing on a net basis, but the data shows continued upward movement in sums due from NUI, and in sums due to NUI Energy and NUI EB, as the table below shows.

Table V.7. Changes in Selected Intercompany Balances

	9/30/97	9/30/98	9/30/99	9/30/00	9/30/01	9/30/02	6/30/03
NUI	($15.69)	$13.53	$80.87	$125.76	$269.78	$474.34	$594.04
NUI Eng	(4.95)	(31.34)	(60.57)	(180.28)	(195.13)	(287.59)	(386.38)
NUI EB	(6.28)	(15.24)	(18.58)	(22.32)	(48.14)	(95.57)	($113.58)

An NUI response to a Liberty data request stated:

> *the balances in individual intercompany accounts are meaningless because the Company views the net of all intercompany balances for each business unit at any given time as a balance due to or from NUI Corporation. The Company is in the process of revising its procedures with respect to the settlement of intercompany balances.*

Simply put, NUI was saying that it historically did not settle its intercompany account balances because it had **no plan or policy** to do so. The curiosity of this approach is underscored when one considers, for example, that ETG does not conduct any direct business with NUI Energy. Even so, there was a large balance between them. The reason for the large payable balance due to NUI Energy is that they have mutual customers. ETG has been collecting cash from these customers on NUI Energy's behalf. All cash received went into the single cash pool; therefore, the intercompany accounting entry would reflect the amount as a receivable due from NUI and a payable to NUI Energy, thus offsetting the receivable and payable. However, from a corporate entity perspective, ETG comes under the control of NUI Utilities, Inc. while NUI Energy is under the control of NUI Capital, Inc. Therefore, if each were to produce a standalone financial statement, each would need to report them as a payable or receivable, thus skewing each other's equity position.

While ETG purchases gas and financial instruments through NUI EB, they also do not settle outstanding balances. UBS, which provides billing services to ETG, would also produce similarly increasing accounts payable balances, because they did not settle balances with them either.

NUI has not provided information that would allow Liberty to determine the use of funds provided by ETG on a stand-alone basis to NUI affiliates. Available NUI information does, however, allow a categorization of the funds provided in the aggregate to affiliates from NUI Utilities. The following table provides a summary of each of NUI's non-utility business units' accounts receivable and accounts payable balances. NUI's net total accounts payable balance owed to Utilities was $168.4 million as of March 31, 2003, $111.5 million as of June 30, 2003, and $95.5 million as of August 31, 2003.

Table V.8. Summary of NUI Utilities Advances to Non-Utility Affiliates

NUI Corporation - Business Unit	Balances 3/31/2003	Balances 6/30/2003	Balances 8/31/2003
VA Gas	$57.0	$ 54.9	$54.0
NUI Corp.	47.6	(34.7)	(58.9)
TIC	20.9	21.2	21.1
NUI Energy - Working Capital, net	22.2	20.1	6.8
NUI Energy – Losses	8.7	10.0	10.8
NUI Energy	30.9	30.1	17.6
Telecom - Working Cap./Plant, net	14.1	(1.2)	2.1
Telecom – Losses	4.3	23.3	24.6
Telecom	18.4	22.1	26.7
NUI Ventures – Working Cap./Plant, net	1.3	1.5	2.1
NUI – Losses	6.7	7.0	7.1
NUI Ventures	8.0	8.5	9.2
NUI Envir. - Working Cap./Plant, net	1.8	1.9	2.2
NUI Envir. – Losses	4.4	4.6	4.7
NUI Environmental	6.2	6.5	6.9
UBS	3.6	3.9	3.1
NUI Capital	2.2	2.2	3.2
NUI Saltville Storage	0.3	14.8	18.4
NUI Energy Solutions	0.7	0.7	0.8
NUI Energy Broker	(28.7)	(18.7)	(6.7)
Eliminations & Adjustments	1.3		0.1
Total	$168.4	$111.5	$95.5

Note: Millions of dollars; Positive Balances Receivable Due From / Negative Balances Payable To

This table demonstrates that there are a number non-utility affiliates who, despite doing little if any direct business with Utilities, owed a total of over $157.9 million as of August 30, 2003. It is clear that the funds provided by NUI Utilities to these entities have been provided to cover the operating losses and investment needs of these business; *i.e.*, to provide them with ongoing access to capital, much as banks would, assuming a continued willingness of outside sources of financing to do so. The following table lists these entities and the dollar amounts (in millions of dollars) that they owed to NUI Utilities at August 30, 2003.

Table V.9. Major Sources of NUI Utilities Receivable

VA Gas	$54.0
TIC	$21.1
NUI Energy – Working Capital, net	$6.8
NUI Energy – Losses	$10.8
NUI Energy	$17.6
Telecom - Working Capital/Plant, net	$2.1
Telecom – Losses	$24.6
Telecom	$26.7
NUI Ventures - Working Capital/Plant, net	$2.1
NUI – Losses	$7.1
NUI Ventures	$9.2
NUI Envir. - Working Capital/Plant, net	$2.2
NUI Envir. – Losses	$4.7
NUI Environmental	$6.9
NUI Capital	$3.2
NUI Saltville Storage	$18.4
NUI Energy Solutions	$0.8
Total	$157.9

The failure to properly settle such balances on a routine basis and the lack of any formal policy or ability to make such payments has a negative impact on the financial statements of NUI Utilities. This effect became clear in the PricewaterhouseCoopers audit of NUI Utilities on a standalone basis for the 2001 and 2002 fiscal years. The auditors declined to accept NUI's treatment of NUI Utilities' $61.4 million net receivable due from NUI as an asset. NUI management then reflected it as a charge against equity, which had the effect of reducing it. PricewaterhouseCoopers cited financial accounting guidance from an SEC topic SAB 4G bulletin and FASB topic EITF 85-1 as relevant guidance for the applicable generally accepted accounting principles. NUI's lack of a policy to routinely settle such balances, and its inability to demonstrate an ability to pay back the balance over a definable period proved critical in reaching this conclusion. The guidance cited by PricewaterhouseCoopers includes the following language [emphasis added]:

> *The Task Force reached a consensus that* ***reporting the note as an asset is generally not appropriate, except in very limited circumstances when there is substantial evidence of ability and intent to pay within a reasonably short period of time****.*
>
> *While these notes and other receivables evidencing a promise to contribute capital are* ***often legally enforceable, they seldom are actually paid****. In substance, these receivables are equivalent to unpaid subscriptions receivable for capital shares which Rule 5-02.30 of Regulation S-X* ***requires to be deducted from the dollar amount of capital shares subscribed****.*

> *The **balance sheet display of these or similar items is not determined by the quality or actual value of the receivable** or other asset "contributed" to the capital of the affiliated general partner, but rather by the relationship of the parties and the control inherent in that relationship. Accordingly, in these situations, the **receivable must be treated as a deduction from stockholders' equity in the balance sheet** of the corporate general partner.*

Charging equity with the $61.4 million reduction increased the Utilities debt ratio from 54 to 60 percent at September 30, 2002. The amount due from NUI to NUI Utilities fluctuated monthly before its full repayment in November 2003 and the monthly reconciliation that NUI began in 2003. It reached a high of $190 million as of February 28, 2003. NUI Utilities' debt-to-equity ratio constitutes an important measure of compliance with debt instruments, as well as a key measure of financial health for credit rating agencies. Chapter Four discusses this issue in greater detail.

D. Cash Separation Examination

1. Background

The early-2003 NUI Utilities extension of its revolving line of credit agreement covenant required a separate cash management system or cash pool to be in place by November 12, 2003. NUI began restructuring its cash management system in April 2003. In general, the goal of the cash management reengineering was to create two segregated cash systems. NUI Utilities would operate under one and NUI and its non-utility businesses would operate under the other. NUI kept Liberty informed about progress, beginning in the summer of 2003. Liberty has performed a review and analysis of the progress made by NUI, and tested the separation of the cash pools. Liberty found the Company's goals for the re-engineering project to be appropriate and thus Liberty's testing intended to examine how well NUI's work met them. These goals were:

- Separate cash management for NUI Utilities and NUI
  - Solicit and select new bank vendors
  - Simplify the bank accounting structure
  - Separate NUI Utilities actions from other NUI actions
  - Re-engineer the cash processes and procedures
- Ensure cash security control and timely recording into the general ledger
  - Tighten depository control of cash
  - Ensure control of cash by the unit
  - Improve internal controls
  - Coordinate cash accounting efforts through completing timely bank-to-book reconciliation
  - Reconcile the general ledger to sub-ledgers
- Settle intercompany accounts payable and receivable balances on a timely basis
  - Determine current intercompany balances
  - Reconcile intercompany balances to general ledger
  - Settle intercompany balances monthly through payments of cash.

Liberty examined both the NUI and NUI Utilities cash pools. Liberty specifically focused on the cash balances for August 2003. The September fiscal year-end closing process then underway made August the last month for which books had been closed. The selection of this period provided the ability to test August 31, 2003 bank balances and bank reconciliations to the general ledger balances based upon the close of books as of August 31, 2003. To obtain a better understanding of the progress of the cash system through time, Liberty also requested daily bank account statements and information as of June 2, 2003 and October 1, 2003.

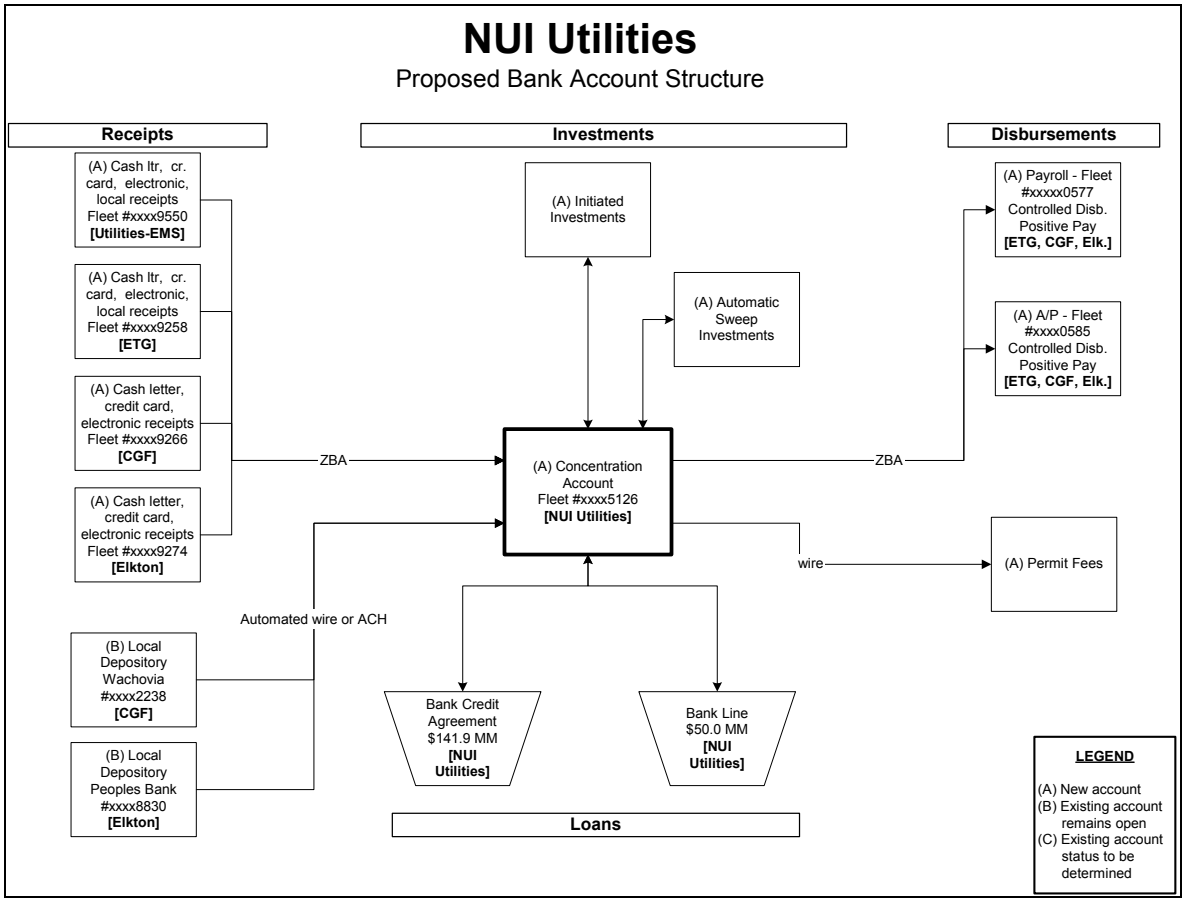
2. Selection of Bank Vendors and Cash Flow Model

NUI chose Fleet Bank as the primary cash management bank for both NUI and NUI Utilities. The Company has restructured its accounts to separate them in a manner that supports the new, separate cash pools. Fleet serves as the new primary bank for each. NUI, however, had to use some of its previous banks in geographic areas where Fleet does not provide banking services. Some older bank accounts must also remain open for a period of time to cover checks still outstanding. Liberty reviewed the level of activity in these older bank accounts, in order to validate that their use was consistent with the new separate cash management arrangements.

The NUI Utilities cash pool serves as an in-house bank for the utility business units. Each unit has a separate account for deposits. Each utility unit records its deposits on its books as a receivable due from NUI Utilities. NUI Utilities correspondingly records a payable on its books as due to the business unit. NUI Utilities has separate accounts payable and payroll checking accounts. These accounts handle disbursements for all business units in the cash pool. Funds flow to these disbursement accounts from the NUI Utilities concentration account. Payments made on behalf of each business unit get recorded as a payable due to NUI Utilities. NUI Utilities record records a corresponding receivable on its books as due from the business unit involved.

Credit balances in the *due to/due from* accounts comprise short-term liabilities (less than 364 days) of the business unit. Interest charges accrue on a monthly basis. Debit balances in the *due to/due from* accounts comprise temporary cash investments, and earn interest. The table below depicts the cash flow. It shows a total of ten checking accounts (including the concentration account), an investment and automatic sweep investment account, and two bank line of credit accounts.

Table V.10. NUI Utilities Bank Account Structure

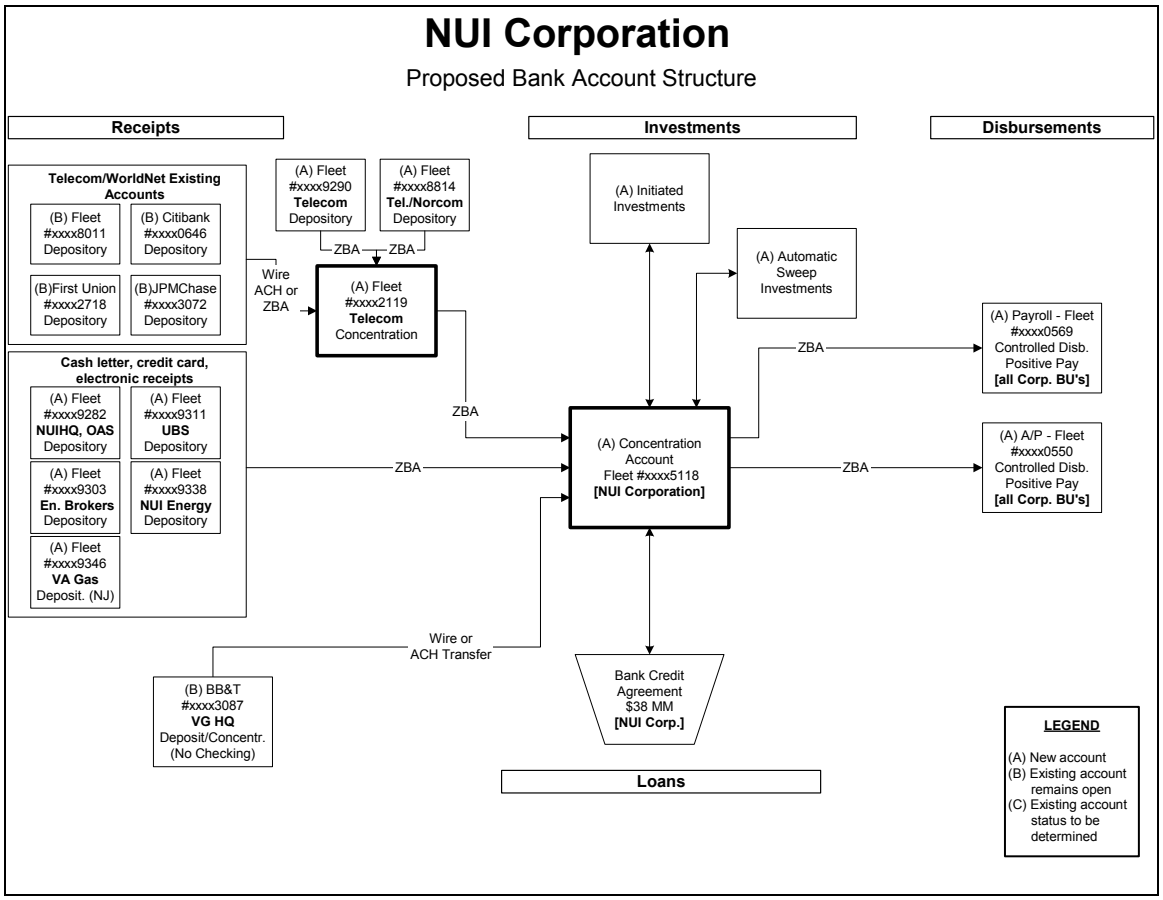


The NUI cash pool currently serves as an in-house bank for the non-utility business units. Each business unit has a separate account for deposits, which NUI records on each unit's books as a receivable due from NUI. In turn, NUI records a payable on its books as due to the business unit involved. NUI Telecom has six bank accounts to handle receipts. NUI has also established an additional concentration bank account to facilitate NUI Telecom's sale. Cash accumulates in this account for transfer to NUI's central concentration account. This addition will make it easier to sever the NUI Telecom concentration account upon that subsidiary's sale.

NUI also has separate accounts payable and payroll checking accounts. These accounts handle disbursements for all business units in the NUI cash pool. Funds flow to these disbursement accounts from the NUI concentration account. NUI records payments made on behalf of each business unit as a payable due to NUI. In turn, NUI records a receivable on its books as due from the corresponding business unit.

NUI now treats credit balances in the *Due to/Due from* accounts as short-term liabilities (less than 364 days) of the business unit, and charges interest on a monthly basis. NUI treats debit balances in the *Due to/Due from* accounts as temporary cash investments, which earn interest. The table below depicts the cash flow. It shows a total of sixteen checking accounts, investment and sweep accounts, and one bank line of credit account.

Table V.11. NUI Bank Account Structure



3. Review of Active and Inactive Bank Accounts

The cash management separation plan required that some older bank accounts remain open for a short period of time, that others be closed, and that new accounts be opened. Liberty obtained a current listing of the general ledger account codes and balances related to all cash accounts for all business units. General ledger accounts act as a control and reporting mechanism to assure consistent reliable financial reporting. A company should also maintain a central bank repository file and database to provide relevant information on each bank account. Such information includes but is not limited to: dates of open and close, names and titles of people in authority, signature cards, and bank service agreements.

No such central bank repository existed prior to fiscal 2003. NUI treasury personnel and the consultants assisting in the design, development, and implementation of the new cash process described a difficult process to obtain signature cards and other relevant data on open and closed accounts. Liberty verified that NUI has now compiled and maintains a central bank repository with a permanent file for open and closed bank accounts. NUI has also developed a computer data base that allows for relevant queries on bank account information, such as bank account numbers, general ledger account numbers, dates

opened and closed, authorized signatories, business unit entity, controlling entity, and other categories.

4. Cash Receipts/Depository/Accounts Receivable

Liberty analyzed NUI and NUI Utilities business unit bank accounts set up primarily for the purpose of receiving and depositing receipts for business-related transactions. The cash receipt functions coordinated by NUI treasury require interaction with the accounts receivable and IT departments to facilitate the flow of cash receipts. Treasury provides for injections of cash through access to bank lines of credit. Liberty sought to determine whether adequate controls existed to ensure proper accounting for and deposits of cash receipts by business unit.

Liberty's review of the accounts receivable department practices showed major improvements. NUI, with the assistance of an outside consulting firm, has drafted formal policies and procedures. It now routinely performs monthly reconciliations of accounts receivable sub-ledger balances to the general ledger balances for all business units. New and improved controls have been implemented to assure that deposits are appropriately tracked, matched, and reconciled to the proper business unit. The accounts receivable department is now operating under its draft policies and procedures. They have been under review by corporate management for a number of months. Management should complete its review and finalize these policies and procedures as soon as possible.

5. Cash Disbursements/ Accounts Payable

Liberty tested NUI and NUI Utilities business unit bank accounts set up for the primary purpose of making accounts payable transactions for the business units. The cash disbursement functions coordinated by NUI treasury require interaction with the accounts payable and IT departments to facilitate the flow of accurate and timely payments. The disbursement side of the cash structure requires that each cash pool will have its own payroll and accounts payable bank accounts. The funds necessary to cover the payments in these accounts come from withdrawals from the concentration account. The process consists of an automated function that determines the amount of funds to be transferred from the concentration account and then deposited in the payment checking accounts. The goal is to exactly cover the daily checks issued by the accounts payable and payroll department checking accounts.

Liberty also sought to determine whether adequate controls existed to ensure proper accounting for and deposit of cash disbursements by business unit. Liberty's review of current accounts-payable practice showed major improvements. NUI, with the assistance of outside consultants, has drafted formal policies. It now routinely performs monthly reconciliations of accounts payable sub-ledger balances to the general ledger balances for all business units. Improved controls have been implemented to assure that invoices are appropriately tracked, matched, and reconciled to the proper business unit.

The accounts payable department does not disburse checks or make payments to any of the business units for the purpose of reconciling intercompany payable transactions or balances. Corporate accounting and treasury, as explained later, perform this function.

Liberty sought to examine the controls in place to assure that a vendor code was not or could not be issued to an NUI business unit, thus allowing a check to be issued to it as a vendor. The accounts payable department agreed to run a query to determine whether this result has occurred. Liberty found that it was possible for those business units, such as Telecom, that provided service to the public as well as it affiliates, to have their own vendor code. This code allows checks to be issued directly from NUI Utilities to that business. NUI should review and amend its current procedures to eliminate this accounting control weakness.

6. Wire Transfers

NUI uses wire transfers for:

- Receipts from NUI clients or customers
- Disbursements for payment on loans, bank fees & closing, and third party contractors; *e.g.*, gas suppliers
- Receipts/disbursements on bank lines of credit
- Settlement of intercompany payable/receivable balances.

Treasury processes wire transfers, sometimes in coordination with other departments. For example, Treasury verifies customer receipts by wire transfer with appropriate accounts receivable departments. Treasury verifies disbursements with accounts payable. As explained earlier, Treasury has not yet prepared and submitted its draft policies and procedures to corporate management for review and approval.

7. Sweep Accounts

NUI's bank provides an automated process of sweeping or withdrawing the funds available as of the last transaction of the business day. The process provides for investment of the funds to earn interest until the beginning of the next business day. Liberty reviewed the process and compared the transactions to the bank statement accounts. Liberty's confirmed that these amounts were appropriately deposited back into the appropriate accounts. NUI's bank made an error in one case observed by Liberty. NUI performs a daily cash position analysis review. This review identified the bank error correctly and promptly.

8. Daily Cash Position

Treasury performs a daily cash position analysis to assess cash needs for the day. Treasury has developed a desktop procedure for this process. The primary purpose of the task is to verify daily account balances, reconcile errors, and plan for the cash needs of the day. The process reviews wire transfers, overnight deposits, and information from the accounts receivable and accounts payable departments. Liberty's test of this process did not address the cash forecasting model, but sought to verify that the daily process operated under reasonable controls. Liberty found the working process to be well defined and reasonably performed and provided.

9. Access to lines of credit

Liberty reviewed transactions involving access to lines of credit and the payment against lines of credit, for the purpose of assuring that NUI limited access to the appropriate accounts. Liberty's review showed that funds withdrawn from the lines of credit do in fact go only to the properly assigned concentration accounts within the appropriate cash pool. Repayments were similarly controlled.

10. Settlement of Intercompany accounts

NUI had not previously settled intercompany account balances. Liberty reviewed the first settlement process conducted after NUI determined to change past practice. Liberty examined an August 31, 2003 consolidating balance sheet for NUI Utilities and NUI by business unit. Liberty verified the sum total of the intercompany payable and receivable balances by business unit.

Liberty observed that the summary balance sheet it received lacked sufficient detail to identify the current versus the long-term portions of the intercompany balances. NUI does not follow FERC guidelines in how it classifies and reports current and long-term intercompany balances. NUI's corporate accounting staff did provide detail worksheets and analyses showing how NUI determined the current and long-term portions.

NUI explained that it had reviewed the balance of July 31, 2003 in detail to determine whether any items should be classified as current obligations. NUI made a number of adjusting entries. NUI compared the sub-ledger balances by business unit to the general ledger balance totals. The accounting department determined that NUI Utilities had an intercompany payable obligation of $4,501,855 to NUI. Corporate accounting then authorized a settlement and a wire request was sent to Treasury on September 25, 2003 in that amount. NUI also provided a summary breakdown of the balances to be credited or debited in each of the business unit accounts to reflect the payment or receipt of the monthly settlement.

11. Bank Reconciliation Analysis

Liberty examined a detail breakdown of the general ledger cash account balances as of August 30, 2003. Liberty tested the reporting by summing up the balances of the general ledger cash accounts for each business unit, and then comparing that amount to the summary cash balance reported for each business unit on the consolidation balance sheet. Liberty noted some minor differences, and requested additional supporting data. Liberty also tested the bank reconciliation process by examining bank reconciliations for selected bank accounts as of August 30, 2003. Liberty intended by this work to test the new, two-pool cash system, as well as the single-pool account. The latter must remain open for a period of time to allow for any outstanding checks to clear.

Liberty's review of the bank reconciliation statements demonstrated that NUI was performing the routine process of bank reconciliations. Further, the bank reconciliations reviewed provided sufficient supporting information to document the necessary adjustments to reconcile the monthly bank statements to books and general ledger

balances for each bank account.

E. Accounts Payable and Receivable

1. Procedures

NUI has had a company-wide formal procedure addressing purchasing and accounts payable and accounts receivable. The purchasing and accounts payable policies and procedures were approved January 1, 1999, and subsequently revised June 1, 2001. These procedures focused on third-party purchases, and not on intercompany transactions. Requisition and non-purchase order approval under "Level-1, Amount-Unlimited" has required the authorization of the president, senior vice presidents, and treasurer. Liberty found it to be unclear in defining appropriate threshold approval levels within the business units and whether those threshold levels require the signature approval of one or all of the officers. Further, for unusually high dollar thresholds, the policy should require senior officer and approval by of the board of directors or its executive committee.

Much of the intercompany accounts payable and receivable activities have involved allocated costs for:

- In-house services
- Outside services
- Shared resources.

In-house services include the payroll and benefits of the corporate staff for accounting and reporting, executive management, treasury, tax compliance, and gas-control service costs (excluding the cost of gas itself). In-house shared resources include capital items, such as vehicles, computers, and related items. Their depreciation expense and other carrying costs (*e.g.*, insurance expense) also get allocated among business units. Outside shared services include, *e.g.*, professional legal and accounting services. Shared resources include lease rental expenses and other such types of related expenses.

NUI's Cost Allocation Policy, effective on June 1, 1994, has governed allocations of all these types of costs. The policy provides for the direct charging or billing of costs incurred directly. NUI allocates common and semi-common costs are allocated on the basis of allocation factors. Chapter Three of this report addresses the merits of NUI's allocation methods. This chapter's treatment of them is limited to NUI's accounting policies and procedures for recording such costs.

NUI financial personnel report accounts payable as a current liability and accounts receivable as a current asset. Accounts payable represent a current liability of funds owed or due to vendors within one year. Liabilities due in greater than one year usually receive different accounting treatment. They become a long-term liability or debt, under classifications like notes payable or long-term debt. An account receivable constitutes a current asset if due within one year. Receivables due in greater than one year generally get classified as notes receivable.

2. Prior Processes and Practices

NUI corporate-services personnel perform many services for the business units, including ETG. These services include purchasing and related activities. NUI allocates many of the purchases and the services needed to make them. Intercompany payable and receivable transactions account for these costs. Each NUI business unit has its own account and corresponding account number for recording intra-NUI, intercompany payable and receivable transactions. The business units report their account balance information on a net basis. They sum and balance their transactions for each reporting period.

A number of NUI internal audits have cited internal control weakness involving accounts payable and receivable. These weaknesses include failure to apply adequate polices and procedures to purchasing and accounts payable. Arthur Andersen, operating as NUI's internal and external auditor until June 2002, deemed a sizeable number of the findings of these earlier internal audit findings not to be material.

NUI replaced Arthur Andersen effective June 2002. NUI hired Deloitte & Touche as its internal auditors and PricewaterhouseCoopers as its external auditors. PricewaterhouseCoopers conducted an audit of books and records for fiscal 2002. The new external auditors found that internal control deficiencies similar to those found by Arthur Andersen still existed. The auditors' September 30, 2002 Management Recommendation Letter stated:

> *During our audits, we identified certain conditions that created a material weakness relating to internal control over financial reporting that resulted in the need to restate prior financial statements.*
> *….we believe the Company must be proactive in continuing to strengthen the internal control environment and must implement policies and procedures to ensure that such internal controls are consistently applied.*

PricewaterhouseCoopers' fiscal 2002 Management Recommendation Letter included recommendations designed to help the Company make many controls improvements, a number of them outside the accounts payable/receivable area:

- Bank Account Reconciliation
- General Ledger Account Analyses
- Debt Covenant Review and Documentation
- Document Formal Accounting/Financial Reporting Policies and Procedures and Related Roles and Responsibilities
- Accounting and Tax Expertise
- Improve Flow of Accounting Information and Communication
- Accounts Payable Invoice Processing Procedure
- Information Technology
- Sarbanes-Oxley Act of 2002.

Liberty examined audit reports as far back as 1999. The following list summarizes key findings from the reports that Liberty reviewed:

- A March 23, 1999 internal audit by Arthur Anderson noted expenditure and purchasing weaknesses in the corporate accounting accounts payable department. The report stated that NUI did not perform regular reconciliations between accounts payable subsidiary ledgers and general ledger balances. The auditor also found that supporting documentation for competitive bids contained invoices not correctly classified. NUI failed to pay 10 of 44 invoices in time to qualify for a discount. The Billing Process account department had not reconciled accounts receivable for NUI Utilities' Northern and Southern Divisions for the past year and one-half. The report recommended a monthly reconciliation process.

- Arthur Anderson noted in a gas trading review that NUI EB made sales to counter-parties prior to the satisfaction of credit limit guidelines. The auditor noted the failure to demonstrate an executed contract valued at approximately $1.5 million with one purchaser.

- A July 25, 2000 internal audit by Arthur Anderson recommended that NUI financial management develop an accounts receivable aging report for leased appliances and review it on a monthly basis. The auditor also recommended that NUI change its treatment for uncollectible appliance receivables to expense them as bad debts. The auditor noted that it had recommended NUI-wide adoption of a process requiring submission of an original, approved invoice to accounts payable for construction activities. Management had agreed to the recommendation, but did not implement it. The audit noted the failure to fully implement similarly recommended and accepted items at NUI EB and NUI Energy.

- A July 20, 2001 Arthur Anderson internal audit of the billing process following transfer of the function to the Distribution Support Group found a failure to develop formal, written policies and procedures for transportation customers. The audit also observed a failure by the Accounting Department to perform a valid reconciliation of the accounts receivable subsidiary ledger to the general ledger. This observation had also appeared a year earlier, in the July 25, 2000 internal audit. The audit also recommended changes to respond to the concern that weaknesses in controls allowed all the users of the customer support system ("CSS") to modify customer and billing data.

- The July 20, 2001 Arthur Andersen internal audit also found a number of problems involving accounting at TIC, some of which concerned accounts payable and receivable directly:
    - No accounting and information systems department written policies and procedures
    - Controls over fixed assets were not sufficient
    - No use of accounts receivable aging report
    - No formal methods to calculate allowance for doubtful accounts

- Inappropriate location of accounting system administration function within the accounting department.

- The July 20, 2001 Arthur Andersen internal audit found a number of similar problems at NUI Telecom:
  - No formalized written policies and procedures
  - Lack of control over bank reconciliations
  - Failure to close books timely
  - Inconsistency of certain general ledger account balances with supporting detail
  - No regular reconciliation between accounts payable subsidiary ledger and general ledger
  - Failure to segregate adequately conflicting responsibilities within accounts payable
  - Personnel with ability to process payments for vendor invoices also have access to set up new vendors in vendor master file.

- The July 20, 2001 Arthur Andersen internal audit found a number of similar problems in Information Technology procurement:
  - Guidelines not in place for purchasing IT hardware or software
  - Ability of purchasers to bypass supervisor approval for emergency purchases
  - Failure to tag and track IT assets.

- Arthur Andersen's May 15, 2002 internal audit found a failure to perform purchasing/account payable procurement card training and a lack of adherence to purchasing and accounts payable documentation requirements. Anderson also noted that personnel did not consistently follow NUI purchasing policies. For example, NUI policy required that competitive bids be obtained for all purchases over $5,000. NUI, however, often made purchases greater than $5,000 by using the procurement card, which allowed them to bypass NUI quality and pricing standards. In addition, the auditors noted a lack of policies and procedures for assigning spending limits. For example a manager with an authorized spending limit of $100,000 could assign each direct report spending limits up to that amount, in order to increase the overall spending power of the department. The report also noted that there should be segregation of duties in the accounts payable department.

- NUI's new internal auditors (Deloitte & Touche) also performed an audit of NUI Telecom. The November 26, 2002 report continued to find internal control weakness, which included:
  - Accounts Receivable aging report contained many credit balances whose correctness could not be substantiated
  - There was a need for a monthly review of accounts receivable aging sub-ledger balances

- NUI did not reconcile accounts receivable aging and the General Ledger balances, the latter of which showed a $2.1 million greater balance
- The 30-, 60-, and 90-day accounts receivable aging reports did not agree with the total balance due column
- Allowances for doubtful accounts were not formalized
- Sales, cost of sales, and accounts receivable balances per Norcom and Telcorp's financial statements did not tie to the Company's monthly consolidated financial statements
- A lack of control in reconciling business unit sub-ledgers to the general ledger increased the risk of over or under-stating the Company's financial results.

- NUI requested two special internal audits to strengthen accounts receivable and accounts payable activities. A July 5, 2002 audit of accounts receivables found:
  - Policies and procedures needed to be documented
  - Policies and procedures that did exist were not current
  - Adherence to policies needed to be enforced
  - Communication of management objectives should be improved
  - Roles and responsibilities needed to be better defined
  - Staffing levels in some functions were affecting efficiency
  - Monitoring and follow-through was lacking
  - Recording and reporting could be more efficient and designed to improve the accounts receivable and accounts payable process.

- The second audit, a September 30, 2002 examination of accounts payable found:
  - Essential procedures needed to be established for returning products
  - Manipulated non-matched invoices in the a/p system, caused by circumventing established controls
  - Uniform supplier documentation was needed to enhance coordination and communication between accounting and purchasing
  - There was a need to control freight costs
  - Duplicate payments were being made to suppliers for a variety of reasons, including, but not limited to, keypunch inconsistencies, paying to an invoice copy or fax, and not properly accounting for prepayments
  - Controls on corporate credit card spending were needed to limit exposure to duplicate payments, employee abuse, or employee fraud
  - Improvements were needed to identify proper sales-tax taxability on purchases.

An earlier section of this report examined generally the quality of NUI policies and procedures. These audits support the conclusion that procedures were lacking at NUI. More importantly here, these audits also demonstrate a long-term pattern of failure to conform actions to those policies and procedures that did exist, and to implement auditor recommendations.

3. Recent Improvements

Liberty's audit work has confirmed that NUI is taking programmatic steps to strengthen its internal controls for accounts payable and receivables. During audit fieldwork, Liberty observed NUI's development of draft updates to policies during fieldwork. NUI had not yet finalized and approved them. Liberty continued work on this portion of the audit up to and through the completion of its December 17, 2003 interim report.

Liberty has learned more recently that NUI now routinely performs monthly reconciliations of accounts payable sub-ledger balances to the general ledger balances for all business units. New and improved controls have been implemented to assure that management appropriately tracks, matches, and reconciles invoices to the proper business unit. The accounts payable department has placed the draft policies and procedures, including desktop procedures, on its web site. This communication practice allows employees updated access to controls references.

Liberty has also confirmed similar improvements in accounts receivable. NUI now performs routine monthly reconciliations there, as well. For example, personnel must now compare and reconcile all accounts receivable business-unit sub-ledger balances to the general ledger balances. Variance reports are then prepared and analyzed. Steps must be taken to resolve any differences. NUI's newly adopted creation of accounts receivable aging reports on a routine, monthly basis has allowed formalization of a method for determining allowances for doubtful accounts. New internal controls address the long-standing concern that customer support system ("CSS") users had the power to modify customer information and customer billing data. One of these new controls comes from the requirement for manager approval of changes to balances due. NUI also now compares the number of customer bills mailed to the number of customer entries placed into the accounts receivable ledger. NUI had planned to implement a new billing system. Liberty learned that this project has been deferred.

Liberty performed focused testing of the recent re-engineering that NUI has been applying to establish previously missing segregation of its cash-management processes. Liberty learned the details of recent improvements in accounts payable and receivable functions as part of this testing. A later section of this chapter addresses that testing, and provides more details on changes in accounts payable and receivable.

F. Payroll

Liberty examined the payroll function that NUI performs for ETG and for affiliates, with a focus on determining whether appropriate controls exist to assure the independence, security, and accuracy of the processing work that NUI personnel perform.

NUI personnel perform the accounting functions related to payroll for all NUI business units. They use the PeopleSoft System to track payroll costs. PeopleSoft's payroll system includes a "Human Resources" module. This module supports human resources and payroll management functions. The human resources functions supported include the adding of new hires, entering salary and benefit information, and processing terminations.

The payroll functions supported include issuing employee paychecks and W-2's, entering employee information, creating paysheets, calculating payments, and general payroll reporting. The module integrates payroll information into the general ledger.

G. Work Order Procedures & Continuing Property Records

Liberty examined how NUI manages its accounting and reporting of plant assets through the use of continuing property records. Liberty evaluated internal controls to determine if NUI established and used adequate policies and procedures to assure that the books and records reasonably report the value of the utility assets. Liberty sought to verify that work-order processes have provided sufficient controls on the commissioning of utility work and on monitoring its performance quantitatively.

NUI has a formal corporate wide capitalization policy. The policy that applied through September 30, 2003 required capitalization of all costs over $500 expended to develop or acquire fixed assets. NUI provided for depreciation over their useful or remaining useful lives. NUI increased this amount to $1,000 as of October 1, 2003. In general, NUI policy provided that the utility divisions, including ERG, use depreciable lives consistent with those approved by the appropriate state utility regulatory authority. The non-utility divisions assign useful lives in accordance with their view of standard practice and on the basis of generally accepted accounting principles. NUI's policies and procedures also specifically address customer advances, capital spending, authorizations to increase approved spending limits, and a year-end accrual policy.

NUI has not performed an external or internal audit or review of the fixed-assets or continuing-property-records functions since at least 1998. Liberty believes that an updated audit is now timely, given problems that NUI has experienced in other controls-related areas and the long time since any prior examination.

H. Joint Property

Liberty examined the existence of property jointly used by affiliates. NUI used assets to provide common overhead and support services. NUI allocates depreciation expenses for NUI assets to other NUI entities on the basis of the three-factor formula, which is also addressed in Chapter Five of this report. UBS used certain customer-information system and billing assets retired several years ago. Chapter Three of this report addresses allocations for common services and the UBS use of assets.

Liberty found only one other instance where one affiliate charged another for assets. This case consisted of certain customer-service-system (CSS) regulatory assets on the books of the Florida utility, CGF. NUI Utilities also used those assets to support ETG utility operations. NUI Utilities allocated depreciation expenses for these assets to its utility operations in proportion to their CSS use. For rate accounting purposes, ETG adds to its net rate base a value reflecting its share of these CSS assets. Liberty's fieldwork produced no concerns about the propriety and the mutual exclusivity of the allocation process.

I. Conclusions

Conclusion V-1. NUI has operated under an accounting structure and an accounting separation that is generally appropriate, apart from the treatment of intercompany balances.

Liberty's analysis of the chart of accounts, the general ledger, and sub ledgers demonstrated that separate accounts are adequately maintained for each business unit. Additionally, each unit maintains sufficient general ledger intercompany balances of payables/receivables between each respective business unit.

Conclusion V-2. NUI's auditors' findings of duplicative accounts indicate a need for more rigor in assuring that account definitions and uses are sufficient to track costs with sufficient detail and distinction.

Liberty reviewed internal audit reports that disclosed a number of duplicative or similar accounts with different account numbers. The purpose of the account structure is to gather and collect similar or like financial data into an account which consistently reflects that type of activity. This process provides and assures continuity in tracking and analyzing cost as well as the assurance that financial data is consistently reported. Consistency and uniformity are major requirements which must be applied when setting up and maintaining the chart of accounts.

Conclusion V-3. NUI business unit controllers reported to their business unit head until 2003; this approach represented a structural weakness.

NUI Corporation has one corporate controller, and the remaining business units have a total of five controllers. Prior to January 2003 these five controllers within each business unit reported to the head of that business unit. NUI corrected this weakness in the organizational accounting structure; as of January 2003 the business unit controllers began to report directly to the NUI Corporate Controller.

Conclusion V-4. NUI has failed to adopt and apply sound financial accounting policies and procedures in a number of areas; while NUI is addressing controls issues in a programmatic fashion, the creation of a comprehensive and well-structured set of written policies and procedures has not yet become a high priority.

NUI has been properly focusing on controls issues. They have proven more difficult to address than anticipated. There has been recognition of the need for the development of structured policies and procedures, but there have not been sufficient resources to prepare all of them while addressing more critical control needs. The development of these policies and procedures serves longer-term interests in assuring that the improvements now being made have a lasting effect. The pending sale of NUI diminishes the return that the company can expect to gain from refocusing efforts on policy and procedure development.

Conclusion V-5. NUI's failure to "push down" NUI Utilities receivables produced confusion and an inability to examine ETG's financial condition on a stand-alone basis.

Form 2 reports for ETG should properly classify and report financial conditions for each of the regulated gas companies on a stand-alone basis. Such reporting is necessary to satisfy condition number 4 of the 2001 BPU Holding-Company Order, which states:

> *There shall be no change in Elizabethtown Gas Company's books or methods of regulatory accounting without prior approval as required by law. Elizabethtown Gas Company shall continue to maintain its books and records in accordance with the Board-approved Uniform System of Accounts or as otherwise prescribed by the Board.*

NUI reporting, however, did not provide a basis for determining the ETG portion of the Utilities short-term notes payable or the intercompany receivables balance associated with this borrowing. Non-utility expenditures were funded in significant part from funds acquired by NUI Utilities under its line of credit. NUI reported much of the notes payable and intercompany receivables balances only at the NUI Utilities level. This approach had the effect of understating their effect on the ETG, CGF, Elkton and the appliance business portions of the general ledger balances.

Funds acquired from ETG customers and funds loaned on the strength of ETG operations have been used to provide capital to NUI and non-utility businesses. The use of the single, common cash pool provided NUI with the vehicle to produce this result. In order to properly report intercompany obligations, NUI should have allocated NUI Utilities short-term debt balances and intercompany receivable balances among ETG, CGF, Elkton and the appliance business. Failing that, NUI provided no practicable way to reflect the proportionate amounts due to NUI Utilities' individual units.

The FERC guidelines discussed previously provide clear guidance as to the accounts under which the relevant transactions should be reported. NUI has consistently misreported ETG intercompany activities. There is one interesting exception. The FERC Form-2 type filing that City Gas of Florida made to Florida state regulators correctly report inter-company payable transactions under account 233- Notes Payable to Associated Companies. The Florida Public Service Commission requires City Gas of Florida to provide certified financial reports prepared by a certified public accountant.

The nature of transactions among NUI affiliates is understandable and generally explainable. Liberty found, however, that NUI did not account for them in an effective manner for outsiders judging ETG's condition. ETG did not properly classify and report intercompany payables and receivables in its Form 2 report. In late 2003, NUI Utilities' balance under its revolving lines of credit stood at approximately $142 million. Chapter Four describes how much of these funds actually went to NUI's non-regulated entities.

NUI did offer an explanation for not recording the intercompany receivable on ETG's books. NUI said:

> *NUI Utilities did not allocate any debt to its utility divisions at the time of this entry because those divisions were unaffected by this transaction. No cash moved into the NUI Utilities' divisions and the transaction did not crate any additional liability on the divisional books. Hence, there were no entries made on the divisional books.*

Liberty found NUI's argument to be unconvincing and its approach to be inappropriate to the circumstances. In particular, those circumstances include a Holding Company Order that expresses a clear interest regarding the ability to examine ETG's condition without confusion from combining its information with that of affiliates. Liberty believes that NUI needed to allocate or "push down" these accounting transactions to the utility divisions, in order to support the clear and important requirement that there remain the ability for the BPU to examine ETG on a stand-alone basis.

The vast and steady growth in these balances made them a significant element of ETG's financial structure. ETG, as part of NUI Utilities, has experienced substantial financial risk on account of the intercompany balances. The failure to report them appropriately in Form 2 reports under the appropriate classifications meant that this risk was not disclosed to the BPU in the principal annual report that it requires. The importance of such reporting is to accurately disclose financial liabilities and their associated values.

> ***Conclusion V-6. ETG did not comply with USofA reporting requirements in classifying and reporting intercompany accounts payable/receivable transactions with affiliated companies and has not accurately reported such activity on its FERC Form 2 annual reports.***

Given the nature of management's actions, one would have expected intercompany transactions in the current period to be reported under account 146, Accounts Receivable from associated companies, and account 234, Accounts Payable to associated companies. However, NUI incorrectly reported its activities with associated companies in Account 136, Temporary cash investments and Account 231, Notes Payable. The USofA describes these accounts as follows (emphasis added):

> *Account 231 Notes payable.*
> *This account shall include the face value of all notes, drafts, acceptances, or other similar evidences of indebtedness, payable on demand or within a time not exceeding one year from date of issue,* ***<u>to other than associated companies</u>****.*
>
> *Account 136 Temporary cash investments.*
> *A. This account shall include the book cost of investments, such as demand and time loans, bankers' acceptances, United States Treasury*

certificates, marketable securities, and other similar investments, acquired for the purpose of temporarily investing cash.

B. This account shall be so maintained as to show separately temporary cash investments in securities of associated companies and of others.

Account 136 provides for the classification of investments in securities of associated companies. The relevant transactions between NUI associated companies, however, consisted of something else. They were unsettled accounts with balances greater than one year or they were losses in the associated companies. NUI provided the following rationale for its classification of the intercompany balances.

> *While the FERC provides definitions and guidelines for the use of its Uniform System of Accounts, certain judgments and interpretations are required. NUI reports all balances in appropriate accounts in accordance with the FERC Uniform Systems of Accounts, to the best of its judgment.*

ETG should have reported the items as receivables or payables from or to associated companies. The USofA account codes, names, and descriptions under which ETG should have reported such items are as follows (emphasis added):

> *Receivables due in one year or less-*
> *Account 146 Accounts Receivable from associated companies.*
> *These accounts shall include notes and drafts upon which associated companies are liable, and* ***which mature and are expected to be paid in full not later than one year from date of issue****, together with any interest thereon, and debit balances subject to current settlement in open accounts, with associated companies.* ***Items which do not bear a specified due date but which have been carried for more than twelve months and items, which are more than twelve months and items which are not paid within twelve months from due date shall be transferred to account 123, Investment in Associated Companies****.*
>
> *Note A: On the balance sheet, accounts receivable from an associated company may be set off against accounts payable to the same company.*
>
> *Receivables greater than one year-*
> *Account 123 Investment in associated companies*
> *A. This account shall include the book cost of investments in securities issued or assumed by associated companies* ***and investment advances to such companies, including interest accrued thereon when such interest is not subject to current settlement, provided that the investment does not relate to a subsidiary company****. (If the investment relates to a subsidiary company it shall be included in account entry to the recording of amortization of discount or premium on interest bearing investments. Include herein the offsetting 123.1,*

Investment in Subsidiary Companies.) (See account 419, Interest and Dividend Income.)

B. This account shall be maintained I such manner as to show the investment in securities of, and advances to, each associated company together with full particulars regarding any of such investments that are pledged.

Note A: Securities ***and advances of associated companies owned and pledged*** *shall be included in this account, but such securities, if held in special deposits or in special funds, shall be included in the appropriate deposit or fund account. A complete record of securities pledged shall be maintained.*
Note B: Securities of associated companies held as temporary cash investments are includible I account 136, Temporary Cash Investments.
Note C: ***Balances in open accounts with associated companies, which are subject to current settlement, are includible in account 146, Accounts Receivable from Associated Companies****.*

Conclusion V-7. NUI failed to follow good utility practice by failing to settle intercompany balances on a regular basis.

Liberty's review of NUI's intercompany accounts payable and accounts receivable transactions showed a long-standing failure to settle balances on a routine basis. There was no policy requiring settlement of such accounts on a routine monthly, quarterly, or annual basis. Management did not have such a plan, nor could it produce any evidence to support an intention of settling such balances. Moreover, NUI could not have settled these balances while meeting its aggressive non-utility expansion goals. The Company's need to respond to deepening financial problems contributed to this inability to form a realistic plan for balance repayment. Liberty concluded that NUI failed to meet good utility practice by operating in this fashion. NUI corrected this substantial weakness in 2003.

This lack of a policy, plan, or capability for repayment bears upon the proper accounting treatment for the balances. NUI should have considered reporting the items as investments in subsidiary companies. The following summary of relevant USofA account codes, names, and descriptions addresses this accounting classification (emphasis added):

Account 123.1 Investment in subsidiary companies

A. This account shall include the cost of investments in securities issued or assumed by subsidiary companies ***and investment advances to such companies, including interest accrued thereon when such interest is not subject to current settlement plus the equity in undistributed earnings or losses of such subsidiary companies since acquisition****. This account shall be credited with any dividends declared buy such subsidiaries.*

*B. This account shall be maintained in such a manner as to **show separately for each subsidiary**: The cost of such investments in the securities of the subsidiary at the time of acquisition; **the amount of equity in the subsidiary's undistributed net earnings or net losses since acquisition: advances or loans to such subsidiary**; and full particulars regarding any such investments that are pledged.*

Account 145 Notes receivable from associated companies
Payables due in one year or less-

Account 234 Accounts payable to associated companies.
*These accounts shall include amounts owing to associated companies on notes, drafts, acceptances, or other similar evidences of indebtedness, **and open accounts payable on demand or not more than one year from date of issue or creation**.*

Note: Exclude from these accounts notes and accounts which are includible in account 223, Advances from Associated Companies.

Payable greater than one year-

Account 223 Advances from associated companies

*A. This account shall include the face value of notes payable to associated companies **and the amount of open book accounts representing advances from associated companies**. **It does not include notes and open accounts representing indebtedness subject to current settlement which are includible in account 233, Notes Payable to Associated Companies, or account 234, Accounts Payable to Associated Companies**.*

B. The records supporting the entries to this account shall be so kept that the utility can furnish complete information concerning each note and open account.

FERC has provided guidance on the matter of cash pool transactions among between affiliates. FERC Account Release-17, effective August 1, 2002, provides (emphasis added):

Public Utilities and Licensees, Natural Gas Companies and Oil Pipeline Companies must account for money pool arrangements and maintain the following documentation for these arrangements under the Commission's Uniform Systems of Accounts as discussed below:

Public Utilities, Licensees and Natural Gas Companies

Amounts deposited with money pools are to be recorded in Account 145, Notes receivable from associated companies, or Account 146, Accounts

> *receivable from associated companies, unless such amounts deposited are evidenced by notes with maturities of more than one year from date of issue. If the notes have maturities of more than one year from date of issue, they shall be recorded in Account 123, Investment in associated companies, or Account 123.1, Investment in subsidiary companies.*
>
> *Borrowings from money pools shall be credited to Account 233, Notes payable to associated companies, or Account 234, Accounts payable to associated companies, unless such borrowings are evidenced by notes with maturities of more than one year from date of issue. If the notes have maturities of more than one year from date of issue, they shall be credited to Account 223, Advances from associated companies.*
>
> *Interest earned on deposits with money pools shall be credited to Account 419, Interest and dividend income. Interest expense incurred on borrowings from money pools shall be charged to Account 430, Interest on debt to associated companies.*

Liberty's audit work determined that NUI's books and records did not account for such transactions in the above accounts even as late as the end of the 2003 fiscal year.

> ***Conclusion V-8. NUI has implemented a new cash management structure and process, whose design provide appropriately for the separation of utility and non-utility cash flows; NUI has begun to operate under the plan, but has not yet formally adopted its cash management agreement.***

Management has begun to operate under its cash separation model and draft cash management agreement. NUI has drafted a cash management agreement for the services to be provided by the single cash pool on behalf of all its business units. Major features of the draft cash management agreement include:

- Settle intercompany balances monthly
- Credit balances in the *Due to/Due from* accounts constitute as short-term liabilities (less than 364 days)
- Such credit balances accrue interest monthly
- Debit balances in the *Due to/Due from* accounts constitute temporary cash investments
- Such balances earn interest monthly.

Liberty found these elements satisfactory, and verified that they are in operation. However, the agreement should be changed to provide that NUI will follow the FERC Uniform System of Accounts for the proper classification and reporting of current and long-term transactions related to intercompany payables and receivables between associated companies. NUI will seek the approval of the three state utility regulatory authorities for its cash management agreement.

Finally, NUI management should take the appropriate steps to complete its final review and approval of the cash management agreement.

> ***Conclusion V-9. NUI has developed and now maintains a central bank repository file and database; however, a review of all of the bank accounts and current database reveal a number of control weaknesses.***

Control weaknesses include allowing the same authorized signatories on both NUI Utilities and NUI bank accounts, outdated signatory cards that still include personnel no longer with the company, and in some cases no signatory cards at all. A review of permanent files to the database revealed some inconsistencies. General ledger account numbers were missing, status was not up to date, and most of the permanent files on each bank account did not include a copy of the bank service agreement.

Liberty reviewed a detailed report providing relevant information on each bank account. Liberty found that the database did not provide current updated information as to the account status (closed or open), date of closing or opening. A number of the bank accounts listed did not contain any corresponding general ledger account codes. Additionally, a number of old, closed bank accounts had no permanent file. Liberty attempted to compare treasury's database to the general ledger chart of accounts codes for each bank account. This comparison proved difficult and time consuming, because the description of the general ledger bank account did not provide sufficient information to correlate the two. Liberty learned that the supporting information in other areas of the PeopleSoft general ledger chart of account system does not provide any additional information on bank account numbers either.

Interviews conducted with NUI and a review of the database and permanent files revealed a number of employee/officers on both NUI Utilities and NUI bank accounts. There were also since-departed personnel listed as authorized signatories on a number of other bank accounts. Finally, one bank account that Liberty reviewed had twenty five signatory cards on file. Liberty learned that ten of these still need to be deleted, because individuals either left the company or moved to other positions. Two more names needed to be added. The number of authorized people for this account should be reduced to a more manageable level.

> ***Conclusion V-10. NUI's cash separation and bank flow process for cash receipts, depository, and accounts receivable as developed appears to be reasonable and adequate, but has not been subjected to final and approved policies and procedures.***

Liberty did not test the accounts receivable functions, but is satisfied that draft polices now in use are reasonable. Liberty's review of the bank statements and bank service agreements did provide assurance that the depository accounts were tied to the appropriate concentration accounts. Liberty's test of the Treasury functions demonstrated that depository transactions are reasonably accounted for. They can be

traced in the depository accounts as receipts into the proper business unit accounts. They are then properly transferred out to the appropriate cash pool concentration accounts.

Treasury has not, however, adopted formal or even draft policies and procedures, with the exception of some desktop procedures. Liberty understands that treasury is a small department that has undergone a number of changes and reorganizations. However, it is important that policies and procedures be implemented as soon as possible.

> ***Conclusion V-11. NUI's cash disbursements / accounts payable process for the cash separation and cash flow as developed now appears to be reasonable and adequate, but has not been subjected to final and approved policies and procedures.***

Liberty notes that the Accounts Payable department is operating under draft policies and procedures that have been under review by corporate management for a number of months. Management should complete its review, and finalize these policies and procedures as soon as possible. Liberty limited its testing of the accounts payable functions to assuring that a business unit could not be assigned a vendor code and be paid outside the intercompany settlement process. Liberty is satisfied that the currently used draft polices are reasonable. Liberty's review of the bank statements and bank service agreements provided adequate assurance that the disbursements/depository accounts tie to the appropriate concentration accounts. Liberty's test of the treasury functions demonstrated that NUI adequately accounts for the applicable concentration accounts, makes deposits to the appropriate bank account to cover disbursements, and makes disbursements in accord with those authorized by the accounts payable department.

> ***Conclusion V-12. NUI's wire transfer process for the cash separation and cash flow as developed appears to be reasonable and adequate, but has not been subjected to final and approved policies and procedures.***

Treasury has developed some desktop procedures which it has been using and modifying during the cash reengineering process. Liberty conducted a review of desk top procedures, observed actual transfers, compared the conduct of those transfers with the requirements of the desk top polices, and tested the wire transfer process. The process is well documented, requires appropriate authorizations and supporting documentation, and runs under a system of internal controls designed to separate the input and authorization before a wire transfer is released for payment. For example, no less than two people can work on a wire transfer, no one person can perform two consecutive steps, and one of the individuals performing the task has access to only one pool. Entry into the system is automated. It requires a user pass code to enter the system and then another pass code, which changes frequently on an automatic basis. Liberty verified that an attempt to perform dual or consecutive tasks causes a denial of access or a refusal to permit the transaction.

Liberty reviewed bank statements to verify wire transfers with that of the system. Liberty could trace all tested entries to the business unit accounts. With the exception of

the lack of formal polices and procedures, Liberty believes the process reasonably assures transactions are properly accounted for and separated between the two pools.

Conclusion V-13. NUI's sweep account process for the cash separation and cash flow as developed appears to be reasonable and adequate.

The sweep account process provides adequately for daily returns, assures crediting to the appropriate accounts, and operates with routine error-checking.

Conclusion V-14. NUI's daily cash position analysis appears to be reasonable and adequate.

The process is well defined and reasonably performed.

Conclusion V-15. NUI's access to lines of credit and repayment within the cash separation and cash flow model as developed appears to be reasonable and adequate; however, the cash forecasting model should address anomalies where funds are both accessed and repaid on the same day.

Liberty was able readily to verify the transactions by reviewing the bank statements and authorizations.

Conclusion V-16. NUI's new monthly settlement process of intercompany accounts payable and receivable within the cash separation and cash flow model as developed appears to be reasonable and adequate.

Liberty found the process to be well documented and performed in a manner that reasonably assures that the current portion of the intercompany balances were properly and timely settled.

Conclusion V-17. NUI's monthly bank reconciliation process appears to be reasonable and adequate; however, as discussed in the accounting section of this report, NUI must continue to monitor the use of its general ledger account codes to eliminate the use more than two general ledger accounts for one bank account and internal audits should be performed on the new cash separation, accounts payable and receivable processes.

Liberty's review revealed that, as of August 31, 2003, one bank account had two general ledger accounts. NUI accounting explained that this result arose from a desire to track two types of activities within the bank accounts. NUI noted that the sum of the two general ledger accounts did agree with the bank reconciliation. NUI has used at least one other bank account with multiple general ledger account codes. It too was designed to

track multiple transactions. However, NUI has corrected this process. It now uses only one general ledger account code for each bank account.

Liberty also noted a large number of reconciliation adjustments for the August 30, 2003 ETG bank reconciliation statement. Supporting documentation showed that the adjustments were necessary because the accounts receivable department was not then performing daily reconciliations within their department. That reconciliation occurred at the same time that bank statements were reconciled. That practice has changed as accounts receivable now performs daily reconciliations. The number of adjustments in more recent bank reconciliations is minimal.

Liberty found the bank reconciliation to be satisfactory. Liberty believes, however, that internal audits should be conducted on the new accounts receivable and accounts payable process. Liberty also recommends that an internal audit be conducted on the new cash separation process as well.

> ***Conclusion V-18. The accounting process for recording and collecting payroll data are reasonable and adequate, but NUI has recently been addressing controls weaknesses similar to those that have existed in other areas.***

NUI adequately collects costs, and properly reflects them on the individual books of the business units. NUI's query functions within PeopleSoft provide a reasonable basis for extracting payroll cost by the business unit functions, including those cost that NUI allocates.

Liberty's requested to review NUI's internal audits on payroll controls from 1998 to date. NUI's conducted only one internal payroll audit, which produced a June 19, 2003 report. This Deloitte and Touche report found a number of controls weaknesses. They affected the areas of time and attendance, approval of additions to regular time and attendance, payroll preparation and disbursements, segregation of duties, general ledger posting and accounts reconciliation. Specific concerns included the following:

- NUI did not maintain proper segregation of duties between human resources and payroll functions
- Payroll personnel had full access to add, change, and inactivate employees, create and print off-cycle payments or manual, and can perform rate increases
- Exception reports were not being generated for management review
- NUO over-relied on manual payroll process and subsequent verifications
- TIC commission payments were part of payroll; there was no evidence that commissions or other requested special payments were being reviewed and approved by finance department management at Telecom
- Payroll summary reports were being printed after payroll had been processed, which delayed error correction to the next pay period; also, the process was inconsistent among New Jersey, Florida, and Georgia
- A review of payroll and payroll tax bank account reconciliation for five months produced a number of differences that had no explanations, $583,064

in payroll tax bank deposits not recorded in the general ledger, and there was an unexplained adjustment of $637,128

- There was no formal training process to ensure consistent processing by timekeepers, and that the procedures for time entry, tracking, and monitoring are inconsistent among the various locations.

NUI has updated its payroll internal controls to address these issues. Formal policies and procedures in the payroll department existed only in draft form when Liberty finished its audit fieldwork. They required completion, documentation, and formal approval by the responsible corporate executives.

Conclusion V-19. NUI's management of accounts payable and receivable affecting ETG have suffered from a persistent lack of controls, but NUI has taken significant corrective actions recently.

Liberty's own review of controls at NUI and of NUI's prior audit reports demonstrates a history of consistent and persistent lack of sufficient internal controls across a significant number of years. Arthur Andersen characterized a sizeable number of audit findings as not material. Liberty did not agree with this characterization for two reasons. One is the persistence of similar findings across a number of years, and a failure to implement changes to address recommendations with which management agreed. Second is the greater level of significance that later auditors placed on findings of a generally similar nature.

Liberty found NUI's recent corrective actions to be programmatic, substantial, and responsive to its controls weaknesses.

Conclusion V-20. NUI's operating expenses are overstated because it fails to assign an A&G loader to construction costs.

The USofA instructions for the capturing of cost associated with gas plant construction provides as follows:

3. Components of construction cost. A. The cost of construction properly includable in the gas plant accounts shall include, where applicable, the direct and overhead costs as listed and defined hereunder:

(12) "General administration capitalized" includes the portion of the pay and expenses of the general officers and administrative and general expenses applicable to construction work

4. Overhead construction costs.
A. All overhead construction costs, such as engineering, supervision, general office salaries and expenses, construction engineering and supervision by other than the accounting utility, law expenses, insurance, injuries and damages, relief and pension, taxes and interest, shall be charged to particular jobs or units on the basis of the amounts of such

> *overhead reasonably applicable thereto, to the end that each job or unit shall bear its equitable proportion of such costs and that the entire costs of the unit, both direct and overhead, shall be deducted form the plant accounts at the time the property is retired*
> *B. As far as practicable, the determination of pay roll charges includible in construction overheads shall be based on time card distributions thereof. Where this procedure is impractical, special studies shall be made periodically of the time of supervisory employees devoted to construction activities to the end that only such overhead costs as have a definite relation to construction shall be capitalized. The addition to direct construction costs of arbitrary percentages or amounts to cover assumed overhead costs I not permitted.*
> *C. The record supporting the entries for overhead construction costs shall be so kept as to show the total amount of each overhead for each year, the nature and amount of each overhead expenditure charged to each construction work order and to each utility plant account, and the bases of distribution of such costs.*

NUI does not properly assign A&G overhead cost to the cost of construction. NUI's current method has the effect of overstating A&G operating expenses. In addition, plant asset values, accumulated reserves for depreciation, and annual depreciation expenses would be understated on the financial statements.

J. Recommendations

Liberty's most significant conclusions relate to historical NUI treatment of intercompany balances. Liberty has found that NUI has substantially addressed those balances and has taken steps to prevent their recurrence. Therefore, Liberty has no recommendations in that area. Moreover, NUI's recent re-engineering of its cash-management processes has produced significant improvements in securing proper cash segregation and in establishing much improved controls. Some detailed items remain to be completed. They form the basis for most of the recommendations of this chapter.

> ***Recommendation V-1. Complete the formalization and approval of necessary procedures.***

Liberty's test work involving the cash separation process identified substantial progress. In most cases, this progress includes the drafting and the interim use of draft procedures. However, NUI has generally not yet completed management review and approval of them. NUI should complete these final steps in the procedure development process promptly.

> ***Recommendation V-2. Take appropriate steps to complete the final review of the cash management agreement.***

NUI is already operating in accord with the agreement, which Liberty finds generally to be satisfactory. NUI should complete any remaining approval steps. NUI should also

follow the FERC Uniform System of Accounts for the proper classification and reporting of current and long-term transactions related to intercompany payables and receivables between associated companies.

Recommendation V-3. Correct control weaknesses in the current bank accounts and database.

NUI should eliminate the use of common authorized signatories on both NUI Utilities and NUI bank accounts. NUI should also eliminate departed personnel signatory cards, and add signatories for accounts that had none. Missing general ledger account numbers should be added, status should be updated, and permanent files on each bank account should include a copy of the appropriate bank service agreement.

Recommendation V-4. Conduct an audit of continuing property records.

It has been at least five years since the conduct of an NUI audit of the fixed-assets and continuing-property-records functions. This area has not been a management focus in the past year, which is understandable, given the other controls-related problems that NUI has faced. However, particularly given the existence of substantial and pervasive controls weaknesses in recent years at NUI, such an audit should be performed in the near future.

Recommendation V-5. Assign A&G overhead cost to the cost of construction.

NUI's current method overstates A&G operating expenses. It also understates plant asset values, accumulated reserves for depreciation, and annual depreciation expenses would be understated on the financial statements

Chapter Six: Energy Affiliates

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A. Background

ETG has had at least nine affiliates involved in energy operations of some type. The following paragraphs describe the energy operations of those affiliates.

1. NUI Energy

NUI Energy operated as a retail energy marketing company, serving some industrial customers (220 meters), but mostly commercial ones (about 2,800 meters) in six states. Its customers were located mainly in New Jersey and Florida. Others were in Maryland, Pennsylvania, New York and North Carolina. NUI Energy offered commodity pricing options not available to customers from their local gas distribution companies (LDCs). The Company often provided customers with a fixed price for one or two years. NUI Energy's annual sales had reached 24 to 25 Bcf/year when NUI sold the business effective July 1, 2003. The following tables show NUI Energy employment and the corporate charges made to it.

Table VI.1. NUI Energy Employees

Year	1998	1999	2000	2001	2002	2003
Empoyees	9	13	17	20	25	5

Table VI.2. Summary of NUI Corp. and Utilities Charges to NUI Energy

	1998	1999	2000	2001	2002	2003
Corporate STD Interest Expense Allocation	383,458	484,491	679,981	305,155	675,133	732,373
Corporate General Taxes Allocation			-	15,262	-	-
Corporate Depreciation Allocation			-	30,841	35,321	55,210
Corporate Accounting Allocation		26,847	35,460	41,823	46,927	62,556
Corporate IT Allocation		48,567	58,500	186,602	104,985	116,373
Corporate Marketing Admin Allocation		10,674	22,586	19,362	7,103	-
Corporate Legal Allocation		11,384	13,258	17,369	18,966	40,481
Corporate HRD/Benefits Allocation	100,005	126,968	244,745	183,446	369,657	351,078
Corporate Investor Relations Allocation			-	8,133	5,679	10,679
Corporate Development Allocation			-	3,232	5,440	4,004
Corporate Secretary Allocation			-	8,932	12,276	11,864
Corporate Executive Allocation			-	23,138	24,277	27,348
Corporate Internal Audit Allocation			-	3,750	-	-
Corporate Public Affairs Allocation			-	6,759	7,301	6,612
Corporate Executive & Other Allocation		61,063	101,630	-	(41,375)	75,249
Corporate Real Estate Allocation		60,919	76,337	79,694	88,662	100,714
Corporate Insurance Allocation		6,705	6,423	5,426	14,059	34,232
Corporate Treasury Allocation		6,755	8,082	16,531	16,687	65,820
Corporate Accounts Payable Allocation			-	5,720	4,267	4,525
Corporate Purchasing Allocation			-	-	6,776	6,401
Corporate Customer Care Allocation			-	-	-	-
Corporate Environmental Affairs Allocation			-	-	-	-
Utility Transportation Allocation			-	-	-	-
TOTAL	483,463	844,374	1,247,002	961,175	1,402,141	1,705,519

The following tables show NUI Energy's income statements and balance sheets since fiscal 2000. Fiscal 2003 results are unaudited and subject to changes.

Table VI.3. NUI Energy Income Statements 2000-2003

	FY 2000	FY 2001	FY 2002	FY 2003
Operating Margins				
Revenue - Non Affiliated	51,778,720	122,832,310	113,582,778	118,082,222
Revenue - Affiliated				19,263
Operating Revenues	51,778,720	122,832,310	113,582,778	118,101,485
Cost of Sales	49,372,761	117,124,004	111,418,209	119,606,351
Total Operating Margins	2,405,959	5,708,306	2,164,569	(1,504,866)
Other Operating Expenses				
O&M	2,486,098	3,276,018	3,679,845	7,526,142
Other Operating Expenses	267,364	386,782	409,132	160,395
Total Other Operating Expenses	2,753,462	3,662,800	4,088,977	7,686,537
Net Operating Income	(347,503)	2,045,506	(1,924,408)	(9,191,403)
Interest Expense	679,981	305,331	675,133	965,356
Income before Income Taxes	(1,027,484)	1,717,600	(2,599,541)	(10,841,351)
Income tax Expense	(358,351)	402,779	(1,048,677)	(3,515,721)
Income from Continuing Operations	(669,133)	1,314,821	(1,550,864)	(7,325,630)
Discontinued Operations				
Income (loss) from disc ops				
Income tax expense (benefit)				
Income (loss) from Disc Ops				
Net Income (Loss)	(669,133)	1,314,821	(1,550,864)	(9,824,774)

Fiscal 2003 amounts are unaudited and subject to change

Table VI.4. NUI Energy Balance Sheets 2000-2003

	FY 2000	FY 2001	FY 2002	FY 2003
Assets				
Total Current Assets	9,732,266	33,199,583	29,780,186	1,796,966
Net Utility Plant				
Net Non Utility Plant	446,992	287,952	493,884	(242,394)
Total Other Assets	132,166	160,769	176,947	91,841
Total Assets	10,311,424	33,648,304	30,451,017	1,646,413
Liabilities				
Current Liabilities	4,484,618	9,227,204	7,571,158	1,285,303
Payable to Affiliates	7,811,679	22,706,763	23,201,642	13,832,199
Notes Payable to Banks				
Total Current Liabilities	12,296,297	31,933,967	30,772,800	15,117,502
Other Liabilities	209,710	2,594,100	2,108,844	(1,057,132)
Total Liabilities	12,506,007	34,528,067	32,881,644	14,060,370
Capitalization				
Paid-in Capital	1,000	1,000	1,000	1,000
Unappropriated Retained Earnings	(2,195,583)	(880,763)	(2,431,627)	(12,413,957)
Total Capitalization	(2,194,583)	(879,763)	(2,430,627)	(12,413,957)
Total Liabilities & Capitalization	10,311,424	33,648,304	30,451,017	1,646,413

Fiscal 2003 amounts are unaudited and subject to change

2. NUI Energy Solutions

NUI Energy Solutions acted as an energy management consulting company. NUI Energy employees actually provided its services to customers. NUI now classifies it as an

inactive business unit. It has no employees and no corporate services are charged to it. NUI has no plans to add new business to it.

The following table shows corporate allocations to NUI Energy Solutions. There were none for fiscal 2003.

Table VI.5. Summary of Charges to NUI Energy Solutions

	1998	1999	2000	2001	2002
Corporate STD Interest Expense Allocation	($3,855)	$16,636	$57,991	$62,820	$25,126
Corporate General Taxes Allocation			$0	$0	$0
Corporate Depreciation Allocation			$0	$0	$3,211
Corporate Accounting Allocation		$11,932	$5,455	$0	$3,640
Corporate IT Allocation		$21,585	$9,002	$20,400	$9,544
Corporate Marketing Admin Allocation		$4,270	$4,234	$0	$546
Corporate Legal Allocation		$5,062	$2,040	$0	$1,459
Corporate HRD/Benefits Allocation		$44,354	$37,736	$0	$16,361
Corporate Investor Relations Allocation			$0	$0	$516
Corporate Development Allocation			$0	$0	$495
Corporate Secretary Allocation			$0	$0	$1,116
Corporate Executive Allocation			$0	$0	$2,207
Corporate Internal Audit Allocation			$0	$0	$0
Corporate Public Affairs Allocation			$0	$0	$664
Corporate Executive & Other Allocation		$27,139	$15,637	$0	($3,761)
Corporate Real Estate Allocation		$6,796	$3,598	$0	$3,051
Corporate Insurance Allocation		$4,457	$3,233	$0	$286
Corporate Treasury Allocation		$3,003	$1,156	$0	$1,517
Corporate Accounts Payable Allocation			$0	$0	$328
Corporate Purchasing Allocation			$0	$0	$521
Corporate Customer Care Allocation			$0	$0	$0
Corporate Environmental Affairs Allocation			$0	$0	$0
Utility Transportation Allocation			$0	$0	$0
TOTAL	($3,855)	$145,234	$140,082	$83,220	$66,827

Fiscal 2003 amounts are unaudited and subject to change

The following tables show NUI Energy Solutions balance sheets and income statements. Fiscal 2003 amounts are unaudited and subject to changes.

Table VI.6. NUI Energy Solution's Balance Sheets 2000-2003

	FY 2000	FY 2001	FY 2002	FY 2003
Assets				
Total Current Assets	$24,453	$3,750	$96,673	$23,018
Net Utility Plant				
Net Non Utility Plant	$389,258	$369,528	$257,249	$206,727
Total Other Assets	$0	$0	$0	
Total Assets	$413,711	$373,278	$353,922	$229,745
Liabilities				
Current Liabilities	($196,947)	($225,183)	($95,775)	($59,551)
Payable to Affiliates	$957,638	$815,460	$789,470	$1,026,005
Total Current Liabilities	$760,691	$590,277	$693,695	$966,454
Other Liabilities	$0	$153,824	$93,566	($272,314)
Total Liabilities	$760,691	$1,334,378	$1,480,956	$1,660,594
Capitalization				
Paid-in Capital				
Unappropriated Retained Earnings	($346,980)	($370,823)	($433,339)	($464,395)
Total Capitalization	($346,980)	($370,823)	($433,339)	($464,395)
Total Liabilities & Capitalization	$413,711	$373,278	$353,922	$229,745

Fiscal 2003 amounts are unaudited and subject to change

Table VI.7. NUI Energy Solutions Income Statements 2000-2003

	FY 2000	FY 2001	FY 2002	FY 2003
Operating Margins				
Revenue - Non Affiliated	$345,521	$133,423	$289,043	$137,347
Revenue - Affiliated				
Operating Revenues	$345,521	$133,423	$289,043	$137,347
Cost of Sales		$0	$0	
Total Operating Margins	$345,521	$133,423	$289,043	$137,347
Other Operating Expenses				
O&M	$688,639	$117,026	$247,799	$138,967
Other Operating Expenses		$9,929	$121,095	$50,521
Total Other Operating Expenses	$688,639	$126,955	$368,894	$189,488
Net Operating Income	($343,118)	$6,468	($79,851)	($52,141)
Interest Expense	$57,991	$62,820	$25,126	
Income before Income Taxes	($401,109)	($56,351)	($104,977)	($52,141)
Income tax Expense	($164,558)	($32,508)	($42,461)	($21,085)
Income from Continuing Operations	($236,551)	($23,843)	($62,516)	($31,056)
Discontinued Operations				
Income (loss) from disc ops				
Income tax expense (benefit)				
Income (loss) from Disc Ops				
Net Income (Loss)	($236,551)	($23,843)	($62,516)	($31,056)

Fiscal 2003 amounts are unaudited and subject to change

3. NUI Energy Brokers

NUI EB has provided wholesale trading, brokering and risk-management services. NUI EB has traded physical natural gas in the Northeast (primarily south and west of the Greater New York City area), the Southeast, and the Gulf Coast producing region. NUI EB has also traded natural gas futures, options and swaps on the New York Mercantile

Exchange and in over-the-counter markets. NUI EB's total gas sales in fiscal 2002 were about 104 Bcf.

The following table shows NUI EB employment since 1998.

Table VI.8. NUI EB Employees

Year	1998	1999	2000	2001	2002	2003
Employees	9	24	25	27	29	31

The following table summarizes corporate charges to NUI EB since 1998. The charges for fiscal 2003 are for the first nine months.

Table VI.9. Summary of Corporate Charges to NUI EB

	1998	1999	2000	2001	2002	2003
Corporate STD Interest Expense Allocation	$168,459	$313,688	$304,365	($109,896)	$316,563	($187,018)
Corporate General Taxes Allocation			$0	$28,489	$0	$0
Corporate Depreciation Allocation			$0	$57,570	$83,486	$72,645
Corporate Accounting Allocation		$41,762	$68,195	$78,069	$86,638	$82,310
Corporate IT Allocation		$75,549	$112,503	$184,656	$248,146	$153,123
Corporate Marketing Admin Allocation			$0	$0	$17,485	$0
Corporate Legal Allocation		$17,709	$25,496	$32,423	$46,685	$53,265
Corporate HRD/Benefits Allocation	$81,567	$295,290	$425,150	$322,828	$528,728	$631,170
Corporate Investor Relations Allocation			$0	$15,182	$13,424	$14,051
Corporate Development Allocation			$0	$6,033	$12,859	$5,269
Corporate Secretary Allocation			$0	$16,672	$29,017	$15,611
Corporate Executive Allocation			$0	$43,190	$57,381	$35,984
Corporate Internal Audit Allocation			$0	$7,000	$0	$0
Corporate Public Affairs Allocation			$0	$12,616	$17,257	$8,700
Corporate Executive & Other Allocation		$94,987	$195,441	$0	($97,796)	$99,012
Corporate Real Estate Allocation		$160,716	$203,837	$209,105	$218,847	$211,430
Corporate Insurance Allocation		$8,951	$9,905	$9,406	$18,342	$48,060
Corporate Treasury Allocation		$10,509	$15,540	$30,859	$39,441	$86,605
Corporate Accounts Payable Allocation			$0	$10,677	$10,503	$5,954
Corporate Purchasing Allocation			$0	$0	$16,679	$8,422
Corporate Customer Care Allocation			$0	$0	$0	$0
Corporate Environmental Affairs Allocation			$0	$0	$0	$0
Utility Transportation Allocation		$3,423	$3,987	$4,156	$3,983	$3,208
Total	$250,027	$1,022,584	$1,364,419	$959,037	$1,667,669	$1,347,801

The following tables show NUI EB balance sheets and income statements since 1998. Fiscal 2003 amounts are unaudited and subject to changes.

Table VI.10. NUI Energy Brokers Balance Sheets 2000-2003

	FY 2000	FY 2001	FY 2002	FY 2003
Assets				
Total Current Assets	$64,846,166	$67,962,184	$59,419,706	$47,523,003
Net Utility Plant				
Net Non Utility Plant	$175,098	$154,685	$1,297,067	$1,545,480
Total Other Assets	$321,991	$363,318	$382,109	$279,725
Total Assets	$65,343,255	$68,480,187	$61,098,882	$49,348,208
Liabilities				
Current Liabilities	$53,785,323	$18,852,891	$29,846,203	$18,159,039
Payable to Affiliates	$1,023,730	$26,996,529	$389,817	$1,769,170
Total Current Liabilities	$54,809,053	$45,849,420	$30,236,020	$19,928,209
Other Liabilities	$1,168,079	$6,070,161	$7,950,889	$3,829,665
Total Liabilities	$55,977,132	$51,919,581	$38,186,909	$23,757,874
Capitalization				
Paid-in Capital	$2,415,021	$2,415,021	$2,415,021	$2,415,021
Unappropriated Retained Earnings	$6,951,102	$14,145,585	$20,496,952	$22,416,420
Total Capitalization	$9,366,123	$16,560,606	$22,911,973	$25,590,334
Total Liabilities & Capitalization	$65,343,255	$68,480,187	$61,098,882	$49,348,208

* Includes other comprehensive income of $758,893 in FY 2003. Fiscal 2003 amounts are unaudited and subject to change

Table VI.11. NUI Energy Brokers Income Statements 2000-2003

	FY 2000	FY 2001	FY 2002	FY 2003
Operating Margins				
Revenue - Non Affiliated	$370,079,827	$330,645,212	$210,948,440	$268,226,329
Revenue - Affiliated	$49,740,322	$150,331,871	$122,917,319	$145,321,626
Operating Revenues	$419,820,149	$480,977,083	$333,865,759	$413,547,955
Cost of Sales	$407,001,063	$461,589,908	$314,412,842	$396,454,183
Total Operating Margins	$12,819,086	$19,387,175	$19,452,917	$17,093,772
Other Operating Expenses				
O&M	$5,128,838	$6,783,482	$7,140,786	$6,951,993
Other Operating Expenses	$233,091	$310,604	$478,767	$388,084
Total Other Operating Expenses	$5,361,929	$7,094,086	$7,619,553	$7,340,077
Net Operating Income	$7,457,157	$12,293,089	$11,833,364	$9,753,695
Interest Expense	$306,264	($108,375)	$319,234	($202,047)
Income before Income Taxes	$7,481,532	$12,759,777	$11,658,618	$10,255,600
Income tax Expense	$3,063,016	$5,197,725	$4,794,893	$4,199,935
Income from Continuing Operations	$4,418,516	$7,562,052	$6,863,725	$6,055,665
Discontinued Operations				
Income (loss) from disc ops				
Income tax expense (benefit)				
Income (loss) from Disc Ops				
Net Income (Loss)	$4,418,516	$7,562,052	$6,863,725	$2,685,192

Fiscal 2003 amounts are unaudited and subject to change

4. Virginia Gas Company

Virginia Gas Company is a natural gas storage, pipeline and distribution company with principal operations in Southwestern Virginia. Virginia Gas operates two storage facilities. One is a depleted reservoir and the other is a high-deliverability salt cavern. Virginia Gas also owns and operates a 72-mile intrastate pipeline. It also serves

approximately 300 customers as an LDC. NUI operates a joint venture with Duke Energy Corporation to develop additional high-deliverability storage facilities at the same location. The name of this joint venture is Saltville Gas Storage Company, LLC. Virginia Gas operates a subsidiary called Virginia Gas Pipeline Company. This subsidiary serves as a construction and operations manager for the joint venture. NUI's interest in the joint venture is held through NUI Saltville Storage, Inc. Virginia Gas's storage capacity in its two facilities amounts to approximately 3 Bcf. The Saltville Gas Storage Company facility currently has about 1 Bcf of capacity. The joint venture plans to increase it to 6.1 Bcf by fiscal 2008, and perhaps ultimately to 12 Bcf.

The following table shows Virginia Gas employment since 1998.

Table VI.12. Virginia Gas Company Employees

Year	1998	1999	2000	2001	2002	2003
Employees	NA	NA	NA	68	53	55

NUI formed NUI Storage, Inc. to develop other gas storage facilities. NUI Storage acquired options on land and mineral rights involving property located in Perry County, Mississippi. Its goal was to develop a gas storage facility with a working-gas capacity of about 7.8 Bcf. NUI Richton Storage, Inc., a subsidiary of NUI Storage, holds these options.

NUI Utilities' CGF division has been constructing a transmission pipeline across Florida, in conjunction with expanding its service territory westward. Phase I of the Florida East-West Pipeline project extends from West Palm Beach to South Bay. It is currently in service. The Company recently announced agreements with a gas-producing company to study the viability of developing up to 15 Bcf of gas storage capacity that would be connected to the pipeline project.

The following table summarizes corporate charges since 2000. Fiscal 2003 charges are for the first nine months.

Table VI.13. Summary of Corporate Charges to Virginia Gas Company

	2001	2002	2003
Corporate STD Interest Expense Allocation	$1,766,285	$3,294,310	$1,528,507
Corporate General Taxes Allocation	$0	$0	$0
Corporate Depreciation Allocation	$0	$131,652	$122,043
Corporate Accounting Allocation	$0	$106,508	$138,281
Corporate IT Allocation	$0	$391,308	$257,246
Corporate Marketing Admin Allocation	$0	$24,588	$0
Corporate Legal Allocation	$0	$65,651	$89,485
Corporate HRD/Benefits Allocation	$23,137	$301,186	$585,018
Corporate Investor Relations Allocation	$0	$21,168	$23,605
Corporate Development Allocation	$0	$20,277	$8,851
Corporate Secretary Allocation	$0	$45,758	$26,226
Corporate Executive Allocation	$0	$90,486	$60,454
Corporate Internal Audit Allocation	$0	$0	$0
Corporate Public Affairs Allocation	$0	$27,213	$14,616
Corporate Executive & Other Allocation	$0	($154,216)	$166,340
Corporate Real Estate Allocation	$0	$125,104	$122,400
Corporate Insurance Allocation	$0	$74,056	$244,538
Corporate Treasury Allocation	$0	$62,195	$145,496
Corporate Accounts Payable Allocation	$0	$13,172	$10,003
Corporate Purchasing Allocation	$0	$23,455	$14,149
Corporate Customer Care Allocation	$0	$0	$0
Corporate Environmental Affairs Allocation	$0	$9,742	$6,420
Utility Transportation Allocation	$0	$0	$0
TOTAL	$1,789,422	$4,673,613	$3,563,679

The following tables show Virginia Gas income statements and balance sheets. Fiscal 2003 information is unaudited and subject to changes.

Table VI.14. Virginia Gas Company Income Statements 2001-2003

	FY 2001	FY 2002	FY 2003
Operating Margins			
Revenue - Non Affiliated	$2,730,120	$9,711,399	$10,090,088
Revenue - Affiliated	$93,000	$210,754	$78,750
Operating Revenues	$2,823,120	$9,922,152	$10,168,838
Cost of Sales	$227,492	$934,643	$1,454,799
Total Operating Margins	$2,595,628	$8,987,509	$8,714,039
Other Operating Expenses			
O&M	$817,405	$3,823,963	$4,225,253
Other Operating Expenses	$809,257	$2,789,384	$2,489,142
Total Other Operating Expenses	$1,626,662	$6,613,347	$6,714,395
Net Operating Income	$968,966	$2,374,162	$1,999,644
Interest Expense	$1,626,462	$3,177,181	$2,950,282
Income before Income Taxes	$164,901	($661,084)	($795,250)
Income tax Expense	$56,925	($260,475)	($308,020)
Income from Continuing Operations	$107,976	($400,609)	($487,230)
Discontinued Operations			
Income (loss) from disc ops			
Income tax expense (benefit)			
Income (loss) from Disc Ops			
Net Income (Loss)	$107,976	($400,609)	($487,230)

Fiscal 2003 amounts are unaudited and subject to change

Table VI.15. Virginia Gas Company Balance Sheets 1998-2003

	FY 2001	FY 2002	FY 2003
Assets			
Total Current Assets	(18,934,211)	3,387,067	12,172,457
Net Utility Plant	47,748,738	72,171,347	56,306,820
Net Non Utility Plant	20,704,456	3,427,610	262,702
Total Other Assets	20,694,419	8,149,057	9,863,997
Total Assets	70,213,402	87,135,081	78,605,976
Liabilities			
Current Liabilities	2,895,656	(4,425,680)	2,649,205
Payable to Affiliates	36,899,712	62,419,071	48,511,865
Notes Payable to Banks	176,422	126,534	
Total Current Liabilities	39,971,790	58,119,925	51,161,070
Other Liabilities	842,642	704,821	491,641
Total Liabilities	40,814,432	58,824,746	51,652,711
Capitalization			
Paid-in Capital	29,290,994	29,290,994	29,290,994
Unappropriated Retained Earnings	107,976	(980,659)	(2,337,729)
Total Capitalization	29,398,970	28,310,335	26,953,265
Total Liabilities & Capitalization	70,213,402	87,135,081	78,605,976

Fiscal 2003 amounts are unaudited and subject to change

The following tables show Saltville Storage income statements and balance sheets for fiscal 2003. The numbers are unaudited and subject to change.

Table VI.16. NUI Saltville Storage 2003 Income Statement

Operating Margins	
Revenue - Non Affiliated	
Revenue - Affiliated	
Operating Revenues	
Cost of Sales	
Total Operating Margins	
Other Operating Expenses	
O&M	
Other Operating Expenses	
Total Other Operating Expenses	
Net Operating Income	
Interest Expense	
Income before Income Taxes	$184,492
Income tax Expense	$75,365
Income from Continuing Operations	$109,127
Discontinued Operations	
Income (loss) from disc ops	
Income tax expense (benefit)	
Income (loss) from Disc Ops	
Net Income (Loss)	$109,127

Fiscal 2003 amounts are unaudited and subject to change

Table VI.17. NUI Saltville Storage 2003 Balance Sheet

Total Current Assets	$2,525,528
Net Utility Plant	
Net Non Utility Plant	
Total Other Assets	$34,103,376
Total Assets	$36,628,904
Liabilities	
Current Liabilities	$60,475
Payable to Affiliates	$20,158,196
Total Current Liabilities	$20,218,671
Other Liabilities	($20,291)
Total Liabilities	$20,198,380
Capitalization	
Paid-in Capital	$16,321,397
Unappropriated Retained Earnings	$109,127
Total Capitalization	$16,430,524
Total Liabilities & Capitalization	$36,628,904

Fiscal 2003 amounts are unaudited and subject to change

5. Interaction among Energy Affiliates

Varying forms of interaction have occurred among NUI's energy affiliates. The following paragraphs highlight the principal ones.

NUI EB conducted the gas-supply operations of all of the NUI Utilities' LDCs. Acting as each LDC's agent, NUI EB bought all LDC requirements for daily spot-market gas supplies and some of the monthly supplies. NUI EB also managed LDC gas-transmission and storage-capacity assets. NUI EB also conducted their individual secondary-market programs. These programs consisted of off-system sales and capacity-release activities. NUI EB advised the LDCs on the development of their gas-price stabilization (hedging) programs, and executed those programs for them.

NUI EB also acted as a wholesale gas supplier to the LDCs. For example, NUI EB sometimes emerged as the successful bidder in "reverse auctions" conducted for the LDCs by the East Coast Natural Gas Cooperative (ECNGC, or the Co-op). These reverse auctions consisted of competitions for the right to supply gas to Co-op members, sometimes including ETG. Suppliers like NUI EB won these competitions by bidding the lowest price to provide the required supplies. NUI and seven other Mid-Atlantic gas companies formed this gas-supply services cooperative in 1995. The Co-op has conducted these auctions to select providers for annual, seasonal, and monthly supplies for participating members.

NUI EB provided all of NUI Energy's gas supply. In performing this function, NUI EB acquired gas supply in wholesale markets, and then sold it to NUI Energy. NUI Energy again re-sold the gas to its customers. Most of NUI Energy's customers preferred fixed-price arrangements. NUI EB therefore also hedged the prices of gas that it provided to NUI Energy.

Most of NUI Energy's customers were behind the city gates of NUI LDC affiliates. NUI Energy served its customers by using the LDCs' metering and transportation services in the same way as other, unaffiliated marketers used them. NUI Energy either contracted for those services from the respective LDCs, or assisted their customers to make those arrangements directly with the LDC. NUI Energy reported that it never had more than about one-third of the commercial and industrial market on ETG's system.

NUI Energy Solutions provided consulting services to commercial and industrial clients regarding energy management. It used employees of NUI Energy to provide those services.

NUI EB expected to contract for about 1 Bcf, or 20 percent, of the first increment of storage capacity to become available from Saltville Gas Storage Company. The NUI LDCs have had no direct relationships with Virginia Gas Pipeline Company, Virginia Gas Storage Company or Saltville Gas Storage Company. NUI EB, however, had kept open the possibility of using storage capacity NUI EB had acquired from this affiliate to provide gas-supply services to the NUI Utilities LDCs.

NUI EB has had optimization agreements with Virginia Gas Pipeline Company and Virginia Gas Storage Company. Those Agreements provide for NUI EB to engage in natural gas purchase and sale transactions and related activities on behalf of each of those companies, in order to optimize use of their assets.

NUI Utilities has a Transcontinental Gas Pipeline Company (Transco) system storage contract that it does not use in providing utility service. NUI EB has taken over responsibility for the costs of this contract. The Company reported that the BPU agreed to this arrangement in a July 7, 1999 Order at Docket No. GR98080532. NUI EB uses the contract in conducting its gas-supply and asset-management services and in performing its energy-trading activities.

Table VI.20., which may be found several pages below, shows that ETG was using the WSS storage as a source of gas for off-system sales prior to transferring control of the asset to NUI EB. It therefore had at least for some time a public-utility use and its costs were being borne by utility customers.

NUI Utilities could have turned back any unneeded storage capacity to Transco. This option is a prime one to consider in cases where margins from sales were not sufficient to cover the costs of an asset, and where a utility does not need the asset to provide supply to its on-system customers. In a case where utility need has ceased or diminished, however, an asset like the WSS storage contract can still have potentially positive market value. Capturing that value might or might not involve unacceptably high market risks for a public utility operation. Whether so or not, however, NUI Utilities could also have put its storage rights out for bid in the secondary market. This option would allow customer recovery of disposition benefits from an asset whose costs they have been responsible for carrying.

NUI Utilities neither turned back the capacity nor put it out for bid. It allowed NUI EB to take over the storage contract, in return only for reimbursement of costs. The storage facility is not new; it forms part of Transco's rate base. There is reason to believe that the storage contract made available to NUI EB has had value in excess of its costs. There was no "market test" to answer that question objectively at the time NUI EB acquired control of the storage contract. No other party had the opportunity to make an offer for the facility use that was given to NUI EB. Accordingly, if there was positive value at the time of the transfer, it was not captured by customers, who had been paying carrying costs, but by NUI EB, which had not been so responsible before taking over the contract.

As a result of the recent transfer of NUI Utilities' gas-supply services from NUI EB to a third party, control of this contract will return to NUI Utilities this coming spring. The third party now providing services to NUI Utilities considers the asset to be of significance in maximizing ETG cost recovery associated with off-system transactions. That manager has taken steps to return the asset's use from NUI EB to NUI Utilities effective March 1, 2004. These steps demonstrate a belief that there is positive value now.

Many of NUI's energy-related affiliate relationships do not have a material direct or indirect impact on ETG's costs or operations. The relationship that has the largest impact on costs recovered from New Jersey customers is the one between NUI EB and NUI Utilities. The balance of this chapter focuses primarily on that relationship.

6. Operating Relationships

An NUI Utilities energy planning group conducts strategic and operational planning for the three LDCs. The energy-planning group estimates LDC peak-day and annual requirements. It then prepares winter and summer gas acquisition plans. These plans include actions to hedge gas prices. Energy planning has responsibility for each LDC's delivery-capacity portfolio. It determines the length (*i.e.*, multi-year, seasonal, monthly) and nature (*e.g.*, base-load, swing) of commodity-purchase contracts.

Energy planning prepares an operations plan each month for each LDC. These monthly plans take the name of "set-up sheets." Energy planning schedules supplies under each transportation contract (flowing supplies) and the group schedules storage quantities for injection (summer) or withdrawal (winter) under each storage contract. Energy planning also operates the gas control function. Gas control prepares rolling five-day forecasts of each LDC's requirements, including estimates of requirements at each gate station.

NUI EB advised and worked with the NUI Utilities energy planning personnel to conduct planning activities. NUI EB then executed the various plans for the NUI LDCs. NUI EB acted as ETG's agent in this capacity. NUI EB personnel dealt directly with NUI Utilities' personnel on the utility gas-supply processes through the monthly operations planning dialogues and through daily conference calls with NUI Utilities gas control personnel. NUI EB's operations group applied the NUI Utilities' estimates of requirements by gate station to perform the nominations and tracking required to serve those requirements. NUI EB's gas traders also bought any daily spot-market gas

necessary to fill LDC requirements. These traders also sought to sell any supply resources that proved each day to be in excess of LDC needs. This off-system sale function became a major focus of Liberty's audit work.

NUI EB has also bought and sold gas routinely and continuously for its own customers and interest. It has done so at the same time as it bought and sold for NUI Utilities. NUI EB used the same resources, systems, and processes to serve its own needs and the daily LDC needs. The table below shows NUI EB physical transactions for itself and as agent for the LDCs. NUI Utilities' transactions represented only a modest share of all NUI EB physical transactions.

Table VI.18. Distribution of NUI EB Physical Transactions

Fiscal Year	NUI EB	CGF	ETG	ELK	NCG	VC/W
1998	86%	3%	11%	0%	0%	0%
1999	88%	3%	8%	0%	0%	0%
2000	87%	4%	9%	0%	0%	0%
2001	85%	1%	13%	0%	0%	0%
2002	84%	2%	13%	0%	0%	0%
2003	84%	3%	13%	0%	0%	0%

2003 figure is through June

ETG is the only NUI LDC that uses a hedging program. NUI EB executed ETG's hedging program by using financial instruments. ETG's hedging program also represented only a small share (about five percent) of all NUI EB financial transactions.

NUI EB also conducted secondary-market activities for the LDCs. These activities consisted primarily of off-system sales and capacity-release transactions. NUI EB first identified (considering information provided by NUI Utilities' personnel) each day's supply resources that would remain unused after the scheduling of requirements for city-gate supplies and then tried to make use of the excess in secondary markets.

More recently, NUI EB became more than an agent in buying and selling resources for its affiliated LDCs. It also became a direct supplier of gas to them. NUI EB did so through its own direct participation in supply-contract bidding conducted by the Co-op. This relationship is discussed in more detail below.

NUI Energy's retail energy-marketing functions operated in parallel with those of the LDCs. NUI Energy used annual load-profile information that came from the customer, or information that it developed for customers of representative types. NUI Energy used this load-profile information to estimate customer requirements by month. It then summarized those requirements for delivery points appropriate for each customer group. Generally, LDC city gates served as its delivery points.

NUI EB bought all of NUI Energy's gas. NUI Energy, however, sometimes used its own arrangements to transport the gas to city-gate locations. This approach had some parallels with how the LDCs arranged for supply. At the beginning of each month, for

example, NUI Energy provided NUI EB set-up sheets similar to those of NUI Utilities. NUI EB would then buy the gas, and secure its delivery to the proper city gates or other applicable delivery points.

NUI EB's operations group also performed nominations and tracking for NUI Energy's gas. The LDC that delivered the gas from the city gate to the customer typically metered NUI Energy's customers' gas. NUI Energy would monitor the usage of its customers through those meter readings, and then advise NUI EB of its needs at particular locations for more or less gas than estimated in its monthly set-up sheets.

NUI Energy sales peaked at 24 to 25 Bcf per year prior to NUI's sale of the business. NUI EB acquired gas that NUI Energy needed, and resold it to NUI Energy. NUI reported total unregulated gas sales for fiscal 2002 of 103.7 Bcf after consolidation. Liberty inferred from this information that sales to NUI Energy represented about 25 percent of NUI EB's total gas sales, or about 30 percent of the transactions for NUI EB's own account.

B. NUI Utilities' Gas Acquisition

1. Purchase Options

NUI Utilities has bought gas for its system-supply customers in three ways. First, ETG has one remaining long-term gas-purchase contract with a third-party supplier. This remaining contract provides for 10,000 Dth/day, or 3.65 million Dth/year. NUI Utilities has been allowing its long-term contracts to expire without replacing them. This strategy seeks to achieve greater supply flexibility and to more closely match the supply portfolio to changes in markets. NUI Utilities total fiscal 2002 requirements amounted to 43.2 MDth. This number includes purchases for on-system interruptible customers and for off-system sales. Some of ETG's off-system sales are of gas ETG already has under contract. It is also customary, however, for additional ETG gas purchases to be made in order to make use of its excess pipeline capacity through off-system sales.

The "reverse auctions" conducted through the Co-op comprise the second NUI Utilities gas-purchase method. NUI Utilities reported that it has attempted to purchase through Co-op auctions all seasonal and monthly gas-supply requirements. Seasonal requirements include five-month and three-month supplies. NUI Utilities rejects Co-op auction offers if it deems them to be out of line with market conditions. When that happens, NUI EB purchases unfilled requirements in the monthly spot market.

The daily spot market provides the third type of NUI Utilities gas acquisition. Generally, the first two methods will have secured base-load gas by using seasonal and monthly purchases. NUI Utilities designs the amounts of those purchases to equal approximately what it expects to be its average requirement through the month. NUI Utilities then must address the inevitable and daily variances that all LDCs experience relative to such expectations. NUI Utilities meets these daily swings through withdrawals from storage, "pipeline shorts and longs," and purchase and sales transactions in the daily spot market.

The table below summarizes ETG's purchases for system supply over the last five fiscal years, plus the first nine months of fiscal 2003.

Table VI.19. Sources of ETG's System Gas Supply (MDth)

Type	1998	1999	2000	2001	2002	2003
Long-term contracts	21,113	13,584	13,158	10,698	5,068	2,607
Inter-company	70	73	367	49	15	0
ECNGC						
seasonal purchase	1,831	3,108	4,114	3,313	4,619	7,394
monthly purchase	0	0	0	710	7,107	1,970
Spot market (NUI EB)						
monthly	16,273	15,799	18,364	19,003	11,940	16,337
daily	6,752	7,892	7,012	6,719	3,691	6,998
Total	46,039	40,456	43,015	40,492	32,440	35,306

NUI Utilities used deferred-payment agreements to purchase gas for storage injection in 2001, 2002, and 2003. Chapter Four of this report discusses these purchases in detail. These agreements secured gas for delivery during the storage-injection months of April through October. These agreements covered very large gas amounts: 90 percent of the required storage volumes for 2001, 60 percent for 2002, and 50 percent for 2003.

ETG does not buy gas only to serve customers directly. It also engages in the industry-typical practice of buying gas to support off-system sales that it makes to recoup a portion of its pipeline and storage capacity costs. The level of ETG's transportation and storage resources depends in major part on peak needs. There exists a significant difference between peak and minimum usage levels on these facilities for essentially all LDCs. Thus, ETG has found itself in the understandable position of having for significant periods of time more capacity than it needs to meet customer requirements at the moment. Gas supply for ETG's off-system sales comes first from supplies that are committed to ETG's system, but prove to be excess to on-system customers' needs. When excess ETG transportation or storage assets would allow it to address additional off-system markets profitably, ETG permitted NUI EB to buy additional gas in monthly and daily spot markets. Those purchases enabled ETG to make more off-system sales.

ETG, therefore, may have a need to sell excess gas to which it has committed. Or it may have a need, for example, to sell excess transportation capacity, which it markets by buying gas that then flows through that capacity. The next table summarizes the sources of gas supply for ETG's off-system sales for recent fiscal years. Figures for 2003 are through June.

Table VI.20. Gas Supplies for ETG's Off-System Sales (MDth)

	1998	1999	2000	2001	2002	2003
From ETG system supply						
System supply pool	4,882	2,307	1,916	1,476	1,354	1,186
WSS and/or Hattiesburg	1,846	2,862	137	58	259	0
Spot market (NUI EB)						
Monthly	5,868	4,562	549	5,057	2,549	2,076
Daily	6,257	5,298	5,346	4,683	8,215	3,102
Other	N/A	N/A	697	4,000	3,494	N/A
Total	N/A	N/A	8,645	15,274	15,871	N/A

2. The East Coast Natural Gas Cooperative

NUI Corporation joined with seven other natural gas companies in the Mid-Atlantic region to form the East Coast Natural Gas Cooperative in 1995. These companies formed the Co-op to share gas supplies in emergency circumstances. The Co-op soon progressed to programs that consolidated buying requirements in order to improve the terms on which the members could routinely buy gas.

NUI Utilities reported that it has referred all requirements for seasonal and monthly supply purchases to the Co-op reverse auction process. The Co-op conducts these auctions by aggregating the requirements of those member companies participating in any given auction at market centers. Transco Station 65 and some points on the Texas Eastern system provide examples of typical market centers. The Co-op then takes supplier bids for supply at those points. The Co-op sets up each auction, but the individual companies carry them out, and decide individually whether to buy.

The Co-op has invested considerable effort in developing its bidding process. The Co-op pre-qualifies bidders for participation in its auctions and it has arranged for each of the Co-op members to enter into a base contract with qualified suppliers. Qualified suppliers with a base contract in place have recently submitted their bids in an on-line auction process. The on-line process allows bids to be accepted within 15 minutes of their submission time. The acceptance process can proceed with a simple order-confirmation (such as Attachment A to the industry-standard GISB contract), because the base contracts are on file. Supplier objections arose after the on-line process began. Participation in the Co-op auctions declined significantly. The remaining members of the Co-op therefore decided recently to return to more traditional, "paper" auctions.

3. Shared Resources

Each LDC has its own portfolio of contracts for commodity, pipeline and storage capacity, and, in ETG's case, some owned peaking capacity. NUI EB also has some gas-supply resources, composed primarily of contracts for storage and pooling services and of contracts for interruptible transportation capacity. NUI EB also uses some transportation contracts still in the names of predecessor or other NUI entities (primarily NUI Energy). NUI EB sometimes uses secondary firm gas transportation capacity. NUI EB has basic contract arrangements in place, in the event of a need to use such capacity.

NUI Utilities' director of gas planning and his staff worked until recently at NUI's Bedminster offices, near NUI EB's offices and trading floor. NUI Utilities took cost responsibility for five individuals. Three performed supply operations functions and two performed "back-office" functions. These five people worked from NUI EB's offices and NUI EB personnel managed their day-to-day performance. These people comprised an unsegregated part of larger groups that performed common functions for all of NUI EB's transactions and activities, whether for NUI Utilities or not.

NUI Utilities canceled its agreement with NUI EB about two months before this report. NUI Utilities transferred functions formerly performed by NUI EB to a third party. The NUI Utilities personnel needed to support supply operations now work directly under the management of NUI Utilities personnel. They were scheduled to move to the Union location imminently. The arrangement with a third party runs through March 2005. It allows NUI Utilities, however, an option to exit the agreement at the end of March 2004. NUI Utilities can take this option in the event that a bidding process scheduled to commence imminently produces an agreement with another third-party supplier that NUI Utilities deems preferable. That process has produced bids that NUI Utilities is now evaluating.

NUI EB has used a common Energy Management System (EMS) to track gas-supply transactions for all of the entities that it serves. EMS captures the details of physical gas purchases and off-system sales, from the inception of each transaction through cash payment or receipt. All gas-supply contracts, both short-term and long-term, that involve an NUI subsidiary or affiliate get recorded in EMS. NUI EB developed and maintains this system. EMS includes a number of functions unique to NUI EB's businesses. For example, EMS has a credit module that tracks NUI EB's payables/receivables position for each counter-party with whom it does business. NUI EB made no separate charge to the LDCs for NUI EB's use of this system on their behalf.

As noted earlier, NUI Energy in some cases had its own arrangements for transportation capacity upstream of its customers' city gates. In other cases, it bought its supplies at the city gate. NUI EB performed nominations and tracking for NUI Energy. NUI EB sold gas to NUI Energy. NUI Energy therefore received bills generated by EMS. NUI Energy prepared or arranged for its bills to its customers, however, and handled its own customer service and credit and collections management.

C. NUI Utilities Business Activities Controls

The relationship between NUI Energy and the LDCs has generally been conducted at arm's length, recognizing the state regulatory frameworks that apply to that relationship. Liberty found generally that NUI Utilities treated NUI Energy as it would any other third-party energy supplier. Liberty's work was not detailed, however. The recent competitive-services audit already examined the NUI Utilities/NUI Energy relationship. Liberty does not intend its general conclusion to contradict any more detailed findings and conclusions of that audit.

NUI EB, unlike NUI Energy, has not operated in retail markets. It serves its customers, including ETG, at the wholesale level. The competitive-services audit therefore was not called upon to examine ETG's relationship with NUI EB in detail. Liberty did, however, examine the ETG/NUI EB relationship in detail. Liberty found it not to have been at arm's length.

The NUI Utilities' director of energy planning and his staff worked at NUI's Bedminster offices, located in the same building as NUI EB's offices. Five persons paid by and nominally assigned to NUI Utilities worked as an unsegregated part of a larger NUI EB complement performing certain common functions for all of NUI EB's affiliates, asset-management clients, and other customers. This informal arrangement was adopted to provide a means for apportioning the costs of functions performed in common for NUI Utilities and for other NUI EB operations.

The respective natures of NUI EB's business activities and those of NUI Utilities mean that the use of NUI EB to conduct ETG's gas-supply activities exposed NUI EB and its personnel to significant conflicts of interest. The conflict that is easiest to understand arises in the context of the sale of natural gas. NUI EB participated in production-area and market-area gas markets routinely, buying and selling gas for its own account. All of the margins (100 percent) for those sales, whether positive or negative, accrued to NUI EB's account.

NUI EB also conducted NUI Utilities' secondary-market programs until the recent transfer of this function to a third party. In the course of conducting these programs, NUI EB sold gas in the same markets and to the same customers. The benefits that accrued to NUI EB differed significantly, however, when it made a sale for one of the LDCs. When NUI EB made an off-system sale for ETG, BPU rules required that 85 percent of the resulting margin be retained for ETG customers. The BPU allowed the remaining 15 percent to be treated as below-the line; *i.e.*, for the benefit of shareowners. The corresponding margin that Florida customers get is 50 percent for CGF sales.

Chapter One of this report describes how NUI publicly reported off-system margins under a unit other than the one including utility operations. NUI reported those margins in SEC Forms 10-K as arising under the business segment including NUI EB, not the segment including ETG. NUI EB also included margins made from off-system ETG sales in the bonus pool for its NUI EB employees. NUI reports that, from an accounting perspective, it actually assigns the below the line portion of ETG off-system sale margins to NUI Utilities. Nevertheless, several factors make these margins of much importance to NUI, to NUI EB, and to NUI EB employees. These factors include the public reporting of margins, the NUI EB bonus calculations, and the responsibility of NUI EB personnel for making such transactions on behalf of ETG.

Liberty learned that NUI EB personnel who made trades for both utility and NUI EB's accounts had significant latitude in electing to sell gas for an NUI LDC, rather than for NUI EB. When they made this election, they made it with knowledge of the difference in margins that would accrue to the different NUI entities based on their choice. Their

choice could affect not only their personal compensation, but also NUI public reports about the contribution of non-utility operations to the corporate bottom line.

NUI EB's traders clearly knew that senior NUI management was not focusing on which affiliate got accounting treatment for the margins ultimately. Instead, management knew that NUI EB, not NUI Utilities, had essentially full responsibility for producing the 100 percent margins that produced shareowner returns. Likewise, there was no room for doubt that NUI EB had similar responsibility for producing the 15 percent margins on ETG transactions that fell to shareowners, rather than to customers.

In view of this structural conflict of interest, Liberty examined two critical issues. First is the quality of controls that NUI, NUI Utilities, and NUI EB adopted and employed to mitigate the effects of the conflict. Second was to examine those areas where one might expect to see adverse results for ETG as a result of any controls failure that may have existed.

1. The Contract between ETG and NUI EB

NUI EB conducted ETG's gas-supply activities pursuant to an agency agreement. The parties entered a May 1, 2000 *Gas Supply Agency Agreement between NUI Corporation d/b/a Elizabethtown Gas Company and NUI Energy Brokers, Inc.* NUI EB also performed off-system sales activities for CGF and Elkton. No written contract addresses those services.

An exhibit to this agency agreement listed the asset-management services that NUI EB agreed to perform. They included: (a) acting as the utility's agent to acquire gas for delivery to the utility, and (b) performing all nominating, scheduling and any other activities necessary to accomplish delivery of the Utility's gas to its city gates. Other provisions included the following:

- NUI EB designates a project manager to be the utility's principal contact
- NUI EB identifies to the utility the names of the NUI EB personnel that will be performing the services
- ETG enters into and executes all agreements necessary for NUI EB to perform the services
- Each month, ETG transfers to NUI EB funds equal to all costs for providing ETG with supply
- NUI EB pays all vendors of gas and storage and delivery services used in providing service to the utility
- No compensation is paid to NUI EB by the utility for the services, but the utility provides some of the people that do the work.

The primary term of the agreement was for three years, with an "evergreen" provision for successive one-year terms until terminated by either party. ETG also had the right to suspend or terminate the agreement if it deemed suspension or termination necessary to enable it to protect its system or to meet its public-utility obligations. Beyond the utility's authority to suspend or terminate, the agreement imposed no limits or

performance standards on NUI EB. ETG has recently ended its relationship with NUI EB, and has selected a third-party to perform the services.

2. Policies and Procedures for Conduct of Utility Supply Activities

NUI Utilities reported that NUI EB was required to conduct its gas-supply activities in conformance with the operating procedures and guidelines specified by the owners of the gas storage and transportation facilities used in providing those services to the LDCs, and in conformance with the terms and conditions of the LDCs' gas-supply contracts. NUI Utilities' energy planning group also provided the seasonal supply plans and monthly guidelines for the conduct of its supply activities. The gas control function at NUI Utilities also provided information to NUI EB about near-term LDC supply requirements.

There existed no formal policies and procedures for NUI EB's conduct of LDC gas-supply activities. There were identifiable, but unwritten supply practices, discussed above, under which NUI Utilities performed the gas control function, and informed NUI EB of quantities to deliver and where to deliver them.

Some time ago, NUI Utilities issued control procedures for off-system sales and capacity-release transactions. Those procedures provide guidelines for NUI EB's conduct of NUI Utilities' secondary-market activities. The procedures specify the economic and operational principles involved in defining an opportunity for a secondary-market transaction (off-system sale or capacity-release transaction). They also identify the parties responsible for particular types of transactions, and specify documentation requirements. Under the procedures, NUI Utilities energy planning is generally responsible for identifying types of secondary-market opportunities to pursue. This identification takes place through the seasonal and monthly gas-supply plans. NUI EB is responsible for individual transactions, including entering those transactions into the EMS.

In view of the significant embedded conflicts in the EB/Utilities relationship, Liberty asked NUI EB whether it had any special policies and procedures in place to address those conflicts. The Company's answer was that there is no competition between NUI EB's execution of off-system sales for the LDCs and sales for its own account because the transaction points for both types of sales are sufficiently liquid that execution of multiple sales is not a problem. Liberty took this response to mean:

- No controls existed
- The Company considered none to be necessary.

Liberty also considered the response to exhibit an evident lack of concern and attention to a controls issue with important potential consequences. The attitude that it reflected was, in Liberty's opinion, a material contributor to the highly inappropriate actions and results that have occurred over many years in ETG's off-system sales activities. A more detailed discussion of those actions and results follows later in this chapter.

NUI EB applied an informal policy for LDC gas-sales or capacity-release transactions. Each transaction involving a gas-supply resource belonging to one of the LDCs was

attributed to that LDC's account. Communication of this policy came in the form of verbal instructions to NUI EB's traders. Each individual trader decided which NUI entity's account to credit with a transaction. The trader had freedom to make that designation up to the time when the trader completed the paperwork required for each transaction. This freedom made controls on transaction documentation while "in the hands of" the trader very important.

NUI EB used EMS as the system for controlling transaction records; *i.e.*, where documentation was no longer resident with individual traders. The point of entry into EMS was the submission of trader transaction information to the group that entered data into EMS. Until recently, traders had a significant ability to change designations even after the entry of transaction information into EMS. NUI EB very recently instituted limits on trader changes to documentation after its entry into EMS. This change came after issues of potential after-the-fact designations were made known to NUI EB as a result of work by the Company's external auditors, PricewaterhouseCoopers. That work came during the course of their still-not-completed audit of NUI for fiscal 2003.

NUI EB did make substantial efforts to verify prices and quantities for each trade. Liberty found, however, no controls significantly limiting an individual trader's designations of transaction parties. Prior to early 2003, NUI EB and its traders were not even in the custom of informing counter-parties whether NUI Utilities or NUI EB was the NUI party-in-interest in transactions being arranged by NUI EB. The confirmation statements that the Company sent to counter-parties to provide a basis for assuring that transaction details were mutually understood did not do so. Nor did it appear that traders did so in pre-agreement discussions with potential counter-parties.
NUI EB did maintain voice recordings of trader telephone conversations. It did not use them to control these designations. Liberty therefore found that NUI, NUI Utilities, and NUI EB failed to adopt controls sufficient to address trader incentives to designate NUI EB, rather than ETG, as the party-in-interest to economically more favorable transactions.

There have been admissions by at least one trader to NUI's outside auditors that after-the-fact designations were made for the purpose of increasing NUI EB margins at the expense of ETG margins. There were also admissions of other behaviors, clearly contrary to the interests of ETG, to the auditors. One such behavior has been repeatedly confirmed by audio tapes kept in the regular course of business by NUI EB. In addition, all of NUI EB's traders of physical gas have left NUI EB employment. The reason for their departure was that they declined to be interviewed by Stier Anderson LLC regarding their trades on behalf of NUI EB and ETG. Stier Anderson LLC is the independent investigative firm retained by the Audit Committee of NUI's board of directors to examine potential improprieties at NUI EB of the type at issue here. A more complete discussion of these developments follows later in this chapter.

Liberty's audit work did not produce any admissions of improper behavior by NUI EB personnel. However, Liberty did not interview the four NUI EB traders whose NUI EB employment ended after they declined to discuss these matters with Stier Anderson LLC.

All the NUI EB personnel that Liberty interviewed considered performance for ETG to have been at least satisfactory.

Liberty's audit work has determined that performance was far less than satisfactory. Liberty's preliminary work found purchase-price and sale-price patterns demonstrating that NUI EB produced far better economic performance for itself than it did for ETG. The difference was striking. It could be observed even after controlling for the factors likely to cause transaction prices to differ from one another. Liberty has sought explanations for these differences from NUI Utilities and NUI EB personnel. Liberty has received no satisfactory explanation, nor can Liberty from its own experience discern one. Liberty found that its data supported the reasonableness and the credibility of the NUI EB trader admissions. Those admissions included the following:

- Use of intermediaries (through a practice known as sleeving) that allowed NUI EB to capture a significant portion of the price associated with ETG sales or purchases that NUI EB arranged
- Relative inattention to ETG sales, whose 15 percent share of margins to shareowners was far less than the 100 percent share associated with NUI EB sales
- Failure to identify transaction parties at all, or even decisions to retroactively change them, in order to reassign after the fact more profitable transactions from ETG to NUI EB

As Liberty discusses more fully below, the work of NUI's outside investigator, Stier Anderson, confirmed that the first practice was routine and its work in Liberty's judgment found nothing that would tend to disprove the latter two. Liberty's own examinations and its reviews of the work of PricewaterhouseCoopers and Stier Anderson led Liberty to conclude that:

- NUI EB traders and NUI EB had an incentive to work in ways contrary to the interest of ETG
- NUI, NUI Utilities, and NUI EB failed to institute and apply adequate controls on trader performance with respect to these incentives
- NUI EB acted against the interest of ETG in ways that do not comport with good-utility practice or prudence
- ETG and its customers suffered significant cost penalties as a result.

In making these conclusions, Liberty did not consider it necessary to find conduct that violated criminal statutes or that was personally reprehensible. The standard that Liberty applied was conformity to good-utility practice and to prudence standards applicable to stewardship of operations affecting utility customers and assets whose costs customers bear when paying for utility service. One might conclude from reviewing the Stier Anderson work that NUI EB did violate any reasonable notion of fair dealing, whether or not NUI EB's conduct was that of an "agent." Liberty does not see that question as relevant, however. Adverse consequence resulting from inattention or from a failure by NUI Utilities to require NUI EB to act in accord with good-utility practice should not be borne by customers. Liberty believes that this distinction has much significance in addressing what use the Stier Anderson work ultimately should have in determining the degree to which customers have been harmed by conduct that NUI EB undertook, and

that NUI Utilities allowed by failing to exercise proper control over the utility functions that it permitted NUI EB to perform. Liberty returns to that discussion later in this chapter.

3. NUI EB's Co-op Role

NUI EB, which had an agency relationship with NUI Utilities insofar as ETG was concerned, initially refrained from acting as a principal in providing gas supplies to the NUI LDCs. NUI EB eventually decided, however, that the Co-op's gas-purchasing programs provided a vehicle for NUI EB to begin selling gas to ETG. Co-op members wanted to expand the number of suppliers participating in the purchasing programs. NUI EB wanted additional opportunities for increasing its own margins, especially from its relationships with utility affiliates. The agency agreement offered NUI EB no incremental gain from making or facilitating purchases for the NUI LDCs. It did not even have the 15 percent incentive to shareowners that existed for making off-system sales for ETG.

NUI EB sought Qualified Supplier status with the Co-op in the summer of 2000. NUI EB's interest in that status caused some controversy within the Co-op. Other Co-op members had wholesale marketing affiliates, but only one of those had sought a similar status. The status was granted, but for the limited purposes of making sales from one specific facility. NUI EB's request differed in that it sought the right to participate without limitation. Liberty understands that the other members' concerns about NUI EB focused on the issue of the security of bid information when NUI entities were on both the sending and receiving end of the bid process. NUI EB did, however, on September 29, 2000, gain Qualified Supplier status, which allowed it to participate in reverse auctions for supply to Co-op members. Soon after that date, the Co-op amended its Standards of Conduct. One of the provisions of that document addresses the handling of bid information if a member or one of its affiliates was to be a bidder in a purchasing program.

Washington Gas Light Company (WGL) dropped out of the Co-op, also during the summer of 2000. Two of the original eight members had left previously. Two other significant changes accompanied WGL's departure:

- NUI's Bedminster office became the official address of the Co-op
- An NUI employee became chairman of the Co-op's buying committee.

The address change was significant because of the nature of the Co-op's gas-buying process. Suppliers were not supposed to know which other suppliers, if any, were participating in the process. All of the members of the Co-op, however, had access to all of the suppliers' bid information. The Co-op had used an accounting firm for administrative tasks since beginning its gas-buying program. The accounting firm sent potential suppliers the announcements of each auction. The qualified supplier agreements, however, listed NUI's address as the return address for the completed agreements.

Many suppliers participating in the Co-op purchasing programs knew that several Co-op members had wholesale marketing affiliates. Many suppliers dealt with those affiliates in the course of their own wholesale trading activities. The exception was Washington Gas Light, which did not engage in those activities. Thus, suppliers knew that they were depending on the good faith of the utility companies not to share supplier bid information with their respective wholesale affiliates.

One of the agreements that a Qualified Supplier signed was a Confidentiality Agreement, which bound the parties. The agreement required the utility affiliates who were the recipients of the bid information to maintain in strict confidence all aspects of the bidding and negotiation process. That agreement provided no consequences for breach, however. Washington Gas Light's involvement helped to mitigate some concerns, given its lack of such an affiliate. Having to return materials to a Bedminster address that many suppliers would know to be NUI EB's did not.

With the change in its chairmanship, the buying committee embarked on an experiment with a new process for conducting its auctions. The new process involved conducting auctions over the internet. Suppliers would submit their bids via e-mail. They committed to holding the offers open as binding for an agreed period (15 to 30 minutes) after the close of the auction. Each Co-op member company that wanted to accept a supplier's offer would call the supplier to confirm within the agreed period.

By the fall of 2000, supplier participation in the Co-op's purchasing programs had declined significantly. NUI maintains that the suppliers did not like the on-line auction process, because it forced them to compete with each other. Whatever the reason, NUI Utilities had a difficult time maintaining its rule of insisting on at least three bids prior to accepting one of them.

NUI EB had an active role in NUI Utilities' participation in Co-op auctions. NUI Utilities would receive a "market outlook" from its principal gas-supply manager at NUI EB, on the day that a set of auctions was to be conducted. This outlook included an estimate of the range into which auction prices might be expected to fall, given NUI EB's assessment of current market conditions. If the bids that came later fell within the specified range, NUI Utilities would generally accept them. If not, however, the utility would contact that same NUI EB manager, to ask whether the market had changed. Liberty understood that this contact would take place after bidding had stopped, but prior to the close of the 15- to 30-minute window available to NUI Utilities for accepting or rejecting the bids. If the manager's market assessment had not changed, the utility would generally reject bids outside the specified range.

This process differed on auctions for seasonal supplies. NUI EB was not so directly involved with NUI Utilities on these auctions for longer-term supplies. NUI Utilities would still check with NUI EB before the auctions to get an expected price range. NUI Utilities might not, however, check with NUI EB after receiving the bids, because there was less urgency for a decision. After an NUI person took over the chairmanship of the buying committee, the seasonal auctions were conducted in "rounds". The first round

would be conducted in August or September. There was one more round, for example in the fall of 2001. Two more rounds occurred in October 2002 and 2003.

Liberty examined information that NUI provided about NUI Utilities and NUI EB's participation in Co-op auctions to provide supply to NUI Utilities after NUI EB became an approved supplier. Liberty's review revealed the following:

2001 Auctions for Monthly Supplies

- Half of the 22 auctions held were withdrawn
- The withdrawn auctions generally had none or one participating supplier
- NUI EB won 6 of the 11 that were awarded
- NUI EB was the only bidder in two of the 6 that it won.

2000 Auctions for Winter-Period (November through March or December through February) Supplies

- 19 auctions were held in the fall of 2000
- 3 of them drew none or one bidder, and were withdrawn
- Of the 16 awarded, two drew three bids; the other 14 drew only one or two bids
- NUI EB won three auctions, in one of which it was the only bidder.

2001 Auctions for Winter-Period Supplies

- 19 auctions were held in the fall of 2001, in three rounds
- 8 of them drew none or one bidder, and were withdrawn
- NUI EB was the only bidder in 1 of the 11 awarded; it won that auction
- The maximum number of bidders in the other 10 auctions was 3; most had one or two.

2002 Auctions for Monthly Supplies

- Twelve auctions were held in 2002
- All resulted in an award
- NUI EB won six, including the last four in a row
- Except for the last two, the 2002 auctions generally drew three or four bidders
- The last two drew only two bidders, and NUI EB won both.

2002 Auctions for Winter-Period Supplies

- 30 auctions for winter-period supplies were held in the fall of 2002, in three rounds.
- 15 were withdrawn, mostly in the second round
- Of the ones withdrawn, two had three bidders, the others had two or less
- NUI EB won five of the 15 awarded, with four of those among the eight awarded in the final round
- NUI EB was one of two or three bidders in each of the eight successful auctions in the final round.

2002 Five-Year CGF Auction

- In November of 2002, the Co-op conducted an auction for a five-year supply of gas to CGF
- NUI EB was the only bidder in that auction, yet it was awarded the contract.

2003 Auctions for Monthly Supplies

- 26 auctions were held

- NUI EB did not participate in any of those auctions
- Most drew only one bidder
- 23 of those auctions were withdrawn.

2003 Auctions for Winter-Period Supplies

- 31 auctions for winter-period supplies were held for NUI Utilities, in three rounds
- 15 of those auctions resulted in awards, 16 were withdrawn
- NUI EB bid in only 1 of those auctions, and it won
- The on-line auction process was no longer used; participation increased considerably.
- Most of the successful auctions had at least 4 bidders; some as many as 8.

NUI's representative to the Co-op buying committee had been the manager of gas acquisition for NUI Utilities. His supervisor was NUI EB's Director of Energy (physical) Trading. When NUI EB began participating in Co-op auctions as a supplier, this NUI Utilities employee transferred to NUI EB. He then reported directly to NUI EB's President. Another of NUI EB's traders took over from the former NUI Utilities' employee most of his gas-buying responsibilities for NUI's LDCs in the Northeast and Mid-Atlantic.

NUI reports that NUI EB's remaining employees are not sure who prepared NUI EB's bids for auctions involving NUI Utilities. They believe, however, that it was not the same person who advised NUI Utilities on the day of the auctions regarding market conditions and expected prices. That person was the one who bought most of ETG's gas. The person at NUI Utilities responsible for selecting the winning bids told Liberty that "he could not rule out the possibility that" the two NUI EB traders (the one who advised him on market conditions, and the one who prepared NUI EB's bid) consulted with each other between the time that one of them gave him the expected price range, and the other prepared NUI EB's bid.

NUI EB won a significant number of those competitions to provide supply to NUI Utilities that actually produced an award. NUI EB generally won about half of the ones in which it participated. NUI EB, however, won almost none of the competitions to provide supply to other members of the Co-op, even though it was qualified to bid. The following table summarizes the volumes that NUI EB provided to the NUI LDCs through the Co-op auctions. Information for 2003 is through June.

Table VI.21. NUI EB Co-op Sales to NUI Utilities (MDth)

	1998	1999	2000	2001	2002	2003
Elizabethtown Gas						
From NUI EB	0.0	0.0	0.0	1.0	1.0	4.2
Total Co-op	1.8	3.1	4.1	4.0	11.7	9.4
NUI EB percent	0	0	0	25.4	8.4	45.4
City Gas Company						
From NUI EB	0.0	0.0	0.0	0.8	0.0	0.8
Total Co-op	0.4	0.8	0.7	0.9	0.0	1.6
NUI EB percent	0	0	0	93.0	0	52.3
Elkton Gas						
From NUI EB	0.0	0.0	0.0	0.06	0.0	0.42
Total Co-op	0.0	0.02	0.15	0.46	0.31	0.43
NUI EB percent	0	0	0	13.2	0	96.9
Valley Cities/Waverly						Sold
From NUI EB	0.0	0.0	0.0	0.0	0.0	
Total Co-op	0.0	0.0	0.0	0.2	0.0	
NUI EB percent	0	0	0	0	0	
North Carolina Gas						Sold
From NUI EB	0.0	0.0	0.0	0.0	0.0	
Total Co-op	0.1	0.2	0.02	0.2	0.2	
NUI EB percent	0	0	0	0	0	

The Co-op's buying committee began using the on-line auction process when an NUI EB employee, who had been NUI Utilities' manager of gas supply acquisition, became the committee's chairman. At about the same time, NUI EB entered into an agreement with the Co-op to provide marketing services to the Co-op, acting as its agent. Under this agreement, the NUI EB employee who was chairman of the buying committee was also named director of marketing for the Co-op. This job consisted primarily of promoting other applications of the on-line auction process being used by the buying committee. The Marketing Services Agreement between the Co-op and NUI EB began October 1, 2000, two days after NUI EB became a Qualified Supplier, and ended on September 30, 2002. The Co-op went back to "paper" auctions for seasonal supplies at about the time that the Marketing Services Agreement expired. Supplier participation in Co-op auctions for NUI Utilities increased considerably thereafter.

The NUI EB employee who had such a prominent role at the Co-op told Liberty that he sought to continue use of the on-line auction process. That process had the effect of limiting competition for NUI Utilities' requirements for gas supply. NUI EB had a high success rate in auctions conducted under the on-line process. Liberty believes that its earlier discontinuation would have produced a more robust level of participation, that a more robust level of participation would have been in ETG's interests, and that NUI Utilities should have taken action to require its earlier discontinuation.

The Co-op received small commissions from those who sold gas under its auctions. The proceeds of that commission have gone primarily to cover the Co-op's expenses. Those expenses consist primarily of:

- Salary and benefits of the NUI EB employee who establishes and maintains the Co-op's relationships with approved suppliers, and who sets up each auction

- Royalties to the company that developed the computer software used to conduct the auctions.

The Co-op distributes any Co-op revenues that remain after its expenses are covered. The payments to each member come in proportion to purchases by that member or its affiliates. NUI EB is the NUI entity that participates as a partner in the Co-op. The following table presents NUI EB's share of the Co-op's profits. The payments have been nominal. By agreement with the NJ BPU, 25 percent of these profits are flowed back to ETG's system-supply customers as a credit to the Company's purchased-gas cost.

Table VI.22. NUI EB Share of Co-op Profits

Year	Amount
1995	$6,328
1996	$ (3,431)
1997	$9,878
1998	$ (5,841)
1999	$64,357
2000	$717
2001	$ (9,845)
2002	$ (12,399)

4. NUI Utilities' Measures of NUI EB Effectiveness

Liberty examined how NUI Utilities determined the effectiveness of actions that NUI EB takes on its behalf. The following list includes all evaluative activities reported to Liberty:

- NUI Utilities' vice president and general manager examined a comparison of ETG's purchased-gas cost with those of the other two New Jersey LDCs as filed with the BPU. He reports that ETG's cost was always "in line with" the other two; therefore, he has seen no need to inquire further about the reasonableness of performance.
- NUI Utilities' director of energy planning compared the prices that his LDCs have paid for the gas acquired through the Co-op with published price information "from time to time." He found the prices he paid always in line with the published indexes; therefore he too saw no need for further inquiry about the reasonableness of performance.
- NUI Utilities reported that it continuously oversaw the actions taken by NUI EB, and was actively involved in analyzing and approving any major transactions associated with the management of its gas-supply assets; therefore, it has not found it necessary to conduct formal studies of NUI EB's performance.

Liberty inquired into the loads and gas-supply portfolios of other New Jersey LDCs. Liberty obtained the most recent five-year forecasts for New Jersey Natural Gas Company and South Jersey Gas Company in order to make some comparisons with ETG. The following tables show the results of those comparisons.

Table VI.23. Peak-Day Capacity Mix, FY 2004

Resource (%)	ETG	NJN	SJG
Pipeline capacity	42	48	52
Storage withdrawals	27	34	33
Peaking supplies	32	18	15

Table VI.24. Design Winter Reserve Capacity, FY 2004

Resource (MDth)	ETG	NJN	SJG
Design weather firm load (MDth)	37.2	64.9	26.2
Design weather reserve capacity (MDth)	29.0	43.3	53.6
Reserve capacity/firm load	0.778	0.667	2.046

Supply/Demand Forecasts use the term *Reserve capacity* to identify the amount of delivery capacity that the utility: (a) owns or has under contract, and (b) is over and above the amount required to serve a company's firm load. Reserve capacity is available for on-system interruptible load, for off-system sales, and for capacity releases.

These comparisons place ETG's capacity portfolio within the range defined by the other two companies. All three New Jersey LDCs are attempting to adjust their capacity portfolios in response to changes in their loads. Migration of customers from sales service to transportation services constitutes the primary change factor. The preceding table indicates that New Jersey Natural has moved further than ETG in reducing its reserve capacity. South Jersey has much more reserve capacity than the other two. It anticipates a very large migration between fiscal 2003 and 2004. Liberty believes that available information provides a strong indication that ETG was maintaining capacity on the basis of what it needed for utility purposes. Liberty saw no reason to conclude that ETG's maintaining of capacity was actually intended to provide a source of capacity for NUI EB or NUI Energy's use.

NUI Utilities does, however, appear to have accommodated NUI EB's marketing and trading activities when it could. An example of such accommodation involves ETG. In low to moderate demand periods, ETG can shift up to 5,000 Dth/day between its Columbia and Transco gate stations. It can also shift up to 35,000 Dth/day, or about eight percent of its peak-day supply capacity, between its Texas Eastern and Transco gate stations. NUI Utilities' director of energy planning told Liberty that NUI EB has sometimes requested these displacements during daily gas control meetings. NUI Utilities has granted such requests when load conditions permit. He did not know whether ETG incurred any extra costs when these requests were accommodated. A different gas price or different variable costs of transportation provide examples of the kinds of incremental costs that ETG might bear from granting such requests. Allowing the transfer of use of a utility's asset without firm knowledge that it causes no incremental cost is not consistent with good-utility practice.

D. NUI EB's Performance for ETG

1. NUI EB's Role as Purchasing Agent

The first and most important measure of NUI EB's performance of its responsibilities for the LDCs is in buying gas for them. NUI EB has been responsible for ETG's daily and monthly spot-market purchases as agent for ETG. Table VI.19 earlier in this chapter showed that those purchases have amounted to as much as 66 percent of ETG's supplies in recent years. NUI EB also counsels ETG on its hedging program and it places the hedges pursuant to ETG direction.

Liberty could find no internal evaluation of NUI EB's performance in these roles other than the comparison among New Jersey LDC city-gate gas costs that the NUI Utilities energy planning department has done when the LDCs have made BGSS filings with the BPU. The BGSS filings that form the basis for this comparison actually present estimates of future gas costs, include the effect of hedges, and make adjustments for prior-period over- or under-collections. Liberty does not consider them of significant value in evaluating NUI EB's performance in a structured manner.

Liberty does not have access to other companies' gas-purchase data. Liberty was not able to compare prices paid by ETG to those of other LDCs. Liberty did have access to NUI EB's records of gas purchases for the affiliated LDCs, however, and for its own account. Liberty examined comparable, short-term purchases. Liberty found a strong pattern of higher prices for ETG as compared to itself, when NUI EB made purchases. A later section of this chapter addresses that test work.

2. NUI EB's Role as ETG's Asset Manager

A second important role that NUI EB played for the LDCs is in managing their gas-supply assets. In addition to ensuring deliveries for the LDCs' on-system customers, this role includes management of the LDCs' secondary-market programs, including both off-system sales and capacity releases.

Liberty examined NUI EB's level of placement of ETG capacity in the secondary market. New Jersey LDCs report to the NJ BPU estimates of the amount of capacity available for secondary-market activities. The LDCs also report the amounts of capacity placed through those activities. The table below presents ETG's results for the past several fiscal years. The table presents ETG's reserve capacity estimates, the volume of off-system sales and capacity-release transactions accomplished, and the proportion of the reserve capacity placed through the accomplished transactions.

Table VI.25. ETG Secondary Market Performance (Bcf)

Fiscal Year	Estimated Reserve (1)	Off-System Sales (2)	Capacity Releases (3)	% Used (2+3)/1
2000	21.7	8.6	6.4	69
2001	27.5	15.3	3.0	67
2002	24.1	15.9	5.3	88
2003	26.7	N/A	N/A	N/A
2004	29.0	N/A	N/A	N/A

Liberty compared the reported ETG performance with that of the other two New Jersey gas-only LDCs. Comparisons should be restricted to LDCs operating in New Jersey. Policies regarding secondary-market activities vary from state to state. The table below presents comparisons for the three New Jersey gas-only LDCs.

Table VI.26. Secondary-Market Activities, FY 2002

	ETG	NJN	SJG
Design weather reserve capacity (MDth)	29.0	43.3	53.6
Off-system sales and capacity releases (MDth)	21.2	96.5	68.0
Off-system sales and releases/reserve capacity	0.731	2.23	1.27

New Jersey Natural Gas generates a much larger volume of off-system sales and capacity releases relative to its capacity available for such transactions. South Jersey Gas's off-system sales and capacity releases show a less pronounced, but similar result. The three companies' gas-supply portfolios are not the same; therefore, their opportunities for secondary market transactions differ as well. For example, reserve capacity is available for both secondary market activity and interruptible sales. The comparisons in the preceding table do not include interruptible sales. Interruptible sales using LDC pipeline capacity, however, are relatively small for all three of these LDCs, because most interruptible customers have their own capacity upstream of the LDC's city gates. There thus exist limits on comparisons using this information. The table does, however, provide a general indicator that the other two New Jersey gas-only LDCS are making more use of their available capacity than ETG does. Alone it would have little significance. To the extent that other indicators prove corroborative, it merits at least some consideration.

NUI Utilities provided Liberty with its own analysis of NUI EB's performance in the secondary market. The Company's analysis, taken from the four New Jersey LDCs' BGSS Filings for the BGSS year October 1, 2003 through September 30, 2004, shows that ETG's fixed costs per therm are the lowest among the three New Jersey gas-only LDCs. This comparison is net of on- and off-system sales credits. The following table shows that analysis. Liberty believes that the Company's analysis does not contradict the indicator noted in Liberty's immediately preceding discussion. Line 5 of the table shows off-system credits as a percent of total fixed costs. It shows revenues from secondary-market activities. ETG's recovery of its fixed gas-supply costs through off-system credits is less than a third of the recovery of the other two LDCs.

Table VI.27. NUI Comparison of Unit Fixed Costs

	Item	ETG	NJN	SJG
1.	Fixed supply costs	$44,977,000	$93,476,000	$49,498,951
2.	Firm sales (therms)	318,781,800	549,539,000	210,500,000
3.	(1)/(2)	$0.1411	$0.1701	$0.2351
4.	Off-system credits	$2,241,209	$14,786,000	$8,900,163
5.	(4)/(1)*100 (%)	5.0	15.8	18.0
6.	(1)-(4)	$42,735,791	$78,690,000	$40,122,832
7.	(6)/(2)	$0.1341	$0.1432	$0.1906
8.	On-system credits	$9,262,390	$4,292,000	$6,930,006
9.	(8)/(1)*100 (%)	20.6	4.6	14.0
10.	(6)-(8)	$33,473,401	$74,398,000	$33,192,826
11.	(10)/(2)	$0.1050	$0.1354	$0.1577

Liberty did not find the fixed-cost-per-therm data useful for assessing off-system sales. That figure is substantially affected by issues such as:

- Proportion of peaking capacity in peak-day supply mix (ETG's is higher)
- Load factor (ETG has more industrial, higher-load-factor customers)
- Vintage of contracts for pipeline capacity.

The relevant data on the question of NUI EB's performance in producing secondary-market margins is not fixed costs per therm, but how much of available secondary-market revenue NUI EB produces. As a percentage of fixed supply costs, ETG's amount is comparatively very low. In total magnitude it is comparatively even lower.

3. Transaction Analysis: Differences in NUI EB and ETG Prices

Liberty tested actual NUI EB purchase and sale transactions to examine the issue of structural conflicts that arise from NUI EB's buying and selling of gas for its own account at the same time that it does so for ETG. The same NUI EB traders bought and sold gas for both entities. Until recently, the NUI EB trader decided whose account should be credited with any particular transaction. The work of Liberty and the two groups who have examined NUI EB performance for NUI demonstrate that those decisions could be and were often made well after the fact.

A counter-party might prefer to do business with either ETG or NUI EB, for reasons such as perceived credit risk. It might also charge a higher price for sales to an entity with a relatively greater perceived risk. Until February of this year, however, NUI's confirmation paperwork and billing did not distinguish between ETG and NUI EB. Other information corroborates a lack of distinction by traders between NUI EB and ETG as the party being represented by NUI EB in a transaction. A trader therefore had the ability to attribute a transaction to one or the other without adequate controls to prevent the practice. As the following paragraphs discuss, the evidence is that traders did so.

Liberty used gas sales transaction data from NUI EB to perform an initial examination of the distribution of ETG and NUI EB sales prices in comparison to each other. At the time it began this examination, Liberty understood the potential for favoritism, but had not yet seen enough information to confirm or deny its existence. Liberty obtained data for fiscal years 2000, 2001, 2002 and 2003. The data then available ran only through

March, 2003. Liberty selected a summer and a winter month for each year (July and January) for its first-cut analysis. Liberty filtered all sales for those months, in order to produce comparable sales transactions. The specific conditions that Liberty used to filter the data included:

- Common date for agreeing to the sale
- Common beginning and ending dates for the gas that flowed under the sale
- Common delivery points for the gas that flowed under the sale.

Liberty considered time of day as another potentially relevant filter. NUI EB's records, however, do not contain information that identifies the time of day when traders made transactions. In addition, Liberty saw no reason for concluding on a "going-in" basis that this variable would be other than random in any event.

Liberty then compared the prices that NUI EB produced for ETG sales and that NUI EB produced for sales for its own account. Liberty's comparison sought to determine whether the differences varied from a random distribution; *e.g.*, a third higher, a third lower, and a third equivalent. Liberty's review showed results that clearly were not random. Much more than a third of the transactions produced lower sales prices for ETG, as compared with the sales prices that NUI EB generated for its own gas. Generally, the cases where ETG received a lower price constituted an absolute majority of the common transactions. When Liberty removed those sales where prices proved equivalent, the data showed that the cases where ETG received the lower price outnumbered those where NUI EB received the lower price by many times. Liberty found therefore, that, for sales made at the same time, for the same delivery periods, and at the same delivery points, NUI EB received greater value from the marketplace for its own gas sales than it received for sales of gas for ETG's account.
Liberty also compiled the data from which to determine whether a similar pattern exists in the case of NUI EB non-term (*i.e.*, reported to be less than a month in duration) purchases for ETG and for itself. This examination is also important, because the same structural conflict and opportunity exists, and because NUI EB secures a relatively large proportion of the LDCs' supply in short-term spot markets. Liberty's sample purchase analysis found a strong predominance of higher-priced NUI EB purchases for ETG. As a result, Liberty proceeded to investigate whether the pattern found was representative and whether, assuming it was, there existed sound business reasons to support it.

Liberty discussed the pattern in the gas sales data with NUI Utilities' director of energy planning and with NUI EB's director of energy trading, in order to determine if any systemic reasons should produce the pattern that Liberty's preliminary analysis identified. NUI Utilities' representative was unaware that the pattern existed. He could think of no reason why ETG's gas should show such a pattern of lower prices. He also said that the discovery of such a pattern was beyond the information available to him. He stated that NUI EB permitted him access to NUI Utilities transaction data. He said that he did not have access to data for transactions that NUI EB conducted for its own account.

The NUI EB representative presented several possible reasons for the differences. None of them proved explanatory. The variables cited consisted mostly of ones that over time would be as likely to produce relatively lower prices as frequently as they would to produce relatively higher prices for ETG gas sales. Moreover, the principal explanation offered proved to be at odds with what NUI EB traders had entered in the applicable fields on forms used to record their transaction details (so-called "deal tickets"). It later also proved, based on Liberty's familiarity with the Stier Anderson work, to be at odds with how NUI EB traders conducted business with counter-parties.

NUI EB did not at that time apply effective controls for preventing post-hoc changes to the deal tickets that traders used to record transaction details. Liberty in fact observed frequent changes to material transaction details. Moreover, NUI EB at that time also failed to require immediate trader recording of transaction details. Therefore, even unchanged documents were not free of concern. For example, traders could and apparently did frequently complete them after the conclusion of trading for the day. This lag meant that a trader's unchanged transaction might still represent an after-the-fact selection of the selling party.

Liberty had intended to continue its interviews and investigation, but became concerned about document integrity on the basis of statements made by an interviewee. Liberty therefore approached the NUI Controller to seek assistance in securing the underlying documents for later, more detailed review. It was necessary to explain Liberty's work to date in sufficient detail to the Controller to demonstrate the need to secure documents that NUI EB used in its operations and that remained exposed to further alteration. That explanation convinced the NUI Controller that NUI might need to conduct its own examination.

The Controller contacted PricewaterhouseCoopers in order to determine what Company actions might prove appropriate to the circumstances. Almost immediately, PricewaterhouseCoopers extended its audit procedures in this area. Liberty, the BPU project manager for this focused audit, NUI's Controller, and PricewaterhouseCoopers agreed that simultaneous continuation of Liberty's field work and PricewaterhouseCoopers' examinations could prove cumbersome. Liberty agreed to defer its field work, provided that it was satisfied with the scope of the PricewaterhouseCoopers work, and further provided that Liberty would have access to the results of that work.

The goal was, where possible, to allow Liberty eventually and in its sole judgment to decide whether to rely on the facts and analyses produced by examinations undertaken for the Company. The Company gained the ability to move more expeditiously toward the completion of its annual audit activities, and to avoid the added burden of supporting two significant, parallel audit efforts.

Liberty provided PricewaterhouseCoopers with a summary of its work and observations to date, including its preliminary analysis of the sample data. PricewaterhouseCoopers gave Liberty several updates on its progress, and shared its workpapers with Liberty.

Those workpapers included notes of interviews, reviews of audio taped trader conversations, and a number of transaction data analyses.

PricewaterhouseCoopers preliminary work also indicated the existence of the overall pattern that Liberty had observed in common sales transactions. Moreover, PricewaterhouseCoopers also heard trader statements in interviews and in audio taped phone conversations that Liberty found to raise questions of potentially severe impropriety. By this time, Liberty concluded that there was sufficient evidence to merit detailed examination of the following types of attitudes or conduct that could be adversely affecting costs that ETG recovered from customers:

- A significantly greater focus by NUI EB traders on NUI EB sales than on ETG sales, because of the recognition that NUI would keep the full 100 percent of margin that sales for NUI EB's account would produce, as compared with the 15 percent left for NUI after customers received the 85 percent required by the BPU on sales for ETG's account.
- A significantly lower hurdle rate for ETG sales than for NUI EB sales, in the sense that a trader would try to maximize NUI EB margins, while focusing in the case of ETG merely on assuring that any positive margin was obtained.
- The belief that getting ETG the best price in the market was not the performance standard, but that it was only necessary to avoid causing ETG a net loss in a transaction when made contemporaneously or in a redesignation of transaction parties after the fact.
- The creation of an expectation among at least some counter-parties that NUI EB would be prepared to sell them ETG gas for less than NUI EB gas.
- Potentially extensive use of "sleeving," which consisted, for example, of the practice by which NUI EB arranged to sell utility gas to a counter-party, and then buy it back essentially immediately at a very small mark-up from that same party in NUI EB's own name, and then sell the gas to a third party at significantly higher prices.
- Encouragement of reluctant counter-parties to sleeve by noting that it could not be found out by an examination of NUI EB's EMS records.
- Changing deal tickets after the close of the trading day, but before the deal tickets were entered into the EMS, when NUI EB had an unfavorable day overall, in order to shift profits from ETG to NUI EB to mitigate NUI EB losses.

It was not long into the PricewaterhouseCoopers examination when the Audit Committee of the Company's Board of Directors ordered a further investigation of NUI EB's operations and business practices by the law firm of Stier Anderson, LLC. That investigation continues as this report is being written. As was true of the PricewaterhouseCoopers work, Liberty has had continuing access to the data, analysis, and observations of this second team of investigators working for the NUI board's Audit Committee.

NUI's assignment of an investigative firm to the matter added to Liberty's already significant concern about the potential for a broad and quite possibly deliberate effort to deprive ETG of the kind of service that it should have expected from NUI EB, and that

the BPU would expect of ETG. Liberty found even more worrisome the fact that NUI EB personnel, who served as the principal trading group, refused to be interviewed by the Stier Anderson team. Liberty had ceased its field work in order to allow for first one and now another examination by teams working for NUI to seek explanations for the patterns that Liberty's preliminary analysis first uncovered. Their work, however, did not lead to satisfactory explanations for the price variances at issue.

Liberty decided that the continuing lack of satisfactory explanations from NUI EB personnel warranted a resumption of Liberty's own work. Liberty has now examined the transcripts of the Stier Anderson team interviews in detail. Liberty and the Stier Anderson team have also shared numerical analyses of transactions. Liberty conducted several hours of interviews with senior NUI EB employees, and continued an examination of transaction data. Subsequently, Stier Anderson's investigation uncovered a pattern of sleeving transactions.

Liberty then progressed from a sample of common sale and purchase transactions to an analysis of all such transactions for the period from fiscal 1999 through 2003. The following table presents the results of this more extensive comparison.

Table VI.28. ETG/EB Common Sale Prices

Fiscal Year	ETG Higher	EB Higher	Match	Number
1999	14.96%	37.80%	47.24%	127
2000	12.99%	49.15%	37.85%	177
2001	10.19%	70.37%	19.44%	324
2002	12.20%	74.02%	13.78%	508
2003	25.48%	61.15%	13.38%	314
Total	12.06%	65.05%	22.89%	1136

Liberty required "common" sales transactions to have matching obligation type, and matching commitment date, flow-start date, flow-end date, and transfer (delivery) point. Liberty excluded affiliate transactions, *i.e.* transactions among ETG, NUI EB and NUI Energy. Liberty also eliminated EMS balancing accounts for the various pipelines that transport the gas. Liberty's analysis of all comparable transactions continued to show what Liberty found from its earlier sampling. Specifically, NUI EB obtained in a disproportionate number of cases a higher price for its gas sales.

Purchase transactions remained an issue for Liberty as well. NUI EB generally bought gas to sell it to someone else. An NUI EB trader could make a greater margin for NUI EB by buying gas at a lower price. On reselling it, the spread between the purchase and the eventual sale price would become larger, thus increasing the margin for NUI EB.

The tactic of sleeving was a principal margin-diverting opportunity for purchases as well as for sales. NUI EB could arrange to buy gas from a third party. NUI EB could then sell the gas to another third party at a significant mark-up. NUI EB could also arrange then to have the third-party re-sell the gas to ETG at a very small mark-up. Acting on ETG's behalf, NUI EB could just as well have arranged for the first third party to sell directly to ETG at the low price. Doing so, in Liberty's judgment, is what NUI EB was

hired to do. Even if it was not, it is clear that the duty on ETG was to hire someone to do precisely that. The sleeving approach simply would not comport with good-utility practice. Its sole effect would be to increase customer costs for the purposes of providing a margin for NUI EB. Sleeving on the sale side has the same effect and it is similarly indefensible as an effective and efficient utility practice. Moreover, it not only fails to meet the prudence standard. Depending on how it was executed, it could constitute an intentionally deceptive and, from the utility perspective, intentionally harmful practice.

Liberty conducted an analysis of all common purchase transactions for the same five fiscal years covered by its sales analysis. Liberty used similar methods, filters, and exclusions. Liberty also excluded purchases that constituted "term" transactions, *i.e.*, transactions of 30 days' or greater duration. Those transactions are more likely to have accompanying hedges, which may make direct comparison of prices problematic. Moreover, longer-term utility versus NUI EB purchasing philosophies and practices were more likely to diverge. The following table presents the results of Liberty's analysis of non-term purchases by NUI EB for ETG and for itself.

Table VI.29. ETG/EB Common Purchase Prices

Fiscal Year	ETG Lower	EB Lower	Match
1999	7%	66%	27%
2000	11%	60%	29%
2001	13%	69%	17%
2002	13%	69%	18%
2003	22%	65%	14%
Total	13%	66%	21%

The results showed the same pattern as that observed for sales by NUI EB for itself and for ETG. Specifically, NUI EB produced more favorable prices for its own purchases with much greater frequency than it did for ETG.

4. Explanations for Observed Price Differences

NUI EB personnel gave Liberty three possible explanations for the patterns in the transaction data.

The first explanation focused on relative differences in the time of day that NUI EB made sales for itself and for ETG. NUI EB personnel stated that, for utility city-gate sales, ETG would generally be selling excess supply. This phenomenon often put ETG in the market at the same time of day; *i.e.*, as soon as it had completed comparing its estimate of load for the next day with its available supplies. Knowing this fact would alert counter-parties that, at a certain time of the day, the utility was selling if it had excess supply. The reasoning offered to Liberty was that counter-parties would know the utility would likely accept a lower price, because of pressure to dispose of excess supply. NUI EB's business kept it in the market throughout the trading day, which, NUI personnel said, allowed NUI EB to wait for prices to improve before selling.

Liberty noted in interviews that this explanation appeared to require a consistent, predictable intra-day market direction. To the extent that there were roughly equal probabilities that market prices for gas would be about as likely to go down over the course of the trading day as they would be to go up, the time-of-day effect would "wash out" over time. Put another way, if the market could be reliably counted on to act in a particular way at a particular time of day, then it would not take great experience or knowledge to know whether to enter it or to stay out of it at that particular time. NUI EB personnel abandoned reliance on this explanation. Liberty's examination of trading documentation also indicated that there was no consistent sequence pattern to NUI EB and to ETG sales. Some NUI EB sales came before NUI Utilities sales. Liberty also observed from its preliminary work that sales for NUI Utilities' account occurred throughout the trading day. Liberty did not find them to be limited to a particular time slot every day. To Liberty's knowledge, neither NUI-commissioned examination has found support for the time-of-day explanation either. Liberty therefore did not accept it as a valid explanation for the preponderance of prices relatively more favorable to NUI EB.

The second explanation offered by NUI EB personnel focused on the nature of the underlying obligation. NUI EB personnel argued that a high percentage of NUI EB's sales were firm, while a similarly high percentage of sales for ETG were "less than firm"; *i.e.*, interruptible or priority interruptible. NUI EB personnel drew a direct correlation between the higher firmness and higher price. The rationale was that the higher value on delivery likelihood, and the risk of compensatory damages due on failure to deliver, command a higher price in the marketplace.

A senior NUI EB representative provided an analysis showing the obligations that NUI EB and ETG took on in making sales to third parties. NUI EB used seven obligation categories in coding its transaction data for entry into the EMS. This NUI EB analysis considered them to fall as follows in order of descending firmness:

- EFP (exchange for physical) means the purchase, sale or exchange of natural gas as the "physical" side of an exchange for physical transaction involving gas futures contracts. EFP incorporates the meaning and remedies of "Firm Fixed."
- FF (firm fixed) means the purchase and sale of a fixed quantity of gas on a daily basis for a specified period where either party may interrupt its performance without liability only to the extent that such performance is prevented for reasons of force majeure; provided, however, that during force majeure interruptions, the party invoking force majeure may be responsible for any imbalance charges related to its interruption after the nomination is made to the transporter and until the change in deliveries and/or receipts is confirmed by the transporter. Firm Fixed is an obligation type under a GISB or NAESB contract.
- FB (firm base-load) has the same meaning as "Firm Fixed." However, Firm Baseload is an obligation type under NUI/NUIEB's "Base Agreement for the Sale and Purchase of Natural Gas" also known as the "Buy/Sell Contract." The Buy/Sell Contract was developed and used by NUI/NUIEB prior to the industry wide acceptance and adoption of the GISB form of contract. Most Buy/Sell

Contracts were superseded by GISB contracts, but some Buy/Sell Contracts are still in effect.

- FS (firm swing) means the purchase and sale of a variable quantity of gas between a minimum and a maximum quantity during a specified period, at the election of a designated party by a specified deadline, where either party may interrupt its performance without liability only to the extent that such performance is prevented for reasons of force majeure; provided, however, that during force majeure interruptions, the party invoking force majeure may be responsible for any imbalance charges related to its interruption after the nomination is made to the transporter and until the change in deliveries and/or receipts is confirmed by the transporter. Firm Swing is an obligation type under a Buy/Sell Contract.
- FV (firm variable) has the same meaning as "Firm Swing," but is an obligation type under a GISB or NAESB contract.
- I (interruptible) means that either party may interrupt its performance at any time for any reason, whether or not caused by an event of force majeure, with no liability, except such interrupting party may be responsible for any imbalance charges related to its interruption after the nomination is made to the transporter and until the change in deliveries and/or receipts is confirmed by the transporter.
- PI (priority interruptible) means that either party may interrupt its performance at any time for any reason, whether or not caused by an event of force majeure, with no liability, except for reason of having obtained a more favorable purchase or sales price. In the event a party interrupts the transaction for reason of price, the remedies related to a Firm Fixed or Firm Baseload transaction shall apply, otherwise, such interrupting party shall only be responsible for any imbalance charges related to its interruption after the nomination is made to the transporter and until the change in deliveries and/or receipts is confirmed by the transporter.

As reported to Liberty, this NUI EB analysis found NUI Utilities' sales identified as EFP, FF or FB (the most-firm categories) to represent only 14 percent of sales for NUI Utilities. The same analysis suggested that 60 percent of NUI EB sales for its own account fell into those same, relatively more firm, categories.

Liberty performed a similar analysis for fiscal 1999 through 2003. Liberty excluded transactions among NUI affiliates from this analysis. Liberty obtained different results. Liberty's results are presented in the table below.

Table VI.30. Sales Transactions by Obligation Type

	FY 1999		FY 2000		FY 2001		FY 2002		FY 2003	
Obligation	**ETG**	**NUIEB**	**ETG**	**NUIEB**	**ETG**	**NUIEB**	**ETG**	**NUIEB**	**ETG**	**NUIEB**
EFP	0.33%	6.29%	0.00%	0.19%	0.10%	0.00%	0.00%	0.04%	0.22%	0.00%
FB	1.21%	6.23%	5.25%	4.21%	1.20%	1.50%	1.03%	2.82%	0.00%	2.79%
FF	9.12%	29.72%	18.59%	28.81%	21.06%	39.02%	11.90%	22.49%	2.59%	20.07%
FS	16.70%	12.40%	15.66%	15.28%	12.24%	9.08%	13.71%	9.15%	8.84%	9.54%
FV	36.70%	27.52%	33.13%	39.87%	40.22%	31.63%	55.24%	55.65%	79.74%	55.63%
I	1.87%	1.25%	2.53%	0.50%	1.60%	1.96%	1.42%	5.40%	3.02%	8.47%
NA	0.00%	0.00%	0.10%	0.19%	0.30%	0.00%	0.13%	0.07%	0.00%	0.08%
PI	33.30%	16.07%	23.94%	8.99%	21.26%	14.38%	16.30%	3.43%	5.60%	2.86%
PEAKING	0.11%	0.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
FIRM (electric)	0.00%	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S	0.00%	0.12%	0.00%	1.95%	0.00%	2.42%	0.00%	0.95%	0.00%	0.57%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total Annual Transactions	2590		2572		2507		3603		3085	
	FY 1999		**FY 2000**		**FY 2001**		**FY 2002**		**FY 2003**	
Obligation	**ETG**	**NUIEB**	**ETG**	**NUIEB**	**ETG**	**NUIEB**	**ETG**	**NUIEB**	**ETG**	**NUIEB**
FIRM:										
EFP+FB+FF	10.66%	42.23%	23.84%	33.21%	22.37%	40.52%	12.94%	25.35%	2.80%	22.85%
INTERUPTIBLE:										
FS+FV	53.41%	39.92%	48.79%	55.16%	52.46%	40.72%	68.95%	64.80%	88.58%	65.17%
I+PI	35.16%	17.32%	26.46%	9.50%	22.87%	16.34%	17.72%	8.83%	8.62%	11.33%
Total Interuptible:	88.57%	57.24%	75.25%	64.65%	75.33%	57.06%	86.68%	73.62%	97.20%	76.50%

	FY1999-FY2003	
Obligation	**ETG**	**NUIEB**
FIRM:		
EFP+FB+FF	16.33%	30.97%
INTERUPTIBLE:		
FS+FV	59.44%	55.72%
I+PI	24.08%	12.09%
Total Interuptible:	83.53%	67.80%

Liberty found that NUI EB did apply the three more-firm designations (EFP, FB and FF) more frequently for its own sales than it did for sales of ETG gas. The difference, however, is not pronounced. Furthermore, the frequency with which NUI EB received the higher sales price notably exceeds the frequency with which NUI EB sales received the "firmer" obligation designations. This gap is not only true when comparing to Liberty's obligation analysis. It is true of the NUI EB analysis reported to Liberty. There remained nevertheless the possibility of at least a weaker correlation between obligation type and sale price. Liberty therefore performed another analysis of the sale price gap discussed earlier in this section of the report. Specifically, Liberty's previous analysis did not filter by obligation type. Liberty now added this filter to the analysis, and performed it again for fiscal 2001, in order to examine the potential for the correlation identified in the NUI EB analysis. The following table shows the results of this revised analysis.

Table VI.31. 2001 Sales by Obligation Type

	ETG Price Higher	EB Price Higher	Price Match	Total
Firm Fixed	8.54%	74.39%	17.07%	24.55%
Firm Swing	15.38	53.85	30.77	3.89%
Firm Variable	14.55	64.85	20.61	47.31%
Interruptible	0	83.33	16.67	1.80%
Priority Interuptible	5.88	79.41	14.71	19.46%
Total	10.19%	70.37%	19.44%	100%

These results show that the frequency with which NUI EB secured higher prices for its own sales does not significantly change when adjusted for obligation type. The data do not show a correlation between obligation type and sale price.

There is also substantial evidence that the marketplace did not perceive a difference in delivery assurance as between NUI Utilities and NUI EB gas. For example, the personnel who scheduled delivery for both NUI EB and NUI Utilities sales for delivery on the interstate pipeline systems told Liberty that there was no difference between the delivery obligations of the two sellers. Their observation was that virtually all sales for both entities were from their perspective firm. Moreover, Liberty's review of the workpapers of and discussions with the two firms that have conducted examinations of NUI EB for NUI disclosed no substantial support for the conclusion that delivery obligation was a material factor in the negotiations between NUI EB traders and those who purchased gas from NUI EB when selling for itself or ETG.

The third explanation that NUI EB personnel offered to explain the higher prices obtained for NUI EB's gas related to "risk orientation." NUI EB personnel argued that NUI EB and NUI Utilities had materially different tolerances for market risk. NUI EB personnel told Liberty that its traders would sell the utility's gas as soon as they knew that they could get a positive margin. For example, if the market-area price exceeded the sum of production-area price and variable transportation costs, the trader would buy in the production area and sell in the market area. By transporting the gas on pipeline capacity already under contract to the utility, NUI Utilities would succeed in making some recovery of its fixed transportation costs.

NUI EB personnel told Liberty that NUI EB operated differently. Its purchases and sales were generally in the market area, and both involved some speculation. NUI EB did not generally come to a sale opportunity with the required supply already committed. NUI EB generally needed to find a supply that it could obtain at a price sufficiently lower than what a potential sale promised. Conversely, if NUI EB's traders thought that the price was going up, they might buy some gas first and then look for a market. In both cases, rather than take any small margin available immediately, the traders might "hold the position" to find the largest margin available in the market.

NUI EB representatives told Liberty that this difference in orientation toward risk arose as a matter of policy. Liberty was told that speculative trading was considered outside the range of activity appropriate for a public utility company.

Liberty did not, however, find this explanation persuasive. Liberty issued data requests seeking procedures and policies related to gas supply. Liberty did find some general guidance by NUI Utilities to NUI EB for the conduct of the utilities' secondary-market programs. Liberty also interviewed the NUI Utilities' director of energy planning. He was generally responsible for NUI Utilities' monitoring of NUI EB activities in support of utility operations. He, for example, had authorized the guidance document that does exist. He knew of no guidance to NUI EB of the nature described by NUI EB personnel.

Moreover, even the guidance document that does exist (discussed in the preceding paragraph) does not adopt a policy of the type cited. It sets forth detailed decision rules for determining when the utilities' capacity could be offered into secondary markets. It also offers detailed guidance for accounting for any such transactions. It contains, however, no requirements or even suggestions that NUI EB should limit its search for margins due to risk. Its only seemingly relevant language instructs NUI EB "… to obtain the best price that the market will support at that time" for the utility's assets.

NUI Utilities told Liberty that it retained NUI EB as its agent for gas-supply activities because of NUI EB's gas-market expertise. NUI Utilities could have performed the function internally, by retaining an outside third-party or through an affiliate. In any of these cases, good-utility practice and prudence require the use of a competent, capable, and experienced group. Meeting this burden clearly requires the possession of sufficient expertise to make timely and informed assessments of risk. A proper exercise of NUI EB's responsibilities includes the taking of limited risks in pursuit of optimizing returns from the gas-supply portfolio paid for by NUI Utilities' customers. Indeed, in this case, not to take appropriate risks would have resulted in sacrificing part of the value of NUI Utilities' portfolio.
Liberty understands the need for utilities to avoid untoward risks at customer expense. Liberty also understands the corresponding rewards that shareowners should receive when they underwrite such risks. It is important to observe, however, that the primary operations here concern the short-term natural gas marketplace. The sometimes-vast risks that can accompany long-term obligations for very large amounts of gas are not the same here. For the most part, NUI EB was being asked to use marginal amounts of resources across sharply limited periods of time. It is reasonable to expect NUI EB to bring more than a rote, formulaic approach to business of this type. Clearly, this has been the BPU's expectation as well. The BPU allows shareowners to take a 15-percent share of off-system sale margins. The incentive it intends is certainly not to do what it would take little or no experience to do. The incentive is to provide a value of service that equals or exceeds the amount shared.

Finally, as with the other two explanations offered by NUI EB personnel, Liberty found information that does not comport with this explanation. What Liberty learned about how NUI EB's traders actually conducted comparable NUI EB and NUI Utilities businesses does not show the difference asserted. Therefore, Liberty found that the assertion about risk orientation did not explain the predominance of higher prices for NUI EB sales in comparable transactions.

E. Cost Responsibility and Allocation

In the regulatory framework prescribed by the BPU, ETG was required to treat NUI Energy, its retail marketing affiliate, like any other marketer. The other states in which NUI Energy operated had generally similar regulatory requirements. The cost and other aspects of the relationships between the various divisions of NUI Utilities and NUI Energy were therefore generally governed by each LDC's tariff. NUI Utilities and NUI Energy had little to do with each other except for the standard utility/customer

relationship. NUI Utilities acted as a provider of services, such as gas delivery and metering. NUI Energy was a customer for those services.

The relationship between NUI Energy and NUI EB was less constrained. NUI EB provided all of NUI Energy's gas, and delivered it to places and in quantities that NUI Energy specified. NUI EB recovered its costs through the prices that it charged to NUI Energy. NUI Energy recovered its costs in the prices that it charged to its customers. Liberty found no written agreement between NUI EB and NUI Energy.

The gas supply agency agreement governed the relationship between ETG and NUI EB. That agreement obligated NUI EB to provide gas procurement and asset-management services, acting as ETG's agent and at no cost to ETG. The agreement provided that NUI EB could perform other tasks for ETG, with compensation to be negotiated between the two.

1. Gas Supply Costs

Each NUI Utilities LDC has its own gas-supply portfolio, including contracts for transportation and storage capacity, and some term gas-supply contracts. Supply contracts obtained through the Co-op auction process go out for bid, and get awarded for each LDC individually.

NUI EB also had its own gas-supply portfolio. It consisted mostly of pooling and interruptible transportation contracts. NUI very substantially curtailed NUI EB's entry into new agreements during the severe financial constraints of 2003. NUI EB has not been released from those constraints.

NUI EB generally bought its gas in short-term markets when NUI had the financial capacity to allow it to operate at full force. NUI EB did not make widespread use of term gas-supply contracts. The exception to the "own-contracts" rule was a WSS storage contract on the Transco system. This contract was assigned to ETG when Transco unbundled its system in response to the FERC's Order 636. ETG found that it could do without this particular storage in order to serve its system-supply customers. NUI EB saw value for its operations in storage capacity at that location, however. NUI EB therefore began to use the storage, and took over responsibility for its costs. The third-party now managing ETG's gas-portfolio assets is expected to move control of this asset back to NUI Utilities this coming spring.

The agency agreement between ETG and NUI EB required that ETG transfer funds to NUI EB, and that NUI EB pay all third-party gas-supply costs on ETG's behalf. In practice, the single NUI cash-pool formerly used meant that transactions between NUI EB and the LDCs took place through debits and credits to their respective accounts in the NUI general ledger. There existed no contract provision, but the same payment arrangements applied to NUI Energy's purchases of gas from NUI EB.

2. Personnel Costs

Most of the people who work for NUI Utilities are attached to one of the individual LDCs. In those cases, the LDC involved bears direct responsibility for the costs. Energy planning, including gas control, has taken place on a centralized basis, however. NUI Utilities must therefore allocate its costs to the LDCs. NUI Utilities energy planning consisted of the director and three other people. Until termination of the arrangement with NUI EB, all were located at the Bedminster facilities. NUI Utilities had eight people in gas control all of whom were located at ETG's headquarters in Union. As noted earlier, energy planning pays for another five people who work for NUI EB, three in operations (transportation and exchange) and two in nominations and scheduling.

NUI EB reported that it had about 35 people, including the five from NUI Utilities. Six NUI EB people worked in operations. These six included three of the five NUI Utilities people assigned to NUI EB. This NUI EB operations staff of six managed that function for NUI EB's purchases and sales for its own account, all three LDCs, NUI Energy, and at least one unaffiliated asset-management client. That client is Valley Energy. It is the gas-supply affiliate of the small Pennsylvania/New York distribution company that NUI sold in late 2002. NUI EB used four additional people to trade physical natural gas. Another four analyzed and traded financial instruments. These two groups of four also did business for all of the same entities. Four NUI EB people supported EMS. NUI EB maintained and used EMS for the benefit of all of the same entities. Most of the rest of NUI EB's employees served in various executive or support functions, again for the benefit of NUI EB itself, its four affiliates, and one unaffiliated client.

NUI reported to Liberty that NUI EB employed in fiscal 2003 a total of 16 individuals that performed various levels of service for NUI Utilities, but for which NUI EB was receiving no direct compensation. NUI's last competitive services auditor found that these services represented a cross-subsidy of ETG by NUI EB. Liberty does not agree that NUI Utilities subsidized NUI EB. Liberty examined not just the question of common resource use, but of all interactions between the two affiliates. Liberty concluded that NUI EB received substantially more value from ETG than it returned.

NUI Energy had 16 sales people in various locations in order to be near the customers that they served. NUI Energy also managed its own "back-office" functions of billing, credit, and collections. NUI Energy recovered the cost of those people and functions out of the margins that it made on gas it sold. NUI EB was compensated for managing the delivery of all of NUI Energy's gas in the prices that it charged NUI Energy for the gas.

F. Counter-party Credit

1. Utility Gas Acquisition

Chapter Four of this report addresses the debt-rating agencies' linkage of NUI Utilities' credit with that of the parent. The downgrades in NUI Utilities' credit rating that occurred as a consequence of that linkage prompted its suppliers to begin demanding payment in advance for gas supplies. Additional, similar demands continued through the

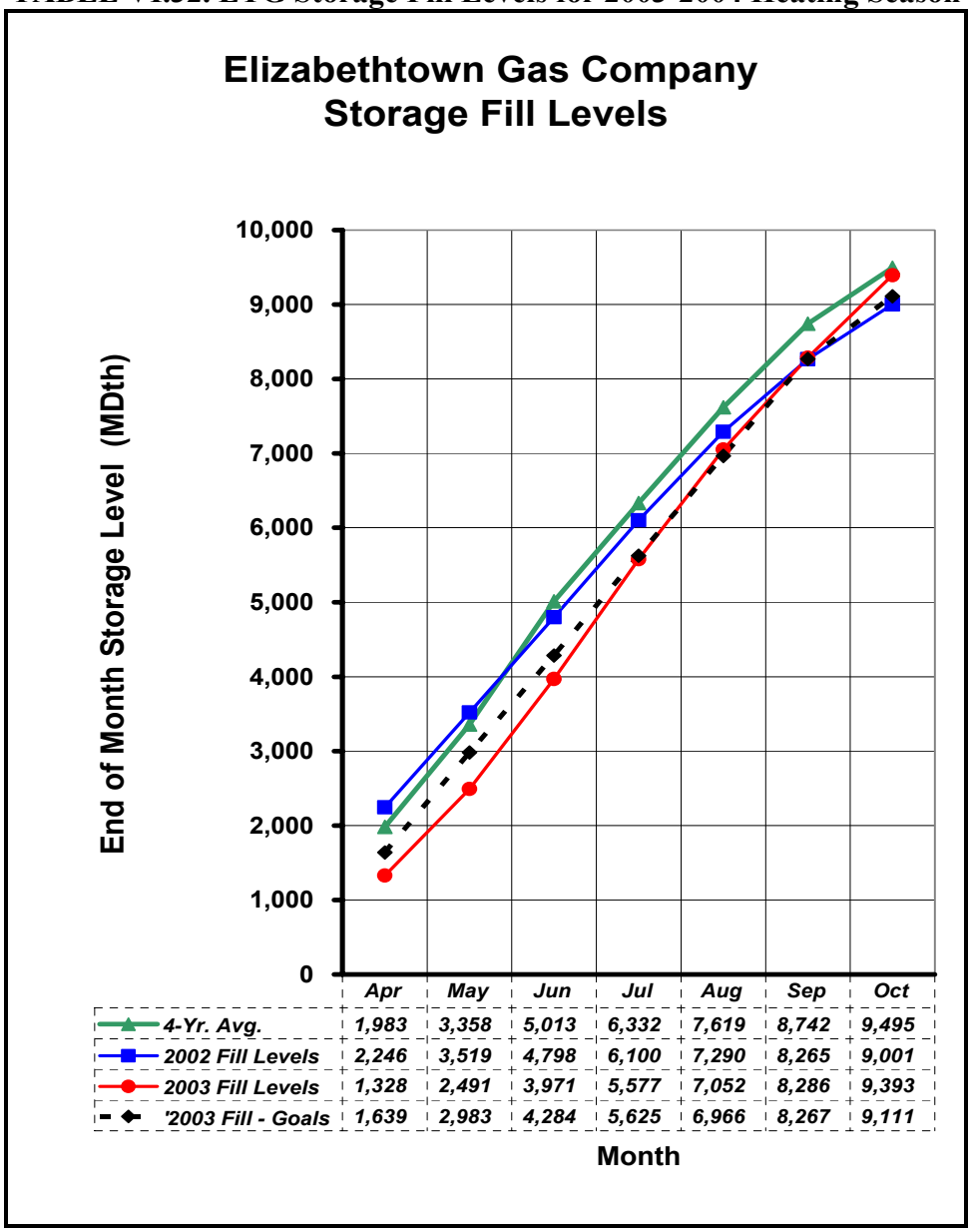
rest of calendar 2003. They also began to include pipeline companies demanding pre-payment of fixed charges.

Liberty began to inquire about the consequences of the downgrades for NUI Utilities' gas acquisition during early summer 2003, when the storage-injection season was well under way. The Company's response was that demands for increased security were indeed being encountered. The Company also reported success in finding other counter-parties who did not require increased security. The Company reported that it had gas-purchase contracts in place with over 100 counter-parties. It would normally be doing business with about 25 at any one time. The number of counter-parties who had declined to supply gas to NUI Utilities without additional security was not substantial, according to the Company. NUI therefore believed that there remained a sufficient number of other suppliers who were willing to sell gas to ETG during the storage-fill season without additional security.

Liberty inquired whether the terms of gas supply had changed as a result of the Company's position with respect to additional security. The Company's response was that the prices that the Company was paying were "within the bid/ask [buy/sell] spreads".

Liberty found no anomalies in the pace of ETG storage fill across the preceding summer. The rates and amounts for the storage fill season leading up to the current winter were generally consistent with the year's targets and with historical performance. The following table shows those rates.

TABLE VI.32. ETG Storage Fill Levels for 2003-2004 Heating Season



	Apr	May	Jun	Jul	Aug	Sep	Oct
4-Yr. Avg.	1,983	3,358	5,013	6,332	7,619	8,742	9,495
2002 Fill Levels	2,246	3,519	4,798	6,100	7,290	8,265	9,001
2003 Fill Levels	1,328	2,491	3,971	5,577	7,052	8,286	9,393
'2003 Fill - Goals	1,639	2,983	4,284	5,625	6,966	8,267	9,111

The next table demonstrates that prices for storage gas moderated slightly as the injection season progressed. That moderation assisted ETG in accommodating the significant cash requirements of this part of its typical year.

Table VI.33. Cumulative Prices for Storage Injections

Injection Month	Quantity Injected	Monthly Price	Cumulative Price
	MDth	$/ dth	$/dth
April	671	$4.9940	$4.9940
May	1,329	$5.6003	$5.3969
June	1,589	$6.0563	$5.6888
July	1,620	$5.4574	$5.6169
August	1,469	$4.8727	$5.4532
September	1,167	$4.9626	$5.3802
October	*1,182*	*$4.7917*	*?$.3031*
Initial Price	**3/31/03**	**$3.7055**	
Current Price	**9/30/03**	**$5.2308**	
Estimated October 31, 2003 Inventory Price		***$5.1756***	

Gas prices have increased since the heating season began. Liberty has been routinely monitoring their effects upon NUI Utilities' liquidity. Liberty has also been examining the effects of collateral calls on liquidity. Chapter Four discusses the major Credit Suisse First Boston refinancing by NUI in November 2003. That refinancing has placed NUI and NUI Utilities in a position to handle increased prices without imminent threat to liquidity. ETG has entered the time of year when receipts relative to current expenses are strong. Current cash projections demonstrate a reasonably strong ability to meet cash outflow requirements with existing funds sources. Liberty continues to monitor liquidity generally, and gas prices and collateral calls specifically. As of the filing of this report, Liberty believes that NUI and NUI Utilities are well positioned to meet current prices and collateral call levels with a margin sufficient to address contingencies at a reasonable level.

2. NUI EB's Energy Trading Business

NUI EB was a significant consumer of credit. Operating like a mutual-fund manager, NUI EB owned a portfolio, the value of which it sought to enhance through trading. If it could use borrowed money to supplement equity money, the portfolio could become bigger. A larger portfolio would offer more opportunities to trade. NUI's financial problems caused a drastic curtailment in the amount of money it could let NUI EB use to trade. NUI EB reduced the margin collateral that it had on deposit with counter-parties during 2002 from $34.4 million to $5.0 million. Significant reductions in NUI EB trading volumes occurred through 2003.

The requirement that NUI Utilities' finances be segregated from NUI's unregulated businesses was of special consequence. NUI EB had little in the way of assets. The parent company therefore had to guarantee its performance in order for counter-parties to be willing to engage with NUI EB in trading. At the end of fiscal 2002, such guarantees had been issued to 79 counter-parties, in amounts totaling approximately $385 million. The amounts outstanding under those guarantees were generally much less than that. The amount outstanding at September 30, 2002, for example, was $17.5 million.

As NUI worked to disentangle NUI Utilities financially from the parent, NUI EB began to distinguish itself from the utilities in its invoices and statements. This separation had become visible to third parties in the first half of 2003. NUI EB's counter-parties made a response, in terms of significant increases in collateral calls. They have leveled over the past several months. They remain high, but consistent with estimated cash resources.

G. The Gas Storage Projects

NUI has been involved in the development of high-deliverability natural gas storage projects, as part of its energy hub strategy. The Saltville Gas Storage Company project in Virginia recently entered service. NUI EB acquired options on land and mineral rights for a similar facility to be located in Perry County, Mississippi. NUI has also just announced agreements with a partner to develop a storage facility in conjunction with an expansion of NUI's Florida East-West Pipeline project.

These projects involve significant financial commitments. The total cost to acquire Virginia Gas Company was about $46 million. About half came in the form of NUI stock and about half in assumed debt. NUI took on a partner for development of the Saltville (Virginia) project. NUI's share of expenditures in fiscal 2003 was expected to be $18.3 million, with another $7.3 million expected in fiscal 2004, and just under $1 million in fiscal 2005, 2006 and 2007.

NUI has provided no estimates for its share of the investments for the Mississippi or Florida projects. The Mississippi project is described as a two-well salt dome storage facility that has a working gas capacity of approximately 7.8 Bcf. A 14-mile pipeline is also planned, in order to connect the facility to the interstate pipeline system. It was expected to affect the Company's capital expenditure program in fiscal 2005 and 2006, "after the funding needs of the Saltville facility are essentially satisfied". The Florida East-West Pipeline project is a 126-mile pipeline, intended to connect with the Florida Gas Transmission system on both the east and west coasts, and with the new Gulfstream Natural Gas System on Florida's west coast. Phase I was completed in 2001. The remaining portions of the pipeline were anticipated to be completed by late 2005. NUI plans to complete the pipeline included agreements with a producer of natural gas to develop a storage field to be operated in conjunction with the pipeline. The storage field could eventually have up to 15 Bcf of working gas capacity, and would require a 12-mile connection to the East-West Pipeline.

NUI has said that only the Saltville project involves significant current expenditures. Duke Energy, NUI's partner in the Saltville project, was reimbursing NUI for its half of those expenditures. The Company had previously reported that it planned to seek a compressor station lease as a means of financing its share of the project. "Structural" issues were identified that delayed conclusion of the desired arrangement. The Company's goal early last fall was to proceed with a lease "soon."

NUI has more recently deferred non-utility expenditures. It has sold or will sell its non-energy, non-utility ventures. These energy ventures remain, but NUI's focus on

preparing the Company for sale and on conserving its cash resources have caused a retrenchment in many of the short-term plans for them.

H. Audit Cooperation on NUI EB Issues

Condition 3 of the holding company order provides that:

> *Subject to the execution, where appropriate, of acceptable confidentiality agreements, the parties to this proceeding shall be provided reasonable access to the books and records of NUI Holding Company or any of its regulated or unregulated subsidiaries. Nothing in this provision shall be construed so as to limit the authority of the Board pursuant to N.J.S.A. 48:2-16 et seq.*

The RFP under which Liberty conducted this audit provides that the auditor should:

- *Determine the portion of gas sales by the affiliates to the Utility and the relative dependence on these sales to continue as a "going concern."*
- *Review and assess bidding procurement policies and procedures that are done in a competitive or non-competitive manner.*
- [Conduct a r]*eview and assessment of financial performance of the Company and all of its affiliates*
- [With respect to each affiliate,] *encompass each business activity from its inception to the present and then forward on a short-term and long-term basis.*

NUI on many occasions in connection with Liberty's audit work involving NUI EB failed to conduct itself in compliance with the third Holding Company Order condition by failing to provide timely and complete information necessary to meet the scope of the audit. Liberty also concluded, based upon its extensive experience in performing affiliates audits of utilities, that good-utility practice required more than NUI offered. Examples include:

- Liberty was refused access to reports showing the amount of value NUI EB had placed at risk through its trading activities. Liberty sought this information through its Data Request 56. This information was crucial to evaluating the degree to which NUI EB's activities might have been placing at risk corporate, and in turn utility, financial health. It ultimately took extraordinary efforts by Liberty to get, seven weeks later, information that should have been provided routinely.
- At the same time that Liberty was denied even basic quantitative information about value at risk, NUI EB was reporting it to others in the industry. The response to Liberty Data Request 46 shows that NUI was reporting summary information on value at risk to the AGA Financial Forum meeting in May 2003. Ironically, the information that NUI reported to an industry group that clearly included its competitors was redacted from the information provided to Liberty, on the grounds that its high commercial sensitivity required that it be denied to

Liberty and the BPU in order to make sure that competitors did not gain access to it.

- Liberty asked for a specific gas-purchase agreement that NUI EB made for ETG regarding costs that flow through the BGSS mechanism. It took more than a month to provide it. Company counsel claimed that there were "confidentiality issues" associated with the contract. There is no valid reason why it should take more than 30 days to provide regulators with a contract directly involving a regulated utility and involving costs recoverable through a reconcilable adjustment factor.
- Liberty has still not been told how much NUI paid for land and mineral rights associated with NUI EB's potential Mississippi gas storage project. NUI redacted that information from its response to a Liberty data request 107.
- When approached by the NUI controller about securing the documents associated with Liberty's examination of NUI EB transactions for ETG, NUI EB did not cooperate immediately; it took the intercession of NUI's CEO to gain NUI EB cooperation.
- After Liberty agreed to defer audit work on the NUI EB transactions for ETG and to meet with PricewaterhouseCoopers to share Liberty's work and progress to date, in order to assist NUI's auditor in getting started quickly and efficiently, NUI EB's counsel inappropriately sought inclusion in the meeting where Liberty was to provide information that management self-evidently should not have access to during the pendency of an examination of its own conduct.
- NUI EB administers East Coast Natural Gas Co-operative bidding activities, many of which are for ETG. In order to assess the conduct of NUI EB and its effects on ETG, Liberty asked for a description of the co-op activity of other LDC members. Liberty was denied access to the information for an extended period of time.

I. Conclusions

Conclusion VI-1. The relationship between NUI Utilities and NUI EB was not at arm's length; NUI EB received accommodations that were not consistent with good-utility practice and that would not have been provided to a non-affiliate performing similar functions.

Good-utility practice requires the effective management of supply, storage, and transportation assets. Using an affiliate to perform these functions does not alter the responsibility that an LDC has to optimize operations to assure reliable and economic supply. Liberty found that NUI structured its affiliate relationships not to optimize utility needs, but to create opportunities for NUI EB and shareowners. A number of accommodations made came at the expense of ETG customers. Accommodations that together show a failure to conform to good-utility practice and prudent management include:

- The agreement under which NUI EB managed ETG's gas-supply assets gives NUI EB broad control over the use of utility assets, but imposes no effective limits or performance standards

- NUI EB conducted ETG's secondary-market activities; therefore NUI EB had access to essentially all of ETG's gas-supply resources to assure that NUI EB's customers' needs were met
- ETG allowed NUI EB to shift its requirements among ETG's city-gate delivery points, without cost or obligation, presumably to accommodate NUI EB's trading activities
- Until early 2003, NUI EB had broad access to the utilities' credit
- Only within the last year have energy-trading counter-parties been able to distinguish between NUI EB and NUI Utilities, which gave NUI EB an effective opportunity to trade on benefits of association with utility operations
- NUI EB used a number of ETG's people in the performance of functions common to NUI EB, ETG, NUI Energy and other unaffiliated asset-management clients
- NUI EB is the NUI member of the Co-op, rather than ETG
- NUI EB used one of NUI Utilities' storage contracts

The basic bargain inherent in the relationship between NUI EB and NUI Utilities was that NUI EB provided gas-supply management services to NUI Utilities in return for being provided the credibility that allowed NUI EB to be in business. The nature of the credibility provided was at least twofold.

The first enhancement to NUI EB's position is in apparent ability to deliver. NUI EB's trading partners knew that it had control of the excess portion (on any given day) of critical NUI Utilities assets. NUI Utilities held assets sufficient to provide supply on *design day* conditions, which are based on the coldest day in 30 years. NUI EB control of the portion not needed for utility use meant that NUI EB could in general terms assure delivery to its customers on most days, except those on which utility needs would consume all peak-day assets. As a consequence, NUI EB's ability to deliver was virtually the same as the utilities; *i.e.* at or akin to firm, while its cost structure reflected interruptible or secondary-firm assets.

NUI EB's second enhancement came in the form of a bolstering of its credit. NUI EB explained the value it has received in this fashion in its 1999 business plan:

> *NUI EB is provided with absolute capital support from NUI Capital; in addition, NUI EB is perceived in the marketplace as an asset-based company through its affiliation with NUI Corporation.*[1] *Although it is expected that the capital support provided by NUI Capital will continue, NUI EB's perceived creditworthiness may be affected by the deregulation of NUI Corporation's merchant sales service. In the event NUI Corporation exits the merchant function and releases upstream assets, i.e., [pipeline] capacity and storage, to companies other than NUI EB, the perception that NUI EB is an asset-based company will diminish. The evaporation of this perception will materially affect NUI EB's*

[1] This 1999 plan came before the current holding-company structure for NUI. The parent being referred to was the utility. NUI Capital was a first-tier subsidiary of the utility.

> *creditworthiness. In the absence of an infusion of capital from other sources, the reduction in NUI EB's creditworthiness will ... limit NUI EB's ability to execute trades.*

Liberty believes that NUI EB also benefited from significant cost subsidization through its relationship with NUI Utilities. The question of cost subsidy for common personnel usage depends on the costs assigned to each entity versus the benefits received by each. NUI Utilities paid the costs of the five positions that NUI Utilities contributed to NUI EB's common operations. The benefits received consisted of management of NUI Utilities' gas-supply assets, including the use of the Energy Management System (EMS) developed by NUI EB, and 85 percent of the margins from off-system sales and capacity releases.

It takes considerable judgment to value benefits received when a utility decides, as NUI Utilities did, to give its business to an affiliate without a structured examination of its alternatives. One way, for example, to establish a more tangible assessment of is to solicit third-party bids for the management of utility gas-supply management functions. Many LDCs have done so. NUI Utilities is now itself in the process of doing so, since its termination of its relationship with NUI EB.
Had NUI Utilities done so in the past, it would presumably have to take some or all of the five persons it provided to the common NUI EB staff. In fact, the recent transfer of the NUI EB function to a third party involved the return of about that number. The assumption of responsibility for these five people would not, however, have increased the costs to NUI Utilities. Even under the relationship with NUI EB, NUI Utilities was already paying for those people. If a contracted, third party external asset manager agreed to pay the utility's 85 percent share of secondary-market margins, then any positive or negative change in benefits to NUI Utilities would depend on the third-party manager's performance in the secondary market relative to NUI EB's. For the time being, that is also the relationship that exists with the third party to whom NUI Utilities has transferred the functions formerly performed by NUI EB.

A third party asset manager could make use of the delivery assurance that comes with knowledge and control of the utility assets, as NUI EB did. Such a third party would presumably consider that value in offering NUI Utilities either a lump sum or an enhanced sharing arrangement (different percentages or higher minimums, for example). NUI Utilities is now considering a range of offer types from third parties. Those offers demonstrate that third parties place considerable value on the opportunity to serve as manager for NUI's utility assets. ETG's portion of the value of those assets is the dominant one, as evidenced both by Liberty's own assessment and the offers that NUI Utilities has received.

The costs incurred and benefits received by NUI EB in its relationship with NUI Utilities are difficult to measure. The tangible costs to NUI EB and to NUI Utilities are fairly straightforward. NUI EB had the benefit of the services of the five NUI Utilities people, for which it had to incur the incremental cost of the services that NUI EB provided to NUI Utilities. Liberty saw substantial equality in this portion of the exchange, but does

not consider it proper to emphasize particularly this aspect sufficient of the relationship in assessing overall costs and benefits.

The intangible portions of the calculation are more complex. The benefits to NUI EB were clear and substantial and NUI EB paid nothing for them. First, NUI EB had the benefit of the credit synergy. Second, NUI EB's role as operator of ETG's assets gave NUI EB a presence in the market that is also difficult to value. That role gave NUI EB knowledge about who was buying gas, who was selling, and what prices they were paying. NUI EB's access to information about gas movements for ETG also gave it inside knowledge of which transportation systems had capacity available (and where), and which did not. ETG also allowed NUI EB to shift deliveries among production area receipt points and city-gate delivery points in response to load conditions on the pipelines. That knowledge and control allowed NUI EB to provide firm service, but to only pay for interruptible assets. Thus, the value of the delivery-assurance credibility that NUI EB received in the relationship might be measured by comparing the cost of the utility companies' capacity portfolios to the cost of NUI EB's.

As noted, NUI EB paid nothing for these intangible assets. Measured against them are the benefits that NUI EB gave to ETG without requiring payment. Those consist virtually entirely of the quality of NUI EB's performance. Liberty found that performance not to be an asset, but a liability. A later conclusion explains the basis for Liberty's conclusion that NUI EB failed ETG through both inattention and intentional conduct contrary to utility needs and interests.

Liberty concluded that NUI EB received net benefits far in excess of those received by the LDCs it was supposed to serve. It is not possible to quantify the excess with precision. That NUI EB enriched itself at utility expense increased the loss that ETG suffered on the exchange. The structure of the relationship failed to meet good-utility practice and it was not prudent for NUI Utilities to have allowed its utility business to be conducted in this manner.

Conclusion VI-2. NUI Utilities has made only superficial evaluations of NUI EB's performance in its role as the manager of ETG's assets.

NUI Utilities focused on comparisons with other New Jersey LDC BGSS filings and comparisons of prices to indexes to evaluate NUI EB performance. NUI Utilities did not examine specifically how or even whether NUI EB assured that it did not sacrifice utility interests when it faced daily opportunities to transfer benefits away from utility operations. This failing was imprudent. One of the most critical elements in serving gas LDC customers lies in assuring unbiased, professional, and attentive procurement and the offsetting of fixed or sunk supply, storage, and transportation costs.

Liberty found that NUI Utilities undertook wholly insufficient and ineffective means for providing this assurance. The structure of NUI operations made this role exercisable in practice only at a level above NUI Utilities. Therefore, the failure to take adequate efforts to assure that NUI EB's conduct was honest and effective was a corporate one.

Conclusion VI-3. NUI EB took considerable advantage of NUI Utilities' ineffective supervision of its activities.

Liberty's transaction analysis and the preliminary results of the PricewaterhouseCoopers and Stier Anderson fieldwork to which Liberty had access show a pattern of activity that caused ETG to lose significant economic benefit.

NUI EB's increasing role as a provider of supply to NUI Utilities through the Co-op also caused ETG to bear costs that NUI EB could have avoided for ETG by acting effectively in its capacity as agent. This supply came through the Co-op auction process. NUI EB's emergence as an NUI Utilities supplier came only after NUI EB took an increased role on the Co-op's buying committee. The number of bidders in Co-op auctions clearly fell thereafter. Liberty believes that NUI EB's participation as a bidder had the clear tendency to reduce the number of bids received, and diminish the competitiveness of the prices in the bids. NUI EB held onto an ineffective bidding process despite clear indications of problems with it.

Liberty sought to determine whether there were objective measures of how well NUI EB performed. Liberty measured how NUI EB performed relative to its peers in New Jersey. The table below compares NUI EB's fiscal 2002 results with those of NJR Energy Services Company and South Jersey Resources Group, the wholesale marketing affiliates of the other two gas-only LDCs operating in New Jersey. The activities of those two affiliates were comparable to those of NUI EB.

Table VI.34. Comparative Affiliate Margins

	NUI EB	NJRES	SJRG
Sales volume (Bcf)	103.7	332.6	49.5
Operating margins ($million)	19.4	17.1	5.0
Margin/Mcf (cents)	18.7	5.1	10.1

All three wholesale affiliates engage in activities other than gas sales. Their operating margins include these other activities. The differences in the activities of the three preclude quantitative conclusions, and strongly caution against use of this information as a determinative indicator of performance. However, the data from the preceding table provides at least general corroboration of Liberty's conclusion that NUI EB experienced margin gains at the expense of ETG. NUI EB's margin per unit was far in excess of those of the other two companies. The size of that margin per unit allowed NUI EB to produce operating margins that exceeded those of NJR Energy Services Company, which had three times NUI EB's sales volumes.

Conclusion VI-4. NUI EB's participation in Co-op auctions for NUI Utilities' gas was not consistent with its duties to ETG.

NUI EB felt that its compensation from ETG failed to compensate NUI EB adequately for services being provided to the utility. The agreement with ETG did not provide NUI EB with separate compensation for helping to procure utility gas. That was one reason why NUI EB sought and ultimately obtained qualified-supplier status for Co-op auction

participation. Participation in the auction process gave NUI EB a margin opportunity that would cover costs for purchasing services it provided to NUI Utilities.

Liberty believes that NUI EB's duty to ETG included an obligation to obtain the best price available in the market when buying gas. NUI EB supposedly operated under the rule that it could not sell gas directly to ETG. A clear value in such a rule is to prevent NUI EB from buying from ETG under circumstances where NUI EB knew it could resell the same gas for more to a third party. Clearly, if NUI EB knew of a third party willing to pay a given price, it could just as arrange for ETG to sell the gas directly to that party. In that event, ETG would receive the third party's higher price, not the lower price NUI EB was willing to pay. Introducing a shell transaction did little more than provide NUI EB with a margin when it bought low from ETG and sold high to the third party. Moreover, such a shell transaction represented a "zero-sum" game on NUI EB's part. All of the margin it took for itself came at direct and equal loss to ETG.

Similar concerns and values apply on the purchase side, when NUI EB found supply available on terms that would allow NUI EB acquisition, markup, and resale to ETG. Liberty believes that NUI EB should have made the gas available to ETG at the initial acquisition price of the third party, not an artificially marked up one that allowed NUI EB to profit. Doing otherwise merely created an opportunity for NUI EB to get around its no-mark-up purchasing obligation to ETG. Acting in this fashion at most assured ETG that the price was market competitive. Even that assurance would exist only in the case of fidelity and capability in conducting the auctions. Market competitiveness of pricing was not, however, the standard to which NUI EB was held in conducting purchasing. The bargain it made was to provide procurement without a mark-up. Having taken advantage of its benefits under that agreement, however, NUI EB denied ETG its benefits. NUI EB did so by declining to make purchases under that agreement, and instead acting under a separate arrangement whose effect was simply to allow NUI EB to increase its price.

Conclusion VI-5. NUI EB's control systems ignored key interests of ETG's ratepayers.

Liberty's transaction analysis demonstrated that control procedures were not sufficient for preventing errors or manipulation in the assignment of gas purchase and sale transactions among NUI EB's various asset-management clients.

Conclusion VI-6. NUI's energy affiliates, except NUI EB, have not been profitable; their operations have been substantially funded by the corporate concentration account, and ultimately NUI Utilities.

NUI Energy operated at roughly a break-even rate from fiscal 2000 through 2002. It experienced a nearly $10 million loss in 2003. NUI Energy Solutions suffered losses for each of the years 2000 through 2003. These losses averaged less than $100,000 per year. Virginia Gas has had operating losses averaging about $400,000 for the past three years. Saltville had about $100,000 in net operating income for 2003, its first year of operation. NUI EB has reported profitability averaging over $5 million per year since 2000. Its

profitability cannot be examined separately from that of NUI Energy, for whom NUI EB made gas purchases.

All of NUI's energy affiliates have had very sizeable intercompany balances, relative to their size. NUI Energy's balance peaked at about $23 million in 2002, and fell to $13.8 million in 2003, before NUI liquidated it. NUI Energy Solutions had a payable balance of about $1 million from 2000 through liquidation in 2003. Virginia Gas has had extraordinarily large intercompany balances. Its 2001 balance of $37 million grew to $62 million in 2002. The 2003 balance before liquidation was $49 million. Saltville too had a significant payable balance of $20 million before liquidation in 2003. NUI EB has had a small intercompany payable in most years since 2000. One exception was 2001, when the NUI EB balance reached about $27 million.

Conclusion VI-7. NUI failed to make adequate allocations of corporate costs for Virginia Gas.

The three-factor test that NUI has used, which averages payroll, plant, and customers, means that NUI made no allocations respecting Virginia Gas during fiscal 2001, even though NUI owned the company for a number of months in that year. This failure caused other NUI operations, including ETG, to absorb significant extra costs. It was appropriate under the circumstances for NUI to assign costs to Virginia Gas for the portion of fiscal 2001. Had it done so, Virginia Gas would have absorbed costs that, instead, were borne in substantial part by ETG.

Conclusion VI-8. The parent company's credit problems have had an impact on the availability of gas supplies to the utility, and probably on the cost.

As noted in the body of this chapter, some existing gas suppliers have requested payment in advance, and some potential new ones have declined to provide gas to NUI Utilities without additional security for payment. NUI Utilities' strategy, as carried out by NUI EB, was to decline to offer security to new suppliers, thus diminishing the number of available alternatives.

NUI Utilities asserted that the price of gas to the utilities was not affected by this problem. There can be no precise measurement of the consequences of the credit downgrades on prices paid for gas. Even so, it strains reason to assert that the smaller number of suppliers remaining interested would fail to include in their prices compensation for the additional credit risk. Moreover, NUI Utilities has been making substantial collateral call payments for many months now. The levels of these payments do not impose short-term liquidity concerns.

Conclusion VI-9. Throughout this audit, NUI EB has conducted itself in a manner that is not consistent with: (a) the disclosure requirements of the holding company order, (b) good-utility practice, and (c) the scope and requirements of this audit.

Liberty encountered excessive delays in getting information. NUI EB personnel offered Liberty justifications for price variations that were very different from what they eventually conceded to Stier Anderson team members. NUI told Liberty it could not

provide certain credit information because of concerns about competitors gaining access to it, when NUI had already shared similar information at meetings attended by those competitors. NUI refused access to information material to the financial performance of some non-utility investments. In general, NUI's conduct during Liberty's audit made it much more difficult and time-consuming to examine the effects of NUI EB performance on ETG and on costs that ETG customers bear for regulated utility service.

J. Recommendations

Recommendation VI-1. Outsource NUI Utilities' gas-supply management function.

A fair competition among third party asset managers will allow full value of ETG's supply, storage, and transportation assets to accrue to NUI Utilities' system-supply customers, who bear the costs of the assets. Following an order of the BPU, NUI decided to undertake this approach. It is now evaluating a number of bids received from third parties for the management of various gas-supply management activities for the 12-month period that will begin with the April 2004 start of the storage injection season. NUI Utilities has so far conducted an open and competitive process. That process has produced an encouraging response. NUI Utilities has received bids that, subject to eventual selection and agreement negotiation, hold substantial promise for bringing competent and dedicated expertise under terms that will prove beneficial for ETG customer reliability and cost.

Recommendation VI-2. Reimburse customers through the BGSS mechanism $1.2 million for the margins that NUI EB derived from selling gas to ETG through the Co-op.

NUI EB should not have sold gas to ETG as a Co-op bidder. The appropriate remedy for NUI EB's breach is for it to return to each utility whatever margins it made on the sale of gas to that utility. Table VI.34 indicates that NUI EB's average margin on the volumes of gas that it sold in 2002 was 18.7 cents per Dth. Multiplying that margin by the 6.2 million Dth that NUI EB sold to ETG through the Co-op yields a total margin of $1,159,000. Liberty recommends that NUI EB refund this amount to ETG.

Recommendation VI-3. Reimburse customers through future BGSS adjustments of excess costs of ETG sales and purchases made or arranged by NUI EB.

1. Liberty's Assessment of Harm

Liberty found that NUI Utilities and NUI EB failed to meet good-utility practice and prudence in a number of ways. First, NUI Utilities failed to require that its relationship with NUI EB be conducted at arm's length. Second, NUI EB failed to adopt and apply adequate controls to prevent trader abuse. Third, NUI Utilities failed to exercise reasonable care in requiring NUI EB to do so. Fourth, there is sufficient evidence that NUI EB used prearranged purchases from and sales to third parties ("sleeves") to provide ETG with a net sale price less than that available in the market, and a net purchase price above that available in the market. Fifth, there were admissions by at least one NUI EB

trader that transaction parties were rearranged after the fact to reverse NUI EB daily losses in the market. These reversals would have been at the direct expense of ETG's customers. Sixth, there was evidence that NUI EB personnel paid significantly less attention to the sale of ETG gas, on which NUI gained only 15 percent of margins, rather than the 100 percent of margins made on NUI EB sales. The one notable and extensive exception to this rule consisted of the many occasions on which NUI EB could construct a "sleeve," whose effect was to give NUI EB much of the remaining 85 percent that otherwise would have gone to the benefit of ETG customers.

Liberty's overarching conclusion with respect to NUI EB's performance for ETG is that it pervasively failed to meet its duty to get ETG the best prices available in the market. NUI EB instead sought to get itself those prices, largely consigning ETG to what was left over afterwards. Much as NUI did with ETG's financial resources, NUI EB effectively pooled ETG's gas supply assets. NUI EB failed to give ETG what was ETG's. Instead it took what was ETG's and used it where it could to provide gain for NUI EB and for NUI (as to the 15 percent of margins that the BPU allowed to fall "below the line" for ratemaking purposes).

Liberty approached the overall measure of harm by accepting the basic premise on which NUI EB actually structured the business that it conducted for ETG. That is, NUI EB treated its own and ETG's resources as common, operating them on an "all-for-one" basis. NUI EB clearly should not have done so, but the evidence is that it did do so. Moreover, an important effect of its having done so, in combination with the departure of its trading staff from employment without first discussing their performance for ETG, is to make impracticable a discretely quantifiable assessment of the adverse consequences that ETG customers suffered.

NUI EB used all the assets it could get control over to maximize the benefits for itself. Liberty would make only one material change to this "all for one" approach that NUI EB personnel took to their business. Specifically, Liberty would simply require a corresponding "one for all" sharing of the benefits.

Liberty's method for applying the one-for-all, all-for-one approach was similarly simple. Liberty calculated the weighted-average prices for ETG sales and purchases. Then Liberty calculated the weighted-average price for all NUI EB sales and purchases, including those for ETG. Then Liberty multiplied the difference in the weighted-average prices by the ETG sales and purchase volumes.

This approach accomplished the result of giving ETG the same purchase and sale prices that NUI EB experienced overall. In other words, it gave ETG and NUI EB the benefits and burdens of each other's transactions proportionately. NUI EB, in contrast, disbursed the burdens and co-opted the benefits disproportionately, and with its own interests in mind.

This Liberty approach had the effect of imputing significantly higher sales prices for ETG off-system sales. As the BPU allows 15 percent of the margins for those sales to fall below the line for rate-making purposes, Liberty reduced the added ETG margins by

15 percent to give shareowners the benefit of the sharing mechanism. Given the fundamental breach of responsibility that took place, it would not be unreasonable to withhold even this benefit from NUI.

The following tables show the results of this calculation. The analysis shows a total of $10.7 million in imputed additional margins for ETG sales, net of the 15 percent sharing. It also shows a total of $3.9 in imputed reductions in the cost of ETG purchases. The purchase analysis conducted by Liberty included only short-term purchases. Liberty assigned no value to differences in purchases of a longer-term nature, primarily because of the complexity of assessing the offsetting effects of the hedges that often accompany longer transactions.

Table VI.35. Sales Margin Sharing Analysis

Fiscal Year	Market Area	Production Area	Market/Production Area	Annual Total
1999	2,145,825.55	1,259,917.78	(62,160.21)	3,343,583.12
2000	1,180,756.48	(3,777,804.62)	(892,428.40)	(3,489,476.54)
2001	3,248,360.43	2,635,865.98	4,046,612.87	9,930,839.28
2002	1,976,910.17	202,758.52	150,894.20	2,330,562.89
2003	137,517.54	(31,045.22)	377,079.34	483,551.66
			Minus 15% EB Fee:	**1,889,859.06**
			Total to ETG:	**10,709,201.35**

Table VI.36. Purchase Margin Sharing Analysis

	Purchase Transactions			
Fiscal Year	**Market Area**	**Production Area**	**Market/Production Area**	**Total**
1999	(9,651.27)	(300,131.90)	197,076.68	(112,706.49)
2000	447,976.22	(2,018,243.45)	(22,301.28)	(1,592,568.51)
2001	3,172,067.78	759,275.50	606,022.20	4,537,365.48
2002	(157,070.17)	6,983.01	(181,172.22)	(331,259.38)
2003	1,441,517.41	463,894.88	(472,963.78)	1,432,448.51
	4,894,839.98	(1,088,221.96)	126,661.59	**3,933,279.62**

Liberty believes that this "one-for-all, all-for-one" approach provides an appropriate baseline for determining what should be NUI's obligation to make ETG customers whole. It comports with the way that NUI EB ran its business, including the portion it conducted for ETG. It also comports with the difficulty in direct measurement of consequence by other means. Liberty simply does not agree that the failure to find direct means for quantifying the harm from specific types of insufficient or inappropriate conduct means that no consequence should attach to them. Liberty does believe that this approach tends to conservatism on the high side as to transactions that NUI EB actually made for ETG. The approach does not, however, attempt to place a value on any transactions that NUI EB could and should have, but did not, make for ETG. Liberty found no reasonable way at all to assess the magnitude of those types of transactions, or to place a value on them.

Liberty did find some tangible, but indirect ways to test this approach to consequence assessment. Recent experience with ETG's secondary-market transactions provides a

benchmark for testing Liberty's sales-side estimate. During fiscal 2003, NUI EB found its business opportunities sharply curtailed due to fiscal constraints, and reduced by credit-rating slides. The first factor limited the value of transactions that NUI EB could handle. The second factor reduced the number of counter-parties willing to do business with NUI EB. Liberty observed that the curtailment in NUI EB's business corresponded with sizeable increases in the secondary-market margins that NUI EB began to produce for ETG. The following table shows the growth in monthly margins produced by NUI EB for ETG as fiscal 2003 progressed.

Table VI.37. ETG Secondary-Market Margins for 2003

					ETG Sales Detail	
FY 2003 Month	**EB Sales**	**ETG Margins**	**ETG Sales**	**ETG Unit Margins**	**Capacity Release**	**Off-System Sales**
October 02	10,001,051	$262,000	1,421,401	$0.18	293,446	1,127,955
November 02	11,311,652	$168,000	1,592,751	$0.11	238,980	1,353,771
December 02	11,599,260	$160,000	733,817	$0.22	246,946	486,871
January 03	11,505,729	$131,000	771,253	$0.17	246,946	524,307
February 03	7,571,575	$488,000	757,944	$0.64	223,048	534,896
March 03	8,167,312	$956,000	1,434,792	$0.67	246,946	1,187,846
April 03	5,877,756	$959,000	1,125,026	$0.85	238,980	886,046
May 03	5,495,891	$365,000	1,303,624	$0.28	246,946	1,056,678
June 03	4,641,862	$130,000	908,607	$0.14	238,980	669,627
July 03	3,424,368	$236,000	1,226,838	$0.19	711,946	514,892
August 03	3,515,020	$239,000	1,441,626	$0.17	711,946	729,680
September 03	3,258,979	$135,000	1,524,544	$0.09	238,980	1,285,564
Total 2003	86,370,455	$4,229,000	14,242,223	$0.30	3,884,090	10,358,133
Total 2002	98,038,227	$2,643,757	21,202,621	$0.12	5,331,590	15,871,031
Total 2001	88,734,567	$2,153,512	18,284,728	$0.12	3,010,789	15,273,939
Total 2000	135,338,777	$2,858,337	14,995,917	$0.19	6,350,443	8,645,474
Total 1999	161,455,935	Not Avail	Not Avail	Not Avail	Not Avail	Not Avail

The table shows that ETG margins grew as NUI EB's own sales fell. Prior-period data shows that ETG monthly margins exceeded $300,000 in only two months out of the 40 that came before February 2003. Strikingly, from February through May of 2003, ETG's margins then proceeded to exceed $300,000 in each of those four months. The low was $365,000 and the high was $959,000. For the preceding 40 months, the average margin was about $210,000. The margin average for these four months in 2003 was more than three times higher, at $690,000.

The table also shows that the principal source of ETG margin growth was not increased volumes. The added dollars offsetting ETG customer costs came instead from a substantially increased margin on each unit sold. Average margin for all of 2003 was twice the level obtained in the prior three years. The table corroborates the statements made by NUI EB personnel that they paid less attention to the business of ETG, and that for ETG they focused more on assuring merely that the margins they produced were positive, while paying significantly more attention to maximizing the size of the positive margin earned on NUI EB sales. The data are consistent with the observation that NUI

EB did begin to spend more time and effort concentrating on ETG sale profitability as NUI EB's own field of potential transactions for its own account dropped.

Liberty compared ETG's 2003 margin performance to average performance in the past three years. Liberty also compared margin performance between 2003 and 2001, because the winters in both of those fiscal years were cold, and prices for natural gas experienced considerable volatility. The following table shows those differences.

Table VI.38. Trends in ETG Secondary-Market Margins

	2000	2001	2002	2003
Margins	$2,858,337	$2,153,512	$2,643,757	$4,229,000
Difference vs. 00-02 Average				$1,677,131
Difference from 2001				$2,075,488

Increasing actual margins by the average difference between 2003 and the three prior years ($1.7 million) would produce an increase in value of $6.7 million due to increased sales margins for the period from 1999 through 2002. Increasing them by the difference between 2003 and 2001 would produce an increase of $8 million. Note that these estimates assume that NUI EB diversion of profitable transactions and other conduct produced no harm for sales made in fiscal 2003. If instead, that harm is assumed to be as low as $250,000 in 2003, then the resulting five-year amounts become $7.9 million for the lower end and $9.5 million for the higher end. Reducing these amounts by the 15 percent margin sharing would produce net harm to ETG ratepayers of $6.7 to $8.1 million.

An amount of approximately $5 million is consistent with what it appears that NUI EB could have attained for 2003, had credit issues not ended up affecting even the utility's position in the marketplace. Comparing a value of $5 million per year against recent performance would generate a total of about $10.6 million, which becomes $9 million after allowing shareowners' 15% of margins.

These benchmarks indicate that the numbers produced by Liberty's baseline analysis are not out of line with results that might have been expected, had NUI EB performed as it was required to perform and as NUI Utilities should have required it to perform.

2. NUI Price Gap Analysis

Liberty also had access to two alternate methods for determining the amount that could be returned to ETG customers. The first was an analysis performed by NUI personnel. This analysis calculated the difference in prices for transactions in common between NUI EB and ETG. It then applied the calculated price difference per Mcf to all ETG volumes. NUI offered this result as one way to measure potential harm to ETG from NUI EB performance. NUI's analysis did not agree that any harm had actually occurred. NUI offered it only to provide an alternate way of measuring such harm, should it be demonstrated to have resulted from improper NUI EB performance. NUI was awaiting the Stier Anderson report at the time it prepared this analysis for Liberty. NUI therefore

was not at the time of the analysis prepared to take a position on the quality of NUI EB's performance for ETG.

The NUI analysis used two comparable-transaction data sets supplied by Liberty. The first included common sales and the second included common purchases. Liberty's review of the analysis submitted by NUI produced the calculations shown in the following tables. The first table shows results for sales transactions. The second shows the results for purchase transactions. They show that assigning the calculated common-transaction price difference to all transactions produces a value difference totaling $6.5 million over five years. Note that conformity with Liberty's baseline approach would have reduced the total sales price gap calculation by 15 percent to reflect the margin sharing allowed by the BPU. The NUI analysis did not include this reduction.

Table VI.39. NUI's Price Gap Analysis for ETG Sales

Fiscal Year		Market	Production	Market/ Production	Total
Quantities (Dth)					
1999		9,620,280	4,754,363	313,702	14,688,345
2000		6,538,237	5,632,247	602,453	12,772,937
2001		8,771,056	3,464,960	5,193,591	17,429,607
2002		11,404,012	793,785	3,114,333	15,312,130
2003		6,164,781	706,407	3,423,630	10,294,818
Difference ($/dth)					
1999	$0.0073	$70,228	$34,707	$2,290	$107,225
2000	$0.0270	$176,532	$152,071	$16,266	$344,869
2001	$0.0498	$436,799	$172,555	$258,641	$867,994
2002	$0.1363	$1,554,367	$108,193	$424,484	$2,087,043
2003	$0.0282	$173,847	$19,921	$96,546	$290,314
					$3,697,446

Table VI.40. NUI's Price Gap Analysis for ETG Purchases

Fiscal Year		Market	Production	Market/ Production	Total
Quantities (Dth)					
1999		1,900,623	11,263,771	145,812	13,310,206
2000		2,748,356	9,605,958	110,463	12,464,777
2001		3,124,866	7,827,991	493,689	11,446,546
2002		1,189,654	11,678,727	543,246	13,411,627
2003		1,998,602	8,465,895	1,037,968	11,502,465
Difference ($/dth)					
1999	$0.0199	$37,822	$224,149	$2,902	$264,873
2000	$0.0247	$67,884	$237,267	$2,728	$307,880
2001	$0.0758	$236,865	$593,362	$37,422	$867,648
2002	$0.0361	$42,947	$421,602	$19,611	$484,160
2003	$0.0788	$157,490	$667,113	$81,792	$906,394
					$2,830,955

The sales data set that Liberty provided to NUI included the most restrictive filter used in this audit. It was the only Liberty data set complete enough to allow use for the purpose

intended by NUI's analysis. Liberty prepared this data set not for general analysis, but in order to test the assertion of several NUI EB employees that obligation type affected prices that NUI EB could obtain in the marketplace. The data set therefore required a precise match in obligation type for an individual ETG and an NUI EB transaction to classify as comparable. Liberty's own examinations and information learned from the work of NUI's own outside examinations provided no substantial support for finding a correlation between the price gap Liberty observed and obligation designations. This data set therefore is therefore too limited in its capture of comparable transactions.

Because of this concern, Liberty prepared a data set that eliminated the obligation-type filter. This revision used the same filters that Liberty first created for testing the existence of patterned differences in prices. Liberty then ran an analysis similar to the one performed by NUI. Liberty's revision to the NUI analysis increased the resulting calculation for common sales transactions by about $220,000 over the five-year period. This revision brought the amount for sales and purchases combined to about $6.7 million, again before the application of the 15 percent margin sharing provision.

3. Stier Anderson Analysis of Comparable Transactions

The Stier Anderson analysis confirmed the pattern of pricing discrimination observed by Liberty. It found that ETG failed to get either the best or the average price of the day just more than three-quarters of the time. Stier Anderson used EMS data to determine "monetary damage" that resulted from conduct by NUI EB to shift net revenue from ETG to NUI EB by giving more favorable pricing to the NUI EB transactions. The Stier Anderson analysis quantified this amount by assuming three different standards relative to NUI EB pricing on comparable transactions. Those three standards consisted of the following failures by NUI EB:

- ETG did not get the best price (*i.e.*, the highest sale price or the lowest purchase price)
- ETG got less than the average price
- ETG got the worst price.

Calculations of harm measured with reference to the maximum price amounted to $6.2 million. Calculations measured with reference to the average price produced an amount of $5.6 million. Calculations of harm for cases where ETG got the worst price ranged from $4.3 million to $4.8 million. These amounts also do not include the 15 percent margin sharing.

Liberty did not consider the worst-case scenario to be illuminating. Liberty believes that NUI EB's duty to ETG was clearly to do more than beat its own worst price for a comparable transaction. NUI EB had a duty to get ETG the best price available in the market. Liberty found Stier Anderson's "best" and "average" clearly more relevant for the purposes of concern to the focused audit.

Liberty found merit in the Stier Anderson approach insofar as it identified the potential consequences of those patterns of conduct that lent themselves to objective measures of

quantification. Liberty therefore examined the Stier Anderson analysis in some detail. As was true in all its dealings with the Stier Anderson team, Liberty found them candid and open in sharing information and in discussing theories of causation and damage.

Liberty found that the Stier Anderson approach to identifying common transactions had four notable differences from the one used in Liberty's baseline analysis. First, Stier Anderson broke longer-term transactions into daily ones, when data available to it allowed a determination that daily re-pricing took place. This refinement produced more comparable transactions. Liberty considered this change to be sound in general. The breaking down of longer transactions into daily ones produces additional transactions that can be deemed comparable. Liberty has not had the time needed to independently validate the application of the method, but found Stier Anderson's description of how it was performed convincing and defensible.

Second, Stier Anderson considered two separate delivery-zone designations, Texas Eastern's Zone M3 and Transco's Zone 6 Non-New York, as common for their purposes. The two zones relate to different pipelines, but lie in the same general geographic area. They are effectively inter-connected through ETG's facilities. This change from Liberty's analysis also produced more common transactions. Liberty found this second change sound. It promoted consistency of the set of comparable transactions with a proper understanding of the opportunities that NUI EB had to substitute between itself and ETG as the party in interest.

The third Stier Anderson change was to segregate transactions by size into three classifications:

- Less than 20,000 Mcf
- Between 20,000 and 40,000 Mcf
- Greater than 40,000 Mcf.

Liberty found the third change to be at odds with other information available to us. First, Liberty's own experience did not suggest a strong correlation between price and the sizing categories selected by Stier Anderson. Second, a PricewaterhouseCoopers team member observed that lower-volume transactions might actually produce lower prices, for reasons including a lesser sales volume across which to spread transaction costs. Third, at least one NUI EB employee interviewed by PricewaterhouseCoopers felt that there was no inherent price difference due to transaction size.

Given this collection of information, Liberty undertook an analysis of pricing sensitivity to transaction volumes. Liberty sought to determine whether pricing results specific to NUI EB's transactions for itself and ETG warranted a stratification of transactions by volume. Liberty tested this possibility by analyzing 2002 and 2003 NUI EB transactions in order to identify whether there was a material difference in intra-day pricing between transactions of up to 20,000 Mcf, and transactions at 20,000 Mcf and above.

Liberty's testing of 2002 and 2003 transactions showed that there was no significant correlation between transaction unit price and a 20,000-Mcf volume breakpoint. Stier Anderson reran its analysis after Liberty made this observation. The revised calculation increased the calculation of consequences from common transactions by about $100,000. This revision would increase the Stier Anderson damages to the following range:

- $5.7 million for its "average" calculation case
- $6.3 million for its "best" calculation case.

The fourth adjustment by Stier Anderson was to eliminate certain affiliate transactions, because of their failure to reflect "market" pricing. Liberty also recognized this phenomenon, but eliminated more types of transactions. Stier Anderson eliminated only transactions where NUI EB sold to NUI Energy. Liberty believes that all transactions involving NUI affiliates should be eliminated from the analysis.

As Liberty did, Stier Anderson found a pattern of price discrimination involving NUI EB sales for ETG. Liberty believes that the same motivation and opportunity existed for NUI EB sales of Elkton gas, for example. Therefore, those sales should also be eliminated. Were the prices of Elkton sales similarly lower due to price discrimination, including them in the comparison group would depress the calculation of harm. The close connection between NUI EB and NUI Energy also makes any transaction that NUI EB arranged or conducted for NUI Energy suspect in terms of its market competitiveness as well. Liberty therefore did not include any affiliate transactions.

Stier Anderson is still considering another adjustment. It would filter comparable transactions to require commonality in obligation type. It appears that Stier Anderson so far has not found a basis for concluding that obligation type explains price differences between NUI EB transactions for itself and for ETG. Liberty's analyses and its discussions of what the Stier Anderson team has learned so far combine to cause Liberty to conclude that obligation type should not now be considered to be a cause of observed price differences in NUI EB and ETG transactions.

4. Transactions Types Addressed by the Stier, Anderson Analysis

The following table shows roughly the percentages of ETG sales and purchase volumes that were included as common transactions in the Stier Anderson analysis. The table shows that only a relatively small portion of ETG transactions became subject to the Stier Anderson damage calculations. The numbers are not fully comparable, but they can be used to conclude that less than one-third of ETG's sales transactions ended up being assigned "damages" in the Stier Anderson analysis. On the purchase side, the proportion is considerably lower. Liberty's review of the Stier Anderson analysis disclosed only $1,900,705 of "damages" on the sales side, out of combined sale and purchase damages of $6,166,174.

Table VI.41. Proportion of Total Transactions

Year	SA Common Amounts		Total ETG Transactions	
	Sales	Purchases	OS - Sales	Purchase
2003	1,934,119	5,728,557	10,358,133	N/A
2002	3,474,418	9,048,480	15,871,031	46,698,000
2001	6,092,471	7,061,780	15,273,939	54,232,000
2000	2,795,991	7,862,325	8,645,474	49,607,000
1999	1,756,800	10,056,737	N/A	N/A
1998	2,472,847	6,980,694	N/A	N/A
1997	617,244	6,321,049	N/A	N/A
2000-2003 Sales	14,296,999		50,148,577	
% Included	29%			
2000-2002 Purchases		23,972,585		150,537,000
% Included		16%		

In contrast to Stier Anderson, Liberty did not use its sampling of price patterns to calculate impacts to ETG. Liberty's analysis to determine whether there existed patterns used narrowly-defined delivery points. Liberty sought at first only to create as unbiased a data set as possible for determining whether a pattern of price differentiation existed. With each increase in breadth in transfer-point identification, there would be an increased likelihood of introducing factors other than bias in identifying the benefiting transaction party. Liberty decided therefore to test the existence of the pattern without introducing potential bias in defining transfer point comparability. Only if that testing identified a pattern would the question of whether it was explainable arise. And only if there were no satisfactory explanations would the question of how to measure harm to ETG arise.

Liberty did find the pattern. Having done so and having not found satisfactory explanations for it, Liberty therefore agreed with the combining of delivery points that the Stier Anderson analysis included. Liberty does not, however, agree with the confinement of harm assessment to common delivery points, even under the moderately expanded Stier Anderson definition of commonality.

The potential for and ease of carrying out discriminatory pricing exists at non-common locations, as well as at common ones. Liberty had determined, even before the design of its sampling for price differentiation, that delivery location was not a central element to any patterned intent there might have been to favor NUI EB. In our common-transaction analysis, Liberty was testing whether NUI EB took advantage of the opportunity to select the NUI transaction party. It could do so when the transfer point was the same, but Liberty also believes that NUI EB could do so between transfer locations as far apart, for example, as the Carolinas and the Northern New Jersey region. It would not be uncommon for extreme weather in North Carolina to produce high prices at the same time moderate weather is producing relatively lower prices in New Jersey, and vice versa. NUI EB's traders would seem to have had the discretion to select which entity would get the higher-priced transaction even when the transfer points did not precisely match.

Liberty identified an ultimately unexplained pattern of discrimination in pricing in favor of NUI EB. Liberty did not use the common-transaction database to measure the effects of that discrimination because the database included only a subset of the transactions

where identical or substantially similar motives and opportunities for discrimination existed. Moreover, statements made by NUI EB personnel to PricewaterhouseCoopers related to conduct whose consequences would not be measured through an analysis that required a common transaction (as defined by Liberty or Stier Anderson) to exist, and to be subject to a common measurement process.

The traders' employment at NUI EB ended without a prior discussion of their conduct, apart from several early interviews with PricewaterhouseCoopers. Neither Liberty nor Stier Anderson has had access to them. Liberty's request to interview a key NUI EB employee interviewed by PricewaterhouseCoopers went unanswered. Stier Anderson has conducted a number of interviews of other personnel, and has reviewed many documents. Stier Anderson has discussed freely and liberally with Liberty its progress in seeking the relevant facts. Liberty particularly commends the openness and candor with which the Stier Anderson team worked with Liberty. Liberty also found their work to be thorough and professional.

Liberty believes that the Stier Anderson team has succeeded in identifying certain conduct patterns with reasonable surety, despite the unavailability of certain critical personnel for interview. Liberty also found that the Stier Anderson work as described to Liberty did not substantially diminish the possibility other conduct of concern occurred. Therefore, as was the case when Liberty began its analysis, Liberty remains unable to conclude that harm assessment should be confined to common transactions.

The Stier Anderson analysis does so. Liberty finds it a very useful data point in assessing the range of harm. It should be considered as a data point that lies at the lower end of the range of potential harm. Liberty believes this for two reasons. First is the fact that it does not address harm from non-common transactions. Second is the fact that it employs an analytical abridgement that may introduce bias. Liberty understands the need for the abridgement, and does not intend any criticism of its use. The amount and complexity of the data rendered it practicably necessary. Moreover, Liberty is not able to offer a correction for the bias potential. Liberty does however believe that it is necessary to note the bias as a factor that bears on where in the range of probability the Stier Anderson analysis lies as a measure of harm from price discrimination by NUI EB.

The following table shows the effect of the issue. The method actually used allows only one transaction of ETG to match one transaction of NUI EB. The highest-priced NUI EB sale was for 30,000 Mcf in the example. The method used assumes that ETG could have gotten that same price on one 15,000 transaction, but not the second, even though the two ETG transactions together comprise volumes equal to or less than the volumes under the single NUI EB sale.

Table VI.42. Sale Matching Example

Totals			
Sale	**$/mcf**	**Mcf**	**Cost**
ETG1	$5.00	15,000	$75,000
ETG2	$5.10	15,000	$76,500
EB1	$5.20	15,000	$78,000
EB2	$5.30	30,000	$159,000
Difference			
Actual Method			
ETG1/EB2	$0.30	15,000	$4,500
ETG2/EB2	$0.10	15,000	$500
TOTAL			**$5,000**
Alternate Method			
ETG1/EB2	$0.30	15,000	$4,500
ETG2/EB2	$0.20	15,000	$3,000
TOTAL			**$7,500**
INCREMENT			***$2,500***

Whether the convention applied actually introduces bias is primarily a function of the relative sizes of volumes in an ETG transaction as compared with the NUI EB counterpart. Liberty has not had time to test the Stier Anderson data for this variable.

Liberty also observed that the results of the preliminary Stier Anderson quantitative analysis had produced a significantly larger price gap than the one identified by the NUI analysis. Note well that the larger Stier Anderson price gap did not necessarily mean a larger degree of potential harm. Their quantification applied the gap only to common transactions. Liberty applied its gap to all ETG transaction volumes. The NUI analysis did so also, not because the company conceded the logic of doing so, but only in the interests of producing an analysis whose overall construct was similar to Liberty's.

Liberty considered it necessary to construct an approach that would encompass all forms of harm to ETG. Specifically, Liberty did not find it acceptable to conclude that no harm resulted just because no objective means could be found for measuring it. To have done so would have been to confuse the questions of cause and effect. Moreover, the lack of a direct and objective measurement method does not mean that effect should not be quantified at all. More direct means are certainly preferred, but the lack of them does not end the matter.

Moreover, Liberty does not believe that conduct involving personal culpability is necessary for finding harm to ETG and its customers. Liberty used good-utility practice and prudence as its evaluation standard. Criminal culpability, breaches of employment contracts, or reprehensible personal conduct are not required for a finding of a breach of good-utility practice or prudence. Inefficiency, inattention, lack of initiative, or failure to conform one's behavior to accepted industry practices can suffice.

The Stier Anderson work succeeds in unwinding some of this pooling by NUI EB. It cannot, however, provide reasonable assurances of unwinding all of it, or of addressing the different levels of attention NUI EB gave to its own bottom line and that of ETG's

public-service costs. Liberty can identify no way of performing a complete segregation. Therefore, while it considers the Stier Anderson analysis very useful in measuring the effects of a portion of the NUI Utilities/NUI EB relationship that does not meet good-utility practice or prudence standards, Liberty does not consider it appropriate to take the Stier Anderson analysis as a full measurement of the harm that ETG customers have borne.

Recommendation VI-4. Require ETG to refund to customers the amount by which ETG's allocations of NUI costs were inflated due to the failure to make allocations to Virginia Gas.

NUI's failure to revisit allocation factors, once set for the fiscal year, ignored the burdens placed on the company by its non-utility operations. Those operations were increasing substantially during the test year on which ETG based its most recent claim for a base rate increase. NUI should have disclosed the forward-looking effects of its non-utility growth. As the test year included the increased costs of NUI, so should it have included recognition of the causes of that cost growth. The change was clearly known and measurable. It involved months at the beginning of the test year.

Requiring a return of one-year's worth of cost offsets that should have been built into rates on a recurring basis represents a moderate approach to addressing the imbalance created by NUI's use of its general allocator. This chapter of Liberty's report makes similar recommendations to address failures to allocate test-year costs to two other non-utility affiliates.

The following table provides the basis for Liberty's calculation.

Table VI.43. Omitted Va. Gas Allocations

Annual Allocation in 2002, excluding interest	$1,379,000
Monthly Allocation Amount	$114,917
Months in Test Year	4
Additional Allocation to VA Gas in Test Year	$ 459,667
Elizabethtown Allocation Factor in 2001	62.50%
Elizabethtown Share of VA Gas Allocation	$287,292

Chapter Seven: Corporate Governance

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A. Background

Liberty's examination of corporate governance focused on the period from 1998 through 2003. A board of directors needs to provide a source of independent wisdom, judgment, and experience in overseeing:

- Broad corporate direction
- Integration of the strategies and plans of multiple business segments with different and sometimes competing needs
- Consistency of performance results with specific goals and objectives and with more general notions of what defines success, proper risk mitigation, and flexibility in exploiting opportunities
- Actions taken to assure fair dealing with stakeholders of all types and compliance with public requirements
- Efforts to assure that controls intended to apply to senior management and operations groups get planned and executed with sufficient objectivity, vigor, and thoroughness.

Functioning effectively as a board naturally creates natural tension with becoming an inappropriate intrusion on effective and timely executive action. Successfully balancing this tension requires meeting an important set of standards. Liberty structured its audit work to provide an examination of how NUI has applied these standards in designing and in executing its corporate-governance process. The standards include:

- Conducting an effective director-selection process that produces the right skills and attitudes
- Creating an effective structure for dividing director responsibilities
- Assuring sufficient director time commitments
- Establishing effective board participation in executive succession
- Providing sufficient initial and ongoing training and education for new and incumbent board members
- Providing the board with sufficient and timely information to exercise its responsibilities
- Ensuring that the board is knowledgeable and conversant with the kinds of information it needs to know to perform effectively
- Recognizing the differences in the needs of multiple subsidiaries, particularly the public-service responsibilities imposed on utility subsidiaries
- Assuring audit independence and effectiveness
- Properly structuring the roles and interactions between board chairman and CEO
- Measuring board effectiveness
- Complying with public requirements
- Giving the board real control over executive compensation
- Providing sufficient and appropriate board compensation.

The next chapter of this report addresses compensation issues.

B. Board Structure

The scope of operations of large corporations exceeds a board's ability to provide sufficient oversight when acting exclusively as a committee of the whole. Recent changes in public expectations underscore the need for a sub-structure that provides specialized expertise and more focused attention on key areas. Areas associated with financial controls have particular importance. It is necessary to adopt a robust committee structure, define and support the mission of each committee, and populate them with sufficient relevant expertise.

1. NUI Corporate-Board Membership

The NUI board consisted of seven directors until recently. Two were insiders; *i.e.*, the Chairman of the Board and the CEO. There have been five outside directors. The following table shows the board members, their committee memberships, the year they joined the board, and when their current terms expire. NUI added an additional board member as Liberty completed this report. He is Robert Kenney and he is a retired President and CEO of ETG.

Table VII.1. NUI Board Members

Member	Position	Committees	Joined	Expires
John Kean	Chairman of the Board; Former CEO, NUI	Exec, Inv	1969	2004
John Kean, Jr. (1)	CEO, NUI	Exec	1995	2004
James J. Forese	Outside Director	Audit, Comp, Exec, Nom & Gov	1978	2003
R. Van Whisnand	Outside Director	Inv(2), Comp, Exec, Nom & Gov	1982	2003
Dr. Bernard S. Lee	Outside Director	Comp(2), Audit, Nom & Gov	1992	2004
Dr. Vera King Farris	Outside Director	Comp, Inv, Nom & Gov	1994	2005
J. Russell Hawkins	Outside Director	Nom & Gov(2), Audit, Comp, Exec, Inv	1998	2005

(1) Resigned effective September 25, 2003, replaced by Marc Abramovic, who left the Company in early 2004
(2) Indicates committee chairmanship

These board members served at the time of the BPU Holding Company Order. Each also had had at least a number of years of NUI board service before that order.

2. NUI Board Committees

The NUI board committees include Audit, Compensation, Executive, Investment, and Nominating and Governance. This structure is reasonably typical. All of the committees are of long standing, with one exception. The NUI board created the Nominating and Governance Committee in late 2002.

Audit Committee: this committee assists the board in fulfilling its oversight responsibilities with respect to:

- Integrity of financial reports and other financial information
- Compliance with legal and regulatory requirements
- Independent auditor qualifications and independence
- Performance of the internal-audit function
- Performance of the Company's independent public accountants
- System of internal controls
- Audit, accounting, and financial reporting processes generally
- Preparation of a report of the committee for inclusion in the Company's annual proxy statement.

The Audit Committee's charter was created in November 2002. It requires at least three independent directors. The charter provides for at least four annual meetings, with greater frequency as required. The committee must also hold at least two annual executive sessions with the internal auditors, independent accountants, and management. These meetings address matters that any of those parties believe should be discussed privately. The audit committee must also meet at least annually with management to discuss internal controls, the results of audits, and the accuracy of financial reporting.

Compensation Committee: this committee discharges the responsibilities of the NUI board regarding compensation of executive officers and directors. The compensation committee's charter, created in November 2002, provides that it shall consist of three or more independent directors designated annually by the board. The committee chairperson is designated by the board or elected by the committee. The committee must meet at least twice annually and more frequently if circumstances dictate.

Executive Committee: NUI created this committee to provide a smaller, flexible group to meet with management as an advisory group. The executive committee does not have a charter. NUI has not used it significantly. It includes all but one director. It therefore does not provide benefit in terms or flexibility or efficiency for meetings and actions.

Investment Committee: this committee has responsibility for overseeing the investment of assets held by company retirement plans. The committee selects investment managers, establishes guidelines under which they operate, and reviews their performance.

Nominating and Governance Committee: this committee:

- Identifies individuals qualified to become members of the board
- Recommends to the board director nominees for the annual meeting of shareholders
- Develops and recommends to the board a set of corporate-governance guidelines, in order to lead the board in its annual review of board performance
- Recommends to the board nominees for each committee.

3. Subsidiary Boards and Committees

The following list of NUI subsidiaries identifies with an asterisk those that have a separate board of directors:

- NUI Capital Corporation*
  - NUI Energy Inc.*
  - NUI Energy Brokers, Inc.*
  - NUI Energy Solutions, Inc.*
  - NUI Environmental Group, Inc.*
  - NUI International, Inc.*
  - NUI/Caritrade, Inc.[1]
  - NUI Hungary, Inc.*
  - NUI Sales Management, Inc.*
    - T.I.C. Enterprises, LLC
  - NUI Service, Inc.*
  - NUI Telecom, Inc.*
  - Utility Business Services, Inc.*
- NUI Saltville Storage, Inc.*
  - Saltville Gas Storage Co LLC (50% owner)
- NUI Storage, Inc.*
  - NUI Richton Storage, Inc.*
- NUI Utilities, Inc.*
- Virginia Gas Company
  - Virginia Gas Distribution company
  - Virginia Gas Pipeline Company
  - Virginia Gas Storage Company

NUI also maintained an ETG advisory board. That board had no legal authority. It existed to provide advice and counsel to the CEO and others on ETG matters. Membership on that board included the NUI Chairman, the NUI CEO, and four other members. Two were retired heads of NUI's utility operations. The other two were outsiders. One of the outsiders has regional-banking, senior executive experience. The other has senior executive experience in gas LDC operations. NUI's decision to sell the Company in the fall of 2003 included a change in the role of these four ETG advisory board members. NUI added each to the NUI Utilities, Inc. board of directors. NUI also added the NUI Utilities Vice President and General Manager to the NUI Utilities board at that time. There were no outside directors on the NUI Utilities board before these changes.

The NUI board also created a special committee at the time of its decision to sell the Company. This committee consists of all of the outside directors on the NUI board. The four ETG advisory board members added to the NUI Utilities board have been sitting with the NUI board's special committee during the latter group's meetings.

[1] This affiliate uses a management committee in lieu of a board of directors.

4. Conclusions

Conclusion VII-1. The NUI board was too small given the size of the work load, the number of committees, and the infrequency of meetings.

The committee structure required directors to be members of three or even four committees. These multiple assignments contributed substantially to director work load. The NUI board also met only every other month until the decision to sell the Company last fall. The relative infrequency of meetings had the tendency to increase the effects of using a board of such small size. The size of the board actually dropped in 2002. An outside director resigned. NUI decided not to replace that member. NUI did add a director in February 2004. He is a retired executive who was in charge of ETG.

The work load of the directors has been heavy, particularly since the creation of new securities-exchange and Sarbanes-Oxley statutory requirements. Liberty describes this act's requirements below in this chapter. At least one independent director, who is an executive of another company, described the workload as a problem to Liberty.

The large workload of the Nominating and Governance Committee added to the burdens of the NUI board. That committee has been setting up guidelines, implementing a self-assessment process for the board and the other committees, replacing two directors expected to be retiring in the near future, and possibly adding one or more additional directors. This committee and the Audit Committee have also had to oversee various aspects of the Sarbanes-Oxley Act of 2002 and new requirements of the New York Stock Exchange. The workload-increase problem has been exacerbated by the fact that much of that work is breaking new ground, in areas that many boards, like NUI's, had not addressed previously.

Small boards can function effectively. Liberty found, however, that the small size of the NUI board and the infrequency of its meetings did not serve NUI well in a period of significant expansion. That expansion increased both the size and the scope of Company ventures. The extensive amount of additional work imposed by new governance requirements also came at a time when NUI was experiencing growing financial problems. This additional work further taxed a small group of outside directors already facing large challenges. The failure to replace the departed member and the failure to increase meeting frequency until circumstances reached crisis proportions did not comport with the needs of the Company.

Conclusion VII-2. The committee structure provided a reasonable division of authority and responsibility for the various board functions.

Liberty found the committee structure appropriate. Liberty's review of the information provided to the committees and the committee-meeting minutes revealed a focus on matters appropriately within their respective scopes.

Conclusion VII-3. NUI did not bring sufficient structure or order to the large number of subsidiary boards it used.

NUI left to its senior executives and the board the oversight of over a dozen subsidiary boards. NUI did not create a standardized structure, reporting format, or reporting relationships for those boards. This large number of subsidiaries had significantly varying operations natures and aggressive growth plans. NUI should have provided for enhanced administrative control over its governance functions. This conclusion has, however, become essentially moot, given the disposition of non-utility ventures and the pending efforts to sell NUI.

5. Recommendations

Liberty's principal concerns about the structure of NUI's corporate governance have become moot given the pending efforts to sell the Company. A sale would most likely end the tenure of the current board. It would also produce a different governance structure, which would become apparent to the BPU in the context of sale approval. The very recent addition of a new NUI director also helps to address some of the concerns raised by Liberty's conclusions.

Recommendation VII-1. Require common meetings of the NUI corporate and the NUI Utilities boards until completion of the sale of NUI.

There remains, however, one important element of governance that NUI should address in the near term. Liberty recommended the inclusion of the ETG advisory board members on the NUI Utilities board and in the meetings of the special committee last fall, when NUI decided to sell the Company. Liberty considered their experience and their perspectives to be crucial additions to a governance process that had not focused adequately on utility needs and the impacts of other corporate activities on those needs.

NUI did make the change that Liberty recommended. The current board will oversee NUI operations until the completion of the sale of the Company. That process will likely take through the remainder of this calendar year and perhaps beyond. Liberty therefore recommends that NUI provide for joint meetings of the NUI and NUI Utilities board. Specifically, Liberty's purpose for making this recommendation is to assure that the NUI Utilities board members have a formal and structured opportunity to offer their views on corporate actions before the NUI board acts on them.

The purpose is not to provide NUI Utilities board members with a veto or even a vote on actions by the NUI board. The purpose is simply to make sure that the NUI directors hear directly and in advance what the NUI Utilities directors think will be the impact of parent actions on the utility. One of Liberty's major concerns about the performance of the NUI board is its failure to consider with sufficient depth of understanding utility needs and the public requirements that attach to utility operations and actions.

A new CEO is only now starting at the parent. He does, however, bring very significant utility leadership experience. His addition brings significant added strength to NUI

senior executive management. NUI also has a new general counsel. He does not come from the utility industry. The NUI financial function continues to be led by an outside consultant. He does not have utility experience. NUI has decided not to make any changes in its outside directors pending the sale. Liberty's recommendation will help to assure that those directors place a proper emphasis on ETG's needs as they finish their tenure at the Company.

C. Selecting, Developing, and Retaining Directors

1. Background

The process for selecting board members contributes directly to the creation of an effective mix of skills, experience, and behavioral traits. A diverse board is necessary for sound functioning in corporations with complex and varied business operations. Many see increasing the percentage of outside directors as a single solution. That notion is constructive and important, but not alone sufficient. Tyco stands as a principal recent example of failed corporate direction and control. Its board consisted entirely of outsiders, with the single exception of its CEO.

As significant as independence is the question of whether board members bring a collective set of skills, experience, and background as broad as those of the corporation's business operations. It is also important to bring a diversity of roles. For example, a board consisting largely of other corporate CEOs who are used to dominating decision-making processes can have greater difficulty in operating in a more collegial atmosphere. Incorporating the right financial and auditing experience on the board is also significant in an era of increased financial visibility and risk.

Forward-looking companies did not need recently imposed changes from the outside to recognize the importance of early training and of reinforcing it with continuing measures. They have sought to assure that board members have the background necessary to properly interpret key data, consider new opportunities and risks in light of corporate strengths and weaknesses, ask the right questions of management and interpret the answers properly, and give informed guidance to the corporation and its subsidiaries.

2. Conclusions

Conclusion VII-4. The NUI board has been characterized by low turnover.

Two directors left the NUI board since 1998, which is the first year examined by Liberty. The first retired in January 1999 after 30 years of service. He had reached the mandatory retirement age of 72. His replacement was the only candidate considered to fill the vacancy. A second left the board voluntarily in January 2002. He had served for 23 years. NUI did not fill the resulting vacancy until February 2004. The current outside directors also have had long tenures. Two have served for more than twenty years. NUI's outside directors have an average tenure of over 17 years, excluding the member added because of the 1998 departure. It became clear to Liberty that service until

retirement at 72 or voluntary departure constituted the only practical methods for replacement, in terms of history and current Company plans. NUI even opted not to use retirement as a means to bring in new, independent direction on one available occasion.

Liberty believes that NUI should have had guidelines or requirements with respect to term limits, continuation, or average tenure. Even a policy formally requiring a focused examination of consideration for re-election would have been a material improvement. NUI has recently proposed a guideline that the board would consider each director's continuation on the board every three years. The guideline, while constructive, did not specify what criteria would apply or what tenure-diversity goals or objectives were to be sought.

Conclusion VII-5. The processes for identifying director candidates and for reviewing them have not been sufficiently structured.

Of the five current outside directors, three were business or other acquaintances of the current Chairman, who was the CEO at the time of their addition to the NUI board. One was a prior member of the ETG board. One was identified by one of the Company's banks. None was identified through a formal screening process. In no case were multiple candidates offered for consideration.

NUI has recently adopted formal, written guidelines and requirements for board-member selection. NUI's November 2002 Nominating and Governance Committee ("Governance Committee") charter and Corporate Governance Guidelines provide that:

- A majority of directors will meet the New York Stock Exchange criteria for independence; this requirement will be reviewed annually by the governance committee
- Director nominees will be selected and considered by the governance committee in accordance with its charter
- Preferable board size is in the range of seven to eleven members
- No director may serve on more than three other company boards
- No director may be nominated to a new term if age 72 or older at the time of the election
- There are no term limits; however, the governance committee will review each director's continuation on the board every three years.

This new approach constitutes an improvement, but it has not yet been applied. Its effectiveness therefore cannot be evaluated.

Conclusion VII-6. The NUI parent board demonstrated a lack of utility operating and regulatory experience.

Liberty found material the lack of utility operating and regulatory experience on the NUI parent board. Pertinent background can come from other than job experience. Therefore, the lack of that job experience was not necessarily determinative. However, Liberty's interviews with the board members disclosed a lack of sufficient familiarity with the kinds of issues that ETG faced, particularly given the Holding Company Order.

Only the Chairman and CEO, both insiders, brought directly relevant experience to the NUI board. Moreover, much of the CEO's background with NUI focused on non-utility activities. The outside directors have come from different backgrounds. They include controls at a large corporation, executive leadership for an office-equipment and supply-systems company, natural-gas research and development, academia, a telecommunications background, and engineering and construction contracting. Two independent directors did have gas- or energy-industry experience. It did not, however, relate to gas-utility operations, gas-supply-portfolio management, or utility regulation. Both, while technically outsiders, had also been long-standing acquaintances of the NUI Chairman, through activities of the American Gas Association.

All of NUI's directors had certainly attained recognized and significant stature in their own fields of expertise. Liberty intends no criticism of their individual capabilities. Their accomplishments, however, did not make up for their lack of utility-operating and regulatory experience. Moreover, their training as directors was largely limited to what they learned on the job at NUI.

Liberty believes that their combined lack of utility operations and regulatory experience and training proved to be a significant factor in NUI's failure to come sufficiently to grips with what the Holding Company Order meant and what was necessary to implement it effectively. Moreover, Liberty believes that the gaps in their collective experience made it more difficult for them to maintain the utility-centric focus that Liberty believes is essential for a company moving aggressively outside of its traditional area of expertise. That this area is one intimately intertwined with public service obligations makes that utility-centric focus particularly important.

Liberty's interviews with the directors disclosed a broad lack of knowledge of key indicators and events in the natural-gas industry and in NUI's utility businesses. In interviews with Liberty, the directors did not exhibit strong knowledge of the natural-gas business and industry events, except at the broadest levels. The outside directors, for example, did not know ETG's level of storage fill, or seem to appreciate its significance. They did not seem conversant with the utility's cost of gas or its impacts on customer bills. They did not know the extent to which NUI planned for ETG to use the storage sources controlled by NUI affiliates. They were not able to explain in substantial depth the relationship between ETG and NUI EB with respect to purchasing and delivering gas to the utility city gate.

Liberty attributed their lack of knowledge of utility operations partly to the minimal level of utility information provided in the packages given to directors in advance of board and committee meetings and the minimal level of discussion of those subjects as reflected in the minutes of the board. Liberty discusses information flow and board meetings later in this chapter.

Liberty did not find the senior NUI executive team to be strong in its knowledge of the details of utility operations either. They did have a number of business units to oversee.

The breadth of their job responsibilities certainly affected their ability to have at instant command financial and operating data of each unit other than at a high level. Nevertheless, their grasp of the details was not at a level commensurate with the dominant position that ETG plays in the success of NUI. In effect, NUI consigned operational knowledge of its most important unit to an executive beneath the parent level. That knowledge came only at the department, or business-unit, level. Moreover, NUI kept a number of key utility functions above the NUI Utilities level. Finance and key gas supply activities represent key examples. This stratification made NUI's most senior, utility-focused executive effectively a department manager in all but name, until changes made in September 2003. To have done so for such an important part of its business was not sound.

Liberty has seen before the effects of stratifying focus and attention in this way. The effect, which Liberty observed at NUI, was that parent executives and the parent board became relatively less focused on utility operations and relatively more on non-utility plans and activities. In-depth utility knowledge and experience therefore came to be applied too little at the strategic and oversight levels within the parent. The only board with outside membership and with substantial authority operated at the parent. This aspect of the NUI governance structure was unwise.

NUI lacked a formal director-selection process that incorporated clear identification and meeting of utility needs. This gap in the process contributed to limitations on available skills and knowledge needed to make diversification work in uncertain, high-risk markets and environments. The public-service needs that the Holding Company Order sought to protect would have been better served had NUI taken sound efforts to bring a more substantial utility orientation, through greater experience and focus, to its examination of non-utility plans and investments. This conclusion applies to the NUI board and to senior NUI executive management.

In particular, this experience and focus would have materially contributed to a better examination of what the BPU expected and of how the utility could be affected in the event that investments in other areas proved less successful than anticipated. Those other NUI investments suffered an extreme failure to perform. A more informed, cautionary outlook might have made a very large difference in Company fortunes. At the least, Liberty believes that it would have produced far more substantial compliance with financial separation requirements. Such compliance in turn would have very likely halted the drain of resources to non-utility ventures at an earlier date.

Conclusion VII-7. NUI had no specific requirements or guidelines for either industry or general training until recently.

NUI historically conducted no director education and training programs. This approach had the effect of limiting director knowledge of the businesses generally to what directors:

- Brought with them to NUI
- Learned on the basis of what management put before them
- What they asked.

NUI began to provide some formal training to directors in 2002. Outside counsel provided a training session on corporate governance. One director attended a three-day program at the Stanford University Graduate School of Business Administration on corporate governance and board oversight.

The Company has recently developed draft guidelines for continuing education of directors. In May 2003, the Nominating and Governance Committee issued draft "Guiding Principles for Continuing Education of Directors." The document sets forth the following guidelines:

- Directors should stay abreast of current and developing laws, regulations, trends, and practices affecting the businesses of the Company
- To do so, they may use methods including reading relevant materials, receiving information or presentations from the company, its advisors, or other boards on which a director sits
- Each director should attend at least one relevant educational seminar, course, or program sponsored by an outside party every 18 months, with reimbursement up to $6,000
- It is recommended that at least two directors, or a member of the board and a member of senior management, attend together to provide for better information sharing
- Directors should request discussion or presentations about topics on which they would like to become better informed.

The committee also provided a list and description of some 12 programs for possible attendance by directors.

3. Recommendations

Liberty views the continuation of NUI's directors past the completion of the sale of the Company as very unlikely. The pending efforts to sell NUI make recommendations regarding long-term training and development of NUI directors essentially moot.

D. Board Effectiveness

1. Board Time Commitment

It clearly takes more time to be an effective director in the increasingly complex and high-risk world in which companies in the non-utility energy business operate. A superb structure filled with the most able people still needs hard and dedicated work to succeed. A board characterized by brief meetings dominated by routine action items, infrequent committee meetings, little time on training, and desultory attention to financial and operational information will most likely stumble, given enough time.

The best means to minimize the risk that a well-developed governance structure filled with capable personnel will fail at a critical juncture or with profound consequence is to require it to work diligently. Increasing demands have had the unfortunate consequence

of making it more difficult to find candidates willing to spend the necessary time. Nevertheless, it remains important not to sacrifice commitment for credentials. Electing directors who have enough competing responsibilities to prevent them from committing the two person-months of effort (measured by 8 hour days) it may take to serve as a regular director is not sound. That effort can perhaps double for members serving on a demanding committee such as the audit committee.

The NUI board typically met six times per year through mid-2003. Its committees typically met two to three times per year. For the period from 2001 through early 2003, one of those meetings has been a two-to-three day off-site retreat addressing strategic issues. Each director has also served on several committees. Four of the five outside directors have chaired one of those committees. Meeting durations are not recorded. Meeting minutes indicate starting times, but not ending times. Board members estimated meeting durations to be typically 3 to 4 hours. In addition, directors have received information packets of background and preparatory information for each board and committee meeting. Those packages arrive several days to several weeks in advance. Estimates of time spent reviewing that information varied by director. They typically fell in the range of one-half to one day per meeting. Board members unable to be present occasionally attended by telephone.

Liberty reviewed the minutes of all board and board committee meetings, the information provided to board members in advance of those meetings, and the available information handed out at those meetings for the period from 1998 through the portion of 2003 for which such information was available. In addition, Liberty interviewed all board members, NUI executives, and senior management individually.

2. Demonstrated Board-Member Knowledge

It would be helpful to be able to judge the quality of board operation through a *post mortem* examination of how it reached decisions. The problem is that board minutes are a notoriously poor indicator of the specific dialogue. Much of that dialogue often comes in preparation for, rather than at, meetings. There is not generally an incentive for candidly sharing with outsiders (auditors or not) how "the sausage was made." Thus, in the case of this audit, Liberty made judgments using the information provided to the board and the board's level of knowledge and understanding of the workings of the business.

Liberty would expect board members to have a basic understanding of the following:

- The primary cost drivers of the gas-utility business in general and at the Company in particular
- The nature and cost of key services provided to ETG by affiliated and non-affiliated entities
- Significant trends in the gas-utility industry and natural-gas markets
- Current and potential problems, threats, and opportunities
- The absolute and relative performance of the various business units.

For example, the most significant component of ETG's cost structure is the cost of gas delivered to the city gate. This cost includes the commodity, pipeline transportation, storage, and other peaking facilities. The cost of gas is about 60 percent of the average customer's gas bill. Following that, operations and maintenance expenses typically comprise the second-largest item of expense.

The recent prices of natural gas approached record highs and storage neared historical lows. There have been major changes in natural-gas markets. There have been bankruptcies of several large diversified-energy companies and the withdrawal from trading of others. Liberty expected to encounter a heightened level of board attention to the operations of NUI's natural-gas businesses. Liberty expected more than what might be considered a "business-as-usual" level.

3. Getting Information

Efficient and effective board functioning requires a steady flow of timely and comprehensive financial and operational performance data and information. A board also needs clear, written descriptions of major new plans, initiatives, or activities before it commits a corporation to undertaking them. It is important that directors have the ability to set their agenda. This power helps to assure that they obtain access to all the information that they need. Even where they have the same agenda as management does, board members need to assure themselves that they are given the information that they feel is necessary.

It is proper for management to identify routine, standardized information packages and to assemble what it feels is necessary for a board to address special or nonrecurring issues requiring board attention. This approach needs to be accompanied however by the ability of directors to request supplemental data and to receive it on a timely basis. Moreover, no executive management team is perfectly prescient in predicting director information needs. A track record of actually taking advantage of its ability to get special information provides one indicator of effective board performance. That indicator can prove particularly meaningful at times when a company faces important or difficult opportunities, risks, or key decisions.

A related issue is the structuring of the meeting agenda to focus attention on the "big" issues. Boards have to ratify a number of decisions that are made (and properly so) on a *pro forma* basis. It is useful to structure the agenda and the information flow to segregate those matters and to position them to assure that time constraints do not cause the major or difficult issues to suffer the loss of attention.

Liberty would expect the regular information flow to the board to provide information to enable understanding of the following topics:

- The primary cost drivers of the gas business in general and at NUI in particular
- The nature and cost of key services provided to utility operations by affiliated and non-affiliated entities
- Significant trends in the industry and the marketplace

- Current and potential problems, threats, and opportunities
- The absolute and relative performance of the various business units

4. Recognizing Different Needs of Subsidiaries

A board of directors needs to consider overall corporate needs, and also to uniquely identify and respond to the specific needs of all subsidiaries. Utilities have important public-service responsibilities, which require special consideration of the demands they make on corporate governance.

Liberty sought to determine whether board attention to ETG was adequate to respond to the service quality, reliability, safety, continuity, and cost-control requirements and expectations legitimately imposed on a family of enterprises that includes utilities. Significant harm can occur from even short-term tensions between utility and non-utility resource needs, management inattention, performance weaknesses, and other factors.

5. Division of CEO/Chairman Responsibilities; Executive Succession

Creating the proper balance between executive management and the board of directors is a difficult task, particularly when a company is into new and challenging business areas. Recent and unfortunately widespread experience shows that it has been far too easy to create a structure and a set of operating principles that fail to provide for effective outside and critical examination of management's vision, goals, and plans. On the other hand, going too far can produce an antagonistic, confrontational environment. There may be times when significant, and sometimes even blunt, disagreements become necessary. They should not be common and they should be capable of prompt and effective resolution when they do occur.

Executive succession usually takes place a structured process. It is important to consider how and when the board should participate in it. Much "softer" but perhaps even more important is the environment in which the board and senior executive management cooperate in developing the in-house candidate pool and in balancing that with the need for new sources of expertise or fresh insights.

The Chairman of the Board since 1995 has been the former CEO and President. He was CEO from 1969 to 1995. The succeeding CEO served from 1995 to late September 2003. His successor served until early 2004.

The NUI CEO had two principal reports during the latter part of Liberty's audit field work. The first was the Senior Vice President, COO and CFO. That officer came to NUI in 1997. He replaced the departing CEO in September 2003. He too left NUI in early 2004. After September 2003, an outside consultant has served as CFO, but NUI dropped the COO responsibilities from that position. A new CEO is just beginning service as Liberty completes this report. He came from outside NUI.

The second person reporting to the NUI CEO was the Chief Administrative Officer, General Counsel, and Secretary. He came to NUI in 1995. He left with the departing CEO in early 2004. His replacement came from outside NUI.

Earlier, two additional senior officers had also reported to the NUI CEO. They departed in 2003. The first was the Vice President – New Ventures. He became an NUI officer in 1993. The second was the Vice President – Corporate Development and Planning. He became an NUI officer in 1996.

6. Board Self-Assessment

Management at all levels has become much more focused on routine and comprehensive performance measurement. A major goal of such measurement is to instill a commitment to continuous improvement. It is less common to see structured evaluations of board performance, even though board performance is critical to corporate success. There should be a way to assess board and director performance on an ongoing basis. Those assessments should be material factors in determining additional information and training needs and, where appropriate, in determining whether directors should continue to serve.

The board began in late 2002 a formal self-assessment process under the auspices of the Nominating and Governance Committee. There had previously been no formal or informal process, other than infrequent discussions at board meetings.

7. Conclusions

Conclusion VII-8. NUI senior executive management and the NUI board did not focus sufficiently on fulfilling its role with respect to the utility business or ETG in particular.

Chapter Two of this report addresses NUI's aggressive non-utility expansion plans. That chapter sets forth Liberty's specific concerns about:

- Failures to consider risk
- The ability to finance non-utility growth
- Holding-Company Order financial separation requirements
- NUI executive and board performance in capital and expense budgeting during the period of financial constraint and later crisis.

The NUI board did not exercise effective oversight in its examination and testing of management's presentations and recommendations about non-utility expansion. It also failed to require management to prepare and implement a firm and reasonable plan for meeting the financial separation requirements of the Holding Company order.

In particular, as the Company's financial problems deepened, the NUI board did not inquire with sufficient depth into budget details. It neither questioned management closely nor coordinated its reviews adequately with those of the ETG advisory board. At least one NUI director labored under an impression that an ex post facto approval of money already spent by NUI Utilities actually constituted a new budget authorization.

He expressed to Liberty the view that the capital work at issue was in addition to work anticipated at the time board approved the initial capital budget. Chapter Two of this report details the board's lack of focus on the ability to finance non-utility investments.

The NUI board failed particularly in using the ETG advisory board effectively in helping to oversee matters involving ETG. The Holding Company Order requires its existence. Prudent conduct indicated its use as a substantive source of reviewing utility needs and the impacts of other corporate activities in relation to them. Liberty's examination disclosed that senior NUI executive management and the NUI board did not consider the advisory board to be of substantial importance for these purposes.

Conclusion VII-9. Board members make a reasonably substantial time commitment to NUI matters.

Each board member spends approximately 20 to 25 days per year on board and committee matters, depending on committee memberships. This includes attendance at six regular board meetings, the NUI annual meeting of shareholders, an annual retreat, and committee meetings that range from two to four per year.

Conclusion VII-10. Director attendance at board and committee meetings has been good.

Liberty's review of director attendance demonstrated a consistent pattern of regular attendance by all members.

Conclusion VII-11. Directors receive information packets to prepare for meetings with sufficient time, but the information given to the board and its committees does not contain sufficient details about ETG's business.

Most information provided to directors prior to the board and committee meetings has come in the form of written reports. Liberty found the information to be circulated in a timely manner. It arrived from several days to several weeks before meetings.

Directors received a combination of presentations at the meetings. Some included handouts. There was routinely time for discussion, questions, and answers. Board members indicated to Liberty that they typically spent from two hours to half a day preparing for each board or committee meeting.

Liberty found that management's presentation of key financial and operational information, broken down by business unit, was either limited or was not provided at all. For most board meetings the information package included two pages of financial data. One addressed performance against financial parameters in the previous quarter. Another compared current and prior year results. Each business unit had one line item on each of those pages. Liberty saw no operational data in the information that management provided to directors. Liberty also found no narrative "context" piece addressing the relative importance of each business unit, highlighting notable information, or addressing matters the board might be discussing or approving from financial, operational, or other perspectives.

Conclusion VII-12. Oral reports and documents provided at board and committee meetings and the minutes displayed a lack of detail about ETG operations.

Minutes are not intended to capture everything said at the meetings. Nevertheless, they do convey a sense of the topics discussed, who made presentations, the nature of discussions and presentations, and whether and to what extent board members had questions. In particular, the minutes of NUI board and committee meetings appear to be comprehensive with respect to who made presentations or reports, the matters addressed, and whether and to what extent there were questions and discussions. Liberty did not find them to disclose significant attention to ETG operations.

The oral reports and information that the board has received displayed the same lack of detail that Liberty found in the written material described in the preceding conclusion. The discussions among directors and management, as reflected in the minutes and presentations, also did not reflect an understanding of the interrelationships and interdependencies of ETG and other subsidiaries.

ETG's gas-utility business is a mature one that operates in a stable franchise area. Other subsidiaries, such as NUI EB and UBS, were significant service providers to NUI Utilities and others. NUI Telecom provides or provided telecommunications services, and TIC provided sales and telemarketing services. Both telecommunications enterprises comprised much higher-risk businesses than did ETG. Various other ventures, such as NUI's environmental and overseas ones, might be considered highly speculative.

There were many NUI businesses. They offered a broad scope of services, and were characterized by significant geographic diversity. Perhaps most important, their stature varied very substantially. They ranged from mature and stable to incipient and high risk. Liberty found that the documentation of NUI board oversight of them did not demonstrate a comprehensive, structured method for accounting for their status, risks, opportunities, and challenges, when taken together.

Board members indicated to Liberty that discussions and contacts between themselves and management outside of meetings were fairly limited. They felt, however, that it was sufficient and available when needed.

Conclusion VII-13. The board has not applied an effective mechanism for dealing with new ventures.

Liberty found no structured NUI processes or procedures for:

- Setting evaluative criteria for new ventures
- Assessing the business risks they introduced
- Evaluating the relative degree of success for those ventures
- Terminating them when they failed to meet expectations.

The board did not institute a framework for evaluating and monitoring those ventures. The existence of broad expansion plans, aggressive actions to execute those plans, and

significant failings of those actions over time to produce expected results led Liberty to conclude the board should have done so. Chapters Two and Four of this report address those plans and results in detail. The NUI board also did not establish firm go/no-go decision points, and did not set milestones or well-defined exit strategies for new ventures. Board discussion appears at times to show an understanding that certain ventures had higher risks than others. Liberty did not encounter, however, discussions of specific actions to take to assess the magnitude of those risks or to mitigate NUI's exposure to them.

This lack of a process for addressing new ventures in a structured manner was compounded by the lack of evidence that the NUI directors offered significant challenge to or questioning of management on the feasibility of new ventures.

Conclusion VII-14. The division of responsibilities between the Chairman and CEO was reasonably understood and implemented.

NUI had no formal statement of the responsibilities of the two positions. The minutes of board meetings and interviews of directors confirm that the chairman managed the board and its business. The CEO was responsible for the operations of the company. Presentations involving strategic direction or key issues typically came from the CEO or other senior executive management. The minutes reflected that board meetings ran under the direction and control of the chairman.

Conclusion VII-15. NUI has handled succession on an ad hoc basis, without a formal succession plan or process.

Positions that should have succession plans include Chairman, CEO, senior officers, and heads of the utility business unit and supporting units (*e.g.*, UBS and EB). Historically, the Company has experienced low turnover in the president, CEO, and chairman positions. NUI has handled each change as a distinctive event. Several potential candidates for senior-executive positions, judging only from their positions on the organization charts, have left NUI in the past several years. Thus, the field of internal candidates has been fairly limited.

Conclusion VII-16. Beginning in 2003 the board began a self-assessment process.

The NUI board undertook a self-assessment process through the Nominating and Governance Committee. It came primarily as a result of the Sarbanes-Oxley Act. The process takes the form of a survey of board members. Each director must respond to 35 statements on a five-point scale. A typical statement might be the following:

	Strongly Agree			**Strongly Disagree**	
The Board receives adequate information.	1	2	3	4	5

Each board member has filled out one survey to date. An overall result was tabulated for each statement. The results were to be fed back to the board. NUI's financial and regulatory crises deepened in the second half of 2003. The Company reduced its priority on completing this exercise. Liberty's latest information was that it was not completed.

The surveys of the board were planned to be annual. The Company had expected to add a similar survey of the committees starting in 2004. The survey provides valuable insights into what the board thinks about itself, but provides no outside perspectives. Assuming that the directors are being as objective and straightforward as possible, the survey can only provide feedback and insight to the extent that the directors are aware of shortcomings and problems and the survey asks questions to elicit comments on those topics.

Put another way, the survey can only address what the directors know they don't know. For example, none of the problems found during this audit appeared as an issue in the survey. The board members apparently felt that they received enough of the right kinds of information and gave themselves a relatively high score.

Conclusion VII-17. NUI has not kept full records of board operations.

NUI had no written policy on records retention. NUI did not routinely retain in an organized fashion those documents handed out at board meetings. In addition, the Company was unable to produce certain reports and presentations that directors specifically requested be filed with the minutes.

8. Recommendations

Liberty views the continuation of NUI's directors past the completion of the sale of the Company as very unlikely. The pending efforts to sell NUI make recommendations regarding long-term training and development of NUI directors essentially moot.

E. Compliance with Public Requirements

1. Background

Audit committees comprise standard elements of board structure. It is important that these committees have the power to set their own agendas and to secure the information that they determine is necessary. There is also growing support for giving the outside directors on audit committees the responsibility for choosing, setting the compensation of, and limiting the other corporate work of the outside auditors.

The President signed The Public Company Accounting Reform and Investor Protection Act of 2002, better known as the "Sarbanes-Oxley Act," into law in July 2002. It states its purpose as:

> *To protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes.*

The principal Sarbanes-Oxley requirements relevant to NUI's activities and to this audit are found in Title III of the Act – Corporate Responsibility, and Title IV – Enhanced Financial Disclosures. The act also imposes substantial requirements on the SEC,

auditing firms, securities analysts, and others. The act's requirements that are relevant here include the following:

Table VII.2. Sarbanes Oxley Requirements Summary

Section	Requirement
201	Accounting firm not to provide non-audit services contemporaneous with audit
203	Lead and reviewing audit partners to rotate off audit every 5 years
204	Auditor must report "critical accounting policies and practices" and alternative treatments that have been discussed with management.
206	CEO, Controller, CFO, and Chief Accounting Officer may not have been employed by audit firm within one year prior to start of audit.
301	Audit committee members must be independent directors.
	Audit committee responsible for appointment, compensation, and oversight of audit firm.
	Audit committee to establish procedures for receipt, retention, and treatment of complaints regarding accounting, internal controls, and auditing.
	Audit committee may engage independent counsel or other advisors.
	Audit committee to receive appropriate funding.
302	CEO and CFO to certify financial statements and disclosures.
303	Unlawful for officers or directors to fraudulently affect auditors to render financial statements that are misleading.
304	In event of restatement of financial reports due to "material non-compliance," CEO and CFO must reimburse company for any incentive-based or equity-based compensation and any profits from sale of company securities received during 12 months following issuance.
306	Officers, directors, and other insiders prohibited from trading company stock during pension fund black-out periods.
401a	Financial reports to reflect all material correcting adjustments identified by accounting firm.
	Annual and quarterly financial reports to disclose all material off-balance sheet transactions and other relationships that may have material current or future effect.
402a	Prohibition on personal loans to executives.
403	Directors, officers, and 10% owners must report transactions by end of second business day.
404	Annual report to contain "internal control report," including management responsibility, assessment, auditor's attestation, and report.
407	SEC to issue rules requiring companies to disclose whether at least one member of audit committee is a "financial expert."
409	Companies required to disclose information on material changes in financial and operating conditions rapidly and on current basis.

There is substantial commonality between the Sarbanes-Oxley Act and roughly contemporaneous action by the major American stock exchanges. For example, the NASDAQ board of directors approved more than 25 corporate governance proposals in July 2002, and submitted them to the SEC for approval. The NYSE board of directors followed with a similar action on August 1, 2002. It then approved the final recommendations of its Corporate Accountability and Listing Standards Committee, and submitted them to the SEC. The following list illustrates the kinds of changes proposed recently by each; they are in various stages of implementation:

- Majority of directors to be independent
- Regularly convened executive sessions of non-officer directors only
- Identification of outside director presiding at above meetings
- Establish nominating/governance and compensation committee
- All audit, nominating, and compensation committee members to be independent

- Audit committee to approve all related-party transactions
- Limits on other compensation of directors by corporation
- Tightened definition of "independent" director
- Independent director approval of director nominations
- Independent director approval of CEO compensation
- Outside auditor hiring/firing solely by audit committee
- Audit committee prior approval of non-audit services by outside auditor
- Audit committee power to retain independent services
- Audit committee members to understand financial statements
- Exchange-approved continuing director education
- Accelerated disclosure of insider transactions
- CEO compensation approval at executive session
- Shareowner rights to vote on all stock option plans
- Annual CEO certification against violations
- Adoption and posting of business and ethics codes.

2. Conclusions

Conclusion VII-18. The Company's use of the same firm as both internal and external auditor was not sound.

NUI used the services of Arthur Andersen as its external accounting firm and as its internal auditor. The chairman of the Audit Committee stated that using the same firm for both services concurrently comprised an accepted practice in the past. He observed that the major accounting firms actually touted common use as a benefit for their clients. NUI did not begin to question its common use of Arthur Anderson until the audit committee began to examine the need to replace Arthur Andersen. The replacement question arose because of the impending demise of the accounting firm, and as public awareness of auditor issues and conflicts began to increase. The NUI Audit Committee decided then that it would be preferable to hire separate firms for the two functions.

Liberty would not conclude as a general rule that it was necessarily improper to use the same firm for internal and external auditing at the time that NUI did so. However, one must consider the special circumstances that existed in this situation. NUI had a lack of internal resources to dedicate to overseeing auditing and controls issues. It also did not place strong senior management attention on controls issues. Chapters Four and Five of this report address controls issues at NUI. In addition, the Company's non-utility operations spanned a wide range of business types and operating and financial risks. Some of those risks were potentially very large.

NUI's business profile therefore called for greater, not lesser, attention to well-established and effectively implemented controls. The introduction of the BPU's Holding Company Order in early 2001 (described below) should have further underscored for NUI executive and board leadership the need for the establishment of robust controls and financial separation. These factors taken together lead Liberty to

conclude that NUI should have earlier adopted a more conservative approach by retaining separate firms to perform internal and external auditing.

Conclusion VII-19. The Audit Committee's practices and procedures were generally in the spirit of the new requirements.

The committee has for a number of years been composed solely of outside directors. It has also had for some time responsibility for selection of and oversight over the external auditing firm. The Audit Committee has met with the external auditors on a regular basis. The committee's currently designated "financial expert" has been a director since 1978. He has been the chairman of the audit committee for 10 years.

Conclusion VII-20. The recently approved charter of the Audit Committee and of the Nominating and Governance Committee implements or formalizes many of the requirements or proposed requirements of Sarbanes-Oxley and the exchanges.

The Audit Committee charter implements or formalizes the previously discussed requirements. The charter also provides the committee with unrestricted access to all information. All employees have been directed to cooperate as requested by the committee. It has the power to conduct or authorize investigations into any matters within its scope of responsibilities. The Audit Committee is empowered to retain outside assistance as needed, at the Company's expense. The Nominating and Governance Committee has been acting to implement new requirements through a structured plan and schedule for some time.

Conclusion VII-21. NUI has developed corporate-governance guidelines.

The minimum requirements of Sarbanes-Oxley for those guidelines include:

- Director qualifications with respect to independence
- Director responsibilities, such as attendance and advance review of materials
- Access to management and independent advisors
- Compensation
- Orientation and continuing education
- Management succession
- An annual performance evaluation of the board.

NUI's corporate governance guidelines of November 15, 2002 address those minimum requirements.

3. Recommendations

Liberty has no recommendations regarding this aspect of corporate governance at NUI.

F. Compliance with the BPU Holding Company Order

1. Background

On January 31, 2000, the company filed a request with the BPU for permission to form a PUHCA-exempt holding company to own all the outstanding stock of NUI. By order dated February 14, 2001, the BPU approved the petition subject to a number of conditions, including the following:

> *The assets of Elizabethtown Gas Company shall not be pledged to support any financing related to NUI Utilities' other divisions or its subsidiaries unless approved by the Board pursuant to N.J.S.A. 48:3-7.* [Order at 5, item 16]
>
> *There shall be no commingling of cash between NUI Utilities and NUI Capital. If NUI Capital shall fund operations, capital additions or investments by external borrowing, any such borrowing or commitments by NUI Capital or its subsidiaries must be non-recourse to NUI Utilities and may not provide for cross-default to, or for credit support from NUI Utilities, unless prior approval is granted by the Board.* [Ibid. at 6, item 24]

Four of the five outside NUI directors told Liberty that they could not recall any briefing to the board on the subject or conditions of the Holding Company Order. They did recall notification that NUI had received BPU approval of the request. The fifth director remembered some type of discussion about the order but no specifics. All five stated that they learned of the specific requirements with respect to the commingling of cash and the intercompany balances from a recent PricewaterhouseCoopers audit. Chapters Four and Five of this report discuss that audit in detail.

The directors shared with Liberty their reactions to learning they might be deemed to be out of compliance with the Holding-Company Order. Liberty found the comments to display a surprising lack of common understanding. Liberty would have expected that a milestone event of this type would have produced substantial discussion and a reasonably clear and common understanding about what public requirements were. Liberty would have expected similar knowledge and agreement about what the Company was doing to assure that those requirements were met. Instead, Liberty learned that there was not much discussion, little apparent monitoring at the board level, and not entire agreement on lessons learned after the fact.

More specifically, the comments made to Liberty showed:

- Differing recollections on whether there was any recognition of the existence of sizeable intercompany balances before the PricewaterhouseCoopers audit addressed them
- Disagreement about the significance of the PricewaterhouseCoopers audit in the context of Holding-Company-Order compliance

- Different recollections about whether management had ever even informed the directors about the Order's requirements as they affected NUI's overall structure and operations.

The comments that each made to Liberty are summarized below:

Outside Director One: Before retaining PricewaterhouseCoopers to replace Arthur Andersen, Director One did not know that commingling of cash was an issue. The board knew there was one cash "bucket," but did not know that it was inappropriate. Director One considered commingling consistent with what other holding companies did. As soon as it was identified as a problem, the board took immediate action. Director One believes that NUI has not violated the holding-company order in commingling resources

Outside Director Two: Director Two was not aware of the existence of cash commingling, nor of the significance of the issue. Director Two relied upon Arthur Andersen to be on top of issues of that kind. Arthur Andersen did not identify that cash commingling was taking place. When PricewaterhouseCoopers found otherwise, Director Two's reaction was to make the change immediately. Director Two felt that the holding-company order made commingling improper. It should have clear all along that it was improper to those on whom Director Two thought the board was relying.

Outside Director Three: Director Three first became aware of the intercompany-balance issue following the PricewaterhouseCoopers audit. Director Three's reaction was to question how this could have happened. Director Three was stunned to learn of the problem.

Outside Director Four: The board had several reviews with management specifying what was required by the BPU's holding-company order. There would have been a presentation by management about it. Director Four did not study the BPU order. Nobody has ever led Director Four through its requirements. Director Four relied upon management to tell Director Four what was in it. The Company would not challenge the BPU's belief that commingling violated the order. If Director Four had known that NUI was violating the order, the board would have changed things. Director Four would have expected Arthur Andersen to identify issues or problems to the chair of the audit committee. Director Four was aware that NUI had a single cash pool. The board thought that was acceptable. The directors depended heavily on Arthur Andersen. When it became clear that commingling was not acceptable, the board instituted the necessary changes.

Outside Director Five: With respect to commingling of cash, Director Five has not concluded that NUI was in violation of the Holding-Company Order. As Director Five understands it, what NUI did with respect to commingling was consistent with the order. Director Five thinks that NUI has been meticulous in complying with the Holding-Company Order. The board was not adequately informed about the intercompany balances. The board directed management to "fix it" when it came to board attention. The existence of those balances was significant, but did not have any effect on the utility.

2. Conclusions

Conclusion VII-22. NUI experienced a number of high-level corporate failures with respect to compliance with the Holding-Company Order.

NUI's management clearly ignored key terms of the BPU's Holding-Company Order. It is difficult to comprehend how anyone could read its provisions and not come away with a clear understanding of several prohibited activities.

In addition, the NUI board has operated without a sound understanding of the Holding-Company Order and without requiring a structured process for overseeing compliance efforts. The board failed to require management to adequately explain the Order's requirements and to institute reasonable measures for assuring continuing compliance with the Order. At best, the NUI board treated the Holding-Company Order too lightly. The directors failed to see it as a milestone event that required its full understanding. Liberty believes the NUI board also failed to exert the necessary leadership and direction at the time to ensure the development and implementation of measured steps to assure that NUI met the conditions of the Order.

To the extent that the board may have been briefed on the Order, it appears that its material conditions were not mentioned. Liberty has found no briefing documents, there is no record of discussion of the order or its terms, and only one outside director believed that there had been a review of the order by management. Further, the statements that directors made to Liberty fail to demonstrate even a basic knowledge or understanding of the requirements of the order.

The Company's official position is that it has been in full compliance with the Holding-Company Order at all times since its issuance. Its general counsel filed, in April 2003, a letter with the BPU so stating that position, and he repeated the claim, not when Liberty was interviewing him, but at a point when Liberty was trying to determine a director's personal views on the matter.

3. Recommendations

Liberty has no separate recommendations regarding this aspect of corporate governance. Other chapters of this report address specific issues relating to holding-company compliance.

Chapter Eight: Executive and Director Compensation

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A. Background

The compensation received by executives and directors is usually not, by itself, a significant part of the cost of service for investor-owned utilities. This does not mean, however, that it is not important for regulatory bodies to pay attention to executive and director compensation, because the cost of pay is something that customers ultimately bear. NUI allocates the costs of executive compensation for those executives who serve multiple business units using the three-factor formula. Chapter Three of this report describes that formula and its application in more detail. The use of this formula requires ETG to bear about 60 percent of the costs of these executives, such as NUI's CEO, COO/CFO, general counsel/chief administrative officer, and treasurer.

Modern compensation programs are intended to focus utility management and boards of directors on improving performance, which is in the interest of customers. Compensation often absorbs relatively more of executives' and boards of directors' time than other, larger components of a utility's expenses.

Inquiries into executive and director compensation form a legitimate part of the regulatory processes. That legitimacy is heightened when a utility company encounters problems, as NUI has. Thus, Liberty's review of executive and director compensation concentrated on the cost and focus of the executive and director compensation programs of NUI.

An additional factor has more recently heightened the interest of regulators, utility customers, and the general public about executive compensation. There is a trend toward very high compensation of executives in American corporations, even those that have not been successful. The concern expressed in so many quarters about executive pay, and the volatile performance of the stock market, have started to have some effects. NUI's compensation consultant, Pearl Meyer & Partners (PM&P), for example, issued a report on its survey of senior executive pay at selected multi-billion dollar U.S. companies. PM&P found that total remuneration, which includes salary, annual bonus, long-term incentives, and stock-option value, has shown the following trends:

- Rose an average of 2 percent for 2002 over 2001 for CEOs
- Dropped 1 percent for CFOs
- Dropped the most for chief legal officers; *i.e.*, 3 percent
- Remained flat for top human resources executives, following a 7 percent decline in 2001.

In the face of this trend, NUI raised its executives' compensation substantially for 2002, as is described in more detail below.

B. Executive Compensation

1. NUI Approach

Not all NUI corporate officers are "executives" for compensation purposes; those who are vice presidents and above are treated as executives for compensation purposes. NUI has usually qualified about a dozen executives for compensation purposes, until recent resignations and retirements reduced that number.

The Compensation Committee of NUI's Board of Directors ("Board"), described more fully in the Chapter Seven of this report, sets the policies of NUI for executive and director compensation. As currently constituted, the committee became effective in November 2002. It consists of three or more independent directors selected annually by the Board. Its governing documents require that the committee consist of at least three independent directors, meet at least three times a year, conduct an annual evaluation of its operations, and issue a report of its activities. As of September 2002, NUI's consultant on executive and director compensation began to report directly to the Compensation Committee. The consultant previously reported to management.

At its three regular meetings, the Compensation Committee routinely addresses three distinct aspects of the executive compensation process. In September it establishes an executive compensation plan, and sets compensation levels for the coming year. Executive compensation follows a calendar year, as opposed to the NUI fiscal year. Compensation changes therefore usually take effect in January. The committee examines at the regular November meeting executive incentives earned on the basis of results for the preceding fiscal year. The committee considers mid-year compensation revisions at its regular May meeting. The Compensation Committee does not consider changes to the compensation of Directors regularly, but examines the issue on an *ad hoc* basis.

NUI uses the three-factor formula to allocate the costs of executive compensation for those, such as NUI's CEO, COO/CFO, general counsel/chief administrative officer, and treasurer, who serve multiple business units. The factor consists of the simple average of each NUI business unit's labor, plant, and customers. ETG has recently represented somewhat more than 60 percent of NUI under this formula. Small variations occur from year-to-year as a function of how the magnitude of each unit's portion of the three factors changes yearly. ETG therefore has borne between half and two-thirds of the costs that NUI allocates by using this formula.

All NUI executives receive a base salary. They are also eligible to receive incentive compensation generally as provided for in a plan that has board-of-director approved limits. NUI's stockholders also approve these limits. That plan, the essence of which NUI laid out in its 2002 proxy statement, includes:

- An annual cash incentive award
    - Pays for performance in a given fiscal year.

  - Varies with performance, which is categorized as threshold (performance below which no bonus is paid), target (expected, good performance), and maximum (performance significantly above expectations).
  - Provides opportunities that are typically greatest for the CEO, less for the other executive officers, and considerably smaller for the remaining executives.
- Grants of restricted stock
  - Vary in size in a manner similar to that of the cash bonus.
  - Converts restricted to real stock on the basis of the Company's financial performance.
- Long-term incentive awards
  - The most recent long-term plan covers the period 2002-2004.
  - Consists of two parts: a cash award that could be paid in 2004, and a grant of stock options. (Because of the Company's financial problems, there will be no payouts under this program.).
  - Pays out the cash portion only in the event that the Company performs in an exceptional manner.
  - Vests stock options after 2004 if the executive stays on as an employee. NUI views the options as helping to retain executives.

Management develops the measures that trigger the payout of the short-term incentives (the cash and restricted stock) in advance of the forthcoming fiscal year, or soon after it starts. The same number of restricted shares is available each year, but the measures under which awards occur change.

The Compensation Committee has awarded special grants of restricted stock to NUI's executives, as described below. The board of directors recognized that the long-term awards program would not pay out because of the Company's financial problems. The board nevertheless still wanted the Company's executives to be motivated to perform on the behalf of stockholders. They chose the restricted stock grants as the vehicle for doing so.

NUI has not used stock options as its primary form of stock-based compensation. Options generally prove more lucrative than restricted stock if a stock price increases, but not if it remains stable or decreases. Restricted stock generally has value even if the company does not do well, but does not become as lucrative as option grants if stock value increases.

2. Executive Payouts

NUI has paid its top executives well recently, even though its financial performance has not been strong. In the first half of the 1990s, the cumulative return to NUI's stockholders lagged the gas-utility index against which NUI measured itself. NUI performance also trailed the Standard & Poors (S&P) 500 index in three of five years. The following table

shows the compensation of the NUI CEO in two years, 1993 and 1994; *i.e.*, before the Company's significant expansion and diversification efforts.

Table VIII.1. NUI CEO Compensation

Year	Base	Restricted Stock	Cash Bonus	Total
1993	$261,325	$116,663	$115,700	$493,688
1994	$272,000	$119,000	$0	$391,475

Information from these two years provides historical context, however, Liberty examined the compensation that NUI's executives received in the era of major growth and diversification plans. Liberty specifically focused on the most recent fiscal years; *i.e.*, 1998 through 2003. The incentive compensation program has not yet paid out for 2003. It therefore includes only base salary and two mid-year awards of restricted common stock. Incentive compensation for 2003 does not include the cash bonus, the restricted shares, and stock options granted under NUI's long-term incentive program. Additionally, there were no increases in base salary for 2003. The program originally covered 16 executives during the period. Resignations in 2003 reduced the number of executives by the end of 2003. In order to assure that Liberty's examination reflected the product of NUI's compensation practices during the period, Liberty considered all of the executives for the six-year period.

The purposes of the analysis were to determine the increases in executives' base salaries during the period and to identify the frequency and extent of incentive-compensation payouts. The results of Liberty's review are as follows:

- Base Salary Observations
  - The base salary of NUI's executives increased quickly between 1998 and 2002.
  - The CEO's base salary increased by 86 percent from 1998 to 2002; *i.e.*, from $263,000 to $490,000.
  - The next most-highly-paid executive, NUI's COO/CFO, experienced a 61 percent salary increase over the same period; *i.e,* from $190,000 to $305,000.
  - The rates of increase for NUI's other executives were considerably lower, generally only a few percent per year, with the exception of the head of Energy Brokers, whose base salary increased by 74 percent.
  - A major portion of the increase in base salaries came about in 2001 and took effect in 2002.
- Bonus Payment Observations
  - NUI's executives did not receive bonus payments every year.
  - When paid, the payouts comprised a relatively small percentage of base salary.
  - No executive received a bonus payment every year.
  - With the exception of the head of Energy Brokers (EB), who is covered by a different incentive compensation plan designed specifically for his

business unit, the percentage of the bonus payments were in the range of 15-70 percent.
    - Most were less than 30 percent.
    - The bonus payouts for the head of EB were between 100 and 205 percent of base salary.
- Restricted Stock and Options Observations
    - NUI's executives received large grants of restricted shares every year, but because NUI did not meet the performance targets that allowed these shares to vest, the executives did not necessarily benefit from the grants (this was the case in 2002).
    - Grants of stock options under the three-year program paid out only in 2001. The grant was worth slightly more than the base salary for the CEO, but was worth half or much smaller fractions of the other executives' base salary.

In 1999 and 2000 NUI's earnings per share ("EPS") increased over the previous years. In those two years the executives earned substantial cash bonuses and stock that converted from restricted status to actual grants. In 2001 NUI's EPS declined. The corresponding bonus payments became smaller and no restricted stock became real stock. NUI's Board decided to give the CEO a special cash bonus payment for that year, despite the decline in EPS. The board also gave the CEO a special grant of restricted stock.

3. Analyses by NUI's Executive Compensation Consultant

NUI had not regularly used the services of a consulting firm to advise it on executive compensation, but changed that practice when it retained PM&P in 2001. PM&P is a small firm to whom NUI paid $193,000 in 2001, $144,000 in 2002, and $62,000 through May in fiscal-year 2003. NUI allocated these expenses to subsidiaries by using the three-factor formula. PM&P produced two reports/presentations that evidently reflected the product of extensive research and analysis of the Company, including an understanding of the strategic plans of NUI's executive management.

PM&P's 2001 Report: The first report is comprehensive in its coverage. PM&P issued it in September 2001. The report included comparisons of NUI's executive compensation program with those of companies with revenues of $1 to $3 billion. The comparisons used surveys published by international compensation-and-benefits consulting firms, compensation information for a group of peer gas companies, and information on the financial performance of NUI and other companies. At that time, NUI's revenues amounted to about $1 billion, including the gross value of energy trades. The Emerging Issues Task Force Section 02-03 of the Financial Accounting Standards Board would later require companies to report the net rather than gross value of energy trades. This change lowered NUI's fiscal 2002 results by half, making it no longer a billion-dollar corporation. The 2001 revenues originally reported in 2001 amounted to $1.1 billion. The restatement dropped them to $0.66 billion. Fiscal 2002 revenues totaled $0.56 billion.

PM&P's peer group of gas companies consisted of 11 companies, whose revenues ranged from $800 million to $3.4 billion. The group's mean revenues were $1.7 billion. NUI was the second smallest of the peer group in 2001. PM&P did collect and analyze data that compared NUI against gas companies, albeit larger ones. PM&P's emphasis, however, fell on those large survey companies that were not utilities. PM&P compared NUI to companies in the general industry category and with revenues in the range of $1-2 billion. PM&P showed that NUI's cash compensation for executives was at the market median for non-utility companies in the $500 million-to-$1 billion revenue range.

In September 2001, PM&P told the Compensation Committee that:

> *In the past NUI Corporation was being compared to other LDC companies. The change was appropriate in light of the increasing contributions to income from the non-regulated businesses.* [PM&P's representative] *explained that a company's compensation system should link to the strategic plan and should drive behaviors and financial results that lead to the achievement of the strategic plan*.

PM&P concluded that "Going forward, NUI faces significant long-term business challenges, which should be reflected in its compensation programs." PM&P cited NUI's corporate strategic goals, which called for shareholder returns that exceeded the S&P 500, a doubling of the "economic value" of NUI in five years, earning a return on invested capital of 25 percent for all *growth stage* (*i.e.*, new non-regulated) businesses, and earning a return on invested capital at two percent above the cost of capital for mature businesses. At the same time, PM&P provided its opinion that "NUI's long-term performance objectives may be very difficult to sustain year after year." NUI's consultant also noted that the S&P 500 Index had a 15 percent annual return over the previous 10 years while NUI's total shareholder return over the same period had been, on average, 9 percent.

PM&P also displayed a chart showing that only 10 percent of S&P 500 companies beat the median total shareholder return every year for three years. Only five percent succeeded in doing so for five years. In addition, NUI's goal of earning two percent above its cost of capital meant that it would have to earn returns of 8 to 10 percent. PM&P's data showed that only half of the S&P 500 earned returns on invested capital of 10 percent for one year, a third did so for three years, and only a quarter of S&P 500 companies were able to earn a return on invested capital of 10 percent for five years. Thus, it was apparent at the time that extraordinary performance would be required for NUI to reach the financial goals that it set out for itself.

It was within this context that PM&P recommended that NUI change its program. NUI had been using the utility industry as the *market* to determine whether its executive compensation was competitive. Now, however, when PM&P compared NUI's executives to the different market that PM&P thought was relevant, it found that

executives were paid total remuneration of about 20 percent less than the market median and 50 percent less than the 75th percentile of other companies in the $1-2 billion revenue category. PM&P found that NUI's CEO was being paid at 44 percent below the market median, and that only one executive, the general manager of NUI Utilities, was receiving cash compensation over the market median.

Despite PM&P's primary focus on non-utility comparables, it did provide some utility benchmarks. For example, PM&P found that NUI's incentive compensation opportunities were much smaller than those that at the peer utility companies. The difference was greater when compared to the companies whose pay practices PM&P recommended that NUI emulate. PM&P noted that NUI's executives were not consistently receiving significant payouts from the incentive program. In the September 2001 presentation PM&P recommended: "Given NUI's desire to continue to diversify its portfolio into non-regulated businesses, it should benchmark its executive compensation to general industry" and:

- Set base salaries at the 50th percentile of the market (companies whose revenues were between $1 and $2 billion)
- Provide annual and long-term incentives with target payouts at the 50th percentile of the market, and at the 75th percentile for above-target performance
- Have a greater proportion of annual compensation come from the long-term program.

PM&P made specific, numeric recommendations about bonus pay and the long-term incentive-stock program, including increases to the stock programs and an addition of a new program. PM&P also provided an analysis showing that the additional long-term incentives would pay for themselves in greater profits. PM&P estimated that the proposals would have an after-tax cost of $1.3 million, against an $8 million increase in projected 2002 operating earnings, which would come about because of the effect of the incentives. PM&P noted that, absent the increase in earnings the increased payouts would not be made.

At a subsequent presentation in November 2001, PM&P made additional recommendations, including specific increases in base salary and comprehensive recommendations on cash and stock-based incentive compensation. The recommendations provided for generous payouts to NUI's executives through 2006, should the Company succeeded in continually enjoying better financial performance when compared with fiscal-year 2001.

PM&P's 2002 Report: A September 2002 PM&P report and presentation included some 2002 data showing that, as compared with the peer gas companies from the 2001 study, NUI's CEO's compensation was 6th among the 12 companies, the COO/CFO's compensation was the 7th highest of 11 companies against which PM&P matched his position, and the general counsel's pay put him at 3rd among 7 of the companies. By this time, NUI's revenues were the lowest of this group of companies. Using those results,

PM&P recommended no raises in cash compensation beyond normal merit (*i.e.*, inflation) raises, and no changes in incentive compensation programs.

Liberty asked NUI for support for text in that the proxy statement of January 28, 2003 that said that the CEO's salary is "… significantly lower than the 50th percentile based upon a competitive market comparison to similar positions …." The documents that NUI provided showed that, using 2002 survey data including service companies with revenues of $0.5-1 billion and $1-3 billion, NUI's CEO was paid 7 percent and 27 percent less than the market median for those respective revenue ranges. Of NUI's 13 officers, 4 were paid above the market median of companies in the $0.5-1 billion revenue survey sample, and 2 were paid above the market median of companies in the $1-3 billion revenue survey sample. The average of the differences between the NUI executives and the respective market medians were 9 percent and 3 percent for the higher and lower revenue ranges, respectively.

PM&P further recommended to the Compensation Committee that, because of changes in accounting that reduced NUI's revenues, the officers of NUI should receive merit (cost-of-living) increases in their pay in the next fiscal year, instead of increases needed to raise them to the levels of their peers in other companies. PM&P also recommended that grants of stock be the same as they were for 2002. NUI adopted these new programs and increases.

4. Changes to the Executive Compensation Packages

At the November 2001 Compensation Committee meeting, NUI's CEO noted that the cash-incentive program depended on financial performance targets that the Company failed to meet. He therefore observed that there would be no payout to the executives under that program. None of NUI's executives, except the head of Energy Brokers, received any payouts under the long-term plans. The details of these plans are therefore relevant only to what executives could have made, not what they did make.

In that meeting the CEO and PM&P presented the Company's new executive-compensation program, as follows:

- Base salaries would be set at the 50th percentile of the relevant market
- Executives would be granted options that vest in three years; a feature intended to retain executives
- The Company would issue restricted stock that vests partially on reaching threshold performance, and vests fully on achieving a target level of performance
- Executives would be eligible to earn annual cash incentives that begin to pay out at threshold performance, and could pay up to 200 percentage points of the targeted award on achievement of exceptional performance
- NUI would pay its executives a long-term cash incentive in three years if the Company exceeded the targeted performance by that time.

The CEO and PM&P also recommended that all officers except the CEO, COO/CFO, and general counsel/chief administrative officer, be brought to within 10 percent of the relevant market's 50th percentile.

NUI made all of the increases in base salary for 2002 that PM&P recommended, with one exception. That exception applied to an executive who is no longer with the Company. The following table shows the largest absolute increases in base salary:

Table VIII.2. NUI Executive Base Salary Changes

Executive	2001 Base	2002 Base
CEO	$410,000	$490,000
COO/CFO	$265,000	$305,000
General Counsel/CAO	$196,000	$226,000
Head of EB	$165,000	$218,000

At the March 2002 Compensation Committee meeting, the CEO explained that the warm weather of the preceding heating season meant that the Company could not meet the threshold level of performance. The Committee decided to adjust the requirements of the program to remove the effects of warm weather, because management could not control this factor.

NUI's 2002 financial performance did not support incentive payments. The vice president of human resources told the Compensation Committee the following in advance of its November 2002 meeting:

- NUI did not meet its financial targets; therefore, executives generally were not eligible to receive the annual incentive
- The one exception was the head of Energy Brokers (his incentive award was so large that his total cash compensation became the Company's highest for 2002)
- NUI's executives would have to forfeit the restricted stock that would have vested in 2002
- Management conducted an "historical review" of the compensation of all of the executives, and recommended no salary increase for the top five executive officers, and a three percent raise for all other officers
- Management recommended no changes in restricted stock grants
- Management recommended two new 2003 incentives
    - The first would allow the executive officer group to earn a total of 46,150 shares of restricted stock, should NUI Corp. and NUI Utilities maintain their investment grade bond ratings of BBB- or better
    - The award would be eligible to vest on March 31, 2003 depending on the results on that date
    - The second incentive would allow the executives to earn up to a total of 97,775 shares of restricted stock, should the Company achieve earnings per share in excess of the target EPS for 2003

- This incentive would replace the cash opportunity available under the Company's long-term plan.

The Compensation Committee agreed with management's recommendation that there be no cash incentive payout for executives. Moreover, while executives were eligible for a 15 percent vesting of restricted stock under the long-term incentive plan of 2000, the recommendation was that such vesting be waived. At the meeting, PM&P also recommended that:

- The Company compare itself in the future, for compensation purposes, to companies with revenues in the range of $500 million to $1 billion
- The grant of restricted stock to executives in 2003 be the same as that for 2002
- The Board issue additional restricted stock to the executives that would vest in March 2003 if NUI maintained an investment-grade rating.

The Board accepted these recommendations. The 2002 restricted stock award that the executives did in fact earn was a declining percentage of salary:

- The CEO's opportunity was represented by stock equal to 100 percent of his base salary
- The COO/CFO could earn 50 percent
- The general counsel could earn 40 percent
- The rest could earn 30 percent or 20 percent.

The FY 2003 Mid-Year Bond Rating Focus Award opportunity was 46,150 shares, as noted above. NUI's executives earned 36,920 of those shares on March 31. The level of the awards ranged from 11,000 shares for NUI's CEO, down to 1,000 shares for the chief information officer. However, at this same time, NUI was in the midst of a flurry of bond downgrades by Moody's Investor Service, as detailed in Chapter 4 of this report. NUI (NUI Corp., the holding company) had lost its investment-grade rating with Moody's on March 10, 2003. NUI Utilities lost its investment-grade rating with Moody's on May 7, 2003. The timing of these rating actions would seem to call into question the application of this award to executives.

The basis for determining whether to grant the focus incentive restricted stock award was whether the Company's mid-year performance of earnings per share (EPS) exceeded a target. The executives earned a quarter of the shares allotted to them. The CEO earned more than 8,000 shares for the CEO; the lowest-paid vice president earned less than 1,000 shares.

The Compensation Committee approved at its December 2002 meeting measures of financial performance (a *scorecard*) that applied to each business unit for 2003. This scorecard included the introduction of an earnings-per-share *gatekeeper*, which served as a primary threshold of earnings that must be surpassed before any cash incentive compensation could be earned. The gatekeeper was set at 120 percent of NUI's annual

dividend. The measures used in the scorecard comprised earnings per share, operating margin, and bond rating.

NUI's management requested that cash incentive payouts be set at 50-100-200 for achievement of threshold, target, and maximum values of the scorecard. The Compensation Committee decided to reduce the maximum payout to 150 percent, with payouts for results in between scorecard values to be linear. The board of directors also decided that there would be no increases in the base salaries of the executives in 2003, and approved the recommendations of its consultant on grants of restricted stock.

C. Executive Compensation Comparisons with New Jersey Utilities

NUI began in 2001 to compare itself with diversified energy companies and non-energy companies for compensation purposes. NUI has since been comparing itself to two peer groups when making presentations to financial analysts on its financial performance. One group consists of gas-distribution companies and the other of diversified-energy companies. The criterion for inclusion in the first group is that 80 percent of a company's assets be in gas-distribution. The criterion for inclusion in the second group is the reverse; *i.e.*, that more than 20 percent of the company's assets should be in non-utility businesses.

The 15 companies in the first group include two New Jersey local distribution companies, and other similar companies, many of them larger than NUI. The 21 companies in the diversified-energy group include many very large utility holding companies, like Dominion Resources, KeySpan, PG&E, Reliant Energy, and Southern Company. NUI is smaller than most investor-owned natural gas utilities in the U.S.

NUI does not specifically compare itself with other utilities in New Jersey for purposes of setting the compensation of its executives or directors. Liberty did, however, make such comparisons. Liberty first compared NUI with the other two natural-gas LDC holding companies in New Jersey. Those two companies, South Jersey Industries (SJI) and New Jersey Resources Corporation (NJR), are similar to NUI in having diversified from their LDC origins, while remaining primarily distributors of natural gas in New Jersey. In that sense, they represent good *comparator* companies. Using them may in fact even be generous to NUI for reasons described below.

Compensation consultants use scope measures to compare their clients against other companies. Choosing the right measure for comparing companies involves judgmental factors. PM&P and the large national consulting firms that conduct compensation surveys generally use revenues as the primary measure of company size when establishing comparison groups. Reported revenues provides a convenient measure, but it is imperfect and subjective. For example, note that NUI had to restate its trading revenues after the fact. For that reason, Liberty views revenues as one valid, but not the sole, indicator for establishing a comparison group of companies.

In the first quarter of 2003, before the full extent of NUI's financial problems became known and the price of its stock declined further, NJR had total annual revenues of $1.8 billion and SJI had $0.51 billion. NUI's $0.6 billion put it in the middle of this group.

Applying market capitalization (the value of outstanding common stock) as another indicator of size would put NUI in a different place. In the first quarter of 2003, NJR's market capitalization was over $900 million, and SJI's was about $425 million. NUI's value of about $225 million makes it much smaller than its New Jersey LDC counterparts under this measure of size.

Number of employees provides another measure of size. At the end of 2002, NJR had about 780 employees, and SJI had 638. NUI's complement of 1,144 makes it substantially larger than those at NJR and SJI.

The following table provides a snapshot comparison of the compensation of NUI's five most highly paid executives with those of SJI and NJR for the most recent year for which data are available.

Table VIII.3. Comparison of 2002 Executive Compensation of New Jersey LDCs

	SJI	NJR	NUI
Top 5 Executives - Total Cash	$1,397,729	$1,622,060	$1,287,850
Top 5 Executives - Total Adjusted Cash-Equivalent*	1,584,480	1,646,959	1,691,122
Top 5 Executives - Total Compensation	1,884,217	1,646,959	2,438,120
CEO - Total Cash	487,989	657,711	450,000
CEO - Total Adjusted Cash-Equivalent*	561,231	661,711	658,944
CEO - Total 2002 Compensation	683,824	661,711	1,067,216

*Calculated by using ⅓ of the reported value of restricted stock awarded.

Making no other adjustments, these data permit these conclusions:

- The cash compensation that NUI paid was lower than what the other two companies paid
- The reason is that NUI's executives earned no cash bonus in 2002
- Once stock-based compensation is added to salary and base compensation, the compensation of NUI's executives well exceeds that of the other companies.

Liberty does not believe that the water, electric, and telephone utilities in New Jersey are comparable to NUI for the purpose of forming detailed conclusions about the representativeness of NUI's executive compensation. Doing so would require a detailed study and subjective adjustments for variations across industries. An overall comparison is, however, useful in providing a general frame of reference. Liberty therefore reviewed the publicly-available information on the compensation of the investor-owned electric utilities that serve New Jersey customers.

The five most highly paid executives of FirstEnergy Corporation, the company that owns Jersey Central Power & Light, have positions that are not comparable to NUI's

executives; thus, no conclusions can be drawn. Pepco Holdings, Inc. (PHI), a multi-state holding company with a market capitalization of almost $3 billion, owns Atlantic City Electric Company, an electric utility in New Jersey. In 2002 Pepco's president and chief operating officer, who reports to the corporation's CEO, received a salary of $455,000, cash bonus of $258,000, restricted stock worth $206,000, 48,000 options to buy stock, and a payout of $59,000 under an incentive plan. Comparing the base salary of that executive and against that of NUI's CEO, who arguably has less responsibility than the president of PHI, indicates a comparatively high salary for the NUI CEO.

Liberty also considered Public Service Electric and Gas Company (PSE&G), which is the largest subsidiary of PSEG, a holding company. PSE&G is also one of the country's largest combination electric and gas utilities. PSE&G serves almost three quarters of the population of New Jersey, and has 1.6 million gas customers. These customer numbers are about four times as many as ETG serves. In 2002 PSE&G's president and chief operating officer, who reports to the CEO, received a base salary of $374,000 and bonus of $143,000, and an award of stock options. He was the fifth most-highly-paid executive of the five reported in the NUI's proxy statement. PSEG's proxy does not value the award of stock options, but it is possible to compare the cash salary and bonus that the president and chief operating officer received with that received by NUI's CEO. That comparison indicates that NUI's CEO's pay in 2002 was comparatively high, given that the responsibility of the executive in charge of PSE&G arguably was greater than that of NUI's CEO.

Liberty understands that there usually is a sizable premium in the compensation of CEOs relative to their subordinates. This factor does reduce the validity of comparisons of the pay received by NUI's CEO with COOs of other, albeit larger, utilities. This means that the comparisons made above should be taken as indicative, not dispositive.

D. Directors' Compensation

The primary compensation for NUI's directors takes the form of an annual retainer, which NUI pays in deferred grants of common stock. NUI has also had a director-retirement plan, which became effective in 1988. Qualification for payments under this plan requires 10 years of service, retirees to be over 65 years of age, and departure from the Board. The retirement benefit is equal to the director's final pay, which is the annual retainer at the time of departure from the board.

NUI management used survey data to review the compensation it paid to its directors in 2000. The review produced a conclusion that its director retainer of $15,000 per year fell below the median of peer companies. NUI defined peers as those service companies with revenues of $1-1.9 billion. The median for the peer group was $25,000. The review also found that the board and committee meeting attendance fees were at the average, but that NUI's $3,000 retainer for committee chairs fell below the peer-group average (which was $4,000).

NUI's management recommended increases in the annual director and committee chair retainers, and an annual grant of stock options worth about $7,000. The board decided to increase the annual retainer by $5,000 to $20,000, increased the fee for attendance at meetings to $1,000 from $400, and increased the retainers for the chairs of committees from $2,500 to $3,000. It did not institute a grant of stock options.

In 2002, PM&P evaluated the compensation of NUI's directors. PM&P's analysis used an updated version of the survey used in the previous Company analysis. The following table shows the total cash compensation results of the updated survey.

Table VIII.4. 2002 Directors' Compensation Comparison

Company Type	Basic Range	Basic Median	Total Range
12 Gas-Only Utilities	$20,000 - $45,500	$31,500	$20,000 - $76,000
Service companies $500-$999M revenues	$11,500 - $117,500	$31,000	$11,500 - $163,250
Service companies $1-$1.9B revenues	$8,000 to $79,000	$36,500	$8,000 - $206,000

Basic Range excludes supplemental stock options and restricted stock

NUI's general counsel presented at the March 2002 meeting of the Compensation Committee recommendations to increase director compensation. He used the information about service companies whose revenues fell in the range of $1-1.9 billion. He advised the Committee that it was important to keep the compensation package for Directors competitive, in order to enable NUI to keep and attract qualified board members.

The Committee decided to change director compensation as follows:

- Increase the annual retainer for directors from $20,000 to $25,000
- Increase the additional annual retainer for committee chairs from $3,000 to $4,000
- Grant to non-employee directors an option each year to buy 1,000 shares of common at an exercise price equal to the fair market value of NUI's common stock on the grant date
- Exclude new directors from the retirement plan.

PM&P made a November 2002 presentation to the board on director compensation. In comparing NUI to general industry, PM&P said that:

> *Compensation levels for NUI's board members are below the ... averages for total compensation mainly due to the value of the stock option grant amount. Retainer and fees are very close to the marketplace.*

For what were deemed to be peer gas-utility companies, NUI was 6th of 12 for the total retainer and fees, and second lowest for total remuneration. As described above under the

discussion of executive compensation, the comparison group that PM&P consisted of companies appreciably larger than NUI.

NUI has not specifically compared its director compensation with that of SJI and NJR. Liberty, however, believes that such a comparison can be illuminating. SJI paid its directors $11,000 in cash and restricted stock worth $8,000 in 2002. Members of the executive committee received an extra $2,500, and $1,000 for each executive committee meeting attended. Starting in 2003, SJI increased the grant of restricted stock to a market value of $9,000 and the annual retainer to $16,600 for chairs of committees. All other non-employee directors receive an annual retainer of $14,100.

NJR provides its non-employee directors an annual retainer of $18,800, of which $8,000 is paid in common stock, and an annual award of options to buy 1,500 shares. In addition, the chairs of the NJR audit and executive committees receive additional retainers of $10,000, and the chairs of other committees receive additional retainers of $5,000. All non-employee directors receive meeting fees of $1,000, except that the meeting fee is $1,500 for members of the audit committee. In addition to the fees and options described above, directors joining NJR's board receive 200 shares and an option to buy 5,000 shares.

The members of the ETG Advisory Board currently receive the same compensation that was established in a resolution passed by the ETG Board of Directors in 1985. Members of the Advisory Board who are not officers (employees) of ETG, which is all of them, receive an annual retainer of $4,500 and a meeting fee of $450. If they are also directors of ETG affiliates, they receive an annual retainer of $1,000.

E. Other Compensation Issues

1. Stock Ownership Requirements

In 1996 NUI's Board set a standard minimum requirement for stock ownership by the Company's executives and directors. It took effect as a requirement in October 31, 2003 for executives with the Company then, and six years from start date for executives hired subsequently. The requirement is determined by taking the officers' current base salary, multiplying it by a specified factor, and dividing the product by the market price of the stock in order to calculate the number of shares required to be owned. The factors are four for the CEO, two for the other executive officers (COO/CFO and general counsel/chief administrative officer), and one for all other executives. The members of NUI's Board must own stock with a value equal to at least six times the director's annual retainer, which produces a requirement of $150,000.

As of June 2003 all of NUI's directors complied with this requirement. Two members of the current officer group required to be in compliance by October 31, 2003 had deficits. The minutes of the meeting of the Compensation Committee show that it monitored the progress of the officers in meeting this requirement.

2. Employment Agreements

NUI has had change-in-control agreements with key employees for several years, which it has disclosed in its proxy statements. Starting at the end of 1998 NUI began writing the agreements with its officers and with two NUI Utilities employees. These agreements provide a severance benefit that is a multiple one to three times the covered employees' compensation if NUI has a new owner and the employees' services with NUI are ended as a result of that ownership change. These agreements provide a form of severance benefit that the Board decided to undertake to assure that employees will not work against the interests of the Company's stockholders in case an attractive offer for NUI would come from a prospective new owner.

3. Consulting Contract with the Chairman of the Board

NUI has had a consulting agreement with the Company's Chairman of the Board. The agreement, which NUI discloses in its proxy statement, was first written in 1995 when the Chairman retired as CEO of NUI. The agreement was amended and restated in 1998. The agreement has had three-year terms, the last having been renewed in 2001. The current agreement expires on March 31, 2004.

The initial agreement provided the Chairman with annual cash compensation of $150,000 and these other benefits:

- The same vehicular transportation provided while he was CEO
- Continuing health and medical benefits
- A $500,000 life insurance policy
- Offices at NUI's City Gas of Florida subsidiary and in the Company's Bedminster headquarters, with secretarial assistance.

NUI raised the annual consulting fee to $280,000, effective for the final three-year term and made several other modifications as well. The Chairman does not receive any compensation for serving on the Board of Directors or any committees of the Board of the Company, its divisions, and subsidiaries. In return for his compensation, the Chairman must make himself available for up to 110 hours per month. He reports directly to the board of directors. The agreement is automatically extended for three years if there is a change in control of the Company.

F. Conclusions

Conclusion VIII-1. NUI's structure for and administration of executive compensation have been reasonable.

The package of compensation that NUI has made available to its executives is reasonably similar to those of comparable utility companies. Specifically, the components are like those of those other investor-owned utilities. Executive compensation generally now consists of a base salary, annual bonus, and long-term (more than one year) compensation that usually includes some variation of the common stock of the Company. The stock

component may take the form of grants of stock options, restricted stock, or stock-appreciation rights, all of which usually have certain conditions attached to the executives realizing the ownership of the stock or the value of the increase in the price of stock.

Stock-based compensation is now standard for executives of investor-owned utilities and corporations generally. The theory that such compensation aligns the interests of executives with that of stockholders remains sound. This theory supports weighting compensation more heavily to stock, options, warrants, and restricted stock, despite the perception that it has been abused. The problem with stock-based compensation comes in its implementation, rather than the concept; *e.g.*, the amount of stock-based incentive compensation made available, and the difficulty of earning it.

The weighting of the incentive compensation that NUI's executives receive has not been out of the range of other companies, including NJR and SJI. Accordingly, Liberty believes that NUI's executives had reasonable incentives to try to make the Company's financial performance better than that of a firm whose base business was gas distribution with little growth.

Liberty found that NUI's administration of its compensation programs for executives and directors used practices that were usual compared to other, similar utility companies and consistent with the interests of ETG's customers.

> ***Conclusion VIII-2. NUI has used an inappropriate market against which it compared its executive and director compensation, resulting in raises in base salary that were too large.***

Liberty does not agree with PM&P's perspective on which companies should have been used for comparison purposes. PM&P recommended comparing NUI's compensation package for executives against the companies with whom it wanted to be competing in the future, rather than to companies that were like it in the past and present. NUI wanted to make itself over. The rationale that paying its leadership like the companies it hoped to emulate does have a superficial appeal. Moreover, NUI's revenues had been increasing as it added new businesses, including the boost of trading revenues, although these were not the same kind of revenues it was receiving from its base business, which was and remains distributing natural gas.

NUI and PM&P incorrectly decided that NUI's executives were underpaid. Specifically, Liberty concludes that it was not proper to move away from using as the appropriate market for NUI's executives those gas-distribution utilities with revenues of less than $1 billion. This movement caused NUI to raise the compensation of its executives substantially for 2002, as it did in previous years. Liberty believes that executive compensation prior to those raises was at a reasonable level. It compared favorably with the levels of two other New Jersey LDCs, South Jersey Industries and New Jersey Resources Corporation. In 2002, however, total reported NUI CEO compensation was at $1.07 million. This total far exceeded the $684,000 and $662,000 CEO compensation at

SJI and NJR, respectively. These totals include SEC-reported values of restricted stock grants, which may differ from what eventually became vested.

Liberty concluded that NUI took too great an anticipatory view in choosing those against whom it was competing for executive talent and directors. That is, the Company compared itself against where it wanted to be rather than where it was. The most obvious example of this is the conclusion stated in NUI's most recent proxy statement that its CEO's compensation was significantly below the market median. Liberty found that statement to be incorrect, unless applied in the context of companies far larger than NUI. For example NUI had no problems in hiring a new controller, vice president of human resources, and treasurer in same period, even though it offered compensation at the market median for general industry companies much smaller than those the proxy statement contemplated. Those companies fall within the range of $500 million to $1 billion in revenues. That range serves as the new NUI standard. This more appropriate comparator should have remained the standard earlier as well.

Actual 2002 NUI executive compensation did not vary much from that of the executives of SJI and NJR. The closeness of results, however, did not result from similar compensation elements and amounts, but from NUI's poor financial performance. Had 2002 been a good year for NUI, the cash bonuses its executives would have received would have put their compensation, across the board, at levels higher than those of the other two companies.

Conclusion VIII-3. The requirement of having Directors and executives own a minimum amount of the common stock of the Company is sound, because it helps align the interests of executives with those of stockholders and customers.

NUI's management and board of directors appropriately monitor the progress of directors and executives in meeting the ownership requirement. There has been an acceptable of compliance with minimum ownership requirements.

Conclusion VIII-4. NUI distributes the costs of the compensation of shared executives incorrectly, unduly burdening ETG.

Utilities have wide latitude in determining how they will compensate their executives, but regulators also have the right to assure that customers of regulated services pay only costs that are reasonably associated with the provision of utility service. Given that several of NUI's executives provide services that benefit both ETG and other NUI companies, it is important that their costs be distributed properly to the entities that benefit from the application of their time. In that light, NUI's use of the three-factor allocation method unduly burdens ETG with the cost of executives whose time has not been spent on ETG matters in proportion to ETG's size as measured by the three factors. Officers such as NUI's CEO, CFO, and general counsel/chief administrative officer have clearly spent disproportionate amounts of time on non-utility activities or on the consequences to ETG that have resulted because of financial problems occasioned by non-utility activities and

the failure to segregate utility resources as required by good utility practice and the BPU's holding company order..

Applying the three-factor method produces proper allocations of common costs for which unique beneficiary identities or proportions cannot be identified. The expenses incurred in preparing and printing the proxy statement provide an example of such costs. Identifying when particular affiliates benefit disproportionately from common services can prove difficult on occasion. The difficulty, however, offers no valid reason for failing to attempt to recognize the differences.

Chapter Three of this report addresses the consequences of the overuse of the general allocator more fully.

Conclusion VIII-5. NUI's decisions to pay certain executive incentives when the Company's financial performance did not meet goals was not reasonable.

The main idea behind incentive compensation is that it should give management additional inducements to do a good job in running a company. In theory, if management does not perform, then executives do not receive compensation above base salary. The problem with the application of the theory is that when no incentives are received for a year or longer, the board and senior executives begin worrying about losing key people.

NUI's performance in adhering to the parameters of its incentive compensation program was mixed, as is typical for companies with financial problems. Once it is deemed acceptable to circumvent the rules of a program, it becomes much more difficult to return to a path that keeps performance and pay in close step.

For the most part, NUI's pre-established long-term incentive programs have not paid out recently. This result conforms to the design of the programs, because the Company's financial performance did not warrant incentive payments. In each of the past three years, however, NUI executives still managed to secure significant payments in lieu of what they would have earned had they produced better performance for the Company. NUI had financial problems in 2001, primarily due to non-utility financial performance. The CEO therefore did not qualify to have restricted shares of stock vest. Nevertheless, the board of directors awarded him an additional cash bonus for that year.

The board of directors also overrode the program when the weather was warmer than normal in 2002. Such an override is not categorically wrong, but beginning to make adjustments for warm weather begs the question of whether management should be rewarded for the benefits of weather that boosts profitable sales.

The two special grants of restricted stock in 2003 provide a more striking example of circumventing the provisions of the long-term compensation program. Each of those two grants resulted in all of NUI's executives earning new shares of stock, even as the

financial condition of the Company continued to deteriorate. It is worth noting also that NUI's executives received the special restricted-stock award for maintaining bond ratings even though Moody's reduced its ratings but S&P did not.

In total, NUI's incentive-compensation decisions over the past three years have substantially eroded the connection that should exist between executive pay and performance.

> ***Conclusion VIII-6. The compensation of NUI's board of directors is higher than it should be, and ETG has borne an unfair burden of the cost of that compensation.***

The various surveys used by NUI's management, board of directors, and compensation consultant all show that NUI director compensation falls at least at the top of the relevant market. The best comparisons are with other New Jersey gas utility holding companies. That comparison shows that SJI has just caught up with NUI, but does not have a retirement program for directors. NJR's compensation is less, except for the chairs of its audit and executive committees. NJR also does not have a retirement program.

Liberty recognizes that the pay of directors in the United States may be increasing substantially in the next few years as the time commitment and risks of board membership become greater. It is reasonable to recognize that prospective directors consider the commitment of time they must make to a new board membership and the risks that they would bear. It is also likely that the pending sale of the Company will moot the issue of NUI director compensation. Liberty's expectation is that there will be no holdovers from the current NUI board. First, it is reasonable to expect that there will be no need for a separate board at the NUI level, after completion of a sale. Second, as is more fully described in Chapter Seven of this report, the history of NUI and NUI board performance at the parent level give no reason to anticipate the need or desire for retaining current board members after sale completion. Given these factors, the compensation practices of a new NUI owner are likely to replace the current practices, which have produced greater than appropriate compensation for the NUI parent board members.

NUI allocates the costs of the compensation of NUI's board of directors and of the consulting agreement with the Chairman under the three-factor formula earlier in this chapter and in Chapter Three of this report. The result of this method of allocation is that ETG has borne between half and two-thirds of these costs in recent years. Liberty's examination, for reasons more fully addressed in Chapter Seven, has shown clearly that NUI Corp. director focus has fallen disproportionately on non-utility businesses or on severe financial problems resulting from a failure to focus on utility requirements and the conditions of the holding company order. It has not been appropriate to allocate the majority of the costs of compensating the members of the Board and the Chairman as consultant to ETG.

Chapter Three of this report addresses the consequences of the overuse of the general allocator more fully.

Conclusion VIII-7. ETG bears too much of the costs of consultants on executive compensation.

ETG is NUI's largest business, but its leadership, including the executive officers of NUI (CEO, CFO/COO, and general counsel/chief administrative officer), has spent its time in recent years disproportionately on the affairs of the non-utility businesses. In addition, there are several executives responsible for businesses other than ETG. While NUI has not spent excessive amounts on consulting on executive compensation, it is still inappropriate to impose on ETG more than half of the cost of consultants who help NUI on executive compensation.

Chapter Three of this report addresses the consequences of the overuse of the general allocator more fully.

Conclusion VIII-8. The policy of paying Directors in stock instead of cash may be well-intentioned, but could cause problems in attracting new Directors.

The attraction of the policy is that it aligns the interests of the directors with those of stockholders. That the value of director stock holdings has declined with the Company's problems underscores the connection. That positive attribute may, however, be outweighed by an unintended consequence of the policy. Not all prospective directors may be able or willing to defer their compensation until they retire or resign from the board. Making the policy mandatory may be reducing the size of the pool of potentially-desirable directors. The pending sale of the Company, however, substantially moots the need for action to address this issue.

Conclusion VIII-9. The measures that NUI uses in determining whether executives should be awarded payouts under the Company's incentive compensation program have had little to do with utility performance.

The measures that NUI has used have been over-weighted to financial performance and have little to do with ETG or utility group performance, even though ETG has represented, as the Company measures it for cost-allocation purposes, between half and two-thirds of the Company. Unlike the non-utility subsidiaries, ETG operates under the special restrictions and the high public expectations imposed upon utility service providers. All but one of the four applicable incentive measures have to do with subsidiary or corporate financial performance That single exception accounts in total account for 20 percent of the incentive measures for the executive whose sole responsibility is ETG.

Conclusion VIII-10. The compensation of the members of ETG's Advisory Board is too low.

If NUI has deemed the contribution of the ETG Advisory Board is important, then its members have been paid at a rate that is too low to compensate them for the time they should have to devote to meeting their responsibilities. Moreover, those board members have now been made members of the NUI Utilities board of directors and they have sat with the special committee of the NUI board since last October or so, as NUI sought to create more financial stability, respond to growing public and regulatory perception of the Company's problems, and provide for a smooth transition to a new owner of NUI. Liberty has been particularly impressed with the vigor and the dedication shown by the four advisory board members in helping to address the problems that NUI's non-utility performance and that its executive and director leadership have caused for NUI Utilities in general, and ETG in particular. Compensating them at levels far lower than their counterparts on the NUI board fails to measure their value and contribution reasonably.

Conclusion VIII-11. The consulting agreement with the Chairman of the Board has become unreasonable.

It is understandable that NUI's Board of Directors wanted to have access to the time of the Chairman after he retired as CEO. That the CEO who replaced him was only 37 years old at the time (1995) underscores this conclusion. Several aspects of the agreement, however, make its continuation through the present time inappropriate and unnecessary.

First, Liberty understands that it was common to have a retiring CEO remain on a board of directors, and even to retain the role of chairman of the board. More recent thinking, however, begins more to call this practice into question. There is now a respected view that a former CEO may be an impediment to changes that a new CEO may think is necessary. The fact that the NUI Chairman has offices and secretarial resources in two locations reinforces the potential for this problem, and adds significant costs.

Second, although not typical, it is not unknown for a corporation to have a consulting agreement with a retiring CEO or other corporate officer to take advantage of that person's experience and industry knowledge and contacts. However, such contracts are usually short. In contrast, when NUI's Chairman retires he will have served as a consultant for nine years. Such a long tenure makes questionable the description of the relationship as that of a consultant.

Third, NUI's contract sets up the potential for compromising independence of judgement. The consultant is also the Chairman of the Board and a Director. The agreement's initial term extended three years. NUI has renewed it twice and for similar terms. The length of the agreement and the significant levels of compensation it produces are of concern in assuring director independence. The current contract costs NUI more than $300,000 a year, which is a significant amount for a company of NUI's small size.

Conclusion VIII-12. The Company's change-in-control agreements are a standard feature of the relationships between corporations and their officers, but recent oral amendments to them are questionable.

It is reasonable to expect that executives will work in the best interest of their employers; *i.e.*, the stockholders. It is nevertheless also fair to be concerned that they may not be motivated to work themselves out of jobs in the event of a prospective takeover or merger. Thus, boards of directors can reasonably choose to protect the owners with such agreements. NUI did so prior to the emergence of substantial concerns about its financial performance and about the quality of its executive leadership.

The NUI CEO departed in September 2003. At the time, NUI's board increased the multiple of salary that the then COO and general counsel/CAO would become entitled to on a change of control. The COO became the CEO and the general counsel/CAO continued in the same position. NUI wanted them to remain to provide for an effective process of selling NUI and transitioning to new ownership. NUI's board also orally waived the provision that would have disqualified the two executives from receiving payments if sale closing happened at a specified time after their earlier departure.

The expansion of the rights of these two executives has become more than an academic question. They are departing NUI effective at the end of January 2004. The changes to the agreements involving them increase the size of their change-of-control entitlements and in particular the oral change substantially increases their chances of qualifying for it. Liberty believes that these changes, coming at a time of acute BPU focus on what happened at NUI and why it happened are questionable.

Specifically, events at NUI demonstrate that the question of executive severance payments simply cannot rest on traditional notions that disallowance of costs for ratemaking purposes make regulatory concerns about such payments irrelevant. NUI conducted holding-company operations under the holding-company order that the BPU issued. The major failure of NUI executives and directors to conform activities to the separation and other requirements of that order is described in detail in Chapter Seven of this report. That failure has brought a major New Jersey utility to circumstances that should not have existed and, absent a catastrophic economic failure of general applicability should never exist.

NUI's situation is not the first in which executives have departed with large incremental payments while shareowners and employees are left with substantially diminished value. Liberty is firmly of the belief that the corporate America has profoundly failed to associate reward and consequence in executive compensation when it comes to departure payments. NUI's change-of-control provisions were not atypical, but sweetening them as the NUI board did was unfortunate. Liberty did not come to this audit disfavoring change-of-control provisions. However, it leaves it firmly committed to the notion that public service commissions should become more proactive in examining them and what

they accomplish in potential, future circumstances where they might operate to diminish incentives not just to operate optimally, but to act in accord with baseline notions of public duty and responsibility as set forth in explicit rulings.

G. Recommendations

Recommendation VIII-1. Base executive and director compensation on comparisons with similar gas-utility holding companies.

NUI was and is an LDC with some non-regulated businesses. This means that the way to evaluate whether the compensation of NUI executives and directors is competitive for the purpose of determining whether increases are needed is to use other LDCs of comparable size. While it is best to use a large sample of similar companies and positions for making comparisons, because no companies are exactly alike, the two New Jersey LDCs (SJI and NJR) are especially-good matches with NUI. Comparisons with SJI and NJR are generally going to be more appropriate because of their size, mix of businesses, and location in the same state, until there is divergence in the companies that reduces the validity of the comparisons.

Anticipating the sale of NUI, it does not appear likely that executive compensation (except for NUI Utilities) will see a near-term occasion for reconsideration by the board of directors. NUI has recently replaced its two principal holding-company executives under contracts whose compensation Liberty believes is reasonable under the circumstances. Therefore, this recommendation is very likely to be rendered moot.

Recommendation VIII-2. Distribute the costs of NUI's Directors, shared executives, and consultants on executive compensation in a manner that is more equitable.

The costs of NUI's Board of Directors, executive-compensation consultants, and executives whose responsibilities include utility and non-utility businesses are distributed to the business units by allocation using the three-part factor. This method results in ETG bearing more of the costs of these resources than the amount by which ETG benefits from the work performed at this level.

NUI should instead directly assign costs whenever possible to the business units who cause the costs to be incurred. Where it is impractical to directly assign costs, by, for instance, time reporting, then NUI should do at least annual studies of the amount of time that Directors and shared executives devote to utility *versus* non-utility matters.

The cost of executive-compensation consultants should be distributed to the business units by a method that follows the distribution of the costs of the executives. This means that the costs should ratably follow the executives who work only for a particular business unit where that is the case, and otherwise should follow the distribution of direct

assignments of time, or finally, the results of the special studies of the distribution of the time of shared executives.

Recommendation VIII-3. Revise the methods of compensating directors.

There is not likely to be a near-term occasion for examining holding-company director compensation. Liberty anticipates that the next annual meeting of NUI shareowners will come after the signing of a definitive agreement of sale of NUI. Liberty believes that there is very little likelihood that either NUI's director-compensation practices and levels or its incumbent directors will long survive the Company's sale.

There is, however, the separate question of compensating NUI Utilities' outside directors. They consist of the four members of the ETG Advisory Board. The addition of fiduciary responsibilities to their role and the associated time and risk factors entailed require that their compensation be moved at levels closer to those of the NUI directors.

Recommendation VIII-4. Change the measures used for incentive compensation for executives.

While ETG has been the mainstay of NUI, the Company's executive-compensation program did not recognize that fact. In the future, the incentive compensation of executives should be appropriately weighted to the financial, customer-service, and reliability performance of ETG.

As a matter of policy NUI should not override the structure of its incentive-compensation program even when that means that executives will not be eligible for payouts. This means that the types of measures and the set points of those measures should be determined carefully, but this also means that if shareholders and customers are not doing well that the executives should also not do well financially.

Recommendation VIII-5. End existing and preclude the use of future consulting contracts with members of the Board of Directors.

The consulting contract of the Chairman of the Board is ending soon. Precipitous action regarding that existing arrangement is not required, other than to assure that the sale of NUI does not produce change-of-control payments thereunder. NUI's board of directors should, however, refrain from undertaking any further such contracts through the end of their tenure, which Liberty anticipates to be in the very near future.

Recommendation VIII-6. Require the filing, justification, and approval of agreements providing severance or change-of-control payments to departing holding-company executives and directors.

In general, such agreements remain appropriate and reasonable. The concern lies in the failure to adhere to them and in the reluctance that one can expect senior leadership to

have in enforcing them to the letter and in using termination for cause as a means to require executives and directors to perform at levels that meet public responsibilities.

There is a growing perception that corporate leadership, absent a few, notorious examples of criminal prosecution, does not bear sufficient personal responsibility for contributing to poor financial or operating results. In fact, it sometimes appears that executives do very well financially, even as shareowners and employees suffer. Customers can be in the same position in theory, although Liberty has not found that to be the case at NUI.

Liberty proposes that the BPU consider requiring approval of such agreements as a condition on holding company approval or continuation. Doing so would provide an opportunity to limit agreement terms and enforcement to occasions where payouts are not only in accord with what corporate leadership considers appropriate, but also with what regulators deem to be appropriate in connection with meeting public responsibilities.