

BEFORE THE STATE OF NEW JERSEY

BOARD OF PUBLIC UTILITIES

**I/M/O THE PETITION OF PUBLIC SERVICE)
ELECTRIC AND GAS COMPANY FOR)
APPROVAL OF A SOLAR ENERGY PROGRAM) BPU DKT. NO. EO07040278
AND AN ASSOCIATED COST RECOVERY)
MECHANISM)**

**TESTIMONY OF MATTHEW I. KAHAL
ON BEHALF OF THE
NEW JERSEY DEPARTMENT OF THE PUBLIC ADVOCATE,
DIVISION OF RATE COUNSEL**

**RONALD K. CHEN
PUBLIC ADVOCATE OF NEW JERSEY**

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1 **I. QUALIFICATIONS**

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. My name is Matthew I. Kahal. I am employed as an independent consultant retained
4 in this matter by the Department of Public Advocate, Division of Rate Counsel (Rate
5 Counsel). My business address is 5565 Sterrett Place, Suite 310, Columbia, Maryland
6 21044.

7 Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND.

8 A. I hold B.A. and M.A. degrees in economics from the University of Maryland and
9 have completed all course work and qualifying examination requirements for the
10 Ph.D. degree in economics. My areas of academic concentration included industrial
11 organization, economic development and econometrics.

12 Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?

13 A. I have been employed in the area of energy, utility and telecommunications
14 consulting for the past 30 years working on a wide range of topics. Most of my work
15 has focused on electric utility integrated planning, plant licensing, environmental
16 issues, mergers and financial issues. I was a co-founder of Exeter Associates, and
17 from 1981 to 2001 I was employed at Exeter Associates as a Senior Economist and
18 Principal. During that time, I took the lead role at Exeter in performing cost of capital
19 and financial studies. In recent years, the focus of much of my professional work has
20 shifted to electric utility restructuring and competition.

21 Prior to entering consulting, I served on the Economics Department faculties
22 at the University of Maryland (College Park) and Montgomery College teaching
23 courses on economic principles, development economics and business.

24 A complete description of my professional background is provided in
25 Appendix A.

1 Q. HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT WITNESS
2 BEFORE UTILITY REGULATORY COMMISSIONS?

3 A. Yes. I have testified before approximately two-dozen state and federal utility
4 commissions in more than 300 separate regulatory cases. My testimony has addressed
5 a variety of subjects including fair rate of return, resource planning, financial
6 assessments, load forecasting, competitive restructuring, rate design, purchased power
7 contracts, merger economics and other regulatory policy issues. These cases have
8 involved electric, gas, water and telephone utilities. In 1989, I testified before the
9 U.S. House of Representatives, Committee on Ways and Means, on proposed federal
10 tax legislation affecting utilities. A list of these cases may be found in Appendix A,
11 with my statement of qualifications.

12 Q. WHAT PROFESSIONAL ACTIVITIES HAVE YOU ENGAGED IN SINCE
13 LEAVING EXETER AS A PRINCIPAL IN 2001?

14 A. Since 2001, I have worked on a variety of consulting assignments pertaining to
15 electric restructuring, purchase power contracts, environmental controls, cost of
16 capital and other regulatory issues. Current and recent clients include the U.S.
17 Department of Justice, U.S. Air Force, U.S. Department of Energy, the Federal
18 Energy Regulatory Commission, Connecticut Attorney General, Pennsylvania Office
19 of Consumer Advocate, New Jersey Division of Rate Counsel, Maine Public
20 Advocate, Rhode Island Division of Public Utilities, Louisiana Public Service
21 Commission, Arkansas Public Service Commission, Maryland Department of Natural
22 Resources and Energy Administration, and MCI.

23 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NEW JERSEY
24 BOARD OF PUBLIC UTILITIES?

1 A. Yes. I have testified on cost of capital and other matters before the Board of Public
2 Utilities (Board or BPU) in gas, water and electric cases during the past 15 years. A
3 listing of those cases is provided in my attached Statement of Qualifications.

4 Q. HAVE YOU PARTICIPATED IN PREVIOUS CASES IN RECENT YEARS
5 IN CASES INVOLVING PUBLIC SERVICE ELECTRIC AND GAS
6 COMPANY (“PSE&G” OR “COMPANY”)?

7 A. Yes. In recent years, I submitted testimony on capital structure/financial issues in the
8 PSE&G/Exelon merger case (BPU Docket No. EM05020106), the PSE&G deferred
9 balance securitization (BPU Docket No. EF03070532) and the recent PSE&G gas
10 base rate case on rate of return (BPU Docket No. GR0510085). In each of those
11 cases, my testimony was submitted on behalf of the Division of Rate Counsel.

II. COST OF CAPITAL ANALYSIS

1 **A. Testimony Subject**

2 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

3 A. In this docket, PSE&G has proposed a large program to fund solar energy
4 development in New Jersey, with the investments to be supported by its electric retail
5 customers. The Petition was originally filed on April 16, 2007, and the program
6 details are described in testimony filed on June 1, 2007. PSE&G's program proposal
7 would charge customers a rate of return on the Company's investment, inclusive of a
8 significant rate of return "bonus". I have been asked by Rate Counsel to evaluate the
9 appropriateness of the requested rate of return (including the requested "bonus"), and
10 to recommend an appropriate rate of return on investment for this program.

11 Q. IN DEVELOPING YOUR RATE OF RETURN RECOMMENDATION,
12 ARE YOU EXPRESSING SUPPORT FOR THE PROPOSED SOLAR
13 PROGRAM AND ITS STRUCTURE?

14 A. No. My testimony should not be construed in any way as either support for or
15 opposition to the proposed solar program and its structure. My understanding is that
16 the overall merits of the program, the program features and possible alternative
17 approaches will be addressed by other Rate Counsel witnesses, including
18 Dr. Dismukes. My testimony is intended to critique PSE&G's rate of return request
19 and to recommend a more appropriate return, in the event that the Board is inclined to
20 approve the basic structure of the proposed solar program.

21 Q. WHAT IS YOUR PROPOSED RATE OF RETURN?

22 A. Assuming that Rate Counsel's ratemaking treatments are employed, I am
23 recommending an overall pre-tax return (i.e., the return grossed up for income taxes)
24 of 10.22 percent, inclusive of a return on the common equity component of 9.75

1 percent. Under the Company’s proposed structure, this return is to be applied to the
2 unamortized program “regulatory asset.” Please note that the Company requests an
3 overall pre-tax return of 12.11 percent which includes a proposed return on equity of
4 11.0 percent. If Rate Counsel’s cost recovery treatments are not accepted, and the
5 Company’s largely risk-free cost recovery methods are approved, then the 9.75
6 percent return on equity is too high. It should be lowered to a debt return, i.e., 6.5
7 percent.

8 **B. Summary of Company Program Proposal**

9 Q. PLEASE PROVIDE A SUMMARY OF THE PROPOSED SOLAR
10 PROGRAM.

11 A. The stated purpose of the program is to promote the development of solar electricity
12 generation in the Company’s service territory to help meet the State’s solar energy
13 supply objectives. This is essentially a project loan program for the Company’s
14 customers and/or solar developers that will work in conjunction with the State’s Solar
15 Renewable Energy Certificate (SREC) program.

16 PSE&G itself will neither develop nor own the solar facilities. Rather,
17 PSE&G will provide loans to customers (but not directly to its residential customers)
18 or local project developers based on the terms described in the filing. The borrower
19 will pay back the loans (interest and principal) in the form of the SRECs associated
20 with the solar energy generation. (The borrower also has the option of retaining the
21 SRECs and instead making debt service payments in cash.) The Company anticipates
22 the program will total approximately \$100 million in loans, and it targets 30 MW of
23 total solar development divided among residential, municipalities and
24 commercial/industrial customers.

1 The program costs, including a return on PSE&G’s investment, will be
2 recovered dollar-for-dollar through the Company’s Societal Benefits Charge (SBC)
3 mechanism. The Company does not plan on monetizing the SRECs it receives from
4 the borrowers for their loan interest/principal repayments. Rather, these will be
5 distributed free of charge, pro rata, to the generation suppliers (BGS and competitive
6 retail suppliers) that are providing generation service to the Company’s retail
7 customers. The Company believes that the receipt of the SRECs by generation
8 suppliers will to some degree lead to a reduction in the prices they charge (compared
9 to what they otherwise would charge) due to a lowering of their supply costs (i.e., the
10 SREC compliance costs). To the extent this occurs, this would provide a partial
11 offset to the very large SBC program charges that the Company intends to impose on
12 ratepayers.

13 Q. WHAT INTEREST RATE WOULD PSE&G CHARGE FOR THE SOLAR
14 LOANS?

15 A. My understanding is that PSE&G intends to charge borrowers a loan interest rate
16 equal to its pre-tax rate of return on the program regulatory asset, i.e., 12.11 percent.
17 However, these interest payments may be paid in the form of SRECs generated by the
18 solar facility.

19 Q. HOW DOES PSE&G INTEND TO ATTACH A MONETARY VALUE TO
20 THE SRECS?

21 A. As discussed in the testimony of PSE&G witness Lynk, the SRECs will be imputed a
22 monetary value for loan repayment purposes based on the monthly SRECs produced
23 by the solar facility and the SREC published market price index approved by the
24 SREC Program Administrator. (Lynk Testimony, page 4) However, PSE&G would
25 employ a minimum “floor” price of \$475 per MWh for SRECs regardless of market

1 prices. The term of the loans will be 15 years, and once the SREC transfers have paid
2 off the loan, PSE&G will have a “call option” on any further SRECs at 75 percent of
3 market price until the end of the original loan term. (*Id.*, page 9) Thus, the price
4 floor provides the borrower some downside revenue protection, and the call option
5 provides PSE&G a possible opportunity for purchasing discounted SRECs (after the
6 loan is paid off but within the 15-year term).

7 Q. WHAT IS THE COST RECOVERY PROPOSAL?

8 A. This is described in Mr. Schirra’s testimony. PSE&G proposes to recover all
9 program costs from its retail customers through the SBC mechanism rather than in
10 base rates. This would include a rate of return on the balance of the regulatory asset,
11 annual amortization of the regulatory asset, program administrative expenses and lost
12 revenues (until the completion of the next base rate case). The lost revenues refers to
13 the estimated reduction in customer payments to PSE&G for electric distribution
14 service due to the customer’s on-site solar generation that displaces utility purchases.
15 The regulatory asset (referred to as “net plant”) is essentially the loans that PSE&G
16 will make to program participants, along with related metering and program start-up
17 costs. As mentioned, the Company contemplates a total investment of approximately
18 \$100 million.

19 Q. WILL PAYMENTS THAT PSE&G RECEIVES FROM BORROWERS BE
20 CREDITED TO THE SBC TO DEFRAY PROGRAM COSTS?

21 A. With some minor exceptions, the answer is no. Loan payments will either be in the
22 form of SRECs (allocated to the generation suppliers) or cash which will be used to
23 purchase more SRECs (also distributed free of charge to suppliers). The limited
24 exceptions might be in the event of project default if PSE&G receives insurance
25 payments or if it sells the equipment to satisfy a bankruptcy claim.

1 Q. YOU STATE THAT THE CUSTOMER BENEFIT MAY COME FROM A
2 SAVINGS IN GENERATION PRICES SINCE SUPPLIERS WILL ENJOY
3 LOWER SREC COMPLIANCE COSTS. DOES PSE&G HAVE AN
4 ESTIMATE OF THAT BENEFIT?

5 A. No. Mr. Schirra merely states that the effect of distributing the SRECs will
6 “somewhat offset” the solar program costs that customers will pay. (Schirra
7 Testimony, page 17) However, he concedes that the “amount of customer bill
8 decreases is impossible to determine.” (*Id.*)

9 Q. HAS THE COMPANY ESTIMATED THE COST TO CUSTOMERS FROM
10 THIS PROGRAM THROUGH THE SBC?

11 A. Yes, this is provided with Mr. Lynk’s testimony and I have summarized the total
12 estimated charges on my Schedule MIK-3 for the assumed 15-year program life. This
13 shows that the total SBC charges related to this program will be about \$250 million
14 (\$22 million in the first full year), of which about \$90 million is for rate of return
15 (inclusive of associated income taxes), based on the requested 12.11 percent. Thus,
16 both the total program cost and the rate of return component are quite substantial and
17 over time will impose a large cost on customers.

18 Q. HOW WOULD YOUR RATE OF RETURN RECOMMENDATION ALTER
19 THESE CHARGES?

20 A. The approximately 2 percentage point reduction that I am recommending would
21 reduce the approximately \$90 million return component amount to about \$76 million
22 -- a \$14 million savings over the program’s life. Thus, rate of return is a significant
23 issue for ratepayers.

24 Q. HOW DID MR. SCHIRRA DEVELOP HIS RATE OF RETURN
25 RECOMMENDATION?

1 A. The 12.11 percent rate of return is based upon the rate of return award granted by the
2 Board in BPU Docket No. GR05100845 (November 6, 2006), which he claims is the
3 Company's last base rate case. The return on equity in that case (established by
4 Board-approved settlement) is 10.0 percent, and he adds 100 basis points as an
5 "incentive" or reward for conducting the program, resulting in an 11.0 percent return
6 on equity. I show the calculation of his 12.11 percent rate of return on Schedule
7 MIK-1.

8 Q. THE AUTHORIZED RETURN IS OFTEN LINKED WITH RISK. DOES
9 MR. SCHIRRA IN ANY WAY JUSTIFY THE 11.0 PERCENT RETURN
10 ON EQUITY IN TERMS OF INVESTMENT RISK?

11 A. No, he does not. The Company simply argues that the 11.0 percent return on equity
12 is appropriate and that the Board has the authority to grant the requested "bonus."
13 Mr. Schirra also volunteers that the Company would be willing to consider alternative
14 incentive payments such as linking the bonus to the value of the loans or number of
15 megawatts of solar installations, although he provides no details. (Schirra Testimony,
16 page 3)

17 C. **Rate of Return Analysis and Recommendation**

18 Q. WHY DO YOU TAKE ISSUE WITH MR. SCHIRRA'S RATE OF RETURN
19 ON EQUITY?

20 A. I have several disagreements with the 12.11 percent rate of return request in this case.
21 First, the Company purports to use the authorized rate of return from the most recent
22 rate case, but the rate case selected is a gas distribution case, and is not the electric
23 service authorized return. The SBC cost recovery mechanism for this program is
24 applicable to PSE&G's electric ratepayers, not its gas ratepayers. The last electric
25 case (BPU Docket No. ER02050303, April 22, 2004) awarded PSE&G an electric

1 service rate of return of 9.75 percent, not 10.0 percent, and there is no suggestion in
2 the Petition, Mr. Schirra’s testimony or data responses that PSE&G’s cost of equity
3 for electric operations has increased since then. Second, the Company seeks a return
4 “bonus” for the program but offers no substantive justification, other than a
5 willingness to spend money on the program with ratepayers providing the cost
6 reimbursement. Third, there is no assessment or consideration of the business risks
7 that the Company is absorbing from conducting this program relative to the risks
8 associated with the rest of its electric operations.

9 Q. WHAT IS YOUR RECOMMENDATION?

10 A. Assuming Board approval of a solar program that has the basic attributes similar to
11 the Company’s proposal (i.e., a loan program with SBC recovery), I recommend a
12 10.22 percent rate of return, as shown on Schedule MIK-2. This consists of a 9.75
13 percent return on common equity, a 6.0 percent cost of debt and a 60 percent debt/40
14 percent equity capital structure. This rate of return preserves the currently authorized
15 9.75 percent electric rate of return, employs a reasonable prospective cost of debt
16 (very close to the Company’s figure) and a capital structure that is adequate for the
17 very low risk treatment that the Company is seeking for program costs.

18 Q. WHY DO YOU BELIEVE THAT THE COMPANY’S INVESTMENT IN
19 THIS PROGRAM IS LOW RISK?

20 A. “Low” and “high” are relative terms and not absolutes. In this case, my position is
21 that the cost exposure and return recovery risks are low relative to the “traditional”
22 base rate recovery on which the currently authorized 9.75 percent return is based.
23 This is because the proposed cost recovery is essentially a dollar-for-dollar pass
24 through in the SBC rate mechanism without the usual exposure to base rate case risks,
25 sales variability risk, regulatory lag and so forth. Due to the very low risks (for

1 shareholders) associated with this cost recovery arrangement, it is completely
2 inappropriate for PSE&G to seek a return “bonus.” Moreover, the nature of these
3 investments and the cost recovery assurance under this program means that PSE&G
4 should be able to finance its program investment with somewhat more leverage than
5 it otherwise might choose to use for its conventional electric utility rate base.

6 Q. HAS PSE&G IDENTIFIED ANY RISKS THAT IT WILL INCUR UNDER
7 ITS PROPOSED PROGRAM?

8 A. Rate Counsel posed this question in RCR-RR-6. In response, the only risk that the
9 Company identified is that the rate of return is locked in for the program life, and its
10 cost of capital could change over time, possibly rendering the 11.0 percent return on
11 equity as too low. No other business risks were mentioned.

12 Q. IS THIS A SIGNIFICANT RISK THAT PSE&G WILL EXPERIENCE
13 UNDER ITS PROGRAM?

14 A. I agree that this “lock in” feature is an investment risk, but certainly not an
15 extraordinary or unusual risk. It is normal for the utility’s rate of return to be set and
16 remain in effect for a number of years. In this case, the loans are for 15 years,
17 recovered from ratepayers on a straight-line basis. Investors do require compensation
18 for locking in a fixed return for a long term, but the additional return requirement is
19 not large relative to the implicit cost of equity risk premium. For example, investors
20 require a risk premium of less than a percentage point for 30-year Treasury bonds as
21 compared with five-year Treasury notes. By comparison, the 9.75 percent return on
22 equity is four to five full percentage points above a risk-free rate and more than three
23 percent points above utility long-term bond yields. Investors today are willing to hold
24 long-term (20- to 30-year) utility bonds for a return of 6.0 to 6.5 percent. The
25 observed “lock-in” risk premium is only a small percentage of the return on equity

1 rate case risk premium. No other source of program risk has been identified by the
2 Company.

3 Q. WHY IS 9.75 PERCENT MORE APPROPRIATE THAN “THE MOST
4 RECENT” 10.0 PERCENT?

5 A. I agree with the Company that the 10.0 percent figure is a more recent award.
6 However, that figure is applicable to gas distribution service, and it is not based on
7 the Company’s electric operations. This is no more valid than if the Company
8 happened to select the return awarded to another utility for use in this program.

9 While I understand that the 10.0 percent was established as part of a
10 settlement agreement, the evidence on cost of capital in that case clearly pertained to
11 the gas distribution industry. In that case, I served as Rate Counsel’s cost of equity
12 witness, with Dr. Roger Morin serving as the Company’s witness. Both of us
13 presented and relied upon gas industry market studies for our respective
14 recommendations. Neither of us argued that the fair return should be based on
15 PSE&G’s electric operations risk, and the settlement return was within the range of
16 our respective recommendations.

17 The 10.0 percent gas return is irrelevant for purposes of a rate of return on an
18 electric utility program. The latest approved return on equity for PSE&G’s electric
19 operations is 9.75 percent.

20 Q. DO YOU HAVE ANY FURTHER COMMENTS ON THE 100 BASIS
21 POINT INCENTIVE?

22 A. Yes. The Company has not provided any substantiation for the 100 basis point rate of
23 return bonus other than claiming that utilities in other states have received incentives
24 and that the Board has the authority to approve the requested bonus. I believe that the
25 9.75 percent return already is a favorable return given the very low risk associated

1 with the proposed program. The Company does not have a convincing argument for
2 the award of the bonus.

3 In considering the bonus, it is important to understand that while PSE&G's
4 rate recovery mechanism insulates itself from risk, this is not the case for its
5 customers. The customers will be at risk for actual program costs, adverse events
6 such as loan defaults and the elusive nature of the generation supply cost-reduction
7 benefits. For example, PSE&G freely admits that it has no idea whether distributing
8 the SRECs to suppliers free of charge will result in lower generation prices
9 commensurate with the market value (i.e., that ratepayers are paying) of those
10 SRECs. (Schirra Testimony, page 17) In other words, the risks are shifted on to
11 ratepayers, PSE&G is largely insulated from risk, yet PSE&G still argues that it is
12 entitled to a return bonus.

13 Q. WILL LOWERING THE RATE OF RETURN FROM 12.11 TO 10.2
14 PERCENT PROVIDE ANY BENEFITS?

15 A. Yes, it will provide a meaningful reduction in the ratepayer SBC charges for this
16 program, about a \$14 million savings. Moreover, lowering the loan interest rate will
17 also benefit program participants and encourage project development by reducing the
18 debt service costs they must pay on their solar investments. Finally, given the low
19 risks described above, the 10.2 percent is fair to PSE&G and provides a fully
20 compensatory return.

21 Q. WHAT COST OF DEBT ARE YOU USING?

22 A. I am using 6.0 percent. The most recent 12-month average utility bond yields
23 published by Moody's Investors Service is 6.0 percent for single A and 6.25 percent
24 for triple Baa, as shown on Schedule MIK-4. However, these current figures may
25 slightly overstate the debt cost associated with this program since (a) the solar loans

1 are only 15 years and the Moody's yields are for bonds of 20 to 30 years; and (b) the
2 program's risks are lower than typical utility risks. This is obviously very close to
3 PSE&G's claimed 6.19 percent debt cost obtained from its gas rate case settlement.

4 Q. WHAT CAPITAL STRUCTURE ARE YOU USING?

5 A. I am using a 60 percent debt/40 percent equity capital structure. This is somewhat
6 more leveraged than the capital structure (about 50 percent debt) claimed by PSE&G.
7 However, given the program's relatively low risk, it is both feasible and appropriate
8 to employ more leverage to finance the program investments (i.e., the loans) as
9 compared to the Company's electric rate base.

10 If the base rate case 9.75 percent return on equity is to be used for these loan
11 investments, then it is fully appropriate that an economical capital structure be
12 employed. Please note that the 60/40 capital structure is within the benchmark range
13 specified by Standard & Poors (June 2004 benchmarks) for an investment grade
14 credit rating for an electric utility with a "Business Profile" of "4" or "5."

15 **D. Risk Implications of Rate Counsel Rate Recommendations**

16 Q. HAS RATE COUNSEL PROVIDED RECOMMENDATIONS TO MODIFY
17 ANY ASPECTS OF THE COMPANY'S COST RECOVERY PROPOSAL
18 FOR ITS SOLAR PROGRAM?

19 A. Yes. Rate Counsel witness Andrea C. Crane critiques the Company's program and
20 sets forth several specific recommendations to modify the program's cost recovery
21 features. Her testimony does not support or endorse the program's basic structure
22 even with her proposed modifications.

23 Q. WHAT ARE HER RECOMMENDED MODIFICATIONS?

24 A. My understanding is that within the assumed framework of SBC cost recovery for
25 program costs, she recommends the following modifications or clarifications:

- 1 • Program administrative costs should be recoverable in the SBC only to the
2 extent they are shown to be reasonable, prudent and “incremental” to the
3 Company’s cost of service.
- 4 • She recommends periodic reporting and documentation on the
5 administrative costs so that the verification for SBC cost recovery can be
6 provided. She also recommends that the Company document and support
7 program start up costs, which presently is an “information gap.”
- 8 • Ms. Crane would place limits on SBC rate recovery of loan default costs.
9 (There is no indication that PSE&G expects this to be a significant
10 problem.)
- 11 • Ms. Crane contests the Company’s proposal to recover “lost revenues” in
12 the early years of the program (i.e., prior to the first rate case).

13 Her testimony also observes that the Company’s unregulated generation
14 supply affiliate may benefit significantly from this program since it has a 30 percent
15 market share of Basic Generation Service (BGS). Under PSE&G’s proposal, it will
16 therefore receive a large allocation of SRECs, paid for by ratepayers, free of charge.

17 Q. DO HER RECOMMENDATIONS HAVE ANY IMPLICATIONS FOR THE
18 COMPANY’S INVESTMENT RISK FOR THIS PROGRAM?

19 A. It has some implications, although it does not change the basic structure of cost
20 recovery. The Company could continue to recover almost all program costs (subject
21 to costs being prudent and incremental) through the low-risk SBC mechanism. The
22 largest change would be the denial of the near-term “lost revenue.” I assume that
23 even the Company would agree that it should not charge customers for program costs
24 that are unreasonable, imprudent or already are part of its cost of service (i.e., not

1 “incremental”). While the Company seeks “lost revenue” payments as part of its
2 “below the line” profits, lost revenue payments clearly are not program costs.

3 Q. ARE MS. CRANE’S RECOMMENDATIONS CONSISTENT WITH YOUR
4 PROPOSED 10.2 PERCENT RATE OF RETURN?

5 A. Yes, they are. While not proposing a change to the SBC recovery mechanism, her
6 recommendations and positions do indicate that the program is not and should not be
7 risk free. This is completely consistent with my recommendation for an overall (pre-
8 tax) rate of return of 10.2 percent, which is well above a risk-free return. This
9 incorporates the currently authorized return on equity (9.75 percent), the Company’s
10 current, incremental cost of debt (6.0 percent) and a 60/40 capital structure. I regard
11 this return as being entirely fair to the Company since the SBC rate recovery
12 mechanism is far more favorable and lower in risk than recovery in a base rate case --
13 the basis for the 9.75 percent equity return. As mentioned, Ms. Crane does not
14 propose a change to the SBC rate recovery.

15 Q. DOES HER POSITION ON “LOST REVENUE” INCREASE RISK?

16 A. Not relative to normal base rate cost recovery. That is, under standard ratemaking,
17 the utility is at risk for revenue losses (between rate cases) for any number of reasons.
18 Moreover, it is not clear that the Company’s program would actually be the cause of
19 the (temporary) revenue loss that it seeks to recover in the SBC. Rather, the larger
20 cause is the State’s and the Board’s policy of promoting solar generation
21 development, which inevitably would displace some utility sales. The Company is
22 simply linking the “lost revenue” recovery to the solar installations and seeking
23 recovery from customers because it happens to be operating the program. In other
24 words, the Company would not have the ability to seek recovery of the (between rate

1 case) displaced sales revenue from its captive customers if the program instead is
2 non-utility. This is discussed further in Ms. Crane's testimony.

3 **E. Summary of Position**

4 Q. PLEASE SUMMARIZE YOUR POSITION.

5 A. Ms. Crane's recommendations do not change the fundamental low-risk nature (for
6 PSE&G) of the program's cost recovery. It remains far lower in risk than
7 conventional base rate recovery, and my recommended 10.2 percent pre-tax return is
8 certainly well above a risk-free return. Absent the adoption of her ratemaking
9 recommendations (which do have some risk implications), my 10.2 percent
10 recommendation would provide excessive compensation to PSE&G shareholders.

11 Q. SUPPOSE MS. CRANE'S PROGRAM COST RECOVERY RECOM-
12 MENDATIONS ARE NOT ACCEPTED. WOULD THAT ALTER YOUR
13 RECOMMENDATION?

14 A. Yes, it would. If Ms. Crane's recommendations are rejected in favor of PSE&G's
15 current, largely risk-free cost recovery proposal, then a far lower return would be
16 appropriate. In that case, it would be reasonable to reduce the return on equity of
17 9.75 percent (which is based on standard ratemaking) to 6.5 percent. The 6.5 percent
18 approximates the upper end of the yield on long-term utility debt within the past year,
19 as shown on Schedule MIK-4. This would produce an overall (pre-tax) return of
20 8.0 percent.

21 Q. ARE THERE ANY OTHER APPROACHES TO FINANCING THE SOLAR
22 LOANS THAT SHOULD BE CONSIDERED?

23 A. Yes. Another conceptual approach, which could provide large savings for both
24 ratepayers and program participants, would be to securitize the regulatory asset once
25 it is established. If feasible, this would result in a return and loan interest rate far

1 below either the Company's 12.1 percent or my 10.2 percent -- possibly as low as
2 6 percent. However, it is my understanding that for electric utilities securitization
3 financing is limited to stranded cost recovery and certain transition period BGS costs
4 and therefore is not presently available for a program such as this. Moreover, the
5 desirability of securitization depends on the program being quite large due to the
6 large transaction costs associated with implementing this form of financing.

7 Therefore, the economics of any securitization proposal would need to be evaluated at
8 the time any such proposal is set forth.

9 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

10 A. Yes, it does.

11

APPENDIX A
STATEMENT OF QUALIFICATIONS
FOR
MATTHEW I. KAHAL

MATTHEW I. KAHAL

Mr. Kahal is currently an independent consulting economist, specializing in energy economics, public utility regulation and financial analysis. Over the past two decades, his work has encompassed electric utility integrated resource planning (IRP), power plant licensing and a wide range of utility financial issues. In the financial area he has conducted numerous cost of capital studies and addressed other financial issues for electric, gas, telephone and water utilities. Mr. Kahal's work in recent years has shifted to electric utility restructuring, mergers and competition.

Mr. Kahal has provided expert testimony on more than 300 occasions before state and federal regulatory commissions and the U.S. Congress. His testimony has covered need for power, integrated resource planning, cost of capital, purchased power practices and contracts, merger economics, industry restructuring and various other regulatory policy issues.

Education:

B.A. (Economics) - University of Maryland, 1971.

M.A. (Economics) - University of Maryland, 1974.

Ph.D. candidate - University of Maryland, completed all course work
and qualifying examinations.

Previous Employment:

1981-2001 - Exeter Associates, Inc. (founding Principal).

1980-1981 - Member of the Economic Evaluation Directorate, The Aerospace Corporation, Washington, D.C. office.

1977-1980 - Economist, Washington, D.C. consulting firm.

1972-1977 - Research/Teaching Assistant and Instructor, Department of Economics, University of Maryland (College Park).

1975-1977 - Lecturer in Business/Economics, Montgomery College.

Professional Work Experience:

Mr. Kahal has more than twenty years experience managing and conducting consulting assignments relating to public utility economics and regulation. In 1981, he and five colleagues founded the firm of Exeter Associates, Inc. and for the next 20 years he served as a Principal and corporate officer in the firm. During that time, he supervised multi-million dollar support contracts with the State of Maryland and directed the technical work conducted both by Exeter

professional staff and numerous subcontractors. Additionally, Mr. Kahal took the lead role at Exeter in consulting to the firm's other governmental and private clients in the areas of financial analysis, utility mergers, electric restructuring and utility purchase power contracts.

At the Aerospace Corporation, Mr. Kahal served as an economic consultant to the Strategic Petroleum Reserve (SPR). In that capacity he participated in a detailed financial assessment of the SPR, and developed an econometric forecasting model of U.S. petroleum industry inventories. That study has been used to determine the extent to which private sector petroleum stocks can be expected to protect the U.S. from the impacts of oil import interruptions.

Before entering consulting, Mr. Kahal held faculty positions with the Department of Economics at the University of Maryland and with Montgomery College teaching courses on economic principles, business and economic development.

Publications and Consulting Reports:

Projected Electric Power Demands of the Baltimore Gas and Electric Company, Maryland Power Plant Siting Program, 1979.

Projected Electric Power Demands of the Allegheny Power System, Maryland Power Plant Siting Program, January 1980.

An Econometric Forecast of Electric Energy and Peak Demand on the Delmarva Peninsula, Maryland Power Plant Siting Program, March 1980 (with Ralph E. Miller).

A Benefit/Cost Methodology of the Marginal Cost Pricing of Tennessee Valley Authority Electricity, prepared for the Board of Directors of the Tennessee Valley Authority, April 1980.

An Evaluation of the Delmarva Power and Light Company Generating Capacity Profile and Expansion Plan, (Interim Report), prepared for the Delaware Office of the Public Advocate, July 1980, (with Sharon L. Mason).

Rhode Island-DOE Electric Utilities Demonstration Project, Third Interim Report on Preliminary Analysis of the Experimental Results, prepared for the Economic Regulatory Administration, U.S. Department of Energy, July 1980.

Petroleum Inventories and the Strategic Petroleum Reserve, The Aerospace Corporation, prepared for the Strategic Petroleum Reserve Office, U.S. Department of Energy, December 1980.

Alternatives to Central Station Coal and Nuclear Power Generation, prepared for Argonne National Laboratory and the Office of Utility Systems, U.S. Department of Energy, August 1981.

"An Econometric Methodology for Forecasting Power Demands," Conducting Need-for-Power Review for Nuclear Power Plants (D.A. Nash, ed.), U.S. Nuclear Regulatory Commission, NUREG-0942, December 1982.

State Regulatory Attitudes Toward Fuel Expense Issues, prepared for the Electric Power Research Institute, July 1983, (with Dale E. Swan).

"Problems in the Use of Econometric Methods in Load Forecasting," Adjusting to Regulatory, Pricing and Marketing Realities (Harry Trebing, ed.), Institute of Public Utilities, Michigan State University, 1983.

Proceedings of the Maryland Conference on Electric Load Forecasting, (editor and contributing author), Maryland Power Plant Siting Program, PPES-83-4, October 1983.

"The Impacts of Utility-Sponsored Weatherization Programs: The Case of Maryland Utilities," (with others), in Government and Energy Policy (Richard L. Itteilag, ed.), 1983.

Power Plant Cumulative Environmental Impact Report, contributing author, (Paul E. Miller, ed.) Maryland Department of Natural Resources, January 1984.

Projected Electric Power Demands for the Potomac Electric Power Company, three volumes with Steven L. Estomin), prepared for the Maryland Power Plant Siting Program, March 1984.

"An Assessment of the State-of-the-Art of Gas Utility Load Forecasting," (with Thomas Bacon, Jr. and Steven L. Estomin), published in the Proceedings of the Fourth NARUC Biennial Regulatory Information Conference, 1984.

"Nuclear Power and Investor Perceptions of Risk," (with Ralph E. Miller), published in The Energy Industries in Transition: 1985-2000 (John P. Weyant and Dorothy Sheffield, eds.), 1984.

The Financial Impact of Potential Department of Energy Rate Recommendations on the Commonwealth Edison Company, prepared for the U.S. Department of Energy, October 1984.

"Discussion Comments," published in Impact of Deregulation and Market Forces on Public Utilities: The Future of Regulation (Harry Trebing, ed.), Institute of Public Utilities, Michigan State University, 1985.

An Econometric Forecast of the Electric Power Loads of Baltimore Gas and Electric Company, two volumes (with others), prepared for the Maryland Power Plant Siting Program, 1985.

A Survey and Evaluation of Demand Forecast Methods in the Gas Utility Industry, prepared for the Public Utilities Commission of Ohio, Forecasting Division, November 1985, (with Terence Manuel).

A Review and Evaluation of the Load Forecasts of Houston Lighting & Power Company and Central Power & Light Company -- Past and Present, prepared for the Texas Public Utility Commission, December 1985, (with Marvin H. Kahn).

Power Plant Cumulative Environmental Impact Report for Maryland, principal author of three of the eight chapters in the report (Paul E. Miller, ed.), PPSP-CEIR-5, March 1986.

"Potential Emissions Reduction from Conservation, Load Management, and Alternative Power," published in Acid Deposition in Maryland: A Report to the Governor and General Assembly, Maryland Power Plant Research Program, AD-87-1, January 1987.

Determination of Retrofit Costs at the Oyster Creek Nuclear Generating Station, March 1988, prepared for Versar, Inc., New Jersey Department of Environmental Protection.

Excess Deferred Taxes and the Telephone Utility Industry, April 1988, prepared on behalf of the National Association of State Utility Consumer Advocates.

Toward a Proposed Federal Policy for Independent Power Producers, comments prepared on behalf of the Indiana Consumer Counselor, FERC Docket EL87-67-000, November 1987.

Review and Discussion of Regulations Governing Bidding Programs, prepared for the Pennsylvania Office of Consumer Advocate, June 1988.

A Review of the Proposed Revisions to the FERC Administrative Rules on Avoided Costs and Related Issues, prepared for the Pennsylvania Office of Consumer Advocate, April 1988.

Review and Comments on the FERC NOPR Concerning Independent Power Producers, prepared for the Pennsylvania Office of Consumer Advocate, June 1988.

The Costs to Maryland Utilities and Ratepayers of an Acid Rain Control Strategy -- An Updated Analysis, prepared for the Maryland Power Plant Research Program, October 1987, AD-88-4.

"Comments," in New Regulatory and Management Strategies in a Changing Market Environment (Harry M. Trebing and Patrick C. Mann, editors), Proceedings of the Institute of Public Utilities Eighteenth Annual Conference, 1987.

Electric Power Resource Planning for the Potomac Electric Power Company, prepared for the Maryland Power Plant Research Program, July 1988.

Power Plant Cumulative Environmental Impact Report for Maryland (Thomas E. Magette, ed.) authored two chapters, November 1988, PPRP-CEIR-6.

Resource Planning and Competitive Bidding for Delmarva Power & Light Company, October 1990, prepared for the Maryland Department of Natural Resources (with M. Fullenbaum).

Electric Power Rate Increases and the Cleveland Area Economy, prepared for the Northeast Ohio Areawide Coordinating Agency, October 1988.

An Economic and Need for Power Evaluation of Baltimore Gas & Electric Company's Perryman Plant, May 1991, prepared for the Maryland Department of Natural Resources (with M. Fullenbaum).

The Cost of Equity Capital for the Bell Local Exchange Companies in a New Era of Regulation, October 1991, presented at the Atlantic Economic Society 32nd Conference, Washington, D.C.

A Need for Power Review of Delmarva Power & Light Company's Dorchester Unit 1 Power Plant, March 1993, prepared for the Maryland Department of Natural Resources (with M. Fullenbaum)

The AES Warrior Run Project: Impact on Western Maryland Economic Activity and Electric Rates, February 1993, prepared for the Maryland Power Plant Research Program (with Peter Hall).

An Economic Perspective on Competition and the Electric Utility Industry, November 1994. Prepared for the Electric Consumers' Alliance.

PEPCO's Clean Air Act Compliance Plan: Status Report, prepared for the Maryland Power Plant Research Plan, January 1995 (w/Diane Mountain, Environmental Resources Management, Inc.).

The FERC Open Access Rulemaking: A Review of the Issues, prepared for the Indiana Office of Utility Consumer Counselor and the Pennsylvania Office of Consumer Advocate, June 1995.

A Status Report on Electric Utility Restructuring: Issues for Maryland, prepared for the Maryland Power Plant Research Program, November 1995 (with Daphne Psacharopoulos).

Modeling the Financial Impacts on the Bell Regional Holding Companies from Changes in Access Rates, prepared for MCI Corporation, May 1996.

The CSEF Electric Deregulation Study: Economic Miracle or the Economists' Cold Fusion?, prepared for the Electric Consumers' Alliance, Indianapolis, Indiana, October 1996.

Reducing Rates for Interstate Access Service: Financial Impacts on the Bell Regional Holding Companies, prepared for MCI Corporation, May 1997.

The New Hampshire Retail Competition Pilot Program: A Preliminary Evaluation, July 1997, prepared for the Electric Consumers' Alliance (with Jerome D. Mierzwa).

Electric Restructuring and the Environment: Issue Identification for Maryland, March 1997, prepared for the Maryland Power Plant Research Program (with Environmental Resource Management, Inc.)

An Analysis of Electric Utility Embedded Power Supply Costs, prepared for Power-Gen International Conference, Dallas, Texas, December 1997.

Market Power Outlook for Generation Supply in Louisiana, December 2000, prepared for the Louisiana Public Service Commission (with others).

A Review of Issues Concerning Electric Power Capacity Markets, prepared for the Maryland Power Plant Research Program, December 2001 (with B. Hobbs and J. Inon).

The Economic Feasibility of Air Emissions Controls at the Brandon Shores and Morgantown Coal-fired Power Plants, February 2005, (prepared for the Chesapeake Bay Foundation).

The Economic Feasibility of Power Plant Retirements on the Entergy System, September 2005 with Phil Hayet (prepared for the Louisiana Public Service Commission).

Expert Report on Capital Structure, Equity and Debt Costs, prepared for the Edmonton Regional Water Customers Group, August 30, 2006.

Maryland's Options to Reduce and Stabilize Electric Power Prices Following Restructuring, with Steven L. Estomin, prepared for the Power Plant Research Program, Maryland Department of Natural Resources, September 2006.

Conference and Workshop Presentations:

Workshop on State Load Forecasting Programs, sponsored by the Nuclear Regulatory Commission and Oak Ridge National Laboratory, February 1982 (presentation on forecasting methodology).

Fourteenth Annual Conference of the Michigan State University Institute for Public Utilities, December 1982 (presentation on problems in forecasting).

Conference on Conservation and Load Management, sponsored by the Massachusetts Energy Facilities Siting Council, May 1983 (presentation on cost-benefit criteria).

Maryland Conference on Load Forecasting, sponsored by the Maryland Power Plant Siting Program and the Maryland Public Service Commission, June 1983 (presentation on overforecasting power demands).

The 5th Annual Meetings of the International Association of Energy Economists, June 1983 (presentation on evaluating weatherization programs).

The NARUC Advanced Regulatory Studies Program (presented lectures on capacity planning for electric utilities), February 1984.

The 16th Annual Conference of the Institute of Public Utilities, Michigan State University (discussant on phase-in and excess capacity), December 1984.

U.S. Department of Energy Utilities Conference, Las Vegas, Nevada (presentation of current and future regulatory issues), May 1985.

The 18th Annual Conference of the Institute of Public Utilities, Michigan State University, Williamsburg, Virginia, December 1986 (discussant on cogeneration).

The NRECA Conference on Load Forecasting, sponsored by the National Rural Electric Cooperative Association, New Orleans, Louisiana, December 1987 (presentation on load forecast accuracy).

The Second Rutgers/New Jersey Department of Commerce Annual Conference on Energy Policy in the Middle Atlantic States, Rutgers University, April 1988 (presentation on spot pricing of electricity).

The NASUCA 1988 Mid-Year Meeting, Annapolis, Maryland, June 1988, sponsored by the National Association of State Utility Consumer Advocates (presentation on the FERC electricity avoided cost NOPRs).

The Thirty Second Atlantic Economic Society Conference, Washington, D.C., October 1991 (presentation of a paper on cost of capital issues for the Bell Operating Companies).

The NASUCA 1993 Mid-Year Meeting, St. Louis, Missouri, sponsored by the National Association of State Utility Consumer Advocates, June 1993 (presentation on regulatory issues concerning electric utility mergers).

The NASUCA and NARUC annual meetings in New York City, November 1993 (presentations and panel discussions on the emerging FERC policies on transmission pricing).

The NASUCA annual meetings in Reno, Nevada, November 1994 (presentation concerning the FERC NOPR on stranded cost recovery).

U.S. Department of Energy Utilities/Energy Management Workshop, March 1995 (presentation concerning electric utility competition).

The 1995 NASUCA Mid-Year Meeting, Breckenridge, Colorado, June 1995, (presentation concerning the FERC rulemaking on electric transmission open access).

The 1996 NASUCA Mid-Year Meeting, Chicago, Illinois, June 1996 (presentation concerning electric utility merger issues).

Conference on “Restructuring the Electric Industry,” sponsored by the National Consumers League and Electric Consumers Alliance, Washington, D.C., May 1997 (presentation on retail access pilot programs).

The 1997 Mid-Atlantic Conference of Regulatory Utilities Commissioners (MARUC), Hot Springs, Virginia, July 1997 (presentation concerning electric deregulation issues).

Power-Gen ‘97 International Conference, Dallas, Texas, December 1997 (presentation concerning utility embedded costs of generation supply).

Consumer Summit on Electric Competition, sponsored by the National Consumers League and Electric Consumers’ Alliance, Washington, D.C., March 2001 (presentation concerning generation supply and reliability).

National Association of State Utility Consumer Advocates, Mid-Year Meetings, Austin, Texas, June 16-17, 2002 (presenter and panelist on RTO/Standard Market Design issues).

Louisiana State Bar Association, Public Utility Section, October 2, 2002. (Presentation on Performance-Based Ratemaking and panelist on RTO issues). Baton Rouge, Louisiana.

Virginia State Corporation Commission/Virginia State Bar, Twenty Second National Regulatory Conference, May 10, 2004. (Presentation on Electric Transmission System Planning.) Williamsburg, Virginia.

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
1. 27374 & 27375 October 1978	Long Island Lighting Company	New York Counties	Nassau & Suffolk	Economic Impacts of Proposed Rate Increase
2. 6807 January 1978	Generic	Maryland	MD Power Plant Siting Program	Load Forecasting
3. 78-676-EL-AIR February 1978	Ohio Power Company	Ohio	Ohio Consumers' Counsel	Test Year Sales and Revenues
4. 17667 May 1979	Alabama Power Company	Alabama	Attorney General	Test Year Sales, Revenues, Costs and Load Forecasts
5. None April 1980	Tennessee Valley Authority	TVA Board	League of Women Voters	Time-of-Use Pricing
6. R-80021082	West Penn Power Company	Pennsylvania	Office of Consumer Advocate	Load Forecasting, Marginal Cost pricing
7. 7259 (Phase I) October 1980	Potomac Edison Company	Maryland	MD Power Plant Siting Program	Load Forecasting
8. 7222 December 1980	Delmarva Power & Light Company	Maryland	MD Power Plant Siting Program	Need for Plant, Load Forecasting
9. 7441 June 1981	Potomac Electric Power Company	Maryland	Commission Staff	PURPA Standards
10. 7159 May 1980	Baltimore Gas & Electric	Maryland	Commission Staff	Time-of-Use Pricing
11. 81-044-E-42T	Monongahela Power	West Virginia	Commission Staff	Time-of-Use Rates
12. 7259 (Phase II) November 1981	Potomac Edison Company	Maryland	MD Power Plant Siting Program	Load Forecasting, Load Management
13. 1606 September 1981	Blackstone Valley Electric and Narragansett	Rhode Island	Division of Public Utilities	PURPA Standards
14. RID 1819 April 1982	Pennsylvania Bell	Pennsylvania	Office of Consumer Advocate	Rate of Return
15. 82-0152 July 1982	Illinois Power Company	Illinois	U.S. Department of Defense	Rate of Return, CWIP

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16.	7559 September 1982	Potomac Edison Company	Maryland	Commission Staff	Cogeneration
17.	820150-EU September 1982	Gulf Power Company	Florida	Federal Executive Agencies	Rate of Return, CWIP
18.	82-057-15 January 1983	Mountain Fuel Supply Company	Utah	Federal Executive Agencies	Rate of Return, Capital Structure
19.	5200 August 1983	Texas Electric Service Company	Texas	Federal Executive Agencies	Cost of Equity
20.	28069 August 1983	Oklahoma Natural Gas	Oklahoma	Federal Executive Agencies	Rate of Return, deferred taxes, capital structure, attrition
21.	83-0537 February 1984	Commonwealth Edison Company	Illinois	U.S. Department of Energy	Rate of Return, capital structure, financial capability
22.	84-035-01 June 1984	Utah Power & Light Company	Utah	Federal Executive Agencies	Rate of Return
23.	U-1009-137 July 1984	Utah Power & Light Company	Idaho	U.S. Department of Energy	Rate of Return, financial condition
24.	R-842590 August 1984	Philadelphia Electric Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
25.	840086-EI August 1984	Gulf Power Company	Florida	Federal Executive Agencies	Rate of Return, CWIP
26.	84-122-E August 1984	Carolina Power & Light Company	South Carolina	South Carolina Consumer Advocate	Rate of Return, CWIP, load forecasting
27.	CGC-83-G & CGC-84-G October 1984	Columbia Gas of Ohio	Ohio	Ohio Division of Energy	Load forecasting
28.	R-842621 October 1984	Western Pennsylvania Water Company	Pennsylvania	Office of Consumer Advocate	Test year sales
29.	R-842710 January 1985	ALLTEL Pennsylvania Inc.	Pennsylvania	Office of Consumer Advocate	Rate of Return

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30.	ER-504 February 1985	Allegheny Generating Company	FERC	Office of Consumer Advocate	Rate of Return
31.	R-842632 March 1985	West Penn Power Company	Pennsylvania	Office of Consumer Advocate	Rate of Return, conservation, time-of-use rates
32.	83-0537 & 84-0555 April 1985	Commonwealth Edison Company	Illinois	U.S. Department of Energy	Rate of Return, incentive rates, rate base
33.	Rulemaking Docket No. 11, May 1985	Generic	Delaware	Delaware Commission Staff	Interest rates on refunds
34.	29450 July 1985	Oklahoma Gas & Electric Company	Oklahoma	Oklahoma Attorney General	Rate of Return, CWIP in rate base
35.	1811 August 1985	Bristol County Water Company	Rhode Island	Division of Public Utilities	Rate of Return, capital Structure
36.	R-850044 & R-850045 August 1985	Quaker State & Continental Telephone Companies	Pennsylvania	Office of Consumer Advocate	Rate of Return
37.	R-850174 November 1985	Philadelphia Suburban Water Company	Pennsylvania	Office of Consumer Advocate	Rate of Return, financial conditions
38.	U-1006-265 March 1986	Idaho Power Company	Idaho	U.S. Department of Energy	Power supply costs and models
39.	EL-86-37 & EL-86-38 September 1986	Allegheny Generating Company	FERC	PA Office of Consumer Advocate	Rate of Return
40.	R-850287 June 1986	National Fuel Gas Distribution Corp.	Pennsylvania	Office of Consumer Advocate	Rate of Return
41.	1849 August 1986	Blackstone Valley Electric	Rhode Island	Division of Public Utilities	Rate of Return, financial condition
42.	86-297-GA-AIR November 1986	East Ohio Gas Company	Ohio	Ohio Consumers' Counsel	Rate of Return
43.	U-16945 December 1986	Louisiana Power & Light Company	Louisiana	Public Service Commission	Rate of Return, rate phase-in plan

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
44. Case No. 7972 February 1987	Potomac Electric Power Company	Maryland	Commission Staff	Generation capacity planning, purchased power contract
45. EL-86-58 & EL-86-59 March 1987	System Energy Resources and Middle South Services	FERC	Louisiana PSC	Rate of Return
46. ER-87-72-001 April 1987	Orange & Rockland	FERC	PA Office of Consumer Advocate	Rate of Return
47. U-16945 April 1987	Louisiana Power & Light Company	Louisiana	Commission Staff	Revenue requirement update phase-in plan
48. P-870196 May 1987	Pennsylvania Electric Company	Pennsylvania	Office of Consumer Advocate	Cogeneration contract
49. 86-2025-EL-AIR June 1987	Cleveland Electric Illuminating Company	Ohio	Ohio Consumers' Counsel	Rate of Return
50. 86-2026-EL-AIR June 1987	Toledo Edison Company	Ohio	Ohio Consumers' Counsel	Rate of Return
51. 87-4 June 1987	Delmarva Power & Light Company	Delaware	Commission Staff	Cogeneration/small power
52. 1872 July 1987	Newport Electric Company	Rhode Island	Commission Staff	Rate of Return
53. WO 8606654 July 1987	Atlantic City Sewerage Company	New Jersey	Resorts International	Financial condition
54. 7510 August 1987	West Texas Utilities Company	Texas	Federal Executive Agencies	Rate of Return, phase-in
55. 8063 Phase I October 1987	Potomac Electric Power Company	Maryland	Power Plant Research Program	Economics of power plant site selection
56. 00439 November 1987	Oklahoma Gas & Electric Company	Oklahoma	Smith Cogeneration	Cogeneration economics
57. RP-87-103 February 1988	Panhandle Eastern Pipe Line Company	FERC	Indiana Utility Consumer Counselor	Rate of Return

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
58. EC-88-2-000 February 1988	Utah Power & Light Co. PacifiCorp	FERC	Nucor Steel	Merger economics
59. 87-0427 February 1988	Commonwealth Edison Company	Illinois	Federal Executive Agencies	Financial projections
60. 870840 February 1988	Philadelphia Suburban Water Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
61. 870832 March 1988	Columbia Gas of Pennsylvania	Pennsylvania	Office of Consumer Advocate	Rate of Return
62. 8063 Phase II July 1988	Potomac Electric Power Company	Maryland	Power Plant Research Program	Power supply study
63. 8102 July 1988	Southern Maryland Electric Cooperative	Maryland	Power Plant Research Program	Power supply study
64. 10105 August 1988	South Central Bell Telephone Co.	Kentucky	Attorney General	Rate of Return, incentive regulation
65. 00345 August 1988	Oklahoma Gas & Electric Company	Oklahoma	Smith Cogeneration	Need for power
66. U-17906 September 1988	Louisiana Power & Light Company	Louisiana	Commission Staff	Rate of Return, nuclear power costs Industrial contracts
67. 88-170-EL-AIR October 1988	Cleveland Electric Illuminating Co.	Ohio	Northeast-Ohio Areawide Coordinating Agency	Economic impact study
68. 1914 December 1988	Providence Gas Company	Rhode Island	Commission Staff	Rate of Return
69. U-12636 & U-17649 February 1989	Louisiana Power & Light Company	Louisiana	Commission Staff	Disposition of litigation proceeds
70. 00345 February 1989	Oklahoma Gas & Electric Company	Oklahoma	Smith Cogeneration	Load forecasting
71. RP88-209 March 1989	Natural Gas Pipeline of America	FERC	Indiana Utility Consumer Counselor	Rate of Return

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72.	8425 March 1989	Houston Lighting & Power Company	Texas	U.S. Department of Energy	Rate of Return
73.	EL89-30-000 April 1989	Central Illinois Public Service Company	FERC	Soyland Power Coop, Inc.	Rate of Return
74.	R-891208 May 1989	Pennsylvania American Water Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
75.	89-0033 May 1989	Illinois Bell Telephone Company	Illinois	Citizens Utility Board	Rate of Return
76.	881167-EI May 1989	Gulf Power Company	Florida	Federal Executive Agencies	Rate of Return
77.	R-891218 July 1989	National Fuel Gas Distribution Company	Pennsylvania	Office of Consumer Advocate	Sales forecasting
78.	8063, Phase III Sept. 1989	Potomac Electric Power Company	Maryland	Depart. Natural Resources	Emissions Controls
79.	37414-S2 October 1989	Public Service Company of Indiana	Indiana	Utility Consumer Counselor	Rate of Return, DSM, off- system sales, incentive regulation
80.	October 1989	Generic	U.S. House of Reps. Comm. on Ways & Means	NA	Excess deferred income tax
81.	38728 November 1989	Indiana Michigan Power Company	Indiana	Utility Consumer Counselor	Rate of Return
82.	RP89-49-000 December 1989	National Fuel Gas Supply Corporation	FERC	PA Office of Consumer Advocate	Rate of Return
83.	R-891364 December 1989	Philadelphia Electric Company	Pennsylvania	PA Office of Consumer Advocate	Financial impacts (surrebuttal only)
84.	RP89-160-000 January 1990	Trunkline Gas Company	FERC	Indiana Utility Consumer Counselor	Rate of Return
85.	EL90-16-000 November 1990	System Energy Resources, Inc.	FERC	Louisiana Public Service Commission	Rate of Return

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86.	89-624 March 1990	Bell Atlantic	FCC	PA Office of Consumer Advocate	Rate of Return
87.	8245 March 1990	Potomac Edison Company	Maryland	Depart. Natural Resources	Avoided Cost
88.	000586 March 1990	Public Service Company of Oklahoma	Oklahoma	Smith Cogeneration Mgmt.	Need for Power
89.	38868 March 1990	Indianapolis Water Company	Indiana	Utility Consumer Counselor	Rate of Return
90.	1946 March 1990	Blackstone Valley Electric Company	Rhode Island	Division of Public Utilities	Rate of Return
91.	000776 April 1990	Oklahoma Gas & Electric Company	Oklahoma	Smith Cogeneration Mgmt.	Need for Power
92.	890366 May 1990, December 1990	Metropolitan Edison Company	Pennsylvania	Office of Consumer Advocate	Competitive Bidding Program Avoided Costs
93.	EC-90-10-000 May 1990	Northeast Utilities	FERC	Maine PUC, <u>et. al.</u>	Merger, Market Power, Transmission Access
94.	ER-891109125 July 1990	Jersey Central Power & Light	New Jersey	Rate Counsel	Rate of Return
95.	R-901670 July 1990	National Fuel Gas Distribution Corp.	Pennsylvania	Office of Consumer Advocate	Rate of Return Test year sales
96.	8201 October 1990	Delmarva Power & Light Company	Maryland	Depart. Natural Resources	Competitive Bidding, Resource Planning
97.	EL90-45-000 April 1991	Entergy Services, Inc.	FERC	Louisiana PSC	Rate of Return
98.	GR90080786J January 1991	New Jersey Natural Gas	New Jersey	Rate Counsel	Rate of Return

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99.	90-256 January 1991	South Central Bell Telephone Company	Kentucky	Attorney General	Rate of Return
100.	U-17949A February 1991	South Central Bell Telephone Company	Louisiana	Louisiana PSC	Rate of Return
101.	ER90091090J April 1991	Atlantic City Electric Company	New Jersey	Rate Counsel	Rate of Return
102.	8241, Phase I April 1991	Baltimore Gas & Electric Company	Maryland	Dept. of Natural Resources	Environmental controls
103.	8241, Phase II May 1991	Baltimore Gas & Electric Company	Maryland	Dept. of Natural Resources	Need for Power, Resource Planning
104.	39128 May 1991	Indianapolis Water Company	Indiana	Utility Consumer Counselor	Rate of Return, rate base, financial planning
105.	P-900485 May 1991	Duquesne Light Company	Pennsylvania	Office of Consumer Advocate	Purchased power contract and related ratemaking
106.	G900240 P910502 May 1991	Metropolitan Edison Company Pennsylvania Electric Company	Pennsylvania	Office of Consumer Advocate	Purchased power contract and related ratemaking
107.	GR901213915 May 1991	Elizabethtown Gas Company	New Jersey	Rate Counsel	Rate of Return
108.	91-5032 August 1991	Nevada Power Company	Nevada	U.S. Dept. of Energy	Rate of Return
109.	EL90-48-000 November 1991	Entergy Services	FERC	Louisiana PSC	Capacity transfer
110.	000662 September 1991	Southwestern Bell Telephone	Oklahoma	Attorney General	Rate of Return
111.	U-19236 October 1991	Arkansas Louisiana Gas Company	Louisiana	Louisiana PSC Staff	Rate of Return
112.	U-19237 December 1991	Louisiana Gas Service Company	Louisiana	Louisiana PSC Staff	Rate of Return

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
113. ER91030356J October 1991	Rockland Electric Company	New Jersey	Rate Counsel	Rate of Return
114. GR91071243J February 1992	South Jersey Gas Company	New Jersey	Rate Counsel	Rate of Return
115. GR91081393J March 1992	New Jersey Natural Gas Company	New Jersey	Rate Counsel	Rate of Return
116. P-870235 <u>et al.</u> March 1992	Pennsylvania Electric Company	Pennsylvania	Office of Consumer Advocate	Cogeneration contracts
117. 8413 March 1992	Potomac Electric Power Company	Maryland	Dept. of Natural Resources	IPP purchased power contracts
118. 39236 March 1992	Indianapolis Power & Light Company	Indiana	Utility Consumer Counselor	Least-cost planning Need for power
119. R-912164 April 1992	Equitable Gas Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
120. ER-91111698J May 1992	Public Service Electric & Gas Company	New Jersey	Rate Counsel	Rate of Return
121. U-19631 June 1992	Trans Louisiana Gas Company	Louisiana	PSC Staff	Rate of Return
122. ER-91121820J July 1992	Jersey Central Power & Light Company	New Jersey	Rate Counsel	Rate of Return
123. R-00922314 August 1992	Metropolitan Edison Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
124. 92-049-05 September 1992	US West Communications	Utah	Committee of Consumer Services	Rate of Return
125. 92PUE0037 September 1992	Commonwealth Gas Company	Virginia	Attorney General	Rate of Return

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
126. EC92-21-000 September 1992	Entergy Services, Inc.	FERC	Louisiana PSC	Merger Impacts (Affidavit)
127. ER92-341-000 December 1992	System Energy Resources	FERC	Louisiana PSC	Rate of Return
128. U-19904 November 1992	Louisiana Power & Light Company	Louisiana	Staff	Merger analysis, competition competition issues
129. 8473 November 1992	Baltimore Gas & Electric Company	Maryland	Dept. of Natural Resources	QF contract evaluation
130. IPC-E-92-25 January 1993	Idaho Power Company	Idaho	Federal Executive Agencies	Power Supply Clause
131. E002/GR-92-1185 February 1993	Northern States Power Company	Minnesota	Attorney General	Rate of Return
132. 92-102, Phase II March 1992	Central Maine Power Company	Maine	Staff	QF contracts prudence and procurements practices
133. EC92-21-000 March 1993	Entergy Corporation	FERC	Louisiana PSC	Merger Issues
134. 8489 March 1993	Delmarva Power & Light Company	Maryland	Dept. of Natural Resources	Power Plant Certification
135. 11735 April 1993	Texas Electric Utilities Company	Texas	Federal Executives Agencies	Rate of Return
136. 2082 May 1993	Providence Gas Company	Rhode Island	Division of Public Utilities	Rate of Return
137. P-00930715 December 1993	Bell Telephone Company of Pennsylvania	Pennsylvania	Office of Consumer Advocate	Rate of Return, Financial Projections, Bell/TCI merger
138. R-00932670 February 1994	Pennsylvania-American Water Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
139. 8583 February 1994	Conowingo Power Company	Maryland	Dept. of Natural Resources	Competitive Bidding for Power Supplies

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
140. E-015/GR-94-001 April 1994	Minnesota Power & Light Company	Minnesota	Attorney General	Rate of Return
141. CC Docket No. 94-1 May 1994	Generic Telephone	FCC	MCI Comm. Corp.	Rate of Return
142. 92-345, Phase II June 1994	Central Maine Power Company	Maine	Advocacy Staff	Price Cap Regulation Fuel Costs
143. 93-11065 April 1994	Nevada Power Company	Nevada	Federal Executive Agencies	Rate of Return
144. 94-0065 May 1994	Commonwealth Edison Company	Illinois	Federal Executive Agencies	Rate of Return
145. GR94010002J June 1994	South Jersey Gas Company	New Jersey	Rate Counsel	Rate of Return
146. WR94030059 July 1994	New Jersey-American Water Company	New Jersey	Rate Counsel	Rate of Return
147. RP91-203-000 June 1994	Tennessee Gas Pipeline Company	FERC	Customer Group	Environmental Externalities (oral testimony only)
148. ER94-998-000 July 1994	Ocean State Power	FERC	Boston Edison Company	Rate of Return
149. R-00942986 July 1994	West Penn Power Company	Pennsylvania	Office of Consumer Advocate	Rate of Return, Emission Allowances
150. 94-121 August 1994	South Central Bell Telephone Company	Kentucky	Attorney General	Rate of Return
151. 35854-S2 November 1994	PSI Energy, Inc.	Indiana	Utility Consumer Counsel	Merger Savings and Allocations
152. IPC-E-94-5 November 1994	Idaho Power Company	Idaho	Federal Executive Agencies	Rate of Return
153. November 1994	Edmonton Water	Alberta, Canada	Regional Customer Group	Rate of Return (Rebuttal Only)

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	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
154.	90-256 December 1994	South Central Bell Telephone Company	Kentucky	Attorney General	Incentive Plan True-Ups
155.	U-20925 February 1995	Louisiana Power & Light Company	Louisiana	PSC Staff	Rate of Return Industrial Contracts Trust Fund Earnings
156.	R-00943231 February 1995	Pennsylvania-American Water Company	Pennsylvania	Consumer Advocate	Rate of Return
157.	8678 March 1995	Generic	Maryland	Dept. Natural Resources	Electric Competition Incentive Regulation (oral only)
158.	R-000943271 April 1995	Pennsylvania Power & Light Company	Pennsylvania	Consumer Advocate	Rate of Return Nuclear decommissioning Capacity Issues
159.	U-20925 May 1995	Louisiana Power & Light Company	Louisiana	Commission Staff	Class Cost of Service Issues
160.	2290 June 1995	Narragansett Electric Company	Rhode Island	Division Staff	Rate of Return
161.	U-17949E June 1995	South Central Bell Telephone Company	Louisiana	Commission Staff	Rate of Return
162.	2304 July 1995	Providence Water Supply Board	Rhode Island	Division Staff	Cost recovery of Capital Spending Program
163.	ER95-625-000 <u>et al.</u> August 1995	PSI Energy, Inc.	FERC	Office of Utility Consumer Counselor	Rate of Return
164.	P-00950915 <u>et al.</u> September 1995	Paxton Creek Cogeneration Assoc.	Pennsylvania	Office of Consumer Advocate	Cogeneration Contract Amendment
165.	8702 September 1995	Potomac Edison Company	Maryland	Dept. of Natural Resources	Allocation of DSM Costs (oral only)
166.	ER95-533-001 September 1995	Ocean State Power	FERC	Boston Edison Co.	Cost of Equity

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167.	40003 November 1995	PSI Energy, Inc.	Indiana	Utility Consumer Counselor	Rate of Return Retail wheeling
168.	P-55, SUB 1013 January 1996	BellSouth	North Carolina	AT&T	Rate of Return
169.	P-7, SUB 825 January 1996	Carolina Tel.	North Carolina	AT&T	Rate of Return
170.	February 1996	Generic Telephone	FCC	MCI	Cost of capital
171.	95A-531EG April 1996	Public Service Company of Colorado	Colorado	Federal Executive Agencies	Merger issues
172.	ER96-399-000 May 1996	Northern Indiana Public Service Company	FERC	Indiana Office of Utility Consumer Counselor	Cost of capital
173.	8716 June 1996	Delmarva Power & Light Company	Maryland	Dept. of Natural Resources	DSM programs
174.	8725 July 1996	BGE/PEPCO	Maryland	Md. Energy Admin.	Merger Issues
175.	U-20925 August 1996	Entergy Louisiana, Inc.	Louisiana	PSC Staff	Rate of Return Allocations Fuel Clause
176.	EC96-10-000 September 1996	BGE/PEPCO	FERC	Md. Energy Admin.	Merger issues competition
177.	EL95-53-000 November 1996	Entergy Services, Inc.	FERC	Louisiana PSC	Nuclear Decommissioning
178.	WR96100768 March 1997	Consumers NJ Water Company	New Jersey	Ratepayer Advocate	Cost of Capital
179.	WR96110818 April 1997	Middlesex Water Co.	New Jersey	Ratepayer Advocate	Cost of Capital
180.	U-11366 April 1997	Ameritech Michigan	Michigan	MCI	Access charge reform/financial condition

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	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
181.	97-074 May 1997	BellSouth	Kentucky	MCI	Rate Rebalancing financial condition
182.	2540 June 1997	New England Power	Rhode Island	PUC Staff	Divestiture Plan
183.	96-336-TP-CSS June 1997	Ameritech Ohio	Ohio	MCI	Access Charge reform Economic impacts
184.	WR97010052 July 1997	Maxim Sewerage Corp.	New Jersey	Ratepayer Advocate	Rate of Return
185.	97-300 August 1997	LG&E/KU	Kentucky	Attorney General	Merger Plan
186.	Case No. 8738 August 1997	Generic (oral testimony only)	Maryland	Dept. of Natural Resources	Electric Restructuring Policy
187.	Docket No. 2592 September 1997	Eastern Utilities	Rhode Island	PUC Staff	Generation Divestiture
188.	Case No. .97-247 September 1997	Cincinnati Bell Telephone	Kentucky	MCI	Financial Condition
189.	Docket No. U-20925 November 1997	Entergy Louisiana	Louisiana	PSC Staff	Rate of Return
190.	Docket No. D97.7.90 November 1997	Montana Power Co.	Montana	Montana Consumers Counsel	Stranded Cost
191.	Docket No. EO97070459 November 1997	Jersey Central Power & Light Co.	New Jersey	Ratepayer Advocate	Stranded Cost
192.	Docket No. R-00974104 November 1997	Duquesne Light Co.	Pennsylvania	Office of Consumer Advocate	Stranded Cost
193.	Docket No. R-00973981 November 1997	West Penn Power Co.	Pennsylvania	Office of Consumer Advocate	Stranded Cost
194.	Docket No. A-1101150F0015 November 1997	Allegheny Power System DQE, Inc.	Pennsylvania	Office of Consumer Advocate	Merger Issues

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
195. Docket No. WR97080615 January 1998	Consumers NJ Water Company	New Jersey	Ratepayer Advocate	Rate of Return
196. Docket No. R-00974149 January 1998	Pennsylvania Power Company	Pennsylvania	Office of Consumer Advocate	Stranded Cost
197. Case No. 8774 January 1998	Allegheny Power System DQE, Inc.	Maryland	Dept. of Natural Resources MD Energy Administration	Merger Issues
198. Docket No. U-20925 (SC) March 1998	Entergy Louisiana, Inc.	Louisiana	Commission Staff	Restructuring, Stranded Costs, Market Prices
199. Docket No. U-22092 (SC) March 1998	Entergy Gulf States, Inc.	Louisiana	Commission Staff	Restructuring, Stranded Costs, Market Prices
200. Docket Nos. U-22092 (SC) and U-20925(SC) May 1998	Entergy Gulf States and Entergy Louisiana	Louisiana	Commission Staff	Standby Rates
201. Docket No. WR98010015 May 1998	NJ American Water Co.	New Jersey	Ratepayer Advocate	Rate of Return
202. Case No. 8794 December 1998	Baltimore Gas & Electric Co.	Maryland	MD Energy Admin./Dept. Of Natural Resources	Stranded Cost/ Transition Plan
203. Case No. 8795 December 1998	Delmarva Power & Light Co.	Maryland	MD Energy Admin./Dept. Of Natural Resources	Stranded Cost/ Transition Plan
204. Case No. 8797 January 1998	Potomac Edison Co.	Maryland	MD Energy Admin./Dept. Of Natural Resources	Stranded Cost/ Transition Plan
205. Docket No. WR98090795 March 1999	Middlesex Water Co.	New Jersey	Ratepayer Advocate	Rate of Return
206. Docket No. 99-02-05 April 1999	Connecticut Light & Power	Connecticut	Attorney General	Stranded Costs
207. Docket No. 99-03-04 May 1999	United Illuminating Company	Connecticut	Attorney General	Stranded Costs

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
208. Docket No. U-20925 (FRP) June 1999	Entergy Louisiana, Inc.	Louisiana	Staff	Capital Structure
209. Docket No. EC-98-40-000, <u>et al.</u> May 1999	American Electric Power/ Central & Southwest	FERC	Arkansas PSC	Market Power Mitigation
210. Docket No. 99-03-35 July 1999	United Illuminating Company	Connecticut	Attorney General	Restructuring
211. Docket No. 99-03-36 July 1999	Connecticut Light & Power Co.	Connecticut	Attorney General	Restructuring
212. WR99040249 Oct. 1999	Environmental Disposal Corp.	New Jersey	Ratepayer Advocate	Rate of Return
213. 2930 Nov. 1999	NEES/EUA	Rhode Island	Division Staff	Merger/Cost of Capital
214. DE99-099 Nov. 1999	Public Service New Hampshire	New Hampshire	Consumer Advocate	Cost of Capital Issues
215. 00-01-11 Feb. 2000	Con Ed/NU	Connecticut	Attorney General	Merger Issues
216. Case No. 8821 May 2000	Reliant/ODEC	Maryland	Dept. of Natural Resources	Need for Power/Plant Operations
217. Case No. 8738 July 2000	Generic	Maryland	Dept. of Natural Resources	DSM Funding
218. Case No. U-23356 June 2000	Entergy Louisiana, Inc.	Louisiana	PSC Staff	Fuel Prudence Issues Purchased Power
219. Case No. 21453, <u>et al</u> July 2000	SWEPSCO	Louisiana	PSC Staff	Stranded Costs
220. Case No. 20925 (B) July 2000	Entergy Louisiana	Louisiana	PSC Staff	Purchase Power Contracts
221. Case No. 24889 August 2000	Entergy Louisiana	Louisiana	PSC Staff	Purchase Power Contracts

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222. Case No. 21453, et al. February 2001	CLECO	Louisiana	PSC Staff	Stranded Costs
223. P-00001860 and P-0000181 March 2001	GPU Companies	Pennsylvania	Office of Consumer Advocate	Rate of Return
224. CVOL-0505662-S March 2001	ConEd/NU	Connecticut Superior Court	Attorney General	Merger (Affidavit)
225. U-20925 (SC) March 2001	Entergy Louisiana	Louisiana	PSC Staff	Stranded Costs
226. U-22092 (SC) March 2001	Entergy Gulf States	Louisiana	PSC Staff	Stranded Costs
227. U-25533 May 2001	Entergy Louisiana/ Gulf States	Louisiana Interruptible Service	PSC Staff	Purchase Power
228. P-00011872 May 2001	Pike County Pike	Pennsylvania	Office of Consumer Advocate	Rate of Return
229. 8893 July 2001	Baltimore Gas & Electric Co.	Maryland	MD Energy Administration	Corporate Restructuring
230. 8890 September 2001	Potomac Electric/Connectivity	Maryland	MD Energy Administration	Merger Issues
231. U-25533 August 2001	Entergy Louisiana / Gulf States	Louisiana	Staff	Purchase Power Contracts
232. U-25965 November 2001	Generic	Louisiana	Staff	RTO Issues
233. 3401 March 2002	New England Gas Co.	Rhode Island	Division of Public Utilities	Rate of Return
234. 99-833-MJR April 2002	Illinois Power Co.	U.S. District Court	U.S. Department of Justice	New Source Review

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235. U-25533 March 2002	Entergy Louisiana/ Gulf States	Louisiana	PSC Staff	Nuclear Uprates Purchase Power
236. P-00011872 May 2002	Pike County Power & Light	Pennsylvania	Consumer Advocate	POLR Service Costs
237. U-26361, Phase I May 2002	Entergy Louisiana/ Gulf States	Louisiana	PSC Staff	Purchase Power Cost Allocations
238. R-00016849C001 et al. June 2002	Generic	Pennsylvania	Pennsylvania OCA	Rate of Return
239. U-26361, Phase II July 2002	Entergy Louisiana/ Entergy Gulf States	Louisiana	PSC Staff	Purchase Power Contracts
240. U-20925(B) August 2002	Entergy Louisiana	Louisiana	PSC Staff	Tax Issues
241. U-26531 October 2002	SWEPCO	Louisiana	PSC Staff	Purchase Power Contract
242. 8936 October 2002	Delmarva Power & Light	Maryland	Energy Administration Dept. Natural Resources	Standard Offer Service
243. U-25965 November 2002	SWEPCO/AEP	Louisiana	PSC Staff	RTO Cost/Benefit
244. 8908 Phase I November 2002	Generic	Maryland	Energy Administration Dept. Natural Resources	Standard Offer Service
245. 02S-315EG November 2002	Public Service Company of Colorado	Colorado	Fed. Executive Agencies	Rate of Return
246. EL02-111-000 December 2002	PJM/MISO	FERC	MD PSC	Transmission Ratemaking
247. 02-0479 February 2003	Commonwealth Edison	Illinois	Dept. of Energy	POLR Service
248. PL03-1-000 March 2003	Generic	FERC	NASUCA	Transmission Pricing (Affidavit)

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
249. U-27136 April 2003	Entergy Louisiana	Louisiana	Staff	Purchase Power Contracts
250. 8908 Phase II July 2003	Generic	Maryland	Energy Administration Dept. of Natural Resources	Standard Offer Service
251. U-27192 June 2003	Entergy Louisiana and Gulf States	Louisiana	LPSC Staff	Purchase Power Contract Cost Recovery
252. C2-99-1181 October 2003	Ohio Edison Company	U.S. District Court	U.S. Department of Justice, <u>et al.</u>	Clean Air Act Compliance Economic Impact (Report)
253. RP03-398-000 December 2003	Northern Natural Gas Co.	FERC	Municipal Distributors Group/Gas Task Force	Rate of Return
254. 8738 December 2003	Generic	Maryland	Energy Admin Department of Natural Resources	Environmental Disclosure (oral only)
255. U-27136 December 2003	Entergy Louisiana, Inc.	Louisiana	PSC Staff	Purchase Power Contracts
256. U-27192, Phase II October/December 2003	Entergy Louisiana & Entergy Gulf States	Louisiana	PSC Staff	Purchase Power Contracts
257. WC Docket 03-173 December 2003	Generic	FCC	MCI	Cost of Capital (TELRIC)
258. ER 030 20110 January 2004	Atlantic City Electric	New Jersey	Ratepayer Advocate	Rate of Return
259. E-01345A-03-0437 January 2004	Arizona Public Service Company	Arizona	Federal Executive Agencies	Rate of Return
260. 03-10001 January 2004	Nevada Power Company	Nevada	U.S. Dept. of Energy	Rate of Return
261. R-00049255 June 2004	PPL Elec. Utility	Pennsylvania	Office of Consumer Advocate	Rate of Return
262. U-20925 July 2004	Entergy Louisiana, Inc.	Louisiana	PSC Staff	Rate of Return Capacity Resources

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
263. U-27866 September 2004	Southwest Electric Power Co.	Louisiana	PSC Staff	Purchase Power Contract
264. U-27980 September 2004	Cleco Power	Louisiana	PSC Staff	Purchase Power Contract
265. U-27865 October 2004	Entergy Louisiana, Inc. Entergy Gulf States	Louisiana	PSC Staff	Purchase Power Contract
266. RP04-155 December 2004	Northern Natural Gas Company	FERC	Municipal Distributors Group/Gas Task Force	Rate of Return
267. U-27836 January 2005	Entergy Louisiana/ Gulf States	Louisiana	PSC Staff	Power plant Purchase and Cost Recovery
268. U-199040 et al. February 2005	Entergy Gulf States/ Louisiana	Louisiana	PSC Staff	Global Settlement, Multiple rate proceedings
269. EF03070532 March 2005	Public Service Electric & Gas	New Jersey	Ratepayers Advocate	Securitization of Deferred Costs
270. 05-0159 June 2005	Commonwealth Edison	Illinois	Department of Energy	POLR Service
271. U-28804 June 2005	Entergy Louisiana	Louisiana	LPSC Staff	QF Contract
272. U-28805 June 2005	Entergy Gulf States	Louisiana	LPSC Staff	QF Contract
273. 05-0045-EI June 2005	Florida Power & Lt.	Florida	Federal Executive Agencies	Rate of Return
274. 9037 July 2005	Generic	Maryland	MD. Energy Administration	POLR Service
275. U-28155 August 2005	Entergy Louisiana Entergy Gulf States	Louisiana	LPSC Staff	Independent Coordinator of Transmission Plan
276. U-27866-A September 2005	Southwestern Electric Power Company	Louisiana	LPSC Staff	Purchase Power Contract

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
277. U-28765 October 2005	Cleco Power LLC	Louisiana	LPSC Staff	Purchase Power Contract
278. U-27469 October 2005	Entergy Louisiana Entergy Gulf States	Louisiana	LPSC Staff	Avoided Cost Methodology
279. A-313200F007 October 2005	Sprint (United of PA)	Pennsylvania	Office of Consumer Advocate	Corporate Restructuring
280. EM05020106 November 2005	Public Service Electric & Gas Company	New Jersey	Ratepayer Advocate	Merger Issues
281. U-28765 December 2005	Cleco Power LLC	Louisiana	LPSC Staff	Plant Certification, Financing, Rate Plan
282. U-29157 February 2006	Cleco Power LLC	Louisiana	LPSC Staff	Storm Damage Financing
283. U-29204 March 2006	Entergy Louisiana Entergy Gulf States	Louisiana	LPSC Staff	Purchase power contracts
284. A-310325F006 March 2006	Alltel	Pennsylvania	Office of Consumer Advocate	Merger, Corporate Restructuring
285. 9056 March 2006	Generic	Maryland	Maryland Energy Administration	Standard Offer Service Structure
286. C2-99-1182 April 2006	American Electric Power Utilities	U. S. District Court Southern District, Ohio	U. S. Department of Justice	New Source Review Enforcement (expert report)
287. EM05121058 April 2006	Atlantic City Electric	New Jersey	Ratepayer Advocate	Power plant Sale
288. ER05121018 June 2006	Jersey Central Power & Light Company	New Jersey	Ratepayer Advocate	NUG Contracts Cost Recovery
289. U-21496, Subdocket C June 2006	Cleco Power LLC	Louisiana	Commission Staff	Rate Stabilization Plan
290. GR0510085 June 2006	Public Service Electric & Gas Company	New Jersey	Ratepayer Advocate	Rate of Return (gas services)

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291.	R-000061366 July 2006	Metropolitan Ed. Company Penn. Electric Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
292.	9064 September 2006	Generic	Maryland	Energy Administration	Standard Offer Service
293.	U-29599 September 2006	Cleco Power LLC	Louisiana	Commission Staff	Purchase Power Contracts
294.	WR06030257 September 2006	New Jersey American Water Company	New Jersey	Rate Counsel	Rate of Return
295.	U-27866/U-29702 October 2006	Southwestern Electric Power Company	Louisiana	Commission Staff	Purchase Power/Power Plant Certification
296.	9063 October 2006	Generic	Maryland	Energy Administration Department of Natural Resources	Generation Supply Policies
297.	EM06090638 November 2006	Atlantic City Electric	New Jersey	Rate Counsel	Power plant Sale
298.	C-2000065942 November 2006	Pike County Light & Power	Pennsylvania	Consumer Advocate	Generation Supply Service
299.	ER06060483 November 2006	Rockland Electric Company	New Jersey	Rate Counsel	Rate of Return
300.	A-110150F0035 December 2006	Duquesne Light Company	Pennsylvania	Consumer Advocate	Merger Issues
301.	U-29203, Phase II January 2007	Entergy Gulf States Entergy Louisiana	Louisiana	Commission Staff	Storm Damage Cost Allocation
302.	06-11022 February 2007	Nevada Power Company	Nevada	U.S. Dept. of Energy	Rate of Return
303.	U-29526 March 2007	Cleco Power	Louisiana	Commission Staff	Affiliate Transactions
304.	P-00072245 March 2007	Pike County Light & Power	Pennsylvania	Consumer Advocate	Provider of Last Resort Service

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<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
305. P-00072247 March 2007	Duquesne Light Company	Pennsylvania	Consumer Advocate	Provider of Last Resort Service
306. EM07010026 May 2007	Jersey Central Power & Light Company	New Jersey	Rate Counsel	Power Plant Sale
307. U-30050 June 2007	Entergy Louisiana Entergy Gulf States	Louisiana	Commission Staff	Purchase Power Contract
308. U-29956 June 2007	Entergy Louisiana	Louisiana	Commission Staff	Black Start Unit
309. U-29702 June 2007	Southwestern Electric Power Company	Louisiana	Commission Staff	Power Plant Certifications
310. U-29955 July 2007	Entergy Louisiana Entergy Gulf States	Louisiana	Commission Staff	Purchase Power Contracts
311. 2007-67 July 2007	FairPoint Communications	Maine	Office of Public Advocate	Merger Financial Issues
312. P-00072259 July 2007	Metropolitan Edison Co.	Pennsylvania	Office of Consumer Advocate	Purchase Power Contract Restructuring

BEFORE THE STATE OF NEW JERSEY

BOARD OF PUBLIC UTILITIES

**I/M/O THE PETITION OF PUBLIC SERVICE)
ELECTRIC AND GAS COMPANY FOR)
APPROVAL OF A SOLAR ENERGY PROGRAM) BPU DKT. NO. EO07040278
AND AN ASSOCIATED COST RECOVERY)
MECHANISM)**

**SCHEDULES ACCOMPANYING THE
TESTIMONY OF MATTHEW I. KAHAL
ON BEHALF OF THE
NEW JERSEY DEPARTMENT OF THE PUBLIC ADVOCATE,
DIVISION OF RATE COUNSEL**

**RONALD K. CHEN
PUBLIC ADVOCATE OF NEW JERSEY**

**KIMBERLY K. HOLMES, ESQ.
ACTING DIRECTOR, DIVISION OF RATE COUNSEL**

Division of Rate Counsel
31 Clinton Street, 11th Floor
P. O. Box 46005
Newark, New Jersey 07101

FILED: SEPTEMBER 21, 2007

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

Company Requested Rate of Return
on Solar Program Regulatory Asset

<u>Capital Type</u>	<u>% Total</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>	<u>Weighted Cost w/Tax Gross-up</u>
Long-term Debt	50.64%	6.19%	3.13%	3.13%
Preferred Stock	1.27	5.03	0.06	0.11
Customer Deposits	0.68	2.94	0.02	0.02
<u>Common Equity</u>	<u>47.40</u>	<u>11.00</u>	<u>5.21</u>	<u>8.85</u>
Total	100%	--	8.42%	12.11%

Source: Schedule GWS-2

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

Rate of Return on Solar Regulatory Asset
 Rate Counsel Recommendation

<u>Capital Type</u>	<u>% Total⁽¹⁾</u>	<u>Cost Rate⁽²⁾</u>	<u>Weighted Cost</u>	<u>Weighted Cost w/Tax Gross-up</u>
Long-term Debt	60.0%	6.00%	3.60%	3.60%
Preferred Stock	--	--	--	--
Customer Deposits	--	--	--	--
<u>Common Equity</u>	<u>40.0%</u>	<u>9.75%</u>	<u>3.90%</u>	<u>6.62%</u>
Total	100%	--	7.50%	10.22%

(1) Based on upper end of Standard & Poors benchmark debt ratio for a triple B electric utility.

(2) Incremental cost of debt (most recent 12-month average for Moody's utility debt). Cost of equity is most recent electric return on equity award per BPU Docket No. ER02050303. The 9.75 percent common equity return assumes Rate Counsel Witness Crane's cost recovery recommendations are adopted. If her recommendations are not accepted, return on equity is 6.5 percent, pre-tax weighted cost is 4.41 percent and overall pre-tax return is 8.01 percent.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

Estimated Ratepayer SBC Charges
for the Proposed Solar Program
(millions \$)

<u>Year</u>	<u>Total Revenues</u>	<u>Rate of Return Revenues</u>
0	\$11.1	\$5.8
1	21.8	11.2
2	21.2	10.4
3	20.2	9.6
4	18.8	8.8
5	18.1	8.0
6	17.4	7.2
7	16.7	6.4
8	16.0	5.6
9	15.3	4.8
10	14.6	4.0
11	13.9	3.2
12	13.3	2.4
13	12.6	1.6
14	11.9	0.8
15	<u>5.1</u>	<u>0.4</u>
Total	\$247.8	\$90.2

Source: Schedule FAL-3.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

Moody's Public Utility Bond Yields
July 2006-June 2006

	<u>Baa</u>	<u>A</u>
July 2006	6.61%	6.37%
August	6.43	6.20
September	6.26	6.00
October	6.24	5.98
November	6.04	5.80
December	6.05	5.81
January 2007	6.16	5.96
February	6.10	5.90
March	6.10	5.85
April	6.24	5.97
May	6.23	5.99
June	<u>6.54</u>	<u>6.30</u>
Average	6.25%	6.01%

Source: Mergents *Bond Record*, July 2007 edition, page 137.