# FINAL REPORT Focused Audit of Affiliated Transactions and Management Audit of Elizabethtown Gas

## Volume Two Management & Operations Review

## Public Version Confidential Materials are Redacted

Presented to the:

## Division of Audits New Jersey Board of Public Utilities

By:



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## **VOLUME TWO: MANAGEMENT & OPERATIONS REVIEW**

## **PUBLIC VERSION**

(Confidential Materials are Redacted)

#### I. Governance

#### A. Background

This chapter addresses board of directors and senior executive management structure and performance. It includes a review of Sarbanes-Oxley (SOX) and New York Stock Exchange listing requirements and guidelines. Those exchange listing guidelines cover a wide range of areas. Liberty has incorporated them, as appropriate, in its work in each of the topics addressed in this chapter. There is not a separate set of conclusions addressing compliance with the recommendations. However, Liberty did not find in its study any material exceptions involving them.

The AGLR parent board of directors must consist of between 5 and 15 members, as the board determines. The board currently has 14 members, divided into three classes, each with roughly one-third of the total membership, and serving overlapping three-year terms. Election takes place at the annual meeting of the share holders generally held each April. At the 2009 annual meeting, the shareholders voted to change the procedures for electing directors. All current directors, including those elected to a three-year term at the 2009 annual meeting, will continue to serve the remainder of their respective elected terms. Beginning with the 2010 annual meeting, directors with expiring terms will be elected for one-year terms, the result being that by the 2012 annual meeting all multi-year terms will have expired and all directors will be elected annually. Members may finish the term during which they reach the age of 75, but may not serve as an active director thereafter. All 14 current directors are outsiders, except for the AGLR CEO. The board also has a lead director. The current lead director has served on the board for over seven years.

#### The current directors are:

**Sandra N. Bane**: Pasadena, CA; age 56; Director since 2008; KPMG LLP audit partner (1975 - 1998; retired); Western Region Merchandising practice head and partner in charge of region's Human Resources department; also a director of Big 5 Sporting Goods Corporation and Transamerica Premier Investment Funds.

**Thomas D. Bell**: Atlanta, GA; age 59: Director since 2004; former Chairman and CEO, Cousins Properties Incorporated (Atlanta), former Senior advisor at Credit Suisse First Boston, overseeing the company's real estate activities; former Chairman and Chief Executive Officer Young & Rubicam Inc.; also a director of Regal Entertainment Group and the U.S. Chamber of Commerce, and member of the board of trustees of The Economic Club of New York and New York Presbyterian Hospital.

**Charles R. Crisp**: Houston, TX; age 61: Director since 2003; Former President, CEO and Director of Shell Oil subsidiary Coral Energy (retired 2000); Director at EOG Resources Inc. since May 2002; also a director of Intercontinental Exchange, Inc. and Targa Resources, Inc.; President of Houston Industries domestic power generation group (1997-1998).

**Arthur E. Johnson**: Bethesda, MD; age 62; Director since 2002; Lead Director since April 2009; former Senior Vice President, Corporate Strategic Development, Lockheed Martin Corporation (former COO of Corporate Information and Services Sector); former President of Loral Corporation Federal Systems Group (1994-1996), also director of Eaton Corporation and an independent trustee of Fidelity Mutual Funds.

Wyck A. Knox, Jr.: age 68; Augusta, GA; Director since 1998; Retired Partner, Kilpatrick Stockton, LLP law firm; Chairman and Chief Executive Officer of Knox Rivers Construction Company (1976-1995).

**Dennis M. Love**: Atlanta, GA; age 53; Director since 1999; President and CEO, Printpack, Inc. since 1987; also Director at Caraustar Inc. and Oxford Industries, Inc.

**Charles H. "Pete" McTier**: Atlanta, GA; age 70; Director since 2006; Retired President of the Atlanta-based Robert W. Woodruff Foundation, the Joseph B. Whitehead Foundation, the Lettie Pate Evans Foundation and the Lettie Pate Whitehead Foundation; formerly held administrative positions at Emory University; also a Director at Coca-Cola FEMSA, S.A. de C.V., and an advisory board member of SunTrust Bank of Georgia and SunTrust Bank Atlanta.

**Dean R. O'Hare**: Palm Beach, Florida; age 66; (retired, from Warren, NJ, where he still maintains a residence); Director since 2005; Retired Chairman and Chief Executive Officer, The Chubb Corporation (former CFO); also chairman of the board of SeaPass and a director of DFA Capital Management; Chairman Emeritus of the Partnership for New Jersey – a coalition of leaders of the state's major corporations in association with nonprofit institutions and smaller businesses; also a director at HJ Heinz Company (chairman of the Audit Committee) and Fluor Corporation (finance committee chair and audit committee member); co-chairman for the Hospital for Special Surgery in New York; a trustee and chairman of the Financial Committee at St. Benedict's Preparatory School in Newark, New Jersey; a trustee of the University of Dublin in Ireland, and a trustee of the Intrepid Museum in New York.

**D. Raymond Riddle**: Atlanta, GA; age 75: Director since 1978; former Lead Director between October, 2007 and April 2009; former Chairman of the Board of Directors of AGL Resources; former Chairman and Chief Executive Officer of National Service Industries, Inc. (1994-1996); also a Director at Atlantic American Corporation and AMC, Inc.

**James A. Rubright**: Norcross, GA; age 62; Director since 2001; Chairman and CEO, Rock-Tenn Company, an integrated paperboard and packaging company, since 1999; former Executive Vice President of Sonat, Inc., an energy company (1996- 1999); also a Director at Forestar Real Estate Group, Inc.

**John W. Somerhalder II**: Atlanta, GA; age 52; Director since 2006; AGL Resources Chairman, President and Chief Executive Officer; former President of El Paso Corporation's Pipeline Group and executive vice president of El Paso Corporation; also a board member of American Gas Association, the Gas Technology Institute, the Metro Atlanta Chamber of Commerce, and the Georgia Chamber of Commerce; also a Director at Quicksilver Gas Services GP LLC; past chairman of INGAA and the INGAA Foundation.

**Felker W. Ward, Jr.**: Union City, GA; age 75; Director since 1988; Managing Member, Pinnacle Investment Advisors, Inc., an investment banking firm.

**Bettina M. Whyte**: New York, NY; age 59; Director since 2004; Chairman of the Advisory Board of Bridge Associates, LLC, a turnaround, crisis and interim management firm; former Managing Director and Head of the Special Situations Group of MBIA Insurance Corporation (2006-2007); former Managing Director of AlixPartners, LLC (1997-2006), a business turnaround management and financial advisory firm; former Partner and National Director of Business Turnaround Services, Pricewaterhouse LLP (1990-1997); former Partner, Peterson & Co. Consulting (1988-1990); President, KRW Associates (1982-1988); banking industry prior to that; also a Director at Amerisure Companies and Rock-Tenn Company.

**Henry C. Wolf**: Norfolk, VA; age 66; Director since 2004; Retired (2007) Vice Chairman and Chief Financial Officer of Norfolk Southern Corporation; also a director at Hertz Global Holdings, Inc.

The next table shows the AGLR board committee structure and current membership. The five board committees are:

- Audit
- Compensation and Management Development (C&MD)
- Executive
- Finance and Risk Management (F&RM)
- Nominating, Governance & Corporate Responsibility (NG&CR).

	AGL	R Board (	Committe	ees		
Director	Committee					
Director	Audit	C&MD	Exec	F&RM	NG&CR	
Bane	X	X				
Bell		X		X		
Crisp		X		X		
Johnson		X	Chair	X		
Knox	X				X	
Love	X		X		Chair	
McTier	X				X	
O'Hare	X				X	
Riddle				X	X	
Rubright		X	X	Chair		
Somerhalder			X	X		
Ward	X				X	
Whyte		Chair	X	X		
Wolf	Chair		X		X	

### **B.** Findings

#### 1. Board Membership

AGLR lists skills, backgrounds and experience diversity as desirable board characteristics. The NG&CR Committee conducts annual assessments of existing board member skills and experience in comparison with those required to provide effective governance and oversight. Diversity, age, business or professional background, financial literacy and expertise, availability and commitment, and independence comprise the designated criteria that the committee may consider, in addition to others it deems appropriate. AGLR board members may serve on no more than four other public company boards, absent NG&CR Committee approval. Members are expected to advise AGLR board leadership before accepting directorships of any other for-profit enterprise.

The Board has played a substantial role in leading the process of identifying and vetting director candidates, with the lead director and the chair of the NG&CR Committee taking primary roles. AGLR's board rotates committee memberships regularly. The board also divides the board generally in half for purposes of committee membership. One half of the board, as the preceding table shows, sits on two standing committees and the other half sits on the other two.

One board member hails from New Jersey. He is now retired and living in Florida, but still maintains a residence in New Jersey. His election came soon after the acquisition of NUI. AGLR has eliminated the separate board that NUI maintained for ETG.

#### 2. Assuring Board Member Independence

AGLR requires that a majority of its directors be independent. Only one, the AGLR CEO is an officer, and none previously served as employees or officers of the parent or any of its subsidiaries. One of the directors did, however, serve temporarily as the interim Chairman and CEO of AGLR and some of its subsidiaries from January to March 2006, during the Company's transition to a new CEO. The NG&CR Committee periodically re-examines the standards for director independence and reviews information provided by directors to verify compliance with the existing standards. The standards identify relationships deemed conclusively to be material to independence and those rebuttably presumed to be so. They apply equally to directors and immediate family members and to relationships within three years. The relationships are as follows through October 2008:

#### Conclusive

- o AGLR employment
- o Employee or partner of AGLR audit firm
- o Officer of firm where present Company officers served on compensation committee
- o Officer of firm getting greater of \$1 million or 2 percent of its gross revenues from AGLR
- o Receipt of more than \$120,000 in other compensation from AGLR

#### Presumed

- o Officer, employee, or significant owner of entity accounting for 1 percent of AGLR revenue
- o Officer, employee, or significant owner of firm of whose revenue AGLR represents at least 1 percent
- Officer of charity receiving greater of 1 percent or \$2 million of its revenue from AGLR.

The standards impose additional restrictions on certain committee memberships:

- Audit Committee members may not receive other consulting, advisory or other compensatory fees from AGLR
- At least two C&MD Committee members must not be former employees receiving compensation for prior services (except retirement)
- C&MD Committee members may not be former officers
- C&MD members may not have an interest in any transaction requiring disclosure under Item 404(a) of Regulation S-K (which requires disclosure of transactions between AGLR and any five percent shareholder).

The NG&CR Committee recently adopted changes to conform independence requirements to recent New York Stock Exchange standards amendments. The Committed approved an increase in the permissible direct compensation dollar threshold from \$100,000 to \$120,000 consistent with SEC regulation S-K, and narrowed the restriction on employment with the AGLR audit firm.

#### 3. Combining the Roles of Chairman and CEO

AGLR does not prohibit concurrent service as CEO and board chairman. It does, however, require a lead director when, as is the case now, an executive officer serves as the chairman. The

board appoints the lead director, for a term of three years, from among the independent directors. The lead director's term is for three years and the duties of the position include:

- Serving as the chair of the board's Executive Committee
- Presiding at executive sessions of the outside directors
- Working with the CEO, General Counsel, and Corporate Secretary to set the board and board committee annual meeting calendars
- Maintaining close contact with all board committee chairs
- Overseeing AGLR policy on communications between independent directors and shareowners and third parties
- Communicating to the CEO the board's annual evaluation of CEO performance.

#### 4. Outside Director Sessions and Agenda Formation

AGLR's governance guidelines require that non-management directors meet at least quarterly in executive session without the presence of the CEO. The directors may meet with any members of management or outside advisors they choose. These meetings must take place in conjunction with regularly scheduled board meetings. The Lead Director chairs such meetings. In the event that there are non-management directors who are deemed to be not independent, then the independent directors must meet in executive session at least once per year. There have been regular meetings of the outside directors without the presence of AGLR executives and management. Committee chairs and members form committee meeting agendas. Directors have the ability to contribute to agenda formation for the full board. The lead director takes a role in working with committee chairs and executive management in the formulation of agendas for the full board.

The AGLR governance guidelines support board members' access to senior management, and encourage senior managers to bring more junior managers to board meetings to enhance the discussion of specific issues before the board and to provide potential succession candidates with exposure to the board. The guidelines provide that when a board member contacts an AGLR manager in writing, the CEO should be copied.

#### 5. Board of Directors and Committee Structure and Operation

#### a. Governance Documents

AGLR operates under overall governance guidelines, expressed in a comprehensive document addressing the following subjects:

Chairman and CEO Selection	Time Commitment		
Committees	Committee Meeting Frequency		
Executive Sessions of Outside Directors	Lead Director		
Board Access to Management	Board Compensation Review		
Board Size	Director Independence		
Board Membership Criteria	Committee Membership Criteria		
Selection of New Director Candidates	Former CEO Board Membership		
Management Participation	Assessing the Board's Performance		
Board Interaction with Stakeholders	Director Employment Changes		
Director Membership Terms	Formal CEO Evaluation		

Succession Planning	Director Education	
Director Comp./Share Ownership Requirement	Other Policies and Issues	

#### b. Board Meetings

The full board met six times in 2005, eight times in 2006 including three telephonic meetings), five times in 2007, and five times in 2008. The board routinely meets in Atlanta, attempts to meet once each year in a state, other than Georgia, where the Company provides services. For example, the board met in Jersey City, NJ and Dorchester, SC in 2005, Houston, TX in 2006, and Short Hills, NJ in 2007. The following table shows the committee meetings since 2005, adding in parentheses the number of telephonic meetings.

AGLR B	oard	Committ	ee N	<b>leetings</b>

Committee	Year				
Committee	2005	2006	2007	2008	
Audit	4 (8)	5 (3)	5 (3)	4(2)	
Corporate Development	4	3	1		
Compensation & Management Development	4 (3)	5 (2)	5 (5)	5 (1)	
Environmental & Corporate Responsibility*	3 (1)	4	2		
Executive	(1)	(1)			
Finance & Risk Management	3	5	5	4	
Nomination & Corporate Governance**	3 (3)	5	5 (4)	5	
*Combined with Nominating and Corporate Governance Committee in July 2007					
**Nominating, Governance & Corporate Responsibility Committee assumed all responsibilities and					
oversight of the former Environmental and Corporate Responsibility Committee in July 2007.					

#### c. Pre-Meeting Information Packages

The February 2008 meeting pre-read package typifies the standard briefing materials provided to the board, generally about one week before meetings. It contained:

- A brief CEO Perspective (*e.g.*, three pages for the February 2008 meeting), summarizing key events and recent areas of management focus, and providing:
  - o Earnings per share summary
  - o 4-line paragraph summarizing very briefly LDCs' earnings contribution
  - o Similar detail separately for the three significant non-utility operations segments (SouthStar, Sequent Energy Management (SEM), and energy investments)
  - o 3 paragraphs on financial markets and stock performance
  - o 4 paragraphs on wholesale market conditions and operations
  - o 1 paragraph updating progress on Golden Triangle
  - o 1 paragraph addressing rate case strategy
- 18-page "Fourth Quarter & 2007 Consolidated Financial Summary"
  - o 1-page of consolidated balance sheets
  - o 1-page of notes explaining variances
  - o 1 page on cash flows related to operating activities
  - o 1 page on cash flows related to investing and financing activities

- o 1 page on consolidated 4Q income (breaks out operating margins and operating expenses, including variances for Dist Ops and other units)
- o 1 page on consolidated 2007 income (breaks out operating margins and operating expenses, including variances for Dist Ops and other units)
- o 1 page breaking out operating margins and operating expenses, including variances for Distribution Operations combined and other units
- o 1 page on earnings before interest and taxes (*EBIT*) by segment for the preceding quarter, listing each LDC individually and comparing actual current to actual last year to budget current year
- o 1 page on EBIT by segment for year 2007, listing each LDC individually and comparing actual current to actual last year to budget current year
- o 1 page on capital expense by segment (combining the LDCs) and comparing actual current to actual last year to budget current year with two paragraphs of variance explanations
- o 1 page of statistics for LDC, showing weather and change from normal and prior year, customers and change from prior year
- o Included in the previous page were volume data showing firm and interruptible volumes aggregated for all Distribution Operations, (no breakdown by LDC), and providing volumes for wholesale and for retail units
- o 1 page showing EBIT consolidated for the LDCs and providing
  - Each LDC's individual contribution to operating margin through actual and budgeted sales increases
  - Principal changes in operations expenses on a consolidated basis, with a few items broken out by a specific LDC)
- o 1-page EBIT summaries for each of SouthStar, SEM, and energy-investments
- o A 2.5-page Capitalization & Financing Update
  - 1-page of charts showing, capitalization ratios since 2006, fixed to floating debt amounts, and AGLR returns versus those of a peer group
  - 1.5 page summary of financing activity
- 3-page Investor Relations Update
  - o Share price performance versus peer group
  - o Peer 1- and 3-year total return performance
  - List of top institutional share holders
  - o Graph of institutional versus retail ownership versus peers
  - o Graph of price/earnings ratios vs. peer group
  - o List of earnings estimates, price targets, and ratings by eight analysts
- 18-Page Financial Overview
  - o 8 pages of EBIT charts
  - o 1 page of capital expense data (last and current year budget and actual), lumping Distribution Operations (which represent more than 2/3 of the total), while showing the other units separately
  - o 1-page chart summarizing operations expenses showing Distribution Operations consolidated and AGSC current and prior year budgets and actual
  - o A brief summary of the prior year's cash flow by 10 major categories
  - o 2005 through 2007 capitalization ratios, fixed to floating debt percentages and amounts for 2007

- o 2007 return on average equity and invested capital compared with LDC and diversified energy company peers
- o 2007 EPS by quarter, showing variances from analyst estimates and comparing to 2006
- o 2007 stock price performance versus peers
- o 3-page summary of significant issues and changes in draft of Form 10-K filing
- A 1-page document listing the Board's 2008 objectives (continue current level of focus on strategic growth, continue succession planning efforts with management, use more comparative data to monitor company performance)
- Strategic Update
  - o Summary of Public Service New Mexico's sale of gas business to a third party
  - o Description of participation in auction to purchase DRI's West Virginia and Pennsylvania LDC businesses
  - o Description of NICOR
- Summary level overview of 2008 EBIT budget.

It has been typical for the CEO's brief summary in the pre-read packages to focus more on non-utility businesses. For example, the four-page July 2008 document's discussion addressed SEM, Golden Triangle, containing only a brief LDC mention and one paragraph discussing the Cash Optimization process (which led to the 2009 reorganization discussed in a number of this report's chapters).

#### d. Audit Committee

The Audit Committee charter requires at least quarterly meetings and a minimum of four members, all of whom must be independent, non-employee AGLR directors. Each member must be financially literate or become financially literate within a "reasonable period" after joining the committee. At least one committee member must have accounting or related financial management expertise, and qualify as a financial expert under the SEC's definition. Members may receive no compensation from AGLR, other than directors' fees.

The Audit Committee's primary function is to assist the board of directors in assuring financial statement and report integrity and in complying with legal and regulatory requirements. The Committee charter gives the Audit Committee the responsibility or power to:

- Directly engage the independent auditors and evaluates their performance
- Evaluate the performance of independent auditors and internal audit functions
- Prepare the SEC-required proxy report of the Audit Committee
- Investigate any matter brought to its attention
- Have full access to all company books, records, documents, and personnel
- Engage outside counsel, accounting, and other advisors at company expense.

#### Specific Audit Committee duties include:

- Provide an open avenue of communication among the board, internal auditors, and the independent auditors
- Review the coordination of efforts between Internal Audit and the independent auditors
- Review audit policies and procedures and the scope and extent of audits

- In consultation with management and the internal and independent auditors consider the integrity of the Company's financial reporting processes and controls
- Retain and terminate the independent auditors, set fees and terms (subject to shareholder ratification)
- Directly oversee the work of the independent auditors
- Annually review the qualifications, independence and performance of the independent auditors
- Review and concur in the appointment, replacement, reassignment, or dismissal of the company's Chief Auditor
- Assure that the Internal Audit Department's charter requires it to function independently and inquire regarding its functional independence
- Discuss with management and the internal and independent auditors company risk assessment and management policies, the major financial risk exposures, and steps taken to control them; review risk exposure annually with the Finance and Risk Management Committee
- Review with the Chief Corporate Compliance Officer the status of the compliance
  program and any compliance-related issues; review and approve management's
  procedures regarding accounting, internal accounting controls, or auditing matters,
  complaints and anonymous concerns; review the results of any evaluation of the
  effectiveness of the Company's compliance and ethics program
- Periodically review with management and Internal Audit risk management processes and controls systems, significant audit findings and management responses, any audit difficulties or scope limitations, significant changes to the audit plan of Internal Audit, issues related to Internal Audit staffing and budget, or changes to Internal Audit's charter
- Review officers' expense accounts, perquisites, and use of corporate assets
- Review annually with management the adequacy of the Information Services and Technology systems and processes affecting internal controls
- Perform other duties and responsibilities required by law or authorized by the board.

The charter authorizes periodic meetings in separate executive sessions with the Chief Internal Auditor, the Chief Corporate Compliance Officer, the Chief Financial Officer, the independent auditor, and any members of management chosen by the committee. The charter also calls for quarterly meetings with management and the independent auditor to review and discuss the annual audited financial statements for the prior fiscal year and unaudited quarterly financial results (and associated press releases and earning guidance) prior to the release.

The committee also has specifically defined duties with respect to the adequacy of internal accounting procedures and controls:

- Annual reviews with financial management or the independent auditors and discussion of significant items with management
- Quarterly reviews of any significant deficiencies in the design or operation of internal controls or any material weaknesses in internal controls reported to the Committee by financial management, Internal Audit, or the independent auditors
- Review with management the report by the independent auditor required under §204 of the Sarbanes-Oxley Act of 2002

Annually, the Audit committee must report to the shareholders on its composition and responsibilities and it must review its charter and evaluate its performance. The Audit Committee operates under a detailed annual meeting schedule that identifies 47 specific tasks, lists which of the five meetings per year at which each is addressed, and identifies those activities to be conducted on an as-needed basis.

The Audit Committee reviews with the CFO quarterly and yearly consolidated financial summaries, 10-Q and 10-K filings, and management evaluations of controls effectiveness. The independent accountants regularly report at Audit Committee meetings on audit status, independence and their quality reviews. The Audit Committee annually reviews its own performance. The annual review conducted at the February 2008 meeting included assessing the committee's independence and financial expertise, reviewing the results of the committee's self assessment, and reviewing hiring guidelines for former employees of the Company's independent audit firm. The committee receives a Chief Internal Auditor's Report quarterly; it includes an assessment of his department's performance against established metrics.

The Audit Committee examines the independent accountants' proposed audit fees each year. The independent accountants presented their fees for 2008 work:

The purpose of a SAS 70 audit is to show "the service organizations prospective clients that the service organization has been thoroughly checked and deemed to have satisfactory controls and safeguards either when hosting specific information or processing information such as data belonging to customers that they do business with."

The Audit Committee applies a pre-approval policy for audit and non-audit services. It establishes four classes of services, each of which includes services that have already been approved, with all other services requiring prior committee approval. The policy addresses the overall approach and the considerations apply to pre-

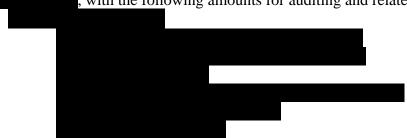


approval and it observes the need for maintaining an appropriate relationship between audit and non-audit fees. The policy requires the committee to pre-approve fees and the VP&CIA to monitor outside services to assure compliance. The table shows the pre-approved fees for 2008. The four categories are:

• Annual audit: terms and fees subject to specific pre-approval

- Audit-related (e.g., new accounting guidance, acquisitions, auditing benefits plans): identified services pre-approved, all others require specific approval
- Tax (tax compliance, tax planning and advice): lists those generally pre-approved, all others require specific preapproval
- All Other Services: Appendix A lists those generally pre-approved, all others require specific preapproval. Company believes that the specific list of SEC-prohibited services allows pre-approval of all others.

The Audit Committee also gets reports of expenditures against pre-approved amounts. By October, 2008, the pre-approved, expected 2008 fees for the independent accountants totaled with the following amounts for auditing and related services:



The reason for the increase appears to be change in the period for the next SAS 70 review.

The Audit Committee receives a quarterly Financial Summary, which forms the basis of a significant portion of its meeting discussions. The July 2008 audit committee meeting included a fairly typical quarterly Financial Summary. It contained:

- Balance sheet and one page of notes explaining variances
- One-page statement of consolidated cash flows operating activities and notes
- One-page statement of consolidated cash flows investing and finance activities and notes
- A page each on Statement of Consolidated Income for the quarter and year-to-date
- A page each on EBIT by segment (breakdown by LDC) for the guarter and year-to-date
- A page each on property, plant, and equipment by segment (with the only LDC breakout being for AGLC pipe replacement and the Hampton Roads Crossing), reported in eight categories:

System Preservation New Business Mandatory All other PRP Strategic Facilities IT Fleet

- Weather, customer, and volume metrics by LDC
- One-page financial summaries (quarterly and year-to-date) for Distribution Operations, not broken out by LDC, but providing very brief notes on variance causes
- Similar one-page financial summaries for the Retail, Wholesale, and Energy Investments segments.

The Audit Committee also receives the brief capitalization and financing updates. There are also quarterly FASB and SEC updates; *e.g.*, an approximately 15-page report provided for the committee's July 2008 meeting.

The Audit Committee regularly holds brief executive sessions with each of the independent accountants, the EVP/General Counsel & Chief Ethics and Compliance Officer (who presents a

quarterly report including legal matters, help line calls and complaints about controls, compliance with legal and regulatory requirements, and the performance review and compensation of chief internal auditor), CAO, the Chief Auditor, and the CFO.

#### e. Compensation and Management Development Committee

The C&MD Committee's charter requires that the committee consist of between at least four members, all of whom must be independent. The committee's purpose is to assist the Board in overseeing company efforts to maximize the long-term total return to shareholders by establishing supportive officer, director, and employee compensation, management succession, and executive development policies and practices. The charter defines a number of specific objectives for the committee:

- Encourage the achievement of long-range objectives by providing compensation that appropriately rewards the performance of the individual and the achievement of internal strategic objectives
- Establish compensation policies and guidelines designed to attract and retain qualified personnel at competitive industry levels and a reasonable cost
- Promote a direct relationship between compensation and company performance through long-term incentive stock-option and restricted-stock awards for executives
- Oversee management's development of succession and executive development plans.

The Committee has the authority to rely upon company staff, consultations with senior management, and retention of its own outside consultants. The specific list of responsibilities set forth in the committee's charter includes:

- Oversee the CEO's annual evaluation, which should include attainment of established goals and objectives, performance of the business, accomplishment of long-term strategic objectives, development of management, and other criteria deemed relevant
- Consider this evaluation when addressing CEO compensation
- Review management succession and executive development plans, focusing particularly on the CEO, and keeping current recommendations from this CEO about replacement candidates
- Provide any appropriate developmental feedback to the CEO
- Annually review and recommend to the Board any proposed changes to retainer and meeting fees and or any other compensation for directors
- Annually review and approve compensation goals, philosophy, and policy for all officers
- Consider company performance, relative shareholder return, the value of similar incentive awards at comparable companies, and the awards given in past years in determining the long-term incentive component of the CEO's compensation
- Establish short- and long-term performance objectives for executives under the short- and long-term incentive compensation plans and determine their attainment
- Consider the need for and hold the authority to retain, set the fees of, and terminate compensation consultants to assist in the evaluation of director and executive compensation (with required annual reviews of consultant performance)
- Review proposed significant changes to employee benefit plans
- Periodically review and provide oversight of management incentive and equity-based compensation and benefit plans

- Administer long-term incentive plans
- Review with management compliance of compensation programs and practices with tax, accounting, legal, and regulatory requirements.

#### f. Finance and Risk Management

The F&RM Committee must consist of at least four directors, and meet at least four times per year. Its primary function is to assist the Board by reviewing (a) leverage, liquidity, funding sources, and related matters, and (b) management's assessments, actions, processes and procedures concerning the Company's exposure to risks. Its principal communications paths thus include the CFO and the Chief Risk Officer. The specific responsibilities assigned to the Finance and Risk Management committee include:

- Review and make recommendations to the board regarding the proposed capital budget
- Review and oversee capital projects (the full board oversees those with an expenditure level exceeding \$100 million)
- Review management's assessment of capital structure, debt capacity, and liquidity
- Review managements procedures to monitor debt-covenant compliance and the impacts of such covenants on capital structure
- Review all major financing and liquidity initiatives
- Review significant rating-agency communications and issues involving debt ratings
- Review the performance of asset management and optimization and retail gas marketing businesses
- Review management's steps to ensure compliance with policies and procedures relating to interest rate, currency, credit, commodity, and insurable risks and any related derivatives
- Review management's steps to: (a) establish and monitor trading and risk management systems and controls at the asset management and optimization businesses, and (b) to ensure compliance with risk management policies and procedures
- Review management's assessment of controls and procedures associated with such businesses' management of affiliate transactions and reporting obligations to regulatory authorities
- Review management's assessments, actions, processes and procedures regarding any other risks identified.

As is true for all board committees, F&RM operates under a calendar that shows the meetings (quarterly with both an October and December meeting in the fourth quarter) and the specific tasks (17 in the case of F&RM) to be addressed at each. Significant changes for F&RM in 2008 were the addition of a quarterly task to review year-to-date and forecasted capital spending, to review the capital budget at the December meeting when the full board approves it, and to review proposed capital projects on an as needed basis. The specific substantive tasks (its 17 total tasks include four administrative ones typical of all AGLR board committees) for 2008 were:

- Review management assessment of capital structure, debt capacity, liquidity
- Review procedures to monitor covenant compliance
- Review major financing and liquidity initiatives management proposes
- Review significant rating agency communications and issues

- Review benefit plans updates from Investment and Administration Committees
- Review SEM financial performance reports
- Update capital expenditures year-to-date and as forecast
- Review management steps to comply with Risk Management policies/procedures
- Review management steps to establish/monitor SEM trading and Risk Management controls
- Review management assessment of controls on SEM affiliate transactions
- Review management actions on risks identified by this and the Audit committee
- Review proposed capital projects
- Review upcoming year capital budget.

#### g. Nominating, Governance, and Corporate Responsibility Committee

The NG&CR Committee must have at least four members, all of whom must qualify as independent. Its responsibilities are to:

- Identify individuals qualified to serve as directors, and recommend nominees for selection by the full board or shareholders
- Develop for board adoption formal, written guidelines for corporate governance and periodically re-evaluate governance policies and guidelines to identify any appropriate improvements
- Oversee the annual evaluation of the board and conduct an annual evaluation of the independence of each board member and the effect of any relationships that might impair independence
- Review, at least annually, the appropriate skills and characteristics of board members, and compare them against current board make-up, in order to promote diversity in skills, background, and experience
- Develop and maintain with management an orientation program for new board members and an ongoing director educational program
- Recommend to the board elections of executive officers
- Review policies, programs and practices regarding relationships with employees, shareholders, customers, competitors, suppliers and the countries, states and communities, including environmental protection, health, safety, legislative and regulatory matters, and charitable and philanthropic contributions
- Review workforce-diversity policies, procedures, programs and practices regarding the workforce, vendors, suppliers and business partners
- Review transition plans regarding any significant acquisition
- Review with management the company's reputation among external constituencies
- Advise the board on emerging political, social and environmental trends and public policy issues.

The NG&CR Committee oversees the activities of the AGLR Foundation, receiving periodic reports about contributions. For example, the December 2007 meeting included a discussion of the AGLR Foundation, highlighting areas of focus for giving and reviewing contributions from 2002 through 2007. The foundation Board membership has no New Jersey representatives, but the senior executive for Southern LDC operations and for SEM are members. The NG&CR Committee also oversees AGLR programs and activities to address manufactured gas plants. The

Senior Vice President, Engineering and Operations has summarized program content, status, and potential insurance recovery for the Committee. He reviewed the program, noting that all possible insurance coverage had been exhausted except for the NC site. The General Counsel & Ethics & Compliance Executive Vice President (GC/E&CEVP) reviews with the Committee any changes to the Code of Conduct. That program includes provision of the code each year to employees in the form of a calendar. AGLR recently changed the code after a review of it by an outside consultant.

The Committee also receives quarterly reports about diversity policies, programs, and practices, reviews director independence standards, discusses proposed committee assignments, and reviews external affairs reports briefly summarizing activities in each state at a summary level.

#### h. Executive Committee

The Executive Committee must have a minimum of at least four members, with the Lead Director chairing the committee. The charter gives this committee the power to act in place of the entire board between meetings to the extent authorized by the resolution establishing the committee. AGLR's practice has been for the Executive Committee to be composed of the chairs of the four standing committees plus the Lead Director and the CEO.

#### 6. Focus on Utility Needs

#### a. Board Structure

AGLR does not have a committee that focuses specifically and primarily on utility operations. All the committees, to varying degrees consider LDC issues. Much of the data provided to the Board and its committees and much of the discussion reflected in the minutes of meetings address the Distribution Operations business segment on a consolidated basis; *i.e.*, combining the information of all LDCs together. The Senior Vice President, Mid-Atlantic, the Virginia-based officer who has responsibility for ETG operations, has attended only one board meeting since taking that position. The New Jersey-based Vice President and ETG General Manager reports to her. He has not attended any board meetings. Neither is asked to prepare any information about ETG operations for board meetings. There is not routinely an oral report to the board addressing New Jersey specific operations at a significant level of detail. Prior to its acquisition by AGLR, NUI operated an advisory board focused entirely on ETG matters. It existed to provide advice and counsel to executives and to the NUI board on ETG matters. AGLR discontinued the use of that board. It has not replaced it with any form of voting or advisory board or committee. There is and has been since 2005 a New Jersey director on the AGLR board; he is retired, and spends much of his time in Florida.

#### c. Board Review of Budgets

The F&RM Committee took on the responsibility for oversight of capital expenditures and major projects following its October 2007 meeting. These added responsibilities were to:

- Review next year's capital budget and recommend to the board whether to approve
- Oversee capital projects (excluding "major capital projects" which are +\$100 million, and subject to full board responsibility) on an ongoing basis and make recommendations to the board on accepting material changes.

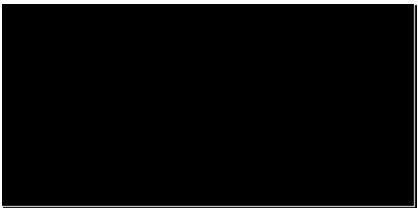
The 2008 capital and operating budgets were presented to and approved by the board at the December 2007 meeting. The presentation of the budget by the EVP/CFO addressed the EPS goal, projected capital expenditures, cash flows, and headcount, and included a 13-page presentation. The presentation showed the past two years of actual and the 2008 estimates of utility operating margin and operating expenses by LDC. The presentation aggregated all LDC capital expense and depreciation actual and budgeted expenses. It did show total operating expenses (separating those incurred locally and those allocated) by LDC.

The presentation broke LDC capital costs down by nine major categories, which the next table summarizes. That breakdown, which used categories consistent with those common in the industry, continued to provide the dollars only by all LDCs combined. There was one exception; *i.e.*, a project specific to Virginia (the Hampton Roads crossing) had its own category. The budget for this project represents very roughly about the same share (\$59 of \$321 million, which is 18 percent) of the total 2008 Distribution Operations budget as ETG comprises of AGLR (using the 13 percent allocation factor that AGLR uses to allocate much of its service-company costs among the LDCs).

The package also showed headcount for 2006, 2007, and budgeted for 2008 for the AGLR's

business units. It provided a comparison of AGLR versus analyst estimates of EPS and Share Price Targets.

The December 2008 board pre-meeting package contained a 2009 budget presentation. It demonstrates the approach of lumping distribution operations, which continue to represent the



lion's share of the business, into one group, while separating the remaining business units. The next table shows that AGLR expects Distribution Operations to consume percent of total AGLR capital expenses from 2008 through 2013.



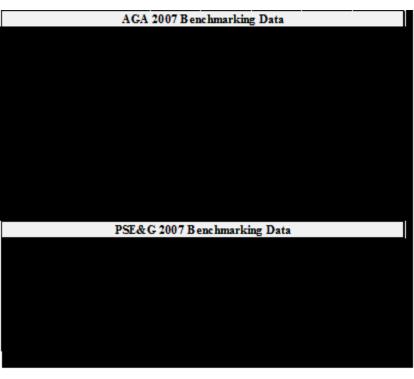
A similar lack of breakdown applies to income and expenses, with Distribution Operations lumped together, as shown in the next table) despite comprising by far the largest contributor to income.



#### d. Board Review of Operating Information

Board review of detailed operating information is not common. An example of what the board has examined came in the form of a management presentation to Oct 2008 F&RM the committee meeting, providing the results of the two benchmarking groups in which AGLR participates (American Gas Association and PSE&G). The next table shows where AGLR falls overall in benchmarking involving these two groups.

ETG-specific (generally as part of data sets showing all AGLR LDCs) information



presented to the board at the December 2007 meeting included:

- Map and customer numbers by LDC (splitting ETG into two regions)
- Annual margins since 2005 and projected for 2008
- Operating Expense, depreciation, earnings before interest and taxes, and return rates since 2005 and projected for 2008
- Average residential rates for 2006 and 2007
- Regulatory summary
- Attainment of appointment commitments
- Monthly leak response-time graphs since October 2006
- Brief summary of planned March 2009 rate case filing
- Asset Management Agreement
- Summary of sales highlights (residential conversions and gas heating in new construction) and territory expansions (including Frenchtown in NJ)
- Customer growth (new and conversions) for 2006 and 2007 and projections for 2008
- Number of inside ETG meters and number to be converted in 2008.

F&RM Committee meetings typically have included a quarterly report from the treasurer, addressing

- Counterparty credit exposure
- Consolidated capitalization by component
- Financial covenant compliance
- Liquidity and credit ratings
- Summary of outstanding revenue bonds and pricing

- Cash flow actuals and forecasts
- Interest rate risk management
- Pension and Post-Retirement Expenses by FAS category
- Pension contribution requirements under future scenarios
- Pension funding status
- New financing issuances and renewals
- Financing options under consideration
- Discussion of financial market conditions.

The committee also generally receives on a quarterly basis Chief Risk Officer Updates, summaries of SEM and SouthStar performance, and a Capital Program Quarterly Update. The April 2008 version added information about weather hedges for ETG and the other LDCs. The presentations have not contained significant LDC-specific data. Capital expenditure updates lump all of Distribution Operations together, with Retail (SouthStar), Wholesale (SEM), AGLR Networks (telecommunications), and the Jefferson Island and Golden Triangle storage projects comprising the other principal categories. These capital expense updates compare actual versus budgeted amounts, and have included a sheet providing details on status, schedule, budget, and events for the Hampton Roads Golden Triangle, and Magnolia Pipeline projects, but no similar information for ETG capital work. The April 2008 Major Capital Project Update provided information for Distribution Operations on a consolidated basis, except for AGLC pipe replacement. It provided much more detail on Golden Triangle and Hampton Roads.

#### 7. Audit Independence

#### a. Internal Audit's Charter

The October 2008 Audit Committee meeting examined the charter of Internal Audit. That charter in describing the function's mission states that Internal Audit:

assists the organization in maintaining effective controls by evaluating the effectiveness and efficiency of those controls, and by promoting continuous improvement. IA will swiftly respond to its changing environment by shifting its focus and direction when needed as a result of new rules, regulations, or business requirements.

Internal Audit's responsibilities are to determine whether "risk management control and governance processes" ensure:

- Effectiveness and efficiency of operations and controls
- Safeguarding of assets
- Reliability and integrity of financial and operating information
- Compliance with laws, regulations, contracts, policies, and procedures.

The scope of Internal Audit's activities includes an effort to determine whether:

- Risks are appropriately identified and managed
- Practices and controls exist and are functioning effectively
- Actions of personnel are compliant with laws and other public requirements

- Significant financial, managerial, and operating information is accurate, reliable and timely
- Existing and proposed information systems are adequate and effective
- Proper use of and accounting for assets takes place
- Resources are acquired economically, used efficiently, adequately protected
- Operations excellence is fostered in control processes
- Agreements with third parties are appropriately created and reviewed.

Internal Audit's charter gives it the authority to review all activities and transactions and to have full, free, unrestricted access to all company records, reports, personnel, and properties. The charter states that Internal Audit's direct reporting is to the AGLR board of directors' Audit Committee. The function reports in parallel to the EVP/GC/CE&CO for broad policy guidance and for administrative purposes. The Chief Auditor has the power to communicate directly with the CEO and with any Audit Committee member. In auditing any area of responsibility under the EVP/GC/CE&CO, the Chief Auditor reports directly to the CEO and to the Audit Committee.

The charter requires an audit report for all audits conducted. Internal Audit must, before issuing such reports, communicate key observations to and review drafts with responsible managers. Internal Audit is also charged with the responsibility to work with those managers to develop action plans that show required steps, responsible parties, and expected completion dates.

Internal Audit's charter gives it broad responsibilities:

- Conducting or updating enterprise-wide risk assessment
- Developing annual audit plans for submission to the Risk Management Committee (RMC) and the Board's Audit Committee for review and approval
- Implementing annual audit plans, getting RMC approval for special projects and reporting their existence to the Board's Audit Committee
- Periodic reports to the Board's Audit Committee and management summarizing results of audit activities
- Testing effectiveness of internal control framework using COSO<sup>1</sup> Framework
- Regular private meetings with the Board's Audit Committee
- Maintain professional staff with sufficient knowledge and experience
- Evaluate significant changes to business processes and assess impact on control structure
- Consulting services to assist management
- Assist in investigation of suspected fraudulent activities and report results to the Board's Audit Committee
- Coordinate Internal Audit's operations with those of the independent accountants, following "International Standards for the Professional Practice of Internal Auditing" issued by the Institute of Internal Auditors
- Verify appropriate management progress on action plan commitments
- Escalate matters of differing opinion with management

<sup>&</sup>lt;sup>1</sup> The "Committee of Sponsoring Organizations formed in 1985 to sponsor the National Commission on Fraudulent Financial Reporting (the Treadway Commission), originally sponsored by five U.S. accounting associations and institutes, and working together to develop integrated guidance on internal control.

- Establish quality assurance and improvement program for Internal Audit activity
- Review Internal Audit's charter with the Board's Audit Committee periodically.

The charter is also clear in describing management's responsibilities in supporting Internal Audit's activities:

- Grant access to people, locations, and documents
- Provide feedback and reviews to assist in determining that audit reports are accurate
- Work with Internal Audit on action plans.

#### b. Internal Audit Structure, Staffing, and Operations

The Vice President and Chief Auditor (VP&CA) reports for substantive direction to the board's Audit Committee and for administrative purposes to the Executive Vice President and General Counsel, who also serves as the lead officer for ethics matters. Three managers reported directly to the VP&CA at the end of 2007:

- Financial Audit Manager (with two senior auditors, an advanced staff auditor, a lead auditor, and a staff auditor as direct reports)
- Information Services Audit Manager (with a lead auditor as a direct report)
- Operations Audit Manager (with no direct reports).

Internal Audit makes quarterly reports to the Audit Committee that address performance highlights, such as internal controls and financial reporting test status, specific audits and follow-ups conducted, new audits started or scheduled. The reports also measure Internal Audit's performance against quantified metrics:

- *Practice Management*: Audit plan progress (%), Continuous Monitoring/Auditing, Report timeliness
- Managing Constituents: Client Satisfaction; Management Satisfaction
- *Talent Development*: Training (hrs), Peer Reviews Performed, Professional Participation & Enhancement
- Cost management: Performance against budget.

Internal Audit also reports its actual versus planned work hours to the Audit Committee. For example, Audit provided Internal committee in February 2008 with an overall summary of its 2007 actual work hours versus the hours shown in the year's audit plan. The accompanying table summarizes those hours. The compliance audits category consists of a review of compliance with asset management arrangements between SEM and all of the utility affiliates and a review

<b>Budgeted vs. Actual 2007 Audit Hours</b>						
Project	B/A	Q1Hrs	Q2Hrs	Q3Hrs	Q4Hrs	Total
Integrated ETG and Pivotal Audits	BUD	1,615	2,545	0	0	4,160
	ACT	191	2,261	900	36	3,388
Reg Compliance Audits	BUD	200	200	200	1,800	2,400
	ACT	187	145	15	891	1,238
Service Center Reviews	BUD	400	600	450	350	1,800
	ACT	413	486	348	307	1,554
SOX 302 and 404	BUD	1,000	500	2,600	900	5,000
	ACT	1,009	46	1,858	2,174	5,087
Officer Expenses and Perks	BUD	100	30	30	80	240
	ACT	37	-	0	0	37
IT	BUD	250	250	250	150	900
	ACT	181	100	140	57	478
Investigations	BUD	125	125	125	125	500
	ACT	49	0	3	70	122
Special Projects	BUD	250	250	250	250	1,000
	ACT	243	894	268	240	1,645
Implement QAR Recommendations	BUD	0	0	0	0	0
	ACT	648	0	0	0	648
Total	BUD	3,940	4,500	3,905	3,655	16,000
	ACT	2,958	3,932	3,531	3,775	14,196

of weather normalization adjustments. Internal Audit reported that it did not meet its 2007 audit plan because of the carryover of asset management audit work.

Internal Audit did not have a formal plan for performing and reporting to the Audit Committee about follow-ups to its audit findings as 2008 began, but was developing a plan for such a program. At the Audit Committee's second 2008 meeting (in April), Internal Audit began to include in its quarterly reports a section addressing prior audits. This section listed findings, listing audit, issue, expected completion date, responsible parties, and status of action plans. The section sorted findings by high, medium, low priorities, and tracked findings from prior audits (36 separate findings in the April report, for example).

Internal Audit also reports to the Audit Committee about progress in meeting goals. For example, the February 2008 report reported on work to meet the function's 2007 goals:

- Advance Integrated Risk Assessment Process
  - o Completed risk assessments for all units and departments
  - o Six units presented results for discussion with Management Committee; 8 more scheduled for O1 08
  - o Met with Compliance Committee and CFO to establish parameters for risk tolerance and appetite
- Rotational Auditor Program
  - o IT rotational auditor started in July
  - o Financial rotational auditor not available in 2007 but filled 1/08
- Reassess SOX 404 testing to gain improvement
  - o Considerable streamlining in 2007; reduced hours by 19%, down 1,168 to 5,087
- Develop scorecard to address the 4 categories of a world-class audit organization
  - o Reporting against scorecard throughout 2007.

#### 8. Ethics and Conflicts Matters

#### a. Codes of Conduct

AGLR maintains a code of conduct that applies to all officers and employees, and that addresses a broad range of subjects that is representative in scope and content in comparison to others. Certain provisions of the code of conduct also apply to directors. All employees must sign a certification annually stating that they have received a copy of the code, that they will comply with all provisions, and that they will report all violations of which they become aware.

For each subject area, the code addresses why the area is important, specifies the expected behavioral standard, and offers questions and answers that illustrate the practical application of that standard. The subject areas addressed specifically are:

Compliance with laws and regulations Maintenance of a safe and healthy workplace Protection of the environment Avoidance of conflicts of interest Protection of company assets Competing fairly

Promotion of a positive work environment Maintenance of accurate, complete records Dealing fairly with others Reporting of code violations Prohibiting trading on inside information

In addition, the code of conduct states AGLR's corporate values, including the ethical values of honesty, integrity and respect.

AGLR applies additional requirements to certain officers through its Code of Ethics for the Chief Executive Officer and the Senior Financial Officers. These officers must:

- Act honestly and ethically
- Avoid conflicts of interest and disclose transactions or relationships that could create the appearance of a conflict
- Provide accurate, timely understandable information in SEC reports and in other company communications
- Comply with government rules and regulations
- Act in good faith, responsibly, with due care and competence, without misrepresentation, and with unimpaired independent judgment
- Deal fairly with customers, suppliers, competitors and employees and without taking unfair advantage
- Respect and maintain confidentiality of work information and not use such information for personal advantage.
- Share knowledge and maintain important and relevant skills
- Proactively promote ethical behavior
- Make responsible use of and maintain control over entrusted assets and resources.

These provisions apply to AGLR's Chief Executive Officer, Chief Financial Officer, Treasurer Assistant Treasurer, Vice President-Controller, Assistant Controller, Vice President Financial-Business Innovation, and Director Budgets & Financial Reporting and any other financial officer the Company may from time to time deem applicable. They also apply to SEM's Executive Vice President and its Vice President and Controller.

#### b. Ethics & Compliance Helpline

The AGLR Code of Conduct advises anyone wishing to report or seek guidance on a possible code violation of the applicable telephone and web-site contact information. The code states that retaliation for good-faith reports are neither permitted nor tolerated.

AGLR makes the helpline available on a 24/7 basis, and announces the name of the independent third party who administers the helpline. The code also lists alternate sources of contact for those wishing them:

- Human Resources
- Ethics and Compliance Department's Executive Director
- The Chief Ethics and Compliance Officer.

Directors and officers complete annual questionnaires (with a certification as to accuracy) that seek information about:

- Directorships in other publicly held companies
- Interlocking board compensation committee membership
- Family relationships with other current or recent directors and officers of AGLR entities
- Family relationships with employees or contractors of AGLR entities

- Existence of an employment contract with AGLR entities
- Direct and indirect AGLR share ownership by oneself and associates
- Description of all benefits and perquisites provided by AGLR entities
- Related transactions with AGLR entities (transactions, agreements, debts, investment banking, legal services, and other)
- Indebtedness to AGLR entities
- Involvement in legal proceedings against AGLR entities
- List of all entities in which one has 10 percent or more of the voting securities
- Involvement in bankruptcy as an individual or owner of an entity
- Criminal conviction or proceedings pending
- Existence of a prohibition against securities activities
- Court, SEC, or Commodity Futures Trading Commission findings of securities or commodities law violations
- Severance, termination, change in control rights
- Unreported stock transactions
- AGLR entity promises to make payments to conditional charitable payments
- Non-standard director compensation agreements
- AGLR entity employment within the past three years
- Compensation in excess of \$100,000 from AGLR entities
- Employment or affiliation with AGLR independent accountants within past three years
- Employment or board service with an entity whose single-year payments to AGLR entities exceed the greater of \$1 million or 2 percent of gross revenues
- Directorships on charitable boards
- Employment with another entity that received payment from AGLR entities
- Other material relationships with AGLR entities
- Financial expertise and experience (for Audit Committee members)
- Service on other companies' audit committees.

The Audit Committee regularly receives ethics and compliance reports, and holds executive sessions with the Chief Ethics and Compliance Officer.

#### c. Anti-Fraud Programs

The Audit Committee addressed at its July 2008 meeting steps toward developing a more robust fraud protection program. Internal Audit provided the review, based primarily on the recently-issued "Managing the Business Risk of Fraud: A Practical Guide," sponsored by the Institute of Independent Accountants, American Institute of CPAs, and Association of Certified Fraud Examiners. The review found all but one of the key elements to be in place (with the exceptions noted in bold below):

- Fraud Risk Governance
  - o Strong tone at the top
  - Code of Conduct and Ethics
  - o Anti-Fraud Prevention and Detection Policy (not final, but existing in draft form at the time)
  - o Traditional policies: authority delegations, travel and entertainment
- Structured Fraud Risk Assessment

- o Risk Identification, Rating, and Response
- o Consider relevant fraud schemes/scenarios and map to controls
- Assess incentive, pressures, and opportunities
- Prevention Techniques
  - o Background Checks
  - o Code of Conduct training
  - o Anti-Fraud training
  - o System of Internal controls (access to physical locations, network, and applications, segregation of duties, change control and deployment)
- Detection Techniques
  - o Ethics and compliance hotline
  - o Audits
  - o Exit interviews (limited for management director and above levels and voluntary below)
  - Internal Controls (management review and monitoring, automated and manual validation of data transfers, alerts, alarms and surveillance systems, account and bank reconciliations)
  - Investigation and Response
- Reporting
  - o Helpline calls and investigation results reported to Ethics & Compliance Committee and to Audit Committee
  - o May require legal counsel, independent auditors, and regulatory notifications
  - o Risk assessment and management policies discussion
  - o Tax matters update
  - o Review/update charter

#### 9. SOX Compliance

At the April 2008 meeting, the outside accountants provided a summary of the annual audit plan. The independent accountants also described the 2008 SOX 404 steps and timeline:

- Provide 2008 SOX 404 steps and timeline
- Finish documentation and control design analysis (AGLR)
- Scope locations and accounts
- Evaluate management's assessment/identification of locations, processes, accounts
- Understand components of entity-level controls
- Remediate self-assessed deficiencies (AGLR)
- Review documentation and perform walkthroughs/ identify gaps
- Evaluate management's assessment of control design and operation
- Evaluate management's objectivity and re-perform management testing
- Perform self-check of remediation (AGLR)
- Assess management's testing of controls
- Develop testing plan and execute
- Communicate deficiencies with management
- Remediate deficiencies found by outside accountants' assessment
- Perform self check of remediation (AGLR)
- Perform check of remediation

- Conduct update testing (throughout the period) (AGLR)
- PwC update testing (throughout the period).

The February SOX 404 report listed all deficiencies found during the previous year, their materiality, and their correction status. For 2007, 61 deficiencies were found; none arose to the

level of material weaknesses. Sixty were minor control deficiencies and one was a significant deficiency related to deferred income taxes. The significant deficiency was reported as corrected. The Audit Committee received a report identifying the types, the correction status of each of the 60 minor control deficiencies, and the plans and schedules for completing corrections on those remaining open.

AGLR completed a 2007 SOX Risk Assessment, which was reviewed with the committee at the February 2008 meeting. The assessment assigned all processes a risk ranking (High, Medium, Low):



- Complexity
- Volume
- Changes in systems, leadership, process owners
- Exposure to management judgment (*i.e.*, use of estimates)
- Susceptibility to fraud
- Frequency of related-party transactions
- Number of deficiencies found in process since 2004 SOX implementation
- IT general controls.

The accompanying table summarizes the processes and controls. The controls are further broken down by three categories: business, information technology, and entity level.

Internal Audit budgeted 5,000 hours for SOX audit activities for 2007, and spent 5,087. This reduction of 19 percent from the prior year resulted from a 2007 Internal Audit goal to reassess SOX testing to gain improvements in accomplishing required testing activities. The independent accountants and Internal Audit have made frequent reports to the Audit Committee on SOX testing schedules, status, results, and actions to address gaps found.

#### 10. Director Education

AGLR's governance guidelines require management to develop and implement an orientation program for new directors. The program is to include comprehensive information about Company business, financial performance, and about board and committee policies, procedures, and responsibilities. New-director orientation includes a requirement to meet with senior management and the opportunity to visit Company facilities. The guidelines also generally commit AGLR to facilitate director participation in relevant continuing education programs.

New directors generally receive a two-day orientation at the Atlanta office. New directors also receive the company's governance documents and the director's handbook. The exact nature of the orientation depends on committee assignments. For example, the agenda for a recent new director, who serves on the Audit and Compensation & Management Committee, included the following topics (presented by senior officers and managers):

- Company insurance programs
- Tour of Gas Control Center
- External Affairs, Government Relations, Corporate Communications
- Pivotal Energy Development
- AGL Networks and Southstar
- Distribution Operations (attended by all regional senior executives and Atlanta-based operations executives)
- Succession planning
- Compensation best practices and AGLR philosophy and plans
- SEM accounting matters
- Finance activities overview
- Enterprise risk management
- Annual 10-K
- Most recent audit and controls assessment by the independent accountants
- Corporate compliance program overview
- Service center, customer care center, and LNG tours.

This orientation also included the provision of a number of documents:

- Relevant committee charters
- Minutes from relevant committee meetings for prior year
- Policies adopted by the relevant committees
- Current 10-K and most recent 10-Q.

All directors excluding one have been to at least one outside director education program since 2004. In total, the 13 outside directors have attended 25 outside programs, with five of them focusing particularly on the energy utility industry. A number of the programs focus specifically on the committee responsibilities of the directors who attended them.

#### 11. Evaluating Board Effectiveness

AGLR provides for annual board and committee evaluations at the start of the fiscal year. At that time, the Nominating and Corporate Governance Committee sets the measurements that will be used for the coming year. At the end of the year, an evaluation against those measures takes place. Board members receive evaluation forms, and return them to a lead director or coordinator, who then conducts confidential interviews (phone or in person) with each director, and synthesizes information provided. The board then discusses the results (without attribution of specific comments to any individual director), and there is a review of the process to determine whether any adjustments for the coming year are appropriate. The 2008 measures for the board committees (each of which could be ranked as satisfactory or unsatisfactory; there was also a field for comments) were:

- Clear understanding by committee members of mission, roles, and responsibilities
- Clear understanding of committee roles and responsibilities between committee and the full board
- Meaningful reporting of committee results to the full board in a clear, concise, and timely manner
- Adequate committee performance of all duties
- Sufficiency, clarity, and timeliness of information received prior to committee meetings
- Agendas address the appropriate issues and do not omit any that should be discussed
- Demonstration through committee discussions of adequate member preparation
- Rational relationship between time spent on items and their importance
- Adequate opportunity for members to discuss and ask
- Respect of member for confidentiality of executive sessions
- Conduct of executive sessions with management
- Sufficiently challenging and supportive of management
- Sufficient formal and informal contact with management other than CEO
- Kept apprised of significant issues relevant to the committee
- Correct size and composition
- Sufficiency of new member orientation.

The measures for the full board also provided for ratings of satisfactory and unsatisfactory, but included a comments field). Details of the board ratings categories follow:

#### **GOVERNANCE**

- Members have full and common understanding of board's roles and responsibilities
- Members understand values, mission, strategic and business plans and products/services
- Clear board, committees, officer, staff structural plans
- Clear board goals
- Ongoing procedure for board to review its goals, policies, objectives
- Attend to policy related decisions to effectively guide management
- Adequate monitoring of financial and other indicators throughout the year
- Adequate monitoring of performance with industry and other comparative data
- Review of CAPEX and O&M budgets and strategic plans annually in sufficient detail

#### **BOARD MEETINGS**

- Meetings facilitate focus and progress on important matters
- Discussion at meetings shows adequate member preparation
- Information received prior to meetings complete, clear, and timely
- Board regularly reviews with management the Company's strategic goals and objectives
- Individual members treat each other and management with respect
- Meetings ensure timely, effective resolution of issues
- Agenda addresses appropriate issues and omits none that should be discussed
- Rational relation between time spent on items and their importance
- Members abide by management decisions

### **BOARD/MANAGEMENT RELATIONS**

• With assistance of C&MD Committee, board regularly evaluates performance and provides encouragement for CEO's professional growth

- Board expects CEO recommendation on all important matters
- Delegates to CEO responsibility for administering board policy and implementing board decisions
- With assistance of C&MD, establish CEO succession plans
- Sufficient board exposure to possible CEO successors
- Board expectations and concerns about management performance effectively communicated to CEO
- Board methods for measuring management performance are appropriate
- Board sufficiently challenging and supportive of management
- Sufficient access to management, internal and external auditors, legal counsel and other advisers outside of management and outside of meetings
- Appropriate management personnel and outside experts present at meetings to answer questions
- Board knowledgeable about competitive factors, such as customer satisfaction, consumer trends, alternatives produces, market saturation

### **COMPOSITION AND ATTRIBUTES**

- Board has right size and composition
- Optimum proportion of inside to independent directors
- Frequency of committee rotation is appropriate
- All necessary skills, stakeholders, diversity represented on board
- New members given sufficient orientation
- Directors kept adequately informed of change in law regulation and in best governance practices

### **COMMITTEES**

- Committee structure enables clear focus on issues
- Committee responsibilities well defined
- Committee reports give adequate information to the board
- Adequate communication/coordination among committees
- Performance of each committee (measured individually)

Each committee also has its own list of measures to be graded (ranging from five to NG&CR to 18 for the Audit Committee).

#### 12. Board Role in Executive Succession

AGLR's governance plans give the C&MD Committee responsibility to review management succession and executive development plans with the CEO. The CEO is also required to make available to the Committee on a continuing basis the CEO's recommendation as to his or her successor. The CEO must review succession planning annually with the full board. The C&MD Committee and the board have met the annual requirements, regularly addressing a variety of succession and related activities. The board, for example, made its role with management in performing succession planning a specific performance objective for 2007, specifying the following actions:

- Direct interaction with senior officers
- Progress on CEO and key executive succession plan, setting quarterly meetings for the C&MD Committee and a December update for the full board

 Requiring reports from management on status of efforts to improve internal talent development, increase "bench strength," and address vendor and employee diversity initiatives.

Succession planning remained a board goal for 2008 and there was an annual discussion of the subject with the full board. The minutes of the C&MD committee, however, do not routinely show attention to this subject.

### C. Conclusions

### 1. AGLR provides for a structurally independent board of directors and the board operates with sufficient independence.

AGLR takes effective measures to assure that board members do not have competing interests. Save the Chairman and CEO, AGLR board members are independent. All members of the Audit, NG&CR, and C&MD Committee are independent. The NG&CR Committee has a primary role in identifying, vetting, and recommending director candidates to the full board. There are no significant commonalities in other directorships, employment, or business interests. AGLR has firm and comprehensive standards applicable to conflicts of interest, and requires all directors, as well as employees and officers, to confirm their compliance with them.

### 2. The directors participate actively in agenda formation, executive sessions, and in communications between meetings.

The directors have a substantial opportunity to participate in agenda formation and they undertake substantial reviews of governance effectiveness in regular sessions among themselves. There is frequent communication among directors and between the lead director and the Chairman and CEO between meetings. Directors have sufficient opportunities to contribute to agenda formation. The post-meeting sessions among independent directors are consistently held, appropriately structured, communicative, and used to provide feedback to senior management.

# 3. The lack of an LDC operations focus in the AGLR governance structure does not give the board insight into ETG operations circumstances and needs at a level that Liberty has observed at other companies. (Recommendation #1)

Separate utility boards and operations committees represent some of the structures used by other holding companies to assure sufficient focus on utility operations matters. Concerns about aging utility facilities and a recent period of reduced investment across the country (and in particular, the older urban regions of the Northeast) have heightened the importance of assuring that utility infrastructure remains adequate to meet service needs reliably. The public safety consequences of inadequately maintained facilities take on increased visibility when public-safety significant incidents occur in the region. AGLR has made significant increases in New Jersey system investments.

Board attention to operations and infrastructure exists and, by historical measures, is not particularly out of the ordinary. However, the lack of a separate utility board, the lack of an operations committee, the comparatively low number of board and committee meetings each year, and the lack of a regular program of reporting specific, quantified, and LDC-specific performance measures do give rise to concern about whether the board's oversight of operations and infrastructure matters specific to New Jersey has kept pace with increasing government and

public attention to infrastructure concerns and with the increasing emphasis of the industry in general and AGLR in particular on network performance and expenditures.

In general, the AGLR governance structure and the operations of its committee does reflect the primacy of utility operations and the unique public service responsibilities of ETG as a public utility. However, the presentations made to the board, the data sets regularly provided to the board, summaries of meetings, and the knowledge demonstrated by board members in interviews reflects greater attention on non-utility operations, despite their secondary size. ETG cannot expect to get the same unique level of attention that it would as a stand-alone LDC in a holding company structure. However, the AGLR board needs to assure that it considers ETG, which operates in a different region and with different operating characteristics, as a unique entity with unique needs. It remains too undifferentiated a part of Distribution Operations overall for that consideration to be deemed optimum.

Another notable feature of the AGLR board committee structure is that the oversight of manufactured-gas-plant remediation falls under the responsibility of the NG&CR Committee, whose other responsibilities lie in administrative areas.

### 4. Board members have appropriate qualifications and experience.

AGLR has a board with a sufficient range of senior experience and the board compares existing and desired capabilities in considering potential new members. There has been a New Jersey member since the acquisition of NUI. Prior to acquisition, NUI operated an ETG advisory board, which proved to be a major source of change instigation during the parent's troubled, last stages. AGLR has discontinued the use of that type of board. Its circumstances make that discontinuation understandable. It can become unwieldy to operate such boards in many states that, as AGLR grows, represent increasingly smaller shares of the business.

Nevertheless, as subsequent conclusions in this section describe, the AGLR board does not routinely get disaggregated ETG performance information at a level that Liberty considers to be important. Moreover, AGLR does not have a board committee primarily focused on LDC operations. Particularly because ETG forms a smaller portion of the business (somewhat less than 20 percent of LDC operations by some measures), and because the organization structure places the most senior ETG oversight at a geographic distance, it is very important to assure that the board does not see ETG principally as an undifferentiated part of a six-LDC business that operates primarily in the Southeast. Weather-based differences in gas usage, divergent economic growth patterns, and different labor characteristics represent some of the factors that make ETG different. The differences in AGLR customer reaction to an off-shore call center (addressed more fully in Chapter VII, *Customer Service*) also highlight the unique needs that ETG places on the Distribution Operations business.

These differences do not compel the conclusion that an alternate board structure or significantly revised membership is necessary. However, they do indicate that, given the current structure and membership, greater attention to ETG-specific circumstance, as is discussed in more detail in the following conclusions, is appropriate.

AGLR rotates committee memberships and structures that membership essentially to place half of its members on the same two of four principal committees and the other half on the remaining two. This bifurcation was described as resulting from administrative convenience, but did not ignore experience and capabilities. Nevertheless, optimization of membership tends to be constrained by applying convenience as a factor. Therefore, the Company should not continue to use convenience as a material factor in committee assignments, given the increased expectations of board members and the added focus on matching committee assignments with member experience.

Expectations for directors have changed in recent years. One of the consequences (and in some cases the driver) of such change has been the need for more detailed study and inquiry in providing effective governance and oversight. The board members demonstrate sufficient depth of knowledge and experience to allow for significant flexibility in committee assignment without loss of necessary committee expertise taken as a whole. Liberty did not find that any committee has been left with resource gaps because of the rotational policy. Moreover, gradual rotation should remain an effective element in considering committee assignments, in order to promote broad director understanding of the business as their tenures extend. AGLR needs, however, to assure that its consideration of committee assignments in the future makes rotational considerations secondary to assuring that committees retain expertise and stability, which are important in assuring that they provide optimally-informed and steady guidance from year to year.

### 5. AGLR has adequately addressed the question of using a combined Chairman and CEO.

The Company does not operate under a firm practice of using the combination, although that is the approach undertaken after the current incumbent had served for some time as CEO alone. The particularly strong outside board member predominance on the board, the use of lead directors with long experience on the AGLR board, and the reliance that the board places on outside-director only sessions provides sufficient assurance that the board can and does exercise its responsibilities with sufficient vigor and independence.

### 6. Board of directors and committee structure and operations are governed by sound and effective documents.

The board and its committees operate under appropriate governance documents. They undergo annual review in conjunction with examinations of board and committee effectiveness. Maintenance of detailed lists of committee activities comprises a particular strength of AGLR's documentation. Committee members showed a thorough and consistent understanding of committee roles and activities particularly, and generally, the role of the board in promoting the creation of an effective controls environment.

AGLR's committee structure supports the implementation of controls necessary for overseeing the operational and financial separation of utility and non-utility operations. The board members understand the importance of that separation and address it in committee and board meetings. Liberty did conclude, however, that AGLR's understanding of what good utility practice requires by way of financial separation should be broadened. In terms of governance, however, Liberty found adequate board oversight in assuring the types of separation that the Company has found to be appropriate.

### 7. The Audit Committee operates independently and effectively.

Membership has sufficiently strong credentials for a company of the size and complexity of AGLR. Its membership is independent, conducts separate meetings with auditors and management, and actively participates in audit plan formation, status monitoring, and follow-up. It has sufficient control over the selection and performance of the independent accountants and it adequately controls the use of those accountants for additional work.

The committee's structure and governing documents provide sufficient independence. The committee has been active in setting its agenda, determining its information requirements, selecting the independent accountants, determining audit fees, and limiting other work by the auditor. The success in complying with SOX requirements on a timely basis depended greatly on the active oversight of the Audit Committee.

The committee may retain outside expertise at its own discretion. Committee members have sufficient informal communications paths and dialogue with the independent accountants, particularly given the plan for the chair to arrange meetings with the partner-in-charge on a recurring basis. It is important that the plan for these meetings be executed. The Audit Committee's actions show engagement in the right kinds of issues and at the right level of detail.

### **8.** There is not a formal process for soliciting proposals from independent accountants. (*Recommendation #2*)

There is regular review of estimated costs of the independent accountants. The committee chair recognizes the value in considering rotation of independent accounting firms, and the Audit Committee charter requires consideration of change at least every three years. However, the policy does not require the use of formal solicitations of cost proposals.

### 9. AGLR has given adequate attention to SOX compliance.

The independent accountants and Internal Audit, operating under Audit Committee guidance appropriately plan SOX work and take, in conjunction with the significant and appropriate self-examination role of management, a proper role in verification and independent testing activities. There is regular reporting of progress against established plans (addressing both schedule and substantive matters). Internal Audit dedicates substantial and sufficient time to its role, and has properly focused on means to make its work more efficient as compliance efforts mature with each annual cycle.

The Audit Committee collectively has substantial experience with SOX compliance at other large companies, and its members showed strong understanding of the importance of and means for assuring compliance. The board of directors has exercised leadership over compliance efforts, and has remained actively involved in monitoring the substance and the timing of actions as part of compliance plans. There exists an effective set of tools to assure that controls undergo comprehensive and timely evaluation, change, and certification.

### 10. AGLR has designed and conducted an effective program for assuring ethics and compliance.

The board promotes and pays regular attention to the maintenance of effective guidelines, policies, and procedures. There exist adequate means for raising complaints and concerns. There is regular reporting to the board about ethics matters. AGLR has recently revised its code following a review of it by an outside consultant. Liberty does have a concern about where AGLR has located executive responsibility for ethics matters. The next chapter, which addresses organization issues, discusses that concern.

### 11. AGLR pays appropriate attention to director training and education.

There exists an appropriate program for introducing new directors to AGLR and its unique circumstance and needs. The board places appropriate emphasis on continuing education, and the directors have as a group participated adequately in continuing education activities.

### 12. The Board is adequately involved in executive succession.

The Board has assured that it maintains a current identification of CEO candidates, should an unexpected need arise for a transition in the position. The board has also made its involvement in executive succession more broadly a specific goal.

13. The Board and its committees undergo regular and sufficient annual evaluations, but have not used the process to advance what it generally concedes to be satisfactory performance. (Recommendation #3)

The evaluation forms used by the Board and committees are notably comprehensive and they are faithfully used, and results are shared. However, the approach suggests acceptance of performance that is viewed as satisfactory. The documents that Liberty reviewed did not appear to focus on soliciting feedback that would improve performance already viewed as acceptable. This approach is acceptable in meeting minimal requirements, but does not sufficiently challenge directors to achieve even greater levels of performance. Another notable feature of the AGLR board's operation – its use of specific annual objectives and its discussion of progress against those objectives – does, however, show board interest in "pushing" its performance.

### **D.** Recommendations

1. Create an LDC-operations-focused board committee and routinely distribute more detailed, focused, and LDC-specific data sets that provide quantitative measures of performance against clear, comprehensive metrics. (Conclusion #3)

AGLR has a committee structure that uses a division of board members derived in significant part for administrative convenience. The board's annual schedule also calls for fewer meetings than is customary. Combining these features with the lack of a regular set of objective measurements leaves the AGLR board with less than optimal information about ETG-specific infrastructure and operations information. Creation of a board committee that focuses predominantly on LDC infrastructure and operations will provide the board with improved oversight capability. Concerns about infrastructure have produced a significantly greater national priority on this subject. Other boards have come to place more attention and emphasis on matters such as specific operations metrics and comparative data among LDCs. These areas of increased attention have come as part of board efforts to make a firmer connection between the financial and budget plans and performance that have characterized their focus for many decades with the

results produced, the gaps remaining, and the likely closure requirements, in terms of service quality, reliability, and public safety. This change will also place manufactured gas plant remediation under a committee with significantly stronger operations focus.

AGLR should accompany this change with the development of a comprehensive set of performance metrics (what some call a "corporate dashboard") for reporting to the board each month, along with goals, quarterly and annual trends, and spotlights on areas of substandard performance and even standard-satisfying performance that is trending downward. Liberty recommends the New Jersey Natural Gas set of measures as a starting point. Liberty has found them to be quite comprehensive, yet presented in a way that facilitates ready comprehension and identification of potential areas of concern or questions for board members. It is essential that the measurements show LDC-specific information. To the extent that there are differences in expenditures or performance from LDC to LDC, disaggregated data will help the board to understand whether what drives those differences is understandable and appropriate.

### 2. Periodically solicit competitive proposals for providing outside audit services. (Conclusion #8)

The available options have become more limited in number in recent years, as has the ability to move outside the range of major service providers, given the greater level of visibility and risk associated with accounting and auditing requirements and guidelines. Working within the limitations it faces, AGLR's Audit Committee does pay attention to controlling the costs it incurs from the independent accountants. The charter appropriately requires consideration of changes in those accountants at least every three years. Periodic solicitation of competitive proposals would emphasize to potential providers the need to offer "best costs" to secure AGLR's business.

### 3. Emphasize the use of board and committee evaluations as improvement tools. (Conclusion #13)

The board and committee annual reviews occur regularly and directors perform them with diligence. However, their structure does not lend itself to optimization, in that it rates performance aspects as satisfactory or unsatisfactory. More gradations in available responses would highlight areas where improvements may be made even where performance meets a standard of "satisfactory," which is not a high threshold. The availability of a comments field begins to address the need for more robust response, but is not alone sufficient.

### II. Organization

### A. Background

This chapter addresses the following topics:

- The corporate structure of AGLR
- The structure of ETG
- Services provided from the parent to ETG.

### 1. Business Segments and Corporate Entities

AGLR reports its results by business segment, which is typical of the industry. Its segments comprise:

- *Distribution Operations*, which consists of the six LDCs that provide service to a total of more than 2.2 million customers in Georgia, New Jersey, Virginia, Florida, Tennessee and Maryland; NUI Utilities, Inc. remains in existence and continues to house ETG and the other two LDCs (Elkton Natural Gas in Maryland and Florida Cities Gas) owned by NUI Utilities
- **Retail Energy Operations**, operated by SouthStar Energy Services LLC (*SouthStar*), which AGLR owns in partnership with Piedmont Natural Gas Company, providing natural gas supply, transportation, and related services to more than half a million end users in the southern states east of the Mississippi River and in Ohio (and not in New Jersey)
- Wholesale Operations, which consists of two businesses:
  - O Asset management, wholesale marketing, gathering, and transportation of natural gas for clients (utilities, marketers, energy poolers, municipalities and industrial customers) in the eastern and southeastern United States, conducted by wholly owned AGLR subsidiary Sequent Energy Management (*SEM*)
  - Energy-supply management services to end users, provided by wholly-owned AGLR subsidiary Compass Energy Inc. (acquired by AGLR in 2007), headquartered in Richmond, Virginia, maintaining sales offices or natural gas operations centers in Virginia and Pennsylvania, and having other employees in Ohio, North Carolina, Vermont, and Texas
- *Energy Investments*, which consists of investments in natural gas delivery-related projects (such as pipelines and storage facilities) and a communications infrastructure company, all of which are wholly-owned AGLR subsidiaries:
  - o Golden Triangle Storage, (project located in Beaumont, Texas)
  - o Pivotal Jefferson Island Storage and Hub, LLC (project located in Erath, Louisiana)
  - o AGL Networks, LLC, which owns, designs, constructs and manages fiber optic networks in Atlanta and Phoenix.

#### 2. ETG Structure

ETG is not owned directly by the parent. ETG continues legally to be part of the organization (consisting of ETG, a number of other LDCs, and several non-utility entities) merged into AGLR as part of the NUI acquisition. The legal name of this organization is Pivotal Utility Holdings, which does business as ETG. The most senior person in charge only of New Jersey utility operations is the New Jersey-based ETG Vice President & General Manager (ETG VP/GM). He

reports directly to the Virginia-based Senior Vice President, Mid-Atlantic Operations (SVP-MAO). The SVP-MAO directly operates the other principal Mid-Atlantic LDC (Virginia Natural Gas), thus operating in that state in a similar manner to how the ETG VP/GM operates in New Jersey.

ETG gets from AGLR significantly greater operating, engineering, and technical services than one typically finds in a holding company structure. The SVP-MAO reports to the Atlanta-based Executive Vice President, Utility Operations (Utility Operations EVP). The Utility Operations EVP reports to AGLR's CEO. The SVP-MAO has a counterpart Senior Vice President for Southern Operations. She also reports to the Utility Operations EVP. Each of these two regional LDC executives take direction from the Utility Operations EVP and their LDCs get from groups under the EVP's direction significant levels of operations services provided under the direction of the service company in Atlanta. Those services come from the other two direct reports to the Utility Operations EVP (other than the two regional senior vice presidents); *i.e.*, vice presidents with responsibility for customer service and marketing. Thus, the Utility Operations EVP is the AGLR organizational level at which operations of all of AGLR's LDCs "come together." This EVP's organization works almost entirely in support of LDC operations.

Another set of service company groups, reporting to the Atlanta-based Senior Vice President, Engineering and Operations (SVP E&O) provides substantial engineering and technical services to all the LDCs. The SVP E&O, like the Utility Operations EVP, reports directly to the AGLR CEO. This group also provides services to AGLR's non-utility segments.

In addition to providing these comparatively more substantial operating, engineering, and technical services, the holding company also provides a broad range of administrative and general services to ETG as well. The service company does the same for AGLR's other LDCs and non-utility business segments.

### 3. Service Company

AGLR uses the typical approach taken by large utility holding companies (keeping in mind its relatively greater centralization of operating, engineering, and technical services):

- The parent holding company has no employees
- A service company (AGLR Service Company, or "AGSC") provides common management and administrative services to all subsidiaries and units (varying in nature and level by subsidiary and unit type, with utility operations receiving the widest and most substantial level of support)
- Separate LCD subsidiaries or units, staffed to provide those service elements best provided through local personnel (either as employees directly of the LDC or matrixed from the service company)
- Separate non-utility subsidiaries or units, operating with varying degrees of staffing separation as required by their locations and the expertise needed to conduct their businesses.

AGLR also operates a captive insurance company (Global Energy Resource Insurance Co.) to meet risk management needs of its business units. Chapter IX, *Support Services*, of this report discusses that subsidiary under the section dealing with Insurance and Claims.

### **B.** Findings

### 1. Senior Executive Management

Top executive management of AGSC and of each subsidiary or business unit comes from AGLR's Chairman, President, and CEO, a three-year incumbent. His direct reports comprise the:

- Executive Vice President and CFO (EVPCFO)
- Executive Vice President, Utility Operations (EVPUO)
- Senior Vice President (human relations and training) and President, AGLR Foundation (SRVPHR)
- Executive Vice President, General Counsel and Chief Ethics & Compliance Officer (EVPGC/CE&CO)
- Senior Vice President, Engineering and Operations (SVPE&O)
- President, Sequent Energy Management (SEM).

These officers comprise AGLR's Policy Council, or "Tier One" officers. They work together to provide overall direction to all AGLR units and they serve as the executives who direct the many management and administrative functions that AGSC provides to these AGLR units.

### 2. Service Company Role

AGLR has adopted a comparatively strong role for its service company. This approach, in major part, grows from what has formed a core element of AGLR's overall growth strategy for many years, extending back to the tenure of the CEO preceding the current one. Acquisition of operating gas utilities has comprised that strategic element. AGLR has built a large central support organization to establish what it views as a "platform" for facilitating the integration of

acquired LDC AGLR's operations. model operating for acquired LDCs depends upon central a organization, its service company, that provides not only a particularly range wide of the management, financial, administrative, and logistical services that typify energy utility holding companies, but comparatively also a

AGSC Services to Business Units									
System Integrity	Reporting	Claims	AMR						
Environmental	Compliance	Info. Services	Instrumentation						
Safety	Taxes	Systems	LNG Ops						
External Affairs	Payroll	Design	Business Systems						
Regulatory Compliance	Budgeting	Purchasing	Work Management						
Codes & Standards	Human Resources	Applications	Gas Control						
Regulatory Affairs	Recruitment	Voice Comm.	Risk Management						
Regulatory Accounting	Staffing	Internal Audit	Supply Chain						
Planning & Forecasting	Compensation	Mid-Atl. Ops	Purchasing						
Regulatory Analysis	Benefits	Ops Support	Fleet						
Government Affairs	Training	Damage Prevention	Sales/Marketing						
Financial	HRIS	Safety	Marketing Analysis						
Finance	Client Services	Operations	Key Accounts						
Treasury	Employee Services	Gas Ops	Wholesale Services						
Fin. Accounting	General Counsel	Gas Accounting	Marketing Ops						
Plant Accounting	Legal	Capacity Planning	Customer Retention						
Vendor Accounting	Ethics & Compliance	Measurement							

high level of operating and technical services as well. That strategy has not led to successful acquisitions following that of NUI and it remains uncertain whether AGLR will be able to bring in utility operations that will take full advantage of the service platform created in anticipation of them.

The accompanying table summarizes the services provided by AGSC to ETG and the other LDCs, with the major areas of service highlighted and their particular offerings set forth under them.

### 3. 2009 Reorganization

AGLR began in mid-2008 a self examination that it entitled a "Cash Optimization Initiative." Economic decline in general, and drops in AGLR customer growth in particular stimulated an effort to optimize capital and O&M costs. The announcement of this initiative noted that it was the first since before the 2004 acquisition of NUI. The effort, expected to last through mid-2009, generated a significant reorganization. Following a process-based review, the organization changes, which ran through June 2009, produced the most significant changes in the following areas:

- Training
- "Public Presence," which included Marketing, Sales, Communications, Governmental Affairs, and Regulatory Affairs
- Supply Chain
- Business Analysis and Reporting
- Design and Construction.

### a. Engineering and Operations

This organization underwent significant change in the 2009 reorganizations. Engineering and operations reports to the Atlanta-based Executive Vice President, Engineering & Operations (EVPE&O). His reports following the mid-2009 reorganization include:

- Vice President Gas Operations (VPGO)
- Vice President, Engineering, Construction & Supply Chain (VPEC&SC)
- Vice President, Technology & Environmental Sustainability (VPT&ES)
- Vice President, Midstream Operations
- President Pivotal Energy Development.

The first three reports have direct responsibility for LDC engineering and operations.

### b. Engineering, Construction, and Supply Chain

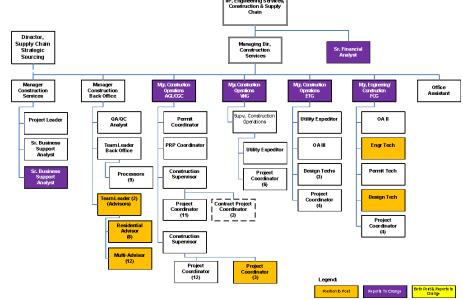
The main change to this organization from the mid-2009 reorganization was the addition of construction services to what had been primarily an engineering and supply chain organization. The direct reports to the VPEC&SC consist of the newly reporting Managing Director, Construction Services and three others, whose organizations did not change as substantially (although changes affecting procurement and fleet management are addressed in Chapter IX, *Support Services*, in this report):

- Managing Director, Engineering Management
- Managing Director, Supply Chain
- Managing Director for safety and compliance (staff of seven) and crisis management (staff of one).

The movement of construction services to this organization in 2009 transfers responsibility for a number of construction-related functions from the LDCs (including ETG) to the service company. AGLR's goal in making this change was to promote greater consistency and the identification and implementation of best construction practices across the AGLR serving

territories. The accompanying table shows the new organization.

The group's four Construction Operations mangers include one assigned to ETG. The construction operations resources for New Jersey include four project coordinators. three design technicians, and a utility expeditor. The total number of persons in the group supporting



New Jersey operations did not change as a result of the reorganization. The Back Office group, which supports all AGLR LDCs grew from the addition of a staff of 22 advisors (consolidated in this organization in 2009) to provide developers, builders, and large customers served by all AGLR LDCs with a single source of contact and support for new and expanded service needs involving construction work.

### c. Technology and Environmental Sustainability

This six-person department, newly created as part of the mid-2009 reorganization, has responsibility for traditional environmental compliance and remediation, and consolidates responsibility for emerging environmental and conservation matters, such as climate change, renewable businesses, distributed, generation, and efficient appliances. The VPT&ES has two direct reports. The first is the Director, Environmental Services and Sustainability Programs. The director is engaged in renewable research and development (primarily landfill gas at this point), and manages a Southern and a Mid-Atlantic Senior Environmental Specialists. The Mid-Atlantic specialist, who is New-Jersey based, continues in the same ETG MGP and other environmental compliance roles he had before the reorganization. He also has responsibility for New Jersey greenhouse gas and other environmental initiatives. He draws support from other AGLR organizations as necessary. The other direct report to the VPT&ES is the Manager, Environmental Projects Midstream Operations. This manager performs work only for Pivotal Energy Development.

### 4. Non-Utility Staffing

AGLR's principal non-utility operations have comparatively strong internal staffing. SEM operates from its headquarters in Houston, and performs a number of its own internal management and administrative functions; *i.e.*, finance, accounting, and human resources. Its

legal services come from a Houston-based staff that reports to the General Counsel in AGSC. AGLR treats the operations of the third-party gas supplier SouthStar, which AGLR owns jointly with Piedmont, as an equity investment. SouthStar has its own staff; AGLR's support for its business comes in the form of managing its investment and overseeing operations generally. Compass Energy, recently acquired by AGLR was already a going concern, founded in 2002. Pivotal Energy Development has a separate president and a staff of ten.

The roles performed by the EVPCFO and SRVPHR are fairly typical for utility holding company structures. Other chapters of this report address the functions they direct. The EVPGC/CE&CO's legal role is typical, but it is unusual to find a company's chief legal officer serving also as its most senior ethics and compliance leader.

The EVPUO and SVPE&O roles reflect what represents a fairly strong degree of centralization of utility-related services at AGLR. The EVPUO has responsibility largely for the administrative services that AGSC provides to ETG and the other LDCs. His responsibilities include customer service, call center operations, billing and collection, meter reading, sales and marketing, communications, and government and regulatory affairs.

The organizations responsible for work that takes place at the LDC locations also report to the EVPUO. AGLR has divided its LDCs into two regions (Mid-Atlantic and Southern), each of which is led by a senior vice president. The Senior Vice President Mid-Atlantic Operations (SVP-MAO) has responsibility for New Jersey, Maryland, and Virginia LDC operations. Two officers reporting to her (one is the Vice President and General Manager, ETG) divide that responsibility. Each of these VPGMs has a sizeable direct staff, has day-to-day availability of a number of AGSC personnel matrixed to the local organizations, and has access to a number of AGSC personnel who perform important LDC-related functions in common, often with staff members dedicated largely to a single or a small number of the AGLR LDCs.

The SVPE&O has responsibility largely for the technical services that AGSC provides to ETG and the other LDCs. These functions consist primarily of capacity planning, gas supply, gas control, engineering, environmental compliance and remediation, construction services, measurement, instrumentation and control, LNG and propane facilities, procurement, fleet management, and field business systems (*e.g.*, work management). He is also responsible for midstream activities, such as the storage projects of Pivotal Energy Development.

### 5. Staffing and Organizational Benchmarks

AGLR uses a service to benchmark a number of metrics that address organization and staffing. Among them are several (shown in the next table) that compare AGLR to other participating utilities in a variety of organization and staffing categories.

#### **Organization Benchmarks**

GLR	Median	Category	AGLR	Median
		Employees eligible to retire in 5yrs		
		Managers eligible to retire in 5 yrs		
		Union total separation rate		
		Union voluntary separation rate		
		Union involuntary separation rate		
			Employees eligible to retire in 5yrs Managers eligible to retire in 5 yrs Union total separation rate Union voluntary separation rate	Employees eligible to retire in 5yrs  Managers eligible to retire in 5 yrs  Union total separation rate  Union voluntary separation rate

First year separations	Non-union total separation rate		
Average employee tenure	Non-union voluntary separations		
Employees with<2-year tenure	Non-union involuntary separations		
Executives with >3-year tenure	Headcount born 1943-1960		
Managers ready for promotion	Headcount born 1961-1981		
Succession candidates/key role	Headcount born after 1981		
Roles with succession candidates	Overtime percent		
Promotion rate	Promotion rate-women		
Reporting layers	Promotion rate-minorities		

Total staffing assignable to ETG (utility employees plus a prorated share of service company employees) compares favorably to that of the other two New Jersey gas-only LDCs. Such comparisons are necessarily imprecise for a number of reasons; allocating common personnel among multiple utility and nonutility subsidiaries is judgmental. Also, there are mismatches in employment data vintages. Liberty has updated its data from the other two LDCs to the extent available through public information sources (annual reports 10-K filings); however, the data gathered directly from AGLR in this audit is more detailed and current. Despite these qualifications, it is reasonably clear that total full-time equivalent personnel devoted to ETG's utility business are comparable to those of New Jersey Natural Gas, when expressed in terms of the number of customers per employee. ETG customers per employee appears significantly higher than is the case for South Jersey Gas, but that is to be expected, given the advantages that ETG and New Jersey Natural gain by having higher customer densities.

More significant is the advantage that each gains by being part of enterprises that collectively serve many more customers. South Jersey Gas serves about 340,000 customers and New Jersey Natural about 484,000. ETG itself serves only 273,000, but AGLR serves about 2,316,000 in total. That large base does not assist in reducing the number of field employees; however, the strong degree of centralization that AGLR has brought to ETG's "office" functions (management, engineering, planning, finance, and administrative services) provides an opportunity for significant job savings, albeit at the expense of large numbers of New Jersey positions. ETG has 259 employees working in New Jersey; the other two have close to 500 each.

### 6. Relationships between Utility and Non-Utility Subsidiaries

The ways in which AGLR maintains and balances the operational, financial, and strategic relationships between its LDCs and its other operations are discussed in detail in Chapter IV (Strategic Planning and Budgeting) and Chapter V (Finance and Cash Management) of this report, and in Chapter I (Procurement and Purchasing) and Chapter II (Affiliate Relationships) of the Phase One report.

### C. Conclusions

### 1. AGLR has created an organization that appropriately focuses on meeting utility needs effectively and efficiently.

Key utility operations functions have dedicated capable leadership. AGLR has provided for a New Jersey-based executive for ETG operations. He, the senior vice president to whom he reports, and the service company organizations provide a source of support adequately dedicated to utility operations. The organization structure at AGLR is more complex than one would find at

some holding companies. This greater complexity results from the large number of jurisdictions in which AGLR operates. At the overall level, AGLR has created a structure that responds effectively to the needs imposed by its large operations footprint.

There exist appropriate missions, goals, and objectives for the organizations that conduct and support the provision of utility service in New Jersey. The *Compensation* chapter of this report addresses the propriety of the performance objectives, measurements, and ties to compensation that serve to motivate and reward performance in effectively and efficiently providing service to ETG customers.

The benchmarking data used by AGLR shows effectiveness in acquiring a staff with competitive levels of tenure, using outside hires effectively, minimizing unexpected departures, preparing succession candidates, minimizing overtime, and applying a representative number of management layers an spans of control. In particular, Liberty views the relatively greater level of outsiders filling positions as a positive factor. Liberty's experience has been that utilities generally tend to overemphasize the value of "home grown" supervisors, managers, and executives and to underemphasize the benefits that outside hires bring to keeping an organization sufficiently open to new and different ways of doing business.

It is certainly fair to say that AGLR's breadth of operations gives it an advantage that smaller holding companies operations do not have. It is equally fair to observe that AGLR has performed well in taking advantage of this opportunity, and in ways that have brought to ETG an organization that is much improved form the past and that is competitive with any that Liberty has seen in its work in the energy utility industry.

### 2. The organization sufficiently separates non-utility businesses operationally.

The two principal non-utility businesses, SEM and SouthStar operate largely independently in meeting their operations needs. AGLR's energy investments segment draws engineering and technical support from the same central group that supports the AGLR LDCs. There are appropriate controls and procedures in place to assure proper charges for that support. The Affiliate Relationships and Cost Allocation Methods chapters of Part One of this report address them.

The work performed in support of energy investments is complementary to that performed by the LDCs; providing it through a common organization benefits the LDCs by bringing to bear the benefits of the experience gained through the performance of complementary work. Where appropriate, the service company organization has dedicated separate groups or individuals to LDC and to energy-investments work.

### 3. The service company is appropriately structured; it provides a range of service that, while appropriate, is broader than typical for a utility holding company structure.

AGSC, the service company, comprises a notable strength of AGLR's organization and operations. It has been effectively designed to provide common services efficiently and effectively. The large number of LDCs it serves has provided an opportunity for centralizing a greater number of services. AGLR has done so, particularly in providing a greater level of engineering and technical services.

The service company's functions operate under well-qualified and highly experienced leadership. The service groups exhibit a culture of "client service." As the recent reorganization (resulting from the Cash Optimization exercise) demonstrates, AGLR conducts examinations of continuing effectiveness, and makes changes. A particularly notable feature of the Cash Optimization effort is its primary emphasis on service delivery. Management clearly expected the effort to generate cost efficiencies, but the execution of the effort showed that service delivery drove improvements (costs included), rather than targeted cost reductions driving service delivery changes.

### 4. There exists a comparatively large number of officers, but their number is appropriate to the large and dispersed nature of AGLR's operations.

Liberty observed and AGLR's benchmarking data (measuring spans of control) show that AGLR has a comparatively high number of officers. This disparity is at least partially offset by comparatively lower numbers of managers, when measured similarly. Liberty did observe that some senior officers have a low number of direct reports (one such situation changed during the audit by virtue of the retirement of a senior executive who was not replaced). However, it must also be observed that AGLR has created an appropriately large and broad (in terms of services provided) service company. Maintaining such an organization, when combined with the desire to address "executive" representation in multiple jurisdictions, does mean, all other things equal, a proportionately greater number of executives. While there does remain the potential for a very small further reduction in executives, there is not a basis for concluding that ETG suffers any measurable or material economic disadvantage.

### 5. AGLR compares favorably with other utilities generally and with New Jersey's other two LDC-only gas utilities in resource levels.

AGLR does have size advantages that should translate into staffing competitiveness. The Company's benchmarking data and Liberty's review of staffing numbers at the other two LDCs in New Jersey confirm that AGLR has used this advantage to produce staffing levels that are sufficiently competitive overall.

## 6. Combining the position of General Counsel and Chief Ethics Officer does not fully promote the objectives of the ethics role. (Recommendation #1)

The Society of Corporate Compliance and Ethics has adopted a *Code of Ethics for Compliance* and *Ethics Professionals*. This code states that "Misconduct includes both illegal acts and unethical conduct. Thus, conduct that is legal may nevertheless be unethical." The first two rules of this code provide that:

R1.1 CEPs shall not aid, abet or participate in misconduct.

R1.2 CEPs shall take such steps as are necessary to prevent misconduct by their employing organizations.

A lawyer has the responsibility to advise the client about what is lawful and not lawful. Combining the responsibilities of chief ethics compliance officer and chief legal officer may well obligate the person to whom management regularly turns for legal advice to apply two different standards. Moreover, it obligates the incumbent to take, as chief ethics compliance officer,

potentially strong measures to prevent actions that he would, as a lawyer counsel, consider within the bounds of the law. Effective management access to legal advice necessarily includes a discussion of what is legal, unencumbered by what meets some higher standard, even discounting the very real problem that this standard is inherently vague. It puts the general counsel in danger of frequently having a conflict of interest. The suggestion that the solution is for management to retain independent legal advice in all such cases is both unrealistic and, even if rigorously implemented, unduly expensive. It is superior to provide for a separate chief ethics officer not responsible for serving as management's source of advice for what is simply within the bounds of the law.

Another issue arises from the Code's rule providing that:

R1.4 If, in the course of their work, CEPs become aware of any decision by their employing organization which, if implemented, would constitute misconduct, the professional shall: (a) refuse to consent to the decision; (b) escalate the matter, including to the highest governing body, as appropriate; (c) if serious issues remain unresolved after exercising "a" and "b", consider resignation; and (d) report the decision to public officials when required by law.

This provision has the curious effect, when the position of general counsel and chief ethics officer are combined, of requiring the general counsel, in the first instance, to advise management that legal (but unethical) conduct is permissible, but then not only refusing to consent to it, but seeking to undo it. A purpose of the Code is clearly to promote the creation of a senior, powerful company voice against conduct that is both illegal and unethical. That purpose should largely be served by an effective legal function. It is where conduct is legal but unethical that a significant gap is likely. Having the company's chief lawyer fill it is not effective. It could hinder the provision of sound legal advice. More likely, it will have the tendency to equate legality with ethicality, which undoes much of the purpose of a chief ethics officer.

7. AGLR has generally managed the relationships among its utility and non-utility subsidiaries effectively and has appropriately balanced the allocation of resources and investment risks among them, but its energy-market operations will continue to require close observation and control.

As discussed in Chapter IV (*Strategic Planning and Budgeting*) and Chapter V (*Finance and Cash Management*) of this report, and in Chapter I (*Procurement and Purchasing*) and Chapter II (*Affiliate Relationships*) of the Phase One report, AGLR generally manages the relationships among its utility and non-utility subsidiaries well, with a few exceptions documented in those chapters. The most notable of these exceptions are the insufficient arms-length relationship between SEM and the utilities, including ETG, and the mixing of the utility and non-utility cash pools.

AGLR has managed its portfolio mix of utility and non-utility subsidiaries effectively in order to ensure that that the utilities, including ETG, have stable and sustainable growth and to minimize the financial failure risk on the utilities from the non-utilities affiliates. Energy-market operations, however, have for some time been viewed as a major source of financial risk. It will continue to be necessary for AGLR, while securing needed operational and financial separation,

to maintain close senior executive oversight as those businesses continue, and to regularly reexamine their needs and risks as energy markets continue to change, and as those businesses grow.

### **D.** Recommendations

### 1. Provide for the eventual separation of the roles of General Counsel and Chief Ethics Officer. (Conclusion #6)

Liberty did not observe (nor did this audit's scope include a detailed review of ethics complaints, inquiries, or other activities) any specific case that would reflect improper advice or counsel as a result of the combined roles. Liberty also found the incumbent to be sensitive to the needs that each role requires. Moreover, Liberty found, as noted in the immediately preceding *Governance* chapter of this report, that AGLR's approach to and programs, policies, and procedures related to ethics matters are effective.

Liberty believes that as a general matter, separation of the two roles is better designed, in the long run, to promote confidence in robust ethics policies and practices and to produce the least conflicted means for addressing issues and problems as they arise. Liberty approached the questions raised by this combination of roles, with the same standard it applies to other cases of potential or apparent conflicts; *i.e.*, confidence in the current incumbent's abilities, objectivity, and integrity is not a reason for an anomalous structure, because incumbents change over time. Thus, without intending to raise any concerns about AGLR's current incumbent, Liberty believes that the positions should be separated. As single-purpose adjustments in executive responsibility are not always easy to accomplish (given that executives all currently have reasonably full, if not overly full, portfolios), Liberty would expect that this transition may best take place in the context of other transitions in incumbents or responsibility assignments, provided that the change is not tabled indefinitely.

### III. Human Resources

### **B.** Findings

### 1. HR Organization, Staffing, and Costs

Senior executive direction of the Human Resources organization comes from the Senior Vice President Human Resources & President of the AGLR Foundation (SrVP-HR). Her organization before the mid-2009 reorganization consisted of the Vice President, Human Resources (VP-HR) and a staff of three focusing on corporate events, VForce (AGLR's employee volunteer program), and foundation matters. Following the reorganization, training (discussed in more detail below) moved from under the VP-HR to become a direct report (the Director, Training) of the SrVP-HR. The current direct reports to the VP-HR comprise:

- Managing Director, Employee Services and Labor Relations, responsible for the following three groups:
  - o Director, Labor Relations (no staff)
  - o Manager, Talent Acquisition (staff of three serving as recruitment group)
  - o Supervisor, Employee Services (staff of four providing a resource for employees about compensation and benefits, including an internal employee call center recently brought from a vendor to in-house resources)
- Director, Employee Benefits (staff of four)
- Managing Director, Employee Relations and Organization Development, responsible for the following four groups:
  - o Manager, Client Services (no staff; responsible for diversity issues across AGLR, including New Jersey)
  - Director, HR Client Services (staff of five serving as HR's field representatives at the LDCs and other AGLR work locations; New Jersey has a resident Manager, Client Services in this group)
  - o Manager, HR Technology (staff of four, which operates the PeopleSoft-based Human Resources Information System: HRIS)
  - o Director, Organization Development<sup>2</sup> (no staff)
- Director, Reward Strategies and Executive Compensation (staff of two to address compensation and the stock plan)
- Manager, HR Business (no staff; performs budgeting, financial reporting, and other administrative activities for HR and for the newly consolidated Training department).

HR's Headcount has remained fairly stable in recent years, growing from 30 in 2005 to 32 in 2009. The 2009 figures exclude four full-time equivalent employees assigned to call-center insourcing. Costs have fallen markedly, due primarily to a reduction in the use of outside resources. Budgeted costs for 2009 show a further drop, but it may be temporary. The following table summarizes HR costs in recent years.

<sup>&</sup>lt;sup>2</sup> Organization Development (OD) applies behavioral science concepts and tools to support an orderly change process, generally on an organization-wide basis, seeking to improve the organization's effectiveness by influencing its beliefs, attitudes, values, and structure to facilitate adaptation to new technologies, markets, and challenges. Structured OD processes seek focused, defined changes based on reflection, self-analysis, planning, and system improvement.

### HR Cost Changes 2005-2009

Item	2005	2006	2007	2008	Change	2009
Payroll Expense						
Outside Services						
Other						
Total						
Headcount						

AGLR benchmarking data show that its HR costs per employee are about twice the median level of a sample group. HR plans to adopt a new budgeting structure, but has not yet made sufficient progress to provide a sample for Liberty review.

### 2. The ETG and AGSC Workforce

#### a. Headcount

Staffing at ETG has dropped considerably under AGLR's ownership. Staffing in mid-2003 (following a year that saw significant employment drops) at ETG numbered 444, and at the parent (which was operating effectively as a common services provider) numbered 117. This produced a total (assuming that about 95 corporate personnel were dedicated to ETG) in the range of 535. The number at ETG is now 260 and the equivalent number of AGSC personnel attributable to ETG is probably in the range of 80, which generates an assumed total dedicated to ETG in the range of 340.

Total New Jersey headcount has fallen by about 6 percent (from 274 to 260) in the three years since January 1, 2006. The next table summarizes the reductions in operations positions. New Jersey-based engineering and environmental personnel have remained constant at a level of six during this period.

**Changes in New Jersey Field Personnel** 

Position	Nun	ıber	C1	Position	Nun	CI	
Position	01/06	12/08	Change	Position	01/06	12/08	Change
Corrosion Technicians				Supervision			
Crew Leader				Meter Reading			
Design Technicians				Operations			
Mechanics				Field			
Me ter Reader				Total Supervision			
Responders							
Warehouse Clerk				Totals			
Other Field*							
			Percent	Changes			
		Supe	rvision				
		Othe	r Field				
		Te	otal				

The next table shows the total change in field plus all other New Jersey positions.

### **Changes in Total New Jersey Positions**

Position	Jan 2006	Dec 2008	Change	Position	Jan 2006	Dec 2008	Change
Account Executives			27.3%	Interns			0.0%
Accountants			0.0%	IT Support Specialist			0.0%
Assistants (Office & Admin)			18.8%	Legal			100.0%
Billing Services			0.0%	Mapping Services Specialist			100.0%
Budget Manager/Business Analysts			0.0%	Measurement Specialist			100.0%
Business Operations Manager			0.0%	Mechanics			10.3%
Commercial Office			33.3%	Meter Change Scheduler			0.0%
Community Outreach Manager			0.0%	Meter Reading			10.0%
Construction Operations Manager			0.0%	Occupational Safety/Compliance			100.0%
Crew Leaders			3.4%	Operations Management/Supervision			12.5%
Customer Advocacy			0.0%	PC Analyst			0
Customer Relations Supervisor			0	Project Coordinator			0.0%
Damage Prevention Specialist			0.0%	Pumper,Drip			0.0%
Distribution Mechanic			0.0%	Rate/Regulatory			0.0%
Energy Assistance			0.0%	Region Manager			0.0%
Engineering			0.0%	Residential Coordinator			0.0%
Environmental			0.0%	Residential Program Manager			0.0%
Facilities Inspection			0.0%	Responders			1.7%
Field Supervisor			16.7%	Safety & Operations Training			0.0%
Fleet Supervisor			0.0%	Sales & Marketing			80.0%
Gas Supply Manager			0.0%	Technicians			4.0%
GasSupply & Reg Analysis			0.0%	Transportation Specialist			100.0%
Government Relations Director			0.0%	Trench Machine Operator			0.0%
Group Leader			0.0%	Utility Exepditor			0
HR Client Services Manager			0.0%	Warehouse Clerk			50.0%

There has been an increase in efficiency (measured by customers per employee) at both the service-company and local level since 2005. The following table summarizes the changes. There may be minor differences in these tables due to timing or to nomenclature differences.

### **Service Company and ETG Staff Reductions**

	•				
Item	2005	2006	2007	2008	Change
AGLR LDC Customers ('000s)	1,545	1,546	1,559	1,557	0.8%
Service Company Employees	816	794	741	777	-4.8%
Customers/Employee (AGLR)	1,893	1,947	2,104	2,004	5.8%
ETG LDC Customers('000s)	266	269	272	273	2.6%
ETG Employees	272	263	252	257	-5.5%
ETG Customers/ETGEmployee	978	1,023	1,079	1,062	8.6%

### b. New Hires in New Jersey

The next table shows the new hires for work in New Jersey since the acquisition of NUI by AGLR.

2	005		
Position	Company	Department	No.
Account Executive	ETG	Customer Development	3
Account Executive	ETG	New Business	1
Customer Advocacy Representative	AGLSC	Billing Services	1
Customer Services Representative	ETG	Appliance Business	1
Energy Assistance Coordinator	AGLSC	Billing Services	1
Government Relations Director	AGLSC	Governmental Relations	1
HR Client Services Consultant	AGLSC	HR Client Services	1
IT Support Specialist	ETG	IT Applications	2
Marketing Manager	AGLSC	Marketing	1
Office Assistant II	ETG	NW NJ Operations	1
Public Relations Director	AGLSC	Corporate Communications	1
		2005 Total	14
2	006		
Commercial & Industrial Programs Manager	ETG	Marketing	1
		2006 Total	1
2	007		
Lead PC Analyst	ETG	IT Applications	1
Residential Program Manager	ETG	Marketing	1
		2007 Total	2
2	008		
Commercial Office Representative	ETG	Commercial Offices	2
Customer Advocacy Representative	AGLSC	Billing Services	1
HR Client Services Manager	ETG	HR Client Services	1
Lead PC Analyst	ETG	IT Applications	1
Mechanic II*	ETG	Union Operations	2
Meter Reader I*	ETG	Union Operations	1
Office Assistant II	ETG	NW NJ Operations	1
Office Assistant II	ETG	Union Operations	1
Region Manager	ETG	Union Operations	1
Responder*	ETG	Union Operations	3
Senor Gas Supply & Regulatory Analyst	ETG	Gas Supply	1
Senior Mechanic I*	ETG	NW NJ Operations	1
		2008 Total	16
		Grand Total	33

### c. Aging Work Force

An annual survey by Black & Veatch (an international engineering and construction company with a large utility business) reports the aging work force as the second leading concern of the utility industry. The issue ranks second only to the service reliability. HR advised the board in December 2007 that 75 percent of the workforce consisted of "baby boomers," 34 percent of whom were eligible for retirement in 2012. HR noted that this produced a potential loss of technical operations knowledge and a need for more training for older workers to deal with technology change. There was also a need to refill the succession planning pipeline following changes in staffing in 2007.

Liberty sought to determine how AGLR projects its future employee population's skills and experience mix, for the purpose of assessing the effectiveness of efforts to bring on and to develop employees with the skills needed to meet expected gaps. Responding briefly to a request for information about recent-year efforts to assess short- and long-term turnover and replacement needs for New-Jersey based and service-company personnel, the Company responded that,

"AGL Resources does not currently have an identified business model or process to capture ETG workforce hiring needs that may result from attrition."

The New Jersey workforce has very long tenure. This fact produces an experienced workforce, but also increases the importance of transition planning to deal with an aging workforce. The following chart shows the tenure of each individual by department.



The next table shows average worker age by job classification. Average age overall is 47.



### 3. Equal Opportunity and Affirmative Action

### a. AGLR's Diversity Policy

AGLR established in 2007 a Diversity Council to focus on issues raised in its 2007 employee satisfaction survey. The AGLR board of directors approved in February 2008 of the creation of a company "Diversity Statement" intended to:

- Promote "integrity, respect, fairness and a commitment to a variety of backgrounds and experiences"
- Maintain diverse board and company management representation
- Promote an environment that is "inclusive and fair to all"
- Reinforce that environment through "employment, promotion, training, community relations and supplier diversity" efforts
- Provide for regular progress reports to the board and discussions with management on progress in achieving diversity goals.

The board received an "Organizational Diversity Update" May 2006, January 2007, and October 2007. There were none in 2008.

### b. Diversity Survey

Somewhat more than half of AGLR's New Jersey employees participated in a mid-2008 survey on diversity. Participants in Diversity Forums held across AGLR filled out these surveys, as part of the conduct of the forums. At these forums, the Company presents its views on diversity, describes its commitment to diversity, lists means for demonstrating that commitment, notes board involvement, describes AGLR's diversity council and sub-councils, lists accomplishments to date, identifies next steps, and identifies ways for employees to become involved. The forums also give participants a chance to respond to a variety of diversity-related statements through a survey. This survey solicited agreement or disagreement on specific statements in a range of categories:

- AGL Resources' view on diversity ( percent for ETG, versus percent for AGLR overall) said all of the following:
  - o "We value the richness that diversity brings ..."
  - o "Diversity makes our company better..."
- o "Proud of efforts to maintain a workforce..." o "Committed to cultivating an environment..." • Diversity as a Fairness or a Business Issue (responders • Local management effectiveness in communicating with employees of different backgrounds and experiences ( percent for ETG versus percent for AGLR overall rated somewhat ineffective or ineffective) • Local management fairness in treating and interacting with individual employees ( percent for ETG versus percent for AGLR overall rated somewhat ineffective or ineffective) • Local management effort to attract and maintain a diverse workforce ( percent for ETG versus percent for AGLR overall somewhat weak or weak) • Degree of pride as an employee ( percent for ETG versus percent for AGLR overall somewhat not or not proud)
- Comfort in expressing new ideas to supervisor or peers ( percent for ETG somewhat not or not comfortable versus percent for AGLR overall)
- Encouraged to share opinions and ideas ( percent for ETG versus percent for AGLR overall disagree or strongly disagree)
- Credibility of communications from the company ( percent for ETG versus percent for AGLR overall disagree or strongly disagree)
- Ability to share feedback without fear of retaliation ( percent for ETG versus percent for AGLR overall disagree or strongly disagree).

AGLR had not conducted a diversity survey before the one that took place in 2008. It came as part of a diversity awareness forum. The Company planned to conduct the next diversity survey in August 2009. This "Personal Diversity Paradigm" assessment will present 10 questions designed to secure employee "thoughts about diversity," for the purpose of assisting AGLR in refining it approach to diversity and inclusion.

HR shared the results of the 2008 diversity survey with New Jersey management and supervisors, in a session that also addressed and reported on operational improvement activities. There are no documented action plans to address the diversity issues raised by the survey and there are no documents addressing the effectiveness of any actions taken to address any diversity issues raised by the survey.

### c. Affirmative Action Planning

The Manager, Talent Acquisition wrote the affirmative action (AA) plan for 2008. She is a member of AGSC HR. The VP & Gen Mgr, Elizabethtown Gas approved the plan. The Manager, Talent Acquisition serves as the Equal Employment Opportunity (EEO) Coordinator, having primary management responsibility for ensuring compliance with Federal Executive Order 11246. This order prohibits ETG, as a provider of services to the federal government, from discriminating in employment decisions on the basis of race, color, religion, sex, or national origin. The EEO Coordinator has responsibility for:

- Developing EEO policy statements, AA programs, and communication procedures
- Assisting in AA/EEO problem identification and resolution
- Implementing an internal audit and reporting system to
  - Measure program effectiveness
  - o Determine success in meeting AA goals and objectives
  - o Identify needed remedial action
- Keeping informed of progress and reporting potential problem areas through reports
- Reviewing the AA policy to ensure it is understood and followed
- Auditing the bulletin board to ensure that up-to-date compliance information is posted
- Serving as company liaison with enforcement agencies.

The plan assigns to management responsibility for:

- Assisting in the problem identification and solution
- Establishing departmental goals and objectives when appropriate
- Reviewing the qualifications of all applicants and employees to ensure nondiscriminatory treatment in hiring, promotion, transfer, and termination
- Reviewing each employee's job performance to assess whether personnel actions are justified by employee performance.

The plan reports the performance of the following analyses and activities:

- An analysis of incumbency versus availability is performed to identify job groups where underutilization exists for females and minorities
- In the case of a significant shortfall, establishment of Placement Goals
- Steps to encourage internal and external applicants for positions subject to Placement Goals
  - o Recruiting at schools with significant minority and female student populations
  - o Publishing job advertisements in periodicals that target females and minorities
  - o Offering job training to candidates currently employed by the company to support their advancement
  - o Using recruitment companies specifically target females and minorities
  - o Using the State Employment Service
- Review of Employment Decisions to ensure hiring and promotion fairness
- Review of applicant flow where females and minorities are selected at lower rates

- Development of efforts to improve applicant flow
- Review of non-voluntary terminations, when females and minority terminations exceed the rate for others, to ensure equal application of termination procedures
- Periodic compensation reviews to identify any significant pay discrepancies between females and minorities and others
- Review discrepancies found for justification under appropriate factors.

The plan cites the following activities as methods to address identified problem areas:

- Conducting periodic analyses of job descriptions to ensure accurate job functions
- Making job descriptions available to recruiting sources and management involved in recruiting, screening, selection and promotion
- Reviewing job applications and other pre-employment forms
- Evaluating selection methods that may have a disparate impact
- Training on interview techniques
- Training management and supervisory staff in EEO
- Using techniques to improve recruitment and flow of qualified applicants
  - o Including "Equal Opportunity/Affirmative Action Employer" in all printed employment advertisements
  - o Placing help wanted advertisements in local minority and women's interest media
  - o Disseminating job-opportunity information to organizations representing minorities and women
  - o Encouraging all employees to refer qualified applicants
  - o Actively recruiting at schools with predominantly minority or female enrollments
  - o Requesting employment agencies to refer qualified minorities and women
- Preparing an internal review of compensation practices
- Ensuring that all employees get equal opportunity for promotion
  - o Posting promotional opportunities
  - o Offering counseling to assist employees in identifying promotional opportunities, training, and educational programs to enhance promotions and other opportunities
  - o Evaluating job requirements for promotion.

The plan also addresses qualified disabled persons and protected veterans. There are plans for each of ETG's two New Jersey areas. There is also a plan that covers the service company. It was, like the two New Jersey plans, prepared by the same person, but was approved by the Vice-President, Human Resources.

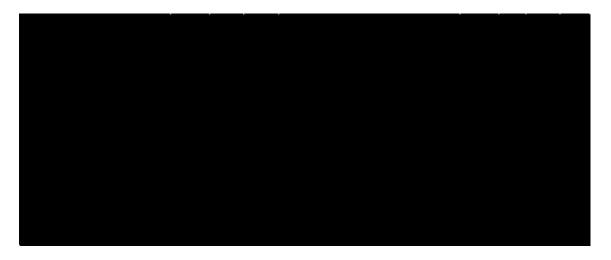
### d. Placement Goals and Results

The next table summarizes the goals set and results achieved for Placement Goals (*i.e.*, areas of significant placement shortfall) established for 2007 and for 2008.

#### 2007 and 2008 Placement Goals



The next table shows the September 2008 workforce composition at Atlanta and at Green Lane (with female, African American, and white employee totals). Data for the smaller Northwest location is not reported separately.



An April 2009 presentation to the Nominating, Governance, & Corporate Responsibility Committee of the AGLR board of directors showed that the New Jersey workforce, alone among

the other AGLR LDC states identified specifically (Georgia, Virginia, and Florida), showed an underrepresentation of minorities when compared with the available state workforce.

### e. Benchmarking

AGLR benchmarks women and minority employment against other companies in a number of categories. The next table shows that AGLR compares favorably with other utilities in the categories benchmarked.

Category	AGLR	Median
Employ	yee Headc	ount
Women		
Minorities		
Manager	ment Head	lcount
Women		
Minorities		
External		
Hires		
Women		
Minorities		
Promotion		
Rates		
Women		
Minorities		
Volunta	ary Separa	tions
Women		
Minorities		

#### 4. Labor Relations

### a. Labor Agreements

There exists a bargaining unit agreement with Local 424 of the Utility Workers Union of America, which represents approximately 160 ETG field employees. The agreement is effective as of November 21, 2005, and either party may terminate it as of November 20, 2009. The agreement provided for a 3.5 percent increase after its first year, and 3.4 percent for each remaining year. The preceding agreement was effective November 30, 2001, and covered approximately 250 employees at that time. It provided for annual increases of 2.5 percent for each year under the agreement, and up to 1.5 percent as an additional incentive payment for meeting individual employee and department performance goals.

AGLR established in 2008 a team to examine and deal with the matters to be negotiated this year, as the contract approaches its November 2009 end. It includes the participation of the New Jersey client service representative and ETG's two division managers. The Company surveys wages, terms, and conditions of the other energy utility contracts in New Jersey, and conducts broader surveys of the regional labor market at times when negotiations are soon to commence.

#### b. Labor Management Organization

A Director, Labor Relations handles labor union matters for all of AGLR. The director reports to the HR Managing Director, Employee & Client Services, who reports to the VP-HR. All three of these management personnel are Atlanta-based. New Jersey and Virginia are the only two AGLR

locations where employees work under a collective bargaining agreement. HR's New Jersey-based client service manager handles day-to-day bargaining unit questions or matters that may arise.

### c. Discipline, Grievances, and Arbitrations

AGLR, as is typical, uses a progressive discipline process. It is based on the approach used when NUI owned ETG. AGLR has not changed it. The first step seeks to work out differences between the employee and the supervisor involved. At the second step, HR's New Jersey client service manager gets involved. If a third step is required, the Director, Labor Relations becomes involved.

The following table shows the changes in grievances and arbitrations since the acquisition of NUI by AGLR. There have been five terminations since 2005.

Year	Grievances	Arbitration	Year	Grievances	Arbitration
2002	67	7	2006	35	4
2003	70	9	2007	26	2
2004	42	5	2008	8	0
2005	24	5			

### **5. Salary Administration**

HR maintains a list of job titles and salary ranges, but not formal salary administration manual. The list provides for each position a job code, title, salary grade, and minimum, midpoint, and maximum pay. A similar list exists for bargaining unit positions, with hourly rates for starting and first through third year employees. The following table shows the salary grades currently applicable to ETG now and the changes since 2006.

Crada	Ja	nuary 200	)9	Ja	nuary 200	)6		Change	
Grade	Min	Mid	Max	Min	Mid	Max	Min	Mid	Max
A	24,500	30,000	35,500	23,300	28,560	33,780	5.2%	5.0%	5.1%
В	26,700	32,800	39,000	25,540	31,360	37,300	4.5%	4.6%	4.6%
С	29,400	36,500	43,500	28,230	34,830	41,550	4.1%	4.8%	4.7%
D	32,600	40,800	48,900	31,140	38,640	46,150	4.7%	5.6%	6.0%
Е	37,700	47,500	57,300	34,720	43,120	51,750	8.6%	10.2%	10.7%
F	41,600	52,600	63,600	38,750	48,380	58,130	7.4%	8.7%	9.4%
G	46,500	59,100	71,600	43,350	54,540	65,860	7.3%	8.4%	8.7%
Н	53,700	68,200	82,700	47,520	60,170	72,700	13.0%	13.3%	13.8%
I	56,500	72,000	87,600	53,300	68,020	82,620	6.0%	5.9%	6.0%
J	66,400	84,700	102,900	60,820	77,500	94,300	9.2%	9.3%	9.1%
K	80,000	102,000	124,000	69,980	89,150	108,460	14.3%	14.4%	14.3%
L	92,200	118,000	143,800	79,000	101,150	123,300	16.7%	16.7%	16.6%
M	100,400	129,000	157,600	90,500	116,300	142,220	10.9%	10.9%	10.8%
N	107,300	139,500	171,700	103,750	135,000	166,100	3.4%	3.3%	3.4%
О	130,000	169,000		120,830	157,060		7.6%	7.6%	
				Av	erage Char	nge	8.2%	8.6%	8.8%

The following table shows the salary grades for all other AGLR business units. Their increase since January 2006 has been about 27 percent higher. ETG's ranges were notably higher in 2006;

they have come more into line with the remainder of AGLR since, but still remain slightly higher; *i.e.*, about a 7 percent premium at the mid-points for comparably graded ETG positions.

Crada	Ja	nuary 200	)9	Ja	nuary 200	)6		Change	
Grade	Min	Mid	Max	Min	Mid	Max	Min	Mid	Max
A	23,900	29,300	34,700	20,800	25,500	30,160	14.9%		
В	26,100	32,100	38,100	22,800	28,000	33,290	14.5%	14.6%	14.4%
С	29,400	36,400	43,500	25,200	31,100	37,100	16.7%	17.0%	17.3%
D	31,200	39,000	46,800	27,800	34,500	41,200	12.2%	13.0%	13.6%
Е	34,400	43,300	52,300	31,000	38,500	46,200	11.0%	12.5%	13.2%
F	39,500	50,000	60,400	34,600	43,200	51,900	14.2%	15.7%	16.4%
G	43,700	55,500	67,300	38,700	48,700	58,800	12.9%	14.0%	14.5%
Н	48,300	61,300	74,400	43,600	55,200	66,700	10.8%	11.1%	11.5%
I	51,800	66,000	80,300	48,900	62,400	75,800	5.9%	5.8%	5.9%
J	59,500	75,900	92,200	55,800	71,100	86,500	6.6%	6.8%	6.6%
K	69,800	89,000	108,200	64,200	81,800	99,500	8.7%	8.8%	8.7%
L	80,300	102,800	125,300	73,500	94,100	114,700	9.3%	9.2%	9.2%
M	90,800	116,700	142,600	84,200	108,200	132,300	7.8%	7.9%	7.8%
N	106,900	139,000	171,000	96,500	125,500	154,500	10.8%	10.8%	10.7%
О	126,200	164,100		112,400	146,100		12.3%	12.3%	
				Av	erage Char	nge	11.2%	10.6%	10.7%

A well-known benefits consultant provided analyses that supported the most recent change to the salary points associated with these grades.

#### **6. Performance Evaluations**

AGLR's performance evaluation process emphasizes five key components:

- Creating an employee/manager partnership in goal setting, ongoing performance dialogue, and results measurement
- Directly linking base pay and incentives to performance
- Setting Individual Performance Objectives (IPOs) for each employee and applying Success Factors (SFs) common to all to measure performance
- Producing one overall performance score for use in determining pay increases and incentives
- Providing a common review date for all employees.

AGLR uses four templates (called "Performance and Development Forms") for conducting non-union employee performance evaluations:

### Customer Care Individual Contributors Managers of People Director and Above

Each begins with a summary listing of the corporate goal of delivering superior earnings and dividend growth, addressing the dimensions shown in the box. The templates then explain subjectively what differentiates the five

Reward shareholders
Focus on core business
Grow businesses organically
Pursue long-term growth opportunities
Live the commitment to employees

increasing levels (e.g., meets and exceeds expectations) of individual performance scores for IPOs and SFs.

Mid-Year (June/July) and Year-End (February) milestones guide the execution of this process. Employees and their managers have defined responsibilities for accomplishing each of these two milestones:

- Employees
  - o Electronic completion of self-evaluation of individual IPO and SF results
  - o IPO review/revision meetings with manager
  - o Meeting with manager to discuss progress, strengths and development opportunities
- Managers
  - o Review of employee self evaluations
  - o Cross-functional "calibration" meetings
  - o Completion of IPOs and Success Factors evaluations for each employee
  - o Entry of ratings into the eMerit system
  - o IPO review/revision meetings with employees
  - o Meetings with employees to discuss progress, strengths and development opportunities
  - o Submission of form signed by the manager and employee to the Client Services Manager.

The templates provide the suggested discussion areas shown at the right to guide the employee/manager meetings. The templates provide instructions for establishing IPOs, which use an on-line form. The IPOs are intended to reflect specific statements of contributions and results each individual must make and attain to accomplish department goals that in turn

Greatest employee successes
Barriers to achieving IPOs and SFs
Joint efforts to eliminate barriers
Strengths and how to leverage them
Employee areas of development focus
Career goals
Ways for manager to improve support

support corporate goals. The characteristics of the IPOs sought (described by the acronym "SMART") are:

- <u>S</u>pecific: describing expected outcomes simply, concisely, and explicitly ("how much, for whom and for what?")
- <u>Measurable</u>: allowing for one to know when a goal has been accomplished
- Achievable: realistic outcomes given current situation, resources and time available
- Relevant: contributing to the department objectives
- <u>Time-Bound:</u> specifying a date for accomplishing results.

From an on-screen menu, a manager assigns four to five IPOs per individual, aligning each to a numbered corporate goal. The manager then assigns each IPO a percentage rating, with the total ratings adding to 100 percent. The forms provide blocks for completing mid- and end-year evaluations against each IPO, providing the following entry blocks:

- Employee self evaluation
- Additional Manager Comments
- IPO rating from among the five available, ascending grades
- A final IPO rating combining the IPO ratings for each individual IPO.

The on-line forms then provide similar entry blocks for rankings (again according to the five available grades) against a pre-set list of SFs (Success Factors). The SFs are preset and differ for each of the four categories of employees. The form also includes additional blocks:

- Examples supporting the SF ratings
- Combined mid- and end-year SF rating
- Yes/no entry assessing compliance with integrity, ethics, and code of conduct
- Explanation block of non-compliant.

The form's next section allows entry of a development plan, providing the following entry blocks:

- Short-Term Development Goals
  - o Two to three short-term development objectives
  - o Steps to achieve them: employee steps and resources needed
  - o How progress and success will be measured
  - o Target date for achievement
- Long-Term Development Goals
  - o Career objectives over next 3-5 years (multiple entries possible)
  - o Steps needed to achieve
  - o Business experience needed to achieve
  - o Knowledge and skills needed to achieve.

The form closes with employee and manager acknowledgement of the conduct of and comments about the mid-and end-year reviews.

Employees and their direct supervisors work together to complete the forms. There are a number of AGSC personnel for whom, while assigned to Mid-Atlantic or ETG operations on a full-time (or nearly so) basis, neither the SrVP-MAOP nor the ETG VP/GM have a formal opportunity to provide information in the context of the performance-evaluation process. Both these officers do participate in meetings to establish New Jersey or Mid-Atlantic goals. They also review performance results, and address concerns and issues in regular staff meetings that include both these "local" AGSC personnel and direct ETG employees. The SrVP-MAOP states that she has the opportunity to raise concerns (or to note areas of superior performance) to the AGSC managers to whom "local" AGSC personnel report.

### 7. Safety

Safety is not managed by the HR group at AGLR, but as part of the engineering and operations organization. The Company depicts the structure of its approach to and program for promoting safety with the following diagram, showing key elements as pillars. A Managing Director, Safety & Crisis Management (MD-S&CM) has overall responsibility for safety at AGLR. She reports to the AGSC Vice President,



Engineering, Construction, & Supply Chain. The MD-S&CM has a direct report (the Director, Safety & Compliance), who manages the group that fulfills safety and compliance responsibilities throughout AGLR. Three safety specialists are located in the field; one is based

in New Jersey, as is another Operator Qualification specialist. The MD-S&CM's organization also includes a Crisis Management Analyst, an Operator Qualification Specialist and a Drug & Alcohol Compliance Specialist. This organization changed as part of the 2009 reorganization. It previously included environmental health and safety, which was combined with technology and moved to a newly created vice presidential position.

AGLR has experienced a corporate-wide safety improvement in recent years. It extends particularly to New Jersey operations as well. The following table shows the reductions in vehicle accidents and in on-the-job (OJI) injuries.

The Director, Safety & Compliance issues to each AGLR location a weekly summary of safety performance. It lists all incidents occurring in the prior week, noting their severity, causes, and the date of the last similar incident at the location. It also lists:

- Year-to-date motor vehicle and on the job injuries (OJI) at all locations
- Causation of and nature of injuries from OJIs
- Causation of and outcomes from vehicle accidents
- Root cause analysis for last three months of vehicle accidents, based on DriveCam observations
- Analysis of the results of driver coaching.

Year	Vehicles		OII
	Total	Fault	OJI
2006	29	15	14
2007	15	10	9
2008	13	3	6
Reduction	55%	80%	57%

The director also provides a monthly "CEO deck" that provides historical AGLR rates and benchmark AGA data with similar companies of like size. It plots six-years of overall OJI and vehicle accident rates against American Gas Association data, and shows the direction of the change in each for the most recent month. The charts show very competitive AGLR performance against the mean for the comparison companies for all years plotted. The monthly report also shows ETG incident rates against other AGLR units. Overall, ETG safety OJI and motor-vehicle incident performance has compared favorably with the rest of AGLR, as the following table demonstrates.

AGLR conducts annual "Safety Summits" at its field locations. The most recent ETG session took place in March 2009. It used a 176-slide presentation to address comprehensively the importance of safety (and included an environmental compliance module), the role of training, and comparative ETG safety performance. The session began with a series of messages reinforcing safety importance and awareness, continued with a summary of vehicle and OJI data at ETG, compared ETG performance with the rest of AGLR, included an exercise to demonstrate accident causation, emphasized the importance of training in safety performance, connected public regulations to safety performance, challenged employees to respond to high-level questions about safety awareness and commitment, and channels of communication about safety issues and performance. The session also reviewed the results of an employee survey addressing the following questions:

- Supervisor communication of safety expectations
- Existence of a safety committee
- Whether safety is an important company value

- Comparative emphasis on safety versus productivity and quality
- Freedom to report hazardous conditions
- Encouraging employee comment on safety program
- Understanding of Safety Compliance Manual requirements and their importance
- Whether safety information and tools improved in the past year
- Attendance at safety meetings
- Receipt of safety training.

The next table shows how ETG's safety performance has compared with other AGLR units.

Comparative ETG Safety Performance

#### 2008 Trend % Rate Variance (Act. vs Pl.) Safety Performance Detail As of December 31, 2008 35 5.4 47 2.2 43 2.1 1.6 6 131 6.5 108 90 4.6 8 AGLResources 22% 15% AGLS 0.3 2 0.3 3 0.4 0 5.5 8 5.5 3.9 5 29% 27 3.4 25 3.2 18 2.2 4 31% 94 7.0 76 5.7 4.7 5 Southern Operations 20 6.4 22 3.3 3.0 15 2.2 3 27% 76 64 5.4 52 4.5 4 17% 0 0 0.0 2 6.9 0 2 5.2 0 0.0 0 CGC 0 3.0 -100% -100% 5 5.3 16 12.7 12 9.5 FCG 5.3 1 1.0 1 6.1 1 5 0% 36% 16 3.8 29 6.1 24 5.0 23 Mid-Atlantic Operations 18 4.3 14 3.1 2 18% 4.9 2 2% 3.5 6 13 -1.9% ETG 9 3.9 2.4 1 15 6.1 5.2 13 5.3 1 1 13 1 12.7 0 0.0 0 0% 1 11.8 0 0.0 0 0.0 0 0% 7 4.6 VNG 8 4.3 3.8 8 4.3 -13% 13 5.9 11 5.0 10 8%

### 8. Gauging Employee Attitudes

### a. 2007 All- Employee Survey

About two-thirds of AGLR's New Jersey employees responded to the all-employee survey, which sought to measure:

- Employee Engagement: employee perceptions about factors associated with job satisfaction, commitment, pride, loyalty, and personal responsibility
- Engagement Priority Items: factors most likely to influence employee engagement
- Manager Effectiveness: employee perceptions about the effectiveness of their immediate supervision
- Manager Effectiveness Priority Items: factors most likely to influence employee perceptions of supervisor effectiveness
- Communications
- Compensation and Benefits
- Customer Service
- Ethics/Compliance
- Company Future/Vision
- Personal Growth and Development
- Inclusion/Diversity
- Involvement and Teamwork
- Performance Management
- Recognition and Rewards
- Safety.

The following table shows that New Jersey employees gave favorable ratings across the board in these categories.

Factor		rcent Fa	NJ/AGLR	
		AGLR	NORM	Gap
Employee Engagement				
Supervisor Effectiveness				
Communication.				
Compensation and Benefits				
Customer Service				
Ethics/Compliance				
Company Future/Vision				
Growth and Development				
Inclusion/Diversity				
Involvement and Teamwork				
Performance Management				
Recognition and Rewards				
Safety				

New Jersey employee responses fell	the rest of AGLR and the external norm applied
in the employee engagement category, with	percent having a favorable opinion,
compared with percent for AGLR as a who	ole, and percent for the external norm. The
following table showed	(and the external norm)
in a significant number of factors that influenced	the engagement of New Jersey employees.

Factor		Percent Favorable		
ractor	AGLR NJ	NORM		
AGLR values my contribution				
AGLR has an outstanding future				
AGLR leadership has communicated a clear, motivating future vision				
I trust leadership				
AGLR is making changes necessary to compete effectively				
There is a clear link between my work and AGLR's objectives				
I feel that I am part of a team				
I would be extremely satisfied with the quality of services as a customer				
AGLR locations cooperate and collaborate with each other				
My performance reviews have been useful to help me improve performance				

New Jersey employees took in 2007 a view of the effectiveness of their direct supervisors. Their views conformed to those at of AGLR overall (percent favorable in New Jersey versus percent for AGLR overall), and exceeded the external norm of percent. The specific factors on which New Jersey employees rated their direct supervisors as comparatively effective (relative to the norm) included:

- Recognition or praise for good work
- Working well with diverse people
- Commitment to fair treatment of each individual

- Ethical and honest behavior
- Commitment to a diverse workforce
- Timely and helpful feedback
- Effective listening
- Opportunity for learning and development
- Clarity in setting expectations of employees.

New Jersey employees, as the next table shows, also expressed satisfaction with compensation and benefits, as compared with AGLR overall, and, in many cases with the external norm.

Factor		Percent Favorable			
		AGLR	NORM		
Understanding of benefits					
Benefits competitiveness					
Understanding the performance drives pay					
Compensation competitiveness with other companies					
Overall satisfaction with total benefits package					

HR shared the results of this survey with New Jersey managers in June 2007. The presentation of those results noted opportunity for improvement in a number of areas; *i.e.*, those areas with the most significant gaps from the external norm (not compared with the remainder of AGLR). These areas were: Employee Engagement, Compensation & Benefits, Customer Service, AGLR Future / Vision, Involvement & Teamwork, and Performance Management. Liberty requested action plans for addressing the gaps experienced by ETG employees. The first was one slide (from the results presentation) briefly summarizing action plans, but providing no specifics. The second was a two-page "Action Plan" addressing the following specifics:

- Concern about "frozen" NUI pension: posting of an informational flyer, detailed presentation to former NUI employees, train employees to model their individual pensions on new computer system under development
- Employee recognition: develop plan for attendance and safety awards, review service anniversary recognitions and picnic options
- Communications and involvement: continue quarterly senior executive meetings with employees to address vision and accomplishment, develop communications plan to inform employees about initiatives and goals in other areas of the company, incorporate bi-monthly business update meetings, identify coaching and listening skills training for supervisors.

The previous recent all-employee survey took place in 2004 and it employed a similar scope. A new all-employee survey began in February 2009, and will finish in March 2010. It has a similar scope to the 2007 survey. Following the current all-employee survey, AGLR plans to survey separately the employees of each subsidiary annually. An outside firm assisted in the design, administration, and results reporting of the 2007 survey. The AGLR business units worked with HR to design the current survey's questions, and Human Resources designed and provided survey results. The 2009 survey has been abbreviated to contain 18 questions (15 scaled and 2 open-ended), versus the 58 scaled-response and 3 open-ended questions used in 2007. This

"Voice of the Employee" survey will address topics generally similar to those of the prior surveys. The Company plans to conduct feedback sessions addressing survey results. Human Resources will facilitate the sessions, and formal action plans will be developed.

### b. 2009 Surveys

HR has conducted what it terms "HR Reviews" with various AGLR units and organizations. HR has scheduled additional reviews for each quarter. These reviews will incorporate the "Saratoga" metrics that AGLR receives through an outside service. There is at present no plan to use such surveys for AGSC. The most recent field survey, took place in July 2009. It separated Mid-Atlantic Operations results for New Jersey and Virginia, and showed total Mid-Atlantic Operations results compared with those for Southern Operations. The subjects addressed included:

- Changes in employee turnover rates between 2008 and 2009
- Headcount (by category, separating women and minorities) for the first and second quarters of 2009
- Applicants (by category, separating women and minorities) for the first and second quarters of 2009
- New Hires (by category, separating women and minorities) for the first and second quarters of 2009
- HR investigations (there were none) and Ethics and Compliance Hotline Calls investigated (there was one)
- Disciplinary actions (15 verbal warnings, 3 written warnings, and 3 suspensions)
- Union report identifying 3 grievances and noting no arbitrations and discussing the pending Employee Freedom of Choice Act (EFCA) and upcoming labor negotiations
- Discussion of mid-year performance reviews, identification of succession candidates and employees with promotion potential
- Listing (identifying 10 positions) and discussion of succession plans for critical management and highly technical operations positions
- Discussion of the Mid-Atlantic Pulse results and diversity survey
- Discussion of leadership development activities
- Discussion of Generation Y and Latino Workforce Project
- Aging workforce study and likely impacts
- Employee knowledge transfer programs
- Programs to address workforce diversity
- Efforts to align jobs with market.

HR also conducts "Pulse Surveys" in its locations. The most recent survey of ETG employees produced 141 responses. HR conducted it in July 2009. This survey addressed the following questions.

- My immediate supervisor is committed to the fair treatment of each individual;
   percent agreed
- In Elizabethtown Gas, an open expression of different ideas and opinions that promotes an inclusive environment is encouraged between individuals, departments and locations; percent agreed

- In Elizabethtown Gas, there is a climate where diversity (in background, age, sex, race, perspectives, and styles) is valued and respected; percent agreed
- Elizabethtown Gas is making the changes necessary to attract and retain customers; percent agreed
- I believe AGL Resources has an outstanding future; percent agreed
- I feel proud to be part of the Elizabethtown Gas team; percent agreed
- Within Elizabethtown Gas, the management team listens and considers my ideas and suggestions; percent agreed
- I believe I can share my concerns and disagreements about business decisions, programs and initiatives without fear of retaliation; percent agreed
- I would gladly refer a good friend or family member to AGL Resources for employment; percent agreed
- Overall, I believe that AGL Resources is a good place to work; percent agreed
- Elizabethtown Gas' management team helps me understand what is happening in our operations and AGL Resources; percent agreed
- Elizabethtown Gas' management team communicates the vision of the company and its relationship to what we do; percent agreed
- Elizabethtown Gas' management team encourages me to share ideas and suggestions for improvement; percent agreed
- Elizabethtown Gas' management team demonstrates ethical and honest behavior; percent agreed
- My immediate supervisor provides me with recognition or praise for doing good work; percent agreed
- What is the smallest change that if made today within Elizabethtown Gas would have the greatest impact; responses
- What one thing that is done well within Elizabethtown Gas would you like to see more of; answers.

These figures show generally more favorable ETG employee attitudes, as compared with those gleaned from the 2007 survey.

# 9. Training and Development

## a. Training Organizations

AGLR had, until the 2009 reorganization divided training responsibility among three AGSC organizations:

- Management development offerings: provided by the HR department, headed by the Vice President, HR (VP-HR)
- Systems-based training: provided by the IT Systems group and addressing systems such as those behind the hand-held equipment used by field operations personnel for work management
- Safety and Operations.

AGSC remains responsible for training, but has consolidated it under a single organization, headed by the Director, Training. She reports to the Senior Vice President of Human Resources (SrVP-HR). Training therefore no longer reports to the VP-HR, but to his direct superior, who

also serves as President of the AGLR Foundation. The organization change responds, as the Director, Training puts it, to a "devaluation" of training in the organization that evolved over the past ten years. It is also designed to address the issue of "rogue" training, which, not as negative as it sounds, consisted of manager- and supervisor-designed and delivered programs to fill gaps they perceived in company-wide offerings.

The Training department works primarily for the LDCs and AGSC, performing some occasional work for SEM and for Golden Triangle. The new organization operates through the four primary

arms shown. It diverges from the prior approach, which focused on types of training (management development, safety and operations, and IT systems) structure.

The leaders of each of these activities report directly to the Director, Training. The Design Manager and his staff of five designers and a technology specialist have responsibility for Training design
Training delivery
Training coordination
Customer department interface

design. One of the major focuses of this position in the new organization will be to improve decision-making about internal versus external solutions, assure that vendor-supplied solutions are appropriately tailored to AGLR-specific needs, improve the quality of internally-provided solutions, and assure that programs (both vendor- and employee-supplied) undergo regular refreshing and updating.

Delivery falls under the Delivery Manager, who now has a staff of 10 operating across the territory. This group of 10 delivers instructor-led training and manages the delivery of computer-based training. ETG serves as the work location for one of these 10 persons working for the Delivery Manager. The ETG-based trainer delivers operations and training programs. The Training department has also just brought on board a trainer to support the coming initiation of a New Jersey-based call center.

Three "consultants" report directly to the Director, Training as well. They provide the interface with the internal "customers," including ETG (termed partners by AGLR) of training solutions offered. Also described as the "eyes and ear" of the Training department, these consultants work with business units, including ETG, to identify needs, provide input to the design of specific offerings, and help in evaluating the effectiveness of solutions delivered.

Training coordination falls under the Supervisor, Coordination, who has a staff of four: two handling the logistics associated with particular offerings (termed "solutions") and two managing the creation and retention of records of training offered. A goal of the records function is to improve the systems used to document training provided.

There remains an area to be brought under the responsibility of the Director, Training. The EVP/GC/Chief Ethics Officer now provides compliance-program training. That responsibility will eventually move to the Director, Training. A final area of importance, Operator Qualification (OQ) will remain under an organization resident in Engineering.

AGLR uses a recently-created AGLR Corporate Training Council (members shown at the right) to provide oversight to training programs. The council has responsibility for:

VP-HR

CIO/VP-IT

**Corporate Training Council** 

Director, Training

SrVP- HR

VP, Engineering

VP/GM Field Ops

VP, Finance

- Considering utility-sector training needs broadly
- Providing guidance on training content and methods

•	Providing input on required behavioral
	changes

- Considering the timing of major system, process, and other changes
- Providing a structure to ensure approval of all training provided
- Providing guidance on external spending for training.

The council meets quarterly in person and monthly by telephone. It considers the following factors in examining training program or offering candidates:

Requesting department	Training driver	Specific training	Risk in not providing
Topic	Audience	<b>Objectives</b>	Delivery method
Cost to develop	Cost to deliver	Provider	Length
	Timing		

Examples of training drivers would include regulatory compliance and the introduction of a new system. AGLR does not operate a structured new-hire training program; however, the Director, Training recognizes the need for improvement in this area. New-hire training comprises one of a large number of gaps (totaling 56) that AGLR observed as part of the recent reorganization process. These gaps fell primarily into the following areas:

- Promoting a culture of employee development
- Needs assessment
- Systems training
- Baseline training
- New hire training
- Delivery method effectiveness
- Results measurement and assessment
- Treatment of Certifications.

The table summarizes training provided by the three training organizations (Human Resources, Safety & Operations, and Information Technology). The table does not include training provided by individual departments, which previously had the ability to commission training within their departments, without central tracking.

### b. Outside Training Vendors

AGLR has used some 25 outside vendors in a variety of training development and delivery roles since 2005, predominantly for personal development support. Safety & Operations and

#### **Training Summary**

Category	Measure	2006	2007	2008
	Courses	0	8	6
Computer	Attendees	0	97	65
	Hours	0	584	260
Managamant	Courses	3	11	0
Management	Attendees	57	299	0
Development	Hours	320	924	0
	Courses	0	25	19
Technical	Attendees	0	102	414
	Hours	0	633	1,034
Cafatri Pr	Courses	40	38	45
Safety & Quality	Attendees	2,487	2,174	2,959
	Hours	7,409	4,852	9,515

IT Systems have not used outside resources. Notable examples of outside vendor use cited by HR include outside firms used to:

- Design and implement a customer service training program (called "Signature Customer Service") for ETG personnel
- Assist in implementing a "Negotiating to Yes" program for ETG
- Design and implement a DiSC® team assimilation training solution for ETG's sales team; DiSC® programs identify how different people (using four basic types) approach their work and what strengths and needs they present, in order to promote effective team creation and application
- Assist in 2007 in communications, delegation, and DiSC® components of the Leadership Development Program.

## c. Professional Development

AGLR provides all employees with a catalog of available professional development offerings, and uses bulletins and flyers to communicate the availability of such offerings. AGLR uses available documentation about course availability to assist employees in designing targeting training during mid-year and annual performance reviews. Training needs were intended to be identified through the employee evaluation process. AGLR's approach in 2006 included the "expectation" (also described as a "target") that all employees would complete 20 hours of professional development training and that managers and above would complete 40 hours. Each department had responsibility for measuring satisfaction of this expectation or target. AGLR thereafter has not communicated to employees an hours-based target; however, managers remain able to address specific expectations as part of the annual process of negotiating performance objectives with individual employees. The movement away from hours-based targets came as part of HR's Talent Development group's change in emphasis to individually tailored development plans. Those 2006 targets were:

- Individual Contributors: 20 hours (including technical training)
- Managers: 40 hours
- Directors and above (including officers): 40 hours.

The next table shows core professional development offerings for meeting these requirements. AGLR highlighted as examples of available programs in announcing to employees the available 2006 career-development opportunities.

#### All Employees

PC Skills (On Line)
Microsoft Word
Excel
Power Point
Outlook

Business Skills (On Line)
Customer Service
Time Management
Change Management
Working Remotely
Problem Solving

Business Skills (Instructor)
Time Management
PC Skills
Professional Presence

#### Managers

Business Skills (Instructor)
Management Essentials
Negotiation Skills
Conflict Management
Seven Habits
Natural Gas Industry

Development Opportunities

Manager Conference
Financial Acumen
Business Book Review

#### **Directors and Above**

Business Skills (Instructor)
Situational Leadership
Pathways to Success
Lead the Business

Development Opportunities

Mentoring

Leadership Forums

Leader Conference

Business Book Review

AGLR's 2008 announcement of career-development opportunities did not address hours requirements. It emphasized creation of new development opportunities and the structuring of programs targeted to specific individuals. Rather than emphasizing individual programs, it highlighted areas of focus, such as the following:

- Individual Contributors
  - o Career Power: design of a development strategy and detailed action plans, using goals, self-assessment, action activities, and in-class exercises
  - o DiSC®: increasing effectiveness through understanding of one's behavioral style
  - o Light Up Your Career Monthly: all-employee sessions
- Managers
  - o Managing for Peak Performance: writing clear performance goals, setting expectations, coaching, and planning employee development
  - o Accelerating Employee Performance: assessing, planning, and managing team performance (using the factors of expectations, feedback, resources, job fit, training and development, and motivations)
  - o Light Up Your Career Monthly: targeted monthly session addressing people development.

The 2008 announcement also emphasized the development of job-specific programs, citing:

- Customer Care Center
- Field Operations
- Field Management
- Sequent, Pivotal and Compass Energy Services.

Alternative development options were also emphasized:

- Volunteering for a VForce (community service) activity
- Serving as team/project sponsor or lead within your department
- Seek out a mentor.
- Shadowing someone to learn
- Joining a team or committee to learn more about another business aspect.

AGLR has made other enhancements to its development programs recently. The Company initiated "Friday Forums" in 2007 to provide employees with an overview of different business areas each month. AGLR has also offered occasional in-depth, interactive sessions, addressing different subjects (*e.g.*, government and regulatory relations in the second quarter of 2008). Another new program added in 2008 (Advanced Gas: Inside AGL Resources) provides a half-day course on non-utility and pipeline operations.

Until the mid-2009 reorganization, the internal daily news publication, *AGL Resources Daily* included a feature on training, "Talent Management Monday" in each Monday organization. It has not been resumed. The AGLR intranet serves as the primary means for communicating training's importance and availability.

## d. Technical Training Programs

AGLR provides on-line access to a list of technical training programs. Employees can readily find descriptions of course content and duration, an identification of those who should attend, and any applicable qualification renewal periods. These programs include:

Identification of attendees and renewal	Transportation procedures Dog bite safety training	
Arc Flash Hazards	Fire extinguisher use	Personal protective equipment
Basic Fire Safety/Emergency Evacuation	Hazardous communication	Purging
Basic Pipe Locating Refresher	Industrial noise	Plastic services repair
Bloodborne Pathogens	Incident command system	Respiratory protection
Hazards of Confined Spaces	Leak investigation and grading	Forklift operator safety
Customer Buried Pipe	Leak repairs	Field personnel safety
DOT flagger	Leak investigation/grading refresh	Driver training
Dog bite safety	Leak repair refresher	Trenching and shoring
Medic first aid	Lockout/tagout	Work zone traffic control
Emergency response	Meter activation refresher	

AGLR also makes available a broad array of training programs designed to support the use of various customer, work planning, and other systems. They include those shown below:

Mobile GIS	Maintain facility data and use GOS software	
WMIS	Work Management Info System for New Business/ New Construction	
CMA	Customer Mgmt Application use to process customer service requests	
CIS	Search, add, maintain, view customer info.; troubleshoot CIS issues	
37/07 Marketing	Retain customers at risk of defecting from gas service	
GPS	Use GPS to track Field Service Representatives to maximize workload	
ARM Mobile Refresher	Order completion for Distribution, Pressure Control and Supervision	
ARM Mobile	Distribution use of Asset Resource Management WIMS Mobile app	
<b>Mobility Enhancements</b>	For those on the original Mobile workstation system in ETG	
<b>Computer Basics</b>	For first time users of Mobile Data Terminals (MDT) in Distribution	
WMIS Sys-II	Foundation needed to effectively use the WMIS software	
AVAIL Training	Field Ops Employees using the Mobility Automated Dispatch system	
High Bill Training	Allows users to understand how to handle high bill inquires	
CAMS	How to cancel a bill in CIS on an old account	
Leak Refresher	Taking emergency (leak) orders for customer care center employees	
<b>Avail Driving Directions</b>	Access, log on, and access the Mobility Automated Dispatch system	
Leak Tracking/Cust. Logistics	Training on old vs. new Leak Tracking system	
Leak Tracking for ERTs	For Emergency Response Team members at Customer Care Center	
Leak Tracking for Field Ops	For Field Operations Office Assistants and their Supervisors	
AD Reports	Access, search, filter, print Mobility Automated Dispatch system info	
High Bill Refresher	Assist CMA users to discuss High Bill Complaints	
New-Hire ERT Training	New employee training of Call Center and call handling.	

ERT Soft Skill Training	Using basic customer service, communication and negotiation skills.	
Meter Reading/High Bill	Analyzing Meter Reading data in both CIS and CMA.	
<b>Budget Bill</b>	Analyzing Budget Billing information in CMA	
CMA 1.5	Navigate the Customer Management App. to process customer requests.	
CMA 1.6	Enhancements to the existing Customer Management Application	
Mobility Playbook	Tool for using the Automated Dispatching technology	
Signature Services	To help develop a customer-focused service mentality	
CMA 1.8B Upgrade	New release of Customer Management Application (CMA)	
Leasing ID	Checking customer Lease/identification information	
DCQ Training	Cust. Care Center agent training for ETG - DCQ billing component	
CMA 1.8 A	Review CMA enhancements	
CMA 1.8B	Review CMA enhancements	
Elkton Rate Case	Rate changes from Elkton Gas rate filing that may appear on bills	
<b>Customer Service Portal</b>	Review web application OAM (customer's view of account details).	
CMA 1.7	Review CMA enhancements.	
LET New Hire	Enable new employees to view/process orders using CMA	
Energy Asstnce/India Help Desk	Understand EA programs and how to locate on an account using CMA	
Energy Asstnce/India Help Desk	Introduction to India Help Desk, explain roles/responsibilities	
Time Clock for Field Personnel	Cover the basics of the Time Clock application	
Scorecard for Field Employees	Educate new/refresh current users of the Scorecard	
Basic Excel	Use of Microsoft Excel	
<b>Concession Credits</b>	Understand concept of concession credits and reporting guidelines	

### e. New-Hire Training

Apart from the call center, AGLR does not have a formal new-hire training approach or program. The development of a more structured approach comprises a goal of the Director, Training in the wake of the mid-2009 reorganization.

### f. Measuring Training Effectiveness

A request for regular reports by groups responsible for training produced spreadsheets (with no narrative) indicating what safety and operations training was coming due, what results such training produced for the month and year to date, and what level of overall compliance with required training resulted. The response also listed the developmental training by AGSC and ETG individuals from 2006 through February 2009. Service Company courses taken in this period numbered 15,876; ETG courses taken numbered 4,421, or 22 percent of the number taken at the Service Company. More than half of the ETG courses taken were more basic courses, which very few or no Service Company employees took. Adjusting for these courses, summarized in the table below drops the percentage of courses taken by ETG employees to 10 percent of the total (Service Company plus ETG).

**ETG Employee Development Courses** 

Financial Accounting Workshop	288	MicroSoft Word	136	
MicroSoft PowerPoint	296	Signature Customer Service	1072	
Teambuilding ETG 224 Written Communications Skills 288				
TOTAL 2,632				

Talent Development follows each instructor-led session with paper evaluation forms (permitting anonymity if sought) that seek feedback on course content, facilitator effectiveness, and administrative details (e.g., food and logistics). Excel spreadsheets capture all evaluation data. IT Systems also used paper forms for all instructor-led sessions. The instructor and management review the evaluations, but do not enter them into a sortable medium. Safety and Operations Training generally takes the form of instructor-led modules that occur over a three- to five-day period. Participants have the opportunity to complete paper evaluation forms at the end of the period. The instructor and management review the evaluations. Safety and Operations also has not previously used a database to sort evaluation information. The Company began, however, to use "Turning Point" technology in 2008. This technology provides real-time feedback on questions provided during the class and AGLR has used this capability to allow summary analysis of the courses as well.

Computer-based solutions comprise the principal alternative to instructor-led ones. None of AGLR's three entities responsible for training has solicited feedback from computer-based solutions.

HR has accumulated the data provided by training recipients, but has not conducted structured analyses of that data for use in judging program effectiveness or usefulness.

AGLR does not routinely benchmark training performance. The Company did, however, participate in a 2005 American Gas Association Survey. This survey addressed, among many other metrics, some measures related to training. In general, the survey showed that both LDCs at that time were generally competitive in hours of training provided, and comparatively cost effective. AGL developmental training, however, was comparatively expensive, as the next table summarizes. It shows the quartile into which AGL and ETG fell, with the first quartile being the lowest in either hours or costs.

Metric	Company	
Wettie	ETG	AGL
Costs per Hour of Technical Training	Top 2Q	Top 1Q
Costs per Hour of Developmental Training	Bottom of 1Q	Top 3Q
Costs per Hour of Combined Technical and Developmental Training	Bottom 1Q	Near Median
Hours of Technical Training per Employee	Middle 2Q	Bottom 3Q
Hours of Developmental Training per Employee	Top 4Q	Middle 3Q
Hours of Combined Technical and Developmental Training per Employee	Top 4Q	Middle 3Q
Technical Training Costs/Employee	Top 1Q	Middle 2Q
Developmental Training Costs/Employee	Middle 3Q	Middle 4Q
Combined Technical and Developmental Training Costs/Employee	Middle 2Q	Bottom 3Q

## h. Training Costs

Liberty asked for budgeted and actual expenditures for training for the past three years. The response provided only very partial information (estimated not actual management development

costs for only ETG and only for 2006 and 2007). The Director, Training observed that the principal focus of organization present is to secure overall training program improvements, particularly in course development and updating, trainer capabilities and preparation, and participant and client

<b>ETG Management Development Training Costs</b>						
		Costs				
Course Title		Facilitator	Materials	Total		
2006						
Negotiating to Yes	46	\$ 10,400	\$ 20,700	\$ 31,100		
DiSC for Sales & Marketing	18	\$ 2,600	\$ 540	\$ 3,140		
Total 2006	64	\$ 13,000	\$ 21,240	\$ 34,240		
	2007					
Signature Customer Service	135	20800	12960	33760		
Leadership Development - module 1	12	\$ 850	\$ 468	\$ 1,318		
Leadership Development - module 2	9	\$ 850	\$ 270	\$ 1,120		
Leadership Development - module 3	10	\$ 850	\$ 390	\$ 1,240		
Total 2007	166	\$ 23,350	\$ 14,088	\$ 37,438		

department feedback. Cost tracking, while needing improvement, represents a second priority. A significant difficulty in comprehensively tracking training costs has been the previous dispersal of the function across three organizations and the tendency for some managers to develop their own approaches and offerings within their functional areas.

The accompanying table demonstrates that AGLR expended only nominal costs for management

# AGLR's Outside Provider Costs for Management Development Training

Training Category	2006		2007		2008	
Training Category	Budget	Actuals	Budget	Actuals	Budget	Actuals
Employee Development	\$294,500	\$329,800	\$304,350	\$267,390	\$331,500	\$231,033
Individual Development	\$2,000	\$78,580		\$11,000		
Executive Leadership	\$130,000	\$231,825	\$45,000	\$216,481		\$68,769
Management Development	\$73,000	\$26,785	\$71,000	\$70,257	\$95,500	\$17,933
High Potential Program	\$70,000	\$135,547	\$25,600	\$21,415	\$32,000	
Leadership Conference	\$415,000	\$7,291	\$157,000	\$19,073		
Online Training	\$68,000	\$98,096	\$115,120	\$37,448	\$94,300	\$105,043
Totals	\$1,052,500	\$907,924	\$718,070	\$643,064	\$553,300	\$422,778

and development training for New Jersey employees in 2006 and 2007. The information regarding safety and operations training was not intelligible.

Liberty also asked HR to describe any new quantitative

metrics developed or under development since the recent reorganization. The response noted an effort to measure field-training effectiveness better, but cited no cost metrics.

HR has not had the capability to track fully its management-development training expenses. It has not segregated the internal costs of its Talent Management department between expenditures for training and for the other functions that this department performs. HR does, however, track

external costs, which the table above summarizes. HR also has not been able to measure training costs at the business unit (e.g., ETG) level.

ETG safety and operations training has been provided largely through a dedicated employee, whose department costs the table to the right summarizes.

<b>ETG Safety and Operations Training Costs</b>					
O&M Expense	2006	2007	2008		
Payroll (includes benefits)	\$124,257	\$100,104	\$76,244		
Outside Services	\$2,758	\$2,084	\$1,369		
Other O&M	\$30,547	\$39,257	\$25,175		
Total O&M	\$157,563	\$141,444	\$102,789		

AGLR does not benchmark its training costs with those of any peer group. There have been no focus groups established to address training since 2006. AGLR solicits feedback on training effectiveness and needs from offering participants, either electronically or in writing. AGLR formally launched a Leadership Development program in 2007, and changed its format and the specific offerings in light of feedback gained from a survey of 36 participating employees. AGLR also made changes to its ePerformance system and training on the basis of feedback received from participants.

AGLR maintains an on-line summary of the personal development curricula available and tailored to each of individual contributors and to managers. These one-page schematics provide in a clear and logically organized form an "at a glance" summary of training and development programs and activities by employee type. For example, the managers schematic (a similar schematic tailored to individual contributors' needs addresses what is available to them) highlights:

- The formal curriculum
- Programs designed especially for new managers
- Accessible books, podcasts, broadcasts, and videos accessible, along with monthly suggested readings
- Targeted development opportunities (special sessions, cafeteria training, 360 evaluations, and job shadowing)
- Other development opportunities (monthly sessions, Friday Forums, cafeteria training, mentoring, special projects or assignments, field trips and ride alongs, and on-line training).

Employees can also access on line a list of more than 30 personal (e.g., working effectively with other employees and with customers), general business (e.g., business writing, presentations, MicroSoft skills), and functional (e.g. finance) skills. Another service provides electronic access to an on-line business skills course library consisting of some 50 available courses. Employees can view course titles, descriptions, lengths, and intended audiences. Plans for 2009 include the streamlining of the offerings and some new course offerings.

The Director, Training is in the process of combining cost data for the three organizations formerly involved in training. That combination and the identification of training needs being undertaken will precede development of the 2010 budget.

# 10. Resource Management

AGLR operates an enterprise-wide system of staffing control, but does not use a central productivity or effectiveness measurement approach.

# a. Staffing Authorization and Control

The number of authorized positions, at the total AGLR, business unit, and department levels requires approval of the Policy Committee. That number shows only little movement from year to year. New positions require the approval of the Policy Committee member responsible for the business unit and work group involved. The manager to whom a vacant but authorized position reports may fill a vacancy after review by the next higher manager. A monthly report of staffing numbers (actual versus authorized) by Policy Committee member and the form required to be completed for creating new positions serve as the principal control documents for staffing at the corporate level.

There is also a process for addressing positions that remain vacant for extended periods. HRMS, the system under which HR manages its operations, regularly generates reports of positions vacant for more than 30 days. An HR person queries the responsible managers about the reasons for such vacancies. HR provides a reminder after 60 days, and, if no action is taken, deactivates a position after it has remained open for 90 days. Managers must in this case use the new position justification process before they may fill a deactivated position.

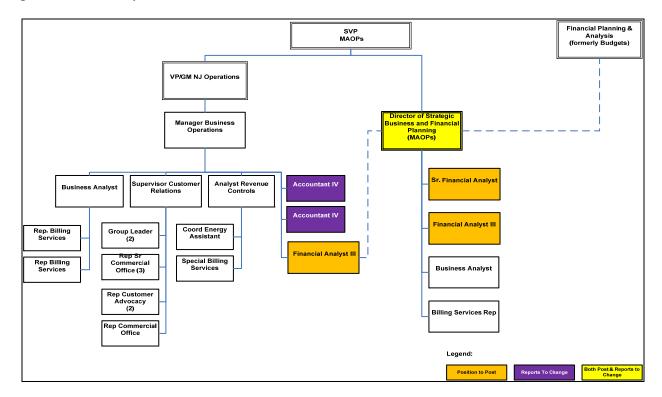
The AGLR budgeting process begins in August or September. It provides a basis for directly measuring the costs associated with staffing. When new positions get created, HR's Manager, Compensation has the responsibility for "pricing" the position. Pricing becomes set by assigning to the position a grade from the approved list. This grade gets entered into HRMS, along with the salary range applicable to the grade.

## b. Measuring Staffing Effectiveness

Neither HR nor any other central group has responsibility for benchmarking staffing levels or measuring effectiveness. At the AGSC, this function falls within the responsibility of the head of each department. At Mid-Atlantic and Southern Operations, however, there exist business planning and analysis groups, who have responsibility for supporting planning, budgeting, and performance measurement at the LDCs within each of these two regions in to which AGLR has divided its utility operations. The mid-2009 reorganization strengthened the role and resources of these two Business Analysis and Reporting organizations. The Mid-Atlantic group, which addresses ETG operations, operates, as it did before the reorganization, under the direction of the Vice President/General Manager, NJ Operations (VP/GM ETG). The pre-reorganization functions of Business Analysis and Reporting, operating then and now under the New Jersey-based Manager, Business Operations functions included:

- A three-person group, under the direction of the Business Analyst, responsible for billing services
- A nine-person group, under the direction of the Supervisor, Customer Relations
- An Analyst Revenue Controls, with a staff of two.

These functions remain. The change made by the reorganization was to add to the staff of the Manger, Business Operations two accountants and a financial analyst. The two accountants previously reported to the financial organization; the financial analyst position is new. Resident in the ETG organization for day-to-day reporting, these three persons report on a dotted line basis to the Director of Strategic Business and Financial Planning. This new position (which has a counterpart in Southern Operations) reports to the Senor Vice President, Mid-Atlantic Operations (as does the VP/GM ETG). The Director of Strategic Business and Financial Planning for Mid-Atlantic Operations has four direct reports (in addition to the three dotted line reports under the New Jersey Manager, Business Operations). These direct reports comprise two financial analysts, one business analyst, and one billing representative. The Director of Strategic Business and Financial Planning for Mid-Atlantic Operations also reports on a dotted line basis to the Financial Planning and Analysis organization. This latter organization was called Budgeting before the mid-2009 reorganization. AGLR has made these organization changes to reside financial and analytical personnel at the LDC level and to maintain dotted line relationships in order to promote AGLR-wide consistency in planning, budgeting, and performance analysis.



### c. Benchmarking

AGLR takes advantage of an outside service known as "Saratoga." This service, which uses, among other techniques, surveys of employee groups addresses employee productivity, succession planning, turnover, and talent depth, among other issues of concern to corporate human-relations professionals. The next chart shows many of the metrics that AGLR uses from Saratoga, ranking AGLR against the service's utility group.

## HR Benchmarking versus Utility Industry

Category	AGLR	Median	Category	AGLR	Median
Managers' span of control			Voluntary separations-women		
Executives' span of control			Voluntary separations-minorities		
Positions filled internally			Employee headcount-women		
Mgmt. positions filled internally			Employee headcount-minorities		
Labor costs/revenue			Management headcount-women		
Labor costs/operating costs			Management headcount-minorities		
Compensation per employee			Union total separation rate		
Benefits per employee			Union voluntary separation rate		
Compa ratio			Union involuntary separation rate		
Voluntary separations			Non-union total separation rate		
First year separations			Non-union voluntary separation rate		
HR Costs per employee			Non-union involuntary separation rate		
Total employees/HR employee			Headcount born 1943-1960		
Average employee tenure			Headcount born 1961-1981		
Employees with<2-year tenure			Headcount born after 1981		
Executives with >3-year tenure			Overtime percent		
Managers ready for promotion			Performance pay/compensation costs		
Succession candidates/key role			Health care costs/employee		
Roles with succession candidates			Retirement/savings payments/employee		
Promotion rate			401(k) participation		
Reporting layers			401(k) costs/employee		
Employees eligible to retire in 5yrs			401(k) employer match		
Managers eligible to retire in 5 yrs			Tuition reimbursement cost/employee		
Executives eligible to retire in 5 yrs			Workers' compensation cost/employee		
External women hires			Workers' comp cost per paid claim		
External minority hires			Sick days/employee		
Promotion rate-women			Paid time off/employee		
Promotion rate-minorities			Severance pay per leaving employee		

# 11. Minority and Women-Owned Business Enterprises (MWBE)

## a. Federal Subcontracting Plans

ETG submitted for 2007 a subcontracting plan pursuant to Chapter 2, Section 211 Section 8(d) of the Small Business Act to the Public Utilities Division, Public Buildings Service General Services Administration of the U.S. government. Federal law requires such plans from those who provide services to the federal government. ETG's plan was called its "Subcontracting Plan for Small Business, Small Disadvantaged Business, Hubzone Small Business, Women-Owned Veteran-Owned, and Service Disabled Veteran-Owned Small Business Concerns." The plan estimated subcontracted 2007 ETG work to amount to \$70,913,396.73 (\$27,546,413.39 for capital and \$43,366,983.33 for O&M). ETG's plan established the goals relating to the total subcontracted amount shown in the next table.

<b>Business Type</b>	Amounts		<b>Business Type</b>	Amounts	
Small	\$7,091,340	15.00%	Women-Owned	\$177,283	0.25%
Business*	\$7,091,340	13.00%	Small Business	\$177,203	
Small Disadvantaged	3,545,670	5.00%	Veteran-Owned	\$177,283	0.25%
Business	3,343,070	3.00%	Small Business	\$177,263	
HubZone	\$14,183	0.02%	Service-Disabled Veteran-	\$14,183	0.02%
Small Business	\$14,165	0.02%	Owned Small Business	\$14,163	

<sup>\*</sup> Includes small disadvantaged, HUBZone and women owned businesses

The previous plan (for 2006) applied the same percentage goals generally (but set 15 percent as the small business goal), and reflected lower expected subcontract total amounts (\$68,670,409). The plan filed in late October 2007 (presumably for 2008) simply restated the 2007 numbers, and listed 2007 as the year covered by the expenditures involved.

## b. Trends in MWBE Contracting

Management reported at the February 3, 2009 NGCR Committee meeting that MWBE spending had increased by percent in 2008 and that targets for minority, women-owned, and small businesses were met. AGLR increased for 2009 its goals for all three categories as a percent of total company spending:

- Minority: percent to percentWomen: percent to percent
- Small business percent to percent.

The table shows the growth in MWBE contracting has grown in vendor numbers and values since 2005. 2005 was the first year for which AGLR tracked contracts by the underlying categories. The 2005 contracts exceeding \$200,000 in value were:

•	Woman-Owned
•	woman-Owned

- o \$539,707; for marketing
- o \$395,290; for facility management
- o \$375,359; for IS staffing
- o \$278,150; for consulting
- o \$277,324; for meter readers and field services
- o \$231,796; for facility management.

### • Minority-Owned

- o \$640,979; for associations-memberships-donations
- o \$295,223; for associations-memberships-donations
- o \$276,434; for associations-memberships-donations
- o \$219,478; for associations-memberships-donations.

The 2008 contracts exceeding \$200,000 in value were:

## • Woman-Owned

- o \$1,419,384; for IS
- o \$971,555; for gas plumbing-engineering
- o \$909,916; for unspecified
- o \$894,204; for LNG materials
- o \$892,884; for general engineering
- o \$855,550; for general engineering
- o \$630,590; for meter reading/field services
- o \$493,106; for meter reading/field services
- o \$447,363; for meter reading/field services
- o \$426,656; for meter reading/field services
- o \$404,009; for meter reading/field services

- o \$385,509; for meter reading/field services
- o \$352,413; for meter reading/field services
- o \$351,319; for meter reading/field services
- o \$246,021; for a category not listed
- o \$224,240; for provision of uniforms
- o \$209,836; for provision of uniforms
- Minority-Owned
  - o \$982,675; for memberships
  - o \$687,160; for general engineering
  - o \$500,546; for staffing services
  - o \$444,003; for consulting services
  - o \$418,794; for environmental services
  - o \$209,259; for a category not listed.

The next table shows ETG's MWBE contracting performance compared with AGLR overall and with all AGLR LDCs as a group.

Category	AGLR	LDCs	ETG
Minorities (%)			
Women (%)			
Small Business (%)			

## C. Conclusions

1. The HR organization structure is effective and provides adequately for the needs of ETG.

The organization presents a logical division of functions. It provides sufficient field representation to meet needs locally under commonly designed programs, policies and requirements. AGLR has recently restructured HR to meet needs better and more efficiently.

2. HR staffing and costs, while the subject of management attention and control are comparatively high; moreover, recent organization changes leave pending a revised budgeting structure and the development of detailed performance metrics. (Recommendation #1)

HR costs have fallen in recent years. There have been functional changes, with the most recent occurring during Liberty's audit field work. With significant organization changes, functional realignments, and budget restrictions for 2009 that are likely to prove temporary, establishing cost performance baselines for HR has been, however, understandably more difficult. HR plans to establish a new structure for its budget, because it was under development. Comparison group information indicates a comparatively high HR cost per employee at AGLR, but that metric alone is not determinative, as such data does not recognize differences in where costs get assigned. Nevertheless, that factor and the fluid structure of HR in the recent past indicate the need for prompt development of a budget structure and cost-performance metrics that will provide assurance that staffing has reached an optimum level.

3. AGLR has produced large gains in efficiency, as measured by reductions in staffing at the time of its acquisition; reductions have continued at moderate levels since the acquisition.

It is clear that the leverage AGLR can apply by virtue of its large LDC operations has been used to make major staffing reductions from the level that NUI had been applying. An annual survey by Black & Veatch (an international engineering and construction company with a large utility business) reports the aging work force as the second leading concern of the utility industry. It ranks second only to the service reliability. HR advised the board in December 2007 that 75 percent of the workforce consisted of "baby boomers," 34 percent of whom were eligible for retirement by 2012. HR noted that this produced a potential loss of technical operations knowledge and a need for more training for older workers to deal with technology change. There was also a need to refill the succession planning pipeline following changes in staffing in 2007.

4. ETG has the advantage of a very experienced work force; AGLR recognizes that it faces the aging-workforce issue that confronts utilities nationally, but has not adopted formal means for dealing with coming transition issues. (Recommendation #2)

The data show that ETG has the benefit of long-tenured personnel across its full range of operations needs. This strength, however, builds in the need to recognize looming losses of the experience that its current force possesses. The data do not show a more acute problem at ETG (versus the remainder of AGLR), but it is clear to the Company that skills maintenance is an issue. The Company informed Liberty that it has not formalized its approach or processes for identifying areas that will permit it to identify the extent and timing of particular skills needs it faces. Recognizing generally it faces an industry-wide problem without focusing more particularly on its details raises a number of questions, such as:

- How AGLR estimates future departures (total, by department, and by job classification)
- How AGLR forecasts the skills and age makeup of its force in future years
- What those forecasts show over a range of future time periods
- How AGLR identifies the types and numbers of people it will need to retain and to develop to meet the needs identified by reliable forecasts
- What competition for those positions may be like?

These questions are critical for a company with an aging workforce.

5. AGLR has adopted and communicated an effective commitment to diversity in its employee population, and supports that commitment with appropriate affirmative action planning.

The announcement of a diversity policy and the creation of the Diversity Council and associated organizations in 2007 demonstrate a focused and comprehensive approach by management. The affirmative action plan compares with others that Liberty has reviewed. It sets specific goals annually, and reports progress against them. Benchmarking data shows that AGLR compares favorably overall with other companies (although, as AGLR recognizes in its plan documents, the firmer measure of progress is against the opportunities it faces in its localities).

6. Success in meeting EEO/AA placement goals at ETG has not been as strong as experienced at the corporate level. (Recommendation #3)

The data show that AGLR has had comparatively less success in meeting placement goals at ETG in 2008. In some cases, there was a lack of hiring opportunities, but even where this was not the case, only one placement goal at the New Jersey and NUI level was met. Data from 2009 indicates that AGLR has, in the other areas it serves, been much more successful in creating an employee population that more closely reflects the available workforce in the states involved.

There was no presentation to the board of directors on diversity in 2008. One has taken place in April of this year. It did not focus on gaps or plans specific to closing the gaps in New Jersey. It showed new hires on and AGLR-consolidated basis.

# 7. AGLR uses and effective and economical organization for conducting labor relations, but running the operation from Atlanta keeps it far from the workers affected. (Recommendation #4)

Only New Jersey and Virginia employees now work under labor agreements. There were, however, agreements in other states ended recently (Georgia in 2006, Tennessee ion 2007, and Florida in 2008). Locating the director in Atlanta thus had more support when most LDCs had bargaining units than doing so now does. The Director, Labor Relations visits New Jersey once per month or so, and conducts telephone meetings with ETG management and the HR client service manager there twice per month. New Jersey personnel contact him at other times when they determine that labor issues in the state merit his input. The director also gets involved in grievances when they reach the third stage, and takes a lead role in preparing for and conducting labor relations. AGLR had experienced labor difficulties resulting in part from a climate contributed to by a prior client service manager. A change at that position has reportedly produced a better climate.

### 8. AGLR has reduced grievances and arbitrations since the NUI acquisition.

Both grievances and arbitrations have fallen in recent years, and are at a level comparable to what Liberty has seen at New Jersey's other LDCs. They represent one objective measure of labor relations performance.

## 9. AGLR has prepared appropriately for the 2009 end of its current labor agreement.

The Company began early to assemble a team, identify matters likely to be in issue, and survey terms and conditions of other New Jersey utility and regional labor agreements.

# 10. AGLR maintains an appropriate range of salary grades, supported by an outside consultant's market analysis.

The number of salary grades is competitive. AGLR regularly adjusts them, and uses a consultant to provide market information to support those adjustments. AGLR has moved ETG salary grades closer to those of the remainder of the Company, but retains a premium of about 7 percent for comparably graded ETG positions.

# 11. AGLR applies a structured, comprehensive process for conducting employee performance evaluations, and effectively ties results to compensation.

A common, electronic form applies to all evaluations, with commonly derived categories and measurement bases, which have been adjusted to reflect the differing kinds of contributions that employees at different levels make to company success. The templates used provide for a robust and nuanced consideration of success factors, but keeps a sound overall focus by seeking to generate quantified overall results that are easy to understand and to apply objectively to the process of determining pay increases and incentive compensation. The process encourages joint and substantial manager and employee efforts in objective setting and results measurement, and the system assures timely mid- and end-year activities from both. The results bear a substantial relationship to compensation, as Chapter XII, *Compensation and Benefits*, of this report discusses in more detail.

# 12. While the performance evaluation process is sound and effectively administered overall, it does not give local management a formal opportunity to contribute to evaluations of AGSC personnel assigned to local operations. (Recommendation #5)

ETG operations get significant support (*e.g.*, engineering, technical, and HR) from personnel who, while responsible to AGSC managers for supervision, work in the field and are assigned full-time or nearly so to New Jersey operations. They interact frequently with local and regional management, the highest layers of which, respectively, are the ETG VP/GM and the SrVP-MAOP. This interaction gives local and regional management significant input into goal setting and results measurement by the AGSC employees at issue here. The performance of those AGSC employees also figures substantially into the ability of local personnel to meet their individual and business unit goals. However, the opportunity for local and regional management to contribute to performance evaluations is limited to voluntarily initiated comments to the AGSC supervisors who formally set goals and measure performance with those AGSC employees. Relying upon such an informal method of input does not sufficiently assure that local and regional management have sufficient input into establishing goals and measuring performance against them for AGSC employees who play integral roles in successful ETG operations.

# 13. AGLR has an appropriate safety organization, which operates effectively to promote safety and measure performance.

Separating environmental responsibilities from safety responsibilities, and moving responsibility for safety upward to a managing director's position has raised safety's position and focus in the AGLR organization. Safety performance has been effective at AGLR overall. At ETG in particular, safety performance has improved, and is at present comparable to that of AGLR's other LDC operations. Safety training, which is addressed in a following section of this chapter, is comparable to what Liberty has observed at other companies. The use of annual safety summits provide an effective vehicle for communicating safety's importance, engaging employees in an active safety culture, making them aware of training, promoting understanding of causes, and making them aware of how ETG's performance compares. The Drive Cam program appears to have been an effective means for improving vehicle safety.

# 14. AGLR surveys employees, including the ETG-specific population with sufficient frequency and breadth, but responses to identified attitude "gaps" are not formal. (Recommendation #6)

AGLR takes the pulse of its New Jersey employees frequently. It solicits feedback on a broad range of issues. In some cases, such as enhancements in its expression of commitment to

diversity and recent changes to health benefits, AGLR has made clear that it responds to the voices of its employees. In other cases, such as the higher level of more "general" dissatisfaction expressed by ETG employees in the 2007 survey, it is less clear that Company response has been clear and decisive. Clearly, ETG employee general attitudes have improved since that survey, as recent survey work confirms. However, the action-plan documents to respond to what were clear indications of broad discontent in 2007 were not specific. They did not focus clearly on the magnitude of the gaps shown, set closure targets, define clear and specific actions to close each gap, assign responsibility to the full range of managers and executives involved, produce objective measures of success, or generate documented reports of results obtained and needs remaining.

AGLR uses many senior and operating people working far from New Jersey to deliver service and to do so in cooperation with a substantial employee population in the Garden State. Chapter I of this report, *Governance*, addresses a number of improvement opportunities in keeping New Jersey operations specifically visible at headquarters. A confident, empowered, challenged, motivated, trusting, and committed workforce in New Jersey is, as AGLR correctly understands, essential to successful operations in the state. Making gains in these attributes is a positive step, but holding on to them (while future advances continue) is not a given. A more structured approach to addressing the gaps identified by AGLR's effective gauging of employee attitudes is needed to assure that progress continues.

## 15. The recent reorganization of training represents a strong step forward by AGLR.

The Company undertook a detailed and focused at its training needs, organization, and offerings in 2009. The resulting reorganization has created a much sounder platform for needs identification, program and offering design, delivery, and results measurement. The new organization reports to a higher management level, which separates it from an HR department with an already large portfolio of responsibilities and roster functions, and set of activities. The new organization focuses specifically on training design, which, if effectively implemented should allow for content improvement and sharper decisions on the costs and benefits of internally versus externally provided solutions. Eliminating the decentralized approach to finding training sources and time availability (work-group-by-work-group) can both reduce costs and improve results. The use of the corporate training council is an effective measure for sustaining close communication with the client groups who both need the services being offered and have to adjust to relying on sources outside their departments' individual initiatives to get the training they require.

# 16. The lack of new-hire training is recognized as an issue, but has not yet been subjected to a firm development plan and schedule. (Recommendation #7)

Formal new-hire training makes sense in a stable environment. The aging work-force issue heightens the need for such training in the current and coming environment. Formal programs have already been developed and implemented by LDCs recognizing that the time it takes for worker knowledge to mature through and apprentice-type, "on-the-job" approach may not be sufficient. For example, the Certified Operations Technician (COT) Training Program of the Gas Technology Institute (GTI) provides a 70-hour program that introduces prospective or new workers to the industry and to skills applicable to a range of operations positions. The program has been used by a number of LDCs, and is being offered at some community colleges.

Recognizing the need to address high retirement rates in the imminent future was a driver in instituting this program to advance the development of skills that will be lost. There are certainly other approaches, including self-development. The important point is that the other major changes resulting from AGLR's positive and strong movement to enhance training overall should not be allowed to let the development of a new-hire training program remain pending indefinitely.

# 17. While AGLR has recognized important gaps in its approach to organizing, designing, and delivering training, it has had and it maintains a broad range of offerings, and communicates their availability.

Liberty did not examine course content, but did examine the roster of offerings that AGLR has made in recent years, how the Company communicates their availability, and the use of the annual performance evaluation process to encourage developmental and technical training. The roster appears typical. AGLR has used typical means to stress the importance of development generally and to allow employees to steer their development through the use of identified offerings that meet specified needs and criteria. Liberty anticipates that there will be streamlining of offerings, changes in their content, and closer examination of who delivers them and how effectively they: (a) are delivered, and (b) support advancement along lines that are most valuable to AGLR and rewarding personally to employees. However, the key conclusion here is that AGLR begins from a sufficiently robust set of offering topics and has familiar and effective means of communicating them and their connection to employee and company success in the long term.

# 18. Measurement of training-results effectiveness and cost performance has been a weakness at AGLR prior to the 2009 reorganization. (Recommendation #8)

AGLR was not able to produce information that showed substantial knowledge and analysis of how effective its training has been, and what drives its costs at a detailed level. There has been some benchmarking of overall performance (hours and costs), but problems with AGLR's data make use of those metrics, which are fairly general in any event, very limited. Those data problems have occurred in the past in part because training data is "buried" in other department data due to the "rogue" approach of the past. Insufficient attention by the organizations providing it, however, have also contributed.

The Director, Training in the new organization understands the need for improved performance measurement and more concise and detailed information about costs at the detailed level. That understanding had not yet, however, produced clear plans, cost reporting templates, objective effectiveness measurement techniques or other tools that will prove necessary to properly measuring training's effectiveness and its costs relative to the benefits it provides. While it is understandable that such matters remain open in light of the major changes recently made, it is important that they be addressed promptly.

# 19. AGLR employs corporate-level resource controls that are commensurate with what Liberty has seen at other, similarly situated companies.

The Company controls staffing growth and the assignment of salary grades through focused measures that operate with sufficient visibility and rigor. The controls over the filling of open positions are particularly strong. The assignment of accounting and financial analyst positions to the field, while coordinating their efforts through dotted line reporting relationships to AGSC financial and budgeting personnel promotes sound budgeting and cost reporting at a detailed level as the year progresses. AGLR partakes of a service (Saratoga) that provides a broad array of staffing and cost benchmarks. The SrVP-MAOP maintains and uses a detailed set of metrics to oversee New Jersey operational and cost performance.

# 20. AGLR has made an appropriate commitment to doing business with minority, womenowned, and other disadvantaged businesses, and has succeeding in producing steady and notable increases in the level of business it does with such firms.

The Company uses specific goals and reports progress against them regularly. It has made significant gains in the level of business it does with such firms and it has substantially broadened the areas in which it does business. AGLR now engages in a variety of technical and operations business relationships with such firms. Some of those agreements include very substantial dollar commitments. AGLR reports progress at the state level as well.

### **D.** Recommendations

# 1. Promptly adopt a comprehensive new budget structure and a series of cost performance metrics at the sub-group level. (Conclusion #2)

Work on this matter was underway during Liberty's audit field work. The recent reorganization and HR's recent cost history indicate significant attention to HR's effectiveness and efficiency. Completing the development of a budget structure that can be supported by performance metrics at the functional level within HR will help to assure that cost performance is optimized.

# 2. Develop a more structures approach to addressing ETG's aging workforce. (Conclusion #4)

AGLR is not alone in its lack of a comprehensive approach to addressing the coming transitions associated with workforce aging. With some estimates indicating that as much as half of the utility workers (professional and others) in the U.S. may retire in five to ten years, it seems surprising that there remains no recognized standard or set of measures to which utility HR groups can turn. However, the lack of a developed approach to the problem does not obviate the need for active measures.

Developing more comprehensive data that can be used to forecast the skills that will be most in need is certainly a key starting point that AGLR can address now. Modeling of needs should be supported through the development of such data and supporting modeling to identify timing and size of expected gaps. This information can then be used to concentrate efforts to identify unique and valuable expertise and to identify formal and informal means for its transfer from more senior employees to more junior ones.

Work with local education and training institutions may be also called for, based on what data and analysis shows. More precise future needs identification can also help to identify strategic relationships with outside providers that may prove more useful as time passes.

With a comprehensive re-examination of training now underway, AGLR has perhaps a unique opportunity to tailor its training and development efforts to assure that the wealth of operational and institutional knowledge its workers have and that it takes to optimize performance remains strong and vibrant. A more robust needs forecasting process can also be of substantial use in evaluating the potentially adverse effects of separation programs that many companies from time to time consider.

Liberty anticipates that a time commitment of between one-half and one full time equivalent person is likely, and that there may also be moderate expenditures in assessing and piloting data management and forecasting services provided from outside. If such outside support is required, Liberty would anticipate total expenses in the range of \$250,000 across a period of 18 to 24 months before data systems are in place and operating at nominal continuing cost and this effort produces results that will allow its full integration into AGLR's overall training and development plans and programs.

# 3. Make the satisfaction of EEO/AA placement goals in New Jersey a priority at both the local and headquarters level. (Conclusion #6)

AGLR has shown that it knows and "lives" diversity as a material corporate value. In states other than New Jersey, its employee population has minority representation that exceeds minority representation in the generally available workforce. There are goals for New Jersey; the problem is not with them, but with the inability to meet them. The size of the gap in the Garden State merits a set of measures specific to ETG. Moreover, the board needs to do more in questioning disaggregated statistics and in holding both Atlanta and state/regional management specifically accountable. There was no 2008 review of diversity with the board or the committee with the lead role in this area. There was one in 2009, but it did not take the disaggregated view that Liberty feels is appropriate. Moreover, across the past several years, the board has addressed supplier diversity quarterly; employee diversity is no less important, and deserves no less frequent attention at the board level. The board specifically should get quarterly reports on progress in New Jersey, and should meet at least annually with New Jersey and MAOP senior management for so long as New Jersey performance lags the remainder of AGLR.

# 4. Establish the goal of moving management responsibility for labor relations to the Mid-Atlantic region. (Conclusion #7)

The current location of the function is understandable, given the fairly recent changes in where represented employees work in the AGLR system. Liberty also understands that work location changes for seasoned managers are not always easy to make without undue disruption. In the long run, however, it makes sense to promote closer, regular contact between the person filling that function and local management and supervision, on the one hand, and bargaining unit representatives and employees, on the other hand. Therefore, AGLR should set the goal of moving the function at its first practicable opportunity, and assuming that there are no further changes in the affected work locations.

Liberty understands the need for the person directly responsible for managing labor relations to have regular opportunity to interact with the remainder of HR to collaborate on the other policy aspects (e.g., wages and benefits, pensions, work practices) that affect bargaining unit employees and the agreement under which they work. However, the AGLR structure entails a reporting structure that already supports that interaction.

# 5. Provide for a formal contribution by local and regional management in the setting and measuring of performance against the individual goals of AGSC personnel assigned to New Jersey operations. (Conclusion #12)

It is appropriate that those who manage AGSC personnel assigned to New Jersey or Mid-Atlantic operations work directly with their AGSC supervisors to set individual performance goals and to measure performance against them. However, local or regional management should have a means for contributing formally to these processes. There is already significant communication between these AGSC employees and local and regional management. Thus, they work together in assuring in goal setting and in results measurement. AGLR should provide for New Jersey or Mid-Atlantic (depending on whether the AGSC employee primarily supports state or regional operations) input to the AGSC managers. This input should come in the form of allowing local or regional managers to input the same information into the goal setting and evaluation system, for review by the AGSC manager prior to finalization of the manager's entries. Local or regional management should also receive a copy of the final entries, although responsibility for the content of those entries should remain with the AGSC supervisor, following consideration of input provided by local or regional management.

# 6. Continue regular surveying of New Jersey employee attitudes and require definitive analyses and action plans subsequent to each. (Conclusion #14)

AGLR has made important progress in promoting positive employee attitudes, which are necessary to assuring that service delivery remains strong and effective in New Jersey. However, AGLR operates across a wide geographic footprint. Moreover, its growth objectives have the strong potential for expanding that footprint, should those objectives be met in significant part. These features of its operations make the always important task of maintaining employee confidence, empowerment, challenge, motivation, trust, and commitment even more critical and challenging. The use of effective surveys of employee attitude give AGLR a strong baseline for accomplishing this task. However, the lack of detailed results analysis and action planning in response to the data gained can substantially diminish progress and can also threaten the improved baseline that AGLR appears to have gained since its early stewardship of New Jersey LDC operations.

AGLR should require detailed, objective, quantified analysis of survey results, and an identification of the nature, size, and root causes of all "gaps" that exist. This work should be steered by experts from HR operating in close coordination with local and regional management and with AGSC managers of their personnel assigned directly to New Jersey operations. For each gap identified at each survey, the group identified above should establish objective "closure" goals (quantified wherever possible), specific actions, assigned responsibilities (including local, regional, and Atlanta operations, supervision, and management, rather than just HR personnel), similarly objective and quantified success measures, and regular results reporting. Comprehensive surveying should not extend beyond intervals of, at most, two years.

# 7. Make the development of a new-hire training program a priority, and set a firm plan and schedule for implementing it. (Conclusion #16)

Recommendation #2 above addresses more generally the problems imposed by work force aging. A sound new-hire training program should form an integral part of efforts to address that issue. After three years with no new hires in field operations, ETG had four in 2008.

ETG's region has already witnessed important advances in the area, with major gas LDCs (including ConEdison and National Grid) as active participants. Cooperation with local educational institutions presents a particularly exciting opportunity, providing not only a training solution, but recruitment assistance as well. The metropolitan New York region already has at least one community college offering courses.

The Director, Training has a full and difficult agenda to address as she brings a new focus on and approach to training at AGLR. New-hire training needs to be an important and current part of that agenda.

# 8. Establish a robust training budget structure, cost reporting system, performance reporting and metrics, and benchmarking program to assure that training is producing appropriate results cost effectively. (Conclusion #18)

It would be understandable if the training budget structure undergoes moderate change this year. Until the group works through the approaches that each of its principal managers will follow, radical change will be premature. In time for 2011 budgeting, however, the training group should seek to identify its cost drivers at the detailed level, adopt a cost reporting structure that corresponds to its goals, objectives, resource alignment and specific groups of offerings. That structure needs to be designed to support effective analysis of both results quality and costs. The development of that structure will then permit the adoption of a budget structure that "rolls-up" from the details of the group's services. It will also support efforts to value properly the offerings being made and to assess more robustly the costs and benefits of internal versus external design and delivery. The way that the organization has been restructured will support effective measurement, just as it can support more effective operation.

Another important element in assuring quality and cost effectiveness will be to engage in benchmarking with other similar enterprises, as AGLR develops the data (and the metrics that rely upon that data) needed to make comparisons with others meaningful. The significance of the changes taking place in training make it especially important to examine what others are doing and how they are doing it.

# IV. Strategic Planning and Budgeting

# A. Background

Strategy, planning, budgeting, and company-wide risk management comprise important areas in providing direction and goals for ETG in meeting evolving challenges in gas distribution. The strategy needs to set clearly the vision and direction for ETG, considering external market, regulatory, economic, commodity and technology factors. The strategy also needs to consider customer needs and plans to support them and it needs to identify the management and financial resources required to execute the strategy. Appropriate long-term goals and objectives to guide the utility result from this process.

Business planning for an LDC should use strategic plans as a foundation for conforming and more detailed shorter-term planning that contain specific goals and objectives. Such short-term plans should serve as reasonable extensions of the strategic plan and consistently address the market environment, management and financial resources required, and the objectives to be reached through the allocation of resources.

The annual budgeting process comprises a specific short-term application of the planning process. This process must also be consistent with longer-term goals. Budgeting processes require considerable detail and take significant time and effort from all levels of company management. The setting of appropriate financial and operational goals consistent with the parent holding company targets provides a foundation for budgeting. Most enterprises apply a bottom-up budgeting process that eventually must also meet high-level (top-down) company targets. Following the approval of budgets, the monitoring of actual results against the budget is an important management performance measurement tool. Effective management reporting systems need to exist to provide important information to managers and executives about key performance measures against those that have been budgeted.

Enterprise risk management is a newer management tool that is being developed in many companies to help identify and manage the most crucial risk areas. The identification of high-risk areas allows mitigation efforts to be evaluated or established as necessary. Enterprise risk information is important from an executive management and Board of Directors standpoint to ensure that the most important risks are being addressed by company management.

Tax allocation policies at utility holding companies generally direct the filing of one consolidated tax return and allocate tax liabilities among the subsidiaries. Tax allocation policies must be clear and executed precisely so that utilities and their customers pay only their fair share of the tax burden.

Liberty examined the following areas to evaluate ETG regarding the discussion above:

- Strategic plans and processes
- Specific goals and objectives for ETG and the holding Company
- Overall ETG business strategy
- Budgeting processes for ETG and MAOPS
- Resources dedicated to ETG

- Enterprise risk management
- Tax allocation policies.

# **B.** Findings

# 1. High-Level Strategy

### a. Mission/Vision

AGLR has adopted the highlighted vision, mission and "keys to success" for its businesses. The practical application of AGLR's vision and mission for the holding company and its major

business units, as explained in interviews with top executives, is specific. The holding more company's focus is on the natural gas chain" "value extending pipelines to storage assets to local companies. distribution The Company is interested in potential value-creation opportunities within this chain; however, AGLR is not interested in extending its reach into the natural gas production business.

AGLR operates six regulated gas distribution companies in six jurisdictions. different AGLR's vision for the regulated utilities is to focus on stable and sustainable growth. Low levels of growth in customers, as well as declining usage per customer have significantly limited organic growth at the LDCs. The Company intends to plan for the strategic replacement of gas mains Vision: We will execute and create value around the natural gas value chain in a way that no other company can.

Mission: We will provide reliable, safe and affordable natural gas services in an environmentally friendly manner.

- For customers, we will provide outstanding service
- For employees, we will offer rewarding career opportunities
- For shareholders, we will deliver a superior investment
- For communities, we will give our time, resources and energy
- For elected and appointed officials, we will serve as responsible corporate citizens.

#### Keys to Success:

- Balanced portfolio: We use our related and complementary businesses to strengthen our operations and earnings potential.
- Exceptional execution: We always give our best effort and embrace safety in everything we do.
- Development expertise: We execute projects with diligence and innovation.
- Superior marketing: We promote the advantages of natural gas to retain, acquire and create desire in our customers.
- Outstanding business processes: We use our skills, knowledge and technology as competitive advantages.
- Cost discipline: We manage the company's resources as if they were our own.
- Focus on opportunities: We take advantage of emerging industry trends and potential acquisitions.

and pipe. On a regulatory basis, most of the AGLR utilities have recently operated with five-year agreements not to file rate cases. The Company is planning to file at least four new rate cases in 2009 and 2010.

AGLR continues to be interested in the acquisition of additional gas LDCs. However, the Company maintains that it is quite selective in screening acquisition candidates. Such candidates must be accretive to earnings in a short period of time. They must be credit neutral or credit positive to the holding company; the acquisition should improve or maintain the consolidated ratios and metrics used by the credit rating agencies. Acquisition candidates must also be compatible with the AGLR PeopleSoft financial software system, its customer information system, its IT systems, and the standard engineering platform, in order to minimize merger costs and to generate substantial operating savings. The acquisition should also provide further diversification with regard to jurisdiction. The Company also prizes candidates whose

acquisition has the potential to significantly reduce non-fuel operating and maintenance. The Company notes that pricing for LDCs was, prior to recent financial market difficulties, "bid up" by infrastructure acquirers into a range that AGLR has considered too expensive.

AGLR's vision is to grow non-utility businesses at a measured pace. The company has a growth goal of about 10 percent per year on a consistent and sustainable basis. SEM and SouthStar represent the two primary non-utility lines of business that AGLR will continue to pursue, along with investments in gas storage projects. Another strategic market for non-utility businesses is natural gas infrastructure investments in the "upstream" natural gas market.

AGLR defines its most important strategic risks to be carbon legislation and the impact of hurricanes on gas supply and price. The Company works primarily with the AGA and trade groups regarding the carbon issue. AGLR has been actively working for several years to secure access a more diversified gas supply sources to mitigate potential region-specific weather events.

## b. Business Focus and Mix

AGLR targets a strategic mix of LDC and non-utility businesses that will limit earnings from the latter sector businesses to about 30 percent of the holding-company's total. Limiting non-utility contribution to earnings is an attempt to manage the holding company's risk profile. The company also believes that investors are comfortable with an earnings mix of about 70 percent from the regulated businesses and up to 30 percent from non-utility businesses. Rating agencies and equity analysts express comfort when utility earnings produce about 70 percent of total holding-company earnings, but have not viewed reductions from this level as positive. AGLR notes that several other utility holding companies also target this approximate mix of regulated and non-utility businesses. Equity investor groups have indicated that they are more supportive of asset-based businesses that have a regulatory component, such as LNG peak shaving facilities, regulated pipelines or landfill gas projects. Investors tend to be more interested in conservative projects that have some regulatory element to reduce risk.

SEM operates as an energy marketing and trading business that focuses on trading around hard assets, such as gas storage facilities. SEM's objective is to provide disciplined growth in two key areas: storage facilities, including AGLR's two new major projects, and the asset management business. SEM will continue to focus on asset management for both affiliates and non-affiliates, and on producer services and optimization of storage and transportation capacity. SEM's growth plans presented to investor groups include expansion into new markets, such as a recent expansion into the western U.S. and Canada, and on building a commercial and industrial wholesale business base.

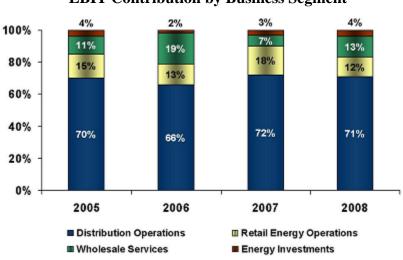
SouthStar, owned by AGLR and Piedmont Natural Gas (another LDC holding company), competes as a third-party provider of natural gas commodity to retail markets. The SouthStar retail business focuses on the states of Georgia and Ohio. SouthStar has a 34 percent market share in Georgia, operating as a commodity supplier in the Atlanta Gas Light markets. SouthStar is currently focused on developing a new market for its retail business in Ohio. The retail provider also has interest in opportunistic acquisitions of retail commodity providers.

The energy investments business so far has concentrated on two natural gas storage projects: Jefferson Island Storage & Hub (a high-deliverability facility in Louisiana with about 7 Bcf of working gas capacity) and Golden Triangle Storage (an under-construction high-deliverability facility in Texas that planned for an eventual build-out of approximately 12 Bcf of working gas capacity). AGLR likes the attributes of gas storage assets, as they provide gas supply and the price insurance as well as the opportunity for price arbitrage profits. Salt dome storage projects are considered to be the most favorable gas storage facilities due to their high delivery capability.

AGLR also has a focus on smaller-scope pipelines such as the Hampden Roads pipeline project in Virginia. These projects may reside within one of the AGLR LDCs, and remain subject to state regulation. Others may fall under the jurisdiction of the FERC. The holding company has also evaluated gas gathering and processing assets. The Company has not yet made any investments of this type, but the assets would fit within their target areas in the natural gas value chain. Investments in LNG imports also may be of interest in the future, as they may make AGLR storage assets more valuable.

### c. Growth Drivers

The LDCs (which AGLR publicly reports as its Distribution Operations segment) accounted for 71 percent of 2008 earnings before interest and taxes (*EBIT*). SouthStar (reported as the Retail segment) accounted for 12 percent and Sequent (reported as the Wholesale segment) accounted for 13 percent. These contributions have been relatively stable since 2005, as shown the next chart shows.



**EBIT Contribution by Business Segment** 

AGLR expects approximately the same proportions in the future, with growth in the investments area increasing faster than that of SEM and SouthStar. The Company continues to look at natural gas storage and regulated pipelines as a growth component of its business. Change in the energy markets and the availability of project financing; however, have more recently caused the Company to significantly slow its pace of growth in these areas.

The Company considers its strategic financial drivers to be: (a) earnings per-share growth, (b) meeting investor expectations, and (c) the 70/30 percent earnings mix. Investor expectations for AGLR growth include increasingly efficient operations and better consolidation of the existing businesses. The Company expects earnings growth to be in the 4 to 6 percent range annually. Sustaining this growth requires LDC customer growth of 1.5 to 2.0 percent. This rate would provide about one-half of targeted total holding company growth. AGLR expects continued strong investment in the utilities. It would like to grow the total rate base by 2 percent per year. The earnings growth of the non-utility businesses would need to grow at 5 to 7 percent annually to meet the overall holding company growth objectives. The company has a total-return-to-investors target of around 9 percent annually, with 4 to 6 percent from earnings growth and 3 to 4 percent from dividend growth.

AGLR considers investments in Pivotal storage projects to be its most important growth engine. Ten percent of holding company EBIT may ultimately come from gas storage projects. Other key AGLR growth drivers are the new markets for SEM and SouthStar and potential acquisitions. The Company considers acquisitions of LDCs, pipelines, storage projects, and retail operations to be growth opportunities if they have the correct strategic, financial and operational fit.

Other AGLR growth drivers could come in the form of financial or ownership changes. Share repurchases of common stock, for example, can be beneficial to earnings growth if they are executed at a favorable (low) price. Some AGLR strategic-planning documents discuss the possibility of ownership change, should a high price per share be realizable. For instance, in late 2007, LDCs commanded premium price valuations of 15 to 17 times earnings. These high valuations have diminished with the financial market changes in 2008 and 2009.

# 2. Goals and Objectives

## a. Strategic Overview/ Board of Directors

Liberty requested access to AGLR and ETG longer-term strategic planning documents, in order to review and evaluate the strategic planning process, which companies often develop based on the mission, vision and high-level strategies and business mix discussed above. Numerous requests and discussions with AGLR executives determined that the Company does not perform a specific long-term strategic planning process or develop a "corporate strategic plan." AGLR has strategic visions and long-term financial targets. Shorter-term planning processes are organized, managed and coordinated at the holding company, as discussed later in this chapter. However, the Company does not prepare any single, seminal strategic planning document that is used by management as a platform for conducting medium-term and shorter-term planning.

AGLR also does not employ a stand-alone group to conduct or to coordinate strategic planning. The Executive Vice President, Utility Operations has responsibility for developing and executing utility strategies. The Senior Vice President, Government and Regulatory Affairs has responsibility for regulatory strategy. Each non-utility business prepares its own strategy. These strategies tie together conceptually at the holding company level, under the overall direction of the CEO and CFO, with the input of an eight-person "policy committee" consisting of the most senior AGLR executives. They are the CEO, the CFO, five executive vice presidents

(distribution operations, engineering, legal, human resources, and external affairs, and the SEM president. The AGLR board of directors receives a "strategic outlook" presentation each year. The presentation summarizes strategic options and their effect on budgets and earnings forecasts over a 5-year forecast period.

The Company derives its strategic outlook presentation from a five-year financial plan and forecast that it calls the "base plan." The base plan five-year forecast includes the Company's more stable plans for the LDCs and specific strategic overlays for major projects and investments. Automated meter reading systems or investments in customer information system provide examples of utility-related, major strategic investments. Incremental investments in SouthStar, SEM, and major energy investments such as gas storage projects or pipelines are examined in model iterations, and the proposed five-year plan for these investments is included in the base plan. The forecast measures the income statement; earnings before interest, taxes, depreciation and amortization (*EBITDA*); EBIT; earnings per share; cash flow; balance sheet; and key credit statistic results for five-year planning scenarios and the final base plan. The Company's forecast model is a common five-year forecast format used by utility management throughout the industry.

The incremental investments and projects modeled and included in the base plan are crucial to the Company, generating more than minimal levels of long-term earnings growth. Any of these additions to the base plan must have a credit-neutral or credit-positive impact and add to earnings growth over the planning period. The Company may also consider potential acquisitions from time to time, but acquisitions generally are not part of the base plan because of their opportunistic and ad-hoc nature.

The "strategic overview" is presented to the AGLR Board of Directors in December of each year. The strategic overview provides a review of the results of the base plan over the five-year forecast horizon. The "base case" strategic overview includes only previously approved non-utility projects and the base plans for the LDCs. New projects that have not been approved or additional storage and pipeline projects that may occur in the next five years are not included in the base strategic overview.

The strategic overview focuses on the EBITDA and earnings-per-share results. The overview includes estimates of the compound growth rate of both measures over the five-year forecast period for the LDCs, SEM, SouthStar, and known, approved energy-investment projects. The five-year growth in EBIT and net income also represent key outputs. The overview also provides credit metrics that result from this base plan, including funds flow coverage for interest and debt, the debt-to-capitalization ratio, and retained cash flow as a percentage of debt. The strategic overviews that Liberty reviewed indicated that the company's base plan through 2013 had compound growth of earnings-per-share and EBITDA of around 2 to 3 percent per year. This is compared in presentation charts to an optimistic target growth level of 5 percent. The conclusion of the base-plan presentation is that more investments in profitable non-utility projects would be required to approach 5 percent compound growth in earnings per share. The strategic overview also modeled projected results with certain "discretionary projects" that have not been approved by management or the board of directors. These discretionary projects could include investments of about \$200 million over five years for two of the projects, and a large storage project for over

\$300 million. The holding company would still remain short of reaching 5 percent compound earnings per share growth, even with the modeled investment in all of the discretionary projects.

The strategic overview for 2008 through 2013 showed lower EBITDA growth for the distribution LDCs, but higher compound growth of over 60 percent for SEM and over 30 percent for SouthStar. The base forecast included a breakdown of the EBIT contributions as of the last year of the forecast in 2013. The box shows the percentage targeted EBIT contributions of each business segment for 2013.

Distribution Operations Wholesale (SEM)	64.9% 11.4%
Retail (SouthStar)	14.6%
Energy Investments	10.0%
Corporate	(0.9)%
Total	100%

## b. ETG Strategic Initiatives/Strategy

Atlanta Gas Light (AGL) is by far the largest of AGLR's six utility LDCs, providing over one-half of the total revenues and assets of the utility group. ETG and Virginia Natural Gas are AGLR's next two largest LDCs. AGLR's LDC business strategy calls for a focus on stable and sustainable areas of growth. The most important areas of planned utility growth involve the strategic replacement of pipe and gas mains. Most of the gas utilities have had stay-out provisions for rate cases, with durations running as long as five years. AGLR plans to file at least four new rate cases in 2009 and 2010. The low levels of growth in customers, as well as declining usage per customer, have significantly limited organic growth at the LDCs, which form AGLR's primary business line.

ETG has developed some significant strategic initiatives to improve infrastructure, improve customer service and to comply with the New Jersey greenhouse gas plan. The strategic initiatives that were identified by the ETG vice president and general manager were as follows:

- 1. Regional Greenhouse Gas Initiative The State of New Jersey has enacted a requirement that plans for a 20 percent reduction in greenhouse gases by 2020. ETG has established a work plan and a cost-recovery rider to support this objective. The greenhouse gas plan proposes six programs that were filed in a petition with the NJBPU in February 2009. The programs include a whole-house energy efficiency program; an HVAC and water heater incentive program; small and large commercial customer energy efficiency programs; a combined heat and power program; and a gas cooling program for commercial and industrial customers. ETG has proposed to recover the costs associated with these programs through the implementation of a new rate rider surcharge that recovers the cost of the programs. The investments in the programs total \$14.7 million over two years.
- 2. Utility Infrastructure Plan The New Jersey governor requested the state's energy utilities to play a role in assisting in a broad economic recovery by increasing planned investments in necessary and beneficial utility infrastructure. ETG proposed five projects, all of which are outside the scope of its projected normal capital expenditures but will enhance the safety, reliability and integrity of the Company's gas system. ETG estimated the total incremental capital investment required to complete these projects to be \$60.4 million by March 31, 2011. ETG also proposed a cost-recovery rider for these infrastructure projects to be effective April 1, 2009. The projects include:
  - a. Replacement of 29 miles of elevated pressure 10-12 inch cast-iron main

- b. Replacement of 40 miles of low pressure four-inch cast iron main
- c. Construction of a pipeline interconnect to eliminate a one-way feed serving 4,500 customers
- d. Construction of a pipeline interconnect to provide backup supplies from the interstate natural gas pipelines for 7,500 customers
- e. Replacement of heaters at two Company gate stations.
- 3. Changing out inside meters as ETG replaces the cast-iron mains, 160,000 inside meters may be moved outside. This project will be performed in conjunction with the greenhouse gas plan over 10 years or more.
- 4. *Customer outreach and education* ETG is working to develop new programs in these areas and will filing with the NJBPU for approval of new programs.
- 5. Revisiting the customer experience this project would include updating the call center and developing automated orders and scheduling.

Other strategic initiatives are a long-term rate plan, developed in conjunction with the rate department, and replacement mains and pipe developed jointly with AGLR gas engineering. The Company plans to include the estimated cost of these programs in the normal capital and operating budget processes.

The regulatory strategy is also a key area of focus for the AGLR utilities. A corporate goal for 2008 was to "Create and execute an integrated regulatory plan for the successful outcome of upcoming rate cases." Four rate cases in different jurisdictions will be filed in 2009 and 2010. The plan for ETG was to file a rate case on March 1, 2009 using a test year of April 2008 through March 2009. The new rates were estimated to become effective at January 1, 2010, or immediately after the end of the ETG five-year rate freeze.

### c. Planning Goals

The two utility operating divisions (MAOPS and SOPS) into which AGLR has divided its LDCs (or Distribution Operations) set financial goals and plans for the annual budget plan. Each individual utility (and the two operating divisions in total) have annual margin and EBIT goals established by the holding company. EBIT serves as the primary financial goal for utility operations overall, and for ETG, Virginia Natural Gas, Elkton Gas and its Mid-Atlantic Operations in total (MAOPS). These financial goals are part of the "10 metrics" that serve as the management performance measures.

<u>Provide superior growth in earnings and dividends</u>. We will aim for flawless execution in our existing businesses. We will continually seek growth opportunities. And we will exercise rigorous discipline in evaluating those opportunities.

Build on our growing reputation for customer service excellence through enhanced logistics. We will continue to implement improvements to make our customer's experience pleasant, efficient and worthwhile. We will deliver exceptional retail and wholesale customer service. We will benchmark ourselves against the best.

<u>Make our people the competitive edge</u>. We will invest in the ability of our people to apply imagination and search for innovations. We will equip them with the resources they need to succeed. And we will clearly articulate our business goals and aspirations.

<u>Be relentless in business process improvement.</u> We will always look for better ways of doing things. We will demand real returns from investments in technology, systems and equipment. And we will identify processes that may be better accomplished through global sourcing or restructuring.

#### Reward our shareholders

- generate total return to shareholders in the range of 8 to 10 percent
- earnings target of 4 to 6 percent EPS growth
- dividend yield target of 4 percent

### Focus on our core businesses

- create and execute an integrated regulatory plan for the successful outcome of upcoming rate cases
- maintain and enhance our industry reputation for safety, performance, low-cost structure and conservative capital discipline
- deliver a superior customer experience by offering choice and convenience

#### *Grow our business organically*

- attract, retain and create desire in our customers
- promote the environmental and efficiency benefits of our superior product

### Pursue long-term growth opportunities

- be opportunistic in pursuing acquisitions of regulated or non-regulated assets that expand our size, scale and market reach
- execute storage and pipeline development projects

## Live our commitment to our employees

- cultivate a collaborative and inclusive workplace that encourages the adversity of ideas, backgrounds and experiences
- invest in the ongoing development of our employees
- recognize achievement through our pay-for-performance programs

AGLR establishes corporate goals for each annual planning cycle. The corporate goals were reviewed for 2006, 2007 and 2008. The Company notes that these annual goals encompass the long-term goals and objectives of AGLR and its affiliates. The corporate goals have some generalized, high-level components for each of these years that are more subjective in nature, and do not have specific performance measures. For instance, the 2006 corporate goals included the general goals shown in the box.

The 2007 corporate goals were similar in form and substance, with more emphasis on growing all of the AGLR businesses and being an opportunistic acquirer. The 2008 corporate goals were somewhat more specific than the previous two years, in that specific long-term financial goals were set forth to help drive the planning process.

Financial targets developed by the AGLR staff are also provided for the holding company, Pivotal, and ETG. A specific "annual budget" is distributed for the holding company and each subsidiary. The annual budget targets include all major income statement items, including operating revenues, operating margin, operating and maintenance and administrative and general expenses, EBIT and net income. The key budget targets for each company are operating margins, EBIT, total operating expenses, and net income. This specific income statement information provides very specific guidance for ETG and the other subsidiaries regarding the holding company's expectations for financial results.

MAOPS and ETG develop goals for their operations based on the corporate goals and budget targets. The ETG goals are included in the MAOPS goals. To be consistent with the earnings targets of the holding company, MAOPS sets separate numeric goals for EBIT, O&M expenses and capital expenditures. Specific bad-debt goals were also set for ETG, VNG and Elkton, and for the ETG and VNG cost-per-customer-connect. ETG's more task-oriented goals included strategically managing ETG financials, implementing a plan to manage ETG bad debt, making the ETG BGSS filing on time and better managing and tracking fuel recovery. Other financial goals included working on decoupling legislation, AFUDC legislation and transportation tax legislation.

MAOPS also set 2008 goals regarding growth opportunities. Separate numeric goals were set for the criteria shown for ETG, VNG and Elkton (the "10 metrics").

MAOPS also identified customer targets for expanding the size, scale and market reach of the utilities. ETG had goals to establish two new franchises; replace 24 miles of 8-inch cast-iron pipe; and to roll out GIS and implement

WMIS. MAOPS also set forth specific numeric safety goals for each of the three utilities.

Adding new meters
Incremental margin
Customer service within 72 hours
Customer appointment attainment
Average leak responses w/i 30 minutes
Number of "no bills" to customers
Meter reading accuracy
Meter reading estimates
AMR performance
Customer complaints

MAOPS also preparers a business plan; the most current plan is called the "MAOPS 2009 Outlook." This business plan focuses on some of the key financial metrics for each of the three utilities, and MAOPS in total. The plan compares four years of history with the coming budget year for margins, operations expense, EBIT and capital expenditure requests. It specifies initiatives for the coming year, such as the ETG rate case filing, the ETG management audit and the renegotiation of the ETG union contract in 2009. The focus of this business plan is on the key financial indicators by company and in total, and providing analysis of the "bridge" between current year margins and expected margins for the plan year.

The senior management of distribution operations and MAOPS emphasized that EBIT and margins are key financial goals for all of the utilities. The key operating goals are the 10 metrics, listed above, which the one-year planning process includes.

#### 3. Planning and Budgeting

#### a. Budget Guidance and Process

Goals set for MAOPS include EBIT and margins. The Company provides this top-down guidance for each of the four AGLR business segments: Distribution Operations, Retail (SouthStar), Wholesale (SEM), and Energy Investments. The MAOPS goals are split out from total Distribution Operations, and ETG is provided goals as a subset of MAOPS. Each of the subsidiaries, such as ETG, has responsibility for building the details of their budgets from the bottom-up. The Company explained that:

The 2009 short-term financial goals and objectives guidance provided to ETG, MAOPS and the distribution segments were provided verbally to the officers of the utilities and appropriate service company providers. This specific guidance was based on the forecast of operating margin as a result of expected housing starts for 2009, payroll expenses and depreciation expense based on capital expenditures. Non-payroll operations and maintenance expenses were to be held flat to the 2008 9+3 levels. (actual through September, plus three estimated months)

The specific guidance for capital expenditures was also communicated verbally to the officers responsible for LDC operations and for service-company functions that support them. However, the previously mentioned special initiatives for ETG were eventually added to the base "business as usual" capital estimate for 2009.

The holding company budget managers send budget assumptions and guidelines to approximately 300 employees who have responsibility for building budget components. The assumptions and guidelines document provides key schedule dates for the budget, common budget assumptions, and any specific budget information required. Each budget area must submit a 12-month projection for both operation and maintenance expenses. The budget managers provide specific instructions for estimating payroll expenses and entering them into the Comshare budget system. Generally, the managers direct the field budget analysts to budget expenses at the utility-department level and not for the service company. This allows the business unit owners to better manage their targets by providing clearer expectations of anticipated expenses at the business unit level. The responsibilities for capital budget data are specifically defined; holding company engineering has responsibility for mandatory, system preservation, and new business capital expenditures for all utilities. Capital budgets for fleet, facilities, equipment, information systems, and telecommunications systems are all provided by AGLR central services for those assets.

The 2009 budget process differed from previous processes to provide a desired increase in budget transparency. The holding-company budget managers set up peer-reviews as part of the 2009 budget process to improve transparency and budget rigor.

#### b. Building the O&M Budget

The Company prepares budgets first for operating expenses by each cost center manager, including specific New Jersey cost centers for ETG. Cost-center managers build operating

expense budgets by starting with the previous year's budget and actual information for each expense category. Cost-center managers include regional managers and some ETG office supervisors. The cost-center managers adjust the previous year's information for new budget year volumes and pricing. Changes in each budget expense must be specifically justified. The ETG operating expense budget is personnel driven, because salary and benefits account for most nonfuel expenditures.

The holding company generates the remainder of ETG's budgeted income statement. For instance, the holding company estimates revenue, and it operates and maintains the budget model. The ETG business manager has responsibility for ETG operating expenses, but also has access to the budget model for use as needed to run different scenarios.

AGLR budget managers supporting 2009 budget development provided a budget template to 10 to 15 higher-level managers, in order to promote account consistency among all AGLR cost centers. The need for consistency was greater for the 2009 budget due to a newly established "peer review" process for these managers. The budget templates included detailed information on each vice president-approved operating expense account by month for the 2009 budget. Each expense line item included explanations of the expense and its priority level. An operating expense prioritization matrix was also provided for the 2009 process. Each cost center was to prioritize its operating expenses as either category one (must do in the plan year), category two (should do in plan year, but there is some discretion between plan years one and two), and category three (nice to have -- can be delayed to plan years two or three).

The budget templates, following vice presidential approval, then underwent the new peer review process. Peers scrutinized and questioned each expense category for each manager. The business units also challenged service-company budgets. The peer review resulted in specific operating expense dollar levels for each category at each priority level. The AGLR budget managers then compared the prioritized expenditures to financial forecasts to determine where the operating expense "cut line" should be set, based on EBIT targets. They then prepared presentations and reports for the AGLR policy committee approval. The policy committee review focuses on presentation and analysis of forecasted factors affecting the changes from the current year to the budget year for EBIT, margins, operating expenses and authorized returns. Comparisons are made for each entity of these results for each of the past four years and the budget year. The analyses and comparisons are presented for ETG and VNG, for MAOPS and SOPS, and for the distribution operations in total.

Following the approval of the policy committee, "CEO review" by the CEO, CFO, and the executive vice presidents of distribution operations and engineering takes place. Following the CEO review, the AGLR CEO presents the budget proposal to the AGLR board of directors in December. The following chart maps the ETG/AGLR operating expense budget process:

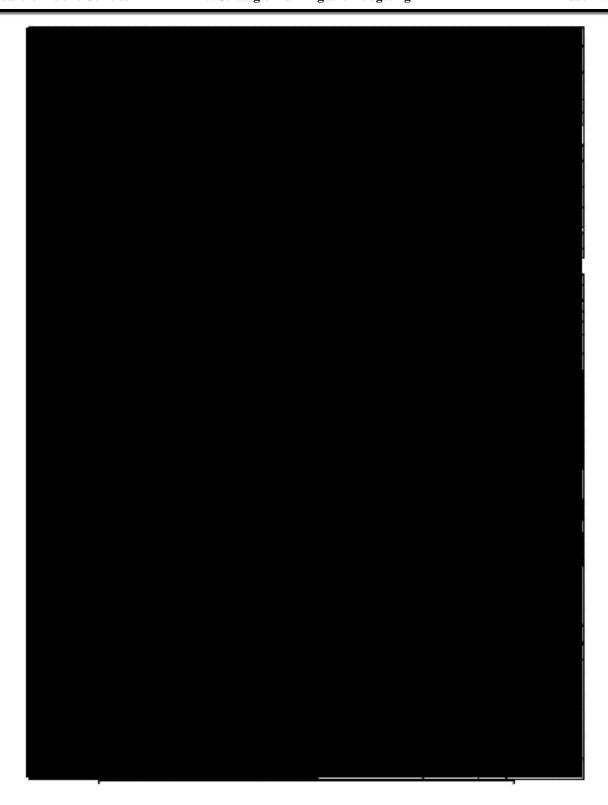
# ETG Annual Expense Budget Process | Processor | Proce

#### c. Capital Budgets

The capital-expenditures budget for ETG and the other AGLR utilities is generated primarily by each utility's engineering staff, who present a proposal to the holding company engineering staff. The capital budgeting process is separate from that described for operating expenses, and is not coordinated by the ETG business operations staff.

The capital expenditures for ETG fall within six major categories. *Mandatory* capital projects may be required by NJBPU regulations, such as pipeline replacement programs, or environmental regulations such as manufactured gas site remediation. *Reliability* projects that are generated by ETG gas system modeling for system improvement comprise a second category. The various project types in system planning may include system pressure improvements, cathodic protection system improvements, and regulator station, meter set, and piping betterments. Company standards as outlined in the operations procedures manual also generate system improvement projects.

A third category of capital expenditures includes *New Business* projects generated by the marketing and economic development staffs. New business projects require business and economic justification in order to be included in the budget. Such projects require a residential gas delivery request that includes the types and cost of mains, service lines and meters and regulators required to add new areas to the ETG gas system. For new business projects, the project justification includes net present value and internal rate-of-return calculations that are prepared at ETG using a model prepared by the AGLR finance staff. The authorization request shown below is for a requested new business project. This figure is confidential.





The remaining capital expenditure categories are *IT*, *Fleet* and *Facilities*. The capital budgets for these categories are prepared by the central staff organizations that serve all of AGLR, based on input from each of the utility staffs.

Each category of the ETG capital budget is prioritized in accordance with a priority matrix guide. A working group that included representatives of distribution operations, engineering, finance, rates, and outside consultants established the prioritization criteria. The ETG staff prepares the prioritizations for new business, reliability, and mandatory projects. The prioritization and project justifications for each of the six capital categories are included in a peer review for capital budgets. This review is similar to the operating expense review described earlier. The utility group vice presidents review discrete projects and each capital line item in the peer review. According to the Company, there is significant discussion at this level regarding the prioritization of projects between the six capital categories. The capital budget is eventually presented to the AGLR policy committee and the CEO group for approval in the December time period. The approved capital budget for ETG for 2009 was about \$42.5 million.

For 2009, however, certain strategic initiatives were added to the ETG capital budget, as previously described:

- Regional Greenhouse Gas Initiative The investments in the programs total \$14.7 million over two years.
- *Utility Infrastructure Plan* ETG estimated that the total incremental capital investment required to complete these projects would be \$60.4 million by March 31, 2011.
- *Moving inside meters* This project will be performed in conjunction with the greenhouse gas plan over 10 years or more.

#### d. Management Reporting

Executives measure ETG's management performance compared to budget primarily through monthly reviews of financial and operating performance for the three operating utilities in MAOPS, and for MAOPS in total (the Mid-Atlantic Operation Review). Budget analysis and variance explanations are driven by information from the bottom-up within ETG and are included in monthly reports for MAOPS.

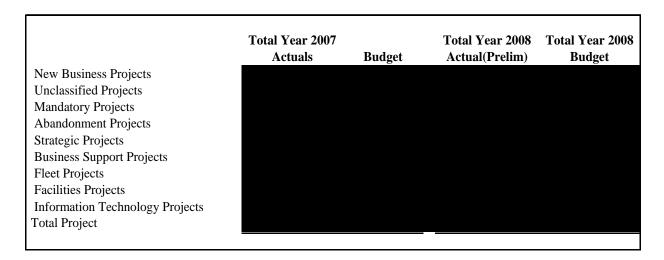
The business operations employees at ETG focus on two analysis areas regarding performance to budgets. They analyze performance to budget and variances on ETG operating expenses. The analysis determines performance to budget for each of the major operating expense categories. Expenses are analyzed by account and down to the journal entry level, if necessary to explain

variances. ETG analyzes operating expense variances every month, and sends the analysis to MAOPS for review and inclusion in their management reports.

The ETG business operations group also has responsibility for analyzing ETG margins. The group analyzes revenues and expenses to determine detailed explanations for the margins and any variances. The focus of this analysis is on the drivers behind the margins. For instance, degree days, consumption per degree day and economic factors are often drivers of margin. On the other hand, some industrial customer margins are driven by factors other than weather. Margins by rate class are calculated in order to identify these effects.

The ETG business operations group sends its analysis of operating expenses and margins to MAOPS. The regional group then performs EBIT analysis as a key component of their operational review report of financial and operational performance. The following tables provide the ETG performance to budget for 2007 and 2008.

Total Year 2007   Total Year 2008   Total Year 2008   Actuals   Budget   Actuals   Budget					
Operating Revenues Cost of Sales Operating Margin Payroll Expenses Fleet Services Facilities LNG Storage Distribution Expenses Customer Account Expenses Customer Service Expenses Marketing Legal Benefits and Incentives Office Administration and Supply Development and Training Outside Services Dues and Subscriptions Travel and Entertainment Equipment Leases Franchise and Riders Miscellaneous Operation Exp Storage Expense Regulatory LNG Storage Maintenance Distribution Expense Maint Other Maintenance Expense Operations and Maintenance Expense Capitalized and Distributed Exp Allocated Costs Depreciation and Amortization Taxes Other Than Income		Total Year 2007	Total Year 2007	Total Year 2008	Total Year 2008
Cost of Sales Operating Margin Payroll Expenses Fleet Services Facilities LNG Storage Distribution Expenses Customer Account Expenses Customer Service Expenses Marketing Legal Benefits and Incentives Office Administration and Supply Development and Training Outside Services Dues and Subscriptions Travel and Entertainment Equipment Leases Franchise and Riders Miscellaneous Operation Exp Storage Expense Regulatory LNG Storage Maintenance Distribution Expense Maint Other Maintenance Expense Operations and Maintenance Expense Capitalized and Distributed Exp Allocated Costs Depreciation and Amortization Taxes Other Than Income		Actuals	Budget	Actuals(Prelim)	Budget
Operating Margin Payroll Expenses Fleet Services Facilities LNG Storage Distribution Expenses Customer Account Expenses Customer Service Expenses Marketing Legal Benefits and Incentives Office Administration and Supply Development and Training Outside Services Dues and Subscriptions Travel and Entertainment Equipment Leases Franchise and Riders Miscellaneous Operation Exp Storage Expense Regulatory LNG Storage Maintenance Distribution Expense Maint Other Maintenance Expense Operations and Maintenance Expense Capitalized and Distributed Exp Allocated Costs Depreciation and Amortization Taxes Other Than Income	Operating Revenues				
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Taxes Other Than Income	Allocated Costs				
	Depreciation and Amortization				
Operating Expenses	Taxes Other Than Income				
	Operating Expenses				



The monthly Mid-Atlantic operational review comprises the central document for ETG's management reporting. The focus of the document is the current month's performance for EBIT, margins and variances on income statement accounts. The document presents an analysis of each of these areas for ETG, VNG and Elkton, as well as in total for MAOPS. Explanations of specific variances from the budget follow, along with an outlook for the remainder of the year.

The MAOPS operational review also includes analysis on some of the more important issues for each individual month. For instance, in-depth analysis of marketing programs, overtime payroll, bad debt management and the capital expenditure outlook were presented for the January 2009 report. These reports also present the Company's key operational metrics for the distribution utilities. The operational metrics include:

- Attainment of appointments by percentage
- Service orders per employee day
- Average leak response time,
- Pending the leaks per mile of main
- Aging of customer accounts
- SONP and service re-connects
- New meter installations
- Number of full-time employees.

The reports provide these operational metrics for ETG, VNG, Elkton and MAOPS in total. The operational metrics are consistent throughout AGLR distribution operations and are important management performance measures.

The budget managers prepare monthly reports of the total AGLR distribution operations for the executive vice president. Through 2008, these reports were very similar to the MAOPS reports described above in the information provided. The executive vice president holds monthly performance meetings with ETG and the other distribution utilities by teleconference to discuss this report. The ETG vice president and general manager and business operations manager are included in the conference. The discussion in the monthly meetings is primarily on financial results measured by EBIT and margin, operational updates, and updates on capital projects. The

AGLR budget managers prepare variance analyses for the whole of distribution operations, with input from the regions or individual companies.

The mitigation of budget variances is the responsibility of the vice president and general manager of each business unit, such as ETG. This "point person" has responsibility for determining if the variance may be mitigated within the business unit. If not, the variance mitigation is discussed at the executive level for distribution operations, and finally taken to the CEO if necessary. The performance incentives for regional managers include operating expense budget performance. For vice presidents and general managers such as ETG, individual performance objectives are unit EBIT performance, operating expense performance, safety, and operations. For the executive vice president of distribution operations, the key performance indicators are EBIT and capital expenditure levels.

The AGLR budget managers also produce monthly reports for the CFO and CEO. The focus of these reports is on EBIT by business segment for comparable periods, functional operating expense reports and high-level capital expenditure reviews. The CEO and CFO meet with the heads of the four AGLR business segments: distribution operations, SEM, SouthStar, and energy investments. Performance in each of these areas is measured against EBIT budget goals and operating expense goals.

#### e. 2009 Restructuring

In 2009, AGLR began restructuring some of its business processes to make them more effective. This reorganization grew out of the AGLR "Cash Optimization" process. The Company reviewed a total of 25 corporate processes for improvement potential. AGLR identified six processes as providing the most potential for immediate improvement. These six processes were:

- Business analysis (budgeting and management performance)
- System integrity
- Training
- Customer services
- Supply chain
- Public presence (sales, marketing, public relations).

The Company analyzed each of the six business processes as existing and as modified to a more efficient and effective form following its restructuring. Analysis results were included in a presentation to the AGLR policy committee. No specific cost savings targets were identified; improvement in the processes was the main objective, with cost savings an expected resulting benefit. The Company noted that these process changes do not affect the 2009 budget; however, the 2010 budget will include the full impact of the process changes.

For the business analysis process, the CEO was interested in receiving less detailed budget reports and engaging in more discussion and analysis of key business drivers and issues. In particular, the presentations to the CEO by the business unit heads have been changed to provide more focus on the drivers of business results and much less information on operational metrics. The CEO review has been reduced from about 30 pages to only five or six pages. Operational metrics will all be displayed in a "dashboard" format for quick review.

The financial and operational detail will be included in the reports to the Executive Vice President of distribution operations. These presentations and meetings for the two distribution operations regions will focus on these details with longer reviews and meetings. The existing detailed reports will remain at this level, but not be repeated at the CFO and CEO levels.

A key change in the budgeting will be more of the budgeting by process rather than by company. The Company expects that its regional distribution operation reports will also become more focused and effective by eliminating the unnecessary detail that had been building in its reports over a number of years.

#### 4. Enterprise Risk Management

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) defines enterprise risk management as follows:

Enterprise risk management is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.

ERM represents a new and growing approach to identifying and managing risk. ERM expands upon the concepts of internal control growing out of recent stimuli, such as Sarbanes Oxley, by focusing more broadly on the full range of risks that face an enterprise, not just financial and accounting, but encompassing operations as well. Similarly it takes traditional views of operational risk management, which focused much on mitigating risk through financial measures, such as insurance, toward a more robust approach of identification of and response to such risks. Taking a very broad view of risk, ERM strives to help an enterprise to determine how much risk it is taking, how much it should accept, and what measures exist to bring actual and acceptable risk into line.

AGLR had been addressing a number of risks (beyond those historically addressed in the insurance and claims context) strategically for some time. The Company established risk-management programs and processes very early this decade to respond to industry-wide concerns about commodity trading and hedging risk. An AGLR vice president and chief risk officer was hired in 2001 to help establish risk management policies for trading operations. The Company established risk management policies for trading and hedging, first at SEM in 2001 and then at SouthStar. A second step in risk management development was to establish the infrastructure required for risk management, including a risk management committee of upper management employees. The final step was to establish a finance and risk management committee of the board of directors.

Prior to 2007, numerous risk assessments were performed in various ways by internal audit, compliance, insurance risk management and the chief risk officer's organization. In 2007, AGLR began a structured, three-year ERM development process. AGLR has undertaken a very comprehensive approach to ERM development – one that necessitates a multi-year development

period. AGLR addressed the long-term nature of ERM development by adopting a multi-year ERM "Maturity Path," which calls for a progression of activities through:

- 2007: Business-unit based identification and ranking activities
- 2008: Begin communication and education efforts, monitor and review components developed through 2007 work activities
- 2008: Expand into a corporate orientation
  - o Update risk assessment (provide common risk measurement, identify and distinguish "inherent" and "residual" risk
  - o Develop a portfolio risk view; aggregate similar risks
  - o Integrate ERM Ratings Criteria established by S&P into corporate performance management program
- 2009: Add Strategic Risk Components
  - o Align ERM with budgeting/strategy process for 2010 and beyond
  - o Expand portfolio view by addressing risk hierarchy and exposure interactions
  - o Define risk appetite:
  - o Identify/Implement technology solutions to support program
- 2010: Add risk intelligence: link performance management to ERM/Budgeting/Strategy.

A committee represented by AGLR compliance, auditing, the chief risk officer's organization, and insurance risk management functions has responsibility for guiding the development of the Company's ERM program. In 2009, members from treasury, IT, operations, SEM and legal were added to this committee. This committee operates under the oversight of AGLR's Risk Management Committee. AGLR engaged a consultant in 2008 to audit the results of the risk assessments and to evaluate the overall three-year program. The consulting firm focuses on the energy utility industries, serving a total of about 50 clients spread among investor-owned, cooperative, and public power entities in the production and distribution sectors.

The program's first two years began with a comprehensive assessment of risk across AGLR. The assessment addressed all major areas: six business units and six corporate functions which mainly serve as shared services providers. The process has, as is typical, assigned to each identified risk a likelihood of occurrence and a severity ranking (from 1 to 5). The process has sought to measure what AGLR terms "net risk," which represents the likelihood and severity of risks after consideration of current measures to mitigate them. The first two years' work has identified approximately 370 exposures, which now require aggregation, in order to reflect common risk sources and mitigation methods. AGLR targets the completion of this aggregation process and a ranking of its resulting top 25 risks (again, a representative number) by the end of this year.

Risk assessment in distribution operations included a bottom-up process to identify both operational and business and financial risks. A MAOPS risk assessment included input from executives, managers and field employees, who met to identify and rate risks. The participants prioritized all risks and ranked them on a scale from 1 to 5 regarding the likelihood, consequence and mitigation effectiveness of each risk area. The process identified a total of 43 risks for MAOPS along with the consequence category (*i.e.*, legal, regulatory, reputation or financial) and the owner or responsible party for risk mitigation. Inherent risk scores for unmitigated risks are ranked for likelihood over 3 to 5 years and for the consequence of the risk.

The next step, which the Company has also undertaken is to examine risk mitigation activities; *i.e.*, what the Company is doing to manage or lessen the risk. Residual risks following mitigation efforts are then also ranked from 1 to 5 for likelihood and consequence. A risk mitigation score is then applied that expresses the effectiveness of the risk mitigation, from excessive to inadequate. A control rating is also applied that rates the Company's ability to control the impacts of the risk. Finally, the Company evaluates the risk mitigation effectiveness.

The higher risks for LDCs in AGLR's Mid-Atlantic Operations region (which includes ETG) included employee safety risks; increased business complexity; weather and market changes, bad debt and pipeline safety. The Company considered each risk to have adequate risk mitigation. The Company also performed a risk assessment and risk map of engineering and operations for the utilities.

Another important risk assessment affecting the utilities is that of corporate finance. In 2008, the AGLR financial risk with the highest rating for consequence was ineffective management of pension assets. The Company identified liquidity risk, derivative strategy risk, and ineffective cash management and capital structure policy as likely risks that could have grave consequences (the highest risk consequence category) if not mitigated. The Company believed that its risk mitigation in each of these areas was optimal and that it had a high degree of control of each of these risk areas.

Reports are prepared for the executive risk management committee that presents the top four or five risks for each of the 12 business areas and the mitigation of these risks. The finance and risk management committee of the Board of Directors also receives a similar report.

AGLR has established a development and maturity path for ERM over three to five years. The Company planned first to establish ERM policies and to subsequently develop infrastructure and processes. This path began with the 2007 identification and assessment of risk and their mitigations by business unit. In 2008, the Company updated the risk assessments to include common measurements and distinctions between inherent risks and residual risks after mitigation. The Company established a portfolio view of risk and integration into performance management measures. In addition, ERM ratings criteria were determined by consulting with Standard and Poor's. The development of the ERM continued in 2009 by planning for inclusion in the budgeting and strategy processes starting with 2010. The Company intends for ERM to align with but not to define strategy. Risk hierarchies and technology solutions are also part of the development plan. In 2010, the Company plans to link performance management to the ERM in budgeting and strategy processes.

Standard & Poor's and another external consultant reviewed the AGLR ERM in 2008. Standard & Poor's performed an overall review of the AGLR risk management policies, and for infrastructure and method. Standard & Poor's placed more emphasis on trading and hedging risk management than on the more global parts of the ERM process. The board audit committee wanted reassurance that all of the major risks were being identified, and requested use of the other outside consultant.

#### 5. Tax Allocation Policies

Tax allocation policies in a utility holding company define the subsidiary companies' responsibilities for their share of the consolidated tax filings, including the tax effects of both profits and losses. The AGLR tax allocation policy is defined in a "tax allocation agreement" dated January 13, 2004. The Securities and Exchange Commission authorized AGLR and its subsidiaries to enter into this specific agreement, considering it to be in accordance with their requirements.

The tax allocation agreement allocates consolidated federal tax liability among the members of the consolidated taxpaying group in accordance with sections of the *Internal Revenue Code*. The effect of the allocation method defined in AGLR's allocation agreement is to allocate tax liability as if each company's taxes were calculated on an individual company basis, except for AGLR. Only the tax benefit from acquisition debt is attributable to AGLR, and is excluded from the allocation calculations. This "standalone tax liability" method is common within utility holding companies, and is designed to allocate federal income taxes on a consistent basis with the accounting records recording taxable income and losses. While this tax allocation method is an accepted and standard procedure (for the SEC and IRS) for the allocation and payment of federal taxes, it does not denote the appropriate regulatory treatment of income taxes. Some state regulatory jurisdictions, including the NJBPU, make rate case adjustments to utilities' standalone tax liabilities to compensate the utility and its customers for providing positive taxable earnings, thereby enabling consolidated tax benefits to be realized.

The federal income taxpaying entity for ETG is Pivotal Utility Holdings, which also includes the federal taxes of Florida City Gas and Elkton. The New Jersey state tax return includes ETG tax information only. Other taxes, such as property, sales, and utility taxes are remitted directly to the state on an ETG-only basis. The tax allocation agreement applies only to federal income taxes for ETG.

The AGLR tax department keeps detailed tax allocation spreadsheets. The spreadsheets begin with the input of federal taxable income or loss on a separate tax filing bases. The calculation of federal income tax liability for each taxpaying entity is determined with a simple application of the federal tax rate. The allocations to each entity must add to the consolidated federal tax liability. The AGLR utilities generally have positive federal taxable income and are responsible for tax payments to the holding company. The major non-utility affiliates of AGLR, SEM and SouthStar also generate positive tax liabilities on an ongoing basis.

AGLR calculates tax provisions for its taxpaying entities on a quarterly basis. Liberty reviewed quarterly tax provisions, which are an estimate of the federal and state tax liabilities for each quarter, including the effects of the difference between book accounting and tax accounting. The quarterly tax provisions provide estimates of the ETG tax liability, but the Company does not make payments on a quarterly basis. The Company settles federal tax payments to the holding company once per year, usually in the third or fourth quarter of the year following the tax year. At that time, taxpaying entities make a payment to the holding company, and the holding company makes payments for any subsidiary companies with tax losses. The AGLR parent has regular and sizeable negative federal taxable income, resulting primarily from losses on acquisition debt which are excluded from the tax allocation calculations. Some of the former

NUI unregulated entities have also provided tax losses over the past several years. The subsidiaries' tax payments are subject to a true-up once per year to reflect any changes in the consolidated tax filing.

The consolidated federal tax filing is due March 15 of each year; AGLR requests a six-month extension, which is the norm for larger corporations. As a result, the federal filing date is September 15th.

#### C. Conclusions

### 1. The natural gas business vision for AGLR is appropriate and in concert with ETG needs.

AGLR's vision and mission is focused on the natural gas "value chain." The value chain extends from pipelines to storage assets to local distribution companies. The Company is interested in potential value creation opportunities within this chain.

AGLR's vision for its six regulated utilities is to focus on stable and sustainable growth. Low levels of growth in customers and declining usage per customer have significantly limited organic growth at the LDCs. The Company intends to plan for the strategic replacement of gas mains and pipe and for special pipe replacement and economic development programs at ETG.

The vision for the AGLR non-utility businesses is to grow these businesses, but not too rapidly. The Company has a growth goal of about 10 percent per year on a consistent and sustainable basis. SEM and SouthStar comprise the two primary non-utility lines of business that AGLR will continue to pursue, along with investments in gas storage projects. Natural gas infrastructure investments in the "upstream" natural gas market comprise another strategic market for non-utility businesses. Equity-investor groups have indicated that they are more supportive of asset-based businesses that have a regulatory component, such as LNG peak shaving facilities, regulated pipelines or landfill gas projects. Liberty found these businesses and the expected level of AGLR participation in them to be appropriately complementary with the gas utility business, which will require the use of many of the same types of management expertise.

## 2. AGLR's strategic policy to restrict non-utility earnings to about 30 percent of the holding company total appropriately limits financial failure risk to ETG to acceptable levels.

AGLR is targeting a strategic mix of LDC and non-utility businesses that limits earnings from the non-utility businesses to about 30 percent of the holding company total. The Company has determined that equity investors and credit rating agencies are comfortable with an earnings mix of about 70 percent from the regulated businesses and up to 30 percent from non-utility businesses. Restricting the non-utility contribution to earnings creates boundaries on the size of these businesses, which inherently limits the impact of business failures on the LDCs.

AGLR has experienced an earnings mix near the 70/30 target for the past four or five years, with higher non-utility earnings in 2006 when Sequent profited from opportunities created by higher natural gas market volatility. The Company emphasizes that the 70/30 mix is a long-term target

that is understood by investors to require flexibility on a year-to-year basis, recognizing market volatility.

AGLR's 5-year strategic forecast is generally consistent with the 70/30 target levels, if it is recognized that longer-term LDC rate relief and potential utility acquisitions are not included in the forecast.

3. AGLR and MAOPS plans, processes and business unit goals and objectives tie to and appropriately support the ETG utility business and initiatives; the annual budgeting processes for ETG and MAOPS set sufficiently detailed targets for the most important financial goals and objectives.

AGLR's strategic plan, as defined in its five-year forecast, includes the Company's base plans and targets for the LDCs and specific strategic overlays for major projects and investments. For the utilities, a major strategic investment may be the New Jersey utility infrastructure plan, pipe replacement programs, automated meter reading systems or investments in customer information systems. The forecast measures the income statement, EBITDA, EBIT, earnings per share, cash flow, balance sheet and key credit statistics that become longer-term goals and targets for ETG and the other LDCs.

The AGLR staff also develops shorter-term financial targets for the holding company, Pivotal and ETG. The key budget targets for each company are operating margins, EBIT, total operating expenses, and net income. These income statement targets provide specific guidance for ETG and the other subsidiaries regarding expectations for financial results from the holding company.

MAOPS and ETG develop goals for their operations based on the corporate goals and budget targets. MAOPS sets separate numeric goals for margins, EBIT, O&M expenses and capital expenditures. MAOPS prepares a business plan that focuses on the key financial indicators for ETG, VNG and Elkton and provides analysis of the "bridge" between current year margins and expected margins for the plan year.

The senior management of distribution operations and MAOPS emphasized that EBIT and margins are key financial goals for all of the utilities. The key operating goals are the "10 metrics" included in the one-year planning process. These goals are consistent with AGLR's high-level financial and operational goals.

4. ETG and MAOPS business planning and budget processes include planning and programs to meet the requirements and priorities of its customers.

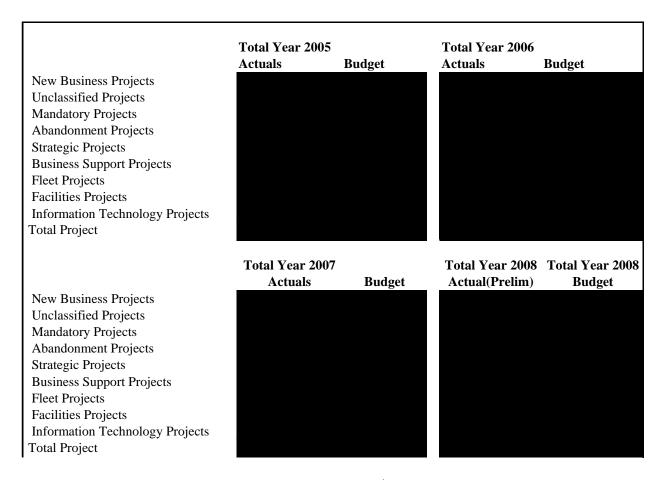
ETG has planned for strategic initiatives, programs, and operating metrics focused on improving customer service. For instance, the ETG greenhouse-gas plan is a strategic initiative that proposes six programs that were filed in a petition with the NJBPU in February 2009. The programs include a whole-house energy efficiency program; an HVAC and water heater incentive program; small and large commercial customer energy efficiency programs; a combined heat and power program; and a gas cooling program for commercial and industrial customers. ETG also has an initiative to move 160,000 inside meters outside. This project will be performed in conjunction with the greenhouse gas plan over 10 years or more.

ETG is also working on developing new customer outreach and education programs that will be filed with the NJBPU for approval. ETG's planned customer experience project would include updating the call center and developing automated orders and scheduling. The Company considers each of the projects described above to be strategic initiatives for ETG that enhance customer service.

The Company establishes and measures ETG's operational goals in accordance with "10 metrics" that are keys to operational performance. Most of these metrics are customer service oriented.

# 5. The AGLR budgeting processes and procedures and the response to New Jersey economic development programs have provided for significant increases in capital and management resources for ETG.

ETG's annual capital budget and actual capital expenditures have increased greatly since 2005. The capital budget has increased from only \$18.6 million in 2005 to \$42.3 million in 2008. Actual capital spending has been more than budgeted amounts in three of the four years. ETG has increased its budgeted and spending significantly in the "mandatory projects" and the "business support projects" categories. The ETG budgets and actual spending levels for 2005-2008 are shown below:



The approved capital budget for ETG for 2009 is about \$42.5 million.

In addition, for 2009 certain strategic initiatives were added to the ETG capital budget:

- Regional Greenhouse Gas Initiative The investments in the programs total \$14.7 million over two years.
- *Utility Infrastructure Plan* ETG estimated that the total incremental capital investment required to complete these projects would be \$60.4 million by March 31, 2011.
- *Moving inside meters* This project will be performed in conjunction with the greenhouse gas plan over 10 years or more.

Liberty concludes that ETG has received substantially increased and sufficient capital authorizations in its normal budget process, and that the capital budget is appropriately funded. The funding for the strategic initiatives will be accomplished through specific tariff riders requested by the Company.

## 6. The ETG performance against its budget is effectively tracked, measured, and reported.

The Company measures ETG's management performance primarily in monthly reviews of financial and operating performance for each of the three operating utilities in MAOPS, and for MAOPS in total (the Mid-Atlantic Operation Review). The business operations employees at ETG focus on two areas of analysis regarding performance to budgets. They perform variance analysis that determines performance to budget for each of the major operating expense categories. They analyze expenses by account and down to the journal entry level, if necessary to explain variances. The business operations group analyzes ETG operating expense variances every month, and sends the analysis to MAOPS for review and inclusion in their management reports.

The ETG business operations group also analyzes operating margins. The group analyzes revenues and expenses to determine detailed explanations for the margins and any variances. The focus of this analysis is on the drivers behind the margins, such as degree days, consumption per degree day and economic factors.

Liberty's review of the management reports and analysis at ETG and MAOPS lead us to conclude that the processes provide appropriate and useful management information at these levels. AGLR is currently restructuring the entire budgeting process to be more efficient; however, the management reporting at the ETG and MAOPS levels is not expected to change greatly.

## 7. ETG management spends virtually all of its time and energies on the ETG business, and effectively addresses regulatory and customer needs in its business planning.

ETG has its own management team and business office to support its planning and management reporting operations. The vice president and general manager for ETG is on-site and his focus and energies are devoted to ETG. The business operations group, which consists of three New Jersey-based employees, is dedicated to planning, budgeting, business analysis and reporting specifically for the ETG utility business. These and other ETG employees stay abreast of regulatory, business environment and customer needs and provide input to business plans and budgets consistent with meeting these needs. ETG management is focused on achieving

reasonable goals and objectives for the New Jersey LDC, and their focus is not diverted by other needs of the AGLR holding company.

## 8. The AGLR enterprise risk management program is developing an effective process for risk identification and mitigation both for ETG and company-wide.

AGLR has developed the ERM process significantly in the past two years. The Company has structured the process effectively to identify risks and the importance of their potential consequences. Standard & Poor's performed an evaluation of ERM for use in its ratings of AGLR and AGLR's securities. AGLR documented Standard & Poor's review and prepared a document of policies, infrastructure and methods. The Company plans to use this PIM document, including Standard & Poor's review, in the further development of the program. Standard & Poor's expressed favorable opinions of the Company's ERM policies, methods and structure. The ERM also received favorable reviews from the outside consultant hired by the audit committee of the Board of Directors. The consultant concluded that the AGLR process did an excellent job in creating the opportunity for the Company to develop a comprehensive list of financial and operational risks. The consultant's main focus was on the completeness of the risk list, as requested by a board audit committee member. The consultant also noted that some risks bear further investigation for their risk consequence score.

# 9. AGLR's 2008 ERM combined risk assessment needs to move to a more consistent and accurate company-wide identification of the most crucial risks to AGLR and its LDCs. (Recommendation #1)

The Company combined the 2008 risk assessment of all 12 AGLR business units identified as individual units for risk management. The 2008 evaluation first provided numerical rankings of the inherent likelihood of risks and the inherent consequence of risks to determine an unmitigated risk score. The Company then identified and evaluated the risk mitigation and then rated the residual risk likelihood and consequence, considering the mitigation to determine a residual risk score. This residual risk score identifies and ranks the most dangerous risks to the company as identified in this companywide process. AGLR has made very substantial progress in its program, but its newness reflects several issues one would expect to find at such an early stage.

Liberty's review of the combined risk assessment leads us to conclude that the ERM ratings are too inconsistent thus far to be of high value on a companywide basis. The ratings have been performed by individual business units, some of whom consider their own unit residual risks to be significantly higher than those of other areas. For instance, SOPS rated the residual risk of each of seven individual risks at the highest possible score of 25. A score of 25 would indicate that after Company risk mitigation efforts, both the residual risk likelihood and risk consequence remained at the very highest levels. Such a high score would indicate that the identified risks are not only very likely to occur and of grave consequence, but they remain so after all mitigation efforts by the company. The seven areas identified by SOPS as having maximum residual risks were:

- Increased business complexity
- Strategic alliances
- Strategic planning

- Traditional organic growth
- Lack of execution of strategies
- Inadequate training
- Fire and explosion with carbon monoxide event.

The inconsistency of the risk ratings is shown by comparing these with the residual risk scores in MAOPS for similar risks. The residual risk of strategic alliances was rated 25 by SOPS and only two by MAOPS. The residual risk of fire and explosion was rated 25 by SOPS and 12 by MAOPS. The risk scores need to be performed consistently on a companywide basis to provide more useful information for executive management.

Liberty also believes that certain other crucial AGLR-wide risks have been underestimated in the companywide risk assessment. An examples of crucial risks that are relatively underestimated are corporate finance risks such as "risk that the company does not manage its capital structure and provide adequate liquidity for the business," and the related "liquidity risk." The Company has correctly identified these crucial risks as both highly likely to occur and of potentially grave consequence if not mitigated. However, the Company rates its mitigation efforts in these areas as optimal, with major control over the risk. The Company's evaluation of its mitigation efforts reduces the residual risk score for these capital access and liquidity risks to only six (for each) of the maximum 25. This rating is especially low when compared to SOPS residual risk ratings of 25 for the less important risks identified above. Corporate liquidity and capital access are certainly of crucial importance and risk, even after mitigation efforts, as described extensively in Chapter V, Finance and Cash Management.

## 10. AGLR's tax allocation policies provide for ETG to pay its "stand-alone" share of consolidated federal income taxes, but do not reflect their regulatory treatment.

The AGLR tax allocation policies provide for ETG's federal tax liability to be calculated and paid as if the company were a stand-alone entity and not part of a consolidated tax return. The Company's tax allocation spreadsheets, quarterly tax provisions and actual payments and true-ups support this underlying principle. We conclude that ETG is charged and pays for its share of federal income taxes as calculated by an allocation method that is in accordance with SEC and IRS regulations. However, we emphasize that these tax allocations and payments are proper for tax and accounting purposes, but do not suggest the appropriate regulatory treatment of consolidated taxes. The NJBPU and other state commissions have made tax savings adjustments to the "stand alone" treatment in rate case proceedings.

ETG makes state and other tax filings and payments as a New Jersey-only business entity. The primary nonutility businesses of AGLR are SEM and SouthStar. Each of these businesses has been profitable and has generated positive tax liabilities and payments. As a result, income tax considerations, and specifically income tax losses, are not a major factor in the development of these businesses. The AGLR holding company derives a sizeable tax benefit from the deductibility of acquisition-related debt payments, but it is excluded from the tax allocation calculations.

#### **D.** Recommendations

1. Make the scoring of ERM risks more consistent on a companywide basis. (Conclusion #9)

The ERM processes and the use of company-wide risk information were recently developed at AGLR and have not yet reached a mature stage. The scoring of risks has not yet become fully consistent, particularly between the MAOPS and SOPS distribution utility business units. The scoring of risks should to be upgraded to provide more useful enterprise risk information to executive management and the Board of Directors. The consistency of risk scoring between the distribution operations and centralized functions, such as corporate finance, should also be improved.

#### V. Finance and Cash Management

#### A. Background

Financial management at a utility holding company needs to provide effectively for financial structure, policies, systems, funding and treasury operations in a manner that focuses adequately upon and fully supports the ability of utility subsidiaries to operate effectively in an energy marketplace that has become much more dynamic and volatile. Long-standing financial management roles for a gas distribution include accounting, raising capital, paying bills, and requesting rates for the operations of the system. Newer challenges include complex supply procurement, hedging and derivatives, trading operations and their complex accounting and collateral requirements, and the funding requirements for commodity resources.

The question of financial risk and the separation of the utility from the finances and risks of affiliates has been very important since the first major waves of utility diversification efforts, now more than two decades ago. Events in the utility industry underscore the importance of financial relationships among affiliates. The major credit rating agencies take the view that the conditions and commitments of all entities in a holding company structure influence the credit of all others. Development of their more robust methods for judging holding company credit has been a response to widely-known problems in the wholesale energy markets in recent years. Last year was a particularly volatile one; it brought the combined impact of dramatic spikes and declines in natural gas prices and a global credit crunch. The latter caused access to capital to nearly close entirely for periods of time. Such an environment proved extremely difficult for holding companies with energy trading and marketing operations affected by price swings and dependent on capital markets for access to liquidity. We have seen some of the financial effects of the energy market and credit market turmoil clearly; others have proved to be more subtle and difficult to detect.

Liberty examined and evaluated ETG, AGLR and its subsidiaries for the following potential financial interaction issues

- Maintenance of appropriate equity levels and capital structure at the utility entity
- Utility financing vehicles and assurances that no utility assets are encumbered by the holding company or affiliates
- The holding company's and affiliates' financial performance and business risk and their effect on the utility's credit rating and access to capital
- Cash management systems, procedures and forecasting for the utility and affiliates
- The separation of utility cash management from the holding company and affiliates
- Holding company financing and the provision of financial support that has impact on utility subsidiaries
- Dividend policies, money flows generated, and funding within the holding company
- The presence of troublesome clauses in financing agreements, such as material adverse change (MAC) clauses or cross-defaults in affiliate financing documents
- Joint bank lines of credit and funding sources for the holding company, utilities and unregulated affiliates
- The adequacy of liquidity for utility operations and threats to this status
- The cumulative impact of unregulated affiliates on utility credit and access to capital.

Potential methods to insulate ETG from affiliate risks and costs.

#### **B.** Findings

#### 1. Financial Policies and Credit Ratings

#### a. Business Growth Strategy

AGLR operates six regulated gas distribution companies in six different jurisdictions. Atlanta Gas Light (AGL) is by far the largest gas utility, comprising over one-half of the total revenues and assets of the utility group. ETG and Virginia Natural Gas are AGLR's next two largest LDCs. AGLR's LDC business strategy calls for a focus on stable and sustainable areas of growth. The most important areas of planned utility growth are the strategic replacement of pipe and gas mains. Most of the gas utilities have had stay-out provisions for rate cases; their durations run as long as five years. AGLR has plans to file at least four new rate cases in 2009 and 2010. The low levels of customer growth and declining usage per customer have significantly limited organic growth at the LDCs, which form AGLR's primary business line.

Continued low levels of projected growth in business and in earnings at the LDCs have provided significant impetus to the AGLR strategy of seeking to grow the non-utility businesses at a higher but controlled rate. AGLR executives emphasize that the business vision sees the nonutility businesses as a growth driver, but does not seek to grow them too rapidly. The Company sees growth in earnings of about 10 percent annually from these businesses as sustainable. A cap of about 30 percent of total AGLR earnings serves as the upper limit on planned contributions from non-utility businesses. This limit seeks to manage the holding company's risk profile, especially in the eyes of equity analysts and the credit rating agencies. Feedback from these key observers, the experience of AGLR, and that of other utility holding companies has produced the conclusion that financial community discomfort with the share of earnings contributed by nonutility businesses becomes a barrier above this 30 percent level. Sequent Energy Management (SEM) and the SouthStar retail subsidiary are AGLR's two principal non-utility businesses, but AGLR also has an energy investments line of business. The holding company expects to derive about 12 to 15 percent of consolidated earnings from SouthStar and another 10 to 12 percent from SEM. AGLR forms its financial plans around driving toward these general overall target levels over a long horizon.

SEM, an energy marketing and trading business, focuses on trading around hard assets, such as gas storage facilities. A significant portion of SEM's business comprises serving as the asset manager for all six AGLR utilities under contracts approved by the state regulatory agencies in each utility jurisdiction. SouthStar, owned by AGLR and Piedmont Natural Gas (another major LDC holding company), competes as a third-party provider of natural gas commodity to retail markets throughout the Southeast U.S. and Ohio, although the majority of its business is related to serving residential customers in the Georgia retail market. The energy investments business so far has concentrated on two natural gas storage projects, Jefferson Island Storage & Hub (a high-deliverability facility in Louisiana with about 7 Bcf of working gas capacity) and Golden Triangle Storage (an under-construction high-deliverability facility in Texas that planned for an eventual build-out of approximately 12 Bcf of working gas capacity). The Company continues to look at natural gas storage and regulated pipelines as a growth component of their business;

however, changes in the energy markets as well as in the availability of project financing has more recently caused the Company to significantly slow its pace of growth in these areas.

AGLR also has a focus on smaller-scope pipelines such as the Hampton Roads pipeline project in Virginia. These projects may be within a gas distribution company and be subject to state regulation, while others may be under the jurisdiction of the FERC. AGLR also operates AGL Networks, a lessor of telecommunication conduit and dark fiber to customers primarily in the Atlanta, Georgia and Phoenix, Arizona metropolitan areas. The next table shows (in millions of dollars) that the LDCs (Distribution) accounted for 71 percent of 2008 earnings before interest and taxes (EBIT). SouthStar (Retail) accounted for 12 percent and SEM (Wholesale) accounted for 13 percent.

#### **Contributions to Earnings (2008)**

Co arresport	Operating	Operating	Operating	EBIT
Segment	Revenues	Margin	Expenses	EBII
Distribution	\$1,768	\$818	\$493	\$329
Retail	\$987	\$149	\$73	\$57
Wholesale	\$170	\$122	\$62	\$60
Investments	\$55	\$50	\$31	\$19
Corporate	(\$180)	\$7	\$9	(\$1)
Consolidated	\$2,800	\$1,146	\$668	\$464

AGLR's strategic plans call for earnings per share growth in the range of 4 to 6 percent per year. Annual LDC customer growth of 1.5 to 2 percent may support one-half of this growth rate. The Company targets a total return for equity holders in the 8 to 10 percent range, with dividends producing between 3 and 5 percent and earnings growth the remainder. Growth levels above this range have occurred in some previous years, but AGLR earnings growth above 4 to 6 percent is probably not sustainable in the long term, especially in the current economic and financial market climate.

The two utility operating divisions (MAOP and SOP) into which AGLR has divided its LDCs (or Distribution Operations) set financial goals and plans over a shorter-term basis. ETG, Virginia Natural Gas, and Elkton Gas comprise what AGLR terms its Mid-Atlantic Operations (MAOP). The southern utilities (AGL, Chattanooga Gas, and Florida City Gas) comprise Southern Operations (SOP). MAOP and SOP prepare capital expenditures budgets that they must justify to AGLR management, rationalize, and allocate among the LDCs that make up each of the two divisions. The divisions also build up operating expenses from the bottom-up. EBIT serves as the primary financial goal for utility operations overall, and each operating division has an annual overall EBIT goal and specific EBIT goals for each LDC. These financial goals are part of the "10 metrics" that serve as the management performance measures.

AGLR notes its strategic risks to include carbon legislation and the impact of hurricanes on gas supply and price. The Company works primarily with the AGA and trade groups regarding the carbon issue. AGLR has been actively working for several years to secure access to more diversified gas supply sources to mitigate potential region-specific weather events.

AGLR does not employ a stand-alone group to conduct or to coordinate strategic planning. The Executive Vice President, Utility Operations has responsibility for developing and executing utility strategies. The Senior Vice President, Government and Regulatory Affairs has responsibility for regulatory strategy. Each non-utility business prepares its own strategy. These strategies tie together at the holding company level, under the overall direction of the CEO and CFO. The AGLR board of directors gets a "strategic outlook" presentation each year. The presentation summarizes strategic options and their effect on budgets and earnings forecasts.

#### b. Dividends

AGLR applies a policy for dividend payments to the holding company by each subsidiary. Each subsidiary pays annually a dividend of 70 percent of its net income, if annual net income is positive. AGLR notes that this policy conforms to the provision of the NJBPU order approving the acquisition of ETG requiring that, "AGLR shall establish a dividend policy regarding NUI utilities to dividend no more than 70 percent of its quarterly earnings to AGLR."

The next table lists (in thousands of dollars) the ETG net income and dividends paid by ETG to AGLR from 2005 through 2008. According to the Company, the dividends are usually paid in the quarter following the one that forms the basis of their calculation.

	2005	2006	2007	2008		
Net Income 1 <sup>st</sup> Qtr	\$15,594	\$14,011	\$6,887	\$16,140		
Net Income 2 <sup>nd</sup> Qtr	-	\$1002	\$9,532	-		
Net Income 3 <sup>rd</sup> Qtr	1	\$181	-	-		
Net Income 4 <sup>th</sup> Qtr	\$4756	\$3326	\$9,199	-		
Net Income Total	\$20,350	\$18,520	\$25,598	\$16,140		
Dividends 1 <sup>st</sup> Qtr	\$10,916	\$9807	\$4,087	\$11,298		
Dividends 2 <sup>nd</sup> Qtr	-	\$702	\$6,672	-		
Dividends 3 <sup>rd</sup> Qtr	1	\$127	-	-		
Dividends 4 <sup>th</sup> Qtr	\$3329	\$2328	\$6,440	-		
Dividends Total	\$14,245	\$12,964	\$17,919	\$11,298		

ETG Net Income and Dividends Paid 2005-2008

#### c. Rating Agency Credit Metrics and Reports

Credit ratings and capital structures comprise an especially important focus of financial policy setting and execution. AGLR's goal is to maintain for the holding company and individual utility subsidiaries ratings that are well above the minimum levels for this "investment-grade" designation. The Company recognizes, however, that pursuing a "AA" credit rating would require 60 percent equity in the capital structure, which is too expensive to be desirable. The AGLR utilities generally have a credit rating target of "A," and the holding company has a target of "BBB+." The Company recognizes that its non-utility businesses and the fact that AGLR has made several acquisitions of smaller utilities causes the holding company credit profile and rating to be weaker than that of its utility subsidiaries.

The holding company targets total debt at 50 to 60 percent of its total capitalization. The holding company tries not to exceed 60 percent debt, including short-term borrowings, except for peak periods of short-term borrowing needed to finance seasonal gas purchases. Variable-rate debt as a percentage of total serves as another important capitalization target. Variable-rate debt and short-term debt create interest-rate volatility risk, which requires that their use be appropriately tempered. The holding company's target range for variable rate debt is 10 to 40 percent, according to Company financial managers early in 2009. AGLR generally approaches the 40 percent maximum in November or December, as it finances seasonal natural gas purchases, for which revenues begin to arrive after the beginning of the following year.

Cash flow ratios form another key target for rating agencies. Funds flow from operations (FFO) as a percentage of total debt outstanding is an important ratio of this type. The holding company has a target FFO/debt ratio of 18 to 20 percent, and an FFO interest coverage target of more than 4 times, which AGLR believes will support the maintenance of current credit rating levels.

ETG's minimum level of 45 percent equity as a percentage of capitalization derives from the NJBPU merger order. Testimony in ETG's current rate case states that capital structures for peer-group gas companies have an average of 54 percent equity; ETG supported this level in its current rate case, and AGLR considers it appropriate for all of its LDCs.

Standard and Poor's and Fitch rating services both give an "A-" rating to the holding company. Standard and Poor's reported in February 2009 that:

AGL's emphasis on regulated utility operations is balanced against the growth of its unregulated operations, which require higher liquidity and strong risk management and make the consolidated company more sensitive to changes in commodity prices. Financial performance at the wholesale services business improved during 2008 due to higher inventory storage and transportation spreads, but this still remains susceptible to price and spread volatility.

Moody's rates the holding company at one notch below the other two rating agencies ("Baa1"), noting that:

... AGLR's LDC portfolio is estimated to be of single- A credit quality, based on the performance of AGLC and Pivotal which comprise the majority. AGLR has a good record in operating its LDCs efficiently and profitably. ... Pivotal Utility has somewhat weaker credit metrics than AGLC. Pivotal Utility is half the size of AGLC (in terms of total assets and debt) but generates about a third of the latter's funds flow from operations (FFO). Pivotal Utility's flagship division is Elizabethtown Gas, which represents over 70% of its rate base and customers. Under AGLR's ownership, Pivotal Utilities' profitability has improved from distressed levels. Its EBIT/interest is now in the high three times range, in line with AGLC's.

Moody's has also noted that AGLR may make additional acquisitions that could be financed with debt. These factors cause the credit profile of the holding company to be weaker than that of its utility subsidiaries and their strong credit metrics.

#### d. Recapitalization

AGLR updates ETG's capital structure semi-annually, through a regular process termed "recapitalization." These recapitalizations reset the utility capital structures per books to be in line with target capitalizations (54 percent equity currently). Authorization to perform recapitalizations at ETG came with the approval of financing transactions pursuant to the NJBPU order in docket No. GF04090904. In order to effect the recapitalizations, ETG first zeroes out short-term debt, which the last ETG rate case excluded, according to the Company. Recapitalization then occurs by moving cash, equity, and debt between ETG and Pivotal (ETG's direct, or first-level, holding company) through a short series of transactions. Transactions between Pivotal and the AGLR holding company then serve to recapitalize Pivotal.

The following table shows the ETG recapitalization as of June 30, 2008. ETG's pre-recapitalization structure consisted of about 58 percent equity, 41 percent long-term debt and less than 1 percent short-term debt. The target ETG capital structure at that time included 55 percent equity (more recently changed to 54 percent), 45 percent long-term debt and no short-term debt. The "Transactions" column shows the adjustments to capital accounts made to reach the ETG targets. Short-term debt reduction to zero came through a cash settlement with the money pool. Long-term debt increase by \$26.4 million came from adding to a note receivable between ETG and Pivotal. Finally, the ETG equity reduction to \$20.3 million resulted from declaring a dividend to Pivotal.

ETG Capital Structure Recapitalization at June 30, 2008

Component	Beginning Balance	Actual	Target	Transactions	New Balances	New Structure
Short-Term Debt	\$6,029,894	0.94%	0%	\$(6,029,894)	\$0	0%
Long-Term Debt	\$261,997,654	40.89%	45%	\$26,360,244	\$288,357,898	45%
Common Equity	\$372,767,782	58.17%	55%	\$(20,330,350)	\$352,437,431	55%
Debt and Equity	\$640,795,329	100%	100%		\$640,795,329	100%

AGLR has recapitalized ETG using this format every six months since December 2005. The target capital structure was 50 percent equity and 50 percent long-term debt until June 30, 2007, when it changed to changed to 55 percent equity. A December 2008 change took the equity component to its current 54 percent level. The next table shows ETG's capital structure (in thousands of dollars) as reported on its books following each recapitalization from December 2005 through December 2008.

**ETG Capital Structure following Recapitalizations** 

Component	Dec. '05	June '06	Dec. '06	June '07	Dec. '07	June '08	Dec. '08
Short-Term	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt	0%	0%	0%	0%	0%	0%	0%
Long-Term	\$256,324	\$215,157	\$241,345	\$295,862	\$299,996	\$288,358	\$310,960
Debt	50%	50%	50%	50%	45%	45%	46%
Common	\$256,324	\$215,157	\$241,345	\$295,862	\$366,662	\$352,437	\$365,040
Equity	50%	50%	50%	50%	55%	55%	54%
Total	\$512,649	\$430,318	\$482,690	\$591,724	\$666,657	\$640,795	\$676,001

#### 2. Debt Financing

#### a. Gas Facility Revenue Bonds

Gas facility revenue bonds issued by Pivotal through the New Jersey Economic Development Authority (NJEDA) form a major portion of ETG's outstanding long-term debt. Five issuances of the revenue bonds with a total of about \$200 million in outstanding principal existed at December 31, 2008. The next table shows these revenue bonds (in millions of dollars), their rates, and their maturity dates.

**Gas Facility Revenue Bonds** 

Issue Date	Amount	Rate	Maturity
July 1994	\$47	0.70%	October 2022
July 1994	\$20	1.10%	October 2024
June 1992	\$39	1.10%	June 2026
June 1992	\$55	0.85%	June 2032
July 1997	\$39	5.25%	November 2033
Total	\$200		

The interest rates on the first four issuances adjust daily or weekly; the rates shown in the table were current as of December 31, 2008. Short-term interest rates generally are lower than longer-term rates; they were extremely so in 2008. ETG has therefore recently benefited greatly from the use of floating rate financing vehicles. The holders of the bonds pay no tax on interest received; therefore, interest on these bonds is lower than would be the case if they were taxable.

Early 2008 credit-market problems caused failed auctions of a portion of the gas facility revenue bonds (as others found as well). A financial market auction held every day or week remarkets the bonds and resets interest rates. Credit downgrades to the bond insurers backing the revenue bonds made the bonds less attractive in difficult financial markets; they could not be remarketed on a daily or weekly basis. The Company repurchased the floating-rate bonds in March and April 2008. The total principal amount was \$161 million. Commercial paper borrowings funded the repurchased amount. In June and September 2008, new letter of credit agreements provided replacement backing and support for the repurchased bonds. The \$161 million in principal eventually was re-issued as variable rate gas facility bonds, with maturity dates the same as the original issuances. The three bond issuances with principal amounts of \$55 million, \$47 million and \$39 million now have interest rates that reset daily. The bond series with a principal amount of \$20 million has an interest rate that resets weekly. The fifth series of gas revenue bonds, issued in July 1997 with a principal amount of \$39 million, has a fixed interest rate of 5.25 percent. It was not affected by the refinancing efforts described above.

#### b. AGLCC Promissory Note

The other major portion of long-term debt for ETG comes in the form of a promissory note with a financing affiliate called AGL Capital Corp. (AGLCC). The holding company and subsidiaries use AGLCC as a central and common financing entity. AGLCC obtains longer-term funding by issuing long-term debt securities. It then allocates the funds to utility and non-utility subsidiaries, as needed, in the form of additions or adjustments to the principal amount of existing affiliate promissory notes. ETG has authorization from the NJBPU to use the AGLCC promissory notes

to meet its incremental long-term borrowing needs and to adjust its capital structure as necessary. The affiliate promissory note has a nominal maturity date of December 31, 2034. According to the Company, all of the LDCs, as well as non-utility affiliates, use promissory notes with AGLCC to provide all of their long-term debt financing requirements. The exceptions to this consolidated method of obtaining long-term financing are inexpensive legacy financing vehicles such as the NJEDA tax-exempt revenue bonds described above. AGLR guarantees AGLCC's financing instruments. The amount outstanding under the affiliate promissory note for ETG at December 31, 2008 was \$130.8 million. The interest rate charges for ETG on the affiliate promissory note are to be based on AGLCC's average financing costs, as described by the NJBPU in order GF04090904:

Petitioners indicate that the rate of interest on the intercompany notes between AGLR (or AGLCC, as applicable) and Utilities will be based on the weighted average cost of long-term debt currently outstanding for AGLR, excluding Atlanta Gas Light Company's outstanding medium-term notes. AGLR states that as a multi-jurisdictional entity it believes this approach is appropriate because it treats each utility subsidiary equally, and does not assign specific debt issuance(s) to one subsidiary versus another. Under this approach, AGLR asserts that all subsidiaries benefit when debt has been issued at advantageous rates and, similarly, pay somewhat higher rates when interest rates in the securities markets rise. This average rate will be reset quarterly.

The next table shows the actual interest rates on the promissory note paid since ETG's acquisition.

**AGLCC Rates Charged to ETG** 

Period	Rate
September - December 2005	6.26%
January- June 2006	6.26%
July - December 2006	6.26%
January- June 2007	6.28%
July- December 2007	6.31%
January- June 2008	6.25%
July- December 2008	6.25%
January - March 2009	5.92%

AGLR's use of AGLCC permits aggregation of the longer-term financing needs of all entities to build larger, and therefore more effective, debt issuances. AGLR observes that debt issuances of \$250 million allow for inclusion in the Lehman index, which attracts a greater number of institutional investors. The Company also notes that some debt investors view the diversity of companies financed through AGLCC as a positive factor.

#### 3. Money Pool and Cash Management

#### a. Money Pool Orders and Agreement

AGLR has centralized the operation of cash management functions. The Company has established a utility money pool and separate non-utility bank accounts, which it operates in parallel and under central management by the service company treasury group. Short-term funding for the utility and non-utility units comes from AGLCC, the financing subsidiary. AGLCC's issuance of commercial paper has generally constituted the exclusive means for securing short-term financing. AGLCC commercial paper holds a rating of A2/P2 (the second highest grading level). AGLCC backs its commercial paper by revolving lines of credit arranged with a consortium of banks to protect against the type of financial market contractions that occurred in 2008. The major revolving line of credit is for \$1.0 billion; a supplementary one-year line of credit of \$140 million was arranged in September 2008, but not renewed in September 2009. AGLR, unlike issuers with lower ratings, remained able to issue commercial paper nearly every day during the 2008 financial crisis. Nevertheless, it found continued access to that market to be uncertain and expensive. AGLCC, in response to the uncertainty, borrowed \$500 million on a one-time basis from its revolving line of credit to ensure funds on hand, should its access to the commercial paper markets close.

The NJBPU order approving the merger between NUI and AGLR authorized ETG to participate in AGLR's utility money pool. The merger order established some additional requirements for participation in the money pool as follows:

... AGLR agrees to establish a separate accounting of money pool activity for each division of NUI Utilities for funds disbursed by NUI Utilities to the AGLR utility money pool. AGLR further agrees that this will be accomplished by establishing separate divisions in the company's general accounting system. AGLR also agrees to establish a separate and distinct bank account solely for AGLR's utility money pool where utility money pool funds shall be deposited and withdrawn and from which loans will be made. AGLR agrees to provide a quarterly report of ETG money pool activity that will include loans to and from the pool, interest and fees charged to the pool. AGLR agrees to certify that all ETG money pool transactions are for terms of one year or less. The utility money pool will be subject to Board audit.

#### b. Daily Cash Operations

Liberty reviewed the Utility Money Pool Agreement and daily operations and documents of the cash management function for the holding company, ETG, and non-utility affiliates. A single service-company treasury manager conducts daily cash management operations for all AGLR units; however, several other treasury employees have been trained to perform cash management operations.

The "Wachovia Connection" program serves as the principal system for supporting cash management operations. Each active AGLR unit has at least one bank account, which requires the Wachovia program to consolidate 12 to 15 bank accounts. The utility money pool consists of several accounts that receive funds swept from utility receipts lock boxes. Each utility has at least one account. The utility money pool accounts consolidate into a single, zero-balance

account, which then feeds into the remainder of the Wachovia accounts system. Miscellaneous utility wires and automated clearing house accounts complement the separate cash-management system accounts for each of the six AGLR LDCs. The utility bank accounts are netted and transferred to the Wachovia concentration account.

The Wachovia concentration account accepts wires and transfers from the utility money pool account and from SEM lock boxes, SouthStar accounts and miscellaneous holding company accounts. Consolidating the utility money pool net account and the holding company and non-utility bank accounts into the Wachovia concentration account produces for AGLR a single net borrowing or investing requirement. All Wachovia accounts, including all regulated and non-regulated bank accounts, all overnight lock box deposits, automated clearing house transactions, wires and transfers are funneled from numerous bank accounts into the Wachovia concentration account for funding by the cash manager.

The cash manager generates a spreadsheet estimate of the net consolidated borrowing or investing requirement each day, for use in rate "shopping" from commercial paper dealers early each business morning. SunTrust, Bank of America, Morgan Stanley, and Wachovia comprise the group of commercial paper dealers from which AGLCC borrows. AGLCC places commercial paper in the required amounts under the optimum combination of lender bids (typically including more than one lender) each day.

Accounting provides the cash manager with requirements for the payment of large accounts-payable items, consolidated vouchers, and interest and debt principal payments. The cash manager then arranges for wire transfers to make such payments. The cash manager also makes daily arrangements for the incoming and outgoing wire transfers of SEM and SouthStar. A "daily balance worksheet" and an "intraday position report" for the consolidated Wachovia concentration account summarizes the estimated cash requirements and the commercial paper transactions arranged to meet them. The cash manager provides his daily spreadsheets and summaries of bank account activity to accounting personnel, who then perform the required accounting entries for each cash movement for each subsidiary company, including intercompany borrowing and lending.

Cash flow forecasts are prepared on a consolidated AGLR basis. The cash forecasts predict the month-end consolidated cash position. There are no individual cash forecasts at the business unit or subsidiary level. The AGLCC revolving line of credit and commercial paper that fund cash needs comprise consolidated facilities; therefore, the focus on cash funding is on a consolidated basis.

#### c. ETG Borrowing/Lending Levels

Intercompany receivables and payables carried over from month to month represent the money pool balances recorded as of the month-end. Each unit that either participates in the utility money pool or has a bank account in the Wachovia system has, as its cash position merits, a net investment or a net loan amount, both daily and at each month-end. Money pool operation produces intercompany loans on a continuous, daily basis. ETG and the other LDCs may therefore be borrowing from each other, or borrowing from or lending to non-utility businesses through the money pool. No provisions of the money pool agreements or financing orders

prohibit this practice. The existence of but a single funding source implicitly produces borrowing and lending among between all participants, both utility and non-utility.

The next table summarizes ETG's month-end net intercompany receivables or payable balances (in millions of dollars) from 2005 through October 2008. The Company reports that the balance is effectively ETG's borrowing or lending to the money pool as of month-end, and does not reflect an average balance. The Company settles other intercompany payables and receivables on a monthly basis. Intercompany interest is settled quarterly through the money pool by journal entry.

Month	Year			
Month	2005	2006	2007	2008
January	\$(43.489)	\$6.074	\$9.348	\$41.119
February	\$(5.672)	\$33.547	\$10.533	\$57.142
March	\$74.424	\$98.530	\$32.310	\$29.415
April	\$61.984	\$113.408	\$(83.881)	\$(57.478)
May	\$48.247	\$93.871	\$(275.543)	\$(83.676)
June	\$55.753	\$(4.812)	\$11.446	\$8.590
July	\$48.744	\$(7.674)	\$(5.487)	\$(2.351)
August	\$37.244	\$(12.298)	\$(10.942)	\$(9.915)
September	\$11.593	\$(29.982)	\$(32.254)	\$24.043
October	\$(4.550)	\$(41.083)	\$(38.500)	\$1.850
November	\$(96.838)	\$(40.743)	\$(45.707)	
December	\$(0.331)	\$0.00	\$25.983	

**ETG Net Intercompany Receivables/(Payables)** 

ETG had a \$20 million margin line of credit that supported its natural gas commodity transactions, prior to its termination in October 2008. That facility supplemented ETG's moneypool borrowing capability. ETG made significant use of that credit line during its existence. Average month-end balances were about \$9.7 million in 2006, \$10.3 million 2007 and \$9.7 million through September of 2008.

#### d. Money Pool Lending Rates and Interest Calculations

Section 1.05 of the money pool agreement defines the interest calculation:

The daily outstanding balance of all loans to any Party shall accrue interest as follows:

If only internal funds comprise the daily outstanding balance of all loans outstanding during a calendar month, the interest rate applicable to such daily balances shall be the rate for high-grade unsecured 30 day commercial paper of major corporations sold through dealers as quoted in the Wall Street Journal (the "Average Composite").

... The interest rate applicable to loans made by a Party to the utility money pool under Section 1.01 of this agreement shall be the Average Composite as determined pursuant to Section 1.05 (a) of this agreement.

The next table shows the Company's calculation of ETG interest expense and interest earned for calendar 2008.

#### Calculation of ETG Interest Expense and Interest Income for 2008

JANUARY		JULY		
Nov-07 Interco Rec & Pay (net)	(47,011,150)	May-08 Interco Rec & Pay (net)	(85,016,372)	
Dec-07 Interco Rec & Pay (net)	9,963,499	Jun-08 Interco Rec & Pay (net)	7,246,141	
Average Balance	(18,523,825)	Average Balance	(38,885,116)	
Interest Rate	4.889%	Interest Rate	2.888%	
Interest Expense (Income)	75,469	Interest Expense (Income)	93,584	
FEBRUARY		AUGUST		
Dec-07 Interco Rec & Pay (net)	9,963,499	Jun-08 Interco Rec & Pay (net)	7,246,141	
Jan-08 Interco Rec & Pay (net)	39,793,348	Jul-08 Interco Rec & Pay (net)	(3,698,118)	
Average Balance	24,878,424	Average Balance	1,774,012	
Interest Rate	3.549%	Interest Rate	2.460%	
Interest Expense (Income)	(73,578)	Interest Expense (Income)	(3,637)	
MARCH		SEPTEMBER		
Jan-08 Interco Rec & Pay (net)	39,793,348	Jul-08 Interco Rec & Pay (net)	(3,698,118)	
Feb-08 Interco Rec & Pay (net)	55,812,492	Aug-08 Interco Rec & Pay (net)	(11,264,395)	
Average Balance	47,802,920	Average Balance	(7,481,256)	
Interest Rate	3.312%	Interest Rate	3.175%	
Interest Expense (Income)	(131,936)	Interest Expense (Income)	19,794	
APRIL		OCTOBER		
APRIL		OCTOBER		
APRIL Feb-08 Interco Rec & Pay (net)	55,812,492 28,081,323	OCTOBER  Aug-08 Interco Rec & Pay (net)	(11,264,395)	
APRIL Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net)	55,812,492 28,081,323 41,946,908	OCTOBER  Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net)	(11,264,395) 22,557,999 5,646,802	
APRIL  Feb-08 Interco Rec & Pay (net)  Mar-08 Interco Rec & Pay (net)  Average Balance	55,812,492 28,081,323 41,946,908 3.028%	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance	(11,264,395) 22,557,999	
APRIL  Feb-08 Interco Rec & Pay (net)  Mar-08 Interco Rec & Pay (net)  Average Balance  Interest Rate	55,812,492 28,081,323 41,946,908 3.028%	OCTOBER  Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate	(11,264,395) 22,557,999 5,646,802 4.563%	
APRIL Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)	55,812,492 28,081,323 41,946,908 3.028%	OCTOBER  Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)	(11,264,395) 22,557,999 5,646,802 4.563%	
APRIL Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)	55,812,492 28,081,323 41,946,908 3.028% (105,846)	OCTOBER  Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)	(11,264,395) 22,557,999 5,646,802 4.563%	
APRIL Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER	(11,264,395) 22,557,999 5,646,802 4.563% (21,472)	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net)	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947)	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net)	(11,264,395) 22,557,999 5,646,802 4.563% (21,472) 22,557,999	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net)	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947) (15,366,812)	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net) Oct-08 Interco Rec & Pay (net)	(11,264,395) 22,557,999 5,646,802 4.563% (21,472) 22,557,999 387,347	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net) Average Balance	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947) (15,366,812) 2.841%	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net) Oct-08 Interco Rec & Pay (net) Average Balance	(11,264,395) 22,557,999 5,646,802 4.563% (21,472) 22,557,999 387,347 11,472,673	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net) Average Balance Interest Rate	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947) (15,366,812) 2.841%	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net) Oct-08 Interco Rec & Pay (net) Average Balance Interest Rate	(11,264,395) 22,557,999 5,646,802 4.563% (21,472) 22,557,999 387,347 11,472,673 4.047%	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947) (15,366,812) 2.841%	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net) Oct-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Rate Interest Expense (Income)	(11,264,395) 22,557,999 5,646,802 4.563% (21,472) 22,557,999 387,347 11,472,673 4.047%	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net) Apress Balance Interest Rate Interest Rate Interest Expense (Income)	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947) (15,366,812) 2.841% 36,381	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net) Oct-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Rate Interest Expense (Income)	(11,264,395) 22,557,999 5,646,802 4.563% (21,472) 22,557,999 387,347 11,472,673 4.047%	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Rate Interest Expense (Income)	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947) (15,366,812) 2.841% 36,381 (58,814,947)	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net) Oct-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Rate Interest Expense (Income)  DECEMBER	(11,264,395) 22,557,999 5,646,802 4.563% (21,472) 22,557,999 387,347 11,472,673 4.047% (38,692)	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate  Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  JUNE  Apr-08 Interco Rec & Pay (net)	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947) (15,366,812) 2.841% 36,381 (58,814,947) (85,016,372)	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net) Oct-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  DECEMBER  Oct-08 Interco Rec & Pay (net)	(11,264,395) 22,557,999 5,646,802 4,563% (21,472) 22,557,999 387,347 11,472,673 4,047% (38,692)	
APRIL  Feb-08 Interco Rec & Pay (net) Mar-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  MAY  Mar-08 Interco Rec & Pay (net) Apr-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Rate Interest Expense (Income)  JUNE  Apr-08 Interco Rec & Pay (net) May-08 Interco Rec & Pay (net)	55,812,492 28,081,323 41,946,908 3.028% (105,846) 28,081,323 (58,814,947) (15,366,812) 2.841% 36,381 (58,814,947) (85,016,372) (71,915,660)	Aug-08 Interco Rec & Pay (net) Sep-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Expense (Income)  NOVEMBER  Sep-08 Interco Rec & Pay (net) Oct-08 Interco Rec & Pay (net) Average Balance Interest Rate Interest Rate Interest Expense (Income)  DECEMBER  Oct-08 Interco Rec & Pay (net) Nov-08 Interco Rec & Pay (net)	(11,264,395) 22,557,999 5,646,802 4.563% (21,472) 22,557,999 387,347 11,472,673 4.047% (38,692) 387,347 (11,181,551)	

The general approach reflected in the table is to take the month-ending borrowing or investing position from "two months prior," and then to average it with the ending balance from the "previous month" to determine an "average balance." The interest rate is the average of the "composite" interest rate for AGLCC for each business day of the "current month," calculated separately. The average balance taken times the interest rate determines either the interest expense or income for the month. For example, February 2008 interest uses month-end net payables and receivables from December 2007 and January 2008. The average of the balances from these two months are averaged and then multiplied by the average composite interest rate for February 2008. The Company confirmed that this description is accurate.

#### 4. Pension Plans

Pension plans and the adequacy of their funding again became a highly publicized issue in 2008. The precipitous decline in US and international stock markets as well as in the value of fixed income instruments caused most pension plans to become underfunded. AGLR manages the NUI Master Trust as the key pension plan for legacy ETG employees. New ETG employees are included under the AGL pension plan.

As of the start of 2008, the NUI pension plan had a projected benefit obligation of about \$67.6 million, and an estimated fair value of assets of \$69.8 million, resulting in a funding status of about 103 percent. The projection for pension expenses for the ETG income statement was approximately \$2.93 million for 2008.

The decline in the stock and financial markets led to an update of pension asset status for the AGLR Board as of October 31, 2008. At this point, the market value of the NUI pension assets had declined from \$69.8 million to \$43.4 million. The Company's analysis for 2009 indicated that the NUI assets would be worth about \$46 million, resulting in a funding ratio of 68 percent. At this point, an \$8 million contribution would have been required for the plan to achieve 80 percent funding. Maintaining 80 percent funding is required to ensure that lump distributions can still take place as an option under the NUI pension plan, and that beneficiaries need not be specially notified. Following some legislative relief in the tax law and actuarial discount rates and some minor adjustments in the calculation, the requirement to fund the NUI plan up to the 80 percent level was reduced to about \$1 million as of an April 2009 updated estimate. The ETG pension expense for both 2008 and 2009 was expected to remain steady at about \$3 million per year.

#### C. Conclusions

1. AGLR has set reasonable financial policies and targets for the holding company and ETG, and has effectively managed to those targets; ETG dividends and equity levels have also been effectively managed to result in reasonable funding costs.

AGLR's long-term goal is to grow earnings per share in a range that averages 4 to 6 percent per year. Half of this growth may come from Distribution Operations (the core utility business of the LDCs) should they be able to achieve 1.5 to 2 percent annual customer growth rates. Overall growth levels above this range have been attained in some previous years; however, AGLR believes that these growth levels may not be sustainable in the long term, especially considering

the current economic and financial market climate. Liberty considers the utility earnings targets that result to be reasonable for ETG.

AGLR's dividend policy for each subsidiary calls for payment of 70 percent of net income, which is the maximum level allowed for ETG by the BPU. ETG has consistently been paying this level of earnings since 2005.

The AGLR utilities generally have a credit rating target of "A," and the holding company has a target of "BBB+." AGLR recognizes that its non-utility businesses and its acquisitions of smaller utilities causes the holding company credit profile and rating to be somewhat weaker than that of its utility subsidiaries. The "A" level target, and the cash flow ranges that are required to attain it, are appropriate for ETG to provide the foundation for reasonable funding costs.

Recapitalizations have been performed for ETG at June 30 and December 31 since the end of 2005 to reset the utility capital structures per books to be in line with target capitalizations, as is allowed by the ETG financing Order, causing a consistently fine-tuned capital structure to support the utility's operations.

## 2. Diversification at AGLR has been limited to levels that moderate the potential adverse impact of poor earnings results on ETG.

AGLR seeks to limit its diversified growth to keep earnings from non-utility businesses at about 30 percent of the holding company's total. The limit on non-regulated contributions to earnings is designed to manage the holding company's risk profile, especially in the eyes of equity analysts and the credit rating agencies. This diversification limit also has the related benefit of limiting the risk that the non-utility businesses pose to the ETG and on AGLR's other LDC operations. As a result, the risk of negative financial results of the unregulated businesses affecting the utilities is being adequately controlled. This earnings limit does not, however, mitigate the potential risk that non-utility businesses may place on the utility's financial market access and liquidity, as addressed in subsequent conclusions.

## 3. Effective steps to refinance the NJEDA gas revenue bonds have maintained a low-cost funding source.

ETG has historically benefited greatly from the use of this tax-exempt, floating rate financing vehicle. However, problems in the credit markets caused failed auctions of the revenue bonds, which threatened this inexpensive financing source in early 2008. Repurchasing \$161 million of the bonds and restructuring the credit support backing them allowed ETG to maintain the substantial benefits of the floating-rate instruments. As of December 31, 2008, the interest rate on the floating-rate bonds was around 1 percent.

4. AGLR has not properly segregated the cash management operations and funds of ETG from that of the non-regulated affiliates and the holding company. The consolidation and joint funding of the utility and non-regulated bank accounts results in intercompany loans among all participants. (Recommendation 1)

The NJBPU merger order authorized ETG to participate in a utility money pool at AGLR, but subject to a number of specific requirements. The order required separate bank accounts for the

utility money pool to be established, and it required separate accounting for money pool activities. The bank accounts were to be "where utility money pool funds shall be deposited and withdrawn and from which loans will be made." AGLR did establish separate utility money pool bank accounts; they consolidate into a single bank account for the utilities. The service company has the ability to account for the cash deposits into and borrowings from the money pool for each of the LDCs.

The establishment of separate accounts conforms to a narrow reading of the BPU order, but AGLR has missed what Liberty views as the core intent. The severe NUI financial problems that profoundly affected ETG five years ago provide the historical context for examining the goal of money pool separation. ETG's distress resulted not from utility problems, but from: (a) banking, cash management, and accounting systems that allowed co-mingling of funds among the utility and NUI's financially troubled non-utility entities, and (b) undocumented intercompany loans among affiliates. Liberty thus views precluding the co-mingling of funds and intercompany loans as an important objective. The cash management operations at AGLR do not take place under a structure and controls that provide ETG with appropriate cash segregation or that prevent loans involving non-utility affiliates.

The specific problem with the AGLR structure is that the bank accounts of the utility money pool and the bank accounts of SEM, SouthStar, the holding company and other non-utility businesses get consolidated into one bank concentration account. The Wachovia Bank concentration account funnels the bank accounts and cash requirements of all AGLR entities into one central account, in order to generate a single consolidated daily cash requirement. The AGLR cash manager may issue commercial paper to meet those daily requirements, or may invest funds with a single daily cash target and set of funding sources to meet this consolidated need. The consolidation of the holding company's cash needs in one concentration account was originally structured by AGLR to capture the operational efficiency of a single funding operation through a single cash manager and funding source (AGLCC commercial paper backed by a revolving line of credit). However, the AGLR financial managers acknowledge that the single bank concentration account allows the co-mingling of funds among utility and non-utility entities. Daily borrowing and lending by each money pool participant is determined by their net balances in relation to the consolidated money pools; therefore, loans routinely occur between utility and non-utility entities.

## 5. AGLR does not have in place a functional utility money pool agreement that follows the NJBPU merger order requirements for ETG. (Recommendation 2)

The Company provided a Utility Money Pool Agreement dated December 8, 2003 between AGLR and AGL Services Company. This date precedes the NUI acquisition. ETG is not a party to this agreement, nor is AGLCC, each of which should be. AGLR financial managers said that they could not locate a relevant agreement for ETG's money pool operations. Thus, there is no utility money pool agreement that meets the requirements of the BPU in accordance with the merger order.

Moreover, AGLR has not been strictly adhering to the terms of the money pool agreement that it provided. For example, Section 1.05 of the agreement provides that the daily outstanding balance

of all loans to any party shall accrue interest based on the daily outstanding balance times the applicable daily interest rate. The next conclusion discusses non-compliance with this section.

# 6. AGLR's calculation of ETG money pool interest does not use the appropriate daily loan or investment balance information, does not match loan balances to interest charges, and has, through calculation error, mischarged ETG. (Recommendation 3)

Section 1.05 of the Utility Money Pool Agreement requires that interest calculations apply the daily outstanding balance of all loans. This approach would conform to the purpose of such an agreement, because money pool balances change each day. However, AGLR does not calculate interest on a daily basis. AGLR instead takes the month-ending borrowing or investing position from two months prior, and then averages it with the ending balance from the previous month to determine an "average balance." A daily average interest rate for the current month is then applied to the average balance. For instance, interest for February 2008 is calculated with monthend net payables and receivables from December 2007 and January 2008, and interest rates from February 2008. The Company confirmed that this description is accurate, and agreed that the calculation is not performed as required. The described interest calculation does not account for the actual daily fluctuations in ETG's borrowing or investment balances. AGLR confirmed that each participant's daily net balance is calculated within the cash management system. However, the non-complying approach to interest calculation is followed for simplicity.

A second problem with the interest calculation is that using the month-end averages for the second month preceding and the preceding month would cause interest for any monthly period not to match actual borrowing or investing activity for that month. This failure to match the borrowing or investing activity with interest charges for the same period violates the matching principle of accounting.

A third problem with the ETG interest calculations is the existence of errors discovered in the calculation of interest charges for January and February 2008. The Company discovered this error in March 2009 when preparing a response to a Liberty data request regarding the interest calculations. The Company's recalculation of interest for these two months indicated that ETG had been overcharged by \$51,683. The Company's response stated: "Since the error is out of period and not material (January-February 2008), a journal entry has not been made."

The Company later re-calculated ETG's money pool interest for 2005 through 2008, using daily money pool balances in the interest calculation. This recalculation produced major differences between ETG money pool interest calculated using the Company's method (and reflected in ETG's audited financial statements) and the appropriate daily interest calculation. The next tables show the results of the Company's interest recalculation.

**ETG Money Pool Interest Re-calculation for 2008** 

Month	<b>ETG Interest</b>	Expense/(Income)
Month	Recorded	Recalculated
January	\$75,469	(132,422)
February	(73,578)	(174,659)
March	(131,936)	(186,365)
April	(105,846)	33,714

May	36,381	127,514
June	168,822	(21,882)
July	93,584	(17,525)
August	(3,637)	2,225
September	19,794	(73,393)
October	(21,472)	(72,706)
November	(38,692)	(1,581)
December	<u>12,791</u>	<u>8,812</u>
2008 Total	\$31,681	\$(508,268)

## **ETG Money Pool Interest Re-calculation for 2007**

Month	ETG Interest Expense/(Income)		
Month	Recorded	Recalculated	
January	\$ (9,244)	140,481	
February	(120,752)	135,228	
March	206,942	14,093	
April	(78,478)	27,562	
May	126,048	515,893	
June	812,162	1,582,160	
July	1,643,893	367,964	
August	(7,891)	500,276	
September	46,801	537,189	
October	104,332	597,845	
November	153,351	561,149	
December	188,208	<u>1,311,946</u>	
2007 Total	\$3,065,371	\$6,291,788	

## ETG Money Pool Interest Re-calculation for 2006

Month	ETG Interest E	Interest Expense/(Income)		
Month	Recorded	Recalculated		
January	\$587,678	\$297,139		
February	\$533,027	\$ 283,595		
March	475,551	301,035		
April	308,227	78,577		
May	149,320	71,764		
June	161,239	182,906		
July	220,434	212,986		
August	(3,574,063)	247,968		
September	59,698	265,229		
October	109,995	373,176		
November	174,562	386,004		
December	6,646,596	421,518		
2006 Total	\$ 5,852,266	\$3,121,897		

**ETG Money Pool Interest Re-calculation for 2005** 

Month	ETG Interest Expense/(Incom	
Month	Recorded	Recalculated
January	0	(50,367)
February	383,924	12,813
March	76,244	487
April	14,760	(29,812)
May	24,837	(47,554)
June	59,811	29,277
July	72,326	24,978
August	75,349	35,940
September	107,786	49,614
October	174,803	112,258
November	247,826	123,816
December	453,778	475,353
2005 Total	\$1,691,444	736,804

The Company's recalculation of money pool interest indicates that ETG was over-charged by \$539,948 in 2008, by \$2,730,370 in 2006, and by \$954,639 in 2005. The calculations also indicate that ETG was under-charged by \$3,226,417 in 2007. However, the Company's accounting push-down of merger goodwill and other items from Pivotal to ETG in 2007 caused ETG's money pool balances to increase by \$300-\$400 million for the months of May, June and December 15-31, 2007. Liberty estimates, based on the Company's cash re-calculation information, that about \$2.9 million in 2007 money pool interest expense was "pushed" from Pivotal to ETG in 2007 as a result. The Company has emphasized that "for regulatory and ratemaking reporting purposes, the impact of the goodwill push-down to interest expense and the equity balance is excluded." Liberty has not reviewed the ETG regulatory filings as part of this audit.

The review of the actual ETG interest booked and the Company money pool interest recalculations demonstrated significant error in calculating ETG money pool interest expense and income from 2005 through 2008. The recalculations indicate a net overcharge to ETG on the GAAP accounting books of \$998,540 in these years. The amount of overcharge to ETG could be considered to be \$2.9 million greater if one recognizes that interest charges related to goodwill accounting are not the responsibility of the ETG regulated utility, although they may be charged to ETG under GAAP and FASB accounting rules.

7. Using AGLCC commercial paper backed by a line of credit to provide short-term funds for ETG has produced a low-cost source of funding; however, combining utility and non-utility requirements, which is now benefitting non-utility operation disproportionately, is contrary to ETG's interests. (Recommendation 4)

AGLCC commercial paper funds the money pool, which provides operating funding for ETG. The commercial paper program's A-2 rating produces a low-cost source of funding for ETG. Commercial paper provides significantly lower interest costs than borrowing from bank lines of credit. AGLCC requires a line of credit (which it has in the amount of \$1 billion) to sell

commercial paper, because it provides back-up liquidity access during uncertain times, when the commercial paper market may not be available.

AGLR was concerned that it might not be able to sell commercial paper at times in the fall of 2008; it responded by having AGLCC draw \$500 million from the line of credit. These funds provided a cash reserve, should commercial paper not be saleable. As it turned out, AGLCC was able to sell commercial paper almost every day in 2008 and 2009.

All AGLR units, including ETG, pay the same average interest rate on money pool borrowings. The net interest rate includes the costs and fees of the commercial paper program and the fees for the line of credit. ETG paid a rate of 4.89 percent in January 2008. That rate dropped to below 3 percent in May through August and again in December. AGLCC's commercial paper rates dropped to below 1 percent in early 2009 and it was still issuing commercial paper at only 0.7 percent by the beginning of April 2009 (when Liberty observed the AGLR cash management operations).

All AGLR units, with the exception of AGLC, have borrowing needs too small to support standalone commercial paper programs. ETG and those other units would have to use significantly more expensive bank borrowing in the absence of a centralized commercial paper program. However, the LDCs together (*i.e.*, excluding the non-utility affiliates) would have the ability to participate effectively in a centralized program.

Recent financial-market turmoil has caused the availability of revolving lines of credit to diminish greatly. The market for lines of credit has become much more expensive and banks have become less willing to offer lines of credit with longer terms. AGLCC's \$1 billion line of credit that backs the commercial paper program has a five-year term (from August 31, 2006 to August 31, 2011). AGLCC negotiated the line of credit when pricing of interest rate spreads above market indexes (such as LIBOR or Eurodollar base rate indexes, for example) and facility and utilization fees was at historically low levels. The good fortune produced by that timing continues to bring advantage to ETG, along with all of AGLR's other borrowing units. The extreme changes in capital markets since the time of those negotiations have brought reduced availability and much higher pricing. Liberty asked AGLR to provide estimates of the thencurrent costs of lines of credit for AGLCC, ETG and other AGLR utilities, and for SEM. The following table compares the costs of the combined, \$1 billion, existing facility, versus what AGLR would have expected from the market (indicative pricing from banks) in April 2009 for disaggregated replacement facilities.

Existing vs. April 2009 Indicative Pricing for AGLCC Credit Facility Costs

<b>Facility</b>		Drawn Spread	Facility Fee	<b>Up-front Fee</b>
Existing	Facility	28 basis points	7 basis points	5 basis points
A	AGLCC (BBB+)	275-300 basis points	37-50 basis points	100 basis points
April 2009	ETG (A-)	250-300 basis points	25-50 basis points	37-62 basis points
Pricing	SEM (AGLR guarantee)	350-400 basis points	50-75 basis points	125-150 basis points
Fileling	SEM (no guarantee)	700 basis points		300 basis points

The table shows the huge increase in pricing, versus that prevailing when AGLCC negotiated the existing credit facility. The market information also indicates that an ETG/utility credit facility with a one-notch higher credit rating than AGLCC would be slightly less expensive in interest rates and fees. The April 2009 data also shows how expensive credit-facility financing would be for a non-utility entity such as SEM at that time, if available at all. The credit markets and credit facility pricing have improved marginally in ensuing months, but remain far more expensive than the existing credit facility.

Liberty concludes that the AGLCC short-term funding vehicles, including the commercial paper program and credit facility, should be kept in place until the scheduled termination date of the line of credit. The borrowing costs of these funding vehicles are much less than current market alternatives would require. ETG net costs would rise under either a stand-alone or an all-LDC line of credit. However, it remains clear that inclusion of the non-utility entities will impose significant costs when it does come time to negotiate a new arrangement. Moreover, while utility versus non-utility spreads were much lower before the turmoil that has spread financial havoc throughout world, it is equally clear that the combined facility has provided benefit to AGLR's non-utility borrowers. That benefit grew to extraordinary levels in the aftermath of that turmoil as of April 2009. We also conclude that a utility-only line of credit and commercial paper program would minimize borrowing costs for ETG and the other utilities in the future.

# 8. The use of a common revolving line of credit for AGLR's utilities and non-regulated affiliates does not adequately protect ETG's liquidity and access to funds. (Recommendation 4)

The AGLCC revolving credit facility has maximum of \$1 billion. This facility was supplemented by an additional \$140 million one-year credit facility in September 2008. The credit limits of these facilities mean that the AGLR companies may have commercial paper borrowings (backed by the credit facilities) and loans outstanding under the credit facilities that total no more than \$1.14 billion at any point in time. This credit capacity is available to any AGLR subsidiary through borrowing from the money pool vehicle or directly from AGLCC. The credit facility does not employ sub-limits, which serve the purpose of limiting the borrowing of individual companies to specified levels. Such sub-limits in a utility holding company structure are sometimes placed in effect to assure that a minimum level of credit availability always remains for serving utility needs. The AGLCC commercial paper program backed by the credit facility also fails to include borrowing sub-limits for individual subsidiaries. Consequently, there exist no legal or contractual limits to protect ETG's access to liquidity. In distressed conditions, ETG could find itself without economic access to necessary liquidity support due to high liquidity demands from other AGLR units.

AGLR financial management deals with the absence of such built-in protections by monitoring access to liquidity manually; management diligence thus becomes the means for assuring ETG's access to sources of liquidity. For example, management targets the maintenance of \$300 million of available credit capacity at all times, including during periods when the purchase of storage gas in advance of the heating season requires heavy borrowing by the LDCs. SEM also has very sizeable storage purchase requirements. This unit's storage purchase requirements would peak at about \$250 million when natural gas prices are at \$8 per MCF. SEM's borrowing requirements

can actually be substantially higher, as they were when gas prices spiked to \$13 per MCF during the summer of 2008.

The following table shows the total consolidated short-term borrowing (in millions of dollars) for all AGLR companies at month-end for 2007, 2008 and January and February 2009. The table indicates that peak borrowing levels, which occurred in November 2008, left AGLR with remaining borrowing capacity of about \$217 million, or 19 percent of its total consolidated capacity of \$1.14 billion.

**AGLR Consolidated Short-term Borrowings** 

Month	FY 2007	FY 2008	FY 2009
January	\$470	\$424	\$738
February	\$340	\$345	\$613
March	\$110	\$255	
April	\$68	\$281	
May	\$110	\$440	
June	\$261	\$512	
July	\$434	\$534	
August	\$499	\$697	
September	\$575	\$768	
October	\$617	\$810	
November	\$656	\$923	
December	\$579	\$865	

# 9. The trading operations of SEM cause AGLR and all of its subsidiaries to be subject to liquidity stress considerations and adequacy questions. (Recommendation 5)

Energy trading operations require large amounts of credit capacity and access to liquidity sources. Changes in market energy prices routinely trigger collateral calls from trading counterparties as the value of contractual commitments increases to threshold levels. Reductions in credit ratings can also trigger contractual collateral calls, especially if a contract participant falls below the investment grade level. These considerations require immediate access to liquidity sources to satisfy the cash collateral requirements that are standard in the energy trading business.

Credit rating agencies, especially Standard & Poor's, have become acutely aware and sensitive to the liquidity requirements of energy companies and trading operations. Standard & Poor's requires energy companies to provide quarterly liquidity surveys, or "stress tests" that measure the adequacy of liquidity for a company or holding company family. These surveys seek to determine whether a company has access to adequate liquidity in the case of "credit events" or "market events" that would cause liquidity calls due to contractual commitments. The Standard & Poor's survey includes extreme credit events that assume a decline in credit ratings to below investment grade level. For AGLCC, this stress test measures the impact of the loss of the three credit rating levels it would take to fall below investment grade. The assumption of the S&P survey in such a credit event is that the Company would be required to immediately produce cash for 60 days of its contractual accounts payable. The market-event stress test measures the

negative mark-to-market effects given a credit event plus a 15 percent market price increase or decrease in the first year and a 20 percent increase or decrease thereafter. These stress tests measure the cash requirements of these rather extreme events to measure liquidity adequacy.

Vast 2008 swings in the price of oil and natural gas caused large and unexpected liquidity requirements for energy companies and utilities, especially those with trading operations. Many market participants experienced great liquidity stress following natural gas's sudden price increase to over \$13 per MCF (followed by a subsequent, even steeper price decline).

The consolidated liquidity stress test for AGLR as of June 30, 2008 indicated a huge requirement for liquidity in the event of a credit event or market event. The total consolidated liquidity exposure in a credit event then was about \$1.7 billion for AGLR. The consolidated sources of primary liquidity were two: (a) cash, posted collateral, and credit facility availability of about \$1.13 billion, and (b) inventories (primarily SEM gas in storage) that could be liquidated for about \$440 million. This case would have left AGLR short by about \$145 million of adequate liquidity sources at June 30, 2008. The Company arranged an additional \$140 million credit facility three months later, in September 2008.

Declining prices for natural gas had reduced the consolidated liquidity exposure in a credit event to about \$958 million at December 31, 2008. Balanced against that exposure were primary available liquidity sources, including the new credit facility, of about \$915 million. Consequently, even though the stress test liquidity requirements had decreased along with natural gas prices, the cash requirements of seasonal gas purchases had caused available liquidity to be drawn down significantly as well. If natural gas prices had stayed at the high levels of June 30, 2008 while the AGLR gas utilities were making seasonal natural gas purchases in the fall, the resulting liquidity shortfall, as measured by an S&P stress test credit event, would have been at least \$500 million at 2008 year-end. This stress test calculation indicates that AGLR would not have sufficient liquidity to weather the combination of \$13 natural gas, SEM operations and the utility seasonal storage fill, and a credit event as defined by S&P.

The event-generated liquidity requirements measured in the stress tests are entirely due to SouthStar and SEM, the latter of which imposes the bulk of the liquidity requirement. The stress test assumes that AGLR would sell all of the SEM inventories in the case of a liquidity event; nevertheless, the estimated exposure of 60 days of SEM contractual accounts payable is a heavy burden. AGLR is effectively required by the Standard & Poor's stress test to arrange for adequate liquidity to prove that it can cover extreme credit and market events. The validity of the stress tests (*i.e.*, that they were not overly cautious) was proven in 2008 when liquidity adequacy was severely tested across the industry. For example, Constellation Energy experienced a market event that was compounded by a probable credit event, forcing the company to sell itself in a distressed situation. Liberty is also aware of other utility holding companies whose liquidity was severely stressed in 2008.

Liberty concludes that the SEM trading operations have the capability to use all of the available liquidity sources within the AGLR holding company under market or credit stress events. Such events could leave ETG and other utility subsidiaries without adequate liquidity to fund

operational requirements, which is unacceptable for a utility with service obligations. ETG should not be subjected to such liquidity risks by the AGLR unregulated businesses.

# 10. AGLR is not following the NJBPU order or AGLCC promissory note provisions in calculating long-term debt interest for ETG. (Recommendation 6)

Liberty observed a number of problems with AGLCC's long-term promissory notes with Pivotal/ETG.

First, the NUI acquisition financing order (GF04090904) specifies that the rate of interest on the promissory notes will be based on the weighted average cost of long-term debt for AGLR (or AGLCC), "excluding Atlanta Gas Light Company's outstanding medium-term notes." Liberty's review of the 2007 and 2008 calculations of interest on the promissory notes shows that the Company included the interest and principal of the AGL medium-term notes in the calculation. The Company also included the interest and principal on the NJEDA gas facility revenue bonds in the interest calculation. That factor has no relationship to the cost of AGLCC long-term debt. The Company calculated the cost of AGLCC long-term debt in 2008 at 6.25 percent. The rate would fall significantly, should only the AGLCC senior notes, as specified by the BPU order, be included.

Second, Liberty's review of the acquisition's financing order, the actual promissory note, and the Company's actual interest calculations and regular recapitalizations demonstrated that these documents and processes do not conform to each other, are not properly aligned, and have not been sufficiently checked. For instance, the promissory note does not mention AGLCC as a party to the agreement, although it is the actual entity providing the loan. Next, the financing order states that the recapitalization review will be performed quarterly. But Section 1.02 of the promissory note states that the principal amount should be adjusted annually in accordance with the authorized recapitalizations of the ETG capital structure. The Company's actual practice is to perform the recapitalizations every six months. The financing order, the promissory note, and AGLR's actual practice all use different intervals.

The calculation of promissory note interest in Section 1.01 states that the interest rate is to be recalculated on a quarterly basis; the Company actually performs the calculation every six months. Section 1.01 also does not conform to the merger financing order in specifically excluding the AGL medium-term notes from the interest calculation. Finally, section 1.05 of the promissory note provides for a default charge of 2 percent per annum to be charged in the event of a default. Since this agreement is between two affiliated parties controlled by the same treasury group, no such default penalties should be charged in an agreement of this type.

# 11. The use of AGLCC to provide all long-term debt financing has conflicting efficiency and credit rating effects, and does not maximize benefits to ETG. (Recommendation 7)

AGLCC provides long-term financing for AGLR's utility and non-utility units. SEM does not require long-term financing through AGLCC, and SouthStar's needs are extremely limited. Service company financial management seeks to optimize benefits to all of the holding company entities through using one large financing entity to issue debt securities. The concept behind this approach is that the economies of scale are substantial, especially for the smaller utilities that would have difficulty accessing capital markets with small debt issuances.

AGLCC had \$1.263 billion in senior notes outstanding at December 31, 2008. AGLCC also had about \$191.8 million in medium-term notes outstanding at that time. The weighted average cost of senior notes charged to ETG for 2008, as corrected, should be 6.11 percent. AGLCC issued the senior notes in series that ranged in size from \$125 million to \$300 million over the period from March 2001 through December 2007. Combining the needs of the AGLR utilities for long-term debt capital allowed AGLCC to offer larger senior note packages, which produces a wider range of interested institutional investors. ETG and other smaller AGLR utilities have benefited from the improved market access and somewhat lower rates provided by the holding company's use of these economies of scale through AGLCC financings.

Despite this advantage, AGLCC carries a debt rating lower than that of the parent and its utility subsidiaries. The credit rating for a stand-alone Pivotal or ETG would be A-; AGLCC is rated BBB+. Accordingly, the negative credit effect of combining utility and non-utility units in common financial packages amounts to one ratings notch. This difference recognizes that non-utility businesses carry more risk than that of AGLR's LDCs. The Company has advised that, over the long term, a one-notch difference in the long-term debt rating is expected to amount to 67 basis points, on average. Thus, the impact on utility credit costs from association with non-utility affiliates is about 0.67 percent on AGLCC's loans to ETG. The non-utility entities also obtain long-term financing at notably lower rates than they would on a stand-alone basis. "Riding on the coattails" of strong utility credit gives them the benefit of a cross-subsidy.

If one considers ETG on a stand-alone basis, it may be that lower interest rates due to economies of scale (by using AGLCC) over time override the negative effect on credit ratings under a financing facility with credit lower than that of ETG. These effects may well be considered a "wash" for the purposes of ETG's existing promissory note with AGLCC, which is for about \$130.8 million at the end of 2008. However, two factors make this comparison a problematic one. First, the use of common financing facilities incrementally exposes ETG to the risks of non-utility activities, which could have an impact on future access to capital markets or on interest rates depending on financial markets and the success of the diversified activities. Second, and more important, a combination of just AGLR's LDCs would substantially if not totally mitigate the economy-of-scale problem. It is logical to consider a sharing of entities with similar risk patterns (the LDCs) and the exclusion of affiliates with different patterns to be appropriate as a means for optimizing costs without imposing undue risks.

The effect of differences in credit strength between the AGLR utilities and non-utility units has been greatly magnified by the turmoil in global financial markets during the past year or two. Liberty asked the Company to determine the difference in interest rates between an AGLCC issuance and that of an AGL utility-only issuance. The Company estimated the spreads, as of April 2009, over comparable-term U.S. Treasuries for a 10-year institutional unsecured senior note to be as follows:

Issuance	AGLCC	AGL-Utility
\$250 million or greater	490 basis points	340 basis points
Less than \$250 million	600 basis points	360 basis points

The Company's analysis indicates that issuing incremental ten-year unsecured notes through a utility-only financing entity would have been less expensive than through the AGLCC entity by 150 to 240 basis points (1.50 to 2.40 percent in annual interest expense). This estimate was made with financial markets still in the throes of a credit crunch, but gradually improving from its most restricted period in the fall of 2008. Further improvement in credit markets has occurred in recent months.

The Company also points out that it would need the approval of six state regulatory commissions to set up a utility-only financing entity. Such an entity would benefit from the same economies of scale of AGLCC, and those positive effects would not be diluted through by a direct financing association with non-utility businesses and the holding company.

An even more dramatic effect of the financial market turmoil is that non-utility business activities would have extreme difficulty in raising capital at all in this environment. The Company acknowledged that it could not set up project financing for a gas storage project at any reasonable price. Project financing has served as the favored financing vehicle used by the AGLR for gas storage projects. The Company also acknowledges that any financing for non-utility businesses or projects would be have to be arranged at the AGLCC level, as stand-alone financing for unregulated businesses is simply not available in these restricted financial markets.

# 12. AGLCC financing documents are free of lien, collateral or cross-default exposures for ETG.

Liberty reviewed the underwriting agreements for long-term debt issuances of AGL Capital Corp. and the Pivotal loan agreements through NJEDA. Liberty also reviewed the credit agreements for the AGLCC \$1 billion credit facility and an additional \$140 million credit facility. Liberty did not find any restrictive or potentially harmful lien or collateral clauses in the agreements, nor did we find any material adverse change or cross-default clauses that are unduly dangerous to ETG. The AGLCC financings are guaranteed by AGLR, making more restrictive security provisions unnecessary to be attractive to debt investors.

# 13. The ETG pension plan will not require large capital contributions or increases in pension expense due to 2008 asset investment losses.

The ETG legacy pension plan suffered serious losses in its investment assets during 2008. The assets declined from \$69.8 million to \$43.4 million, or a decrease of almost 38 percent. However, the pension plan started the year with funding level of about 103 percent. The Company calculates that to achieve an 80 percent funding level, a contribution of only \$1 million would have to be made in 2009. The pension expense on the ETG income statement would remain the same at about \$3 million.

#### D. Recommendations

# 1. Establish separate bank concentration accounts for the utility money pool and all other cash management activities. (Conclusion 4)

The first step in segregating utility funds, cash management and intercompany lending from that of unregulated diversified activities is to set up separate bank concentration accounts for each. Setting up separate accounts would allow for the segregation of the funds so that they are not co-

mingled in the cash management system and so that intercompany loans would not be a byproduct of the current account consolidation in a central concentration account. These segregated accounts should be held separate and not merged for joint funding purposes.

The remainder of any solution to segregating the funds of the utilities from other activities is to arrange for separate funding sources, including separate credit facilities and commercial paper programs. This step is discussed in Recommendation 5.

2. Draft and execute a new Utility Money Pool Agreement that requires cash management segregation of bank accounts and funding sources. (Conclusion 5)

There currently exists no utility money pool agreement that includes ETG as a party, that follows the NJBPU merger financing Order, or that provides for separate bank concentration accounts and separate funding sources for the utility money pool. The Company should draft and execute a new Utility Money Pool Agreement that complies with the merger financing order and includes the cash management segregation and separate funding sources recommendations of this chapter.

The new Utility Money Pool Agreement, as well as a parallel non-utility money pool agreement, should also include borrowing sub-limits, as described in Recommendation 5.

3. Re-calculate ETG's money pool interest for 2005 - 2008 and to date in 2009. The ETG financial statements for 2008 and prior years should be re-examined by financial auditors to determine if restatements are required. (Conclusion 6)

Liberty found problems with the calculation of ETG money pool interest for the calendar years 2005-2008. AGLR has presented daily money pool balance and daily interest rate information, and recalculated the ETG money pool interest for 2005-2008. The Company's recalculation of money pool interest indicates that ETG was over-charged by \$539,948 in 2008, by \$2,730,370 in 2006 and by \$954,639 in 2005. The calculations also indicate that ETG was under-charged by \$3,226,417 in 2007, if ETG is charged for interest related to large goodwill accounting entries per GAAP accounting.

The Company's recalculations indicate a net overcharge of \$998,540 from 2005-2008. This amount could be substantially greater for regulatory accounting purposes. The money pool interest calculations should be re-verified independently to determine the correct ETG interest for each year. ETG should also report to the NJBPU on all related developments, especially if they affect ETG regulatory accounting, or in any event at least monthly until this issue is resolved.

AGLR should establish a proper ongoing format for calculating and assigning money pool interest in the future that uses daily money pool balances and daily borrowing rates to calculate money pool interest.

4. Replace the AGLCC commercial paper program and revolving credit facility with utility-only programs and separate non-utility business facilities after the termination of the current credit facility. (Conclusions 7 and 8)

AGLCC commercial paper funds the money pool, which provides operating funding for ETG. The commercial paper program's A-2 rating has produced a low cost source of funding for ETG and the other AGLR LDCs. AGLCC's commercial paper rates dropped to below 1 percent in early 2009.

The AGLR LDCs, with the exception of AGLC, have borrowing needs too small to support stand-alone commercial paper programs. ETG and all other AGLR units would have to use significantly more expensive bank borrowing in the absence of a centralized commercial paper program. However, the LDCs together (*i.e.*, excluding the non-utility affiliates) would have the ability to participate effectively in a centralized program.

In addition, AGLCC's \$1 billion line of credit that backs the commercial paper program was negotiated when the pricing of such facilities was at historically low levels. The good fortune produced by that timing also continues to bring advantage to ETG, along with all of AGLR's other borrowing units. The extreme changes in capital markets since the time of those negotiations have brought reduced availability and much higher estimated pricing of 3 to 4 percent in increased net borrowing costs. Liberty recommends that the AGLCC short-term funding vehicles, including the commercial paper program and credit facility, should be kept in place until the scheduled termination date of the line of credit in August 2011.

Liberty also recommends that separate utility and unregulated/holding company commercial paper programs and backing lines of credit be solicited and arranged for September 2011 and thereafter. It is clear that the inclusion of the non-utility entities would impose significant additional costs when it does come time to negotiate new credit facilities. Moreover, it is equally clear that the combined facility has provided benefit to AGLR's non-utility borrowers. That benefit has grown to extraordinary levels in the aftermath of the turmoil in the financial markets. We recommend that a utility-only line of credit and commercial paper program be established that would minimize borrowing costs for ETG and the other utilities in the future.

# 5. Add specific borrowing limits to the Utility Money Pool Agreement and to any non-utility money pool agreement that ensure constant access to borrowing capacity and liquidity for ETG and other AGLR utility subsidiaries. (Conclusion 9)

Liberty expressed the concern in Conclusion 9 that the SEM trading operations have the capability to use all of the available liquidity sources within the AGLR holding company under market or credit stress events. Such events could leave ETG and other utility subsidiaries without adequate liquidity to fund operational requirements, which is unacceptable for a utility with service obligations. Liberty believes that ETG should not be subjected to such liquidity risks by the AGLR unregulated businesses.

Liberty has also recommended in Recommendation 4 that the existing AGLCC commercial paper program and revolving line of credit remain in place until September 2011 to take advantage of the favorable pricing of these facilities, which may not be replicated in today's less favorable financial markets.

The current AGLCC commercial paper facility and revolving credit facility do not employ borrower sub-limits, which would serve the purpose of limiting the borrowing of individual companies to specified levels. Consequently, there exist no legal or contractual limits to protect ETG's access to liquidity. In distressed market conditions, ETG could find itself without economic access to necessary liquidity support due to high liquidity demands from other AGLR units.

Since Liberty recommends that the existing, favorably-priced commercial paper and revolving line of credit facilities remain in place, sub-limits should be placed in the money pool agreements, which are to be re-drafted. We recommend that the holding company and the non-regulated entities be limited to no more than \$400 million of the borrowing capacity of the commercial paper program and the revolving line of credit until separate LDC and non-utility credit facilities are established in September 2011. This sub-limit will protect the utilities' access to liquidity during this interim period, until the utility liquidity facilities can be separated from that of SEM and other unregulated operations.

# 6. Recalculate interest charges on the AGLCC promissory notes and request verification from financial auditors; draft and execute between AGLCC and ETG a new promissory note that conforms to the NJBPU financing order. (Conclusion 10)

Liberty requested that the Company recalculate the promissory note interest for the years 2005 through 2008, excluding the AGL medium-term notes and NJEDA revenue bonds as specified by the merger financing order. The Company provided recalculations of the promissory note interest for 2008 and 2007. These calculations indicate that the interest rate would drop from 6.25% to 6.12% in 2008, or a reduction in promissory note interest of \$171,422. For 2007, the ETG interest would decrease by \$84,994. We recommend that the Company recalculate all of the interest charges on the promissory notes since the ETG merger to be in compliance with the BPU financing order that governs this transaction. We also recommend that the Company inform its financial auditors of these mistakes and request that the auditors re-verify interest expenses for ETG, consistent with Recommendation #1 above.

The actual promissory note provided by the Company in response to LCD-589.1 should be redrafted to conform to the financing order, as well as to memorialize the actual procedures of the Company that have been found to be most effective in practice, such as recapitalizations that occur every six months.

# 7. Set up a financing entity that raises long-term capital for only AGLR utility subsidiaries. (Conclusion 11)

Long-term financing provided to ETG through AGLCC as currently structured is less beneficial than an all-LDC solution. The economics of scale gained by consolidating the long-term financing requirements of all AGLR entities are diminished by the lower credit standing of AGLCC. Liberty recommends that a utility financing entity be established by AGLR to maximize the financing benefits to the utility subsidiaries, while greatly reducing the negative credit effects and indirect cross-subsidization of unregulated businesses through AGLCC. Liberty estimates, based on the Company's analysis, that financing through a utility-only entity would offer the AGLR utilities interest rates that are 0.67 percent lower than AGLCC, based on historical information. This advantage would be much greater, at 1.50 percent to 2.40 percent, in more restricted financial markets such as those measured in April 2009.

## VI. Accounting and Property Records

### A. Background

Liberty reviewed the Company's accounting policies, procedures and practices to ensure the books and records are maintained properly in accordance with accounting standards and regulatory requirements. Liberty evaluated the major accounting systems and process flows; *i.e.*, payroll, billing, accounts payable and the work order process to ensure that the Company:

- Processes and records affiliate transactions adequately
- Supports the transactions with appropriate documentation.

Liberty reviewed and evaluated the settlements and payments among affiliates and with vendors to ensure consistent handling and processing. Liberty evaluated the internal controls that affect the reliability of the Company's records and financial reports.

### **B.** Findings

### 1. Accounting Systems Processes, Procedures and Reporting

### a. Accounting Systems, Applications and Processes

Liberty reviewed and evaluated AGLR's accounting systems and applications; accounting procedures; and reporting on the capture and recording of revenues, expenses and capital expenditures. AGLR uses the *PeopleSoft* application for accounting and reporting, and uses the Comshare MPC application for budgeting, tracking, and analysis. The Company uses the Vertex software for sales and use tax verification and return preparation. These three vendors are leading suppliers of applications in the areas in which AGLR makes use of them. The Company uses an integrated PeopleSoft general ledger system for generating all financial data used for the preparation of the Company's internal and external reporting. External reporting includes regulatory reports to state and Federal commissions, such as the NJBPU and the FERC. The major accounting applications and feeder systems included within the PeopleSoft system are the fixed asset, asset management, payroll, human resources, accounts payables, work order management (project costing), and supply chain (i.e., inventory and purchasing). AGLR's UNIX operating system provides the application platform supporting PeopleSoft; Oracle is the application data base. The Company uses two billing platforms: the Customer Information System (CIS) for retail customers and PeopleSoft for large volume commercial, industrial customers, and shippers. iNovah, another leader in its field, provides the remittance processing application; ETG uses iNovah as the cash receipts application for walk-in and collector payments. The Company receives and processes customer payments through the Remote Cash system. The remittance processing system receives the cash to be applied to CIS customers and interfaces with the CIS and PeopleSoft billing systems. The Company uses the PeopleSoft module Time and Labor for tracking and reporting time electronically.

### b. Accounting Close and Reporting Process

The Company uses the PeopleSoft nVision reporting tool for its internal and external reporting requirements. This tool allows AGLR to capture financial and statistical data to develop standard, periodic, and *ad hoc* reports as needed. Each affiliate has its own separate set of books, including a unique general ledger business unit number, unique department identifier, and

resource codes. AGLR has one chart of accounts to record transactions for all subsidiaries, which conforms to the FERC's Uniform System of Accounts (USOA).

Liberty reviewed the month-end closing and reporting process with the Company's accounting and finance personnel. The Company explained that the Accounting department distributes to stakeholders a month-end close schedule that includes a calendar of events for guiding the process. The month-end close schedule describes the events to be completed, and identifies the responsibilities, business owners and due dates. Periodic meetings and review sessions with managers of the applicable accounting and finance groups take place. These meetings seek to determine whether there are any material issues to be addressed and to keep everyone informed of the status of the month-end closing activities. The accounting close schedule includes dates for the quarterly earnings releases and analysts' calls, and expected dates for Security and Exchange Commission (SEC) quarterly and annual filings, such as the 10Q and 10K reports. The close schedule also includes steps to satisfy regulatory reporting requirements, which fall under the responsibility of the rates and regulatory departments, as well as accounting and finance groups. The Accounting Process Manual (APM) documents the accounting procedures for the allocation of costs. The APM forms an integral part of the accounting close process. Liberty discusses the APM in Chapter V (Cost Allocation Methods) of the Phase I report.

Liberty sought to determine whether AGLR applies any accounting procedures outside the monthly close process; *i.e.* quarterly or annual processes. The Company noted that most transactions are consistently recorded on a monthly basis, but there are exceptions. For example, income tax provisions, incentive compensation, asset impairment assessment, pension and postretirement true-ups generally undergo review and, if necessary, adjustment at quarter- or year-end, depending on materiality and necessity. In the case of pension true-ups, a pension adjustment or true-up would not occur until the Company receives the actuarial valuations. which is generally in the third quarter. The Company distributes the financial reports to its managers and officers for interim reviews of the financial information after completion of the month-end close process and production of the financial and statistical reports.

#### c. Inter-company Accounts Receivables and Payables

As described in other chapters of this report, the Company settles affiliate cash transactions through the inter-company accounts based on the Utility Money Pool Agreement. The Company explained that it reconciles and balances the inter-company accounts during the consolidation process, as part of the internal control process during the month-end close. AGSC's finance and accounting group produces intercompany control reports as part of the journal entry validation process to ensure proper accounting of the inter-company receivables and payables for each affiliate company. Liberty describes its testing of settlement transactions among affiliates and the service corporation as part of the affiliate transaction and settlement process in Chapter V of the Phase I report.

#### d. General Ledger System Interfaces

Liberty reviewed the various accounting systems and their interfaces to the PeopleSoft general ledger. The accompanying

System Interfaces to the PeopleSoft General Ledger

Accounts Payable Travel and Expenses
Accounts Receivable Inventory
Asset Management Project Costing

Remittance Processing
Revenue Journal (Billing)
Billing

table shows the major systems that interface directly to the Journal Generator before transactions are posted directly to the PeopleSoft general ledger. The remittance processing system includes the AGSC, affiliates and non-PS payment detail records.

Liberty determined that the systems do not have a direct interface with the PeopleSoft general ledger. These systems initially interface with the Journal Generator and then to the Journals module before transactions are posted directly to the general ledger. This approach is standard for the People Soft application. The Journal Generator and Journals modules contain the internal controls and validation checks for journalizing transactions to the general ledger before final posting. For example, transaction data received from the PeopleSoft systems, such as payroll and accounts payable, interface with Journal Generator and Journals modules. The transactions are validated and verified to ensure the transactions balance and the codes, which are used for such designations as business units, departments, resource codes, and general ledger accounts, are activated and valid within the account chart field and department trees before posting to the general ledger system.

### 2. System Processes and Functions

Liberty reviewed the process flows, procedures and associated internal controls for the following systems: accounts payable, payroll time and labor reporting, accounts receivable/billing (retail and wholesale), remittance processing, project costing (work order processing system, which included partially completed work order process).

### a. Accounts Payable and Settlements

Liberty evaluated the accounts payable business function and process flows, settlements and the related internal controls. Liberty paid particular attention to the Company's processing of accounts payable and receivable among affiliates to ensure the application of a consistent approach, particularly for transactions between utility and non-utility business units. Liberty evaluated the accounting procedures for invoicing of services between affiliates and the associated method of settlement (payment) in Chapter V (*Cost Allocation Methods*) of the Phase I report.

Liberty reviewed the accounts payable processing functions and associated payment disbursements with AGSC accounting personnel. Liberty also reviewed the internal controls for each function. Liberty noted that the documented process flows and procedures for accounts payable identifies the responsible party performing the procedure or step, and the application and systems used to complete a function or step. Validation and verification steps take place throughout the business function with written, documented internal controls for each major risk assessment assigned to the procedure. For example, Liberty reviewed the process steps from the origination of a purchase order for material or services, the approval and authorization of the order, processing the order, the acknowledgement and receipt of the goods or services (vendor invoice), the approval and authorization for payment of the invoice by employees based on the Schedule of Authorization, payment of the invoices, and the recording of the transaction to the general ledger of the business unit affected. Liberty completed a transaction test of an accounts payable transaction with AGSC accounting personnel and found it to be consistent with the supporting documentation. Liberty asked the Company what method it uses to remit funds to

vendors for invoices received. The Company responded that when appropriate, it uses wire transfers of funds for payments to vendors for goods and services provided.

Liberty reviewed sample invoices and associated payment and settlements documentation for payments made among utility and non-utility affiliates. Liberty reviewed and compared the trends in ETG's intercompany accounts payable balances for 2005 through 2008. Testing found no consistent trends, given the varying transactions occurring within the account across the years. For example, in 2007 the Company began a clean-up process for the old NUI Headquarters balance sheet accounts, reclassified or "pushed down" goodwill costs to the NUI business units, and recorded the semiannual and year-end recapitalization transactions. Liberty discusses the trends in intercompany receivables and payables for 2005 through 2008 in Chapter V, Finance and Cash Management.

Liberty's review of selected invoices and payments verified that settlements between affiliates and third parties were timely. Utility and non-utility subsidiaries have specific business units IDs, and are structurally separate to guard against cross subsidization. To further ensure adequate separation of utility and non-utility books and records, the IT group coordinates a review of user access to Sarbanes-Oxley (SOX) applications, and ensures that only active employees have appropriate levels of system access. In addition, an employee must complete a security request form requesting access to a specific business unit (utility or non-utility) to have access to and record transactions to the business unit. The form is forwarded to the IT security analyst who then contacts the Manager of Financial Accounting to ensure the access request is appropriate.

#### b. Accounts Receivable and Billing Systems

Liberty reviewed and evaluated the customer billing systems and processes the Company uses for its retail and wholesale customers, along with the recording of accounts receivables/revenues and customer payments. AGLR has two billing platforms, the Customer Information System (CIS), which provides billing services to its retail customers on behalf of the regulated utilities, and the PeopleSoft billing system, which provides billing services for large volume commercial (except for ETG) and industrial customers and shippers whose volumes are captured in the Gas Operating System (GOS). GOS passes the volume data to the Interface Calculation Module (ICM) system, which stores the rate information. A revenue interface is produced based on the volumes from GOS and the rates in ICM and passed to PeopleSoft for production of the monthly bills. PeopleSoft also provides billing services to customers on behalf of the non-regulated companies. The remittance processing application for walk-in and collector payments is from iNovah. CIS, GOS, and ICM are internally developed billing systems. The Company also receives and processes customer payments through the Remote Cash system. The CIS system bills retail customers through twenty-one billing cycles; the billing of CIS customers is current with no advance billings. The billing manager reviews and approves billing adjustments to customer accounts based on the Company's Schedule of Authorization. If the billing adjustments exceed the billing manager's level of approval, higher management levels are required to approve the billing adjustments. GOS customers are the large industrial customers that are billed at the end of the calendar month and are billed in arrears. The Metretek system is used to capture meter readings and customer usage generally for the customers billed through PeopleSoft.

### c. Billing Systems Interface with the General Ledger and Cash Receipts

There is a direct billing journal feed every month from the CIS and ICM systems to the revenue interface module. Once the accounting system processes the billing data through the revenue journal interface, the revenue journals are posted to the general ledger. Liberty reviewed internal controls associated with this step with the Company, and found them to be adequate. For example, the accounting personnel receive metered and usage counts along with the billing journals. The accounting personnel perform a monthly reconciliation of the metered and usage counts to the associated billed revenues, by cycle and calendar month. This reconciliation process reviews the monthly billing activity for reasonableness due to seasonality and weather trends. The Company explained that if there are any issues identified due to incorrect usage, rates or loss of billing data, the Company can make adjusting journal entries to properly reflect the current month's revenues.

Liberty also reviewed the unbilled revenue process with Company personnel. The Company performs validation and internal control review of the weather analysis, billed sales versus measured sendout, and unbilled calculation before month-end close. There is another review of the billed, unbilled and earned revenue, which is completed after the final month-end close process. The Company completes this process review during the accounting personnel's monthly margin analysis. Liberty found the process and associated internal controls to be sufficient in identifying unbilled revenues. For accounting purposes, these unbilled revenues are recognized and recorded as revenues in the current period.

The Company receives and processes customer payments through the Remote Cash Detail record system. The remittance processing system receives the cash to be applied to CIS customers and interfaces with the CIS and PeopleSoft billing systems. At this point, cash is applied to the customer's accounts receivable balances within the CIS and PeopleSoft billing systems. Liberty reviewed the written internal controls and risk validation checks throughout the cash receipts and cash application process and found them to be adequate. Liberty found the term "Remote Cash" to be misleading, because it suggests that the cash is located away from AGSC's offices in Atlanta, GA. The Company explained that the remittance processing system is not located remotely from other PeopleSoft systems. At one time the cash processing system was remotely located, but the process name was not changed.

The Customer Services cost pools capture the costs of the billing services. The Financial Services and IT cost pools capture Information Technology (IT) support systems costs; the Company allocates these costs to ETG and other affiliates based on the specific company costs drivers, as described in Chapter V (*Cost Allocation Methods*) in the Phase I report. For example, each business unit (utility or non-utility) has its own unique identifier and receives direct charges and cost allocations based on the cost drivers specific to the transaction type; *e.g.*, the number of end user billing customers is used to allocate Customer Services cost.

#### d. Payroll Processing

Liberty reviewed the time reporting, accounting and cost allocation methodology extensively for the Company's payroll function in Chapter V (*Cost Allocation Methods*) of Liberty's Phase I report. Liberty performed test transactions and addressed the allocation of shared and transferred employees with Company personnel. The Company provided and Liberty reviewed examples of

how the Company accounts for its shared and transferred employee costs; the Company noted that the sharing and transfer of employees does not occur frequently. The Company's demonstration and documentation of shared and transferred employee payroll costs illustrates the controls in place to guard against cross subsidization by a utility of a non-utility business unit. Liberty found that there is communication between departments or business units for the sharing or transfer of employees. The Company provided support documentation for the communication activities in the form of internal emails, telephone conversation and meeting notes. The Company requires department manager approval as part of the control function before payroll costs are charged to the affected business units and departments. The Company accumulates payroll costs using an O&M project ID, and then creates a journal entry to manually record the costs to the proper business unit and department.

Liberty reviewed the written payroll function and process flow documentation and found the documentation structured, organized, and easy to follow. Liberty reviewed and evaluated the internal controls and risk assessments included for each major step of the process flow, and found them to be adequate. IT costs for the payroll system and IT support are recorded in the financial services and IT cost pools. The Company allocates the costs to ETG and other affiliates based on specific drivers, such as full time employees (FTE) for costs directly attributable to business units and the composite rates for general and common costs (*i.e.*, shared services) related to the payroll processing system).

#### e. Fixed Asset, Project Costing and Property Accounting Processes

Liberty reviewed and evaluated the Company's fixed asset and project costing (work order) process to ensure plant asset activities such as additions, removals, transfers and changes are properly recorded and reported on the books of the utilities. In addition, Liberty reviewed and evaluated the internal controls to ensure compliance with the Company's practices and procedures and proper charging to utility and non-utility assets. Liberty discusses the accounting for asset transfers and transfer pricing in Chapter V (*Cost Allocation Methods*) of the Phase I report.

The Company provided the accounting policies and procedures that addressed the construction work in progress (CWIP) for the utility plant assets and continuing property records. The Company's documents outline the processes to be followed by employees from the initial request of a project through closure of the project and transferring the costs from CWIP to Plant in Service (PIS). For example, business owners, usually engineers, review a proposed project. The Company prepares an authorization form for the proposed expenditures (AFE) to facilitate project analysis, design, and approval. Project tracking is accomplished by entering the information from the AFE into the PeopleSoft Project Costing system to aid in tracking the project throughout its life. The Company assigns a unique project ID is assigned to record expenditures for the specific asset, and tracks its expenditures through the CWIP phase. The Company refers to the procedures just described are the initial steps as the "Life Cycle Asset Management" process. This is a guide for employees to follow in setting up and managing the project until it is recorded to plant in service. Liberty found the document to be adequate as a general guide to help employees understand the steps of the work order process.

The Company procedures also define what constitutes a capital expenditure and provide the criteria for a capital expenditure. For example, capital expenditures for pipeline and network infrastructure assets require the expenditures to have a useful life of more than one year and non-pipeline infrastructure assets must meet the \$1,000 or more expenditure criteria in addition to the useful life of more than one year. Examples of the type of expenditures charged to capital projects are also included, such as direct labor, direct materials, contract labor, *etc*. These activities must be associated with the project. Once the project is complete, the business owner enters the completion report in the Project Costing module, moving all the assets and costs into the Asset Management module. The Asset Management module contains assets that are in service and can be depreciated, transferred and eventually retired and removed from service. The Project Costing and Asset Management modules are part of the PeopleSoft application.

Although there are detailed and documented CWIP procedures, the Company confirmed that there is no formal procedure or set of forms used to request a work order, receive approval, and provide the forms from engineering to accounting to be entered into the system. The Company provided an example of how it created a project to capture activities in response to a gas outage in Virginia when it was determined that additional resources from an affiliate company would be needed to assist Virginia Natural Gas. The Company provided a series of internal emails and meeting minutes that documented the need for a work order, assignment and setting up the work order to capture time and materials, approvals for time reporting and the work to be charged to the work order. Liberty understands this was an emergency situation; however, formal procedures and forms must be used and documented to comply with internal control procedures.

During one of Liberty's onsite interview sessions, the Company reviewed an example of an IT work order processed through the project costing module. The project reviewed was for the inhouse development of the CIS billing system for the former NUI utility companies: Elizabethtown Gas Company (ETG), Florida City Gas (FCG), and Elkton Gas Services (ELK). The Company explained how it captured the capital expenditures over a period of time and transferred the completed project costs from CWIP to the utility business units' PIS accounts. Subsequent to the onsite visit and per Liberty's request, the Company provided additional details of the CIS implementation and its CWIP process for the project. The Company used a function in PeopleSoft called Express Add to accumulate IT costs and close out the project to PIS when it is completed. When this method of project accumulation, completion and transfer is used, the transfer of CWIP assets to PIS bypasses the normal asset completion process. This method requires manual journal entries to reclassify automated CWIP and PIS transfer journal entries between AGSC and the books of the business units. Liberty notes that the end result is the same under the normal work order closing process and when Express Add is used. The PeopleSoft Express Add function is able to automatically and efficiently move large amounts of work order data to the business units PIS accounts.

Liberty received and reviewed work papers provided by the Company that supported the accounting, allocation and transfer of the AGLR and AGSC's CWIP costs to the affected utilities for the CIS billing system. Liberty reviewed the Company's capital expenditures schedule, the journal entry detail report, CIS project journal entries support schedule and the allocation method used to transfer costs from AGLR and AGSC's books to the utilities. Liberty's review of the documents revealed the project was managed by AGSC. Upon completion of the project, the

AGSC transferred CWIP non-utility assets to the PIS accounts of ETG, FCG and ELK, which are utility companies. Liberty found the Company's accounting procedures to record the asset transfer from CWIP non-utility business units to PIS utility business to be adequate. Although the accounting methods were adequate, Liberty found no evidence of the utility business units' approval of the CIS project, the methodology used to allocate the project asset costs, or whether the transaction was priced at cost, market or the lower of cost or market.

The transaction reflects a transfer of assets from non-utility to utility business units; therefore, the transfer price should be at the lower of cost or market; *i.e.*, net book value. Based on the information the Company provided, Liberty was not able to ascertain if the asset transfers were made at the lower of cost or market price. The total CIS project expenditures and assets transferred from AGLR and AGSC to the utilities was \$6,219,388 as the table shows.

The Company noted that the asset costs on AGLR's books occurred after the acquisition of the former NUI companies. The Company also stated that the asset costs were not transferred to the utilities from AGLR's books until AGLR determined in which

Company	CIS Costs
AGLR	\$2,247,166
AGSC	\$3,972,222
Total	\$6,219,388

company books the costs should reside and how to determine the basis for the allocation of costs to the affected companies. The asset costs remained on the AGLR's books as Liberty confirmed from the review of the capital expenditures report that the charges recorded on AGLR's books started in September 2005 and continued through June 2006. AGSC started recording the project costs on their books in June 2006 and continued through the project's completion in April 2007. The actual CWIP transfers from AGLR and AGSC to the utilities PIS accounts were not recorded to the utilities books until July 2007. The non-utility and utility intercompany money pool accounts were affected based on the Company's funds settlement process for asset transfers.

The accompanying table shows the total amount of the \$6,219,388 CIS Project asset costs

allocated to the utilities. The method of allocation was based on estimated end user customer counts provided by the Information Services and Technology group.

	ETG	FCG	ELK	Total
\$ allocated	\$4,621,627	\$1,594,651	\$3,110	\$6,219,388
% allocated	74.31%	25.64%	0.05%	100%

Liberty calculated and tested the end user customer percentages based on the end user customer counts provided by the Company for 2007 and 2008. The 2007 and 2008 end user customer counts did not significantly change from year to year. Liberty used the 2008 counts for the factor

calculation, as it is the most current data. The next table shows the impact to the three utility companies when the 2008 percentages are used to allocate

	ETG	FCG	ELK	Total
\$ allocated	\$ 4,442,641	\$1,678,009	\$ 98,738	\$ 6,219,388
Updated %	71.43%	26.98%	1.59%	100%

the CIS asset costs. As a result, ETG's share of the asset costs would be \$4,442,641, approximately \$179,000 or 4 percent lower than AGSC's calculation and allocation of \$4,621,627. The costs for FCG and ELK increased ratably.

#### f. Partially Completed Work Orders

Liberty reviewed the processing of partially completed work orders. AGSC's plant accounting personnel indicated that they follow the same procedures as those for closing a fully completed work order, but use additional input from the engineers or project coordinators in the identifying asset costs for those portions of the work that are partially completed and already providing service to the customers. Based on review of the work order expenditures, a project coordinator determines which capital expenditures within the work orders are providing service to the customers and need to be transferred from CWIP to PIS. The system then generates a completion notification notice from the project coordinator to the Plant Accounting personnel.

In order to assure timely change of accounting for completed and partially completed projects, the Company reviews the CWIP Aging Report on a monthly basis. As described above, the project coordinators are responsible for reviewing and monitoring the project status for fully completed or partially completed work orders. After determining that the criteria for a fully or partially completed work order are met, they enter a Completion Report in the PeopleSoft Project Costing system to place the full or partially completed project assets in service. Once the assets are providing service, the costs are transferred from project costing to the asset management system. As an internal control feature, the project coordinators do not have the system capability to make changes such as moving the assets back and forth between PIS and CWIP. Of course, if the assets are transferred in error, the project coordinator contacts the Plant Accounting personnel to take corrective action.

The Company provided copies of the CWIP Aging reports for the periods 2005 through 2008, by quarter. Liberty found the reports to be useful in monitoring the project's activities, determining the age of the project, and determining whether the projects should have been closed to PIS, remain open. The CWIP reports include a summary of open CWIP projects by business unit, project ID, owner/manager, and expenditures aged by number of days outstanding and categorized as current (less than 3 months), three to six months, six to twelve months, etc.

For the year-end 2008, total Company CWIP was \$282 million, with 92 percent in the current aged category (less than 3 months) 4 percent in the 3-to-6 months aged category, and the remainder in the greater-than-6-months category, which extends past the current year. ETG's CWIP aging was slightly better: \$12 million, with 94 percent in the current aged category (less than 3 months), 5 percent in the 3 to 6 months aged category, and the remainder in the 6 to 12 months category.

### g. Asset Impairment: Goodwill

In 2004, AGLR purchased the NUI Corporation (NUI) for \$825 million. The amount represents the fair value of the assets acquired, the liabilities assumed and the associated cost of goodwill. The NUI purchase resulted in \$231 million of goodwill costs as of year ending December 31, 2005.

AGLR originally recorded the goodwill costs resulting from the NUI acquisition on the Pivotal Utility Holding, Inc. (PUHI) books. PUHI is the holding company for the former NUI LDC businesses. In addition to ETG, ELK and FCG, there are other utility companies which make up the Company's Distribution Operations (DOPS) reporting segment. The DOPS reporting

segment qualifies as a reporting unit for the purpose of goodwill "push down" accounting based on the Financial Accounting Standards Boards rules and regulations. Push down accounting is an accounting treatment that allows a company to record the goodwill costs to a business unit's books where the associated assets and assumed liabilities have been recorded as a result of a merger, such as the NUI merger.

In April, 2007, the Company "pushed down" the goodwill costs from NUI Headquarters to the NUI business units (ETG, ELK, and FCG). In addition, PUHI, Inc. received goodwill costs

primarily related to the impairment of the Plaza building lease with the remainder residing at NUI Headquarters. The accompanying table shows the amount of goodwill costs "pushed down" to the NUI business units and PUHI. Goodwill was subsequently adjusted to \$227,493,449 to primarily reflect tax refunds received for periods prior to the acquisition.

<b>Business Unit</b>	<b>Goodwill Costs</b>
Elizabethtown Gas Company	\$127,387,835.20
Florida Gas Company	\$ 26,633,077.35
Elkton Gas company	\$ 2,533,009.05
PUHI, Inc.	\$ 20,745,750.01
Total Pushed Down	\$177,299,671.61
Remainder at NUI	\$ 53,662,480.70
Total Goodwill	\$230,962,152.31

Liberty asked whether the Company relied on internal or external auditor's advice or guidance

for the accounting of goodwill and the annual review of the goodwill impairment test. The Company provided the following response.

Internal Audit's and AGL Resources' independent registered public accounting firm, PricewaterhouseCoopers LLP (PWC), scope and procedures performed with respect to goodwill recorded in the books and records of Elizabethtown Gas, Florida City Gas, Elkton Gas Company and any other affiliate related to the NUI merger for the years 2005through 2009 is as follows:

Internal Audit tests to verify management has performed its annual impairment assessment of goodwill in connection with management's assessment of the company's financial reporting internal control.

PWC tests to verify management has performed its annual impairment assessment of goodwill in connection with PWC's opinion on AGL Resources' financial reporting internal controls.

PWC also performs testing to ensure that consolidated goodwill is fairly stated in accordance with GAAP, including management's conclusion around goodwill not being impaired.

The Company stated and provided support documentation that the annual assessment of ETG's goodwill did not result in impairment or write-down of ETG's goodwill costs.

### 3. Internal Controls and Auditing

#### a. Internal Controls

Liberty reviewed the internal controls specific to recording plant accounting transactions, which include CWIP, PIS, depreciation, removal and retirement of assets. To ensure plant assets are

recorded to the proper utility or utility plant account, the plant accounting group performs a monthly review of plant transactions as part of its month- and quarter-end reviews. As mentioned earlier, each business unit has a unique identifier, which distinguishes between utility and non-utility entities, and has its own set of books. The Company performs a routine business unit review for CWIP and PIS as part of the overall internal and external audit review process.

The Company uses the SOX 404 Key Control Document C29 for the review of the CWIP aging report to monitor projects greater than \$100,000 and or with six months of inactivity. The internal control document also describes and identifies the segregation of duties between the Plant Accounting personnel and project coordinators (from Engineering).

Liberty reviewed the supporting documentation related to plant accounting controls. Based on internal and external audit requirements, for example, the Company reviews SFAS 143 Asset Retirement Obligations; the assets placed in service and retired; the outstanding capital projects by month-, quarter- and year-end; the reasonableness of depreciation expense per state tariff and FERC depreciation rates; account reconciliation for accumulated depreciation; plant subsidiary accounts to control accounts reconciliations within the general ledgers; and Allowance for Funds Used During Construction (AFUDC), using a manual versus system calculation of the AFUDC rate.

Liberty discussed the controls with the Company plant accounting personnel. Liberty found the controls to be adequate. However, based on Liberty's review of ETG's 2007 FERC annual report, the plant-in-service accounts and depreciation rate schedules, Liberty noted that Land Rights, Asset Category 304.0 has an associated depreciation rate of 2.48 percent, which suggests that Company is depreciating the land asset category. Follow up discussion with Company personnel indicated that this asset category contains right-of-way costs. The Company agreed to review the account category and activity, and make appropriate changes if necessary.

Liberty evaluated the Company's documented internal controls, which ensure that transactions between AGSC, ETG and other affiliates are recorded properly. Liberty also reviewed activities with accounting personnel during interview sessions. The Company provided examples of governance activities that are in place, to ensure proper recording of affiliate transactions. This includes service corporation oversight where every operating company president is an officer of the AGLR, allowing the operating company to be part of the major business decisions and to monitor service quality, transactions and corporate spending. For example, each operating company president must approve the operating company's individual annual budget, which includes the service corporation's charges and allocations for the year. Also, the companies that will pay for the initiative must review and approve major projects undertaken by the service corporation on behalf of the individual operating companies. Each affiliate company, including ETG, receives a monthly budget variance report which contains a line item for the service corporation cost allocations. This allows ETG and other affiliates to monitor the service corporation budget to actual allocations by month and on a year to date basis.

#### b. Internal and External Auditing

Liberty reviewed the internal and external audit processes that are in place for the Company. The Company provided risk assessment reviews by its external auditors, PricewaterhouseCoopers,

LLP (PWC). PWC performs the assessments in connection with the planning of its audit and the Company's internal controls over financial reporting. The Company stated that it performs the internal control reviews in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 (SOX). PWC performs the risk assessment at the consolidated level and not at the level of ETG or other affiliates. PWC ranks the Company's SOX 404 internal controls between high, medium and low. The rankings of high, medium and low identify which control requires more attention by the Company. The ranking allows for consistent viewing of the risks by PWC and the Company, and tends to highlight the more at-risk activities.

Liberty reviewed the risk assessments of SOX 404 Corporate Procedures provided by the Company. Liberty noted that most of the assigned risk rankings by PWC and the Company are low to medium. Although PWC assigned high-risk rankings to CIS billing and Uncollectible Reserves, the Company assigned medium risk. Both PWC and the Company assigned high risk to Entity Level Controls. The reviews or walkthroughs of those processes with high-risk rankings are to be conducted by PWC without the aid of the Company's internal audit group during 2008. Since 2006, the Company identified 125 separate risk assessments. The Company summarizes these risk assessments into twenty Strategic Risk categories for ease of review and monitoring. Liberty notes that the Company also implemented a process to combine the separate risk assessments into an Enterprise Risk Management process and report. The Company noted that it does not conduct risk assessments specifically for ETG because ETG is included in a risk assessment for the Mid-Atlantic Operations (MOPS) business unit.

The Internal Audit group performs functional reviews and requires a quarterly Sarbanes-Oxley (SOX) compliance review. As part of the internal audit process, Internal Audit provides questionnaires to be completed by appropriate departments, including the accounting group. Internal Audit reviews the responses and performs its quarterly SOX compliance review using the information gathered from the questionnaires.

Liberty determined that the AGLR Internal Control Department is separate from the Internal Audit group. This department works with the management of various business units and determines if there are significant accounts and processes that could affect the effectiveness of the internal controls for financial reporting. The department develops and documents key controls with the input of management. The Company noted that Internal Audit is responsible for testing the design and operational effectiveness of the financial reporting controls. Two groups independently perform the functions; the Internal Control Group and Internal Audit use the Risk Navigator and Auto Audit software to document and maintain the key processes, controls and testing results. The control process is completed at the consolidated and de-centralized level, such as the ETG business unit, with corresponding key controls test results. For example, some of ETG's controls tested for 2007 and 2008 are as follows:

- Margin Analysis Gas Accounting verifies rates and revenue class are correct and current.
- Gas procurement Broker statements are reconciled as part of the margin analysis, and the Vice President-Gas Operations and Capacity Planning approves deal tickets.
- Unbilled revenues The Margin Oversight Committee reviews and signs the calculation before it is recorded on ETG's books.

The audit control test was deemed effective and the test conclusions were a "pass" for the items listed above and others not listed from the control testing document. The control frequency is predominately on a monthly basis, but *ad hoc* testing is also used. The tests were either IT dependent or were completed on a manual basis such as reconciling dealer broker statements.

The Institute of Internal Auditors (IIA) reviewed the Company's internal audit function. The IIA conducted a Quality Assessment of the AGLR Internal Audit Department in November, 2006. The IIA provided the following Considerations for Senior Management:

- Reevaluate the resources dedicated to operational audit. The IIA recommended adding to Internal Audit staff to allow completion of operational audits, because the operational audits of SouthStar and Sequent Energy Management (SEM) and other units had not started. The IIA also recommended a three-year audit cycle.
- Consider adopting a Management Control Policy. The IIA recommended a short concise statement of compliance responsibilities for business unit managers, the Audit Committee and Internal Audit.
- Enhance the Annual Certification Process for the Code of Business Conduct and Ethics. The IIA suggested a supplement to the existing document to include a representation that all control issues identified by internal or external audit have been addressed in a timely fashion.
- Consider adding a policy guideline for gifts and entertainment.

Management agreed with the suggestions and responded that the Company's current guideline for gifts and entertainment is adequate. IIA made other specific recommendations. The Company is willing to implement the majority of the recommendations and enhance processes currently in place.

#### C. Conclusions

# 1. The Company's accounting systems, procedures and controls are adequate to ensure accurate recording and reporting of affiliate and property transactions.

The Company's methods of accounting for affiliate and property transactions are adequate. AGLR, AGSC, ETG and other affiliates maintain a separate set of books and general ledgers for company-specific recording of transactions and reporting of results. The PeopleSoft integrated accounting system records affiliate transactions in separate business units and inter-company accounts within the general ledger. AGSC uses the inter-company accounts for affiliate transactions and settlements between ETG and other affiliates, including AGSC. The accounting and finance group personnel reconcile affiliate transactions to verify accuracy of the recorded transactions, and the Company appears to settle its inter-company transactions promptly and according to the requirements of the Service Agreements. The Company records property transactions and processes the work order activities properly and in accordance with official Company practices. The Company appears to have reasonably comprehensive accounting control procedures and processes in place. Liberty found the Company's procedures used to guide and control the month-end closing process to be adequate.

# 2. The Company's internal audit process, risk assessment documentation and Sarbanes-Oxley compliance is adequate.

The Company's internal audit methods and timing are adequate. The internal audit group provides formal and independent guidance to departments, such as questionnaires, to help the business units adhere to company policies, practices and procedures. . . The Company makes risk assessments, and ranks the risks and monitors them or financial or operational exposures. The Company has SOX 404 Corporate Procedures and appears to be compliant with the Sarbanes-Oxley Act of 2002. The Company contracted for an outside and independent review of its internal audit function by the Institute of Internal Auditors. Although the IIA made some recommendations as a result of the audit, that the IIA found the overall Company internal audit function and internal controls to be adequate. However, Liberty notes that the Company has not performed an internal audit for the accounting cost allocation process (i.e., the Accounting Process Manual). (See Conclusion #3)

# **3.** The Company does not perform internal audits of its accounting cost allocation process. (*Recommendation #1*)

Liberty reviewed the Company's internal audit reports and did not find internal audits for the cost allocation process; that is, there was no audit of the Accounting Process Manual (APM)., The Company intends to perform periodic internal audits of the cost allocation process based on responses to Liberty's inquiry.

# 4. The Company's process of accounting for and recording the transfer of CIS assets to the affected utilities is adequate. (Recommendation #2)

The Company appropriately transferred and recorded the asset costs to the utilities that receive the benefit from the development of the CIS billing system. Liberty concurs with the Company's use of end user customer counts as the basis for the allocation of the asset costs. This allocation basis is consistent with the Company's cost allocation methods explained in Chapter V of the Phase I Report (*Cost Allocation Methods*).

#### **D. Recommendations**

# 1. Conduct a complete review and internal audit of the Allocation Process Manual. (Conclusion #3)

Liberty understands that Internal Audit has SOA control documents within the APM, but Liberty suggests a formal, comprehensive and timely internal audit and compliance testing of the accounting allocation process and documentation. The Company should meet with the internal audit group and set a time frame to perform an internal audit of the APM procedures, processes and documentation. Liberty believes periodic internal audits, performed by the Internal Audit group in conjunction with the accounting personnel, will further guard against potential erroneous transactions and safeguard against cross subsidization. See also Section D - Conclusions and Recommendations in Chapter V (Cost Allocation Methods) of the Phase I Report.

# 2. Determine the transfer price of the CIS assets and review the allocation method used to allocate assets to the utilities. (Conclusion #4)

The Company should review and determine if the assets transferred from non-utility to utility affiliates are priced at either the lower of cost or market transfer price. This review is important to safeguard against cross-subsidization practices.

The Company should review the method it used to allocate and record asset transfer costs based on the more current end user counts provided by the Customer Services group instead of the Information Services and Technology group. Based on the Company's APM, the Customer Services/Billing group is the group that provides the accounting personnel the end user counts.

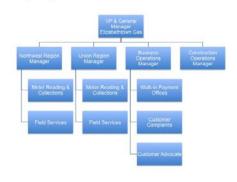
An alternative method of allocating billing costs is to count the number of bills per customer generated by the billing system. The Company should compare the end-user-customer and the bills-per-customer factors and then decide which method allocates billing costs more equitably to each utility.

### VII. Customer Service

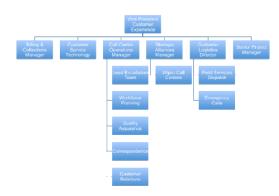
### A. Background

ETG provides customer services (*i.e.*, customer contact, billing, credit and collection, and meter reading) through services provided by AGL Services Company (*AGSC*), and through field and face-to-face services provided by ETG employees in New Jersey. ETG's more than 274,000 customers account annually for more than 400,000 customer calls and more than 2.6 million customer payments. The ETG and AGSC organizations responsible for customer services are shown below.

#### Utility Operations - Elizabethtown Gas



#### **AGL Services**



AGL Services Customer Experience organization provides the following specific services:

- Call Center for customer inquiries
- Quality Assurance
- Customer Service Training
- Customer Billing bill printing, stuffing and mailing
- Remittance Processing
- Credit & Collections Support & Analysis Services
- Customer Complaint Response Support
- Customer Services Technology Services
- Customer Logistics (field dispatch)
- Customer Service & Satisfaction Measurement.

ETG employees provide the following services to customers:

- Field Services (meter on/off, leak response, meter investigation)
- Field Collection Services
- Revenue Protection
- Customer Payment Facilities (2 walk-in locations)
- Customer Advocacy.

ETG Customer Service Priorities are as follows:

• Deliver and outstanding customer experience by offering convenience and choice.

- Educate customers through bill inserts and websites.
- Deliver operational excellence.
- Measure the effectiveness of all programs.

The following initiatives are underway or were completed within the last year to improve the level of service provided by the Customer Service organization:

- Online order processing for turn-on and turn-off orders (2<sup>nd</sup> Qtr 2009)
- Increasing the functionality of the integrated voice response (*IVR*) self-service (2<sup>nd</sup> Qtr 2009)
- Screen pop (customer entered information) to agents (2<sup>nd</sup> Qtr 2009)
- Pay by credit card online and through IVR (3<sup>rd</sup> Qtr 2009).

### **B.** Findings

### 1. Meter Reading & Billing

ETG currently uses 21 billing cycles. The Customer Information System (CIS) downloads daily the scheduled billing cycle's meters to be read to the Itron Meter Reading Application. The expected read date is the target date for the meter readers to complete reading the meters. Once meters are read, the read data file is uploaded from the Itron server back to, which calculates the bills.

AGSC actively pursued an extensive automated meter reading (*AMR*) implementation following the NUI acquisition in 2004. More than 97 percent of ETG's meters are now read automatically each month, using Itron's radio-based, drive-by AMR solution. Within the Union division, two or three employees drive mobile routes each day to collect the readings. Five meter readers work the remaining routes for any meters that are not automated (demand meters, skips, and special reads). In the Northwest territory, one meter reader collects the daily meter readings with mobile AMR. ETG has a 97 percent success rate (successfully read each month via AMR) with the installed AMR devices.

ETG has approximately 284,000 meters in service: 217,000 in Union and 55,500 in Northwest. Approximately 70 percent of Union's meters are located inside the customer premises (156,472). Such a large population of inside meters presents many challenges for ETG. Before AMR was installed, obtaining a monthly reading was difficult. AMR technology has enabled consistent and accurate monthly meter readings. However, inside meters continue to make it difficult to complete service orders, turn a meter on or off, monitor meter conditions and safety, test and change-out meters, or install AMR technology.

Many of the billing functions are conducted in the Riverdale center and in the two offshore call centers in India. These employees resolve cycle billing exceptions through account review, issuing rereads and manual estimation. ETG is in the process of bringing the offshore work back in-house, much of this work will be staffed in the new Green Lane call center.

AGL implemented its Customer Information System (CIS) in 1992. ETG was transitioned over to CIS system in 2007. Modifications and enhancements have been made to CIS over the years, including the release of CMA in 2007. CMA is a "user-friendly" front-end to CIS, enabling

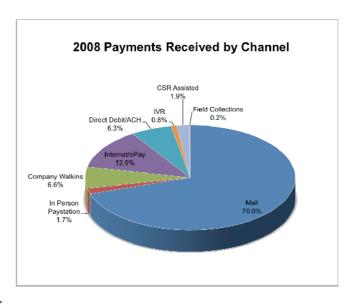
point-n-click access and entry, making it easier to navigate through the system and complete routine transactions.

### 2. Payment Processing

ETG customers can pay in cash, by check, with a credit or debit card, or through a check draft (ACH payment). Payments may be made by mail, by phone, by Internet, or in-person at one of

two company locations or through a network of 33 Western Union payment centers. Customers may pay by credit or debit card by phone, with the assistance of a customer service representative, or in one of company's person at the commercial office. The Company processes credit and debit cards (adding a \$4.95 fee) through a third-party, Western Union SpeedPay.

The Company receives the majority of ETG customer payments through the mail (70 percent). However, Internet payments represent a sizeable portion (12.8 percent) of payments received in 2008. ETG's processes mail payments through a lockbox.



#### 3. Credit & Collection

ETG requires a deposit from those residential customers applying for service who do not satisfy credit requirements. The amount is usually two times the average bill. All commercial customers are required to pay a deposit (two times the average bill) or secure the account with a bond or guarantee. Deposit refunds are applied to residential customers' accounts after 12 months of good payment history.

Problems in receivables are, naturally, related to the customers' ability and willingness to pay their bills. Outstanding accounts receivable are subject to a variety of collection actions depending upon the status of the account and the customers' credit history. Customers have 21 days to pay ETG's bill. If they have not paid when the next bill is issued, a reminder notice will be printed on the bill. ETG initiates an automated call within one to two weeks of an account becoming past due. The call advises customers of the need to contact ETG concerning overdue balances.

At 45 days, the Company mails a disconnect notice to all accounts with more than \$100 past due, notifying customers that the account will be "subject to termination" in 10 days if a payment is not received. Accounts are selected for outside collection or discontinuation of service based on the balance due and prior payment history. An ETG collector will accept checks and cash, and if necessary, will establish a deferred payment plan with a payment of at least 25 percent of the past due balance.

ETG's field collectors, whose primary responsibility is to collect payment, also turn off meters, shut off service at the curb, and talk to customers about the status of their account. During the winter moratorium, which normally lasts from November 15 through March 15 (extended through April 1 in 2009), ETG will not terminate residential customers that have a deferred payment plan in place to pay off any arrears. ETG does not terminate residential service for non-payment if the temperature falls below freezing or on Fridays, weekends, or the days prior to a holiday.

Field collectors report to the Customer Service organization. Field collectors work out of two region locations in New Jersey, and perform field collection functions that result in receipt of payment, satisfactory payment arrangements, or termination of service. All orders to be worked are delivered directly to their laptops. The information on the Mobility equipment enables the collector to communicate with a customer about the account. It also tracks work order status and collector performance. At the end of the day, the collectors report to the region office to turn in any cash payments received. Collectors are assigned special reads instead of collection work orders on some of the days that ETG does not terminate service for non-payment. Most collectors have been with the company for many years and are very familiar with the territory and accounts to be worked.

If the account is not reconnected within 10 days it's moved to "final" status. At 45 days of inactive status, the account is charged-off and turned over to an outside collection agency until it is paid. Any subsequent payments received are credited back to the write-off.

### 4. Complaints and Inquiries

Customers can call ETG's Customer Contact Office (CCO) between the hours of 7:00 a.m. and 8:00 p.m., Monday through Friday, and from 9:00 a.m. to 1:00 p.m. on Saturday. ETG has a separate group available 24 hours a day, 7 days a week for handling emergency calls. Additionally, ETG's automated telephone services and web services are available at all hours. Customers contact the CCO for issues related to new-service connections, service disconnection, gas leaks, billing-related issues, credit- or collection-related issues, or general customer-relations questions.

Prior to NUI's acquisition by AGLR, NUI's Miami call center handled ETG calls. Beginning in March 2005, the Miami center was closed, and AGLR's Riverdale, Georgia call center handled ETG customer calls. In March 2007, the Company outsourced ETG customer-care calls to Wipro, which used two locations in India to provide this service: Pune and Powai. Emergency calls are handled in Riverdale through the Emergency Response Department. Any customer inquiries that cannot be satisfactorily resolved by Wipro in India are transferred by to AGL Services' Lead Escalation Team in the Riverdale call center.

ETG customer calls are routed to the appropriate call center employees based on the phone number dialed (customer service vs. emergency response). Calls are also routed to agents with specific skills required to handle the request (*e.g.*, Spanish language calls) based on the options chosen by customers in the IVR technology, or to automated self-service applications within the IVR. Non-emergency calls are routed to Virtual Hold if the wait time for an agent exceeds 45 seconds. Virtual Hold technology gives the caller the option of requesting a callback and not

waiting in the queue. If a caller chooses the callback option, Virtual Hold keeps the caller's place in the queue and then calls the customer back at the appropriate time, when an agent is available to handle the call. ETG implemented Virtual Hold technology in 2004.

Approximately 21 percent of calls received are completely handled, without agent assistance, in ETG's IVR. These are primarily account balances inquiries, payment arrangements, and customer-read meter readings.

Until recently, ETG's goal in responding to customer inquiries is to answer 80 percent of calls within 60 seconds. ETG revised its call handling goal in May 2009 to answer 80 percent of calls within 30 seconds. ETG manages that goal by using the information produced by its Avaya Call Management System to monitor call-answering performance hourly, daily, *etc.*, and by managing its representatives' workload to meet service level. ETG expects Wipro to perform to the same service level.

Customers who have complaints about a bill, hardship-status determination, or payment arrangement contact customer-service representatives at the phone center. Complaints are first handled by the customer service representative through the outsourcing provider in India. If the customer service representative cannot resolve a call, it is transferred to the Lead Escalation team in Riverdale, Georgia. If need be, it can be referred to any supervisor or manager available to handle the call for ultimate resolution.

Formal complaints (BPU complaints) are communicated to ETG through the Automated Complaint System, an application that links the BPU to ETG's corporate headquarters. All incoming complaints are logged and categorized in the system. ETG's Business Operations group is responsible for the receipt, resolution, customer follow-up, and formal response to the BPU. ETG has five days to respond. Complaint data is accumulated and reported to ETG management on a monthly basis.

Similarly, any written or verbal complaints to senior management are also logged, researched, and followed-up. The resolution of these complaints are documented and sent to senior management.

#### 5. Theft of Service

Traditionally, meter readers and other field employees have been relied upon by utilities for the identification of meter tampering and energy diversion. Most of ETG's meters are read automatically each month; therefore, the responsibility for identifying theft of service falls on the field service employees. All new field employees receive on-the-job training covering ETG's Theft of Service (TOS) process and how to identify potential theft situations. Operations Supervisors also receive training in the identification, investigation, and reporting of TOS incidents.

ETG has a standard operating procedure for TOS conditions that outlines responsibilities and provides guidelines for reporting, coordination of investigation, accounting, prosecution, record keeping and reporting, and employee incentives.

All ETG employees are instructed to report any stolen meter or straight connection to an operations supervisor located in the Service Center where the gas diversion occurred. A field employee or supervisor will then be assigned to investigate and document the incident, prior to correcting the service connection.

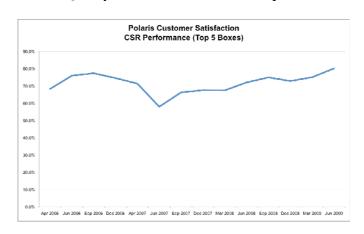
ETG offers cash incentives to employees to report suspected theft situations. A \$25 incentive is paid for each lost or stolen meter that is found and a \$50 incentive is paid for each straight connection (bypass) that is confirmed. All suspected incidents are tracked using ETG's Gas Diversion Incident Site. This provides a record of each incident as well as tracks status determination regarding incentives.

#### C. Conclusions

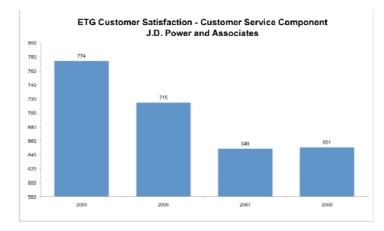
# **1.** ETG's customer satisfaction has declined significantly since 2006. (Recommendations #1 and 2)

ETG measures customer satisfaction quarterly, through recent-contact transactional surveys conducted by Polaris. Since 2006, ETG's Overall Quality of Customer Service Representatives,

as measured by customers who have contacted Customer Service has been declining until most recently, as indicated in the chart to the right, with 2007 sliding performance coinciding with the transition to the outsourcer call centers in India on March 19, 2007. The Polaris Customer Satisfaction survey is conducted quarterly—performance in December 2006, for instance, represents customer satisfaction measured during October through December 2006.



ETG also participates in J.D. Power and Associates Gas Utility Residential Customer Satisfaction studies annually. ETG ranked above average, overall; however, in the East Region



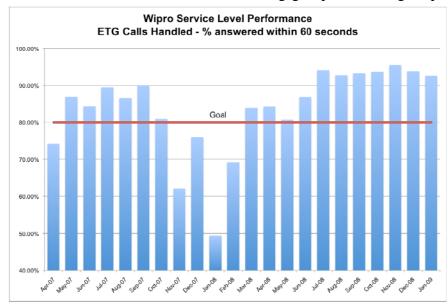
of the J.D. Power and Associates 2008 Residential Gas Utility Customer Satisfaction Study, ETG ranked near the bottom of the New Jersey utilities. Focusing on the "customer service" component of the survey, ETG ranked 7<sup>th</sup> within Customer Service, of the 16 East Region utilities participating. As seen in the following chart, ETG's Customer Service satisfaction has declined significantly over the past five years, especially since 2006.

ETG has worked extensively with its outsourcer, Wipro, to improve customer service performance (and customer satisfaction) since the transition in 2007. In addition, ETG's contract with Wipro stipulates penalties for substandard performance, as measured by service level performance and call quality (not customer satisfaction). It is clear that ETG customers are not satisfied with the level of service provided.

# **2.** ETG customer service performance has deteriorated since 2007. (Recommendations #1 and 2)

Service level provides the clearest indication of what callers are experiencing. ETG has had a goal of answering 80 percent of its calls within 60 seconds. As of May 2009, ETG's goal is to answer 80 percent of calls within 30 seconds. All ETG call handling groups, including Wipro,

are expected to manage to this service level goal. In fact, service level performance is several one of contractual service level measures for the Wipro Master Services Agreement. Failure of Wipro to meet this service level on a monthly basis results in monetary penalties. The depicts chart Wipro's service level performance since April 2007, when it



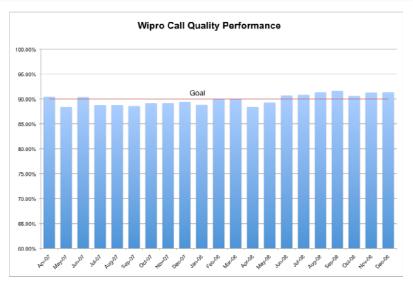
began handling calls for ETG.

The chart shows that, Wipro did not meet ETG service level performance goals during April 2007, or from November 2007 through Feb 2008 (missed goal in 5 of 22 months; 77 percent conformance to service level goal). AGSC worked closely with Wipro to improve its service level performance; however, poor performance during the end of 2007 and early 2008 created long waits for ETG customers, an increase in abandoned calls, and generally made it more difficult to contact ETG.

In addition to service level performance challenges, Wipro had difficulty meeting ETG's quality standards for handling calls. As part of the Master Services Agreement, Wipro agrees to handle calls at a 90 percent quality rating or higher, as measured by AGSC. If Wipro's call quality rating falls below 90 percent in a given month, penalties are assessed. Call quality is measured through direct observation of the handling of a customer call, either by tapping into to a live call or by reviewing call recordings. The chart displays Wipro's call quality performance since April 2007, when it began handling calls for ETG.

Wipro did not meet call quality goals during 10 of 22 months (55 percent conformance to goal). Wipro had great difficulty meeting AGSC call quality standards. Service level performance goals become less meaningful when the quality of the customer contact is below standard.

Additionally, Wipro cannot handle all the ETG calls it receives. Calls outside



Wipro's expertise are transferred to AGSC Lead Escalation Team or the Level 2 Support Desk in Georgia, as are any customers that request to speak with to "someone in the United States." On average, 20 percent of calls are transferred from Wipro to AGSC for handling.

Transferred calls can create dissatisfaction among callers. Not only do transferred customers have to repeat their issue or question, and customer identification information, they often have to wait in queue until another agent is available to take the call, increasing the on-hold time and overall call length. Sometimes the transfer takes the form of an escalated call when the caller asks to speak with someone else or a supervisor. These calls are frustrating and dissatisfying for customers who do not understand why the company cannot answer their questions.

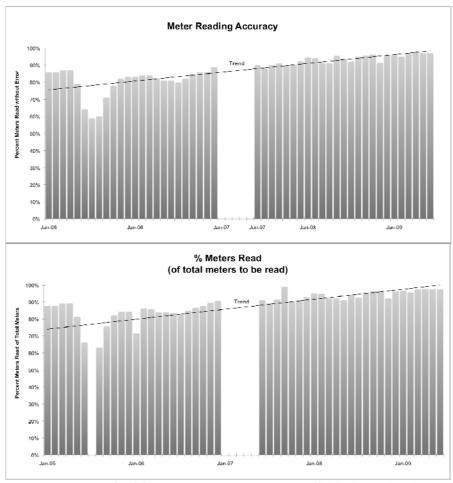
Overall, ETG has a significant opportunity to improve its customer service delivery through its phone center.

# 3. ETG's is moving the handling of ETG customer inquiries to a new call center located in Union, New Jersey.

AGLR is currently in the process of building a new call center in the existing Green Lane facility in Union, New Jersey. The company plans to begin operations on December 7, 2009. The call center will operate from 7 a.m. to 8 p.m., Monday through Friday, and 9 a.m. to 1 p.m. on Saturday. Approximately 60 positions will be staffed with ETG employees to handle calls and provide back-office billing and collections support for ETG customers, including 44 customer service representatives, 3 supervisors, 1 call center manager, 3 support staff (workforce planning analyst, trainer, and quality representative), and 2 back office field support representatives. This also includes 7 back office billing and collections support representatives directly responsible for ETG in the service company.

# 4. Meter Reading performance is improving; however ETG's inside meters continue to provide a challenge for meter reading, billing, and collections. (Recommendation #6)

ETG reads meters on a monthly schedule, primarily through automated meter reading (AMR) technology. As a result, ETG has significantly improved its meter reading accuracy and read rate (timeliness) since January 2005, as seen in the following charts.



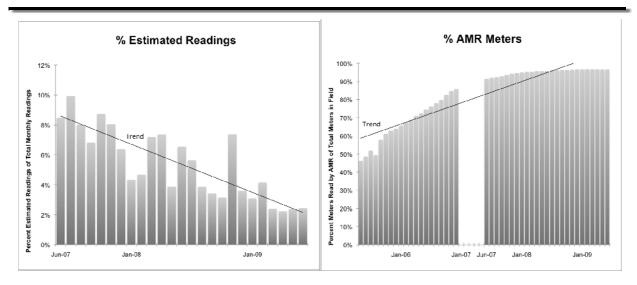
Note: Data was not provided for January – June 2007—unavailable due to CIS Conversion.

ETG has increased the percentage of meters read through AMR since 2005 (see the chart in the following conclusion) from 46 percent to 97 percent today. AMR has improved ETG's read rate, thereby reducing the percentage of estimated bills delivered to customers.

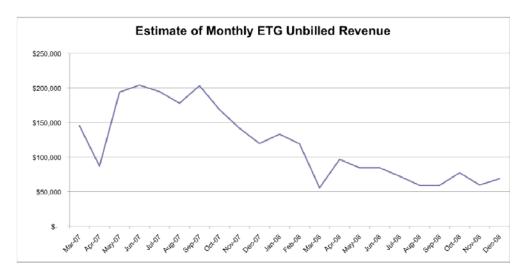
However, ETG's large indoor meter population makes it difficult to physically visit the meter for other needs, such as safety inspections, collections enforcement, and routine start or stop of service. While AMR has improved billing accuracy and efficiency, it has eliminated a frequent physical visit to the meter, making it less likely that employees will observe meter tampering or diversion.

### 4. ETG's billing performance has improved significantly over the past three years.

The introduction of automated meter reading has improved ETG's billing performance considerably. More customers are receiving timely and accurate bills each month. The following chart details the percent of estimated meter readings each month from January 2007 through present. Estimated meter readings have declined steadily as the AMR technology has saturated ETG's service territory.



ETG has also focused efforts on reducing the number of unbilled accounts each month. In 2007, ETG averaged 7,000 accounts per month that were unable to bill, for one reason or another. Through process improvements and system enhancements, ETG reduced its unbilled accounts to an average of 2,600 accounts per month in 2008. The estimated unbilled revenue represented by these unbilled accounts is depicted in the following chart.



# 5. ETG is inappropriately charging a convenience fee for in-person payment of utility bills by credit card. (*Recommendation #3*)

ETG's business offices are charging convenience fees to customers paying their utility bills by credit card. This is a violation of VISA's merchant rules. VISA does not allow vendors to charge a convenience fee for in-person transactions. ETG should immediately discontinue this practice.

## **6.** ETG's collections performance is declining. (Recommendations #4 and 5)

The BPU administers a Winter Termination Program (WTP) that protects specific categories of customers from having their gas or electric service shut-off for non-payment between November 15 and March 15. Customers protected from disconnection include low-income and elderly customers participating in specific assistance programs and any customers that are unable to pay

their utility bills because of circumstances beyond their control, such as unemployment and illness. Customers must provide a doctor's letter or other documentation to qualify. To maintain eligibility throughout the winter, qualified WTP customers must enroll in a 12-month budget payment plan and make good-faith payments toward the WTP budget during the heating season.

ETG is not effectively advising customers of the availability of financial assistance or working to establish payment arrangements to bring accounts current prior to winter. Many customers that would qualify for assistance do not apply, while many other customers apply for assistance near the end of the winter protection program (after they receive a shut-off notice). As a result, customers facing the threat of disconnection in late March or early April have to scramble to pay the balance that has accrued over the winter.

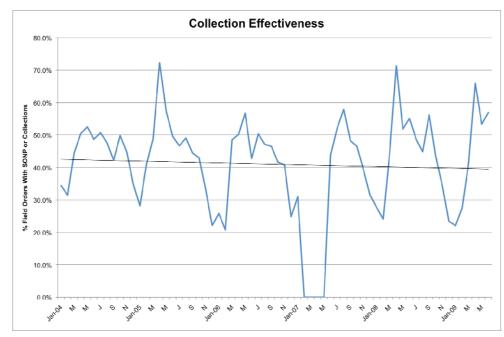
Additionally, ETG is not enforcing the guidelines of the WTP; instead, ETG has significantly reduced its field collection efforts during the moratorium. During December, January, and

February, ETG averages 39 disconnects for non-payment per month. In contrast, ETG averages 777 disconnects for non-payment during the other months. Similarly, ETG averages of 973 collection-related field visits per month during December, January, and February compared to 2,857 visits during the other months.

	Moratorium Average	Non- Moratorium Average
Field Visits	973	2,857
Collection	226	534
Disconnects	39	777

ETG has scaled back its field activities during the winter protection period, effectively giving all

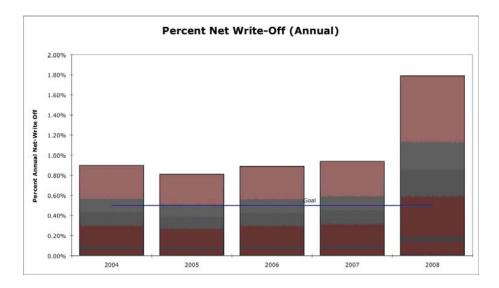
customers WTP. The lack of field enforcement during the moratorium teaches customers they do not have to make payment until the disconnect notice arrives in March. It also delays the requests for energy assistance.



ETG's collection effectiveness, as defined by the percentage of trips that resulted in a field action of either collection or disconnection, has also been trending down since 2004, with the winter months becoming less and less effective. However, in 2008, ETG did ramp up field collection

and enforcement activity immediately prior to and following the moratorium, in an effort to reduce bad debt.

ETG's write-off performance (net write-offs, as a percentage of total revenue) has worsened considerably since 2004, with write-offs doubling from 2007 to 2008.



## 7. ETG is not adequately pursuing revenue protection. (Recommendations #6)

Very few theft of service or tampering cases have been identified over the past three years, as seen from the chart below. In fact, only fourteen cases have been identified and confirmed in the past three years: five straight connections and nine missing meters. All these incidents have been

	Cases Opened	Cases per Customer	Cases per 100,000	Customers
2006	-	-	-	268,619
2007	-	-	-	271,683
2008	9	0.00220%	3.30	273,007
2009	5	0.00182%	1.82	274,976
Total	14	0.00129%	1.29	1,088,285

identified since mid-2008, after the completion of a process improvement project to improve the Gas Diversion and Theft of Service Process.

ETG's process improvement project introduced a web application to manage and track theft of service

incidents. In addition, the team revised operating procedures and documentation guidelines for reporting incidents. Proir to 2008, ETG's Theft of Service process was not well defined and incidents were not tracked.

ETG has taken a passive approach, relying on employees or customers to report the problem. While the web application has improved communication and tracking of incidents, ETG has done little to communicate its theft of service program to employees or customers. ETG's theft-of-service employee-awareness communications have been limited to infrequent discussions or initial employee on-the-job training. While ETG's rewards discovery of missing meters and straight connections (\$25 to \$50), only fourteen cases have been identified since 2006. Nor does ETG have an established communications program to educate customers on energy theft.

To make matters worse, automated meter reading has eliminated the monthly visit to the meter to obtain a reading. As a result, there is very little opportunity for ETG employees to witness a suspected theft or tampering.

Industry averages for theft of service range from .5 to 2 percent -- far greater than ETG's average of .00129 percent. The disparity of ETG's incidence rate versus the industry suggests that ETG may not be applying the appropriate resources to educate employees and customers on how to identify theft of service.

## C. Recommendations

## 1. Fully Staff NJ-based Customer Care Center. (Conclusions #1 and 2)

ETG has made the decision to in-source its telephone-based customer care, pulling the ETG call handling away from the India Business Processing Outsourcing (BPO) provider. ETG also plans to continue to staff the Lead Escalation team in Atlanta to support the newly formed ETG call center, and provide the same assistance that it currently provides to the outsourcing provider. This approach represents an effective strategy for making a quick transition; however, ETG's customer call center should assume responsibility for escalated calls as soon as possible. ETG should develop the expertise in the Green Lane call center so that its employees are prepared to handle any ETG customer service inquiry. Escalated customer inquiries should be handled by ETG supervisors and managers. AGSC should develop ETG call center representatives and supervisors with a goal of handling all ETG calls on-site in the NJ call center by the end of 2010.

The AGSC call center teams in Riverdale should be available as contingency resources in the case of a disaster or temporary shut-down of the NJ center.

## 2. Route the customer service lobby phones to the Lead Escalation Team until the New Jersey call center is operational. (Conclusions #1 and 2)

ETG's business offices are geared to handle customer payments, not all customer service transactions. Walk-in-customers are generally referred to the lobby customer service phones for anything other than a payment, especially during busy times. The lobby phones are routed to the India call centers, just like all general customer service inquiries.

Many customers visit the business offices in person in order to work out some kind of payment arrangement for their overdue bills. However, representatives in India are not allowed to handle payment arrangements or extensions; so, most of these calls are transferred to the Lead Escalation Team in Georgia, once the customers indicate the reason for their calls. This creates an unnecessary delay in serving a customer; the customers must explain the nature of their transactions and then wait to be transferred to someone who can actually complete the transaction. Realistically, the customers have already visited the payment window, only to find out that they have to speak on the lobby phone. When they do this, they are then told they have to be transferred to another group of agents. This process not only inflicts delay and frustration inflicted upon customers, but it is also inefficient.

Ultimately, representatives in ETG's New Jersey call center in the Green Lane building in Union should answer the lobby phones. This will eliminate unnecessary transfers and delays for

customers. However, until the New Jersey center is operational later this year, these calls should be immediately routed to the Lead Escalation Team in Georgia.

## 3. Discontinue charging a convenience fee for in-person payment of utility bills by credit card. (Conclusion #5)

ETG's business offices are charging convenience fees to customers paying their utility bills by credit card. This is a violation of VISA's merchant requirements. ETG should immediately discontinue this practice.

## **4.** Develop promotional campaign to encourage customers to sign up for energy assistance early in the winter. (Conclusion #6)

Many customers approach ETG near the end of the moratorium for help in paying their bill, well knowing that their gas service has been targeted for termination due to non-payment. Under NJ law, customers are required to sign up for energy assistance and negotiate and keep payment arrangements. However, ETG is not holding customers to these guidelines; ;as a result, many do not learn about energy assistance options until they contact the call center after they receive their disconnection notice in late March.

While ETG has a Customer Advocacy group that is responsible for community outreach and educating customers on energy assistance, too many customers are waiting until the last moment to apply for funding, and the funding is limited.

ETG should do as much as possible to identify customers with delinquencies in early fall and require customers to apply for assistance early. Additionally, ETG should set up payment plans for these customers so they can continue to pay something towards their delinquency during the winter months and avoid the large debt.

## 5. Work delinquent accounts more actively during the winter. (Conclusions #6)

For the past several years, ETG has not been effectively treating its overdue accounts during the Winter Moratorium. Under NJ law, residential customers can be protected from service disconnection for non-payment if they have signed up for energy assistance, have negotiated a payment arrangement, and making payments in accordance with the arrangement, or can otherwise provide proof that they are having difficulties paying their bill due to unemployment or medical issues. However, since 2005 ETG has minimized field collection activities during the winter months, effectively granting WTP to all customers. Accordingly, bad debt has been growing significantly over the past few years.

ETG should do everything possible to encourage customers to apply for energy assistance and set up workable payment arrangements for the remaining balance. ETG should track customer payments to make sure that the arrangements are being kept. Any customers that have broken arrangements should be subject to field collection, and possible termination, depending upon the situation and weather conditions.

ETG's lack of action during the winter has created a culture in which many customers stop paying their gas bills in November and then scramble to make arrangements in March, prior to

the spring when ETG begins disconnecting for non-payment. This practice does not help customers or the company; it generally leads to large delinquencies that are much more difficult to repay, many of which ultimately, become uncollectible debt.

## **6.** Pursue a more aggressive revenue protection program. (Conclusions #7)

Nationally, energy theft accounts for approximately \$6 billion annually. Not only is energy theft a crime, it is a public safety issue. Most U.S. energy companies have some form of theft-of-service program in place, typically relying on leads from employees, customers, and law enforcement. More aggressive utilities are employing customer analytics, technology applications, and awareness systems to predict, identify, and confirm tampering and theft.

ETG should pursue a more proactive and aggressive revenue protection program. This program should be focused within the Customer Service organization, with clear responsibilities defined. ETG should assign ownership of the program. ETG should strive to create an even greater awareness of the company's program throughout the Company and community.

ETG should build public awareness about the safety, ethical, and criminal aspects of energy theft through such activities as speaking to civic and church groups, placement of educational articles or copy in local newspapers and media, addition of theft-of-service information to the corporate web site, and performing high-visibility sweeps of neighborhoods.

ETG should increase the scope and frequency of its communications with employees and customers as well as relaying the seriousness of its efforts to eliminate tampering and diversion. ETG should become active in revenue protection associations to promote the sharing of experience and tactics.

While ETG does use exception reporting from the billing system to identify suspicious or unusual patterns in usage, ETG should investigate the use of customer analytics and modeling to identify suspected tampering or theft. Customer demographics, payment histories, and behavioral analysis combined with usage data from the AMR system, can help predict potential situations or pinpoint actual cases of theft.

ETG should also develop specific approaches to detect and investigate theft and tampering within commercial and industrial markets. Industry experiences indicate a growth in tampering for these segments. Additionally, the risk is much greater with these customer segments and usually much harder to detect.

## VIII. External Affairs

## A. Background

Government and regulatory relations fall under the Atlanta-based Senior Vice President, Government and Regulatory Affairs (SrVPG&RA). This senior vice president reports to AGLR's Executive Vice President, Utility Operations. The government and regulatory affairs organizations underwent change in the first half of 2009. The direct reports of the SrVPG&RA include:

- Vice President Regulatory Affairs
- Vice President Government Affairs
- Director, Regulatory Compliance (staff of seven)
- Director, Regulatory Markets Analysis (staff of two).

## **B.** Findings

## 1. Regulatory Affairs

The Atlanta-based Vice President, Regulatory Affairs (VP-RA) manages regulatory affairs for all AGLR units. ETG's regulatory affairs fall under the responsibility of a Director, Regulatory Affairs assigned specifically to New Jersey, and reporting to the VP-RA. Her staff includes five professionals assigned to New Jersey:

- One state regulatory affairs representative
- Three-person rates team
- One director of regulatory financial compliance and reporting.

Separate regulatory affairs organization for the other LDCs also report to the VP-RA. The Director, Regulatory Accounting and Reporting (with a staff of seven) also reports to the VP-RA. It supports all LDC operations. There have been no significant costs for outside services for government affairs in recent years.

The group managed by the Director, Regulatory Compliance serves as the main interface with state regulatory commission gas-safety officials and with those of the U.S. Department of

Transportation. One of his Staff Engineers is responsible predominantly for New Jersey matters. The Director, Regulatory Markets Analysis performs non-LDC regulatory work, serving SEM and the storage projects.

Rate and regulatory affairs makes only limited, specialized use of contractors. The accompanying table shows the outside services exceeding \$50,000 across the past several years.

Service	Cost
2006	
Print Safety Door Hangers	\$216,147
2007	
Design RP1162 mailers	\$121,855
Print/mail RP1162 mailers	\$112,562
Provide data for forecasting customer behavior	\$92,296
Total 2007	\$326,713
2008	
Print RP 1162 bill inserts	\$57,519
Build ROR models/analyze regulatory trends	\$56,954
Total 2008	\$114,473

Allocations have for the past three years comprised the primary means for charges from the Service Company's Rates and Regulatory group (Department 1686) to ETG. The predominant allocation basis has been relative numbers of end-use customers. The amounts directly charged, however, have increased in each of the past two years. The following table summarizes the charges to ETG and their basis.

Rate and Regulatory Charges to ETG

Year	Cost Pool	ETG Share	Allocated	Direct	Total	% Direct
2006	\$1,614,612	15.42%	\$248,955	21,086.74	\$270,041	7.8%
2007	\$1,231,827	12.06%	\$148,562	38,810.37	\$187,372	20.7%
2008	\$1,535,077	12.01%	\$184,359	84,310.61	\$268,670	31.4%

#### 2. Government Affairs

The Vice President, Government Affairs (VP-GA) has responsibility for federal and state legislative matters across AGLR. He has eight direct reports. Six manage such matters in the multiple states in which AGLR operates. A separate Director, Governmental Relations has been assigned to New Jersey matters. A Community Outreach Manager and a seasonal employee, also based in New Jersey, report to him. The other two direct reports of the VP-GA include:

- Managing Director, Economic Development (and two managers)
- Senior Director, Governmental Relations (and a specialist).

The managing director has responsibility for retention and attraction of business in all of the LDC territories. The senior director has responsibility primarily for non-LDC matters, but handles some federal (*e.g.*, climate change) legislative work for AGLR generally.

AGLR has reduced government affairs spending in recent years. The following table summarizes the changes. The table shows corresponding drops in charges paid by ETG. Government Affairs, as the table shows charges out (*i.e.* does not retain) virtually all of its costs. The department also charges a representative level of costs. ETG bears only nominal levels of direct charges.

#### **Government Affairs Spending Levels**

Item	2006	2007	2008
Payroll Expenses	\$1,025,337	\$1,007,619	\$435,936
Total O&M	\$1,912,243	\$1,628,133	\$911,913
Total Allocated	\$1,161,394	\$821,158	\$528,153
Total Direct-Charged	\$716,466	\$726,358	\$339,176
Percent Allocated	61.8%	53.1%	60.9%
Allocated to ETG	\$210,714	\$146,053	\$95,120
Direct-Charged to ETG	\$22,436	\$17,066	-\$492
Total Paid by ETG	\$233,150	\$163,120	\$94,628
ETG Share of Total O&M	12.2%	10.0%	10.4%
ETG Share of Direct-Charged	3.1%	2.3%	-0.1%
ETG Share of Allocated	18.1%	17.8%	18.0%

## 3. Corporate Communications

Corporate communications fell under the responsibility of the recently-retired Executive Vice President-External Affairs. AGLR combined the function with marketing in mid-2009 under a Vice President-Communications & Chief Marketing Officer (VP-C&CMO). This vice president formerly had responsibility only for sales and marketing. She continues to report in her new, combined role to the Executive Vice President-Utility Operations. Headcount in her now-combined operations has fallen due to the mid-2009 reorganization. The drop in corporate communications has come from a decision to outsource creative services formerly performed in house. Sales and marketing reductions have come from a consolidation and reduction that reflects reduced opportunities for traditional sales, resulting from weak economic conditions.

Her direct reports in the communications area include:

- Director, Internal Communications
- Director, External Communications
- Director, Interactive & Creative Services.

The Director, Internal Communications is primarily, but not solely responsible for employee communications. A Manager, Internal Communications serves as the primary writer for press releases and employee notices. A Manager, Customer Communications has responsibility for bill-insert preparation; her internal communications responsibilities include preparation of company information bulletins. The Director, Internal Communications' third direct report is the Specialist, VForce/Employee Connections (AGLR's program for encouraging community service by employees). She has responsibility for managing the AGLR program for encouraging and supporting employee time volunteering to local charitable and community organizations. Her position reported through Human Resources before the mid-2009 reorganization. The functions under the Director, Internal Communications operates across the all AGLR entities from offices in Atlanta. New Jersey has no employees assigned to these functions, with one exception. A New Jersey resident employee administers the ETG portion of the VForce program. AGLR measures the number of employees and hours dedicated to VForce activities, and reports that ETG runs second only to Florida LDC operations in both categories.

The Director, External Communications also uses a single, small organization to serve the needs of all AGLR entities, supported as noted above by the part-time efforts of a person in the Internal Communications Group. The four persons reporting to the director include:

- Media Relations Specialist (to perform public relations activities)
- Senior Staff Writer
- Commercial & Industrial Program Manager (to handle the unique needs of the larger customers in all AGLR LDCs)
- Integrated Messaging Manager (to support corporate event sponsorship and participation).

This group works from Atlanta, except for the Commercial & Industrial Program Manager, who is New Jersey based. The Media Relations Specialist serves as the primary contact for media in all LDC regions, including New Jersey. AGLR has communications procedures that address protocols for dealing with local media in crisis situations. Local New Jersey personnel receive training in media relations, but no New Jersey person has responsibility for managing media relations. AGLR operates under a February 2007 "Crisis Communications Manual." This comprehensive document outlines the values, goals, responsibilities, key positions and contact numbers, checklists, and activities applicable when it becomes necessary to respond in to stakeholder concerns and inquiries during emergency events. The manual also addresses crisis communications to employees and to customers. The document contains an extensive list of media contacts in each state, including New Jersey. A crisis communications team, headed by the Managing Director of Corporate Communications, has responsibility for communications management in these circumstances. The following areas provide core members to this team, with the addition of personnel form other functions, as necessary to the situation involved:

- Public Relations
- Employee Communications
- Customer Communications
- Creative Services
- Administrative Services.

The core team need not include local operations management in the event of a New Jersey crisis situation, but the preset list of core members includes a Virginia-based, Mid-Atlantic Media Relations Specialist.

The Director, Interactive & Creative Services, working with his single report, the Web Administrator, has responsibility for creative work and for web-related activities. AGLR performed many of its creative services (*e.g.*, advertising design) in-house before the mid-2009 reorganization. The Company found this approach to be inefficient; it now has pending a request for proposals seeking to find a single outside agency to handle its creative needs across all AGLR entities.

## 4. Sales and Marketing

Sales and marketing activities represent the other principal set of functions reporting to the VP-C&CMO. AGLR has refocused and reduced its organizations, as continuing economic conditions have greatly diminished new customer growth opportunities. The refocusing has been

to increase attention on customer retention versus opportunities associated more with new construction. A Managing Director, Market Development now has primary responsibility for sales and marketing across all AGLR LDCs; before the mid-2009 reorganization, two persons, one in Mid-Atlantic and one in Southern Operations performed the function. AGLR now conducts its sales and marketing operations under four Market Development Managers aligned geographically and reporting to the single Managing Director, Market Development. One of the four is responsible for ETG activities. The sales and marketing staff for ETG dropped by a net of three persons as part of the mid-2009 reorganization. This reduced ETG staff size is in proportionate in size with the resources assigned to the other AGLR jurisdictions. The staff reporting to the ETG manager comprises:

- 2 Multi-Purpose Account Executives
- Senior Commercial/Industrial Account Executive
- Industrial Account Executive
- 2 Commercial Account Executive
- HVAC Account Executive
- Residential Account Executive
- Sales Assistant.

The Director, Marketing Analysis reports to the VP-C&CMO. This director provides general business analysis and control services to the vice president (in both her communications and her sales and marketing roles). He also has responsibility for analyzing and measuring the effectiveness of AGLR sales and marketing programs. A significant portion of his work recently has focused to date on efficiency programs operated at the state level. The director cited VNG's "energySMART" program as one that is now generating significant reporting and analytical preparation. This program emphasizes the goals of conservation, energy-bill savings, and carbon reduction. It offers free programmable thermostats, a discount on seasonal checkups for heating equipment, rebates on high-efficiency gas equipment, low-income weatherization support, and a variety of informational offerings for customers. The director has also begun the use of "return on marketing investment" calculations in parts of the AGLR serving region, but has yet to initiate efforts in New Jersey. However, the roll-out of the Renewable Energy Investment Program in the state is expected to lead him to begin such work in the coming months.

AGLR is rolling out a new program that will seek to measure objectively and quantitatively the results produced by its marketing programs and initiatives. The program will specifically address, when fully implemented, the impacts of efforts to measure success in achieving the goals and objectives of state-supported programs to change usage patterns and levels.

#### 5. AGLR Foundation

The foundation focuses on five overall areas:

- Natural gas energy assistance (weatherization and emergency-energy) for low-income households and senior citizens
- Education (emphasizing reading, mathematics, and science) for public schools (K 12), colleges and universities, and technical schools
- Support for environmental projects, such as clean air, conservation, and green space

- Community enrichment focused on energy assistance, minority and women leadership programs; limited arts and culture events, and the United Way
- Support organizations that reflect diversity and partnering with organizations providing developmental assistance to minority and women-owned businesses.

The AGLR web-site provides forms, guidelines, and contact information for each of its locations, including New Jersey, where requests for support may be submitted.

### C. Conclusions

# 1. Structure, staffing, and operation of the regulatory and governmental affairs groups and of communications functions is appropriate.

AGLR has structured the organizations to take advantage of its size, while retaining sufficient local roles to ensure that New Jersey needs get met adequately. The organizations have had fairly stable or declining costs, and their limited use of outside resources promotes economy of operation.

#### 2. The recent changes in sales and marketing focus realistically on market opportunities.

The changes have reduced staffing, focused on differences in the needs of different customer groups, and, most importantly, emphasize customer retention in a period of significantly reduced growth opportunities. The changes have been made with specific consideration of New Jersey needs and opportunities, and the organization and staffing support ETG appropriately.

## **D.** Recommendations

Liberty has no recommendations in this area.

## IX. Support Services

## A. Background

Utility operations require key support functions, such as legal services and information technology. Utility holding companies typically provide many of these functions from a centralized services organization. AGLR's structure fits this pattern. AGLR provides or coordinates centralized services to ETG and other AGLR utilities as well as to non-utility subsidiaries through AGL Services Company (AGSC). This chapter reviews the key support functions not covered in the other chapters of this report:

- Insurance and Claims
- Legal Operations
- Facilities Management
- Procurement and Materials Management
- Transportation
- Land Management and Real Estate
- Information Technology
- Records Management
- Infrastructure Security.

AGSC provides most aspects of these functions to ETG, either directly or through vendors. ETG, however, self-provides some key functions, such as significant portions of fleet and materials management and infrastructure security.

## **B. Findings**

#### 1. Insurance and Claims

#### a. Risk Management Organization

The Director, Risk Management has responsibility for claims and risk management (including enterprise risk management). He reports to the General Counsel Ethics & Compliance EVP (GC/E&CEVP). The Director, Risk Management operates a small department with two direct reports:

- Claims Manager
  - o Claims Administrator
  - o Casualty Claims Adjustor
  - Disability Specialist
- Alternative Risk Technique Manager
  - o Alternative Risk Specialist.

Liberty covers the work of this organization related to insurance claims below; Liberty's analysis of AGLR's approach to enterprise risk management (ERM) is in Chapter IV, Strategic Planning.

#### b. Insurance

The Director, Risk Management came to AGLR about nine years ago, with 12 years of experience in alternative risk management approaches already behind him. AGLR has moved

aggressively into alternative approaches, using a captive insurer to address many risks. The use of the captive is designed in significant part to eliminate the costs that traditional insurance acquisition adds: an estimated 10 to 15 percent in broker commissions and another 20 to 30 percent through reinsurance, which represents the predominant practice in the industry. Use of a captive can allow the avoidance of these added costs by dealing directly with those ultimate reinsurers.



The use of a captive does involve added costs, but they are nominal in comparison with the savings achieved. These costs consist primarily of direct expenses to operate the captive, rather than internal costs. A 3 percent adder to the charges from reinsurers for providing coverage serves to defray these costs. AGLR does not operate the captive insurer on a for-profit basis.

The board received an extensive risk management presentation at its December 2007 meeting. It described the means employed to identify risks traditionally considered for insurance and the options available for addressing those risks. The presentation noted the examinations routinely performed by third party experts to assist in risk assessment. They include (a) annual inspections by engineering consultants of major risk locations (LNG and propane plants, headquarters, and the Jefferson Island storage facility), (b) certified actuarial reports for projecting casualty loss probabilities, (c) annual reviews by insurance consultants of coverage types and amounts, agreement terms and conditions, and endorsements, and (d) use of an independent consultant as part of monthly large-claim sessions that assess reserves and settlements and to perform two "best practices" claims audits per year.

An inside staff performs claims management and administration for general liability and for vehicle claims, and for an integrated workers' compensation and short term disability program. That staff includes a full-time case manager, who is a registered nurse.

Global Energy Resource Insurance Corporation (GERIC), a subsidiary of AGLR, serves as the captive insurer. AGLR incorporated GERIC initially in the British Virgin Islands in June 2001, and redomiciled it to Hawaii in 2007. GERIC provides two basic types of insurance for AGLR and its business units: (a) property, casualty, and executive risk, and (b) employee benefits. Contracts with reinsurers cover all of the property, casualty, and executive risks insured by GERIC also uses reinsurers to provide Integrated Long Term Disability, Group Life & Accidental Death and Dismemberment protection for AGLR and its business units.



AGLR incorporated NUI into the program in late 2004, replacing a traditional insurance program costing \$6.5 million with one that reduced annual cost to \$1.2 million.

## c. Claims Management

AGLR handles claims management in-house, under the direction of the Director, Risk Management, and through a staff based in Atlanta. This function includes short term disability and workers' compensation. Combining these two claims activities allows AGLR to operate a single "return-to-work" program, which a dedicated registered nurse conducts. For other claims, AGLR views the reduction in workload (50 or so claim files versus and expected 200 or so for a typical outside adjustor) as an important contributor to more thorough and careful analysis and settlement. AGLR analysis shows the cost of using internal resources to handle claims is at least competitive with the use of vendors on a cost basis, before considering the added benefits of internal management and use of familiar and accepted practices and procedures.

#### d. Potential Future Changes

The advancement of ERM program development will lead AGLR to an exploration of additional enhancements to its captive insurer's operations. Cyber, weather, trade credit, and other financial risks typify the candidates that the Director, Risk Management has already identified for

examination. Some of these areas have few, if any vibrant commercial markets. Trade credit risk mitigation, for example, is more advanced in Europe than in the United States. Should AGLR move into these areas, it will in effect be making the market for leading edge approaches.

## 2. Legal Operations

## a. Internal Organization and Staffing

AGLSC employs all of the AGLR's in-house legal resources. They operate under the overall direction of the General Counsel & Ethics & Compliance EVP (GC/E&CEVP). He has a number of non-legal responsibilities; therefore, routine supervision of the Company's lawyers falls under the direction of the Vice President & Associate General Counsel (VP/AGC). Nine lawyers, all based in Atlanta, perform services on behalf of ETG:

- Corporate Sec. & Securities Counsel VP
- Sr. Regulatory Counsel (state matters)
- Sr. Regulatory Counsel (federal matters)
- Litigation Counsel
- Sr. Litigation Counsel
- Chief Employee Benefits Counsel
- Sr. Corporate Counsel
- Corporate Counsel
- Chief Litigation Counsel.

Houston serves as the work location for the other four in-house lawyers. They do not perform work for ETG, but primarily serve the needs of AGLR's wholesale and energy investments businesses. These four lawyers are:

- Associate General Unregulated Business Counsel
- Sr. Corporate Counsel-Houston
- Corporate Counsel
- Sr. Corporate Counsel-Houston.

In-house legal structure and staffing have not changed significantly in recent years; however, the Houston staffing dedicated to non-utility matters has doubled from earlier levels. AGLR performs, compared to other LDCs, a greater portion of its litigation (for example, employee grievances and terminations, customer disputes, small tort claims, and discovery in larger tort actions) in-house. The same is true for benefits and executive compensation work, a significant portion of which a senior, in-house lawyer performs.

#### b. Practices and Procedures

The VP/AGC conducts monthly staff meetings, including the Houston-based lawyers by phone. These meetings operate under agendas, and included discussions of the major matters each has underway. The VP/AGC also conducts a weekly meeting with the state and the federal regulatory in-house lawyer and a weekly meeting with the two corporate attorneys, and generally bi-weekly meetings with litigation counsel. The department operates a Microsoft SharePoint site that offers in-house and outside counsel access to guidelines for outside counsel, templates for a variety of standard forms and letters, and other matter management documents and services.

Lawyers must report time bi-weekly, but there does not appear to be a department-wide plan for controlling prompt and accurate reporting of work beneficiaries. At least one of the managing lawyers cited "self discipline," rather than management review as the method for assuring proper time reporting.

The legal department uses AGLR's annual process for setting individual performance objectives, which includes a mid-year review and a February review of each lawyer's prior year performance against those objectives.

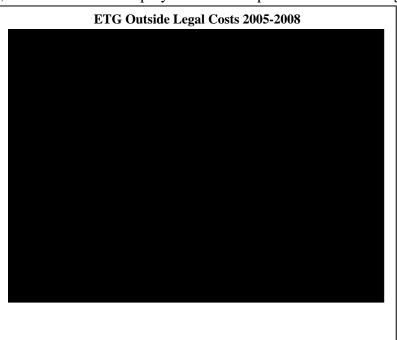
## c. Outside Counsel

The retention of outside counsel must come from the legal department, with the VP/AGC generally making the final decision. An assigned in-house attorney manages all outside legal work. Outside counsel work under documented guidelines and they use an electronic billing system. The system runs on a platform provided by DataCert, a leading provider of corporate legal department invoicing, reporting, and matter management systems. AGLR's system provides for consistent billing format, content, and charge numbers that tie into AGLR's cost assignment and allocation coding. Some outside counsel submit smaller bills in paper format; administrative personnel, however, load their information into the electronic system. Approvals for the payment of fees come initially from the assigned lawyer, with subsequent review by the VP/AGC and then the GC/E&CEVP).

AGLR has not used formal processes (such as competitive solicitation) to test pricing by outside counsel, instead relying upon actions such as blended rates, consultation with peers, comparisons among different firms providing AGLR with similar services, freezes in rates, commitments to reduce partner hours, and fixed fees to measure and to promote cost competitiveness. The VP/AGC considers hours variability among potential firms to so great as to make strict reliance upon hourly rates inapt. Similarly, AGLR does not employ a structured process for evaluating

outside counsel. Discussions among the lawyers and consultation with AGLR client groups comprise the principal methods for evaluating performance.

The accompanying table ETG's summarizes outside legal costs for the 2005-2008 period. There has not been significant variation in those costs from year to year. Subjects commonly addressed by outside counsel in the gas business (tort litigation, state regulatory issues, securities and financing, labor employment, manufactured gas



sites) accounted for nearly 85 percent of outside legal costs in this period. Variations in the firms handling matters in these large dollar areas show willingness to "shop" for the best combination of cost, quality, and timeliness in service delivery. The VP/AGC cited changes in firms handling securities and FERC matters as examples of openness to change firms as circumstances require.

#### d. Hours Charged

The following table summarizes the hours charged by AGLSC lawyers in recent years.

	Hours charged by AGESC Attorneys										
	Attorney	2006			2007			2008			
Base	Role	AGSC	<b>ETG</b>	Total	<b>AGSC</b>	<b>ETG</b>	Total	AGSC	<b>ETG</b>	Total	
Atlanta	Secretary/Securities	2,080		2,080	2,088		2,088	1,872		1,872	
Atlanta	VP/Assoc. GC	2,090		2,090	2,088		2,088	2,030		2,030	
Atlanta	Litigation	1,131	279	1,410	881	258	1,139	1,260	113	1,373	
Atlanta	Benefits	2,080		2,080	2,088		2,088	2,032		2,032	
Atlanta	Litigation				414	85	499	1,665	84	1,749	
Atlanta	Corporate				1,590	4	1,594	1,728	3	1,731	
Atlanta	Chief, Corporate	460	97	557	724	89	812	1,227	39	1,266	
Atlanta	Regulatory	628	32	660	648	117	765	593	149	742	
Atlanta	EVP/GC	2,031	1	2,032	2,089	9	2,098	1,940	7	1,947	
Atlanta	Chief, Litigation	1,036	136	1,172	1,158	140	1,298	1,100	48	1,148	
Atlanta	Regulatory	583	59	642	784	66	850	1,201	113	1,314	
	-		Atla	nta Sum	nary						
	Hours	12,119	603	12,722	14,550	767	15,317	16,647	556	17,202	
	Percent*	64.7%	3.2%	68.0%	63.6%	3.4%	66.9%	72.8%	2.4%	75.2%	
Houston	Non-Utility				610		610	844		844	
Houston	Non-Utility				627		627	703		703	
Houston	Non-Utility	425		425	973		973	879		879	
Houston	Non-Utility	1,278		1,278	885		885	947		947	
	•		Hous	ton Sum	mary			•			
	Hours	1,703	-	1,703	3,094	-	3,094	3,373	-	3,373	
	Percent*	20.5%	0.0%	20.5%	37.2%	0.0%	37.2%	40.5%	0.0%	40.5%	
*Using 2	,080 hours per year per	attorney a	as a bas	e							

**Hours Charged by AGLSC Attorneys** 

The time that the Atlanta charge to AGSC gets allocated to all affiliates, based on the composite ratio. When Houston based attorneys charge time to AGSC, the costs are allocated to AGL Investments, a non-regulated subsidiary of AGLR.

## 3. Facilities Management

#### a. ETG Facilities

ETG maintains several facilities in each of its two regions (Union and Northwest) and at main offices in Berkeley Heights, NJ. ETG had also previously used office space leased at the Liberty Hall Plaza Building in Union, NJ. ETG vacated this space in January 2008. The NUI Corporation continues to lease the space in the Plaza Building, with a lease expiration date of April 30, 2022. The Company has sub-leased most of this space.

#### ETG's Union Region facilities include:

• Green Lane Service Center (Union, NJ): serves as the operations center for the Union Region, serving customers in portions of Union and Middlesex counties, and includes a service center, warehouse space, fleet maintenance operations, a pipe yard, parking for

- personal and fleet vehicles, and office space. ETG is also adding a new call center at the Green Lane facility.
- Erie Street Service Center (Elizabeth, NJ): includes an LNG plant, office space, a fabrication area, and a separately fenced gate station.
- Perth Amboy Pay Station (Perth Amboy, NJ): a walk-in pay center serving approximately 61,000 walk-in customers annually.
- Elizabeth Pay Station (Elizabeth, NJ): a walk-in pay center serving approximately 75,000 walk-in customers annually.

The facilities in the Northwest Region include:

- New Village Service Center (Stewartsville, NJ): serves as the operations center for ETG's Northwest Region, serving customers in portions of Hunterdon, Mercer, Morris, Sussex, and Warren counties. This center specifically supports the field operations of the central portion of the Northwest Region: Warren, Morris, and northern Hunterdon counties. It includes a service center, pipe yard, parking for personal and fleet vehicles, office space, warehouse space, and a separately fenced gate station.
- Andover Service Center (Newton, NJ): a satellite office supporting the northern portion of the Northwest Region, including Sussex County.
- Flemington Service Center (Flemington, NJ): a satellite office supporting the southern portion of the Northwest Region, including Mercer and southern Hunterdon counties.

The following table shows the size, number of employees, and the lease cost or ownership status of each of ETG's facilities.

Size		20	2006		007	2008		
Facility	(Sq. Ft.)	Employees	Annual Lease Cost	Employees	Annual Lease Cost	Employees	Annual Lease Cost)	

b. Management and Planning

AGSC provides support for facility management and planning through centralized resources located in Atlanta. No dedicated New Jersey personnel support these functions. AGSC has a dedicated facilities group with four positions:

• Manager, Facilities: responsible for all facets of facilities planning and management; provides assistance and project management services related to facilities for business managers; directs vendor management for facility construction and property management

- Superintendent, Facilities: directs and coordinates facilities maintenance, including repair, renovation, and enhancements
- Operations Specialist, Facilities: provides daily facilities management, including mail services, maintenance contractions, invoice processing, and budgeting
- Facilities Coordinator: manages lease agreements and subleases, working with the legal organization; facilitates relocations and coordinates new construction.

The facilities group is part of the Information Technology (IT) organization. This group transferred to IT from the controller's organization about two years ago. As of January 2009, the group reports directly to the Chief Information Officer (CIO). The manager and superintendent positions have recently become vacant and AGSC has not yet filled them. The Company indicated that it is still evaluating workload for the facilities management and planning function and developing a long-term strategy for this function before filling these positions.

Besides the dedicated facilities group, other AGSC organizations support facilities management and planning, depending on the nature of the issue (e.g., legal, finance, project management, and other IT groups). For example, the Senior Corporate Counsel in AGLR's Legal Department provides legal support for ETG in real estate issues, including legal representation for land and facility sales, construction and renovation projects, property leasing, and contracting.

The Company does not have any internal policies, procedures, or guidance documents that specifically address facility planning and management processes. There have been no recent audits of the facilities management process. There are no internal measurements to track and manage the process, other than the budgeting process and periodic management reviews.

The Company indicates that the facilities group, in concert with other AGSC support organizations, is trying to transition from a "turn-key" approach to a more service-oriented approach. This change would give the facilities group a more advisory and support role, with equal voice from the business units, such as ETG.

The Company provided as an example of this approach the project for adding a new call center to ETG's Green Lane building. AGLR assembled a team that included ETG managers and executives and the relevant AGLR support organizations. The Vice-President of Customer Service served as the project manager. This team has been accountable for the project, meeting once every two weeks to review project status. The facilities needs were treated as one of many other project requirements, such as telecommunications and training. The team contracted with an architect and a real estate project manager in New Jersey to work on the project locally.

The Company stated that the ETG management team generally initiates the planning for new facilities. The local management team communicates facilities needs and requirements to the appropriate AGSC support organizations that have facilities-planning responsibilities. The 2007 lease of office space for ETG office and management personnel in Berkeley Heights to replace the vacated space in the Plaza Building in Union is the only recent example of the acquisition of a new ETG facility. ETG enlisted the services of a real estate brokerage firm to find the facility. Local ETG management and AGSC facilities personnel toured the locations suggested by the

broker and based the decision to lease the Berkeley Heights facility on location, rental rate, landlord concession and amenities offered.

## 4. Procurement and Materials Management

## a. Organizational Structure

AGSC's centralized Supply Chain department in Atlanta provides procurement and materials management support and related functions, including fleet management. The managing director that heads Supply Chain joined AGLR four years ago, after several years of experience in manufacturing, sourcing, and quality assurance at a prominent Fortune 500 company. The Supply Chain department operated as a traditional purchasing organization when the new managing director joined the Company. He has expanded the focus of the organization to encompass strategic management of AGLR's supply chain.

The Managing Director, Supply Chain had five direct reports in early 2009:

- Director, Strategic Initiatives
- Manager, Provisioning
- Manager, Strategic Sourcing
- Manager, Supplier Diversity
- Manager, Fleet Services.

Strategic Initiatives have focused on strategic projects, such as the salt dome storage projects and the Hampden Roads pipeline project in Virginia. The Provisioning group focuses on management of gas carrying and other materials. Strategic Sourcing manages outside contracts for everything except materials. Outside of the Fleet Services group, the Supply Chain organization also included another Manager reporting to the Director, Strategic Initiatives and a Supervisor reporting to the Manager, Provisioning plus two contract negotiators, one senior buyer, one associate buyer, and two inventory analysts. The employees in the organization have diverse backgrounds, both within and outside the natural gas industry. The next section of this chapter provides a description of the Fleet Services group.

AGLR's mid-2008 self-examination leading to the mid-2009 reorganization (described in Chapter II, *Organization*, and elsewhere in this report) concluded that the Supply Chain organization was underutilized. The Company therefore took steps to further consolidate the strategic direction and support of supply chain management throughout the Company into the Supply Chain department. The reorganization added two new analyst-level positions, and consolidated the organization's principal functions into two Director-level organizations:

- Supply Chain Transaction Services: a new position that incorporates the functions of Provisioning group and includes the Supervisor, Materials Management with two inventory control analysts, two contracts negotiators, a senior buyer, and an associate buyer
- Supply Chain Strategic Sourcing: incorporates the Manager, Strategic Sourcing and also includes a Manager, Strategic Initiatives, a senior buyer, a supply market analyst, and a services sourcing specialist.

In addition, managers in other organizations with supply chain management functions, such as the Manager, IS Purchasing in the Information Technology (IT) department, now report into the

Transaction Services or Strategic Sourcing Directors. The Manager, Supplier Diversity was unaffected by the reorganization. The next section discusses the reorganization's impact on Fleet Services.

In addition to the AGSC Supply Chain department, ETG maintains a small number of New Jersey employees who provide management and staffing of the warehouses in the Union and Northwest regions. These warehouses supply materials for the responders, mechanics, and other field personnel. Only one warehouse (Green Lane) is fully staffed.

### b. Procurement

AGLR's vendor selection process was very dispersed throughout the Company until about three years ago. Changes in policies and organizational structure since that time have made processes more uniform. Supply Chain now works with the local organizations in each of the utilities and other AGLR subsidiaries in the vendor selection process. Supply Chain, however, must review every contract. The Company usually uses master services agreements with vendors, but occasionally uses statements of work for situations in which this is more appropriate. The Supply Chain organization maintains master service agreement templates for each required service type, and has responsibility for the negotiation of these agreements. AGLR tries to take advantage of its size to secure corporation-wide contracts for materials and services as much as possible, but allows exceptions to recognize local requirements. For example, the Company bids locate services as a package across its entire geographic footprint, but makes exceptions in some areas because locate service providers may not operate in each territory.

AGLR's Global Supply Chain Policy document describes the Company's approach and standards and the employees' obligations for sourcing, procurement, contract development, and contract administration associated with material, contracts, consulting contracts, and contract labor for everything except gas purchase, sale, transport, and storage. The document specifies that the Supply Chain organization has responsibility for sourcing these activities in order to ensure compliance with corporate policies, guidelines, and procedures. It includes procedures for competitive bidding, requests for proposals, conflicts of interest checks, assuring supplier diversity, contract awards, insurance requirements, and supplier performance management. The Company specifies purchase authorization amounts at graduated levels, depending on an employee's management level.

The Global Supply Chain Policy specifies five different classes of purchases:

- 1. Purchases covered by existing agreements
- 2. Major purchases -- purchases valued at \$50,000 or greater
- 3. Minor purchases purchases under \$50,000
- 4. Procurement Card purchases
- 5. Emergency purchases.

Existing agreements cover purchases of stock materials for gas distribution systems (for which there is a designated third-party supplier), travel-related expenditures using pre-negotiated rates, office supplies using negotiated discounts and a Company-wide ordering process, and other items (*e.g.*, professional services, engineering, and construction using existing master services agreements).

An employee or organization must work with the Supply Chain Organization for major purchases and with the Legal Department if a contract is required. Supply Chain helps the purchaser determine the appropriate sourcing method (e.g., bid procedures), ensures compliance with such corporate policies as the Supplier Diversity Program Policy and the Environmental Health and Safety Procedures, drafts and issues requests for proposal and the like based on input from technical and legal personnel, negotiates the final price and other contractual terms, and coordinates the execution of the contract and related documents.

An employee or organization requiring a minor purchase can do so locally, by following procedures outlined in the Global Supply Chain Policy. This document includes requirements for different numbers of bids depending on the size of the purchase. The purchaser coordinates with Supply Chain the execution of the purchase order and Supply Chain arranges for the entry of the purchase order in the Company's contract management system.

The standard process calls for purchase to be made electronically through the PeopleSoft system. The Company issues Procurement Cards (P-Cards) to employees for occasional purchases (typically less than \$2,000 and not for gas distribution materials). Employees use the cards mostly for travel, but occasionally for minor materials purchases as well. P-Cards do not provide the same level of tracking detail as purchases through PeopleSoft. The employee's manager must approve a P-Card purchase after it is completed. The Company has performed random audits to ensure that P-Cards are not used for gas-carrying materials.

The Global Supply Chain Policy allows emergency purchases for materials and services needed immediately and for which the normal procedures are not practical. In such cases, the purchaser must contact Supply Chain, which assesses whether the emergency process applies, and, if so, works with the purchasers to complete the purchase.

The Company also has a Supplier Diversity Policy document that outlines purchasing employee's and Supply Chain organization's responsibilities to implement the Company's Supplier Diversity Program "to provide diverse businesses equal access to procurement opportunities." The process is designed "to ensure the inclusion of diverse businesses in all applicable business opportunities." The document defines a diverse business as one a third-party has certified meets the definition of being at least 51 percent owned, controlled, and operated by one or more members of a diverse group. AGLR considers the following groups to be diverse: African Americans, Asian-Pacifics, Hispanic Americans, Native Americans, women, disabled people, and veterans. AGLR also considers Hub Zone and small-disadvantaged businesses. The policy requires the purchasing organizations to reorganize annual targets to ensure that AGLR meets its annual targets for diverse businesses. The Policy document specifies the need for involvement of Supply Chain's Manager, Supplier Diversity in various aspects of the bidding and contracting process. The Policy document also includes steps to encourage suppliers to provide subcontracting opportunities to diverse businesses. Chapter III, *Human Resources*, provides information about the Company's use of diverse suppliers.

#### c. Inventory Management

As much as possible, AGLR uses a uniform process for managing and controlling material inventories in all its utilities, including ETG. The Company uses a single third-party integrator for supplying and managing standard supplies of gas-carrying materials required in the ordinary course of business, but uses the bidding process to select suppliers for special projects.

In most cases, the Company uses unmanned depots for standard material supplies. In AGLR's standard process, the third-party supplier owns and maintains the equipment inventories. The supplier's employees visit each depot location on a specified schedule, conduct a physical inventory, and place any item at or below a pre-determined order point on order for replenishment. The supplier has responsibility for delivering the needed materials and the restocking the bins in the depot the following week. AGLR measures the third-party materials supplier on a performance basis, assessing penalties for poor results or providing benefits for results better than objectives. A service-level agreement, containing such standards as cost savings goals and on-time materials delivery, provides the bases for these measurements. The Company's field staff members have responsibility for maintaining sufficient materials in their trucks, and visit the material depots to replenish their supplies, typically every two weeks, but more often if needed.

When appropriate, the equipment inventories and inventory management process varies from region to region. For example, ETG uses different meters from most of the other AGLR utilities. This difference requires the stocking of different equipment. ETG also uses manned or partially manned instead of completely unmanned materials depots, in part because of its collective bargaining agreement. As with the other AGLR utilities, the third-party materials supplier owns ETG's materials inventories and has responsibility for ensuring that the material depots are fully stocked. However, the ETG storeroom staff takes on some of the role of scanning, ordering, and re-stocking the bins.

This depot process differs between the Green Lane warehouse, serving the Union Region, and the New Village and Flemington warehouses, which serve the Northwest Region. The Green Lane facility is fully manned. The two Northwest Region facilities are only partly manned. An ETG employee visits the facilities to inventory the bins and make sure the open bins are stocked.

All warehouses have an open area with bins; however, this area is a much larger portion of the facilities in New Village and Flemington than in Green Lane. In Green Lane, only the fast-moving equipment (e.g., common pipe fittings) reside in the open bins; all the other equipment must be requisitioned from an attendant. In the Northwest Region, all the depot items are in open bins.

In the depot process, the fast moving items are identified, and an attempt is made to ensure that a month's supply is always on hand. An employee goes through the bins weekly (both for Green Lane and the Northwest warehouses) to see what is needed. ETG provides this information to the third-party supplier, who typically delivers the necessary items by the end of the week. The supplier provides reports of items out of stock or on back order, and offers express delivery for items in particularly short supply that are needed immediately.

The Company does not use the standard depot process for some materials, such as emergency items (*e.g.*, pressure controls) and materials not in regular demand. It houses such items in the same warehouses as the standard depot items, but the PeopleSoft system manages them, and tracks to the specific job and employee. The Company does not track standard depot items at this level of detail.

ETG has succeeded in reducing inventories through improved inventory management. ETG had an inventory of around \$2 million in 2003. The year-end inventory fell to \$745,792 in 2006, \$527,240 in 2007, and \$399,729 in 2008.

The local ETG employees report that the Supply Chain organization has provided effective support for their operations and that the depot process is working well. There have been relatively few complaints, although it took some time for the employees to become accustomed to the new process and to feel comfortable that they could maintain a smaller inventory on their trunks and trust that there would be adequate replenishment of the supplies in the depots.

Supply Chain is working to improve the process further by eliminating supplies of obsolete equipment and by reducing the average length of time that supplies remain in inventory. The organization recently designed a new process to speed the supply replenishment process for the field force across AGLR's utility footprint. This process will use several standard "kits" containing necessary materials that the field force will maintain on trucks, with the mix of kits varying by job function. When any piece of equipment runs out in a kit, the employee will replace the entire kit at the material depot, rather than search through bins or request the storeroom staff to find a single item. Supply Chain worked with utility employees in each region, including ETG, to design kits appropriate to the local needs. Because of some difficulty in fitting shelves to hold the kits safely in ETG's current fleet of trucks, AGLR has delayed introducing the new process in ETG's territory.

## d. Controls

The Company reports that it uses a number of different controls to ensure compliance with its inventory management (depot) process. These controls include:

- Depot audits: an on-site or self-review audit that reviews stock outs, cleanliness, labeling, and bin locations
- Depot Stock Level Review Process: a review of slow moving inventory and stock levels
- Monthly reviews of sales comparing year-over-year and month-over-month sales
- Weekly Depot Backorder Reports provided by the third-party supplier
- Weekly Depot Stock-out Reports provided by the third-party supplier
- Weekly management reports from the third-party supplier
- Unscheduled shipment audits performed at the third-party supplier's facility
- Inventory mismatch reviews, using the PeopleSoft system to block payments based on pre-set criteria, such as pricing and quantity relationships or missing items on a purchase order
- On-site supervision of warehouse operations
- Using a documented procedure for converting a warehouse to the depot process.

Supply Chain supervises a monthly cycle count process through PeopleSoft to check inventory amounts. In this process, a family of items is selected equaling about 1/12<sup>th</sup> of the total inventory items of a business unit, with all inventory items eventually covered in some month during a

year. The table shows the adjustments necessary resulting from this process, demonstrating that, in general, the variances have been decreasing since 2006. The net variances were less than 0.002 percent of the year-end inventory numbers in 2008.

10	Actual Inventory Excess vs. General Ledger Va								
	Facility	2006	2007	2008					
	Green Lane	\$39,760	\$9,960	\$489					
	New Village	\$1,610	(\$579)	(\$1,202)					
	Flemington	\$26,174	(\$1,581)	N/A					

Supply Chain also performs random audits and site visits. Members of the organization randomly visit inventory storage locations each year and discuss any issues with supervisors and managers.

New Village is mainly unmanned; therefore, there are two layers of security: a card lock at the entry to the facility and another at the entry to the warehouse. At Green Lane, there is only a card lock at the entry to the facility. The entries are recorded and tracked. There are also cameras in the facilities. There have been no vandalism problems.

## 5. Transportation

## a. Organizational Structure

The AGSC Supply Chain organization includes a Fleet Services group, as noted in the last section. Before the mid-2009 reorganization, the Fleet Services group was responsible for both support of fleet operations for all of AGLR's operations (acquisition, management and disposal of vehicles and equipment used to support operations) and specific management of the Georgia operations. The group was led by a manager and included a supervisor mainly responsible for specification and design of large company built trucks, a coordinator of vehicle maintenance primarily in Georgia, a contract negotiator, two analysts, and an office assistant. The mid-2009 reorganization separated the southern fleet operations (Georgia, Florida, and Tennessee) from Supply Chain and Fleet Services, and consolidated contract negotiations into the Supply Chain Transaction Services Group. This change leaves a smaller Fleet Services group, which consists of a Manager and two analysts, and now focuses on support of fleet operations throughout the AGLR footprint, including ETG. These support functions include setting policies, managing budgets, developing forecasts, performing analysis, and managing other administrative needs.

An organization located at the Green Lane building in Union, NJ has responsibility for ETG's inhouse maintenance. This organization includes a supervisor, six mechanics, and an office assistant.

## b. Fleet Operations

The Atlanta-based Supply Chain organization, including the Fleet Services group, has responsibility for vehicle purchasing, policies, and analysis. Fleet Services relies on a computer system (called *M4*) for maintaining information on the fleets throughout the AGLR footprint. The group uses M4 to project vehicle replacement, maintenance, and fuel requirements. A Fleet Manual provides the policies, procedures, and guidelines for vehicle use and operation; vehicle maintenance; vehicle acquisition, replacement, and disposal; collection and dissemination of

information about the vehicles; and a disaster recovery plan. The version of the Fleet Manual the Company provided Liberty for review is now several years old. It has somewhat outdated references, and needs to be updated.

Fleet Services tracks and analyzes the AGLR fleets, including ETG's, on a monthly and annual basis, for use by local and corporate management and for overall planning. This analysis includes tracking of vehicle inventories, lease expenditures, maintenance and repair numbers and expenditures, miles driven, and budgeted versus actual expenditures.

ETG maintains a fleet of approximately 270 vehicles. ETG bases most of the vehicles (200) at the Green Lane location in Union, with the remainder in New Village, Flemington, Erie Street (Elizabeth), and Andover. Some of the vehicles based in these locations are assigned to employees that keep the vehicles at their residences. Large, light, and service trucks comprise about three-quarters of the fleet. The rest of the fleet consists of backhoes, forklifts, trailers, a few automobiles, and other miscellaneous equipment.

AGLR introduced a new vehicle safety program after acquiring ownership of ETG. This includes safety awareness programs and the use of "drive cams" in vehicles. ETG's fleet vehicle accident rate has decreased since 2006. In 2006, there were 29 accidents, 15 for which the employee was at fault. In 2007 these numbers decreased to 15 and 9, and in 2008 to 13 and 3, respectively.

The Company has not conducted any recent employee surveys that assess satisfaction with the performance of fleet operations. The Green Lane garage supervisor indicated that the Company assesses performance informally through direct contacts. He indicated that the most pressing issue with employees currently is assistance with the installation of upgraded modems in the trucks that are taking place with the introduction of the new work management applications.

## c. Vehicle Acquisition

Local ETG management makes final decisions on whether to lease or buy vehicles. The Supply Chain organization, including Fleet Services, works with AGLR's Treasury organization to

support lease/buy decisions, and performs "what if" analyses. AGLR inherited significant a number of owned vehicles from the NUI acquisition. The table shows the recent trends in fleet composition. There were 300 vehicles in 2008, which is larger than the approximately 270 in 2006 and 2007. Company indicates that this was a temporary increase due to a change in

ETG Fleet Vehicles										
Vehicle	20	006	20	07	2008					
Class	Leased	Owned	Leased	Owned	Leased	Owned				
Automobile	10	2	7	1	7	1				
Backhoe Loader	10	9	10	9	10	9				
Forklift	2	4	2	4	1	4				
Large Truck	29	18	27	20	26	26				
Light Truck	51	13	48	13	89	11				
Service Truck	88	5	81	4	77	4				
Towable Backhoe	0	3	0	3	0	3				
Trailers	19	10	19	14	19	10				
Miscellaneous	2	2	2	2	2	1				
Total	211	66	196	70	231	69				

the light truck inventory, for which some vehicles had been taken out of service but were still in inventory because they had not completed the disposal cycle.

As the preceding table illustrates, owned vehicles have remained approximately one-quarter of the total number of fleet vehicles since 2006. Heavier trucks and equipment comprise the majority (more than two-thirds) of the owned vehicles. The Fleet Services organization informed Liberty that the trend in AGLR's overall fleet has been toward leasing rather than ownership of vehicles. There was relatively little new lease activity until 2008, when there was an increase particularly in the light truck leases. The Company indicated that it determines the need for replacements based on vehicle class, mileage, and age factors.

Decisions on leasing vendors flow through the Supply Chain organization. The Company tries to use national vendors across the entire AGLR footprint when possible to take advantage of scale economies. ETG's vehicle lessor is GE Fleet Services.

The chart shows the average age of ETG's fleet vehicles by class in 2006, 2007, and 2008.

The Company has maintained a fairly stable average fleet age overall. The drop in average age of leased vehicles from 2007 to 2008 is related to recent light truck leases and should drop even further after the trucks they replaced are taken out of the inventory.

	ETG Fleet Vehicle Average Age (Months)										
Vehicle	20	06	20	07	2008						
Class	Leased	Owned	Leased	Owned	Leased	Owned					
Automobile	97	54	108	106	113	118					
Backhoe Ldr	96	35	108	47	120	59					
Forklift	258	142	270	154	273	166					
Large Truck	91	41	100	41	112	43					
Light Truck	74	34	85	46	38	47					
Service Truck	76	44	85	65	95	77					
Towable											
Backhoe	0	12	0	24	0	36					
Trailers	134	77	146	65	158	94					
Miscellaneous	153	108	165	120	177	186					
Total	87	52	98	58	83	65					

## c. Maintenance

ETG conducts vehicle maintenance and repairs through a mix of in-house employees and outsourced vendors. The Company informed Liberty that the ETG garage personnel are covered under a collective bargaining agreement that governs the repairs of Company vehicles using internal or external resources and limits the amount of outsourcing based on past practice. Mechanics at ETG's Green Lane garage provide preventive maintenance and straightforward repairs of vehicles based in the Union Region (at Green Lane and Erie Street). ETG uses vendors for such work in the Northwest Region, although the Green Lane garage occasionally provides some maintenance and repair work for Northwest Region vehicles. For both regions, ETG uses vendors for complicated engine work, transmission repairs requiring specialty equipment, complicated bodywork, and windshield replacements. Authorized dealers perform repairs for all warranty items.

The Green Lane garage has eight repair bays and six mechanics who work two shifts, four on a 7:00 a.m. to 3:30 p.m. shift and two on a 3:00 p.m. to 11:00 a.m. shift. From October 1 to April 1, one mechanic also works on Saturdays from 7:00 a.m. to 3:30 p.m.

The Green Lane garage supervisor has responsibility for choosing the vendors ETG uses for vehicle maintenance and repair. He tries to use established vendors located close to where the vehicles are housed. Currently, ETG uses four vendors for maintenance in the Northwest Region and two vendors mainly for body work (one in the New Village area and one in Union area).

The Company performs preventive maintenance on most vehicles twice a year or every 5,000 miles. However, the criteria are different for specialized vehicles; for example, backhoes have more frequent preventive maintenance, based on hours in operation rather than mileage.

The Green Lane garage supervisor indicates that he assesses performance of the garage mechanics based on the length of time taken to complete jobs, repeat repair reports from M4, and monthly preventive maintenance audits that the supervisor conducts personally. He assesses vendor maintenance and repair performance based on the length of time for the jobs, job cost, and informal feedback from the vehicle drivers.

The following chart shows the average number of repairs per vehicle for ETG's fleet in 2006, 2007, and 2008. The Company indicated that it does not have targets for number of repairs.

**ETG Fleet Vehicle Average Repairs Per Vehicle** 

ETG Fleet venicle Average Repairs Fel Venicle									
Vehicle Class	200	06	200	07	20	08			
venicle Class	Leased	Owned	Leased	Owned	Leased	Owned			
Automobile	15	9	15	17	11	14			
Backhoe Ldr	0	0	0	0	0	0			
Forklift	0	0	0	0	0	0			
Large Truck	31	26	32	28	29	24			
Light Truck	20	10	22	12	14	12			
Service Truck	21	26	21	15	18	20			
Towable Backhoe	0	0	0	0	0	0			
Trailers	0	0	0	0	0	0			
Miscellaneous	0	0	0	0	0	0			
Total	18	11	19	11	15	12			
Preventive Maint.									
Work Orders		942		863		797			
Total Miles Driven	2,415,657		2,387,074		2,571,361				
Miles/Vehicle		8,721		8,974		8,571			

The next chart shows the maintenance and repair costs and other fleet budget line items compared budget in 2006, 2007, and 2008.

2006 Line Items	Actual	Budget	Actuals AdjustmentFuel in Wrong Account	In-sourced Maintenance	Outsourced Maintenance
Lease	\$30,394	N/A*	•		
Maintenance	\$927,421	\$1,100,044	\$477,947 **	\$118,236	\$329,711

Fuel	\$188,767	N/A*	\$638,241	**		
2006 Total	\$1,677,865	\$1,587,956			\$649,519	\$329,711

2007 Line Items	Actual	Budget	Actuals AdjustmentFuel in Wrong Account	In-sourced Maintenance	Outsourced Maintenance
Lease*	\$2,167	\$106,569			
Maintenance*	\$420,494	\$703,272	\$399,518 **	\$257,623	\$141,895
Fuel	\$601,876	\$399,047	\$622,852 **		
2007 Total	\$1,559,626	\$1,739,632		\$792,712	\$141,895

2008 Line Items	Actual	Budget	Actuals AdjustmentFuel in Wrong Account	In-sourced Maintenance	Outsourced Maintenance
Lease*	\$211,338	\$363,743			
Maintenance*	\$447,800	\$307,900	·	\$226,506	\$221,294
Fuel	\$829,051	\$556,859			
2008 Total	\$2,032,017	\$1,785,475	•	\$770,333	\$221,294

<sup>\*</sup>Due to NUI acquisition-transitional period; all budgeted numbers were consolidated into the one account.

\*\*Much of the bulk fuel purchased in 2006 posted to the maintenance account rather than fuel account.

Because of the problem in properly associating expenses in the budget categories before 2008, it is difficult to discern trends in the reported numbers. The Manager, Fleet Services indicated that a delay in the planned leasing of new light trucks was the reason for the under-run of the leasing budget in 2008. She also indicated that this delay was also the source of the over-run in the maintenance costs. The fuel expenditures are discussed below.

#### d. Vehicle Fueling

AGLR generally uses fuel cards for fueling vehicles. ETG, however, also has on-site fueling stations at Green Lane and New Village, which vehicles housed at those locations use for most fueling although also use fuel cards when refueling on the road. The rest of the vehicles use fuel cards for most fueling. The Company chooses the fuel card vendors based on input from the local managers. ETG uses a fuel card vendor that is different from the rest of the AGLR companies because this vendor also provides card readers for the on-site fueling stations. The Company indicated that it could reduce administrative costs and increase tracking and analysis capabilities with a consolidation of vendors. However, the cost of fuel is about the same for all the vendors AGLR uses.

The following tables show fuel consumption and expenditures for 2006, 2007, and 2008, separated a fuel-card purchased and that on-site (bulk fuel) consumption.

#### **ETG Fleet Fuel Expenditures**

2006 Fuel Info	\$'s	Gallons	CPG
Gallons represent total by			
Bulk Fuel	\$444,968	191,361	\$2.33
Fuel Card	\$193,273	79,403	\$2.43
2006 Total	\$638,241	270,764	\$2.36

2007 Fuel Info	\$'s	Gallons	CPG
Gallons represent total by			
Bulk Fuel	\$423,040	172,566	\$2.45
Fuel Card	\$199,812	79,732	\$2.51
2007 Total	\$622,852	252,298	\$2.47

2008 Fuel Info	\$'s	Gallons	CPG
Gallons represent total by			
Bulk Fuel	\$606,089	165,637	\$3.66
Fuel Card	\$222,962	52,262	\$4.27
2008 Total	\$829,051	217,899	\$3.81

The results demonstrate that except for 2008 there was a relatively small difference in fuel costs between the two fuel purchase methods. In 2008, which was a year of high gasoline price volatility, ETG experienced fuel cost savings from buying the fuel in bulk and using on-site facilities. The overall fueling costs, however, need also to recognize the labor cost involved, which this analysis does not provide.

## 6. Land Management and Real Estate

#### a. Scope of Activities

ETG's current land management and real estate requirements are limited. ETG has not needed to make any rights-of-way or land acquisitions for many years, given the limited growth in its service area. Recent related activities have been confined to the granting of easements. Since the beginning of 2006, ETG obtained 33 easements in the Union Region and 48 in the Northwest Region.

No single organization coordinates land management and real estate activities. At the local level, the ETG Engineering Services group supports right-of-way or easement acquisition through two employees, an engineer for the Northwest Region and a design technician for Union Region, who have considerable experience. For major pipeline projects, AGSC provides support through right-of-way agents. The Company has two right-of-way agent positions based in Atlanta as part of the Engineering and Operations organization. Contractors specializing in right-of-way issues are also used for large projects. The Legal Department has a real estate attorney to provide support in executing legal documents.

## b. Rights-of-Way and Easements

ETG relies as much as possible on public rights-of-way (*ROW*) for gas line placement. Most ROW acquisition or easements occur through new business development. In such cases, the Company prefers to obtain the easement or permits rather than acquire ROWs.

The easement acquisition process generally begins with the sales and marketing organization for new business projects. This organization has standard easement contracts developed by the Legal Department to present to the customer. The ETG Engineering Services organization becomes involved in the detailed drawings that accompany the easement, but occasionally interfaces with the customer if necessary to complete the process.

Occasionally, reaching the new customers requires crossing the land of a third party. When this happens, ETG generally leaves it to the customer to contact and negotiate with the third party for an easement. ETG then becomes involved to complete the contract. There are exceptions, for example, when the third party is an ETG customer. When government agencies are involved, ETG obtains permits rather than easements.

In the rare cases where ROWs are acquired, the Company's policy is to be landowner friendly. AGLR-wide, the percentage of access accomplished through condemnations is well below the national average, and most of these are "friendly" condemnations.

## 7. Information Technology

## a. Organizational Structure

AGSC provides support for ETG's information technology (*IT*) needs through the information Services (*IS*) organization, led by the Chief Information Officer (*CIO*), who reports to the Executive Vice-President, Chief Financial Officer. The CIO's organization provides five major IT functions: applications, infrastructure, project management, incidence response, and disaster recovery. The CIO has six direct reports:

- Vice-President, Information Systems<sup>5</sup>
- Director, Infrastructure and Operations
- Manager, Telecommunications
- Manager, Network Engineering
- Manager, Corporate Applications
- Administrative Assistant.

The CIO joined AGLR about five years ago after extensive experience in various IT positions, including employment at a leading IT services and equipment vendor and at a leading financial company, and 10 years as a technology consultant. He began his association with AGLR as a consultant to the former CIO. He joined AGLR originally at SouthStar and then led application and maintenance support for utility and corporate applications. He was named CIO in November 2008.

<sup>&</sup>lt;sup>5</sup> Some of the titles of these five organizations have changed slightly as part of the mid-2009 reorganization. However, excluding the exceptions noted in the text, the organizations' functions have not changed.

Most of the CIO's organization is based in Atlanta. Three employees and one contractor located in New Jersey support ETG.

The Information Systems group (now known as IT Shared Services) has responsibility for the architecture, development, and support of applications for AGLR's utility businesses. These include applications supporting such functions as customer service, field service, engineering, and compliance. The organization uses two major vendors to supplement the AGSC team for application development. The vice-president of this organization has been at AGLR since 1999, working mainly in the development of automated field support applications. He assumed his current position in November 2008, coincident with the appointment of the new CIO. His organization included 26 AGSC employees and 53 contractors in mid-March. Reporting to the vice-president are:

- Senior Architect: responsible for ensuring the architecture of utility applications meet enterprise standards; also manages database administration
- Director, Information Services: responsible for quality assurance, systems testing, and the project management organization (*PMO*), which has responsibility for project management of all significant IT projects
- Manager, Applications (Engineering)
- Manager, Applications (Customer Service and Marketing).

The current form of the PMO was established last November. Previously, it has been designed for system and application development projects but is now used in management of all significant IT projects.

Prior to the mid-2009 reorganization, a Manager, Training with a staff of six supporting systems and applications training development and delivery also reported to the VP, Information Services also. With the reorganization, this function moved to Human Resources.

The Director, Infrastructure and Operations has responsibility for IT infrastructure (excluding telecommunications, network engineering, and data center operations), incidence response, and disaster recovery. Her responsibilities include architecture support and maintenance of servers, data back up, and storage solutions; IT production control; coordination of mainframe operations (which are hosted by an external vendor); data security; and asset management. The infrastructure responsibility excludes telecommunications, network engineering, and data center operations. This organization contained 37 AGSC employees and 2 contractors in mid-March, including two desk-side support specialists located in New Jersey, providing dedicated support for ETG's office and field personnel. Formerly, the Infrastructure and Operations group had responsibility for IT purchasing. With the mid-2009 reorganization, this function has largely been consolidated into the Supply Chain organization.

The Manager, Corporate Applications has responsibility for business support and technical delivery of corporate applications, mainly Enterprise Resource Planning (*ERP*) applications using PeopleSoft software. These applications support such functions as finance, human resources, supply chain, tax, and legal. The organization consists largely of analysts, who develop requirements and perform quality assurance and testing. It contained 11 AGSC employees in mid-March.

The Manager, Voice Communications has responsibility for all corporate telecommunications, including telephone station sets, telephony circuits, wireless telephony, call recording, call management, voice mail, and interactive voice response (*IVR*) systems. His organization contained six AGSC employees in mid-March, one of whom is a senior telecommunications analyst located in New Jersey.

The Engineer, Lead Network has responsibility for the architecture, delivery, and support of all corporate networks, network security, data center operations, and utility field operations support. This includes responsibility for the core data network: routers, switches, and wireless network. His organization included seven AGSC employees in mid-March. He manages the Atlanta data center and also has responsibility for network security.

## b. Applications

The CIO's organization provides support for the following major software applications to support ETG's operations.

- To support gas operations,
  - O Gas Operations System (GOS), the tool used for shippers to conduct their daily operations; GOS is a vendor-developed application that performs the balancing functions between a shipper's supply and the customers' demand, and tracks such data as major account customer consumption
  - O Customer Management System (*CMS*), a vendor-developed application that assists the management of the relationship of transportation accounts and third-party suppliers; AGLR inherited this system from NUI.
- To support engineering,
  - o Geographic Information Systems (GIS), a mapping system for maintain location data of a utility's physical plant; GIS has capabilities for facility management, network analysis, modeling, and other work order design; it a purchased product that integrates with mobile dispatch, customer service, outage management, and work management systems
  - Work Management System (WMS), a purchased system that automates compliance (such as inspections, leak repair and reevaluation, and emergency leak response) and maintenance work order functions for field, construction, and engineering operations,
  - o Compliance Tracking System (CTS), an internally developed system that manages compliance actions due on various facilities and generates field work orders as due dates approach.
- To support field operations,
  - Mobility, a purchased workforce management application that automates the distribution of field work requests to field resources; it allows the field resources to complete work requests electronically, after which the order completes automatically in a host system (CMA, CTS)
  - o Click Schedule, a purchased product that manages the service delivery process, optimizing work schedules for field service resources; it is integrated with Mobility
  - o Itron P4, a purchased system used in meter reading.
- To support customer service operations,

- O Customer Information System (CIS), a legacy purchased mainframe application used to manage customer accounts, process requests for service work, and maintain premises information
- o Customer Management Application (CMA), a vendor-developed application that is the first phase of replacing CIS, addressing front-office features
- o Customer Self-Service Portal (CSP), a vendor-developed application that allows customers the view current account status and make payments via the Internet
- o Meter History System (MHS), an internally developed system that tracks meters from purchase to retirement; it maintains meter inspection and test data for regulatory compliance reporting
- o Customer Bad Debt (CBD), an internally developed system that tracks delinquent customers and credits for customers who cannot be located
- o Remote Cash System (RCS), an internally developed system that processes payments for all CIS-billed customers
- o Revenue Interface System (*RIS*), an internally developed application that tracks and records CIS-billed revenue and CIS payment posting amounts.
- To support corporate applications,
  - o PeopleSoft, an ERP system that integrates all core financial, supply chain, and human resources functions.

After the NUI acquisition, the IS organization began a transition of the systems and applications to the AGLR platforms. The Company indicated that the applications inherited from NUI were not at the same level of sophistication and quality as the AGLR systems. The CIO believes that the systems supporting ETG are becoming more stable after the NUI consolidation effort.

The systems transition from NUI began with the transition to PeopleSoft, which took one to two months. Most NUI systems have now been replaced. GIS is the most recently completed system. NUI had no system providing equivalent functions; ETG engineers instead used paper records for physical location data instead.

WMS has two releases, one for maintenance and the other for construction; ETG is currently using only the maintenance WMS release, partly because ETG largely outsources its construction work. ETG uses various other methods for supporting new construction management.

CMS is specific to the New Jersey operations and was inherited from NUI. A New Jersey-based contractor supports the application and also acts as the business analyst. The long-term plan is to replace CMS with GOS and other larger systems.

CMA is intended ultimately as a replacement for CIS. It is web-based and helps keep call center databases consistent.

## c. Use of Contractors

The IS organization uses contractors as a way for providing a flexible-sized workforce, depending on the current needs. The organization uses one major vendor to provide resources that supplement its team for all applications except CIS, CMA, and PeopleSoft. This vendor,

which is in the fourth year of its contract, has 28 dedicated contractors, 13 onsite and 15 offshore. A second major vendor supplements the AGSC team for CIS and CMA support. This vendor has 22 dedicated contractors, 10 onsite and 12 offshore; many of the contractors were on the original team responsible for developing the CIS system. The use of offshore resources from these two vendors helps to provide 24-hour support. In addition, the CIO's team uses five other contractors for various functions, one of whom is dedicated to supporting CMS for ETG in New Jersey.

IS uses contractors both for software development and maintenance, but maintains in-house experts on the systems so that the work of the consultants is effectively managed. IS controls the number of contractors and mix of onshore and offshore resources, and uses them mainly for coding. The Company does not outsource architecture, and IS employees perform code review.

## d. Application Development and Enhancement

The Company begins strategic IT initiatives through peer-to-peer interactions. For major system changes that affect all the AGLR utilities, ETG representatives participate in the planning and project delivery to ensure that their needs are addressed. AGLR maintains corporate steering committees, including higher-level management employees (manager and above), for various types of applications. Change control boards, which include lower-level employees, meet on a weekly basis. ETG employees participate on these committees.

The Company has designated two employee teams to be the liaison to the IS organization by leading the change control boards and steering committees: Customer Service Technology (*CST*), a team of Customer Experience employees supporting the customer applications (*e.g.*, CIS, CMA, Itron, CMS, RCS, and RIS); and Business Support, a team of Engineering employees that support field operations systems (*e.g.*, WMS, Mobility, Click Schedule, GIS GOS, MHS, and CTS). These groups are generally the source of requests for IT system enhancements, but IT requests also come from the help desk and the trouble ticket system, management direction and strategic planning, and any identification that a system problem requires corrective action.

The Company provided a description of the process for developing the functionality to meet ETG's regulatory requirement for marketers to bill customers on ETG's behalf as an example of a major system change. ETG brought this project to the CST change control board, which approved the project. The PMO provided project management, involving the ETG business leads and subject matter experts in identifying project goals, requirements, risks, constraints, assumptions, timelines, and funding. ETG's leadership then approved the project, after which the ETG team participated in defining specifications, building test scenarios, and performing user acceptance testing.

As an example of a new application developed for ETG, the Company provided the example of improving the accessibility of historical customer data. This project followed a similar approach.

Each organization provides request for IT support as part of the yearly budgeting process. After high-level cost estimates are established, the management team prioritizes the initiatives. The corporate steering committees use input from the utility general managers and other business unit heads to determine priorities. Regulatory issues receive first priority.

The change control boards routinely evaluate any new issues or enhancement requirements unknown during the budgeting process. The boards review such items and set priorities for scheduling each request. If the estimated work time for a request is less than 40 hours, IS uses the contracted support team to respond to the request. If the estimated time is greater than 40 hours, funding approval is required and IS forms a project team if such approval is granted.

# e. Problem Response

The IS organization has documented procedures for responding to support requirements of AGLR organizations, including ETG. The IT Infrastructure and Operations group maintains a help desk in Atlanta that remains open during normal business hours and provides on-call afterhours support. The help desk is capable of diagnosing and resolving straightforward problems. For more complex problems, employees open trouble tickets. A system, Support Magic, tracks work orders for minor changes required resulting from trouble tickets. The change control board committees usually meet weekly to review Support Magic trouble tickets and work orders.

Deskside support personnel are available in New Jersey to assist ETG's field and office personnel. They provide support mainly for equipment issues but can provide assistance in addressing problems with the use of applications. If they cannot resolve a problem, they refer the employee to the appropriate organization. All deskside support personnel across AGLR's footprint have weekly teleconferences with Atlanta to discuss issues and to discuss the status of projects. A recent project involving deskside personnel in New Jersey was the construction of the new call center at the Green Lane facility; the deskside personnel assisted in the equipment testing.

### f. Hardware

AGLR's data center in Atlanta hosts most of the applications ETG uses. ETG has 18 dedicated and 185 shared servers supporting the various applications. There are also 24 database services and one mainframe that host databases used for ETG's operations. ETG employees have been assigned 276 personal computing devices, including 117 Toughbooks (for mobile operations), 106 desktops, and 53 laptops. In addition, various phone and network equipment at ETG's New Jersey locations support the Company's operations, including IP Media Gateways, routers, switches, and firewalls.

# g. Information Security

The Director, Information Security, who is part of the General Counsel's organization, has responsibility for information security policy. He joined AGLR in November 2007, after extensive experience in information security and technology. He has built information security programs at four companies, including one for the largest data center in the U.S. for housing medical records. Before his arrival, the information security approach had been IT-focused. He developed a comprehensive security program for AGLR, documented it, and put it in pace in the middle of 2008. He has met with the AGLR Board of Director's Management Committee to review the program. The program provides a comprehensive identification of what needs to be secure and when, what controls need to be in place, what the relevant business processes are, and what controls these process. The Director, Information Security noted that training and technical controls, such as encryption, are important to ensure information security.

ETG has experienced very few information security incidents since the beginning of 2006 and none since the introduction of the new information security program in mid-2008. No incident since the beginning of 2006 has affected customer information and there is no evidence that ETG's or employees' personal information has been compromised.

The IS organization manages data security in compliance with the corporate information security policy through the Infrastructure and Operations group. The group employs:

- Intrusion detection, using a managed security service
- Firewalls, using redundant firewall systems
- Spam filtering, suing an email security service
- URL filtering, using commercial product to protect employees from malicious Internet sites
- Virus protection, using a commercial anti-virus/anti-spyware product that protects the Company's systems against viruses, spyware, Trojan horse, and other malware
- Use of two-factor authentication and redundant access for the remote virtual private network (VPN).

The IS organization has introduced is a new initiatives for data leakage detection and prevention using a commercial product. This includes identifying and managing confidential and sensitive information and managing it using content filtering. IS employs a vendor to perform occasional external penetration tests, particularly when there is a significant change in network architecture. The IS department has recently become involved in a data encryption initiative. There is also a wireless security program.

# h. Disaster Recovery

The IS department has a certified disaster recovery professional with considerable experience in business continuity and disaster recovery, who reports into the Infrastructure and Operations group. The Engineering and Operations organization also employs an analyst responsible for crisis management.

The Company has created a detailed disaster recovery plan and has made this available to employees. In addition, to data and computing systems recovery, the plan provides for network data and telecommunications recovery. As part of the plan, the Company has contracted a leading vendor to provide IT recovery services in the event of a disaster or other major outage.

Using business unit input, the IT organization identified critical applications needing recovery in the event of an incident. The recovery services vendor maintains a data center at a facility located at a large distance from Atlanta to use for recovery of critical applications. AGLR maintains two separate systems in Atlanta containing critical data. IT regularly produces daily back-up tapes and stores them off-site; these would be transported to the recovery services vendor's data center in a disaster situation. The recovery services vendor also maintains a location near Atlanta that can host a recovery team, if necessary, when a disaster is localized or regional. Recovery of non-critical applications would be considered at the time of a disaster but can be accomplished using back-up data storage. The vendor that manages the mainframe hosting the CIS system maintains its own redundancy.

The Company performs annual tests of the disaster recovery process. Each year there is a focus on a particular application. The current recovery time objective is 72 hours, but this will speed up with new systems to be put in place.

# i. IT Expenses

The table provides IT capital expenditures and operating expenses allocated or directly assigned to ETG in 2006, 2007, and 2008. IT capital expenditures attributed to ETG have dropped off since 2006 with the completion of the various transitions of systems and applications following

the NUI acquisition. In the operations and maintenance (O&M)expense category, "AGSC Support" includes "Lights On Support," which incorporates support services necessary to keep the business running, such as infrastructure. mainframe. payroll, maintenance support, and deskside support; and "Technical Program Management Support," which

ETG IT Expenditures								
		2006	2007	2008				
	Communications	\$0	\$0	\$192,711				
	Infrastructure	\$731,336	\$572,851	\$376,337				
Capital	Software Dev.	\$3,497,187	\$1,714,184	\$1,176,584				
	Software Install.	\$1,730,630	\$614,108	\$1,056,696				
	Total	\$5,959,153	\$2,901,143	\$2,802,328				
	AGSC Support	\$7,217,012	\$5,452,500	\$4,778,648				
	ETG Tech.	\$332,516	\$1,531,737	\$3,701,739				
O&M	Support							
	IT Apps.	\$0	\$231,606	\$362,099				
	Total	\$7,549,528	\$7,215,843	\$8,842,486				

includes all O&M expenses supporting the capital projects. The "ETG Technical Support" line included ETG deskside support personnel in 2006 before these resources were transferred to AGSC; in 2006 and 2007, the depreciation and amortization expenses comprised the majority of this category.

### j. Performance Management

The IT organization has established a service level agreement (*SLA*) to guide its relationships with the AGLR business departments it supports. The SLA includes performance metrics with objectives and develops monthly reports for management use. The metrics include call response (average speed to answer, average hold time, and call abandonment rate), speed of problem response, speed of problem resolution, speed of response to service requests, and system availability. It also specifies system maintenance windows.

The following table shows IT's performance in meeting the response and resolution SLA objectives for Severity 1 (Critical Impact) and Severity 2 (High Impact) troubles. The IT organization's performance target is to meet all objectives 97 percent of the time. The number of tickets was high and the performance was often below objectives during 2006 an early 2007. This was a period during which the IT organization was transitioning a number of functions from NUI applications to new AGLR applications. The IT organization's performance has been generally good since that time.

# **IT Problem Response and Resolution Performance**

Period	Sev1/Sev2	Outage	Emergency	% Responses	% Resolution
	Tickets	Related	Changes	SLA Met	SLA Met
1/06	100	10	Deployed	05.000/	05.000/
1/06	199	19	33	95.98%	95.98%
2/06	228	37	37	96.49%	89.47%
3/06	139	12	51	98.56%	97.12%
4/06	145	11	42	97.24%	96.55%
5/06	189	12	32	93.12%	95.24%
6/06	168	12	32	95.24%	97.02%
7/06	96	15	40	95.83%	97.92%
8/06	254	20	104	90.55%	85.83%
9/06	225	26	66	94.67%	94.22%
10/06	205	35	65	95.61%	94.15%
11/06	156	14	48	96.79%	96.15%
12/06	131	8	38	94.66%	96.95%
1/07	148	11	92	95.27%	92.57%
2/07	184	13	63	95.65%	96.20%
3/07	225	10	30	96.00%	98.22%
4/07	156	6	47	96.15%	97.44%
5/07	127	9	40	95.28%	98.43%
6/07	108	11	54	96.30%	99.07%
7/07	96	15	40	95.83%	97.92%
8/07	65	12	39	100.00%	100.00%
9/07	41	11	46	100.00%	100.00%
10/07	48	9	48	97.92%	100.00%
11/07	27	6	43	100.00%	96.30%
12/07	38	9	47	100.00%	97.37%
1/08	25	3	39	100.00%	96.00%
2/08	32	9	32	100.00%	100.00%
3/08	32	8	33	96.88%	96.88%
4/08	22	4	35	100.00%	100.00%
5/08	22	8	38	100.00%	100.00%
6/08	21	10	34	100.00%	95.24%
7/08	26	13	32	100.00%	100.00%
8/08	24	10	46	100.00%	100.00%
9/08	36	5	42	88.89%	86.11%
10/08	29	5	49	100.00%	96.55%

The IS organization reported that the "uptime" percentage for critical systems (e.g., GOS, GIS, WMS, and PeopleSoft) was generally greater than 99.999 percent during 2008. The lowest reported availability was 99.99885 percent for GIS.

The AGLR internal audits group review IT general controls annually as part of the Sarbanes-Oxley (*SOX*) 400 testing. The audit scope includes key controls surrounding logical access, program change control and development, computer operations, and backup and recovery for those applications subject to SOX (*e.g.*, CIS, CMA, PeopleSoft, GOS, and Remote Cash). The audits have identified no material weaknesses or significant deficiencies.

The IS organization does not perform any formal satisfaction surveys of users. The CIO reports that IS gets generally "high marks" in informal commentary from AGLR business unit leads. The organization also does not use industry benchmarking to track its performance.

# 8. Records Management

### a. Organization

Prior to June 2008, AGLR a records retention policy and retention schedule, but there was no one in place to enforce them. At that time, AGLR hired a professional records manager to direct the Company's Records and Information Management (*RIM*) program. She had been a records manager for 23 years at a prominent Fortune 500 company. The new Manager, Records reports to the Director, Information Security, who is part of the General Counsel's organization.

Since her arrival, the Manager, Records has been identifying Department Records Representatives (DRRs) within different AGLR organizations, including ETG, whose responsibilities are to:

- Attend annual records management training
- Act as subject matter expert on records management for their department or function
- Serve as liaison with Records Management
- Promote RIM awareness
- Work with management to help ensure that business controls related to record creation, retention, and disposal are in place and that the group the DRR represents is in compliance with this policy.

By the end of February 2009, there were 314 DRRs in AGLR representing 271 departments. This number had grown from 103 at the end of 2008. In support of ETG, there are 21 DRRs representing 23 ETG departments, approximately half of these are located in New Jersey and the remainder in Atlanta.

### b. Policies

After AGLR hired the Manager, Records, she revised the policy and schedule, added a training program, in addition to identifying department representatives in charge of records management. The Company issued new records policy and retention schedule documentation in December 2008. The new procedures introduce a number of improvements over the former procedures. She updated the procedures for handling data stored with the Company's offsite storage vendor and expanded the procedures to include retention, organization, storage and disposal with an emphasis on electronic records management. The manager is continuing to consider new ways to manage records. For example, she is investigating methods for dealing with electronic records when electronic imaging methods become obsolete. The manager indicates that the Company complies with NARUC, ERISA, tax, and FERC document retention requirements and any other state-specific regulatory requirements. She has not identified any BPU or State of New Jersey retention requirements. The Company also has detailed documentation of procedures governing the protection of customer information.

### c. Controls

The Manager, Records is in the process of introducing educational programs and enforcement techniques for ensuring compliance with records management policies. These include enhanced training, monthly audits of outside storage, and reviews of network drives. She is also beginning to introduce a document management check list process.

# 9. Infrastructure Security

# a. Organization

This section discusses ETG's processes for ensuring facility and personal safety and security. The Information Technology section of this chapter considers data and other information security.

AGLR's Corporate Security Department in Atlanta, which is in the General Counsel's office, provides support and oversight for facility and personal safety and security of all AGLR organizations. This department is led by the Director, Corporate Security. Reporting to the Director are a senior investigator, a chief investigator, and an investigator. The senior investigator has a law enforcement background and acts as principal liaison on personal and facility safety and security issues. The chief investigator has a fire department background and acts as principal liaison on fire safety issues. The investigator has both law enforcement and fire department experience.

Since 2000, an ETG Operations Supervisor has managed security activities through ETG's operations territory. He has long experience at ETG and has worked on security issues since 1998. He has responsibility for physical and electronic security equipment for all ETG facilities included the gate stations. The ETG Operations Supervisor works with Corporate Security in conducting security and safety investigations, making equipment and policy recommendations, conducting security surveys, and providing critical facility security training. He also acts as contract facilitator for the guard services and alarm monitoring contractors. His duties include management of SCADA operations, monthly alarm checks at the Elizabeth and Perth Amboy payment facilities, card access readers and timed door access controls, identification badges, and building access control.

# b. Operations

ETG employs a security contractor to provide onsite physical security 24 hours per day, 7 days per week at its LNG plant in Elizabeth.

ETG has had a long-standing relationship with the security contractor and its predecessor companies; the Company has not experienced any performance problems with this contractor. The ETG Operations Supervisor meets quarterly with the contractor to discuss performance. The Company uses cameras to monitor the guards' performance. The contractor has responsibility for background checks of their personnel. The ETG Operations Supervisor provides onsite training in the rare cases in which the contractor assigns a new security officer to the job.

The Company uses another contractor for alarm monitoring of the Green Lane fire system and the Elizabeth and Perth Amboy payment center intrusion alarms. ETG has a long-standing relationship with this contractor and has been satisfied with the service it provides.



As part of providing physical security, ETG employs fencing with top wires and area lighting, depending on the needs of the individual location. The Company uses digital surveillance and crash barriers for critical facilities such as the Erie Street LNG plant. The Company has experienced only one relatively minor facility breach since 2005 and none since 2006.

Corporate Security is primarily responsible for employee security; the ETG operations supervisors, however, act as the first-line contacts when issues arise concerning individual employees. The operations supervisors also involve Human Resources in addressing any incidents.

Human Resources has responsibility for employee background checks. The Company relies on a broad range of information for this purpose, including criminal record searches, social security number verification, motor vehicle records, employment and military history verification, education verification, and use of a federal government employment eligibility program.

# c. Compliance

Corporate Security's support of ETG management includes performing facility surveys and an annual security and fire suppression survey of the Erie Street LNG plant in compliance with the U.S. Department of Transportation Research & Special Programs Administration Pipeline Safety Regulations Part 193, subparts H, I, and J.

AGLR's policy is for the Corporate Security to make an annual visit any "personnel gathering point." For ETG, this involves visits to Green Lane, New Village, Andover, Flemington, and the Erie Street LNG plant. Corporate Security assesses the physical security of the locations and determines whether the locations are appropriately tied into local security systems if they do not have onsite security personnel 24 hours per day, 7 days per week. Based on these inspections, Corporate Security makes recommendations for changes to ETG.

Corporate Security establishes the minimum standards for compliance. The manager of each facility has responsibility for assuring compliance with any specific local regulations. The Union Region and Northwest Region managers have responsibility for complying with corporate security guidelines. In some cases, they may elect not to abide by the corporate standards, when

the annual reviews indicate such lack of compliance. For example, minimum standards require a fire alarm system, and the Andover facility does not have one; however, the region manager determined that the facility is too small for an alarm to be cost effective.

The ETG Operations Supervisor responsible for security visits most ETG facilities on a weekly basis. During these visits, he discusses security issues and performs informal security checks.

The ETG Operations Supervisor assigned responsibility for security issues is the principal liaison with the BPU and New Jersey Homeland Security. He is ETG's representative on the New Jersey Domestic Preparedness Task Force. AGLR Corporate Security has responsibility for coordination with federal organizations concerned with security (Department of Homeland Security, Transportation Security Administration, and Department of Transportation). ETG's practice is to respond to national security threat levels established by the Department of Homeland Security, and to respond to specific local threats, which they coordinate with local police departments and the BPU. The Company also coordinates with local law enforcement and fire departments on a regular basis regarding issues with hazards at facilities such as the Eire Street LNG plant and the gate stations. ETG provides access to the BPU for an annual safety and security audit of the Erie Street LNG plant and for random walkthroughs of the LNG plant and a selection of gate stations.

## d. Training

Corporate Security, the AGLR training group, and ETG conduct security training on the following topics:

- New Jersey Domestic Security Preparedness Task Force recommended training courses (conducted by ETG)
- Critical Facility Training Security Measures (conducted by Corporate Security and ETG)
- Safety Measures Involving Irate Customers and Attempted Robberies (conducted by Corporate Security for payment center employees)
- Personal Safety Training on workplace violence incidents (conducted by Corporate Security).

The NJ Domestic Security Preparedness Task Force calls for three levels of training. The highest level (Session A) is designed for those with security responsibilities (Corporate Security personnel and the ETG operations supervisors). The next level (Session B) is designed for all employees with access to critical facilities. The Company conducts Sessions A and B training in person. In addition to the Session B training designed by the New Jersey Task Force, ETG has developed and provides a special training course for employees with access to critical facilities. The Company provided evidence that the appropriate employees have completed Session A and B training. The last training level (Session C) is for general employees; the New Jersey Task Force did not specify the form this training should take. ETG conducts Session C training in passive form through emails, posters, and information on the Company's internal website.

# C. Conclusions

1. Risk Management's approach to insurance and claims represent a notable strength of AGLR's operations.

The overall approach, particularly the use of the captive, has been effective in providing for a well-defined identification of risk and a very cost competitive approach to mitigating those risks. AGLR's continuing search for effective ways to use its captive insurer has generated sizeable large cost savings, particularly for ETG following the NUI acquisition. Risk Management performs effectively with a small, centralized staff, which further promotes economy, while also allowing for optimum coordination with programs for returning employees with claims back to work. AGLR is, for a utility company, a leader in providing for effective insurance and claims management.

# 2. AGLR's legal resources structure, internal staffing, inside/outside resources balance, overall expenditure levels, and cost allocation and assignment are appropriate.

AGLR has taken advantage of its size to build a large internal staff that performs many of the services that outside counsel do for smaller utilities. The alignment and size of the internal staff is appropriate for meeting utility needs, including those of ETG. AGLR has created a largely separate staff, based in Houston, for the performance of non-utility legal work. This approach facilitates specialization in services offered and proper separation of costs between utility and non-utility resources.

The level of legal resources committed on ETG's behalf, combining inside and outside counsel is competitive with what the other two New Jersey-only LDCs have seen, and is comparable to what Liberty has seen at other energy utilities. The number of outside firms, the types of matters on which they reported working, and the levels of effort committed to those matters did not appear unusual.

Some of the costs of the Houston-based legal group were being assigned to LDCs some years ago, but that practice has not occurred for at least two years. None of their costs get assigned or allocated directly to ETG or indirectly through assignment or allocation to the AGLSC (whose costs in turn do get allocated to ETG).

# 3. Management of outside counsel is generally effective but does not include elements of competitive solicitation or performance review that promote cost and quality optimization. (Recommendation #1)

The alignment of outside counsel matches current and emerging needs. Billing is strictly by matter, and is controlled by an effective web-based system that produces uniform billings, requires inside lawyer approval, and promotes visibility of work efforts and costs to all levels of legal department management. This system also provides for effective case management, easy access to documents (providing both forms or templates and substantive content useful in other matters).

The web-based system adequately supports the assignment and allocation of outside counsel costs by matter, which supports proper separation of utility and non-utility costs (as well as among individual LDCs).

The in-house lawyers responsible for overseeing the work of outside counsel use an array of informal methods (e.g., tapping outside associations and contacts and engaging in comparative discussions with other in-house lawyers). Moreover, there exists an adequate system for assuring

senior legal department management control over outside counsel retention and for maintaining at that level an awareness of outside service costs, including rates. Liberty also found that those responsible for overseeing the efforts of outside counsel understand that rate levels do not necessarily translate into corresponding total costs levels. They have sought out creative methods to optimize the costs of matters handled by outside counsel.

However, there is not a policy calling for periodic solicitations to verify periodically more informal sources of market information about costs. There is also no formal policy calling for evaluations of outside counsel performance.

# 4. Attention to legal time reporting is generally sufficient, but lacks a formal means for assuring maximum billing to individual entities. (Recommendation #2)

Liberty's review of time charges generally showed that those attorneys most likely to be involved in generally applicable functions (e.g., benefits work or high-level department supervision) did have the highest percentages of time charged to AGSC (i.e., passed along ultimately to ETG through a general allocator). Some lawyers, however, charged extremely high percentages of time to the service company. Interviews, even among supervising lawyers, indicated that self-discipline, rather than a formal process, served to control time reporting to specific beneficiaries as frequently as possible.

# 5. The facilities management and planning process is satisfactory, but could be improved with greater strategic focus. (Recommendation #3)

The Company has a centralized group to coordinate and support facility management and planning. However, this group has had no clear location within the organization, having migrated recently among various AGSC organizations: IT, controller, and human resources. Two of the four positions in the group are open, and these are the highest-level positions.

The centralized facilities organization and other relevant centralized AGLR support organizations work collaboratively with local ETG management to manage the facilities, plan facility enhancements, and acquire new facilities. The process used to develop the new call center at Green Lane illustrates this approach. The space available in the facilities is ample to support ETG's needs, but the Company does not have any guidelines or benchmarks to judge to whether it is using this space optimally.

The one significant facility acquisition decision that occurred after the change of ownership was the leasing of the Berkeley Heights building, which succeeded in significantly reducing ETG's lease costs. On the other hand, a very large portion (88 percent) of ETG's facility space is owned rather than leased. The Company states that this is more the result of "inheritance" from the NUI acquisition than strategic decisions by AGLR. The Company does not have any guideline documentation and no internal measurements specific to facilities management and planning.

# 6. AGLR Supply Chain's approach to procurement and materials management provides notable advantages for ETG.

Supply Chain's approach to materials management provides a strategic focus to procurement and materials management that takes effective advantage of AGLR's scale while at the same time

tailoring the corporation-wide approaches to ETG's specific needs. Supply Chain generally relies heavily on outsourcing to reduce costs, but as modified its approach to conform to ETG's constraints. The Company has made notable improvements in inventory levels, cycle count variances, and operational efficiency, and Supply Chain continues to seek operational improvements. The Company has applied effective controls to ensure compliance with the processes and policies. The recent mid-2009 reorganization to further consolidate direction and support of supply chain management into the Supply Chain department should provide further improvements.

# 7. The Company has managed ETG's fleet operations in a reasonable manner.

AGLR has reasonably balanced corporate strategies and goals with local needs and constraints in the management of the ETG fleet operations. AGLR's overall corporate fleet management strategy is to outsource fleet maintenance, repair, and fueling. ETG's collective bargaining agreement constrains the Company's ability to do so, leading to a mix of in-sourcing and outsourcing to accomplish these functions. AGLR has adapted its fleet support and planning activities to accommodate this unique mix for ETG. At least in the case of fuel costs, there is some evidence that the mix worked to ETG's advantage during the period of volatile fuel prices in 2008, when purchasing fuel in bulk for the on-site fueling stations led to lower average cost per gallon as compared to use of fuel cards.

AGLR's Fleet Management organization has effectively managed vehicle acquisition based on input from local ETG management. Fleet Management has also championed greater vehicle operation safety practices; ETG's accident rate has declined.

It is still too early to gauge the impact of the recent reorganization on Fleet Management. There is good logic, however, in changing the organization's focus to a general support function from one that mixes general support with Georgia-specific operational responsibilities.

# 8. The Supply Chain organization can use more formalized tools and methods in performance tracking and analysis. (Recommendation #4)

As noted in Conclusions #6 and #7, Liberty finds that the Company is doing a generally effective job of supply chain management, resulting in some notable improvements in performance for ETG particularly in inventory and materials management but also in fleet management. Nevertheless, Liberty believes the Company may be missing other opportunities for improvement through incomplete use of available tracking and analysis tools and methods.

In response to Liberty's request for all internal measurements used to track and manage materials procurement, the Company provided a list of inventory and on-time delivery measurements. In response to a similar request for fleet management, the Company provided high-level slide presentations focusing mainly on comparisons of actual expenditures to budget, which showed some notable variances. The budget-to-actual comparisons were also difficult to make because of budget line-item misclassifications, as noted above. There are no formal employee satisfaction surveys regarding fleet management and no specific performance management targets or benchmarks.

# 9. The Company's land management is appropriate to ETG's current needs.

Given the low growth in the area ETG serves, the Company's land management needs are minimal. Obtaining easements comprises all ETG's recent land management activity. The Company's staffing and processes are appropriate to the modest level of activity easement activity.

### 10. AGSC's Information Services department is well organized and managed.

Information Services is organized effectively to address key functions of applications development and support, infrastructure support, project management, problem response and resolution, and disaster recovery application. The department supports a modern suite of applications and uses up-to-date tools to support the Company's requirements. It effectively balances in-house and contract resources to meet the changing needs of the business.

The department is sensitive to the needs of its users. The Company maintains standing user groups with representation from across the corporation, including ETG, to identify and prioritize system development and enhancement requirements. The IS department's process involves ETG's and other user organizations' business leads and subject matter experts in identifying project goals, requirements, risks, constraints, assumptions, timelines, and funding. It involves user teams in defining specifications, building test scenarios, and performing user acceptance testing. IS has developed SLA requirements to monitor its performance.

# 11. Information Services provides good support to ETG.

AGLR has replaced the applications supporting ETG's operations with systems providing better automation and control. Information Services has been sensitive to the ETG's specific needs and requirements, and appropriate includes ETG management and employees in developing requirements, specifications, and testing of new applications and application enhancements. Performance reports indicate that the department has provided good service to the users, particularly recently.

# 12. AGLR has initiated a comprehensive approach to information security that provides significant benefits.

AGLR has broadened its IT security program to a more comprehensive information security program. It brought in a manager with considerable experience in the field to develop and implement the program. The broadened focus allows the Company to address more aspects of information protection and additional approaches to information security. Such an approach gives the Company greater ability to achieve security of its key information resources and to protect employee and customer data.

### 13. AGLR has developed an effective IT disaster recovery program.

AGLR has a well considered and documented IT disaster recovery program. It provides the capability for the Company to protect its key data and applications in the event of a disaster and to bring key computing resources back on-line in a short period of time.

# **14. Information Services could benefit from the use of additional tools to measure its performance.** (Recommendation #5)

Information Services measures its performance relative to SLA requirements, which provides a good measures of its performance. The department does not currently use internal user surveys or industry benchmarking. These additional tools could assist Information Services in measuring its performance and planning for performance and organizational enhancement.

# 15. AGLR's recent enhancement of its records management program should provide benefits to ETG.

AGLR has recently hired a professional records manager with considerable experience in the field. She has effectively introduced enhancements to the Company's records management programs, by improving the records management policies and documentation, increasing records management awareness, and identifying resources throughout the corporation to help institutionalize the records management program.

# 16. ETG provides appropriate security and safety for its facilities and employees.

ETG uses appropriate security and safety practices at its facilities, and the Company has assigned appropriate personnel to manage security and safety. The security employees regularly inspect ETG's facilities for security and safety and work with state and federal agencies to ensure the Company's compliance with security and safety requirements. The Company provides appropriate training to employees.

### D. Recommendations

1. Bring more formality to current legal-service quality and cost control methods by conducting periodic solicitations and by requiring formal outside counsel performance reviews. (Conclusion #3)

AGLR's legal department concerns itself with cost and performance quality and there is no reason to conclude that substantial excess outside legal costs are having a negative impact on ETG. Nevertheless, a somewhat more structured approach in two areas will enhance existing efforts to manage outside counsel. There should be periodic solicitations of formal proposals in subject areas that create large and recurring needs.

It is not recommended that all retentions on given matters be preceded by formal "bids." That approach is not conducive to relationship development (an important value in handling repeat matters) or in acting with dispatch (as the timing of particular needs can be unpredictable even in areas of high need over time). However, using it selectively can be helpful both in a number of ways: (a) identifying new sources of assistance, (b) encouraging existing sources to be as competitive as possible, and (c) providing a source of information for negotiating with existing sources. As the latter two cases demonstrate, a change in service providers need neither be contemplated nor necessary to produce benefits.

Structured performance reviews encourage a more reflective and generally better communicated review process and therefore are more likely to serve as an effective tool for identifying areas where dialogue with a provider is useful in meeting service expectations.

2. Provide a review process for assuring that inside lawyers charge the maximum amount of time properly allocable to individual AGLR entities. (Conclusion #4)

AGLR has adopted a structure that promotes proper separation of utility and non-utility legal costs. It has not, however, sufficiently emphasized the need for time charges to keep to a minimum the use of charge numbers that result in the assignment of costs to ETG through a general allocator. The VP/AGC should use the regular goal setting and performance review process with each Atlanta-based attorney (the process need not include Houston attorneys for so long as they continue not to make charges to ETG or to AGSC in a manner that results in assignment or allocation to ETG) to establish individual targets for time assignment, and generally track performance against those targets. Supervising attorneys should conduct quarterly or more frequent reviews of time assignments by those they supervise.

# 3. Bring more strategic focus to facilities planning and management. (Conclusion #5)

The Company lacks rigor and strategic focus in facilities planning and management. Although the evidence indicates that the Company makes reasonable facility decisions when prompted to do so by circumstances, as when new office space was necessary upon vacating the Plaza Builder or when there was need for a new call center in New Jersey, the Company does not otherwise actively engage in the strategic planning of its facilities portfolio. For example, the Company has not actively considered whether the current mix of owned as opposed to leased facilities is optimal, or whether it is using the available space in the most cost effective manner.

The lack of strong strategic focus in facilities planning and management may result from the current open leadership positions in the centralized facilities group and the recent migration of this group among various AGSC organizations. The Company should find leadership for and determine the appropriate staffing and the best organizational location for this group as soon as possible. In addition to considering the most efficient and cost effective approach, the Company should consider how best to improve the strategic focus for facilities planning and management in making these decisions.

# **4.** Use additional methods to track supply chain management performance. (Conclusion #8)

Although the Company is doing a good job of materials management, Supply Chain could use additional formal approaches to the tracking supply chain management performance to improve results further. As examples, Liberty suggests more formalized use of performance targets, comparison of performance results to industry benchmarks, and use of internal satisfaction surveys for fleet, materials, and other aspects of supply chain management. The recent reorganization that has brought increased focus and additional analytical resources to supply chain management provides a good opportunity to review and enhance supply chain performance tracking.

# 5. Use additional methods to track information technology performance. (Conclusion #14)

Information Services provides good value to AGLR and ETG. It effectively tracks its performance using SLA measures. Use of internal user satisfaction surveys can provide additional information to the department in judging how well it is meeting user needs. Industry benchmarking can provide another means for Information Services to judge its performance and consider ways to enhance it.

# X. Contractor Performance

# A. Background

The majority of ETG's 274,000 customers (approximately 12.5 percent of parent AGLR's customer base) are located in the Union territory which is in central/northern New Jersey (Union, Rahway, Edison, etc). The other territory (with fewer customers) is the Northwest (NW), which is located along the Delaware River north and south of Phillipsburg, NJ.

The two territories differ in a number of significant ways; *e.g.*, customer density, system age, materials of construction, and pressures. The Union territory, while smaller in area, has several times the customer density. The NW territory is larger in size but the overall customer density is low. This essentially rural region has some suburban towns and villages.

At the end of 2007 ETG had 787 miles of cast iron (CI) and ductile iron (DI) main and seven miles of bare steel (four miles protected and three miles unprotected) main. "Protected" mains have cathodic protection, which prevents steel from corroding; "unprotected mains do not. All steel pipelines built after 1971 must have both cathodic protection coating and cathodic protection to prevent the steel from corroding. Pipelines built prior to this date are not required to have either but many gas companies have recognized the safety issue and

# Northwest and Union Areas New York New York

have replaced all bare pipelines. The bulk of the CI/DI lies in the Union territory. ETG's NW system consists mainly of plastic mains. ETG is replacing some of the Union leak- and crack-prone pipe via a program it has undertaken with NJ BPU approval.

Other differences between the territories include system operating pressures, with the NW territory operating at an elevated pressure and Union territory operating mainly at low pressure (inches of water column). Another and possibly more important difference is that the majority of meters in the NW territory are located outside. The Union territory has many meters located inside customers' premises. Inside meters are a problem for several O&M programs due to access issues.

# **B. Findings**

# 1. Leak Survey Contracting

ETG contracts for all outside leak-survey work. The current contractor also does leak surveys for most of the AGLR distribution companies. ETG conducts outside leak surveying on a set

schedule, defined by both federal and New Jersey regulations. Although federal codes may take precedence, the state codes are allowed to be more restrictive (less restrictive is not allowed).

ETG operations personnel (Liberty interviewed the range of employees, from street mechanics to vice president) generally agreed that the contractor has been doing a good job. The leak survey consists of two parts: a mobile survey using a van or truck with leak detection gear, and a walking survey during which the survey person carries the detector and survey gear. Survey personnel check the service to each customer. Accordingly, some (if not all) parts of a street may have several leak surveys performed periodically in the course of making sure that every main and service are checked. Additionally, at the time the services are checked, leak survey personnel also perform an atmospheric corrosion inspection of the outside meter set and associated piping.

This inspection satisfies the three-year atmospheric corrosion survey requirement. The accompanying table shows the percentages of leaks reported by source. Leaks reported via company personnel and police and fire are included in the customer-reported total. Leaks reported by public officials are estimated to be less than 2% of the total.

Metric	2006	2007	2008	Total
Customer Reported (CCC Call) Leaks	12,405	12,125	9,299	33,829
Leak Survey Reported Leaks	3,261	3,809	5,745	12,815
Total Leaks Reported	15,666	15,934	15,044	46,644
Percent Customer Reported Leaks	79.2%	76.1%	61.8%	72.5%
Percent Leak Survey Reported Leaks	20.8%	23.9%	38.2%	27.5%

Over the last several years the number and percentage of leaks found by the leak-survey contractor has increased, while those reported by the public have decreased. Because of the large number of inside meter sets in the Union territory, customer-reported leaks will probably always comprise the majority.

ETG personnel handle inside leak surveys; Liberty reviews these leak surveys in Chapter XI, *System Operations and Maintenance*, of this report. Also in that chapter are the specifics on how the Company handles leaks with regard to O & M issues; *i.e.*, monitoring and repairs.

# 2. Contracting for New and Replacement Mains and Services

ETG has instituted a replacement program for its leak- and crack-prone mains and services, as

part of an agreement with the BPU. As of the end of 2007, ETG has 787 miles of CI/DI and seven miles of bare steel mains. Additionally, there were approximately 12,900 unprotected services.

Contractor	Business	Type	Tenure	Expires
(1)	RoW Maintenance	Fixed	2	Open
(2)	Mains/Services	Bid	40	2009
(3)	Mains/Services	Bid	42	2009
(4)	Mains/Services	Bid	2	2009
(5)	Mains/Services	Bid	2	2009
(6)	Mains/Services	Bid	2	2009
(7)	Mains/Services	Bid	10	2009
(8)	Special Services	Bid	5	2009

ETG uses a number of contractors (shown in the accompanying table) to

install all new mains and services and most of the replacement mains and services. ETG uses inhouse crews for small jobs when such crews have available time. The decision to use contractors

was based on manpower requirements and cost issues. Following AGLR's acquisition of ETG, there were substantial force reductions, early retirements and buy-outs to reduce bargaining unit and management workforces. The resulting reduction in available manpower led ETG to focus in-house personnel on tasks they handled better than contractors, and to outsource those tasks that contractors handled better. In 2008, almost all large main and service jobs, and all new mains and services, were contracted out to several pre-qualified contactors.

ETG employs other contractors for specialized tasks, such as leak surveying, locating services, LNG services, automation and controls for the SCADA system, environmental services, corrosion services, and engineering services. ETG hires most of these contractors using specific bids, and the assistance period can vary from days to years.

ETG awards the bulk of construction contracts, both for new mains and services and for replacements via a bidding process; however, it awards some substantial contracts under no-bid conditions. The chart below shows the largest (over \$10,000) no-bid contracts awarded in 2008, the awardees and each reason for a no-bid contract.

Project	Contract	Amount	Date of Award	Justification
Irving St and Lewis St, Rahway -	Contractor 1	\$94.000	January-08	Project negotiated with Contractor 1 because they had additional project in
Conflicts with LP Mains	Contractor 1	394,000	January-08	the same vacinity. Performed at New Business Rates.
U.S. Route 82 Streetscape -	Contractor 1	\$19.000	June-08	Extension of State Project previously awarded to Contractor 1.
Relocate Main	Contractor 1	\$19,000	June-08	Extension of State Project previously awarded to Confidential 1.
North Stiles St, Linden - PRP	Contractor 2	\$176,000	April-08	Extended Contractor 2 low bid prices from another project because work
Project, 8" EP CI	Contractor 2	\$170,000	April-00	was on the same street.
East Inman Ave Bridge - Rahway,	Contractor 2	\$96,000	October-08	Project negotiated with Contractor 2 due to their directional drill capabilities
Repl Main on Bridge	Contractor 2	\$70,000	October-00	and availability.
Midway Ave Fanwood	Contractor 1	\$114,537	January-08	Project negotiated with Contractor 1 because of availability of New Business
Midway Ave Failwood	Contractor 1	<b>\$11</b> 7,557	January-06	crews.
S. Stiles Street, Linden	Contractor 1	\$157,784	October-08	Project negotiated with Contractor 1 because of availability of New Business
5. Suics Succi, Linden	Contractor 1	\$157,764		crews.
				Project negotiated with Contractor 1 because of significant drop in New
Amherst Ave, Union	Contractor 1	\$67,673	January-08	Business Territory work. Trying to keep Contractor 1 Service Crews stable
				and in-tact for when New Business work increases.
				Project negotiated with Contractor 1 because of significant drop in New
ReevesTerrace, Union	Contractor 1	\$26,680	February-08	Business Territory work. Trying to keep Contractor 1 Service Crews stable
				and in-tact for when New Business work increases.
Port Avenue, Elizabeth	Contractor 1	\$68.637	November-08	Project negotiated with Contractor 1 because of immediate need to start
Fort Avenue, Elizabeth	Contractor 1	300,037	November-08	work and Contractor 1 crew availability (pressure problem).
				Project negotiated with Contractor 1 because of significant drop in New
Westfield Rd., Fanwood	Contractor 1	\$297,542	June-08	Business Territory work. Trying to keep Contractor 1 Service Crews stable
				and in-tact for when New Business work increases.
Bisset Place, Metuchen	Contractor 1	\$49,045	April-08	Project negotiated with Contractor 1 because of immediate need to start
Disset Flace, Metachen	Contractor 1	947,043	April-06	work and Contractor 1 crew availability (town paving road).

The total value of these no-bid contracts was \$1,166,900. This value is approximately 2.75 percent of the total capital budget for that year. The largest no-bid contract was worth almost \$300,000. Several of the no-bid contracts were add-ons to existing contracts; in these cases, it was sound to continue with the same contractor. Others were based on the technical abilities of the contractors, while several were let to keep the contractor busy and available for other work.

Awarding significant no-bid contracts can become questionable, particularly in the absence of sufficient justification. Potential justifications include: (1) the need to start work immediately (where the bidding process would delay the start), (2) the lower cost of having an already-mobilized contractor who is on site continue with the work, and (3) the lower cost of negotiating work in times of higher work volumes (in times of high work volumes, negotiating can achieve lower pricing than bidding contracts). In these situations, it is appropriate to maintain records

demonstrating justification, in order to verify that the decision was sound, and that the utility received the best value for the expenditure; e.g., the best combination of price, timeliness and quality.

Contractors working in the two service territories handle different tasks. The NW territory is experiencing more significant growth; therefore contractors in that area are handling mainly new mains and services. Contractors in the Union territory are handling main and service replacements; they install few new services. Each of these tasks involves similar skills; therefore, contractors in both areas must have a work force that can perform many tasks. Such tasks include trenching, fusing plastic pipe, installing meters, building and installing meter headers, and restoring streets and customer property. The counties in the Union territory require that all backfill material used on public streets be new. ETG must therefore remove spoils from each trench that it excavates.

ETG's process for bidding work begins with the sending of a notice of intent to contract via a website. This notice invites bidders to submit proposals. The manager of construction in New Jersey may also send an e-mail to some previous bidders to remind them of the request for proposals and the due date. ETG has added several pre-approved bidders over the last two years, in anticipation of an increase in replacement work. Thus, there are now typically seven bidders for each replacement job. Bidder proposals undergo review by Atlanta and New Jersey personnel; currently New Jersey personnel can award the work based not only on price but also on technical merit. If the contractor is new, New Jersey personnel can award the contract on the basis of the need to qualify and test out the new contractor. If one contractor has come to dominate the competitions, the manager of construction may recommend accepting the second-lowest bid to prevent an overload of work from degrading the low bidder's performance. This approach allows a robust mix of contractors to be working on ETG jobs at all times.

An ETG contractor-management group oversees outside contractors. This group was reduced by 50 percent following AGLR's acquisition of ETG. There were two managers and eight inspectors for the two territories in 2004. The corresponding 2009 numbers are one manager and four inspectors. The reductions affected both management and field inspectors. There are not enough inspectors to visit every job every day. Contractors therefore work for considerable amounts of time without inspection. When a contractor has an issue, a field inspector or manager visits the job site to resolve the issue. Because of the lack of manpower for continuing oversight, it is important that the Company use qualified contractors who are well versed in ETG standards. When the Company uses a new contractor, the field inspectors devote considerable time to the contractor in order to familiarize it with ETG's work methods.

Liberty visited several contractors and job sites during the audit. The next table lists the locations, the type of job, the contractor, and other pertinent information.

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<sup>&</sup>lt;sup>6</sup> In comments to Liberty's draft report, the Company noted, "When AGLR acquired ETG, ETG shifted a significant amount of activity from field inspectors to Contractors or Support staff at AGLR's headquarters. For instance Inspectors formerly completed all main cards, service cards, valve cards, corrosion sheets, contractor pay sheets, set up police for traffic control, ensured payment of police, and ordered materials for all jobs."

# **Contractor Job Sites Visited by Liberty**

Location	Type of Job	Contractor	Remarks
21 <sup>st</sup> & Washington,	Service Replacement	(1)	Service tap on 1913 CI
Kenilworth			main, Tee was steel, no
			anode, just wrapped
Windsor Pl & Lincoln,	CI Main & Service	(2)	Part of drainage project,
Kenilworth	Replacement w/Plastic		several t6 mark-out
			errors
Vauxhall & Coolidge, Union	CI Joint Leak	ETG Crew	On main road
115 Columbia, Cranford	CI Joint Leak	ETG Crew	Several other leaks on
			street make it a candidate for vac truck
			work
703 Prospect, Westfield	New Service for re-built	(1)	New service and
703 Hospeet, Westherd	house	(1)	retirement of old
	110000		service, mark-out
			incorrect
81 Arlene Ct, Fanwood	Class 2 leak on metallic	ETG Crew	Renewed service with 1
	tee		<sup>1</sup> / <sub>4</sub> plastic
646 Hamilton, Rahway	Leak on old plastic	ETG Crew	New tap with saddle
			because of different
			plastic materials, no
THE LABOR TO L	1 0 :	(1)	fusing
Elizabeth Ave, Linden	Main and Service	(1)	Directionally drilled
December 0 Callering	Replacement	ETG Crew	main, bulleted services
Prospect & Galloping Hill, Roselle Park	Leak on 10" CI	E1G Crew	Repaired leaking joint on large CI main
Grove & Boulevard,	Replace 125' of CI and	ETG Crew	Done in one day, crew
Westfield	2 services	LIGCICW	available
Union County College,	Replace/relocate service	(1)	College construction
Scotch Plains	due to construction	(1)	required relocation on
			near side
Inman Ave, Edison	8" CI main replacement	(3)	Large job, part of 12K'
	& services		replacement
New Dover & Foley,	8" CI main replacement	(1)	Directional drilled
Edison			

The design, engineering, bidding, award, and construction process is split between Atlanta and New Jersey. In the flow diagram below, the yellow blocks and diamonds are New Jersey processes, and the green are Atlanta processes. As is shown, the Company identifies needs based on both regulatory commitments (agreements with the BPU and rate case requirements) and input from ETG personnel. Atlanta personnel oversee the design and engineering, but ETG personnel may perform the work, with input from Construction. If a pre-bid meeting is needed, ETG handles it. Atlanta personnel receive the bids and make the awards, with input from ETG Construction as requested.

Settlement with
NJ BPU on
Main
Replacement

Mains
Identified by
ETG for
Replacement

Atlanta sends bids
Territory and posts on
Website

Construction Bidding and Award Process

Atlanta sends bids
Territory and posts on
Website

Construction Manager
Requests Changes

Liberty examined the ten highest-cost bid jobs to see how closely actual costs conformed to bids. The range of results ran from a 19 percent under-run to a 69 percent over-run. The typical reasons for under-runs were differences from work anticipated at time of bidding: (1) fewer services to move, or (2) less footage installed. The most common causes of overruns were greater than expected: (1) excavation (encountering rock along the pipe route), or (2) restoration work. For the ten jobs, the total estimated cost was \$4.840 million and the estimated or actual cost to complete was \$5.187 million; *i.e.*, an overrun of 7 percent cumulatively. Some of the jobs have yet to be completed, but the Company estimates that those jobs that encountered rock during excavation have already over-run. The table below summarizes these 10 jobs.

10 Highest Dollar Volume Bid Jobs for 2008

				Cost at	Estimated or	
Awarded Contractor	ProjectName	Year	Total Bid	Completion	Actual	Reason for Overrun/Underrun
1	Inman Ave, Colonia & Edison	2008	\$ 811,554	\$ 853,994	Estimated, Project still in Progress	Field Design Changes that weren't shown on bid plans
2	New Dover Road, Edison & Woodbridge	2008	\$ 487,395	\$ 440,763	Estimated, Project still in Progress	There were less service transfers and renewals than originally bid
2	Clark Street, Linden PRIM	2008	\$ 363,425	\$ 341,424	Actual, Project Complete	There were less service transfers than originally bid
3	BROADWAY, CLARK & RAHWAY	2008	\$ 469,164	\$ 384,028	Estimated, Project still in Progress	Less main footage installed than originally bid. Had to change installation route which caused additional paving cuts and restoration
4	Johnstone Street, Perth Amboy	2008	\$ 260,158	\$ 300,000	Actual, Project Complete	Main in conflict with extra large concrete walkway going up to plaza. Not originally shown on plans. Caused additional excavation and restoration.
2	SOUTH AVENUE, FANWOOD PRIM	2008	\$ 530,764	\$ 501,647	Actual, Project Complete	Less Main Footage Installed than originally bid
3	KINGWOOD-MILFORD BACK FEED COUNTY ROUTE 619	2008	\$ 449,040	\$ 760,000	Estimated, Project still in Progress	Significant amount of Rock experienced on project; Rise in asphault price; and fencing required at bridge crossing
2	Sailer Street, Cranford PRIM Project	2008	\$ 303,520	\$ 306,102	Actual, Project Complete	Slightly more 2" Plastic Pipe installed than originally designed
2	ALPINE SECTION, LAKE MOHAWK (SEC 1)	2008	\$ 614,950	\$ 750,000	Estimated, Project still in Progress	Significant Rock Experienced on Project
2	GRANDVIEW AVENUE, EDISON	2008	\$ 549,488	\$ 549,488	Estimated, Project still in Progress	Just getting Started

AGLR has significantly improved the technology used by ETG following the NUI acquisition. Some of the improvements consist of new tracking and monitoring systems for following construction work. Other improvements consist of replacing older failure-prone vehicles and tools. Recently AGLR instituted a new PDA-based checklist for construction inspectors so that each time they visit a job site they prepare an automated report. When the inspectors return to the

office at the end of the day, they upload the checklist into the computer system so make a permanent record of the visit.

These technology improvements have made the construction inspectors more efficient; however, the reduced inspection force has resulted in a significant increase in work for each remaining inspector. The 2008 capital budget (for all facets of ETG) was \$42.3 million; *i.e.*, is a 78-percent increase over the 2005 actual capital expenditure of \$23.8 million. Ten individuals handled \$2.38 million each in expenditures in 2004/2005; five are now handling \$8.46 million each. This workload, measured by dollars, reflects an increase of 355 percent.

# 3. Underground Facility Protection Contractors

Damage due to excavation activities is the leading cause of pipeline failures and accidents, both statewide and nationwide. The New Jersey *One Call* program has helped utilities avoid many leaks that would result from excavation damage. New Jersey One Call is a state-regulated, non-profit organization composed of public utilities and municipalities in the State of New Jersey. NJ One Call Center (NJ1C) functions as a one-call notification system that provides excavators and the general public with the ability to notify owners of underground facilities before proposed excavation. NJ1C handles both routine and emergency calls.

ETG relies on a locate contractor and its own employees to identify and mark its underground facilities. ETG's field employees (responders) mark all locates within the Northwest region while a single locate contractor, is responsible for marking all facilities within the Union region. ETG contracted with the locate contractor in early 2009 for underground facility protection. The locate contract runs through 2012.

In the past three years, ETG has contracted with three different underground locating contractors. The current locate contractor provided locating services from 1995 through 2005. After the AGLR acquisition in 2005, the contract was rebid and won by another contractor. However, this other contractor decided it had under-bid the work, and opted out of its contract within a year. ETG then contracted with a third contractor, which was then was working with AGLR's Virginia LDC (Virginia Natural Gas) at the time. The contract was put out for bid again in late 2008 and the current contractor won the work.

AGLR's Operations Procedures Manual clearly specifies ETG's Damage Prevention guidelines and requirements. In addition, ETG employs a dedicated Damage Prevention Specialist, who is responsible for markout contractor oversight and quality assurance (in the Union region only). In addition to contractor quality assurance, this employee is responsible for damage investigation, contractor training, escalated locates, high-profile locates, and excavator oversight. ETG's goals are to continue monitoring contractor quality while developing a program to spot-check excavators. Developing this role with excavators will strengthen excavator damage prevention techniques, and in the long run, reduce facility damages.

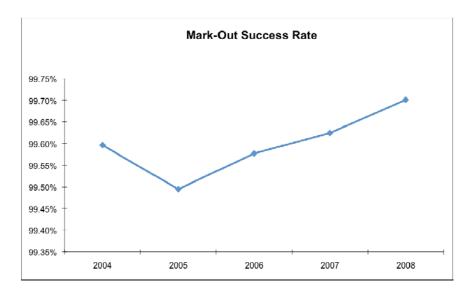
As per the Service Level Agreement, ETG has monthly review meetings with its contractor to review the locating performance "scorecard." The locate contractor's compensation depends on ticket volume, with penalties for audit failures, late tickets, no-shows, improper or tardy documentation, and damages. Scores are calculated and reviewed on a monthly basis with a

quarterly score calculated using the three-month average for each category during the quarter.

The locate contractor holds periodic meetings with all LDCs, excavators, pipeline contractors, and the NJ One Call center to discuss the markout process and damage prevention best practices,

with a goal of team building to strengthen the markout process. The locate contractor is also active in the Common Ground Alliance. National Utility Locating Contractors Association, and other damage prevention trade groups.

ETG receives more than 60,000 requests for markouts each year from customers and



excavators. The above chart depicts the number of damages incurred per 1,000 locates. ETG has been improving its damage rate since 2005.

While requests for markouts have been increasing every year, the Markout Success Rate has been improving steadily since 2005. Markout Success is defined as the total number of markout requests less damage incidents divided by total number of markout requests.

However, not everyone uses the NJ1C notification system; 25 percent of third-party damages have occurred when a markout was not requested. However, this number has fallen from 40 percent in 2004 to 22 percent in 2008, largely as a result of public promotion of the New Jersey One Call system and the 811 campaigns.

Third-Party Damages								
	2006	2007	2008	3 yr Avg				
% without NJ One Call Ticket	23%	29%	22%	25%				
% with NJ One Call Ticket & Not Marked	23%	16%	28%	22%				
% Marked Out & Damaged	54%	65%	51%	57%				

The accompanying table shows that the majority of third-party damages result from the thirdparty excavator not calling in for a markout or not following

proper excavation procedures once the facility was properly marked out. A small percentage of the third-party damages result from either a mismarked facility or the locating contractor missing the three-day window.

To encourage proper markout procedures, ETG's Damage Prevention Specialist conducts monthly audits of approximately eight percent of all contractor locates in the Union region. Five to ten percent of the locates audited by the

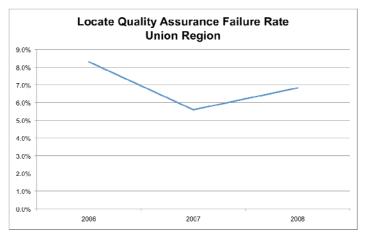
	2006	2007	2008
Total Locates	34,499	34,013	38,660
Audits	2,843	2,681	3,206
% Audited	8.2%	7.9%	8.3%
Failed Audits	236	150	219
Failure Rate	8.3%	5.6%	6.8%

specialist are failures, as seen in the chart shows.

Audit failures are one of the components tracked to determine locating contractor performance (per the Service Level Agreement). Audit failure rate has ranged from five to ten percent over

the last three years. During these same years, ETG has been under contract with a total of three different locate contractors.

ETG has taken corrective measures in response to all field audit failures. In most cases, ETG asked the contractor to make the necessary corrections on site at the time of the audit. The field audits are providing ETG with a higher degree of contractor oversight, strengthening ETG's underground



locating processes and damage prevention performance. The linkage of audit performance to contract payment also helps to strengthen contractor commitment. As a result, third-party damages have significantly declined since 2005 and contractor quality is improving.

# C. Conclusions

# 1. The drop-off in customer- and public-reported leaks indicates a need for a public awareness program. (Recommendation #1)

ETG must ensure that the general public is aware of the leak hazard and is reporting all leaks (odors) that they discover. The proportion of leaks or odor complaints ETG has received from customers or the general public has decreased over the last several years, while the overall number of leaks has remained nearly constant. Some of the decrease could be attributed to better leak surveying, but some of the drop off may because the general public and customers may not be fully aware of the implications of 'smelling gas.'

# 2. The number of personnel assigned and actually performing construction oversight for outside contractors is not sufficient based upon the current and future projections for new and replacement mains and services. (Recommendation #2)

The current construction oversight group is 50 percent of what it was in 2004, while the number and value of construction jobs given to outside contractors has increased and will continue to increase. These inspectors have new technology which helps, but visiting every job site every day is an important method of keeping track of the contractors and maintaining contractor quality and performance. That frequency is not possible with the current work load and inspection force.

# 3. Documentation supporting no-bid decisions is not complete. (Recommendation #3)

ETG has used no-bid construction jobs to keep several contractors busy during lull periods and for good job continuation. Documentation of the reasons for these practices is insufficient.

4. ETG does not have a formalized Quality Assurance and Quality Control program to check the work and cost of outside contractors (leak or construction), but rather relies only on construction inspectors and the leak-survey contractor. (Recommendation #4)

ETG does not formally audit or check the quality of its contractors' work. ETG believes that its construction inspectors perform this duty using the pre-programmed PDA that applies a series of questions. Additionally, ETG holds contractors responsible for the quality of work and for following ETG's construction standards. This approach is sufficient for well-established contractors, but ETG is also attempting to increase its contractor base in order to promote completion and to be able to perform all of the necessary construction work in the mandated or agreed upon time frames. Current quality-assurance and quality-control processes are not sufficient to assure the work of new contractors.

5. ETG use of PDAs for the inspectors and the cost accounting records show that ETG is retaining good records on contractor cost and performance.

ETG construction inspectors are able to keep detailed and accurate records of contractor performance using PDAs and associated software that mandates evaluation of a checklist of items each time an inspector visits a contractor job site. This information is uploaded nightly into the computer and available the next day. In addition, the Company also tightly monitors the costs of construction jobs, thereby providing good estimates on the total cost. This combination of onjob evaluation and cost monitoring is sufficient to ensure that construction jobs are well monitored from both a performance and cost standpoint for well-established contractors, but not for new contractors (see Conclusion #4).

6. ETG's improved locating contractor oversight and contract management have reduced third-party damages. (Recommendation #5)

ETG's third-party damages have declined significantly since 2005. ETG's field audits are providing a higher degree of contractor oversight, strengthening ETG's underground locating processes and damage prevention performance. The linkage of audit performance to contractor payment has also strengthened contractor commitment.

### **D. Recommendations**

1. Review programs for customer and public awareness of the hazards of natural gas. (Conclusion #1)

Outreach and education can be in the form of bill stuffers, advertisements in local papers and other media and other methods that ETG may find appropriate. Because of the large non-English-speaking population in ETG's operating region, particularly in the Union territory, such education programs may in the use of several languages. This outreach may increase the number of odor complaints (leaks) reported by customers, and may speed up the process of repairing such leaks.

2. Increase the number of construction inspectors. (Conclusion #2)

Since 2004, the number of construction inspectors has been cut in half while the value of the construction by contractors has increased by almost 80 percent. Additionally, since most inspectors work out of the Union territory, the time spent driving to job sites in the NW territory

is excessive.<sup>7</sup> The number of jobs that an inspector can visit every day during the construction season is limited, and with three or more contractors working on several jobs each, not every job site is currently visited every day. When there is a problem on a job, there can be a further reduction in job-site visits since one of the four inspectors (and potentially also the manager) is tied up exclusively on one job. ETG must hire additional construction inspectors, to reduce each inspector's work load and to allow for each construction site to have a daily visit.

# 3. Provide additional documentation for no-bid contracts that have a significant dollar value. (Conclusion #3)

Several of the no-bid contracts awarded in 2008 have high dollar values. In order for ETG to show that it has awarded these contracts prudently, it should always have significant justification for each such action. Such awards may not only be prudent but also cost-effective and provide more value to the ETG customers than bid contracts. Without adequate documentation, however, neither the Company nor the regulators can be sure. ETG should, as part of its contracting procedures, have such documentation prepared for all no-bid contracts over a certain dollar value (such as \$10,000 or \$20,000).

# 4. Establish a Quality Assurance (QA) and Quality Control (QC) program. (Conclusion #4)

ETG must develop a multifaceted or tiered approach to QA/QC: ETG must have a QA program, and its contractors must have QC programs that dovetail together. The first level is self-inspection; the second level is a dedicated QA/QC Department that performs inspections and audits year round; and the third level is an Internal Audit Department (which could be a corporate function in Atlanta) that performs specialized and in-depth inspections in problem areas (such as no-bid contracts).

# 5. Continue to emphasize the importance of the New Jersey One Call notification system with contractors and customers. (Conclusion #6)

Every third-party damage incident is a potentially serious public safety issue. As such, the underground locating process should be under continual scrutiny to ensure that all markout requests are properly and timely marked, whether by company personnel or contractor. In addition, ETG should continue to emphasize the importance of the NJ1C notification system with contractors and customers, in an ongoing basis, in an attempt to eliminate third-party damage incidents in which no call was made to NJ1C to request a markout. ETG's excavator oversight plans will also promote proper markout practices and encourage safe excavation procedures.

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<sup>&</sup>lt;sup>7</sup> In comments to Liberty's draft report, the Company noted that one of the project coordinators (construction inspectors) works out of the Northwest territory office.

# **XI. System Operations and Maintenance**

# A. Background

Gas system operations and maintenance (O&M) comprise a principal element of a safe and reliable gas system. Current New Jersey<sup>8</sup> and the U. S. Department of Transportation (*US DOT*)<sup>9</sup> codes set minimum standards that ETG must meet in order to operate without incurring violations. Those minimum standards seek to protect the general public and customers. O&M activities focus substantially on maintaining safety and reliability. Principal activities include corrosion control, pressure control, leak repair, sectionalizing valves (mandated valve inspections), damage prevention and emergency planning.

New Jersey requirements also address meter accuracy, in order to protect customers financially and to hold a gas company accountable for providing accurate and timely billing. Meter testing, reading, and retirement thus also form important parts of effective system operations and maintenance.

# **B.** Findings

# 1. System Planning & SCADA System

ETG's system planning has two components:

- Monitoring the performance of the distribution system to identify needed enhancements
- "Mandatory" projects.

Mandatory projects typically include work done to coordinate and avoid conflicts with government road work, and in ETG's case also include work under the Pipeline Replacement

Program (*PRP*) being conducted pursuant to agreements approved by the BPU. The table summarizes actual 2008 budgeted 2009 expenditures.

Year	Mand	atory	Pressure	Totals	
1 ear	PRP Other		Problems	Totals	
2008	\$14,287,882	\$1,475,802	\$7,625,037	\$23,388,721	
2009	\$13,205,000	\$2,270,000	\$1,615,000	\$17,090,000	

### a. Monitoring Performance

Prior to each winter season, ETG's Engineering Department uses Advantica's SynerGee model to perform network computer modeling of the distribution systems to identify potential pressure problems. ETG monitors problem areas by tracking system pressure, continuously tracking 168 pressures at 103 sites. Pressures are tracked by pressure charts (delayed, paper), SCADA points (real-time, electronic) or wireless points (delayed, electronic). The next table presents the locations monitored in the Union and Northwest territories and the types of sites monitored. ETG has also installed 15 movable pressure recorders at areas that may present problems in the winter months, for anywhere from one day to one month.

<sup>&</sup>lt;sup>8</sup> NJ Administrative Code 14:7, Subchapter 1

<sup>&</sup>lt;sup>9</sup> Part 192 of Title 49, CFR

	Union Division		Northwest Division		ETG Total	
	Recorded		Recorded		************	Recorded
	Locations	Pressures	Locations	Pressures	Locations	Pressures
Pressure Charts	10	14	0	0	10	14
CDMA	20	21	11	15	31	36
SCADA	30	63	32	55	62	118
Total	60	98	43	70	103	168

Gas Control monitors the system SCADA points and Distribution Operations monitors the wireless points and pressure charts. If pressures fall below acceptable levels at any of these locations, the instance is entered into a Pressure Problem tracking system. ETG's Engineering Design Department also reviews the Jobs with Poor Pressure Report from the automated dispatch system (Mobility). This report lists all calls that produce reports of no or low pressure. Potential pressure problems are extracted from this report and entered into the Pressure Problem tracking system. Employees who respond to these calls fill out a pressure recording form for any order that turns out to be an actual pressure problem, or that requires additional follow up. Distribution Operations and Engineering reviews these forms, and adds information to the Pressure Problem tracking system as appropriate.

Engineering and Distribution Operations personnel work together to identify and solve these problems. Weekly update meetings held throughout the winter discuss any new problems and review any outstanding issues. Problems that cannot be solved through adjustments then become the basis for development of system improvement projects. As potential system improvements are identified, preliminary project designs and their estimated costs are developed and prioritized on the basis of project type:

- System pressure improvements
- Cathodic protection system improvements
- Regulator station, meter set and piping betterments.

Pressure-improvement projects generally consist of replacement of an existing pipe with a larger size, a system-pressure upgrade, or system looping. Prioritization occurs on the basis of Federal and State regulations and Company standards as specified in its Operations and Procedures Manual.

Engineering and Marketing/Sales meet annually (or more often if needed) to review areas of potential load growth within ETG's service territories. Their analysis, combined with Engineering's system pressure monitoring processes, seek to ensure that areas of low pressure with potential load growth are incorporated appropriately into short- and long-term plans for system improvements and expansion.

Requests for service may be initiated by Marketing/Sales regarding for new, large customers, for areas of future development, or for new areas of re-development that may affect ETG's distribution system. These are forwarded to Engineering for analysis to determine the feasibility of serving the added loads, and to identify any required system improvements. Additional meetings take place to discuss projects and to assign project managers from Engineering and Marketing/Sales, as needed. Marketing/Sales works with the customer to ensure that requirements for a project are accurately communicated to Engineering and to facilitate meetings

between customers and Engineering as needed. Projects to accommodate load growth are included in the Company's budgets for New Business.

# b. "Mandatory" Projects

Replacement of the Company's eight-inch, elevated-pressure cast-iron mains comprises the largest current Mandatory program. This program is being conducted pursuant to an agreement with the interested parties in the Company's rate proceedings and approved by the NJ BPU in 2006. The program calls for replacing 60 miles of eight-inch pipe that operates at 20 to 25 psig, located mostly in the Union Division, over five years. The program is to be completed by June 30, 2010. This program follows a similar one for replacing the Company's four- and six-inch elevated-pressure cast-iron mains. This previous program began in 1996 and was completed in 2007. The Company's Operating Procedures Manual Standards prescribes the replacement

program's procedures. The table shows the Company's progress in completing the eight-inch program.

Year Scheduled Performed 2006 6 miles 6 miles 2007 6 miles 6.3 miles 2008 18 miles 22.5 miles 17.6 miles planned 2009 24 miles 2010 6 miles Completion planned

Prioritization of replacement projects takes place on the basis of performance history (e.g., leaks and breaks), adjusted for known new construction and public works

projects. If third-party construction around cast-iron mains would jeopardize their structural integrity, ETG plans replacement to occur in conjunction with the construction. Particular replacement projects will also be advanced to coordinate with activities such as state, county and municipal projects for roadway realignment, drainage improvements. Replacement projects can also occur in conjunction with land development or redevelopment, if development plans conflict with existing infrastructure.

Engineering Design annually contacts all municipal and county engineering departments and the New Jersey Department of Transportation, to secure available design and schedule information for all planned projects for the coming and subsequent years. Many of these agencies conduct utility coordination planning meetings to review projects and discuss issues in planning and design.

As projects are initiated, government representatives generally notify ETG Engineering Design by letter. ETG Engineering usually marks up pre-design base plans prepared by the government (often its engineering consultant) showing existing ETG facilities. This information allows the government to design around and limit conflicts with ETG facilities where possible. This process includes on-going communications (meetings, letters, e-mails or phone calls) that permit continuing any required coordination of ETG facility relocation. ETG Engineering and Construction personnel usually attend a pre-construction meeting after plans become finalized, in order to coordinate project construction with the government entity and its representatives.

ETG Construction Operations applies for all necessary permits to town, county, and state jurisdictions where construction will occur. ETG Construction Operations also coordinates with municipal, county and state inspectors and notifies them prior to beginning work.

### c. Bare Steel

ETG has no bare-steel program, but performs replacements when it finds active corrosion. ETG has seven miles of bare steel main. Four miles of these mains have cathodic protection and three miles do not. ETG has only 28 bare-steel services that are not cathodically protected, but has many more coated-steel services (12,870) that are not. ETG also has a significant number of coated-steel services (22,579) that are cathodically protected.

ETG plots leak history on maps. The Operating Procedures Manual provides direction for main replacement on the basis of number of leaks. The Company applies a 20-percent rule for services; when 20 percent of the services on a block are either leaking or have been repaired, then the entire block is replaced.

# d. SCADA System

ETG control has been combined with that of all AGLR LDCs in Atlanta, which is the location to which all inputs from the SCADA system report. ETG uses several modes of communication for real-time and delayed-time pressure and flow control. All gate stations have real-time control, via hard wiring from New Jersey to Atlanta. Most high pressure (HP) regulators are also monitored in this fashion. Some of the elevated pressure (EP) to low pressure (LP) regulators have full electronic monitoring. Wireless pressure monitors which periodically send Atlanta (and Green Lane) pressure data provide another means for obtaining pressure data from both regulator stations and low points. This data, when overlaid with the real-time hardwired pressure data, gives a good view of how the system is operating and behaving and whether there are any locations with major pressure problems. The regulator mechanics and instrument technicians also have communication links with the control center in Atlanta, which allows for dispatching them to any malfunctioning pressure devices and locations with problems. The mechanics and technicians report no issues with either maintaining the system or reporting conditions to a remote location.

Centralizing remote control is now common practice for LDCs that operate as part of a multiutility holding company. It allows economies by permitting a single group of gas controllers to handle several systems, especially when there are no problems. This approach, however, requires good communications and sufficient numbers of pressure (and sometimes flow) devices to support a full understanding of what is occurring at any given time. Both of these conditions appear to be present at ETG, as reported by the New Jersey-based supervisors of the regulator mechanics and the instrument technicians.

# 2. Metering

The majority of the meters in both ETG's Union and Northwest service territories are equipped with automatic meter reading (*AMR*) devices, which communicate electronically with a passing vehicle. These devices have been installed over a number of years, and have greatly reduced the number of estimated readings and missed readings. The Company has not, however, performed, nor does it have a policy to mandate, that the AMR device and the mechanical meter index be 'trued up' regularly. There could, therefore, be malfunctioning AMR devices, whose readings may be erroneous.

four months.

The chart below presents data on the proportion of AMR readings that were missed. Reasons for missed readings include faulty installation, dead battery, receiver too far away, and blocked signals, among others. The chart shows that considerable progress has been made to reduce the missed-readings rate. At the current level, this is no longer considered a major issue. The 2009 rate is based on two months of data and is expected Year 2007 2005 2006 2008 to be lower for the entire year; the 2005 data is for Rate 7.83% 3.58% 2.17% 1.45% 1.92%

NJ BPU rules and regulations require that each distribution utility have a meter-sampling plan to determine whether its meter population is accurately measuring gas consumption. These plans provide that a certain percentage of meters be removed each year and tested using BPU-certified test equipment. Meters found to be out of tolerance (+/- two percent) must be adjusted or scrapped. If a certain meter group (*i.e.*, meters of the same age and type) has an excessive number of out-of-tolerance meters, the entire group must be replaced, and all of the removed meters adjusted or scrapped. ETG has contracted to have the meter testing and adjustments done by an outside facility that specializes in such work. The NJ BPU has inspected and certified that facility's test equipment. In addition, at the Green Lane facility, ETG has modern BPU-certified test equipment for testing meters involved in high-bill complaints.

The next table lists are the initial populations and removals of poorly-performing meters over the last two years. The 2009 listing is the meter population net of 2008 removals.

**ETG Poor Performing Meters & Planned Removals** 

2007			2	2008		2009
Meter Group	Initial Population	Removed	Meter Group	Initial Population	Removed	Initial Population
1990	4	2	1990	2	0	2
1991	7	4	1991	3	0	3
1992	13	11	1992	2	0	2
1993	5	4	1993	1	0	1
1994	22	14	1994	8	0	8
1995	1	1	1995	0	0	0
1997	47	23	1997	24	0	24
1998	53	29	1998	24	0	24
1999	283	99	1999	184	5	179
2000	225	100	2000	125	3	122
2001	209	71	2001	138	2	136
2002	53	21	2002	32	0	32
2003	1252	292	2003	960	158	802
2004	1144	313	2004	831	62	769
2006	324	79	2006	245	0	245
			2007	2421	200	2221

This data indicates that ETG should be removing around 4,500 meters over the next several years to meet the NJ BPU's requirement that poorly-performing meters be adjusted or scrapped.

### 3. Corrosion Control

The control of all of the forms of corrosion (internal, external, stress corrosion cracking, and microbiologically-induced corrosion [MIC]) is a major safety concern because of the large percentage of failures caused by corrosion. These failures typically lead to a release of natural gas (or, in liquid pipelines, a hazardous liquid) that can threaten public safety. A December 2007 incident caused by external corrosion resulted in the death of a motorist in Louisiana, when a pipeline ruptured under an interstate highway. Recent US DOT studies indicate that all forms of corrosion are either the first- or second-largest cause for pipeline failures in the United States. A recent NACE (National Association of Corrosion Engineers) study estimated the total costs of corrosion to the United States infrastructure (which includes roadways and bridges in addition to metal pipelines) at \$276 billion, of which \$7 billion is in the gas and liquid transmission pipelines.

Corrosion is an electro-chemical reaction in which the base metal is returning to its native state, which is typically a chemical anion with either oxygen or a salt cation. The driving force of the reaction is to lower the state of energy in the environment, which can result from having the pure metal (to which energy was added to make it pure) give up electrons to the environment and combine chemically with oxygen (forming an oxide, or rust) or with salt cations<sup>10</sup> to form a soluble metallic salt in the soil. This reaction can be eliminated by isolating the metal from the soil or by providing additional energy to overcome the natural tendency to return to the native state. The energy can be provided via electrons from the soil by having another more active substance to "corrode." This is called a sacrificial anode, which is made from zinc or magnesium and provides electrons to the metal pipe. An impressed current electrode, typically iron, can give up electrons by impressing a direct current on them and making negative the pipe being protected.

Controlling external corrosion in metal pipelines can be accomplished through a proactive corrosion-control program. Such a program typically uses two methods to mitigate the effects of external corrosions. One method is to isolate the pipe or coat from an electrolytic environment, such as soils containing chemical ions, moisture, and oxygen. Such coatings have been mandated on buried pipelines since the enactment of pipeline safety standards in 1968 (which became effective in late 1970). Many larger and proactive gas operators (both inter- and intrastate) started mandating coated pipe in the 1950s. The cathodic protection coating isolates the pipe from the soil environment electrically, thus breaking the corrosion cell before it has a chance to form.

Coating is neither foolproof nor 100-percent effective in stopping corrosion; therefore, the 1968 standards also mandated a second method, cathodic protection. This method involves having either impressed current or sacrificial cathodic-protection currents applied. Cathodic protection

<sup>&</sup>lt;sup>10</sup> A negatively charged ion that has more electrons in its electron shells than it has protons in its nuclei is known as an anion. Conversely, a positively charged ion, which has fewer electrons than protons, is known as a cation.

has been required for all pipelines constructed after 1970. Several operators had been installing cathodic protection as early as the 1950s, in tandem with pipe coatings, to protect their investment. A third level of protecting pipe against corrosion involves ensuring a "protected state" is achieved. Certain minimum standards were set and operators had to test their systems at a prescribed interval to measure the effectiveness of both the coating and cathodic protection currents in achieving this protected state.

Internal corrosion control in metal pipelines can be affected by coatings or treating, transporting, and delivering gas that is not corrosive. The typical components in natural gas (methane, higher molecular weight hydrocarbons, and small or trace amounts of carbon dioxide and sulfur compounds) usually by themselves do not form corrosive liquids or gases. However, when an electrolyte such as water or glycol (from a water-reducing dehydration system) is present in sufficient quantities (over the gases' dew point), then the resulting liquids can form corrosive acids that are detrimental to the interior of the pipe. Most local distribution gas companies (*LDCs*) have not had major issues with internal corrosion provided they are not located near a storage field without adequate dehydration facilities, or that they not receive sour gas supplies from nearby producing fields.<sup>11</sup>

Stress corrosion cracking is not typically an issue for LDCs. One of the safety requirements for gas distribution systems is that they operate at relatively low stress levels, typically below 60 percent of the specified minimum yield strength (SMYS) of the pipe. Most LDCs in urban and suburban areas operate their pipelines at stress levels less than 50 percent of the SMYS for the pipe.

MIC can be a factor in both external and internal corrosion. Mitigating the risk of MIC can require additional measures beyond normal cathodic protection practices. MIC is localized and testing for areas where MIC can occur is easily accomplished. Operators can overcome MIC corrosion by additional cathodic protection currents for external corrosion, and by pH adjustments or buffering for internal corrosion. Removal of electrolyte can also eliminate MIC internal corrosion.

The Federal code relating to corrosion control resides at 49 C.F.R. Part 192, Subpart I (sections 192.451 to 192.491). These requirements have been adopted in full by the NJ BPU under the NJ Administrative Code 14:7, Subchapters 1 and 2. These regulations specify the monitoring intervals for both mains and services, and typically require annual testing on mains (except for short sections under 100 feet) and isolated services. Rectifiers, critical bonds, or current drains must be tested six times per year. Short mains (under 100 feet) and isolated services must be tested every 10 years, and atmospheric corrosion inspections are required every three years.

When a section of a cathodically-protected service is out of compliance (either by a reading less negative than -0.85 VDC with a copper-copper sulfate reference cell, or with less than a 100 mVDC shift upon polarization), prompt remedial action is required. NJ BPU regulations define "prompt" as 12 months from when a non-compliant reading was taken. Under certain

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The Liberty Consulting Group

<sup>&</sup>lt;sup>11</sup> Pipeline gas quality standards prevent untreated gas from entering distribution systems from that source, but locally-produced supplies that do not enter high-pressure transmission systems, either interstate or intrastate, may not have been adequately treated.

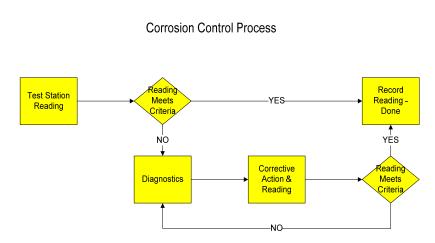
circumstances, additional time for corrective action may be granted by the NJ BPU if such a delay was out of the control of the utility; *e.g.*, permits and road work.

External corrosion (*EC*) appears to be the most prevalent form of corrosion for ETG. Internal corrosion (*IC*) does not appear to be a concern except for some water intrusion issues which are limited to CI/DI (*Cast iron/Ductile iron*) piping which is not susceptible to this form of corrosion. Stress corrosion cracking (*SCC*) corrosion is not a concern because the operating stress level for the transmission system is below the 60-percent SMYS threshold<sup>12</sup>.

The Engineering department operates ETG's corrosion-control program, and manages the Company's leak-survey contractor. The Engineering Manager reports to an Engineering director in Atlanta, who oversees many of the asset-management issues for all of the AGLR companies (e.g., leak survey, engineering improvements, corrosion control.). This individual is somewhat remote from day-to-day activities, and mainly sets policy and reviews major issues or problems. Day-to-day program administration occurs locally, under the direction of the lead corrosion-control technician, who is located in New Jersey, and the New Jersey Engineering manager.

Corrosion control comprises an important part of asset preservation. Accordingly, it must have not only adequate funding, but also a corporate officer who will champion its cause. ETG's 2008 submission to the US DOT reports slightly over 1,000 miles of distribution main, 22,500 services, and 22 miles of transmission pipelines under cathodic protection. ETG also has four miles of high-pressure distribution pipe in Pennsylvania. ETG performed over 8,000 cathodic protection inspections in 2008, not including inspections for atmospheric corrosion of outsidemeter installations (which are performed by the leak-survey contractor). 14

The diagram illustrates ETG's corrosion-control The corrosionprocess. control group consists of a senior corrosion-control technician and three corrosion-control technicians who report to him. This staffing produces an average annual work load of 2,000



<sup>&</sup>lt;sup>12</sup> According to ASME B31.8S-2004, four characteristics identify an SCC threat. The four are 1) a stress level of 60 percent SMYS or higher; 2) being in service for 10 years or more; 3) having a coating other than fusion-bonded epoxy (*FBE*), and 4) being 20 miles or less downstream of a compressor station. All four conditions must be met to have the SCC threat. For high-pH SCC, a gas temperature of 100 degrees F is also required.

<sup>&</sup>lt;sup>13</sup> ETG owns a four-mile, eight-inch diameter, high-pressure distribution pipeline in Pennsylvania known as the Company's Penn-Jersey Line. Its sole purpose is to deliver gas from a gate station on Columbia Gas Transmission Corporation's system in Fork's Township, PA, into the Company's elevated-pressure system in Phillipsburg, NJ. ETG does not distribute gas in PA, nor does it have any customers in PA. Rather, this pipeline is a critical feed to ETG's 7,000 customers in western NJ.

<sup>&</sup>lt;sup>14</sup> ETG first responders or others perform inside meter set atmospheric corrosion inspections.

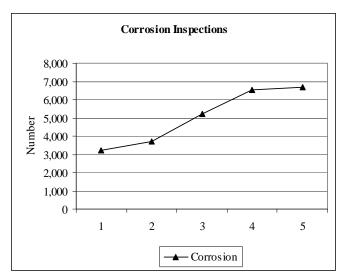
readings per person.<sup>15</sup> Assuming four weeks' vacation and sick time, three weeks holidays and personal time, the normal amount of time available would be about 1,800 hours per technician per year. Dividing 2,000 readings per year by 1,800 hours per year per technician yields slightly more than one reading per hour. The corrosion control technicians also have responsibility for the pipeline integrity program for the transmission system. Considering travel time, this work load seems high to be performed without significant overtime. Moreover, this reading rate does not include any diagnostic work, nor any corrective action work or retesting after corrective actions. Thus, considerable overtime would appear necessary in corrosion control to get all of the required readings done.

Over time, the work load in corrosion control will decrease, because some protected steel will be replaced with plastic. The plastic is mainly replacing CI/DI and bare steel, however, neither of which has any cathodic protection, and thus is not normally tested by the corrosion-control technicians. Thus, the effect of the CI/DI program and bare-steel replacement on the work load in corrosion control is not clear.

ETG's corrosion-control program meets all of the requirements of the NJ BPU and US DOT regulations, and appears to be effective and efficient. Much of this effectiveness and efficiency is due to ETG's corrosion-control technicians, who have an average of almost 13 years with the

Company (the service times range from 22 years to 5 years). The number of corrosion-control technicians has not increased over the last several years, but the number of annual inspections completed has increased dramatically as the chart shows.

In addition to 'regular' corrosion-control work, technicians assist in video inspections of mains for water intrusion, take gas samples and work on cast-iron coupons (these are coupons taken from cast-iron mains to measure the amount of graphitization, a form of corrosion for CI).



The bulk of the corrosion testing takes place in March through October, with the other months reserved for diagnostic testing of 'down' jobs<sup>16</sup> and testing of isolated services and short mains. ETG reports that the increase in the number of corrosion inspections shown in the chart is due to 'finding' a large number of isolated services several years ago and their subsequent incorporation into the corrosion-control program.

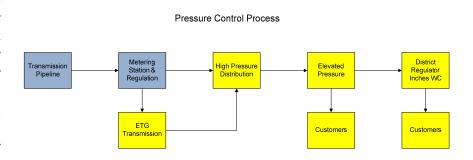
<sup>&</sup>lt;sup>15</sup> 8,000 readings per year, divided by 4 technicians

<sup>&</sup>lt;sup>16</sup> A 'down job' is defined as a corrosion control job that does not meet code requirements, typically -0.85 VDC or a 100 mVDC potential shift. ETG is experiencing around 100 down jobs per year, or less than two percent of the total number of corrosion control jobs.

## 4. Pressure Control

Pressure-control, illustrated in the next diagram, is critical for operating a safe and efficient gas distribution system. This function reduces pressures from pipeline levels (greater than 300 psig) to pressures that are safe to distribute through populated areas and into mains and services for individual customers. Pipeline gas pressures can be as high as 1400 psig, which could cause significant consequences if there was a rupture or release in a populated area. Thus, when gas is being distributed in these areas, pressure is reduced to minimize the risk of injuries to customers and the general public. Reduced pressure also reduces the likelihood that gas mains will rupture rather than leak<sup>17</sup>.

The pressure-control group has both regulator mechanics and instrument technicians for maintaining regulator stations and telemetry. Each high-pressure station typically has regulators, with one for regulation and the other



acting as a safety monitor. Each of the regulators is in a separate vault for safety reasons. In some instances there may be dual regulator runs; i.e. parallel regulator runs, of dual regulators. Each regulator is in a separate vault with a minimum distance between vaults for safety; in case of a fire in one of the vaults, mechanics could get to the other one to either operate it manually or shut it down.

Each regulator vault contains telemetering equipment that permits the central control room in Atlanta to monitor both inputs to and outputs from the station. Some telemetry will not only show pressures but also flows (known as flow control). The higher the pressure, the more telemetry is usually present. As the gas is distributed and the pressures are reduced, the amount of telemetry is reduced. At the district-regulator level, i.e., where pressures are reduced to inches of water column (WC), typically only the inlet and outlet pressures are monitored. In some situations, there is no telemetry and outlet pressures are monitored via recording charts.

Instrument technicians are in charge of all maintenance on the telemetry, verification of proper installation of new facilities, trouble-shooting communications problems between transmitters in New Jersey and Gas Control in Atlanta, and routine preventive maintenance. The number of instrument technicians and supervisors has been reduced since the AGLR takeover; an area supervisor reported to Liberty that ETG is currently experiencing at least 30 percent overtime.

Regulator mechanics are charged with maintaining and checking all of the regulator stations and district regulators. There are monthly leak checks, atmospheric corrosion inspections, and safetyvalve calibrations in addition to major maintenance issues. Where gas flows are at high velocity, the rubber boots of the regulators and monitors may need to be inspected and changed annually.

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<sup>&</sup>lt;sup>17</sup> According to several studies, rupture is more likely when the SMYS (specified minimum yield strength) is greater than 35 percent. Typically, ruptures are caused by combinations of events.

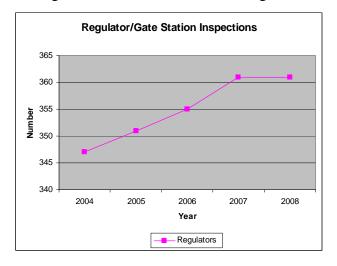
Where the flows are not high-velocity, rebuilding of the regulators and monitors may not be an annual occurrence. The remaining regulator mechanic supervisor reports that AGLR now requires a yearly tear-down of all regulators and monitors. He considers this requirement unachievable due to a lack of manpower. As in the case of the instrument technicians, the regulator mechanics are experiencing high overtime rates, as many of their number left the Company after the AGLR takeover.

Supervisors of the instrument technicians and regulator mechanics report that there are no outstanding maintenance or operations issues within ETG's pressure-control system. ETG has no valves that will not pass at the stated rate, nor are any of the telemetry instruments prone to failure or incorrect readings. AGLR has standardized the valves and the telemetry on all new and replacement vaults. The new valves and telemetry are somewhat different from what was

previously used at ETG, but the new standards are currently in use by many LDCs throughout the country. Currently ETG is using either Grove or Fischer regulators of either a boot or plug design, which is typical in the Northeast U. S.

The table shows the number and type of regulator stations on ETG's system. HP stands for High Pressure, EP for Elevated Pressure, and LP for Low Pressure. The number of regulators to be inspected over the audit period has remained near constant, with a few additional regulator stations having been installed. Included in this number are the 19 gate stations that also have regulators to reduce

Pressure Type*	Union	NW	Total
HP to HP	1	4	5
HP to EP	32	86	118
HP to EP & LP	4	0	4
HP to LP	0	1	1
EP to EP	0	2	2
EP to LP	184	18	202
Total	221	111	332



pipeline-pressure gas to either highpressure distribution or to ETG transmission pressures.

As was the case with construction inspectors, the number of pressure control technicians and regulator mechanics was reduced by 50 percent between 2004 and 2008. The chart below shows that the number of regulator and gate-station inspections has increased over that period, however. Thus, the work load of the remaining technicians and mechanics has increased considerably over the period.

<sup>&</sup>lt;sup>18</sup> In comments to Liberty's draft report, the Company noted that as of 2009 the reduction was 27 percent below the 2004 number.

## 5. Leak Repair

The diagram below illustrates ETG's leak discovery and repair process. Inside meter set leaks are classified as type/class 1 and are handled as immediate repairs, especially when the customer reports the leak. Class or type 2 leaks must be repaired within a specified time, but are not considered an immediate threat to safety. Type/class 3 leaks never have to be repaired because they will never pose a threat to public or customer safety. Type/class 3 leaks are rechecked, as they may worsen. If upon rechecking the type/class changes, the leak will have to be repaired.

When a leak is found by the leak-survey contractor, an ETG first responder is called to "take over." Leak-survey contractor personnel are instructed that protection of the public is paramount, and they are authorized to evacuate a home or building if they think there is imminent danger, such as a class 1 leak inside a building. In the event of discovering a class 1 leak, the leak-survey contractor will stand by until relieved by an ETG first responder.

#### Leak Survey Leak First First First Dispatch Responder Responder Center Dispatched Classifies Makes Safe General Public Call Center Smells Gas Called Out Leak Validate Grade/Class 2 Repair Retest Retest Repairs via Retest Grade/Class 3 Optional Retest Leak

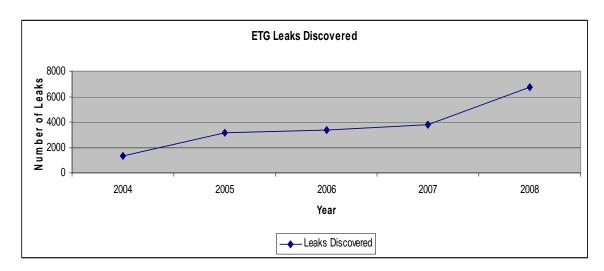
ETG Leak Discovery and Repair Process

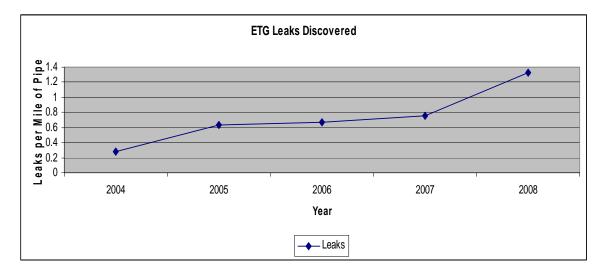
During extreme cold weather, ETG initiates additional leak surveys on CI mains to look for frost heave that can cause breaks and cracks. These surveys can be run by either ETG personnel or the leak-survey contractor, and are designed to pinpoint areas that are susceptible to cracking and breaking. Typically, small-diameter CI is the most prone to such breaks; over time, as the CI ages and graphitization takes place, it becomes even more susceptible to these breaks. Small-diameter CI mains and services are also susceptible to breaks and cracks due to undermining when construction is nearby and the soil is disturbed. During the winter in the northern part of the U. S., CI breaks and cracks are a problem because the gas may be trapped under frozen ground, and then migrate to building walls and foundations, perhaps entering basements or other

areas in occupied housing or business units. In urban areas, having pavement and sidewalks from building foundation to foundation increases the risk that the gas from a break or crack will migrate into a basement. Once the cold weather is over, these special patrols or surveys need not be re-run unless there is construction in the area and undermining becomes an issue.

ETG has experienced an increasing number of leaks over the last several years. The graphs below show this trend both as an absolute number and as leaks per mile of pipe.

## Leaks Discovered and Leaks per Mile of Pipe 2004 to 2008





The graphs show that more leaks are being discovered; thus more leaks need to be repaired. The percentage of leaks found by the leak-survey contractor has also increased. Potential causes for that include:

- Better performance of leak surveys
- Decreased number of inside leaks

• Greater number of miles surveyed. 19

In 2007, according to its annual DOT Distribution report, ETG had 1,139 open leaks. ETG reported the following causes and numbers of leaks.

Total Leaks (inside and outside) Calendar Year 2007

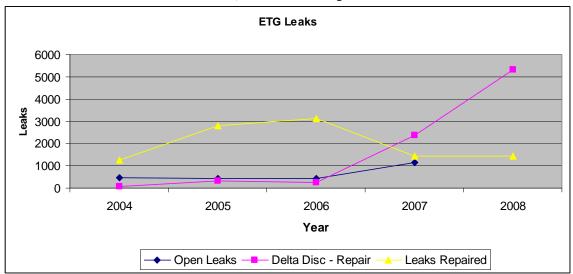
PART C - TOTAL LEAKS ELIMINATED/REPAIRED DURING YEAR						
CAUSE OF LEAK						
	Mains	Services				
CORROSION	60	185				
NATURAL FORCES	119	1				
EXCAVATION	51	151				
OTHER OUTSIDE FORCE DAMAGE	8	18				
MATERIAL OR WELDS	24	51				
EQUIPMENT	55	63				
OPERATIONS	13	2				
OTHER	579	45				
NUMBER OF KNOWN SYSTEM LEAKS AT END OF YEAR SCHEDULED FOR REPAIR						

The large number of 'other' leaks is significant. ETG uses this designation for CI/DI joint leaks. For many other utilities, leaks are classified as 'other' when they do a replacement, which is accomplished by inserting new pipe inside the old, since they cannot determine the cause of the leak.

The graph below is a composite of leaks discovered, leaks repaired, and the difference between those two. The graph shows that ETG is falling behind in the number of leaks it repairs versus newly-discovered leaks, and thus that the leak backlog is starting to grow.

<sup>&</sup>lt;sup>19</sup> Outside leak surveys outside of non-business districts are done over a number of years, typically either three or five years to complete the entire territory.

Leak Metrics, Open Leaks per DOT Report, Delta of Discovered leaks minus Repaired Leaks, and Leaks Repaired



Inside meter sets are an unresolved problem for ETG. Both ETG and the NJ BPU are concerned about the large number of inside meter-set inspections that have not been performed, and the risk of leaks or other events that is inherent in the lack of inspections. According to ETG, in 2008 the Company should have inspected over 33,900 meter sets. It could obtain access to only approximately 13,000 (38 percent). Inability to inspect these meters is not acceptable from either safety or good-operations perspectives, and something needs to be done to resolve the issue.

Leaks at inside meter sets are mostly reported by customers. Such leak reports occur as a result of the customer smelling gas, and of ETG's customer-education processes. Small leaks may go unreported since people lose sensitivity to the odorant in gas with continued exposure. In some cases, increases in odor (an increasing leak) can go unreported due to this insensitivity. Thus, the principal detection method (customer reports) may be flawed, or may have an inappropriately high tolerance to odorant.

The main areas for leaks on inside meter sets are: (1) the penetration through the basement wall and (2) any of the screw fittings that had pipe dope applied many years ago. External and atmospheric corrosion are not usually problems, unless the location is extremely damp and has periods of condensation on the gas piping and meter. Surface rust does not affect the probability of a leak.

A major point of leakage and corrosion is where the service line penetrates the building's foundation. In older installations, which most inside meter sets are, there are no sleeves or isolation devices to keep the steel pipe from contacting the building. Often the space around the pipe has been cemented; thus, on the outside there can be a wet-soil-to-wet-cement-to-steel interface that can cause a corrosion cell to form, depending on the corrosivity of the soil and other conditions. If this condition is allowed to continue, a failure will result. In many cases these older services lines are replaced before the failure occurs and thus no problem is apparent.

The second and maybe the largest contributor to leaks is the aging and drying out of the pipe dope that was used to originally join the screwed connections before and after the meter. These fittings are naturally prone to leaks due to misalignment and other construction issues. Now, several decades (or more) later, the putty that seals some of the joints has become hard and brittle; if disturbed, it will certainly start leaking. Even without some kind of disturbance there can be leakage. This situation will typically yield what is called a 'fuzz' leak, a very minor leak, but one that someone who has not been constantly exposed to the odorant can quickly smell.

Other issues regarding CGI (cannot get in) inside meter sets include the 'true-up' issue, meter changes and other associated O&M work that needs to be scheduled and performed on a regular and periodic basis.

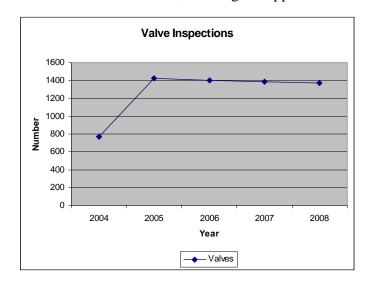
## 6. Valve Program

A mandated emergency valve program is specified by the NJ BPU and US DOT. ETG's program is specified in its O&M manual. Such a program is necessary for at least two important reasons: 1) to shut gas off in the event of a main or service break that cannot be handled at a curb valve; 2) when a wholesale curtailment or shut-down of part of the system is necessary because of low gas supplies, flooding or other natural or man-made disasters.

Whenever there is a gas leak or gas-fed fire, the first step is to reduce the source of the fuel. If the source is a gas-main leak or rupture, then the way to cut off the gas supply is to close a main valve. Most gas companies, ETG included, install gas-main valves in many intersections so as to isolate blocks or areas for this reason. Some of these valves may be considered 'emergency valves' and are part of the valve program, but some may not be. Non-emergency valves may be considered 'spares' in the event another valve becomes inoperable or 'lost' by being paved over. Some of the extra valves may be based on company policies at the time of installation.

The second important reason why emergency valves are necessary is to 'sectionalize' the gas distribution system in times of man-made or natural disasters, where gas supplies have to be

curtailed for safety reasons. Relighting or restarting gas customers is time-consuming and expensive. Gas operators therefore careful to minimize the size and scope of any disruption to service. By using sectionalizing valves, they can target certain areas and minimize the outage to those customers or to a specific area. If there were a flood in one area, for example. that area could be isolated from the rest of the system and only customers in that area would have to be curtailed. Many LDCs have plans to drop certain



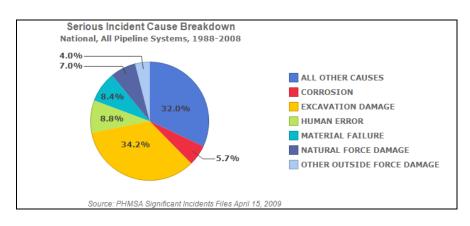
areas if gas curtailment is necessary, and can tailor the area to be curtailed to the load needed to

be shed. Sectionalizing valves are used in this situation as well. If there are not enough valves, the size of the section being dropped is increased, and the time and cost to perform purging and re-lighting increases. If there are too many valves, then the annual costs for inspections increases and thus there is an annual O&M—cost impact.

When any of these emergency valves is required, it is critical that they be ready and operable. Thus, they must be operated and inspected via operation every year. The chart shows ETG's valve inspections since 2003.

### 7. Damage Prevention

The next chart shows damage that underground pipelines during excavation has historically been leading cause of Serious Incidents, which include fatalities and injuries. The single largest cause of Serious Incidents is damage from outside forces:



- First Party Damage: damage the utility does to its own facilities
- Second Party Damage: damage by utility contractors
- Third Party Damage: damage caused by outside entities.

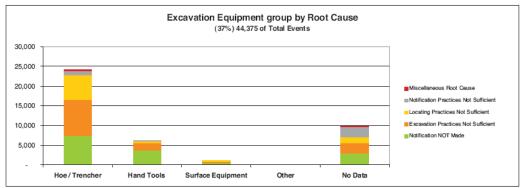
Under both NJ BPU and US DOT regulations gas utilities are required to prepare and execute a comprehensive damage prevention plan. ETG, as most utilities do, has comprehensive internal programs to prevent First Party Damage and Second Party Damage.

Both US DOT and NJ BPU have made reducing Third Party Damage (*TPD*) a goal for all utilities. Besides mandating mark-outs, the regulators have set up both a national and state Common Ground Alliance (CGA), a non-profit organization dedicated to reducing underground utility damage. This organization has been in existence on the national level since 1999 and on the state level since 2005. It provides best practices based on the views of subject matter experts, utilities, regulators and other stakeholders.

The role of TPD in incidents involving LDC mains and services was recognized by the U. S. Congress in its 2006 reauthorization of the integrity management rule. The Congress enacted new requirements for both transmission and distribution pipeline companies. One of the changes was to require that each utility have a distribution integrity management program (*DIMP*) with emphasis on TPD prevention. Additional funding was provided to support the CGA and state administration of the pipeline safety program. A common national locate number was instituted (811), and other enhancements were made.

The next chart shows the latest (2007) data from CGA<sup>20</sup> regarding the root cause of excavation damages by equipment group. Besides the failure to notify, a large contributor to these damages were poor locating practices. That problem coupled with poor excavation practices make up the bulk of the preventable damages. Thus better outreach and better locating should provide ETG with reduced TPD.

## **Latest Data on Damage from CGA**



\*In this case, *No Data* refers to the excavation equipment type. The events listed here have a root cause included in the data reported to DIRT, but no excavation equipment type was specified.

ETG reports that it is currently using<sup>21</sup> the following CGA best practices:

### **Planning & Design Practices**

- 2-2: Gathering Information for Design Purposes
- 2-3: Identifying Existing Facilities in Planning and Design
- 2-4: Utility Coordination
- 2-5: Markers for Underground Facilities (as required by code)
- 2-6: Follow applicable codes and statutes and facility Owner/operator standards
- 2-7: Use of Qualified Contractors
- 2-9: Continuous Interface During Bid and Pre-bid (as needed)
- 2-10: Continuous Interface During Construction (as needed)
- 2-11: As-Built Drawings
- 2-12: Supply Line Separation
- 2-13: Trenchless Excavation
- 2-15: Use of Qualified Designers

#### **Locating & Marking Practices**

- 4-1: Locators utilize available facility records at all times.
- 4-2: Awareness of Errors or Omissions
- 4-3: Uniform Color Code and Set of Marking Symbols (per State requirements)
- 4-5: Training and Documentation
- 4-6: Safe Locates
- 4-7: Visual Inspection

<sup>&</sup>lt;sup>20</sup> CGA Analysis and Recommendations Volume IV (2007)

<sup>&</sup>lt;sup>21</sup> Data Request 215

Comment: Yes with exception of hand digging to verify utility location. That cannot be done since it is a violation of state law.

- 4-8: Adequate Marks
- 4-9: Positive Response
- 4-10: Multiple Facilities in the Same Trench
- 4-11: Information on Abandoned Facilities
- 4-12: Electro-Magnetically, Active/Conductive Locating
- 4-13: Identification of Facility Owner/Operator
- 4-14: Communication
- 4-15: Documentation is Maintained
- 4-16: Damaged Facility Is Investigated as Soon as Possible
- 4-17: Forecasting/Planning for Predictable Workload Fluctuations
- 4-18: Locating Quality Assurance Program
- 4-19: Trenchless Excavation

### **Excavation Practices**

- 5-1: One-Call Facility Locate Request
- 5-2: White Lining
- 5-3: Locate Reference Number
- 5-4: Pre-Excavation Meeting
- 5-5: Facility Relocations
- 5-6: Separate Locate Requests
- 5-7: One-Call Access (24x7)
- 5-8: Positive Response
- 5-9: Facility Owner/Operator Failure to Respond
- 5-10: Locate Verification
- 5-11: Documentation of Marks
- 5-12: Work Site Review with Company Personnel
- 5-13: One-Call Reference Number at Site
- 5-14: Contact Names and Numbers
- 5-15: Facility Avoidance
- 5-16: Federal and State/Provincial Regulations
- 5-17: Marking Preservation
- 5-18: Excavation Observer
- 5-19: Excavation Tolerance Zone
- 5-20: Excavation within Tolerance Zone
- 5-21: Mis-Marked Facilities
- 5-22: Exposed Facility Protection
- 5-23: Locate Request Updates
- 5-24: Facility Damage Notification
- 5-25: Notification of Emergency Personnel
- 5-26: Emergency Excavation
- 5-27: Backfilling
- 5-28: As-Built Documentation
- 5-29: Trenchless Excavation
- 5-30: Emergency Coordination with Adjacent Facilities

## **Mapping Practices**

#### Locator

6-7: Locators are trained in map reading and symbology.

6-8: The locator provides precise facility location to the facility owner operator when there is a discrepancy.

#### Excavator

- 6-10: The excavator provides accurate location information to the one-call center.
- 6-11: The excavator provides basic attributes to the one-call center.

#### **Facility Owner/Operator**

- 6-12: The facility owner/operator provides mapping data to the one-call center.
- 6-13: The facility owner/operator provides mapping data access. The facility owner/operator provides access to a mapping system that can be utilized by both the locator and the facility owner/operator.
- 6-14: Mapping standards are adhered to.
- 6-15: Consistent, current information is provided to the one-call center.
- 6-16: Detailed mapping information is collected.

#### **Project Owner**

- 6-17: The project owner provides accurate information.
- 6-18: The project owner determines basic coordinates.

#### **Compliance Practices**

- 7-1: Public and Enforcement Education
- 7-2: Incentives
- 7-3: Penalties
- 7-4: Damage Recovery.
- 7-5: Enforcement

#### **Public Education Practices**

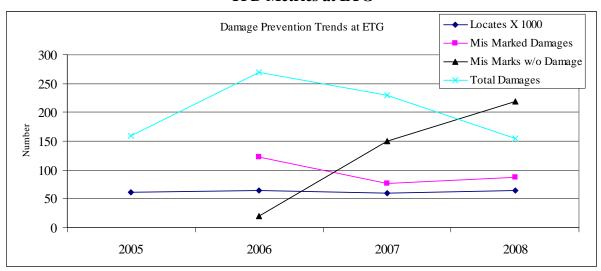
- 8-1: Use of a Marketing Plan
- 8-2: Target Audiences and Needs
- 8-3: The Use of Structured Education Programs
- 8-4: Target Mailings
- 8-5: The Use of Paid Advertising
- 8-6: The Use of Free Media
- 8-7: The Use of Giveaways
- 8-8: Establishing Strategic Relationships
- 8-9: Measuring Public Education Success

### **Reporting & Evaluation** (in the planning stage, not implemented)

- 9-1: All Stakeholders Report Information
- 9-2: Standardized Information Is Reported
- 9-3: Identify Non-compliant Stakeholder
- 9-4: Detailed Information
- 9-5: Requested Information May Change
- 9-6: Standardized Form
- 9-8: Training

ETG has been tracking the TPD metrics presented below.

#### **TPD Metrics at ETG**



These results show that the number of locates has essentially been flat for the last four years. The number of mis-marks with damages has decreased, but those without damages have increased. Working in a congested urban setting, it is important that not only are excavators aware of the necessity of making one-call telephone reports, but the quality of the mark-outs is important, as well. During some brief field visits, Liberty noted on two occasions that the mark-outs were not accurate. No damage resulted only because the contractors in both situations performed another mark-out, or were aware of the gas utility facilities and acted accordingly to prevent any unnecessary damage.<sup>22</sup>

### 8. Emergency Planning

The Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA), Pipeline Safety Regulations 49CFR615 and the related NJ BPU code require that each pipeline operator establish written procedures to minimize the hazard resulting from a gas pipeline emergency. The procedures must provide for receiving, identifying, and classifying notices of events that require an immediate response. They must also provide for (a) communications with fire, police, and other public officials, (b) a prompt and efficient response to notices of emergencies, and (c) the personnel, equipment, tools, and materials at the scene of the emergency.

Each operator must furnish appropriate supervisors with a copy of the latest revision to emergency plans, train operating personnel on the procedures, verify the effectiveness of the training, and review actions taken to determine whether personnel effectively followed the procedures. In addition to training their own personnel, operators should establish and maintain a relationship with fire, police, and other public officials to:

- Learn the responsibilities of each during a gas emergency,
- Acquaint the officials with the operator's response to emergencies,
- Identify the types of emergencies for which the operator will notify the officials, and

<sup>&</sup>lt;sup>22</sup> One situation may have been caused by a incorrect map but this still should have been prevented by toning the line, as required, which would have made the real location apparent.

• Plan how the operator and the public officials can engage in mutual assistance during emergencies.

Many LDCs provide training, both to internal and external individuals. Training includes the emergency response requirements in their O&M manuals.<sup>23</sup> Some companies perform annual or periodic drills for internal individuals; some perform simulated emergencies with both internal and external (governmental) resources. This latter method of advanced training goes beyond what is in the code but confirms that a company will be able to coordinate with governmental agencies in a true emergency, and that its own employees know what to do, when to do it and who to contact. These periodic drills have become an industry best practice. Since the terrorist attacks of September 11, 2001, many utilities in urban areas have participated with governmental agencies, fire departments, police departments, emergency preparedness departments and homeland security departments to maintain and enhance their responses to normal and possible terrorist-caused emergencies.

The objectives of Liberty's examination were to:

- Determine whether ETG emergency plans meet requirements
- Evaluate the emergency plans for completeness
- Assess the training on emergencies that ETG provides to its employees
- Review the liaison that ETG has established with public officials regarding emergency response.

ETG's emergency plan is reviewed annually and updated with phone-number and contactinformation changes. The plan is not a generic one from the parent company in Atlanta, but rather one that was developed by ETG prior to its acquisition by AGLR. The plan continually stresses the importance of preventing injuries or fatalities over property damage or impairment of company facilities. The plan calls for training of operations management personnel on a yearly basis to cover all of the changes in the plan, and training of first responders and others also in that time frame. Additionally, all new employees are trained on the manual as part of their orientation to ETG irrespective of whether they will be part of the emergency team.

ETG's plan covers all of the 'normal' types of emergencies. It lays out specifically who is to be field incident coordinator, and how that position may evolve as the emergency progresses (the first management employee on the scene initially is the field incident coordinator until more senior management arrives). Management employees who could be incident commanders are given specialized training for that task so they will be prepared in the event that they are selected or happen to be on the scene during an emergency.

Outside responders such as fire departments, police departments, village, town, city and county officials are contacted and offered training through several venues. One of the methods is via training sponsored by a consortium of pipelines operating in New Jersey and run by Paradigm.

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<sup>&</sup>lt;sup>23</sup> O&M Manuals: Operations and Maintenance Manuals are documents that gas operators are required to maintain and update pursuant to 49CFR192.605. These manuals detail how operators handle maintenance and operating situations and what actions they will take, what procedures they will follow, and the requirements with which they must comply.

This program sends out invitations to various excavators, fire departments and public officials and has a buffet dinner as an inducement to attend. The response is usually low but it is an effective method of reaching and training responding outsiders, especially where there are many different jurisdictions. ETG also reaches out to the fire-fighting community in New Jersey via the New Jersey Fire Police Association and the New Jersey State Safety Council, which have either participated in training or provided lists of organizations to contact via mailings and other outreach programs. This training goes back for many years and continues into 2009. Besides the formal training, ETG personnel also provide specialized training when fire districts request it, and provide data on handling gas incidents and being non-company first responders to gas incidents.

As mentioned earlier, ETG performs annual training for its own personnel, both management and union, who may be either first responders or field incident commanders (all first-line and above supervisors in gas operations, construction and service). The Company has also prepared a special course for incident commanders, and has provided it periodically to the required individuals. All new employees must take a full training course as part of their orientation program. This course has all of the basics plus several "table—top" scenarios that are played out to improve participation skills. This training meets the code requirement that not only are individuals trained but the effectiveness of the training is assessed.

ETG also simulates a gas emergency on a transmission line annually. Two-thirds of the simulations take place in ETG's Northwest service territory, and one-third in the Union territory (based on two-thirds of the transmission pipelines being located in the Northwest territory). This simulation includes the simulated use of outside resources and possibly some customers. ETG has judges at all locations to monitor communications traffic, time when requests are made, and how long it takes organizations to be apprised of the situation. These large-scale simulations are exactly what PHMSA and the NJ BPU had in mind to check the effectiveness of emergency planning and training. To date, these simulations have provided ETG with good feedback, and have led to improved communications within ETG and with Atlanta (control room, customer service, and dispatch center). There have been issues with the Nextel cell phones (poor or no reception), and ETG is looking at either another cell-phone supplier or using radios. The last lesson learned was that sometimes too much help is not good and takes away from the incident commander managing the situation. In this situation too many people attempted to 'help' the incident commander and he needed to have someone between himself and the 'helpers' so he could run the incident and make decisions.

ETG is able to count the drills on the transmission system under two programs, one for having an emergency drill on a high risk portion of their system under the emergency plan requirement and secondly as an additional Preventative and Mitigative Measure under the pipeline integrity program in § 192.935.

## 9. Mapping

Mapping is an important function in a gas utility. Mapping accuracy is important because it forms the starting point for locating all facilities, and for locating emergency valves. Many utilities have moved from paper maps, which are difficult, costly and slow to be updated, to an integrated geographic information system (GIS) which contains pipe locations, pipe attributes,

maintenance issues and other information (such as corrosion data, emergency valve location, past leak history, etc.). For the Northwest territory, ETG has moved to a digital GIS system; for the Union territory, however, it is in the process of digitizing location data and has not yet implemented a full GIS system.

Under the current system, system improvements in the Union territory are hand-drawn and the drawings are sent to Atlanta to be digitized and put on the master digital map. There is a delay between the time the drawings are sent to Atlanta and when the digital master map is updated. This delay can cause problems if it is too lengthy.

Several other O&M programs would be enhanced or improved if the entire ETG system were on a robust GIS system. Leak management would be improved if leaks did not have to be plotted on paper maps to look for trends, or to see whether the criterion in the O&M manual for replacement had been met. For corrosion control, looking at leaks and other corrosion data on a map would assist in determining whether there are any active corrosion 'hot spots.' An up-to-date digital mapping system would also assist the locating contractor by having the most up-to-date and reliable information available to all of the locators in the field. It would also be extremely helpful during an emergency to locate sectionalizing valves and other appurtenances that will assist in a safe and efficient shutdown of gas to a customer or an area.

In summary, a robust mapping system that can be linked electronically to a leak-management system and a corrosion-control data system; can be easily updated and viewed in the field; and has all of the valves, services, mains, abandoned mains and other appurtenances in it can and will assist with meeting the requirements of § 192.613 (continuing surveillance) of the federal code, and with reducing third-party damage on both mains and services.

## 10. Personnel Allocation, Planning, and Deployment

Liberty reviewed current work loads along with the planning and deployment of the existing staffs (both union and management). This review found that several specialty areas, such as pressure control, were working large amounts of overtime. In project management, some work (such as visiting each construction site every day) was not being done due to manpower shortages. In other departments or areas, such as leak survey or new construction, contractors are being used to free up ETG resources for other duties such as first responder and leak repair activities. ETG has recognized that the work complement needed to respond to day-to-day maintenance and mandated work may be too low for the future and has started adding staff before it greatly affects compliance and customer satisfaction.

Because ETG's two service territories (Northwest and Union) are very different, the allocation in each is different with regard to corrosion control, pressure control and leak repair. The Union territory, which is compact, more static with regard to customer growth and has vintage piping, requires more staffing than the Northwest territory which is mainly plastic pipe, and is still growing via additional penetration of customers in served areas and by adding new towns and villages to the service territory.

Until recently, the personnel complement, their allocation and the planning were acceptable. With new construction and replacement of aging infrastructure, however, additional personnel

are needed just to maintain current work loads and to meet mandated safety programs. Further hiring may be justified to reduce current levels of overtime.

## 11. Transmission and Distribution System Improvements

Besides meeting the requirements of the transmission integrity management program (*IMP*) rule enacted in 2004, ETG does not have any plans to increase or enhance its limited transmission system. The distribution system, on the other hand, requires significant capital expenditures for two essential programs, main and service replacements in the Union territory, and new-business main and service installations in the Northwest territory. Moreover, there is almost always municipal construction due to conflicts/removals/realignments with new and/or relocated streets, other buried utilities, buildings and other construction. A full review of ETG's construction budget is presented in Chapter X. ETG has also filed for federal/state funding under the 2009 Stimulus Bill for improving New Jersey's infrastructure.

In the Union territory, there is a considerable amount of low-pressure cast-iron distribution main and associated vintage services. ETG has been replacing these leak-prone mains with elevated-pressure plastic mains and services, which reduces the number of leaks, reduces the water intrusion and associated meter freeze—ups, and generally provides improved service and greater capacity for new heating and cooking appliances. There are some new customer installations but most of them are relocations of existing services from existing mains.

In the Northwest territory ETG has been signing up new customers in areas currently served, and is now looking at expanding the gas system to include additional villages and towns that are within its franchised area but are not currently served by a main. These new areas will be served by elevated-pressure plastic mains, and all of the latest regulatory requirements will be met or exceeded. The new mains will be tied into existing mains without any supply issues. ETG expects that nearly all of the new construction will use plastic materials, thus eliminating the need for future corrosion control. New regulator stations may be necessary and will be evaluated on as-needed basis. Since a major portion of the existing Northwest territory infrastructure is plastic, there is not as much leak activity as in the Union territory; thus replacement mains are the rarity rather than the norm.

#### 12. General

As required under NJ BPU regulations and § 192.605 of US DOT regulations, ETG has an up-to-date Operating and Maintenance manual (O&M). This manual has been developed for all of the AGLR operating companies, but has certain requirements that are unique to each company. Under each subsection there is citation of both the federal code, 49CFR192, and any applicable New Jersey codes where they differ from 49CFR192. The idea of having a common O&M manual has both advantages and disadvantages. On the plus side, it is easier to have lessons learned distributed to all of the operating companies and to have the latest technology disseminated. On the minus side, there may be sections in the manual that do not pertain to certain operating companies, or procedures that may be good for the majority but not applicable or cost-effective for an individual company.

Liberty found that, overall, AGLR's manual is a good one, and has been customized appropriately where required by state regulations. It meets or exceeds the requirements of § 192.605, which are considered the minimum.

Dispatching of service personnel has been handled out of Atlanta in conjunction with overseas and local call centers. When the dispatch function was first moved to Atlanta there were problems due to the different methods that ETG used versus what the dispatchers were used to with the other AGLR companies. Another issue was the lack of familiarity with the service territories by the Atlanta dispatchers and how to move needed personnel from one job to the next and the time it would take to get to the new job location. Using GPS and new computer software helped overcome the geographical issue. On work methods and other issues, AGLR started using dedicated dispatchers who grew familiar with the territory, the work methods and the strengths and weaknesses of key employees. During Liberty's conversations with supervisors, first responders and technicians, each stated that dispatch had improved significantly since the initial problems. Based on recent reports, ETG is responding in a timely manner to most emergency calls.

### C. Conclusions

## 1. ETG's employs appropriate processes for system planning and design.

Flow simulation with network analysis computer models is how system planning is performed throughout the distribution segment of the gas industry. ETG's combination of this tool with performance tracking is a good way to ensure the modeling exercises are appropriately connected to system performance.

Engineering's incorporation of market intelligence from Marketing/Sales into its network-simulation exercises is also sensible and useful. Simulations would always be a part of responding to a request for new or additional service, but Engineering's practice of meeting periodically with Marketing/Sales, even if only once per year, gives the system-planning function a preview of where growth might be occurring. That intelligence should facilitate multi-year horizons for project configuration and prioritization, which should produce efficiencies in project execution.

2. ETG does not have a process to verify ('true up') the readings obtained from the AMR device and the actual mechanical index on the meter at prescribed interval. (Recommendation #1)

Neither the mechanical dial on the meter nor the AMR device are 100-percent accurate all the time. Consequently, both need to be checked for accuracy periodically. There is a wealth of information on the accuracy of mechanical dials but not as much on the AMR device. Since the customer bill is now a result of the AMR device, it must be checked occasionally for accuracy.

3. ETG does not have a QA/QC program for all of its O&M activities, and therefore should do more to assure that these activities are being performed in accordance with NJ BPU rules and regulations and in compliance with the ETG (AGLR) O&M manual as required under both NJ BPU and US DOT regulations. (Recommendation #2)

ETG should set up a QA/QC plan for internal and external resources so it can be assured that the quality of the work being performed meets the standards set in the O&M manual. The current method of relying on QC checks of external resources for construction and contractors can be an issue, especially with contractors who may cut corners to increase the profit on a job. For internal resources, self-checking is only one of the QC steps that should be used.

4. ETG has not increased the number of specialized workforce individuals, such as regulator mechanics, instrument technicians, corrosion-control technicians and first responders since the retirements, layoffs and cutbacks in 2004. (Recommendation #3)

Since 2004 the operating workforce within ETG has been drastically reduced, in some groups by as much as 50 percent for both management and union/hourly workers as of 2008. Although there have been technology improvements, the volume of work has also increased, and the technology has not been able to fully compensate for the additional work load.

5. ETG is not managing the leak backlog by keeping the number of leaks that are repaired each year at least equal to the number reported. (Recommendation #4)

ETG is falling behind on leak repairs relative to leaks reported. Leak repair only becomes more expensive when postponed. If the Company waits too long, the number of open leaks and new leaks can overwhelm an organization and cause it to make expensive repairs, such as call-outs, overtime and weekend work. Ideally mains should be replaced prior to any type of failure (a leak is a type of failure) but this is impossible; ETG therefore must review the repair rate relative to the rate of reported leaks and make changes as necessary.

6. ETG outreach to other stakeholders regarding outside force damage (TPD) is not as effective as it should be, and its locating and mapping to minimize damage to the gas system also is not effective. (Recommendation #5)

Each year ETG has considerable TPD on its system due to being in a congested area. There are several ways to reduce or mitigate the amount of damage caused by this threat. Some of the ways are via outreach while others involve improvements that the Company can do internally. A mixture of both should provide the most improvement to this growing problem.

7. ETG's simulated transmission emergency does not include the actual participation of outside responders. (Recommendation #6)

ETG currently has an excellent emergency plan and training program. The transmission drill that is performed yearly has resulted in some significant improvements via the lessons learned. By incorporating outside responders in this drill, additional lessons learned may be obtained.

8. ETG has a robust GIS mapping system for the Northwest service territory, but not for Union. (Recommendation #7)

ETG currently is using GIS in the Northwest territory but has not yet fully digitized the Union territory. The Union territory has the bulk of the customers, is the most congested and has the majority of issues since the distribution system there is considerably older than the Northwest

<sup>&</sup>lt;sup>24</sup> In comments to Liberty's draft report, the Company noted that as of 2009 the reduction was 27 percent below the 2004 number.

territory. A full GIS system will assist ETG's staff in managing both the day-to-day operations, and will assist in discerning any developing trends in leaks, corrosion control and damage prevention.

## 9. ETG has a large backlog of work for inside meter sets from a safety and O&M mandated program perspective. (Recommendation #8)

ETG currently has a large backlog of inside meter sets that need inspections, meter reading verification, and safety checks. ETG's current methods of attempting to get into a customer's house, visits, letters, reminders and bill stuffers, are not working..

#### **D.** Recommendations

## 1. Perform for all AMR devices a periodic 'true up' to confirm and validate that the readings are accurate. (Conclusion #2)

The vast majority of the customer meters at ETG have AMR devices attached to provide a fast and efficient method of taking meter readings. Such systems are wide spread and in use all over the world. ETG, however, does not have a formal program to periodically verify that the mechanical dial and the AMR are reading the same. Such verification occurs in many situations only when a meter has been removed from service (for a high bill complaint, a poor performing meter type, or for statistical sampling). Thus a customer may be receiving incorrect bills (all billing is off of the AMR device) for a long period of time if their meter has not changed. Most utilities have instituted a procedure to visit each of the AMR devices on a periodic basis and to check the AMR reading vs. the mechanical dials. Several states mandate the period of this 'true up' but to date the NJ BPU has not required such a program be instituted. By not verifying the AMR device, ETG may be under-charging customers (or over-charging, but most customers in that situation would file a high bill complaint) and thus may be losing revenue. Until the accuracy and longevity of the AMR device can be fully documented, ETG should institute as soon as possible a process to visit and verify every AMR equipped meter in both service territories.

## 2. Start a robust and comprehensive Quality Assurance and Quality Control (QA/QC) program for all O&M activities and tasks. (Conclusion #3)

This is a similar recommendation to #4 in Chapter X which relates to contractors. This recommendation is for an identical QA/QC program for ETG personnel performing O&M tasks. The overall quality assurance program can originate in AGLR but it must be tailored to the specific needs of ETG. The QA plan should mandate a three-tier QC process that includes self-checking/supervisor checking (tier 1); a robust QC department that routinely checks the quality of the work with unannounced field visits and audits (tier 2); and an internal audit group in Atlanta that periodically checks departments or areas for compliance with corporate guidelines and the O&M manual (tier 3). This group would also be called in if an area was having problems relating to special issues that an outside evaluation would be helpful. Such a request could be initiated by the area itself.

3. Add specialized workers to address increasing work load and the age of its existing employees in several key O&M groups. (Conclusion #4)

Many of the specialized groups in the operating department were drastically downsized after/during the AGLR acquisition. As examples, the pressure control group, supervisors, instrument technicians, and regulator mechanics were cut by 50 percent as of 2008. AGLR did improve the technology so everyone could become more efficient. Such an improvement in efficiency did compensate for some of the reduction but in many areas this was not sufficient and overtime rates have become very high. In other areas the workload has also increased and thus the workload per remaining employee has also increased to greater degree than can be compensated by technology innovations. Another area of concern is the aging of the work forces, especially in some of specialty areas such as pressure control, corrosion control, and leak repair. Taken together, these two dynamics will or have impacted how well ETG can meet its mandated programs in the future and needs to be addressed now. It can take several years to qualify and train a new instrument technician or regulator mechanic. ETG needs to be addressing its current and future manpower needs now before it becomes an issue with missed inspections and deadlines on mandated work.

## 4. Increase leak repair rates to keep the open-leak count down, improve public and customer safety, and minimize future O&M costs. (Conclusion #5)

The number of leaks that remain open on the ETG system at the end of each year has increased as has the difference between leaks found and leaks repaired. Both public and customer safety could be affected if the number of leaks becomes excessive and the amount of gas escaping is large. Also, many of these leaks are a future liability, and it is cheaper and most cost effective to repair the leaks sooner rather than later, since open repairable leaks must also be periodically releak surveyed and evaluated. The only true cost-effective method of reducing leaking mains is to replace them with a better material before a substantial amount of money has been invested in leak repairs and re-surveys. ETG in its O&M manual provides a guideline on main replacements but this should be reevaluated based on current conditions, especially with leaking CI/DI joints.

## 5. Provide for all stakeholders additional outreach for ETG's TPD and outside-force program. (Conclusion #6)

Although the number damages per 1,000 locates has not increased in the last few years, the total number of mis-marks has increased. Because many of the contractors that ETG uses double or triple check the mark outs, the number damages per mis-mark has been reduced but a more than equal corresponding increase in mis-marks without damage has occurred. The rate of damages on the ETG system is higher than the average utility but several factors work against ETG: working in an area that is multi-lingual, working in an area that is very congested, and working in an area that is old and requires constant repairs to the infrastructure (rather than wholesale replacement). ETG needs to make sure that it reaching all of the stakeholders and that a multi-lingual approach may be necessary given the population of the territory and excavator population. Another area that ETG needs to explore is the quality of its locate contractors and whether they are doing everything needed to reduce the number of damages (the Union territory uses an outside contractor for locates while the Northwest territory using ETG personnel).

#### 6. Involve outside responders in the annual transmission drill. (Conclusion #7)

<sup>&</sup>lt;sup>25</sup> In comments to Liberty's draft report, the Company noted that as of 2009 the reduction was 27 percent below the 2004 number.

The annual transmission drill currently simulates the use of outside responders. Many of these resources have been trained by either ETG or an industry/pipeline group that ETG is a member of (the Paradigm Group). By involving these outside resources ETG will learn how well they have understood their training, if there are any communication problems (such as the ones ETG has uncovered via previous drills from lessons learned) and any other shortcomings that are not apparent in the plan or have not been previously recognized. ETG, by doing these drills with some input from outside responders, will move the validation of their training to the next level and will fully comply with both NJ BPU and US DOT regulations.

## 7. Make instituting a GIS mapping system across the entire service territory a priority. (Conclusion #8)

The GIS mapping system is currently only available in the Northwest territory, which is the territory that needs it the least. The GIS mapping system is an integral part of many other O&M programs and will assist ETG in meeting or exceeding it internal goals, the goals that the NJ BPU has established and the requirements under the US DOT regulations. A fully active and updated GIS will assist the locate contractors with better and more up-to-date maps, will assist in plotting leaking mains that need replacement, will assist the corrosion control group in identifying active corrosion areas, and will assist developing a comprehensive main replacement program that may be required under the soon-to-be-released distribution integrity regulations.

## 8. Change the methods and approaches for gaining access to inside meter sets to perform inspections and to conduct accuracy checks ('true up''). (Conclusion #9)

ETG currently has a large number of inside meter sets that have not been inspected or leak surveyed in a number of years. Both ETG and the NJ BPU recognize this problem and say it may be the most important issue facing the utility since it covers both safety and billing issues. Many of these meters may also be in the last group of meters that have yet to be moved into the AMR program and thus these customers are either getting self-read or estimated bills.

To perform the inspections, ETG uses first responders or other trained individuals to go to the customer during normal business hours. If this fails, they try post cards and then escalate to additional methods to contact the customer to set up an appointment either through phone contact or letters. What have not been tried are service interruptions or other major steps to obtain access. This problem is not unique to ETG and many urban gas utilities have addressed this in different methods from moving all meters outside regardless if it causes other problems to having a dedicated group of individuals who are charged with obtaining access and performing the necessary tasks such as an inside leak survey, any safety checks, a meter change, a 'true up' between the AMR device and the mechanical dial. Some utilities where there is considerable safety implication, such as a service-affecting corrosion control problem, have terminated the service and cut off the service line, but this is an extreme example. ETG should contact other local urban utilities to determine what their respective methods are and what seems to work the best. They should try these other methods and determine if they are yielding sufficient results to make them permanent.

## XII. Compensation and Benefits

## A. Background

AGLR's compensation philosophy is to keep total compensation competitive with a peer group, about whom the board's compensation consultant provides detailed compensation data. AGLR has collected data from annual surveys by three of the best known providers of corporate compensation services. AGLR uses separate data sets to examine the compensation for its wholesale energy marketing unit (Sequent Energy Management).

AGLR uses a mix of base compensation, an annual bonus program (called the Annual Incentive Plan, or *AIP*), and a long-term incentive plan (*LTI*), which AGLR terms its Omnibus Performance Incentive Plan (*OPIP*). AGLR has designed the LTI to qualify for exemption under

Rule 16b-3 of Securities Exchange Act of 1934. Exemption removes the prohibitions (for securities earned as part of a qualifying compensation program) on what would otherwise constitute insider trading.

For each employee level, AIP and LTI targets are set as a percentage of annual compensation. The table shows base



compensation and AIP and LTI targets for the highest group of officials (comprising the Policy Committee or what AGLR also calls "Tier One" officers).

AGLR compensation also includes another element that does not apply generally, but gives the CEO power to address special situations. The CEO may award (up to a total amount approved by the board of directors) discretionary option and stock award grants for non-executives, new hire grants, retention payments, special recognition, and promotions. The annual limit was 150,000 shares (options and restricted stock), until reduced to 50,000 beginning in 2008.

The next table shows incentive plan payouts as a percentage of payroll for the past three years.

		2006			2007			2008	
AGLR Unit	Bonus	Employee	Payout/	Bonus	Employee	Payout/	Bonus	Employee	Payout/
	Payout	Earnings	Earnings	Payout	Earnings	Earnings	Payout	Earnings	Earnings
AGSC	\$12,636,683	\$51,774,976	24.40%	\$3,857,616	\$61,447,049	6.30%	12,278,469	60,888,734	20.20%
				LDO	Cs				
AGL	\$3,360,115	\$41,565,352	8.10%	\$1,403,226	\$42,386,812	3.30%	3,021,922	41,348,182	7.30%
CGC	\$139,858	\$2,000,466	7.00%	\$72,940	\$2,341,419	3.10%	147,546	2,069,822	7.10%
ETG	\$1,543,983	\$17,782,601	8.70%	\$596,149	\$17,846,475	3.30%	1,431,677	19,765,179	7.20%
Elkton	\$31,248	\$396,922	7.90%	\$13,002	\$429,946	3.00%	33,131	481,212	6.90%
FCG	\$221,612	\$2,496,612	8.90%	\$105,553	\$3,147,480	3.40%	403,565	6,067,378	6.70%
VNG	\$982,251	\$12,095,583	8.10%	\$357,748	\$10,839,860	3.30%	853,848	12,311,136	6.90%
				Non-U	tility				
Networks	\$167,867	\$811,545	20.70%	\$90,568	\$1,236,805	7.30%			
Jefferson Island	\$39,350	\$540,694	7.30%	\$38,812	\$712,455	5.40%			
Sequent				\$1,100	\$61,851	1.80%			
Total	19,122,967	129,464,749	14.80%	6,536,715	140,450,152	4.70%	18,170,157	142,931,643	12.70%

## **B.** Findings

## 1. Compensation Goals and Base Compensation

AGLR seeks to keep compensation for its managers and executives competitive with peers, as measured generally by total compensation, but also generally with respect to each of the three components that comprise it. Those components (each of which this chapter describes) are:

- Base salary
- Short-term cash incentives related to performance against pre-set targets over the past year
- Long-term incentives paid partly in cash, but designed to induce strong performance against pre-set earnings targets over a short number of coming years.

AGLR has used two principal peer groups when considering compensation for its executive officers:

- A group of about a dozen *Proxy Peers*, whose primary operations are in the gas LDC industry, and whose members have changed moderately over recent years as merger and acquisitions have required
- A larger, *Energy Services* peer group, whose members operate in the energy business generally; *i.e.*, not just LDCs. (The group had consisted of about 20 companies; but recently, AGLR considers a group numbering about 90).

AGLR has also considered data from its consultant's general industry survey, but only for reference purposes; *i.e.*, not for quantitative benchmarking. Compensation consultant data and presentations regularly come before the C&MD Committee, supported by consultant comparisons, discussion of trends, and observation of gaps between compensation goals and compensation received by individuals.

AGLR's general goal for executive compensation is to target a point for total compensation (and for each of the three components) between the 50<sup>th</sup> and 75<sup>th</sup> percentile of the *Energy Services* group. In general, the practical effect of this goal has been to place total compensation at about the 50<sup>th</sup> percentile of this group and at the 75<sup>th</sup> percentile of the *Proxy Peers* group, although there have been some exceptions. Liberty's review of the compensation of Tier One executives specifically, and more generally of other executives and managers demonstrated that AGLR has maintained base salaries in line with these objectives. Liberty also found that AGLR uses annual performance objectives and reviews against them (described more fully in Chapter III, *Human Resources* of this report.)

## 2. Incentive Compensation

a. Annual Incentive Plan (AIP)

#### i. Summary

Full time AGLR employees (except those of SEM, Networks, and SouthStar, who operate under different incentive programs) qualify for participation in the Annual Incentive Plan (AIP). Participation begins at the lowest pay grades and includes bargaining unit positions. This program provides for cash incentives based on targets set at the beginning of the year, measured

at the end of the year, and paid thereafter. AGLR recognizes the differing contributions of different employees by weighting the AIP in two ways. First, as employee grades increase, so

does the percentage of annual incentive that can be earned, which the table to the right shows.

Second, the apportionment of the AIP award among the three measurement factors (corporate, business unit, and individual) also varies among different grades, with the corporate factor increasing in relative weight and the individual factor diminishing, as salary grade increases. Measurement of performance takes place against the established targets or scores for each of the three factor types at the end of the year. A single resulting percentage (applicable to annual earnings) determines the amount of each participant's reward. Base earnings comprise the annual pay amount used for exempt participants. Base earnings plus total overtime, shift differential and other premiums serve as the calculation for non-exempt participants.

The next tables show the different weights assigned for 2006 to the three factors for the groups of covered employees and how those weightings had changed for use in 2009.

**2006 AIP Weightings** 

Tier	Corp.	Unit	Indiv.	Total
Policy Committee	75%	0%	25%	100%
Other Officers	25%	50%	25%	100%
Grades K-O	25%	25%	50%	100%
Grade J & below	0%	50%	50%	100%
Union	0%	50%	50%	100%

**2009 AIP Weightings** 

Tier	Corp.	Unit	Indiv.	Total
CEO	75%	25%	0%	100%
SEM President	0%	100%	0%	100%
Other Tier 1 Officers	60%	25%	15%	100%
Tier 2 Officers	40%	35%	25%	100%
Tier 3 and 4 Officers	30%	35%	35%	100%
Grades M-O	25%	30%	45%	100%
Grades K-L	20%	30%	50%	100%
Grade J & below	10%	30%	60%	100%
Union	10%	30%	60%	100%

The three AIP measures adopted at the beginning of each year comprise:

Corporate: a specific earnings per share (EPS) amount, <sup>26</sup> adopted by management's Policy Committee and approved by the C&MD Committee of the AGLR board of directors; in 2007, the C&MD Committee approved the adjustment to EPS to reflect the economic value of the Company's other businesses, such as the wholesale and retail

**AIP Corporate Performance Targets** 

20	06	2007 2008		20	09		
EPS	Score	EPS	Score	EPS	Score	EPS	Score
\$2.58	Thresho	\$2.69	Thresho	\$2.66	Thresho	\$2.65	Thresho
\$2.60	50%	\$2.74	50%	\$2.71	50%	\$2.70	50%
\$2.63	100%	\$2.84	100%	\$2.76	100%	\$2.75	100%
\$2.65	150%	\$2.89	150%	\$2.81	150%	\$2.85	150%
\$2.68	200%	\$3.02	200%	\$2.86	200%	\$2.95	200%

Business Unit: performance goals for each business unit, adopted by the Policy Committee

<sup>&</sup>lt;sup>26</sup> For 2007 and 2008, the goals were based on GAAP EPS, adjusted to reflect the effect of economic value created by the Company's wholesale business unit, but not yet reflected in GAAP earnings. For 2009, GAAP EPS has been further adjusted to reflect the impact of year-end inventory adjustments on the Company's retail business unit.

- *Individual*: A combination of:
  - o Individual Performance objectives (IPOs), negotiated between employees and immediate supervisors
  - o Success Factors established for each position.

#### ii. Corporate Component of the AIP

There is one single corporate measure for all AIP participants. The corporate component consists of an earnings per share (EPS) measure that sets a threshold level of earnings that AGLR must meet for payments under the corporate and business unit components to apply. It also, as noted, serves as the basis for calculating the corporate portion of the three-part award. Should EPS meet but not exceed the threshold level, 50 percent of the amount targeted for the corporate component becomes payable. The corporate, or EPS, targets run to 200 percent of the amount targeted. The table shows the changes in the corporate factor in recent years.

## iii. Business Unit Component of the AIP

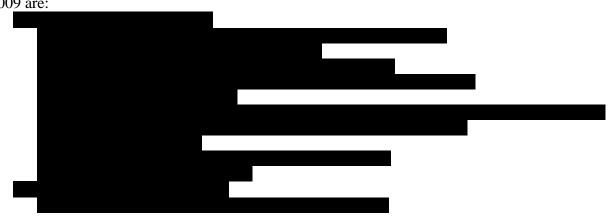
Each unit of AGLR has distinct business unit goals that apply to calculation of the second AIP element. Each of the following comprises a separate business unit for AIP purposes:

- Southern Distribution Operations (Georgia, Tennessee and Florida)
- Mid-Atlantic Distribution Operations (New Jersey, Virginia, and Maryland)
- Jefferson Island Storage & Hub
- AGL Networks
- AGL Resources Services Company.

The business unit goals operate at the Distribution Operations; *i.e.*, not the ETG-specific level. The table shows the Distribution Operations business unit goals for 2009. Dollars are in millions and O&M dollars exclude benefits. For 2009, the business unit component measures are the same for all participants below the level of Policy Committee: (a) EBIT achievements of Distribution Operations, and (b) Operations and Management expense, minus benefits and incentives for Distribution Operations and Service Company combined.

### iv. Individual Component of the AIP

Each employee has individual goals. Those of the executives responsible for ETG and for Mid-Atlantic Operations (MAOP) provide examples. The individual goals for the SrVP-MAOP for 2009 are:





The individual performance component of the AIP ties into the method used for conducting annual evaluations of individual employees. It also applies goals that produce awards ranging from 0 to 200 percent. This element of the AIP employs a matrix defined by two elements: (a) IPOs,

	Individual Performance Objective							
ä	Factor	FM	PM	SM	ME	SE		
Success Factor	FM	0%	0%	0%	0%	0%		
SSF	PM	0%	10-35-60%	65-75-85%	90-100-110%	115-125-135%		
ncce	SM	0%	65-75-85%	90-100-110%	115-125-135%	140-150-160%		
No.	ME	0%	90-100-110%	115-125-135%	140-150-160%	165-175-185%		
	SE	0%	115-125-135%	140-150-160%	165-175-185%	190-195-200%		

- FM (Fails to Meet)
- PM (Partially Meets)
- SM (Successfully Meets)
- ME (Meets and Exceeds)
- SE (Significantly Exceeds)

which AGLR describes as what an individual achieves, and (b) Success Factors, which AGLR describes as how the individual achieves it. Both IPOs and Success Factors receive one of the ratings shown in the box above.

The box to the left shows an example of how the two combine to produce the percentage entitlement of an employee to the individual performance portion of the AIP. For 2006, there were single percentages in each cell. In 2007, supervisors gained the ability (shown in the table) to increase or decrease the percentages called for by each matrix entry by defined amounts

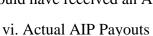
(generally +/- 10 percent), but were still required to manage to an overall budget, calculated at the middle value of each cell.

## v. Sample Calculation

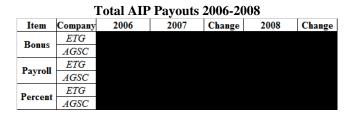
Assume for 2006 an employee at Grade O and an annual pay of \$100,000. The employee's target AIP, which is set by his grade, is 25 percent. In that case (*i.e.*, should the corporate, business unit, and individual factors hit 100 percent of established targets) the employee would earn an AIP of \$25,000, but could earn a maximum of \$50,000 (because all three factors "max out" at 200 percent, or twice the 100 percent level). Now assume that:

- EPS is \_\_\_\_, which, for 2009, calls for a payment of 150 percent of that factor's portion of an individual's award
- The employee's business unit performs at 92 percent of its targeted performance
- The employee's personal rating (see the IPO and Success Factor matrix above) is *Successfully Meets* for IPOs and *Partially Meets* for Success factors.

This employee would have received an AIP award of \$25,125, as the table above demonstrates.



The table to the right shows the actual incentive payouts as a percentage of payroll in each of the last three years. Liberty also examined AIP targets for Tier One officers for 2007, and verified that the percentages were as called for.



Liberty also examined the 2007 award calculations, and verified their conformity to program



requirements. The board gave the CEO an individual performance score of 124 percent for 2007. He waived his AIP award of about \$200,000. The table to the left shows the targets and the calculations for the remaining Tier One officers.

## b. Long-Term Incentive Program

The LTI portion of incentive compensation seeks to induce management to produce increases in shareowner value over the longer term. The AIP focuses on cash incentives related to short-term performance. The LTI program has three elements:

• Annual performance cash awards with a 36-month performance measurement period

- Restricted stock units with a 12-month performance measurement period
- Stock option grants that vest in equal annual installments over a threeyear period.

The C&MD Committee of the board of directors periodically reviews and annually resets (sometimes with changes) the components of the LTI program,



along with other compensation program elements. The table to the right shows the grants for 2007. The amounts were consistent with the salary percentages called for by the program. The C&MD Committee noted in April 2008 the forfeiture of the Restricted Stock Units for failure to meet the EPS hurdle.

The VP-HR, for example, reported at the committee's December 2007 meeting that the outside compensation consultant had concluded that AGLR makes grants of stock options at lower organizational levels than what is typical of the AGLR proxy-peer group and awarded more options. The committee then discussed alternatives (*e.g.* limiting recipients, substituting full value awards for options, increasing cash compensation), and asked the CEO to make a recommendation for committee review in early 2008.



The table on the left shows the roster of officers participating in the LTI program for 2008. The following table below breaks down the LTI awards to the Tier One officers for 2008. LTI awards to all officers require the attainment of identified performance corporate levels. Each officer's award is expressed as a percentage of individual base

salary, with the exception of the CEO's, which the C&MD Committee set at \$1,750,000 in value. The percentage is unique for each Tier One officer but is governed by officer tier or pay grade for others, as the preceding table above shows. The award dollars for each officer are then split among the three LTI types

split among the three LTI types (options, restricted stock units, performance cash) shown in the tables. Each of those three components vests in different ways and is subject to different performance criteria:

• Restricted stock units are converted to restricted shares if EPS meets or exceeds a 2008 goal of \$2.65 per share. If EPS misses the performance goal, the units do not convert to shares. The restricted shares then vest ratably over three years (with first vesting in

January 2010); working with its consultant. AGLR valued them at \$28.53 per share (73.1 percent of the AGLR share price of \$39.03 at the time of the grant)

- Options vest ratably over three years; the compensation consultant valued them at \$6.74 per share (applying a Lattice Ratio of 17.27 percent to the share price of \$39.03)
- The performance cash would become payable in three years, provided that AGLR should meet a threshold level of earnings plus dividend growth; the amounts to be paid can vary between 0 and 140 percent of the awards, based on established targets.

The C&MD Committee received a December 2008 update on the status of incentives under the Performance Cash Units plan, which provides for vesting over a three-year period. The three-year cycle makes three awards "active" at any given time. In late 2008, these three were:

- Awards issued in February 2006 vesting as of December 31, 2008
- Awards issued in February 2007 vesting as of December 31, 2009
- Awards issued in February 2008 vesting as of December 31, 2010.

Each of the three operated under the same performance thresholds:

- Minimum: 6 percent compound annual EPS growth plus dividend yield; calls for 60 percent payout
- Target: 10 percent compound annual EPS growth plus dividend yield; calls for 100 percent payout
- Maximum: 14 percent compound annual EPS growth plus dividend yield; calls for 140 percent payout.

The report to the committee observed that the cycle vesting at the end of 2008 was expected to

generate a payout just above the minimum; *i.e.*, 7.6 percent, using the component data shown in the next table. The table shows that the use of a three-year vesting period served, in this cycle, to increase the payouts over what would have occurred under one- or two-year periods.

Period	EPS Growth	Dividend Yield	Sum
One-Year	0.4%	5.0%	5.4%
Two -Year	0.4%	4.8%	5.2%
Three-Year	3.2%	4.4%	7.6%

The committee also received a report on the vesting of the Restricted Stock Unit (RSU) program. A total of 206,700 units were granted under this program in February 2008. The vesting trigger for these units was an EPS amount of \$2.65 for calendar 2008 (i.e., the units are forfeit at any lower EPS). The report to the committee noted that 2008's projected EPS of \$2.75 would trigger vesting, which then issues the units as restricted shares. These shares would then vest at one-third of the total grant on each January 1 of the years following the year of the grant of the restricted shares.

### 3. Healthcare

### a. 2006 Performance Baseline

AGLR, like all of American industry, has experienced dramatic healthcare cost increases. The chart shows the growth in health-program costs between 2002 and 2006, with the "Change" column comparing against

Year	Costs	Change
2002	\$10.5	
2003	11.6	10%
2004	11.6	10%
2005(AGLR only)	14.5	38%
2005 (with NUI)	21.0	100%

2002 costs. AGLR has been paying significant attention to its health care and retirement costs. The Company has made a number of significant changes in recent years. By the end of 2005, healthcare costs had risen to a level representing 6 percent of total employment costs, and almost 3 percent of O&M expense. The table shows the growth in total healthcare costs (in millions of dollars) leading up to that time. The 2005 total costs of \$21 million include costs of about \$6.5 million for 514 NUI participants. Healthcare costs for employees and their dependents were at \$7,600/year at that time.

The activities that AGLR has been undertaking to control costs in the years shown in the table included:

- Benchmarking best practices
- Reducing plan options (one national PPO vendor and eliminating HMOs)
- Shifting costs to employees
- Changing plans to encourage shopping (4-tier Rx drug plan)
- Increasing out-of-network costs to employees
- Making preventive services more accessible
- Providing incentives for more efficient care delivery and health assessment completion
- Introducing a disease management program.

AGLR compared itself in 2006 to the norm of a group of 435 companies in 18 industries, and made the following observations:

- 14 percent lower in average claims per employee
- 16 percent lower in average claims
- 52 percent of average inpatient admission rate
- 38 percent of hospital bed days
- 72 percent of hospital stay
- 9 percent greater use of lower-cost outpatient services use
- 8 percent higher use of network providers
- 18 percent greater use of cost sharing
- 21 percent lower overall plan expenses
- Lowest total spending among Cigna-insured PPO plan offerings
- 17 percent greater plan efficiency.

AGLR was then expecting an annual average increase in national health care spending of 7.2 percent. This rate was lower than 2002's single-year increase of 9.2 percent, but still 2.1 percent in excess of the expected percent GDP growth for the coming decade. AGLR identified the five highest-cost claim categories, finding that the two highest (musculoskeletal and circulatory/heart) could be controlled through lifestyle changes, and could contribute significant cost savings through moderate incidence reduction. This led AGLR to promote "a culture of health" among employees. Specific plans for 2006 included:

- Implementing optimized outside service delivery
- Proposing alternate retiree medical approaches
- Implementing more efficient retirement plan administration co-sourcing
- Making a decision on the future of the Company's defined benefit pension plan.

## b. 2007 and 2008 Changes

The board received in December 2007 a recap of efforts to gauge employee culture and satisfaction. HR noted at this meeting that employee input was used to reset the 2008 medical plan to increase employee-perceived value without adding costs. The board was also told that AGLR had begun a new on-line retirement services feature.

AGLR and its employees, like others in the U.S., saw no relief in 2007, as the rising trend in health care costs continued:

- Premiums for employer-sponsored health insurance were rising four times faster on average than workers' earnings since 2000.
- Premiums increased 87 percent since 2000, compared to inflation of 18 percent and wage growth of 20 percent.
- Premiums rose by 7.7 percent in 2006 alone.
- The annual premium for a family of four averaged \$11,500 in 2006, with workers contributing nearly \$3,000, or 10 percent more than in 2005.
- Workers were now paying \$1,094 more family coverage than in 2000.
- The average employee contribution had increased more than 143 percent since 2000.
- Average out-of-pocket costs rose 115 percent since 2000.

ALGR introduced a number of health care changes in 2007:

- Long term care benefits
- Change in wellness incentive strategy
- Smoking cessation programs
  - o Health fairs for all locations including (New Jersey).

The rising trend in costs continued into 2008. AGLR experienced an increase in both medical (12.0 percent) and dental (6.9 percent) costs in 2008. Significant 2008 events included an increased focus on "wellness," and increased benefits while holding employee contributions flat for the second year. Key factors in doing so included:

- Increasing employee choices
  - o Offering an in-network only PPO/Co-pay medical plan option
  - o Adding another LTD buy-up option
- Encouraging employees to be aware of and better manage personal health using incentives and disincentives
- Removing caps for preventive care services
- Implementing penalties for failing to complete a health risk assessment
- Implementing penalties for not attempting to stop tobacco use
- Offering health fair screening services and flu shots to virtually all employees
- Enhancing benefits
  - o Basic life insurance to 1 times base pay \$60,000 minimum \$250,000 maximum)
  - o Orthodontia coverage for dependent children
  - o FSA maximum increased from \$2,500 to \$5,000
- Eliminating mandatory mail order program
- Eliminating spousal surcharge.

The table provides an example of the Company's proactive approach to managing health care costs by promoting wellness activities. It shows participation levels and expected savings (the latter as estimated by an article in the *Journal of Occupational and Environmental Medicine*) in health risk assessments.

Health Risk Assessments					
	2007	2008			
Number Completing	168	2,423			
Subject to Non-Completion Penalty	N/A	171			
Penalty	N/A	\$81,000			
Reward for Completion	\$18,550	N/A			
Expected Avoided Costs	\$35,616	\$513,676			
Program Cost	\$0	\$0			
Annual Savings	\$17,066	\$594,676			

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For Medicare-eligible employees, the Company planned for 2009 to replace medical coverage with a fixed reimbursement. For retirees not yet 65, AGLR proposed for 2009 the creation of a cost-sharing method that would provide lower premiums for employees with longer Company service. Longer-term planning included:

- Expanding on recently-instituted wellness initiatives by offering employees incentives and disincentives and by making program changes to encourage personal health management
- Create a future cost sharing plan addressing pricing and employee contribution methods
- Add a portable Health Savings Account (HSA) to the high deductible health plan.

The table shows the Company's analysis of healthcare costs for 2008 and 2009. The expectation was that retiree medical costs would increase by 1.3 percent

Benefit	2008	2009	Change
Active Employee Medical	\$10,386,943	\$11,637,753	12%
Active Employee Dental	\$1,369,892	\$1,464,950	7%

and dental costs by 6.9 percent between 2008 and 2009.

AGLR has taken different approaches to providing medical insurance for its bargaining and non-bargaining unit employees, choosing to self-insure significantly more of the risk in the case of the latter. Self-insurance has come through GERIC, the AGLR captive insurer. Horizon Blue Cross of New Jersey insures medical expenses above \$70,000 per employee. For non-bargaining unit employees, the captive insurer's risk was limited to an annual maximum of \$450,000 per employee and a lifetime maximum of \$2 million per employee, after which it dropped to \$1,550,000.

#### 4. Retirement Benefits

All AGLR employees of at least 21 years of age may participate in AGLR's tax-qualified Pension Plan. Eligibility begins on completion of one year of service. The calculation of benefits uses a "career average" earnings formula, counting base pay, overtime, and bonuses. Vesting occurs after completion of five years of service. Benefits accrue on the assumption of retirement at the age of 65. Benefits normally take the form of a life annuity for single participants and a 50 percent survivor annuity for married participants, with employee options to take other forms of payment. Employees with at least five years of service may elect to take benefits as soon as age 55, with scheduled reductions from benefits payable at age 65.

AGLR also operates an "Excess Plan." This non-qualified, unfunded, defined-benefit plan applies to those highly compensated employees, who are affected by the federal tax limits applicable to qualified plans. The Excess Plan uses a formula that:

- Determines an individual's benefits without applying tax code limits
- Subtracts the amount the participant can receive under the limits
- Pays the remainder in the same form that the qualified Pension Plan would provide.

More specific details of AGLR's defined-benefit plan (*i.e.*, funded entirely through employer contributions and providing a defined dollar level of benefits to eligible employees) follow:

- Eligible Final Average Earnings (*FAE*) compensation: base salary
- Eligible Career Average Earnings (CAE) compensation: base salary plus annual bonus
- Vesting: none through 4 years, 100 percent at 5 years
- Benefit Formula has two components:
  - o FAE (three highest years in past five) for service prior to July 1, 2000
    - If age 50 on July 1, 2000, FAE applies until July 1, 2010
    - Benefit:1.67% x FAE times Capped Service plus 1.5% times FAE times Excess Service minus 1.25% times SSRB (Social Security Retirement Benefit) times Max Service
  - o CAE for service after July 1, 2000
    - Benefit: 1.00% times CAE times Service plus ½ of the differential between Compensation and ½ of SSTW (Social Security Taxable Wage Base).

An Investment Committee manages plan investments, meeting quarterly to review results and to evaluate the performance of the fund manager. The committee had the responsibility to review the plan's funding status, and ensure liquidity to make pension payments. The plan was subject to annual audits, tax filings, and tests to assure non-discrimination. The tax filings required an actuarial assessment determining minimum and maximum annual contributions.

AGLR has also provided retiree medical and dental care to retirees with at least 10 years of service and with employment start dates prior to July 1, 2000 at NUI and July 1, 2002 at AGL. Retiree life insurance (in addition to eligibility for health retirement accounts) was available as follows:

- Two times salary for employees aged 55 on January 1, 1994 and having at least five years of service
- One times salary between 50 and 55 years of age on January 1, 1994
- \$10,000 for all other AGL employees.

## **5. Other Compensation Issues**

#### a. Non-Qualified Savings Plan

AGLR also operates a Non-Qualified Savings Plan that allows eligible employees to defer up to 75 percent of base salary and 100 percent of annual incentive pay on a before-tax basis. AGLR matches 65 percent of employee contributions up to 8 percent of compensation, minus the match made in the Company's qualified 401(k) plan. Vesting is immediate for employee contributions, and AGLR matching contributions vest over a three-year period, based upon employment, not time in the Plan. Distributions come after employment termination.

## b. Change In Control Agreements

AGLR has agreements with several designated officers, including four proxy-table-named executive officers, upon certain circumstances of employment termination after a change in control of AGLR. For the four named executive officers, potential aggregate payments (as of December 31,

CEO	\$10.4 million
CFO	\$4.6 million
<b>EVP-Utility Ops</b>	\$3.5 million
SEM President	\$8.8 million

2008) are shown in the accompanying table. There are no other employment agreements with executives.

### 6. Board Involvement

#### a. C&MD Role

The C&MD Committee determines what needs exist for outside assistance in compensation plan design and content, determines whom to hire, and how to structure the compensation consultant's work. The committee also reviews and approves amendments when required to the Pension Plan and the 401K plan. The committee also reviews the discretionary stock grants made by the CEO. Liberty's review of board minutes found compensation to be a regular subject before the C&MD Committee, followed by summary for and discussion by the full board of matters addressed at the committee meeting.

The February 2008 process for setting targets for the coming year and reviewing those for the prior year illustrates the board's role. Early each year, C&MD reviews performance against the prior year's incentive targets and it considers targets for the current year. This review took place in February 2008. It produced awards consistent with the targets established. EPS performance did not exceed the minimum required thresholds (\$2.74 reported and the adjusted) established for the corporate and business-unit elements of the 2007 AIP. Therefore, the committee recommended no payouts under these elements.

The committee did approve aggregate payments of \$7.024 million under the individual portion of the AIP. This amount conformed to the ratings achieved by individuals under this element. In addition, the failure to meet the adjusted target applicable for restricted stock units led to their forfeiture. The committee also reviewed the 36-month performance cash awards granted to the seven top officers in 2005 (under the program then in effect). Those awards vested at the levels (12.02 percent) called for by the targeted earnings growth plus dividend yield (7.92 plus 4.10 percent) achieved during the measurement period. Vesting required a minimum of 6 percent earnings plus dividend growth. Payments would max out at 14 percent. Each officer had a different base on which the awards were calculated. It consisted of his salary times a multiple (ranging from 2.5 to 5.5 times). The growth factor (12.02 percent) was applied to that base. Given the maximum 14 percent factor applicable to the 2005 awards, the amount that each participating officer could gain under this program was, based on his or her multiple, between 35 and 77 percent of base salary, with an average of 46 percent. The committee decided to continue these cash awards for 2008 at the same target ranges (6 to 14 percent) and for the same, three-year measurement period.

The CEO and CFO presented 2008 Performance Goals at the February 2008 C&MD meeting. They recommended a slightly reduced EPS minimum threshold of from 2007's

level) and a maximum (200 percent) level of \_\_\_\_\_. The committee recommended AIP and OPIP (LTI) goals for 2008. The committee sought a review of the incentive compensation program for 2009, in recognition of the impact that earnings volatility had on personal rewards.

The CEO presented the committee with his assessment of individual performance for the top seven executives reporting to him; the committee then approved AIP payouts for them. The committee then set salary and AIP and LTI target levels for these officers for 2008, after considering Towers Perrin analysis and recommendation of the CEO, considering adjustments for four officers who were considerably below market measures. The committee retained for 2008 the 2007 AIP and LTI targets for the other officers.

The committee considered management recommendation to change mix of LTI grants to reduce use of stock options in favor of increased restricted stock and performance cash. The changes would reduce the annual run rate of equity compensation to a point in line with peer group. The committee decided to defer this change until after 2008 because much lower AIP payments and forfeiture of 2007 restricted shares made 2008 a bad year to reduce LTI participation. With respect to LTI award targets, the committee approved grants of 200,400 stock options, 205,300 restricted stock units, and \$2.7 million in 36-month performance cash awards, which would produce a share run rate consistent with peers and produce 362,000 fewer shares than in 2007 LTI program. The restricted stock unit performance measure was set at \$2.65 EPS for the measurement period of calendar 2008.

The Committee also approved detailed schedules showing:

- Officer LTI awards under the Omnibus Performance Incentive Plan (OPIP)
- Non-officer LTI awards under the OPIP
- A summary of the principal terms of each of the awards
- The CEO's payout under AIP and his 2008 base salary, and AIP and LTI targets.

The AIP payments for the Tier 1 officers included EPS (75 percent) and individual performance (25 percent). The committee decided to continue in 2008 the same 2007 targets for the incentive program for all but the Tier 1 officers



#### b. Progress Reporting

The EVP/CFO typically updates the board's C&MD Committee (*e.g.*, at the December meeting in 2007) on performance incentive plans. He reviews expected earnings per share performance, likely impacts on compensation programs, and attainment/forfeiture and vesting of LTI elements. For example, at the December 2007 committee meeting, he:

- Reviewed the 2005 grants of performance cash units, having a three-year measurement period, noting that they were likely to be paid at or near their maximum amount
- Observed that the 2007 restricted stock units granted almost certain to be forfeited because of the failure to satisfy the EPS performance measure
- Noted that AIP awards were likely to be at below target levels, and could be lost altogether due to a failure to achieve the EPS threshold level.

The committee typically performs mid-year reviews as well. For example, the July 2008 meeting included updates on AIP and LTI performance, on discretionary CEO option and stock award grants. The committee discussed the EPS spread used to establish the threshold and maximum levels under the corporate component of the AIP. The committee also discussed whether to continue leaving to the discretion of the board whether to make payments based on individual performance when the corporate EPS threshold is not met.

#### c. Benchmarking

Each year the C&MD Committee reviews structured benchmarking analyses of compensation, as presented by its outside compensation consultant. Liberty found that the board does routinely examine the benchmarking data provided by its consultant, and uses it to make compensation

decisions that conform to established goals. For example, see the table to the right. It reflects the results of a review with the board's compensation consultant.



The consultant presented an analysis of CEO compensation at the October 2008 C&MD meeting, using the proxy peer group, the consultant's energy services survey (all 89 firms in the predominantly gas and electric utility industry), and the consultant's general industry survey.

The consultant observed that the board uses both proxy and energy services data, but not the general industry survey data, which the consultant included only for reference. Observing that AGLR's goal was to place total CEO compensation at between the 50<sup>th</sup> and 75<sup>th</sup> percentile of the energy services group, the consultant regressed the energy-services and general-industry survey data, in order to size adjust to AGLR's revenue. The consultant did not regress the proxy peer data, due to the small number of data points, but noted that four of the members of that group had revenues greater than those of AGLR. The consultant recommended an increase in base salary, an increase in target bonus to 110 percent, and an increase in LTI award value to produced target total direct compensation at the 50<sup>th</sup> percentile of the energy services peers.

The consultant also reviewed the compensation of the other Policy Committee members. The October 2008 review showed that base salaries, target bonuses, and LTI targets exceed the 50<sup>th</sup> percentile of the *Proxy Peers* for all Policy Committee members. The compensation of some fell below the 50<sup>th</sup> percentile for the *Energy Services* peers. The consultant recommended increases that would allow all to meet the 50<sup>th</sup> percentile of the Energy Peers, and to consider further increases as warranted by salary goals and individual performance.

The consultant also discussed trends in executive compensation. One trend observed was an increase in conservatism, with more companies targeting the 50<sup>th</sup> percentile. Seven of eight *Proxy Peers* target at the 50<sup>th</sup> percentile. Another is the use of more than one corporate performance measure in annual compensation plan design (AGLR uses only EPS), with the following table showing comparative practices. The types of strategic or operational measures

cited by the consultant were: customer satisfaction, safety, employee satisfaction, diversity, reliability, process improvement, and quality.

	AGLR	Proxy	Energy Services
Earnings per Share	Yes	62%	59%
ROIC/ROE	No	30%	14%
Net or Operating Income	No	23%	45%
Strategic/Operational	No	54%	68%

The consultant also noted that 2008 changes in the LTI mix had brought AGLR into conformity

with energy industry practice. Those changes included increases in eligible salary levels and reductions in option grants, although the consultant recommended further reductions in option grants for Tier II-IV officers. A December 2008 C&MD committee meeting included an update on board and executive compensation, competitive analysis, and long-term incentive plans. The committee approved the dropping of three peer group members and the addition of four others to retain consistency with the criteria, as industry conditions change.

With respect to executive compensation competitiveness, the consultant noted at the end of 2008 that the base, target AIP, and LTI components of the CEO's compensation were at the 75<sup>th</sup> percentile for the proxy peer group, but below the 50<sup>th</sup> percentile of the energy-services peer group. The other first tier (Policy Committee) executives generally exceeded the 50<sup>th</sup> percentile of proxy peers, and fell between the 50<sup>th</sup> and 75<sup>th</sup> of percentile of the energy-services peers.

With respect to executive-compensation program design, the consultant found base compensation and AIP cash targets to be competitive with the proxy and energy-services peer groups, but that LTI targets fell generally above 50<sup>th</sup> for proxy peers and below 50<sup>th</sup> for energy services peers.

One difference in AGLR's AIP was its use of a single measure (EPS) for the corporate factor. The consultant observed that many peers were moving to two or more corporate measures. The consultant observed that AGLR continued in 2008 to provide stock options to a broader population of employees than most energy services peers, but that AGLR had used them in 2008 to a lesser extent than it had in previous years.

At its February 3, 2009 meeting, the C&MD Committee decided to postpone the setting of 2009 goals related to EPS. The committee decided to further



constrict eligibility for equity awards, limiting 2009 grants to 0.60 percent of outstanding shares. The board granted compensation increases for 2009 that took all Tier I officers to at least the 50<sup>th</sup>

Position	Corporate	Unit	Individual
CEO	75%	25%	0%
Other Tier 1	65%	25%	10%
President - SEM	0%	100%	0%

percentile of the *Energy Services* group. The committee also approved increases (shown in the table) in the AIP and LTI targets to move AGLR more into line with energy services company data presented by its consultant earlier.

## **C.** Conclusions

1. AGLR has designed its compensation program for executives and management around an appropriate structure, and applies it objectively, and with reference to sound, comprehensive data.

The mix of base, short-term, and long-term compensation amounts is appropriate and AGLR regularly compares total compensation and each of the three components against a range of peer-group information. The long-term awards focus on inducing lasting financial performance, which AGLR has considered an important goal for some time, and which has taken on increased focus in very recent times in the U.S. AGLR has used non-cash incentives more extensively for some levels of management, but the board has monitored its "gaps" in this regard, and has been appropriately sensitive to making major programmatic changes that may cause short-term compensation dislocation, particularly in the period of weaker financial performance that has affected American industry generally. AGLR makes regular yearly use of an appropriate range of compensation data about all three elements, and uses three of the compensation consulting industry's leaders in providing it, and in analyzing it with reference to AGLR's compensation program and with reference to the compensation components and levels of executives and managers.

2. Targeted total compensation levels and individual components are appropriate and are applied with discipline and effectiveness, but AGLR, like all major U.S. corporations faces a potentially changing construct for establishing compensation levels. (Recommendation #1)

One can conclude that AGLR targets a higher level of compensation than do New Jersey's other two gas LDC holding companies. In particular, targeting the third quartile of energy services companies makes the primary difference. This distinction is appropriate, in that AGLR operates over such a larger footprint, and operates a much more substantial support organization. This organization provides significant economies for the LDCs (ETG among them), but makes the organizations and senior executive oversight of them more challenging. Thus, it is appropriate for AGLR to establish compensation goals that will attract those able to meet these increased challenges.

Liberty also observed that AGLR objectively administers its compensation programs, assuring effectively that each component becomes established with adherence to clear, comprehensive, and measurable targets that the board (led by the C&MD Committee) establishes at the outset of each year, and against which it measures following the previous year.

Thus, compensation targets and their application to individuals have been proper. However, the involvement of the Federal Government in responding to the well-known financial problems of major U.S. industries may be bringing a new era in executive compensation. What has begun as "jawboning" may well be moving into direct intervention, particularly where citizens have acquired major owning interests in a number of enterprises. The utility industry in Liberty's experience has never played in the compensation "league" that other American corporations have created over recent decades. Compensation levels have been much more moderate generally and AGLR is no exception. Certainly, utility and energy business risks have increased, but it remains true that this difference in significant part is explained by fundamental differences in what is

expected of the enterprises whose executives have been so highly compensated, and of what are the expectations for those leaders.

Nevertheless, utilities are not wholly isolated from general industry trends, and perhaps will merge even more closely with them as ownership and operation of utilities continues to change. At this critical juncture, therefore, it will be important for the board, and particularly the C&MD committee, to focus not only on medians and quartiles of very large groups. Directors will need to pay particular attention to what concepts, concerns, risks, and opportunities leading edge companies are reflecting in their compensation changes. The consultants that AGLR uses have made a point of discussing emerging trends, and a review of board minutes reflects a willingness of AGLR directors to "engage" in consideration of them. However, the board had, as of Liberty's field work, been made aware of, but not yet expressly addressed, whether and to what extent U.S. industry may be tightening its views of what constitutes "liberality" in executive compensation. Now, when AGLR is operating at a point that cannot be described as ungenerous to employees (but certainly not an overly expansive one) will be a particularly effective time for the board to seek from its consultants more focus on trends and leaders among its peers, whose advances may not yet be broad enough to move the medians and quartiles to which the board has paid particularly close attention in recent years.

3. The AIP program does include individual performance factors that are specific and appropriately focused on LDC performance, but hinge too little of incentive compensation on such performance, do not appear to operate in a transparently objective manner, and contain an inappropriate incentive. (Recommendation #2)

A review of the individual performance objectives for the ETG VP/GM and his direct superior, the SrVP-MAOP, shows a detailed listing of individual performance factors, many of which relate directly to the operational effectiveness and efficiency of New Jersey operations. These individual factors, however, include some that are more closely related to factors already addressed in the other AIP factors and in the LTI component of incentive compensation. For example, the corporate factor under the AIP is earnings per share at the parent level; the business unit factor are EBIT and O&M cost at (in the case of these two officers) the Distribution Operations (*i.e.*, all LDCs combined) level. Moreover, two out of the three LTI forms rely on earnings.

The individual AIP component factors for these two executives also include earnings (at the ETG

level for the ETG VP/GM and at the Mid-Atlantic overall and individual LDC levels for the SrVP-MAOP) directly, and indirectly (meeting O&M and capital budgets). Breaking down the earnings-related measures below the AGLR level is beneficial in



focusing performance by these two executives on the areas over which they have direct control. Moreover, giving regional and local executives and management personal incentives to control ETG costs is consistent with customer interests. However, as the table shows, the strong emphasis on earnings performance constricts the room available for assuring that effective cost performance in the short run does not come at the expense of operations performance. The ETG

VP/GM is a Level 4 AGLR officer; the SrVP-MAOP is at Level 2. The table shows, based on the percentages that AIP and LTI targets bear to base compensation, that operations performance (at the ETG level for the ETG VP/GM and at the Mid-Atlantic level for his superior) can have at most only a modest impact on incentive compensation.

Liberty sought information about the calculation basis for the individual portion of AIP awards.

HR personnel advised that there is not a worksheet, or numerical calculation approach to the categories. The judgment of the superior(s) who evaluate performance thus appears to be only lightly constrained in determining award levels. For example, the individual component for the ETG VP/GM contained five categories, with as many as 12 (in the case of operations targets) specific targets. Each category contains a weight and the weights of each add to 100 percent. There is not, however, a numerical basis for weighting the individual factors within each category, and thus, no transparent way for determining what specific performance aspects, at a detail level must be attained to get the maximum (or any other specific) scoring in the category. A similar structure exists for the SrVP-MAOP,

Factor	AIP		LTI			
	Fin.	Ops.	Fin.	Ops.		
SrVP-MAOP						
Corporate	40%	0%		0%		
Unit	35%	0%	100%			
Individual	15%	10%	100%			
Total AIP	90%	10%				
ETG VP/GM						
Corporate	30%	0%		0%		
Unit	35%	0%	1000/			
Individual	12%	23%	100%			
Total AIP	77%	23%				

but her "scoring" is complicated by the fact that a category (see the listings in the *Findings* section above) may include separate items (*e.g.*, earnings, O&M expense, capital expense, service appointments met, leak response) for MAOP in total and for each LDC. This structure begs important questions; *e.g.*, whether strong performance in the remainder of the region can produce a high or maximum award despite poor performance in the ETG territory.

A related concern arises from AGLR's pooling of executives solely by level, as opposed to role. With the exception of the two regional senior regional vice presidents (Mid-Atlantic and Southern), Level 2 officers generally operate at the service company level. Similarly, most of the Level 4 officers (the category into which the ETG VP/GM falls) are also at the service-company level. It makes much more sense to construe for AIP purposes the "business unit" of the service company executives as encompassing the whole of AGLR. It is not clear that assigning the ETG VP/GM and the SrVP-MAOP to the same pools appropriately focuses them on and rewards them for what they influence most directly. Either assigning them to a different business unit or differently weighting the contribution that total Distribution Operations earnings makes to their AIP awards would better conform to their areas of contribution to success. It would also serve to emphasize more appropriately the effect that what happens in New Jersey brings to their rewards.

Liberty also observed that the individual AIP award for the SrVP-MAOP included the goal of extending the asset management agreement between SEM and Virginia Natural Gas – one of the LDCs operating under AGLR's Mid-Atlantic region. Should a similar goal exist for ETG when the agreement in New Jersey approaches its end, the incentive created thereby contravenes the goal (which should be central to the Senior Vice President's mission) of optimizing ETG costs. Her goal (as opposed to SEM's, which quite understandably may include an extension of that agreement) should be to assure that ETG's assets are managed not, per se, by SEM, but by

whomever will use them to greatest advantage in reducing ETG's revenue requirements while providing reliable service.

## 4. AGLR has adopted and closely monitors and faithfully applies an appropriate long-term incentive program.

AGLR has recognized that incorporating a long-term element into its incentive compensation program encourages the production of lasting shareowner value. The board has adopted and altered a program that is reasonably competitive in the industry, thus serving to attract capable personnel at a reasonable cost. The board has regularly monitored the program for consistency with peers, and administered the program rigorously, in order to assure satisfaction of performance targets.

## 5. AGLR provides for effective, competitive, and economical benefits.

AGLR has undertaken commendable measures to control health care costs, while seeking to gauge and respond to employee views. AGLR has been aggressive in recent years in changing its health care programs, using employee input, and emphasizing wellness programs. The use of the captive insurer has provided cost-effective options, as AGLR has sought available means to mitigate the rise in costs without transferring costs unduly to employees. Despite these efforts, AGLR finds itself, as do employers across the country that it continues to face health care cost increases that far outpace inflation. The increases at AGLR have not been due to a failure to exercise diligence and creativity. To the contrary, AGLR's approaches have been forward-looking and energetic.

The AGLR pension program provides competitive levels of benefits, and is administered in a manner that is commensurate with industry standards.

## 6. The Board of Directors is actively and appropriately involved in establishing and administering executive compensation.

The C&MD Committee routinely engages in consideration, establishment, and monitoring of executive compensation throughout the year. The Committee reports regularly to the full board, which acts when and as required. The committee takes regular, extensive, and appropriate input from expert compensation consulting firms on establishing peer groups, detailed compensation data (both total and by component), trends in compensation among large American corporations, and recommendations for changes to close gaps observed. The board shows particular diligence to assuring that incentives are paid according to established measures. The board annually examines and rates CEO performance, and applies the results of that review in a quantitative manner to the CEO's incentive compensation. The board also familiarizes itself with the CEO's ratings of the Tier One officer group.

## **D.** Recommendations

1. Task the board's compensation consultants with providing a focused analysis on new directions in executive and management compensation and on new developments by individual companies that may be at the leading edge of change. (Conclusion #2)

The board has done well in choosing and using compensation consultants. The C&MD Committee seeks out extensive data, and welcomes discussion of trends with the experts it uses to canvas the industry. Those consultants have already begun to provide notice that compensation thinking overall and compensation elements in particular may be changing. The board should use its relationships with professionals who are at the leading edge of the business to bring added "color" to the sharp, precise identification of breakpoints for compensation elements among quartiles that have characterized the data and analysis the board sees. This added perspective should come in the form of extended discussion of how more aggressive, thought-leading companies are responding to the much more visible subject of executive compensation and to the opportunities that the current marketplace may present.

# 2. Restructure the AIP to increase the weight that local and regional operations have on compensation and assure that extension of the SEM asset management agreement is not a contributor to compensation anywhere outside SEM itself. (Conclusion #3)

There is a large amount of direct and indirect overlap among the three measurement components of the AIP and the EPS component of the LTI. Their net effect is to underemphasize ETG operational performance in the awards to the executive leadership at the local and regional levels. AGLR needs to increase the weight given to ETG operational performance in the AIP for those at the New Jersey and Mid-Atlantic levels. Incentives can match base pay for the SrVP-MAOP and can contribute over two-thirds of base pay for the ETG VP/GM. It is a strength that AGLR hinges so much of the total compensation of local and regional personnel directly on performance. Moreover, Liberty found the selection of operational measures to be comprehensive and appropriate. That strength, however, is diminished by an over-emphasis that ends up getting placed on financial performance. Placing 20 to 25 percent of the ETG VP/GM's base salary at risk directly on the basis of primarily quantifiable ETG operational performance would represent an improved distribution. A factor in the range of 15 percent for the SrVP-MAOP would correspond to this new measure, provided that a discrete portion thereof requires success not just in the region, but in New Jersey as well.

The lack of numerical dimensions on detailed items in an individual's unique portion of the AIP also may weaken linkages between individual contributions and rewards. Scoring the five or so overall categories and then allowing superiors to assign scores at the categorical level without constraints on weight to be given to the individual items is not sufficient. There should be at least overall dimensions placed on the individual items. The failure to do so is particularly of concern at the regional level, where it would appear that a major failure to attain targets in New Jersey would not necessarily produce a "lost opportunity" to an individual, if performance elsewhere proved to be stronger.

Nobody at the New Jersey or Mid-Atlantic level does or should be responsible for promoting the business of SEM. To the extent that they have interest in the management of ETG assets, it should be obvious that such interest lies exclusively in assuring asset optimization from ETG's perspective. In fact, outside SEM directly, it appears that no service-company or AGLR executive leadership has SEM's interests at the forefront. Therefore, outside SEM directly, no AGLR employee or officer should be rewarded, per se, for securing any SEM business with ETG. To do otherwise is, at best, to ignore the obvious possibility that what is best for ETG may

be different from what is best for SEM. At worst, establishing such a reward basis suggests that it does not matter whether doing business with SEM disadvantages ETG.

AGLR has paid appropriate attention generally to "hierarchy" issues in designing and implementing compensation. It adjusts the portions of annual base compensation that can be earned as incentives according to the employee level and it adjusts the makeup of the AIP as well. It will be important for the changes adopted to implement this recommendation "cascade" similarly down through the levels of employees dedicated to New Jersey and to Mid-Atlantic operations that serve New Jersey.