BEFORE THE STATE OF NEW JERSEY OFFICE OF ADMINISTRATIVE LAW BOARD OF PUBLIC UTILITIES

I/M/O THE VERIFIED PETITION OF JERSEY)
CENTRAL POWER & LIGHT COMPANY FOR) OAL DKT. NO. PUC 1200-0
REVIEW AND APPROVAL OF AN)
ADJUSTMENT OF THE NON-UTILITY) BPU DKT. NO. ER05121018
GENERATION CHARGE CLAUSE OF ITS)
FILED TARIFF ("2005 NGC FILING"))

TESTIMONY OF MATTHEW I. KAHAL ON BEHALF OF THE NEW JERSEY DIVISION OF THE RATEPAYER ADVOCATE

SEEMA M. SINGH, ESQ. RATEPAYER ADVOCATE

Division of the Ratepayer Advocate
31 Clinton Street, 11th Floor
P. O. Box 46005
Newark, New Jersey 07101
(973) 648-2690 - Phone
(973) 624-1047 - Fax
www.rpa.state.nj.us
njratepayer@rpa.state.nj.us

Filed: June 7, 2006

PUBLIC VERSION

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 in
4		this matter by the Division of the Ratepayer Advocate (Ratepayer Advocate). My
5		business address is 5565 Sterrett Place, Suite 310, Columbia, Maryland 21044.
6	Q.	PLEASE STATE YOUR EDUCATIONAL BACKGROUND.
7	A.	I hold B.A. and M.A. degrees in economics from the University of Maryland and have
8		completed course work and examination requirements for the Ph.D. degree in economics.
9		My areas of academic concentration included industrial organization, economic
10		development and econometrics.
11	Q.	WHAT IS YOUR PROFESSIONAL BACKGROUND?
12	A.	I have been employed in the area of energy, utility and telecommunications consulting for
13		the past 25 years working on a wide range of topics. Most of my work has focused on
14		electric utility integrated planning, plant licensing, environmental issues, mergers and
15		financial issues. I was a co-founder of Exeter Associates, and from 1981 to 2001 I was
16		employed at Exeter Associates as a Senior Economist and Principal. During that time, I
17		took the lead role at Exeter in performing cost of capital and financial studies. In recent
18		years, the focus of much of my professional work has shifted to electric utility
19		restructuring and competition.
20		Prior to entering consulting, I served on the Economics Department faculties at
21		the University of Maryland (College Park) and Montgomery College teaching courses on
22		economic principles, development economics and business.

A complete description of my professional background is provided in Appendix

A.

23

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 250 separate regulatory cases. My testimony has addressed a
5		variety of subjects including fair rate of return, resource planning, financial assessments,
6		load forecasting, competitive restructuring, rate design, purchased power contracts,
7		merger economics and other regulatory policy issues. These cases have involved electric,
8		gas, water and telephone utilities. In 1989, I testified before the U.S. House of
9		Representatives, Committee on Ways and Means, on proposed federal tax legislation
10		affecting utilities. A list of these cases may be found in Appendix A, with my statement
11		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 electric
15		restructuring, purchase power contracts, environmental controls, cost of capital and other
16		regulatory issues. Current and recent clients include the U.S. Department of Justice, U.S.
17		Air Force, U.S. Department of Energy, the Federal Energy Regulatory Commission,
18		Connecticut Attorney General, Pennsylvania Office of Consumer Advocate, New Jersey
19		Division of the Ratepayer Advocate, Rhode Island Division of Public Utilities, Louisiana
20		Public Service Commission, Arkansas Public Service Commission, Maryland

Department of Natural Resources and Energy Administration, and MCI

1	A.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NEW JERSEY BOARD
2		OF PUBLIC UTILITIES?
3	A.	Yes. I have testified on cost of capital and other matters before the Board of Public
4		Utilities (Board or BPU) in gas, water and electric cases during the past 15 years. A
5		listing of those cases is provided in my attached Statement of Qualifications.
6	Q.	DO YOU HAVE PROFESSIONAL EXPERIENCE WITH PURCHASE
7		POWER CONTACTING?
8	A.	Yes. During the past 20 years, I have worked extensively on issues pertaining to
9		wholesale purchase power contracts between utilities and non-utility generators (NUGs).
10		This includes conducting reviews of both the NUG contracts and attempts to reform
11		NUG contracts of Jersey Central Power & Light Company (JCP&L or the Company). I
12		was the primary author of the competitive procurement rules for wholesale power
13		supplies adopted by one state commission. Cases in which I have testified on purchase

power contracts (or purchase power contract mitigation) are listed on Appendix A.

I. INTRODUCTION

Ο.	WHAT IS THE	PURPOSE OF Y	OUR TESTIN	MONY IN THIS	CASE?
----	-------------	---------------------	-------------------	---------------------	-------

A.

A.

This case deals with the recovery by JCP&L of its deferred balance and non-utility generation (NUG) costs for the period ending December 31, 2005. The filing covers the costs over the period August 2003 to December 2005, i.e., 29 months. The costs at issue primarily relate to the Company's NUG long-term contracts, which collectively are substantially above market, but it also includes certain costs associated with its "legacy" generation assets, i.e., Oyster Creek, Forked River and Yards Creek.

In this case, I have been asked by the Division of Ratepayer Advocate (Ratepayer Advocate) to address certain aspects of the Company's filing and claimed costs: (1) the Company's mitigation efforts for its over-market NUG contract costs; (2) the reasonableness of recovery of the Yards Creek and Forked River costs recovery; and (3) the Company's proposal to earn a full rate base-type return (prospectively) on its deferred balance. Other issues in this case are being addressed by Ratepayer Advocate witness David Peterson.

Q. PLEASE SUMMARIZE YOUR FINDINGS CONCERNING NUG MITIGATION COSTS.

At the present time, JCP&L has nearly 1,000 MW of NUG contracts, the vast majority of which is substantially more expensive than the market value of the energy that they provide. In recent years, contract charges have been about \$250 million annually above market, and this is expected to continue for the next several years, declining sharply after 2019 as contracts expire. The over-market contract costs have been deemed recoverable from ratepayers, subject to the Company's exercise of prudence in managing contracts and seeking to mitigate the over-market costs. The Board has expressed a strong interest in mitigation, and in recent years has approved several negotiated contract restructurings.

1	1 nave	reviewed the NUG mitigation reports submitted by the Company and other
2	information o	btained through discovery. Based on this review, I have reached the
3	following fine	dings:
4	(1)	Over-market NUG costs during the 29-month review period exceed \$600
5		million.
6	(2)	JCP&L achieved some success in mitigating above-market costs during
7		the August 2003 to December 2005 review period, closing on three
8		contract restructuring and obtaining additional, ongoing savings from a
9		fourth restructuring (the Bayonne contract) that closed in 2002. These
10		savings cumulatively totaled \$165 million and offset slightly more than
11		one-quarter of the above-market cost burden.
12	(3)	The post-2005 over-market NUG costs are expected to exceed \$1.5
13		billion. This amount incorporates about [confidential] [end
14		confidential] million in estimated mitigation savings, mostly associated
15		with the 2002 Bayonne agreement (about a [confidential] [end
16		confidential] percent total mitigation).
17	(4)	With one exception (the Marcal contract), it appears that JCP&L's
18		contract restructuring efforts have not been particularly active since 2003.
19		No clear progress has been achieved in mitigating the Lakewood contract,
20		one of the largest and most expensive contracts.
21	(5)	While the mitigation savings obtained from the restructuring of NUG
22		contracts are important, they have been accomplished by shifting some
23		operating risk away from the project owner and on to ratepayers.

1		(6) The mitigation has been largely achieved during this period by operating
2		efficiencies rather than contract buyouts. It is not entirely clear why the
3		buyout approach has not succeeded.
4		(7) Given the present cost burden and the prospects for \$1.5 billion in over-
5		market costs over the next several years, it is imperative that JCP&L
6		vigorously pursue mitigation activities for the Lakewood project, the
7		projects that already have been restructured and the smaller above-market
8		projects.
9	Q.	DID JCP&L ACCOMPLISH ALL FEASIBLE MITIGATION OF NUG
10		CONTRACTS DURING THE REVIEW PERIOD?
11	A.	As mentioned, JCP&L claims to have realized a total of \$165 million of savings during
12		this period, about a quarter of the over-market costs. There is no way for an outside
13		reviewer to determine whether the Company achieved all feasible savings because that
14		would require knowledge of what arrangements NUG counterparties would find
15		acceptable. It is only possible to review deals that are reached, not those that have not
16		been attempted. However, other than Marcal, it does not appear that major mitigation
17		initiatives took place after 2003.
18	Q.	DO YOU HAVE ANY OTHER RECOMMENDATIONS RELATED TO
19		NUG CONTRACTS?
20	A.	Yes. JCP&L presently resells the NUG energy and capacity delivered into the PJM spot
21		energy and capacity markets. This may be a reasonable and straightforward means of
22		capturing the market value of that supply to partially offset market costs. However, it is
23		possible that JCP&L could receive even more value (and a more certain revenue stream)
24		in the forward bilateral market. I recommend that the Company study the feasibility of

doing so and report back to the Board with a recommendation within 90 days of a Board decision in this docket.

In addition, based on discovery responses received, it does not appear that JCP&L has a clear strategy going forward for mitigating its \$1.5 billion of <u>future</u> overmarket costs. I therefore recommend that the Company prepare an alternative strategies report and submit it to the Board, the Board Staff and the Ratepayer Advocate, on a confidential basis, for review. Again, this should be submitted within 90 days of a Board decision in this docket.

Q. PLEASE SUMMARIZE THE ISSUE ASSOCIATED WITH FORKED RIVER.

JCP&L divested its generating assets as part of its restructuring, with the exception of two peaking plants, Forked River and Yards Creek (the latter being pumped storage hydro). Cost recovery for these assets is treated in a fashion similar to the NUGs. The revenue requirement is computed each month, partially offset by the capacity and energy revenue obtained by selling the output in the PJM spot markets.

While this arrangement seems to work well for Yards Creek (which is a low-cost hydro plant), Forked River has produced very weak results. In fact, over the August 2003 to December 2005 review period, Forked River's market revenue has been \$2.85 million less than the unit's operating costs (i.e., its fuel and non-fuel O&M) over this same period, costs which are avoidable by JCP&L if the plant were to be shutdown. JCP&L proposes to charge ratepayers for this operating loss, along with about \$7 to \$8 million of fixed capital cost recovery for the plant (return plus depreciation). I do not contest the fixed cost recovery, but I believe it is not reasonable to assign the operating loss to ratepayers. The \$2.85 million operating loss should be disallowed and not recovered from ratepayers.

A.

Q. JCP&L SEEKS TO USE ITS AUTHORIZED RETURN ON RATE BASE AS THE CARRYING CHARGE ON THE DEFERRED BALANCE. DO

YOU AGREE?

A. No, I do not. Presently, the authorized practice is to utilize the short-term debt rate (net of deferred taxes) as the carrying cost rate. While I can understand why JCP&L would prefer a much higher return, doing so would further burden ratepayers at a time when above-market NUG costs are extremely high and increasing. JCP&L has provided no information in its filing demonstrating a financial need for a higher rate of return (e.g., need to sustain credit rating, cash flow needs, etc.) or that it would be unduly harmed if the return is not increased. JCP&L is certainly free to raise the issue of financial need in a base rate case.

II. NUG COSTS AND MITIGATION

2	Q.	PLEASE PROVIDE AN OVERVIEW OF JCP&L'S NUG CONTRACTS.
3	A.	During the review period, JCP&L had 14 long-term NUG contracts that were material in
4		size, totaling 969 MW. Two of these contracts, totaling 61 MW, have reached their
5		contract termination dates, leaving a total today of about 900 MW. For the most part,
6		these contracts began during the 1988 to 1991 time period, with the exception of
7		Lakewood (1994) and two municipal solid waste facilities (late 1990s). There are four
8		contracts that account for over 90 percent of the estimated over-market costs: (1)
9		Bayonne (125 MW); (2) Lakewood (238 MW); (3) Newark/Parlin (166 MW); and (4)
10		South River (260 MW). One contract, [confidential] [end confidential], by
11		itself accounts for more than half of the projected total over-market costs.
12		Most of the contracts are structured as "must take" energy with JCP&L being
13		contractually obligated to accept a certain amount of energy under the contract. JCP&L
14		pays a defined Kwh charge for the contract energy delivered, with those Kwh charges
15		subject to a variety of indexes or escalators (e.g., gas price, GDP deflator, etc.,). The one
16		major exception is the Lakewood contract, which is dispatchable by JCP&L. Under this
17		contract, JCP&L pays a fixed monthly capacity charge plus a Kwh charge for the energy
18		actually dispatched.
19	Q.	HOW DOES JCP&L RECOVER THE COSTS OF THESE CONTRACTS?
20	A.	JCP&L accepts the energy delivered under these contracts and sells it into the PJM spot
21		energy and capacity markets, i.e., the day-ahead energy market. To the extent the PJM
22		energy/capacity revenue fails to provide a full offset to the contract costs, the balance is
23		deemed by the Company as recoverable from retail customers in the NGC.
24		I present my calculations of the over-market costs for the review period, by year,

on Schedule MIK-1. For the entire 29-month period these over-market costs total \$614

1

4	0.	IS JCP&L SEEKING TO RECOVER THIS \$614 MILLION IN OVER-
3		2003.
2		market value reported in the JCP&L Phase II Audit Report for the 12 months ending July
1		million, or an average of about \$250 million per year. This is similar to the annual over-

Q. IS JCP&L SEEKING TO RECOVER THIS \$614 MILLION IN OVER-MARKET COSTS FROM RATEPAYERS?

A. Not the entire amount. During the review period, JCP&L conducted an active program of contract mitigation, providing the Board with quarterly status reports on its activities.

During the review period, this resulted in completing three restructuring agreements.

While each agreement has its own unique attributes, JCP&L's basic approach is to provide the NUG counter-party with greater operational flexibility. That is, rather than being required to source the power from the NUG generating unit, the counter party may supply the energy from alternative, lower-cost sources. This enables the NUG supplier to reduce its costs of supply, and it also benefits the supplier by reducing plant operating risk. The supplier can continue to supply power from an alternative source and thereby enjoy the full contract revenue stream even if the plant is forced out of operation (e.g., due to a mechanical problem). In recognition of these important savings (and risk reductions), the NUG provides JCP&L with an upfront savings payment when the transaction closes.

Q. HOW MUCH SAVINGS WAS ACHIEVED DURING THE REVIEW PERIOD?

A. Schedule MIK-2 summarizes these restructuring savings. Three restructuring closings occurred during this period with the upfront payments totaling \$94 million. In addition, there were ongoing savings from modifying contract rates during the review period totaling \$71 million, most of which came from the restructuring of the Bayonne contract in 2002 (not during the review period). Thus, total savings is \$165 million, which is

1		about 27 percent of the total over-market NUG costs incurred during this period. In
2		addition, this schedule shows that the modification to contract rates (mostly Bayonne) is
3		expected to provide [confidential] [end confidential] million of additional savings
4		after 2005 over the remaining lives of these contracts. This amounts to about
5		[confidential] [end confidential] percent of the projected post-2005 over-market
6		costs.
7	Q.	HAVE THESE NUG CONTRACT RESTRUCTURING AGREEMENTS
8		BEEN APPROVED BY THE BOARD?
9	A.	All four of the agreements listed on Schedule MIK-2 have received Board approval and
10		have closed. Hence, the issue is not whether these agreements are proper, but whether
11		JCP&L's mitigation efforts have been sufficient. Specifically, a key question is whether
12		JCP&L has fully exploited all realistic opportunities to mitigate the above-market
13		contract costs.
13 14	Q.	contract costs. WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005?
	Q. A.	
14		WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005?
14 15		WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005? Schedule MIK-3 shows JCP&L's projected over-market costs (i.e., after selling energy
141516		WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005? Schedule MIK-3 shows JCP&L's projected over-market costs (i.e., after selling energy deliveries into the PJM market) for 2006 through 2015. The over-market costs decline
14151617		WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005? Schedule MIK-3 shows JCP&L's projected over-market costs (i.e., after selling energy deliveries into the PJM market) for 2006 through 2015. The over-market costs decline very sharply after 2010 as the contracts expire, and after 2015, these costs are not
1415161718		WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005? Schedule MIK-3 shows JCP&L's projected over-market costs (i.e., after selling energy deliveries into the PJM market) for 2006 through 2015. The over-market costs decline very sharply after 2010 as the contracts expire, and after 2015, these costs are not substantial. However, from 2006-2011, the over-market costs are projected by JCP&L to
14 15 16 17 18 19		WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005? Schedule MIK-3 shows JCP&L's projected over-market costs (i.e., after selling energy deliveries into the PJM market) for 2006 through 2015. The over-market costs decline very sharply after 2010 as the contracts expire, and after 2015, these costs are not substantial. However, from 2006-2011, the over-market costs are projected by JCP&L to be \$1.4 billion (\$1.5 billion through 2015), even with the Bayonne rate mitigation.
14 15 16 17 18 19 20		WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005? Schedule MIK-3 shows JCP&L's projected over-market costs (i.e., after selling energy deliveries into the PJM market) for 2006 through 2015. The over-market costs decline very sharply after 2010 as the contracts expire, and after 2015, these costs are not substantial. However, from 2006-2011, the over-market costs are projected by JCP&L to be \$1.4 billion (\$1.5 billion through 2015), even with the Bayonne rate mitigation. Moreover, for 2006 to 2008, over-market costs are expected to average almost \$300
14 15 16 17 18 19 20 21		WHAT IS THE OUTLOOK FOR OVER-MARKET COSTS AFTER 2005? Schedule MIK-3 shows JCP&L's projected over-market costs (i.e., after selling energy deliveries into the PJM market) for 2006 through 2015. The over-market costs decline very sharply after 2010 as the contracts expire, and after 2015, these costs are not substantial. However, from 2006-2011, the over-market costs are projected by JCP&L to be \$1.4 billion (\$1.5 billion through 2015), even with the Bayonne rate mitigation. Moreover, for 2006 to 2008, over-market costs are expected to average almost \$300 million per year if no action is taken to further mitigate the contracts.

3	Q.	WHY HAS JCP&L NOT ACHIEVED RESTRUCTURING SAVINGS ON
2		of the contract.
1		market costs total [confidential] [end confidential] million over the remaining life

THE LAKEWOOD CONTRACT?

A. Lakewood does not fit the pattern of the other four restructuring deals since it is a fully dispatchable resource, with JCP&L paying the actual cost of energy. This means that JCP&L will only take energy from the plant (and pay the cost of generating that energy at those hours) when the cost to JCP&L is lower than the PJM spot market price.

Lakewood earns profits from its operations through JCP&L's fixed capacity payment.

Therefore, Lakewood and JCP&L cannot obtain "shared savings" by permitting

Lakewood to substitute market energy for its own generation. A beneficial contract

Q. THE BAYONNE SAVINGS APPEARS TO BE QUITE LARGE. WHAT IS THE SOURCE OF THOSE SAVINGS?

restructuring would require a different approach (such as a contract buyout), and so far

When the Bayonne contract restructuring occurred in 2002, gas prices and the gas price outlook were far more moderate than currently. The parties in that contract restructuring agreed to "fix" the gas price index component of the rate structure in order to provide both parties with greater rate certainty. Obviously, no one at the time expected the massive increases in gas prices which have occurred since then, but the setting of the gas price index at the 2002 outlook level, in combination with the large size of the Bayonne contract, produces the ongoing savings shown on Schedule MIK-2.

nothing has emerged.

A.

¹ JCP&L will make fixed capacity payments to Lakewood of more than [confidential] [end confidential] over the contract's remaining life. (Source: response to RAR-28)

1	Q.	IS THERE ANY POTENTIAL DISADVANTAGE TO THESE
2		RESTRUCTURING AGREEMENTS FOR CUSTOMERS?
3	A.	Yes, there could be. These restructurings create savings by providing the NUG
4		counterparty the flexibility to substitute market energy for energy sourced from its own
5		facility. This removes operational risk from the NUG, and potentially this could harm
6		customers. That is, absent this agreement, an extended outage at the NUG plant reduces
7		energy deliveries and therefore over-market costs. With the agreement, the NUG can
8		simply source the over-market energy from another unit. Thus, the JCP&L customer
9		accepts this disadvantage and risk in exchange for the upfront payment.
10	Q.	YOUR SCHEDULE MIK-2 SHOWS THE CONTRACT
11		RESTRUCTURING SAVINGS RECEIVED DURING THE REVIEW
12		PERIOD. WHEN DID MOST OF THE ACTIVITY LEADING TO THESE
13		SAVINGS OCCUR?
14	A.	The Marcal agreement, resulting in the \$15.1 million payment, was completed in 2005,
15		with considerable activity prior to 2005. The work leading to the other agreements was
16		mostly prior to 2004. The Newark/Parlin agreement closed in May 2004, and the South
17		River restructuring closed in December 2003.
18		In order to document (above and beyond the Quarterly NUG Mitigation reports)
19		JCP&L's contract restructuring activities during the last few years, the Ratepayer
20		Advocate submitted RAR-32 which asked for copies of all correspondence,
21		communication, meeting notes, etc., dealing with NUG counterparties since January 1,
22		2004. The Company responded as follows:
23 24 25 26 27		The majority of JCP&L NUG mitigation team's focus since January 1, 2004 has been working on the restructuring of the Marcal PPA contract. However, there is additional correspondence pertaining to the other NUG contracts that is provided herewith as RAR-32

Attachment. The correspondence mainly deals with operational issues, rather than "NUG mitigation."

A.

The operational issues cited in the answer refer to certain fuel use, maintenance cost and metering issues at the Lakewood project which also are described in the latest NUG Mitigation report. These contract administration issues are important, and it is proper that JCP&L staff focuses on them. But this response confirms that since early 2004 there does not appear to be much effort devoted to NUG mitigation (in the sense of contract restructuring), other than Marcal. The latest NUG Mitigation report (dated April 27, 2006) does not seem to indicate any ongoing activities.

Q. DOES JCP&L HAVE A CLEAR STRATEGY FOR MOVING FORWARD TO MITIGATE THE EXPECTED \$1.5 BILLION IN PROJECTED POST 2005 OVER-MARKET NUG COSTS?

Not that I am able to identify from discovery documents reviewed. RAR-33 sought documents from JCP&L (reports or memoranda) seeking information on mitigation strategies. The only documents provided in response were copies of the Phase I and II Audit reports on NUG mitigation aspects of the previous deferred balances. In addition to the fact that these are not JCP&L-prepared strategy documents, they refer to activities undertaken several years ago.

My overriding concern is the perceived lack of effort during the past two years (other than Marcal) and currently to mitigate the \$1.5 billion of expected over market-costs that customers must pay during the next several years. JCP&L projections indicate that the four largest contracts account for about 90 percent of projected over-market costs, with one contract [confidential] [end confidential] accounting for more than half. All of these contracts, except Lakewood, have been subject to a restructuring agreements approved by the Board.

1	Q.	SHOULD JCP&L PURSUE MITIGATION OF THE CONTRACTS THAT
2		PREVIOUSLY HAVE BEEN RESTRUCTURED?
3	A.	Yes. While JCP&L has obtained savings from its restructuring of NUG contracts, efforts
4		should not end at that point. The reformed contracts continue to be above market
5		(although much less so in the case of Bayonne). JCP&L concedes this point in response
6		to RAR-34, and commits to continued efforts at mitigation "on a periodic basis."
7		However, JCP&L also argues that there are only "limited opportunities" to obtain further
8		savings. Based on evidence that I have reviewed, I have not seen tangible evidence or
9		indication that existing NUG contracts have been reviewed for further mitigation efforts
10		"on a periodic basis," and no restructuring has taken place on the Lakewood contract.
11	Q.	IS CONTRACT BUYOUT A POTENTIAL TOOL FOR MITIGATING
12		OVER-MARKET COSTS?
13	A.	Yes, although success in doing so depends on the willingness of the NUG counterparty to
14		consider a buyout. While there certainly are impediments to contract buyouts, it is a
15		strategy that should be considered.
16	Q.	SHOULD JCP&L PURSUE MITIGATION WITH SMALLER NUG
17		CONTRACTS AS WELL?
18	A.	Yes, it should do so for those contracts that are over-market. While these contracts
19		account for only a small percentage of total over-market costs, all efforts that potentially
20		can provide meaningful savings should be pursued. While I do not fault JCP&L for
21		emphasizing the larger contracts, the smaller NUG contracts also should be explored.
22	Q.	ARE THERE OTHER WAYS TO MITIGATE THESE COSTS?
23	A.	JCP&L seeks to mitigate NUG contract costs by selling power deliveries into the PJM
24		spot markets (energy and capacity). One issue raised by the Auditor in the Phase II Audi

Report was the merit of using the day-ahead versus the real-time market. The Auditor accepted JCP&L's decision to use the day-ahead market, and I concur.

Another approach would be to sell the power forward through bilateral contracts, e.g., one- or two-year contracts. The power at fixed prices may have value as a hedged product to a market participant that exceeds the value obtained in the spot market, providing a larger or at least more predictable revenue stream for JCP&L. If there is added market value, JCP&L would receive approximate \$5 million in additional mitigation for every \$1 per Mwh increase in market price. While I am not at this time definitively recommending that JCP&L adopt this approach, I do recommend that the Company consider the feasibility of doing so and report back to the Board, within 90 days of a Board decision in this docket. JCP&L may wish to consider testing the idea of using the bilateral market on a pilot basis.

Q. DO YOU HAVE ANY FURTHER RECOMMENDATIONS CONCERNING NUG CONTRACT MITIGATION?

Presently available information indicates extremely large over-market costs from NUG contracts over the next several years, but the active NUG mitigation efforts do not seem to be progressing. Other than the \$15 million from last year's Marcal restructuring, little in the way of new mitigation initiatives has occurred in recent years. I am mindful that achieving savings is not completely under the Company's control, but it is time for greater management emphasis on this area of JCP&L costs. The quarterly NUG Mitigation reports, while a useful monitoring tool, do not go far enough in describing current efforts.

Given present circumstances, I recommend that within 90 days of a Board order in this case JCP&L prepare and submit a NUG mitigation strategy report. This report should focus on potential <u>prospective</u> opportunities and proposed strategies for mitigating

A.

current over-market costs, rather than focusing only on what has been accomplished in the past. This report should be submitted on a confidential basis to the Board, Board Staff and the Ratepayer Advocate, with an opportunity for formal or informal comment.

A.

III. FORKED RIVER OPERATING LOSSES

Q. WHAT IS THE ISSUE WITH FORKED RIVER?

JCP&L divested most of its generating assets as part of its transition-to-competition plan several years ago. However, it has retained ownership of two power plants, the Yards Creek pump storage hydro plant and the Forked River combustion turbine peaking plant. JCP&L charges ratepayers for the ongoing revenue requirements for these assets (including a return on plant rate base at its authorized rate of return), sells the output from these plants in the PJM spot markets and credits those market revenues against the revenue requirements. To the extent the market revenues fall short, ratepayers will be charged the over-market cost (i.e., revenue requirement).

As I understand it, the purpose of this arrangement is to fully compensate JCP&L for the prudently-incurred costs of these generation assets, similar to the way they would be under standard regulation. The Forked River revenue requirements include capital costs (return plus depreciation) and operating costs (fuel and non-fuel O&M). It is the operating costs that are avoidable if the plant were to be shutdown or sold off (even if it were sold at a zero price).

As a practical matter, however, I do not believe that ratepayer support should extend to covering actual operating losses, i.e., a situation where the market revenues JCP&L obtains cannot even cover the avoidable operating costs of the plant. This is <u>not</u> the case for Yards Creek, a plant which has significant market value. However, this is the case for Forked River, a plant with operating expense that exceeded revenue

1		generation by about \$2.85 million during the review period. A company can avoid such
2		losses by choosing not to operate the plant.
3	Q.	HAS THE COMPANY JUSTIFIED IMPOSING OPERATING LOSSES ON
4		CUSTOMERS IN THIS CASE?
5	A.	The Company argues that it is contractually obligated to continue to operate the plant due
6		to its Station Blackout Agreement with AmerGen Energy Company. (See response to
7		RAR-39.) The Company receives blackout service revenue in return for continued
8		operation, but these revenues are far too small to cover the operating costs of the plant,
9		resulting in economic losses. In my opinion, it is inappropriate to charge ratepayers for
10		the inadequacy of the revenues under this agreement. While JCP&L has explained why
11		plant shutdown (to avoid the losses) has not been pursued, it has not justified forcing
12		ratepayers to cover the losses.
13	Q.	HAVE YOU QUANTIFIED THE FORKED RIVER OPERATING
14		LOSSES?
15	A.	Yes. Schedule MIK-5 shows the calculation of the operating losses for each year of the
16		review period. The loss is calculated as the the market revenue (capacity and energy)
17		minus O&M plus fuel expense that JCP&L receives from selling Forked River output in
18		the PJM spot markets. The overall calculation of \$2.85 million for the entire review
19		period is inclusive of the blackout service revenue.
20	Q.	IF JCP&L IS DENIED RECOVERY OF THIS \$2.85 MILLION LOSS, IS
21		THAT TANTAMOUNT TO DENIAL OF STRANDED COST RECOVERY
22		FOR A GENERATION ASSET?
23	A.	In my opinion, it is not the same. The Forked River revenue requirement includes about
24		\$250,000 per month for return on rate base and depreciation of Forked River, which
25		totals about \$7 million over the review period. I am not contesting recovery of that

Page 18

Direct Testimony of Matthew I. Kahal

1		amount, which I consider the legitimate stranded cost eligible for recovery. Providing
2		further recovery for operating losses would be tantamount to assigning a negative market
3		value to the asset which I do not believe is appropriate.
4	Q.	WILL JCP&L CONTINUE TO INCUR THESE LOSSES?
5	A.	Hopefully, it will not. According to the response to RAR-40, JCP&L is in the process of
6		attempting to sell the plant. If successful, the operating losses will not be an issue in the
7		future.
8		
9		IV. THE CARRYING CHARGE PROPOSAL
10	Q.	WHAT IS THE PROPOSAL OF JCP&L ON THE DEFERRED BALANCE
11		CARRYING CHARGE?
12	A.	As described by JCP&L witness Marano, the carrying charges have been computed using
13		the Company's short-term debt rate, applied to the net-of-tax balance, in accordance with
14		the Board's directive. JCP&L proposes to change that prospectively using instead its
15		Board-approved rate of return on rate base. (It appears from the testimony that this return
16		imputation would begin January 1, 2006, not after a Board order in this case.) Ms.
17		Marano does not quantify the added costs ratepayers would pay as a result of this change.
18	Q.	WHAT REASONS DOES JCP&L PROVIDE FOR THIS REQUEST?
19	A.	Ms. Marano argues that this change would more closely align the carrying charge used
20		with JCP&L's actual cost incurred. In addition, she notes that recovery of deferred
21		balances has historically occurred over a period of years, not within a few months.

1	Q.	HAS JCP&L PRESENTED ANY INFORMATION INDICATING THAT
2		THE USE OF THE SHORT-TERM INTEREST RATE AS THE
3		CARRYING CHARGE HAS IN THE PAST OR WILL IN THE FUTURE
4		IMPAIR ITS FINANCIAL CONDITION?
5	A.	No, it has not. No financial condition information of any kind is included in the filing.
6		While I understand that shareholders always prefer a higher return to a lower return, th

While I understand that shareholders always prefer a higher return to a lower return, there is no showing that changing current practice would impose any material financial harm (e.g., weakened credit rating) on JCP&L.

9 Q. OTHER THAN THIS LACK OF DEMONSTRATION OF FINANCIAL 10 NEED, ARE THERE FURTHER REASONS TO OPPOSE THIS CHANGE?

Yes, there are several additional reasons. First, and most important, the over-market NUG problem is growing and will continue to impose a burden on customers. There is no need to exacerbate that NGC rate burden by increasing JCP&L's return. Second, I see no reason why the Company cannot continue to finance the (after-tax) balance using short-term debt. The table below shows JCP&L's financial statement capital structure at March 31, 2006 obtained from FirstEnergy's latest (i.e., March 31, 2006) SEC 10Q filing (page 117):

A.

Capital Type	Balance (Millions \$)	<u>% Total</u>
Common equity	\$3,211.9	68.7%
Preferred Stock	12.6	0.3
Long-term debt	967.8	20.7
Long-term debt due in one year	207.4	4.4
Short-term debt	278.2	6.0
Total	\$4,677.9	100%

This balance sheet data shows that JCP&L would have little difficulty issuing
additional short-term debt to finance a substantially large (net of tax) deferred balance
over a sustained period. Its current 68.7 percent common equity ratio clearly is excessive
for a low-risk delivery service utility, and the issuance of more debt would be entirely
appropriate and clearly would not "over leverage" the Company. I do not see a financial
need for JCP&L to finance deferred balances with additional common equity.

If conditions change, and financing deferred balances with short-term debt creates a problem for JCP&L, the Company is free to bring it to the Board's attention in a base rate proceeding. This is certainly not the case in this proceeding at this time. I therefore recommend that JCP&L continue its current practice of applying carrying charges on the net balance at the short-term debt rate.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

13 A. Yes, it does.

BEFORE THE STATE OF NEW JERSEY OFFICE OF ADMINISTRATIVE LAW BOARD OF PUBLIC UTILITIES

I/M/O THE VERIFIED PETITION OF JERSEY)
CENTRAL POWER & LIGHT COMPANY FOR)
REVIEW AND APPROVAL OF AN) BPU DKT. NO. ER05121018
ADJUSTMENT OF THE NON-UTILITY) BFU DK1. NO. EKU3121016
GENERATION CHARGE CLAUSE OF ITS)
FILED TARIFF ("2005 NGC FILING"))

SCHEDULES ACCOMPANYING THE TESTIMONY OF MATTHEW I. KAHAL ON BEHALF OF THE NEW JERSEY DIVISION OF THE RATEPAYER ADVOCATE

SEEMA M. SINGH, ESQ. RATEPAYER ADVOCATE

Division of the Ratepayer Advocate
31 Clinton Street, 11th Floor
P. O. Box 46005
Newark, New Jersey 07101
(973) 648-2690 - Phone
(973) 624-1047 - Fax
www.rpa.state.nj.us
njratepayer@rpa.state.nj.us

FILED: JUNE 7, 2006

JERSEY CENTRAL POWER & LIGHT COMPANY

Over-Market NUG Costs During the Review Period, August 2003-December 2005⁽¹⁾ (Million \$)

	Offset Revenue			
	Contract Payment	Energy	Capacity	Overmarket ⁽²⁾
August-December 2003	\$ 166.8	\$ 74.7	\$ 2.4	\$ 89.7
2004	\$ 476.4	\$230.7	\$ 5.7	\$240.0
2005	\$ 589.9	\$302.3	\$ 3.0	<u>\$284.6</u>
Total	\$1,233.1	\$607.7	\$11.1	\$614.3

⁽¹⁾ Source: Response to RAR-24. See attached Computed from monthly reports.

⁽²⁾ Over-market costs computed as contract payments minus the energy and capacity offset revenue.

CONFIDENTIAL

JERSEY CENTRAL POWER & LIGHT COMPANY

JCP&L Reported Mitigation Savings for NUG Contracts During August 2003 - December 2005⁽¹⁾ (Million \$)

Contract	Upfront <u>Payment</u>	Ongoing <u>Savings</u>	Total <u>Mitigation</u>	Post 2005 Savings ⁽²⁾
South River	\$26.2	\$9.2	\$35.4	$$25.5^{(1)}$
Newark/Parlin	52.8	-	\$52.8	
Marcal	15.1	3.8	18.9	
Bayonne	-	57.8	57.8	
Total	\$94.1	\$70.8	\$164.9	

⁽¹⁾ Source: Response to RAR-8 (revised) See attached

⁽²⁾ Source: Response to RAR-37 See attached

CONFIDENTIAL JERSEY CENTRAL POWER & LIGHT COMPANY

Projected Above-Market NUG Costs (Millions \$)

	Contract	Market	Above-Market
<u>Year</u>	<u>Payments</u>	Revenue Offset	Amount
2006	\$	\$2	\$
2007		2	
2008			
2009			
2010			
2011	_		
2006-2011	\$2,718.0	\$1,317.7	\$1,400.2
Subtotal	, ,,,	7-7	, ,
2012	\$1	\$	\$
2013	Ψ	Ψ	Ψ
2014			
2015			
2012-2015	\$ 334.3	\$ 188.2	\$ 146.0
Subtotal	Ψ 55 1.5	ψ 100.2	Ψ 1 10.0
Total	\$3,052	\$1,506	\$1,546

Source: Response to RAR-28

CONFIDENTIAL JERSEY CENTRAL POWER & LIGHT COMPANY

Projected Above-Market Costs for the Lakewood Contract (1) (Millions \$)

Year	Contract Payments	Market <u>Revenue</u>	Above-Market Costs
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			
Total			

Source: Response to RAR-28

JERSEY CENTRAL POWER & LIGHT COMPANY

Forked River Operating Losses⁽¹⁾

	Aug-Dec 	Calendar 	Calendar 2005	Total
O&M Costs	\$ 451,505	\$3,161,817	\$ 3,368,859	\$ 6,982,181
Fuel Expense	1,296,465	3,443,684	5,705,349	10,445,498
Energy Revenue	2,581,588	5,668,811	5,602,839	13,853,238
Capacity Revenue	163,141	365,347	<u>195,427</u>	723,915
Total ⁽²⁾	\$ 996,759	\$ (571,343)	\$(3,275,942)	\$(2,850,526)

Other: Blackout revenue = \$210,396

Capital additions = $\frac{$137,771}{}$

Net revenue = \$ 72,625

⁽I) Source: Monthly spreadsheets of Yards Creek and Forked River revenue requirements supplied by the Company

 $^{^{(2)}}$ Total computed as energy and capacity market revenue minus O&M costs + fuel expense.

APPENDIX A QUALIFICATIONS OF 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 250 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:

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

<u>Projected Electric Power Demands of the Allegheny Power System</u>, 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.

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

<u>Alternatives to Central Station Coal and Nuclear Power Generation</u>, 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," <u>Conducting Need-for-Power Review for Nuclear Power Plants</u> (D.A. Nash, ed.), U.S. Nuclear Regulatory Commission, NUREG-0942, December 1982.

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

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

<u>Proceedings of the Maryland Conference on Electric Load Forecasting</u>, (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.

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

<u>Projected Electric Power Demands for the Potomac Electric Power Company</u>, 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 <u>Proceedings of the Fourth NARUC Biennial</u> Regulatory Information Conference, 1984.

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

<u>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.</u>

"Discussion Comments," published in <u>Impact of Deregulation and Market Forces on Public Utilities: The Future of Regulation</u> (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).

<u>Power Plant Cumulative Environmental Impact Report for Maryland</u>, 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 <u>Acid Deposition in Maryland: A Report to the Governor and General Assembly</u>, Maryland Power Plant Research Program, AD-87-1, January 1987.

<u>Determination of Retrofit Costs at the Oyster Creek Nuclear Generating Station</u>, 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.

<u>Toward a Proposed Federal Policy for Independent Power Producers</u>, 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.

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

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

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

<u>Power Plant Cumulative Environmental Impact Report for Maryland</u> (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).

<u>Electric Power Rate Increases and the Cleveland Area Economy</u>, 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 National 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.

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

<u>The FERC Open Access Rulemaking: A Review of the Issues</u>, 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.)

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

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

<u>A Review of Issues Concerning Electric Power Capacity Markets</u>, 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 By Foundation).

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

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).
7

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).

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	<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

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
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 struc- ture, 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

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
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

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<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

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
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

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
85.	EL90-16-000 November 1990	System Energy Resources, Inc.	FERC	Louisiana Public Service Commission	Rate of return
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, et. al.	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

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
99.	90-256 January 1991	South Central Bell Telephone Co.	Kentucky	Attorney General	Rate of return
100.	U-17949A February 1991	South Central Bell Telephone Co.	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 Co.	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 Co. Pennsylvania Electric Co.	Pennsylvania	Office of Consumer Advocate	Purchased power contract and related ratemaking
107.	GR901213915 May 1991	Elizabethtown Gas Co.	New Jersey	Rate Counsel	Rate of return
108.	91-5032 August 1991	Nevada Power Co.	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

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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
126.	EC92-21-000 September 1992	Entergy Services, Inc.	FERC	Louisiana PSC	Merger Impacts (Affidavit)

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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 Co. 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 Co.	Maryland	Dept. of Natural Resources	Competitive bidding for power supplies
140.	E-015/GR-94-001 April 1994	Minnesota Power & Light Co.	Minnesota	Attorney General	Rate of return

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
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 Co.	Maine	Advocacy Staff	Price Cap Regulation Fuel Costs
143.	93-11065 April 1994	Nevada Power Co.	Nevada	Federal Executive Agencies	Rate of return
144.	94-0065 May 1994	Commonwealth Edison Co.	Illinois	Federal Executive Agencies	Rate of return
145.	GR94010002J June 1994	South Jersey Gas Co.	New Jersey	Rate Counsel	Rate of return
146.	WR94030059 July 1994	New Jersey-American Water Co.	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 Co.	Rate of return
149.	R-00942986 July 1994	West Penn Power Co.	Pennsylvania	Office of Consumer Advocate	Rate of return, emission allowances
150.	94-121 August 1994	South Central Bell Telephone Co.	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 Co.	Idaho	Federal Executive Agencies	Rate of return
153.	November 1994	Edmonton Water	Alberta, Canada	Regional Customer Group	Rate of return (rebuttal only)
154.	90-256 December 1994	South Central Bell Telephone Co.	Kentucky	Attorney General	Incentive Plan True-Ups

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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
167.	40003 November 1995	PSI Energy, Inc.	Indiana	Utility Consumer Counselor	Rate of return Retail wheeling

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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
181.	97-074 May 1997	BellSouth	Kentucky	MCI	Rate Rebalancing financial condition

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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
195.	Docket No. WR97080615 January 1998	Consumers NJ Water Company	New Jersey	Ratepayer Advocate	Rate of Return

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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
208.	Docket No. U-20925 (FRP) June 1999	Entergy Louisiana, Inc.	Louisiana	Staff	Capital Structure
209.	Docket No. EC-98-40-000 et. al. May 1999	American Electric Power/ Central & Southwest	FERC	Arkansas PSC	Market Power Mitigation

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
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	SWEPCO	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
222.	Case No. 21453 <u>et. al.</u> 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

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
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/Conectiv	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
235.	U-25533 March 2002	Entergy Louisiana/ Gulf States	Louisiana	PSC Staff	Nuclear Uprates Purchase Power
236.	P-00011872	Pike County Power	Pennsylvania	Consumer Advocate	POLR Service Costs
237.	May 2002 U-26361, Phase I May 2002	& Light Entergy Louisiana/ Gulf States	Louisiana	PSC Staff	Purchase Power Cost Allocations

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
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 & Lt.	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 Co. 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)
249.	U-27136 April 2003	Entergy Louisiana	Louisiana	Staff	Purchase Power Contracts
250.	8908 Phase II July 2003	Generic	Maryland	Energy Admin. Dept. of Natural Resources	Standard Offer Service
251.	U-27192 June 2003	Entergy Louisiana and Gulf States	Louisiana	LPSC Staff Cost R	Purchase Power Contract ecovery

	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
252.	C2-99-1181 October 2003	Ohio Edison Co.	U.S. District Court	U.S. Department of Justice et. al.	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 Co.	Arizona	Federal Executive Agencies	Rate of Return
260.	03-10001 January 2004	Nevada Power Co.	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
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 Co.	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

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
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 and 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 Co.	Louisiana	LPSC Staff	Purchase Power Contract
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 Co.	New Jersey	Ratepayer Advocate	Merger Issues
281.	U-28765 December 2005	Cleco Power LLC	Louisiana	LPSC Staff	Power plant certification, financing, rate plan
282.	U-29157 February 2006	Cleco Power LLC	Louisiana	LPSC Staff	Storm Damage Financing

	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	<u>Client</u>	<u>Subject</u>
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