BEFORE THE STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

I/M/O THE PETITION OF ATLANTIC CITY)	
ELECTRIC COMPANY FOR APPROVAL OF)	
THE SALE OF ITS KEYSTONE AND)	BPU DKT. NO. EM05121058
CONEMAUGH GENERATION STATION)	
ASSETS)	

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

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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 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.
23		A complete description of my professional background is provided in Appendix
24		A.
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1	Q.	HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT WITNESS BEFORE
2		UTILITY REGULATORY COMMISSIONS?
3	A.	Yes. I have testified before approximately two-dozen state and federal utility
4		commissions in more than 280 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
21		Department of Natural Resources and Energy Administration, and MCI.
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	() .	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NEW JERSEY

- 2 BOARD 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.

II. OVERVIEW AND RECOMMENDATIONS

WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A.	During the past year Atlantic City Electric Company (Atlantic or the Company) has been
	engaged in a process to sell its last remaining generation assets on the open market, its
	wholly-owned B. L. England plant and its partial ownership shares of the Keystone
	Station and Conemaugh Station, two very large coal-fired power plants located in
	Western Pennsylvania (referred to as the "K&C assets"). Atlantic's ownership
	entitlements in the Keystone and Conemaugh stations are relatively small, 2.47 percent of
	Keystone and 3.83 percent of Conemaugh, for a total of about 108 MW.

The sale of B. L. England has been delayed pending resolution of certain environmental issues, but Atlantic completed an auction of the K&C assets in the Fall 2005, with Duquesne Light Holdings, Inc. (DLH) announced as the winning bidder. Atlantic seeks approval from this Board for the sale to DLH so that the transaction can close and Atlantic's ratepayers can receive the benefits of the net proceeds.

I have been asked by the Ratepayer Advocate to evaluate the Company's request for approval of the K&C asset sale, and in the event the sale is approved, the calculation method of the net proceeds and use of those net proceeds for the benefit of Atlantic's retail customers.

O. WHAT IS THE COMPANY SPECIFICALLY PROPOSING?

The Company seeks Board approval to complete the sale to DLH at an estimated transaction price of \$173.1 million (subject to certain pricing adjustments at closing). The filing estimates that the \$173.1 million sale price will translate into net proceeds for ratepayers of \$126.9 million, assuming a transaction closing of September 1, 2006. A transaction closing sooner than September 1, 2006 increases the sale price by \$32,877 per day, and a delay beyond September 1, 2006 reduces the value by the same amount per

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1		day. The Company proposes that the net proceeds be maintained in an interest bearing
2		account and then be used to offset the B. L. England stranded costs when the status of B.
3		L. England is finalized (i.e., either sold or retired).
4	Q.	ATLANTIC HAS MAINTAINED OWNERSHIP OF THE K&C ASSETS FOR
5		SEVERAL YEARS POST RESTRUCTURING. WHY IS THAT?
6	A.	Atlantic sought to auction those assets several years ago, reaching an agreement to sell
7		the assets to NRG at a price of \$96 million. However, that transaction did not close, and
8		NRG filed for bankruptcy. The present transaction reflects Atlantic's efforts to remarket
9		the assets.
10		During this time period continuing through to the present, Atlantic has been using
11		the K&C assets for the benefit of its retail customers. Atlantic sells the energy output
12		from its entitlement in the plants into the PJM hourly energy market. After netting out
13		the full revenue requirements associated with the assets (including a pre-tax return on the
14		asset rate base of 13.0 percent), the net revenue is credited against Atlantic's deferred
15		balance. In recent years, these net credits (i.e., ratepayer benefits) have been substantial,
16		averaging about \$15 million per year (i.e., 2003-2005).
17	Q.	WHAT ISSUES ARE YOU ADDRESSING IN YOUR TESTIMONY?
18	A.	My testimony in this docket addresses the following issues:
19 20 21		 Has Atlantic conducted a reasonable and successful auction process that obtains a fair market price for the K&C assets?
22 23		• What are the relevant alternatives to approval of the sale, and should any of these alternatives be considered?
24 25		• Would approval of the sale maximize the value of these assets for the benefit of ratepayers?
26 27		• Assuming approval of the sale, is Atlantic's estimation of the net proceeds for ratepayers appropriate? If not, how should it be modified?

1 2 3		 Assuming approval of the sale, should ratepayer net proceeds be used to offset the B. L. England stranded costs, as proposed? If not, what is an appropriate use of those funds?
4	Q.	WHAT ARE YOUR MAIN FINDINGS?
5	A.	I have reviewed the Company's December 21, 2005 Petition and supporting testimony,
6		responses to the discovery requests propounded by the Ratepayer Advocate and other
7		information (including informal discovery conferences). Based on my analysis of this
8 9		information, I have reached the following findings:
10 11 12 13 14		 Atlantic has conducted a fair and highly successful auction that has resulted in a very strong price for the K&C assets. The resulting price, on a \$ per kW basis, is higher than the prices obtained in other transactions involving older power plants. It is also nearly twice as high as the price resulting from the first auction of these assets conducted by Atlantic.
15 16 17 18		• There are two potential alternatives to approval of the asset sale to DLH, (1) direct Atlantic to remarket the K&C assets in hopes of obtaining a better price; or (2) retain the assets for the benefit of Atlantic's customers, i.e., continue current practice.
19 20 21		 The Fall 2005 auction was successful in producing a robust price, and I have seen no information indicating that requiring Atlantic to remarket the K&C assets would produce an even better result.
22 23 24 25		• Atlantic has conducted a detailed analysis of potential benefits from retaining the K&C assets. Under certain scenarios, retaining the assets provides ratepayer benefits that exceed those from the sale of DLH, but that approach involves more risk.
26 27 28 29 30 31		• The Company's filed estimate of about \$127 million of net proceeds from the DLH sale understates what ratepayers should receive. My recommendation would provide net proceeds (before selling expenses) of about \$136 million. The main difference is that Atlantic improperly subtracted \$6 million of deferred taxes from the sales price in deriving the ratepayer benefit. The Company now agrees that the \$6.0 million for deferred taxes should not be deducted.
32 33 34 35		• Atlantic is presently in the process of marketing B. L. England and the results of those efforts will not be known until later this year or next year. Consequently, the B. L. England stranded costs (if any) are not presently known and cannot be accurately estimated at this time.

0.	BASED ON THESE FINDINGS.	WHAT DO YOU RECOMMEND?

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The threshold issue is whether the Board should approve the sale to DLH. My conclusion is that there are two potentially very attractive options for the K&C assets, the sale at \$173 million or retaining the assets for the benefit of ratepayers. The selection of either option by the Board can be justified. Even though the retention option under certain scenarios appears to show higher net present value benefits, rejecting the sale and retaining the assets would impose significant risk. In recognition of these risks, I believe it would be reasonable for the Board to approve the sale. I recommend against directing Atlantic to re-market the assets since there is no clear basis for believing that doing so would improve the sale price, and there is a risk that it might reduce it.

Assuming that the sale is approved and does close, the net proceeds available for ratepayers should be calculated as gross proceeds minus net book value (at closing date). The deferred taxes should <u>not</u> be deducted, as proposed in the Petition, because those taxes already have been paid by ratepayers. It appears that Atlantic is now in agreement with me on this issue.

Subject to certain standards, I do not oppose recovery of the transaction costs (estimated at \$1.5 million), but those costs are being incurred jointly for both the K&C assets and B. L. England sale. Thus, these costs should be quantified and recovery addressed at the time of final disposition of B. L. England, not at this time.

Atlantic appears to target a closing on the sale in the September 2006 time frame, and I do not object to that timing. Atlantic should not seek to accelerate the closing of the sale (e.g., to June 1, 2006 from September 2006) because the \$32,877 per day acceleration "bonus" is not compensatory. That is, during those high price summer months, the K&C assets will provide net revenue benefits significantly more than the \$32,877 bonus. The sale should close <u>no sooner than</u> September 1, 2006.

Assuming a sale, I recommend that Atlantic's proposal to offset net proceeds
against B. L. England stranded costs should <u>not</u> be accepted, since those stranded costs
are not known and might not be known for quite some time. Instead, I recommend that
the net proceeds be amortized back to customers over ten years, with a return on the
amortized balance at Atlantic's authorized rate of return. Atlantic's customers can expect
to pay very high market prices for generation in the near term, through the BGS process
or retail market, and this amortization credit will help to provide ratepayers with some
relief.

There is one additional very minor item. Atlantic seeks to retain the unamortized Investment Tax Credits (ITCs) associated with the K&C assets for its shareholders. While I do not necessarily agree with shareholder retention, I understand that this issue will be addressed generically in another BPU docket. The Ratepayer Advocate reserves its right to address that issue at the appropriate time.

HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

Section III of my testimony discusses the auction results, and in particular, a comparison between the sale and the option of retaining the assets for the benefit of customers. This section shows that while both options are attractive, retention of the assets might provide larger dollar benefits, though at the cost of greater perceived ratepayer risk. Section IV identifies the estimated net proceeds from the sale and outlines a rate plan for flowing-through those benefits to customers over a reasonable period of time.

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III. EVALUATION OF THE SALE

2	A. <u>D</u>	viscussion of the K&C assets auction
3	Q.	PLEASE DESCRIBE THE K&C ASSETS.
4	A.	Conemaugh and Keystone both are very large, multi-unit coal-fired plants located in
5		Western Pennsylvania. Each plant has 1,700 Mw of installed capacity plus 11 Mw of on-
6		site diesels. The two plants have multiple co-owners, with Atlantic being just one.
7		Specifically, Atlantic owns 3.83 percent of Conemaugh and 2.47 percent of Keystone, for
8		a total of about 108 Mw.
9		As coal plants, an important issue is the control of emissions. The Conemaugh
10		plant is equipped with Fuel Gas Desulfurization (FGD) equipment to control SO ₂ but
11		Keystone is not. It is my understanding that Keystone is likely to install FGD as well,
12		prompted by the Clean Air Interstate Rule (CAIR), and DLH (not Atlantic) would incur
13		this cost if the K&C asset sale closes. The two power plants are at least 30 years old,
14		entering service in the late 1960s, early 1970s.
15	Q.	IS THE MARKET GENERALLY FAMILIAR WITH THESE TWO PLANTS?
16	A.	Yes, very much so. Atlantic has previously marketed this capacity, reaching agreement
17		on a \$96 million sale to NRG that did not close. In addition, other previous co-owners of
18		these plants from time to time have marketed their ownership shares resulting in several
19		transactions. Hence, the Keystone and Conemaugh plants are very well known in the
20		wholesale market, and this fact may have helped to facilitate Atlantic's auction in 2005.

Q. HAVE YOU REVIEWED THE AUCTION PROCESS CONDUCTED BY
ATLANTIC FOR THE K&C ASSETS?

Yes. That process is described in Mr. Hevert's testimony and was investigated further in the Ratepayer Advocate's extensive discovery requests and informal discovery conferences. Atlantic conducted the auction with extensive assistance from Concentric

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1		Energy Advisors, Inc. (CEA) and outside counsel. CEA has considerable experience and
2		expertise in the sale of generation assets.
3	Q.	DO YOU BELIEVE THE AUCTION WAS PROPERLY CONDUCTED?
4	A.	Yes, as a general matter, I do. The auction was initiated with an Offering Memorandum,
5		with Atlantic and CEA conducting a fair and transparent process. It appears that bidders
6		had full access to all information needs, including site visits. I have seen no evidence that
7		bidders or potential bidders encountered confusion or any undue difficulty with the
8		process that either discouraged participation or depressed bid prices.
9		The auction was conducted as a two-step process, with initial indicative bids, a
10		short list and final binding bids. This is a reasonable and efficient way to conduct this
11		type of auction both for the utility and the bidders and facilitates due diligence. The
12		auction produced a substantial number of bidders in the initial phase, and Atlantic/CEA
13		attempted to retain a substantial group of bidders in the short list, binding bid phase.
14		There was significant market participation in the final, binding bid round.
15	Q.	DOES THE AUCTION PRODUCE A FAIR MARKET PRICE FOR THE
16		ASSETS?
17	A.	Yes, I believe the auction produces a fair market price that reflects competitive market
18		conditions. I also agree with Mr. Hevert that in addition to the winning bid being a fair
19		market price, it is a very favorable price. To my knowledge, it exceeds the per kW price
20		of any other older fossil power plant sale. Moreover, the price of approximately \$1,600
21		per kW is in the ballpark of the cost of constructing an entirely new coal-fired plant. This
22		price is an impressive result considering the plants are each more than 30 years old.
23	Q.	ATLANTIC WITNESS MR. SHAW RECOMMENDS THAT THE BOARD
24		MAKE TEN SPECIFIC FINDINGS RELATED TO THE AUCTION. DO YOU
25		AGREE WITH HIS FINDINGS?

I agree with most of his findings, but not necessarily all. He is correct that the sale
produced a fair market price, will not confer market power, will not harm employees, wil
not impair reliability of service and is generally consistent with standards established by
the Board for generating asset sales. While I conclude that proceeding with the sale is a
reasonable decision, no one can say for certain that it is in the best interest of ratepayers
(as I explain later). For that reason, I only accept finding No. 2 with that qualification. I
disagree with his finding No. 9, that net proceeds should be calculated and utilized, per
Mr. Barndt's recommendations. I address that issue in Section IV of my testimony.

A final and potentially complex issue is raised in finding No. 10, where Mr. Shaw states that "additional adjustments" (presumably to net proceeds) may be needed due to retained liabilities and if IRS tax treatment of sales proceeds turns out to be different than assumed. At this point in time, I have no basis to agree or disagree with that proposed finding. I would note that, notwithstanding this requested finding, Atlantic should be held to the usual regulatory standards of prudence.

MR. SHAW ALSO MENTIONS THE NEED FOR EXPEDITED REGULATORY APPROVAL. DO YOU AGREE?

Regulatory approval can be obtained as soon as possible but the closing should be held after the summer months. The purchase agreement adjusts the closing price by \$32,877 per day (about \$1 million per month) depending on whether the closing is before or after a target date of September 1, 2006. Mr. Shaw suggests that a June 1 closing would increase the purchase price by \$3 million, and that is true. However, in 2005 Atlantic produced a net ratepayer benefit of about \$20 million (\$1.6 million per month) from retaining the K&C assets. Thus, advancing the closing to June 1 will increase the price by \$3 million, but it will also likely cause a loss of ratepayer benefits of an even larger

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1	amount, particularly because June 1 to September 1 are the peak summer months when
2	market prices for energy are the highest.

Hence, if the sale is approved, I recommend a closing no earlier than the target September 1, and I would encourage Atlantic to even consider October 1 (since September also is a high value summer month).

BASED ON YOUR ASSESSMENT, WHAT DO YOU CONCLUDE?

After having conducted a detailed review of both the auction process, bid data and results, I conclude that Atlantic/CEA have conducted a successful auction that meets Board auction standards and produces a favorable and fair market price for the assets. Subject to the various other recommendations in my testimony, including the calculation method and rate treatment of the net proceeds, I find that Board approval of the sale would be reasonable. However, as discussed in the next section, the sale should be carefully compared with another option, i.e., retain the assets for the net benefits they can provide customers over the useful remaining lives of these plants.

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B. Second Option -- Retain the K&C Assets for Customers

Q. ATLANTIC HAS NOT SUCCEEDED UP TO NOW IN COMPLETING A SALE OF THE K&C ASSETS. HOW HAVE THESE ASSETS BEEN USED?

For the past several years, Atlantic has maintained ownership of the assets while utilizing these resources for the benefit of its retail customers. It does so by selling the output from its entitlements in these plants into the PJM spot energy markets earning a stream of monthly revenue. Atlantic also calculates the full revenue requirements associated with those assets each month and nets those costs from the achieved market revenue. The revenue requirements are inclusive of a 13.0 percent pre-tax return on the K&C asset rate

- base. The net benefit (or cost) in each month is incorporated into Atlantic's deferred
 balance, reducing the deferred balance in the case of a net benefit.
- Q. WHAT HAS BEEN THE EXPERIENCE WITH THE K&C ASSETS IN
 RECENT YEARS?
- 5 A. Data provided by Atlantic indicate that on an annual basis the market revenues
 6 significantly exceed the ongoing asset revenue requirements, thereby providing an overall
 7 net benefit. The following table summarizes the calculated net benefit for 2002-2005.

Benefit fro	om the K&C Assets	
Keystone	Conemaugh	Total
\$1.51	\$2.14	\$3.65
3.10	8.09	11.19
4.25	8.46	12.71
9.10	<u>12.01</u>	21.11
\$4.49	\$7.68	\$12.17
	Benefit fro (Keystone \$1.51 3.10 4.25 9.10	\$1.51 \$2.14 3.10 8.09 4.25 8.46 9.10 12.01

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During this four-year period, the average annual net benefit is \$12.2 million, and over the last three years the annual ratepayer net benefit has averaged \$15.0 million. The discernible increase since 2002 is attributable to escalating market prices for energy, and market energy prices are expected to remain high for the foreseeable future.

14 Q. IS IT FEASIBLE TO RETAIN THE K&C ASSETS SO THAT THESE

RECENTLY ACHIEVED BENEFITS CONTINUE?

A. Yes, it is. I am not aware of any impediment to continuing this arrangement for the indefinite future. Clearly, the K&C assets have a remaining life stretching over decades, as Mr. Hevert acknowledges in his own analyses. Based on the interest in reviewing this option expressed by the Board Staff and the Ratepayer Advocate, Atlantic prepared a

"Ratepayer Benefit" study that assumed continuation of the present arrangement over the
assumed remaining lives of the plants. The study was originally prepared by Atlantic in
the same time frame as its December 21, 2005 petition, and it was subsequently updated
in February 2006. In all cases my references are to the updated study.

HOW DOES THE RATEPAYER BENEFIT STUDY COMPARE TO MR.

HEVERT'S "FAIRNESS" DISCOUNTED CASH FLOW (DCF) STUDY?

As described in his testimony, Mr. Hevert prepared an asset valuation study using a standard DCF model as a "due diligence" validation on the acceptability of DLH's winning bid. This serves both as a reasonableness check on the winning bid, and it helps to determine whether the auction has produced a fair market price. Using this methodology, he produces a base case, as well as high and low cases, and this range of valuation results helps to validate the winning bid as being a fair market price.

The Ratepayer Benefit study is a net present value revenue requirements analysis, and not a DCF study, but the two approaches are conceptually similar. The Ratepayer Benefit analysis uses utility accounting costs rather than cash flows, but over a long time period the two approaches tend to provide roughly similar results as long as consistent assumptions are employed in both studies. Importantly, both studies are highly dependent upon data inputs for the ongoing operating costs of the assets, capital additions and, above all, the market prices for the energy sold from the plants. Mr. Hevert generally employed common assumptions on these key inputs for the two studies. Importantly, the projected market prices of energy were obtained from an outside forecasting organization, Henwood Associates. As shown for ratepayer benefits on the table above, ratepayer benefits increased dramatically since 2002, a period when market energy costs also were increasing.

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¹ In order to directly compare the two types of studies on an "apples to apples" basis, it is necessary to subtract the net book value from the DCF valuation result since that is what ratepayers receive if the assets are sold.

I	Q.	WHAT DOES ATLANTIC'S UPDATED RATEPAYER NET BENEFITS
2		ANALYSIS SHOW?
3	A.	Atlantic's updated Ratepayer Benefits analysis calculates a cumulative net present value
4		estimate for the two plants as of September 1, 2006, (i.e., the assumed date of closing if
5		the assets are to be sold) of [begin confidential] [end confidential] This
6		amount is significantly below Atlantic's estimated net sales proceeds of \$127 million.
7		Hence, Atlantic concludes that the Ratepayer Benefits study supports approval of the sale
8		to DLH (although Atlantic does not necessarily believe the Ratepayer Benefits study is an
9		appropriate test of the sale).
10	Q.	HAVE YOU REVIEWED THE RATEPAYER BENEFITS ANALYSIS IN
11		DETAIL?
12	A.	Yes, I have reviewed the analysis in some detail and have had the opportunity to discuss
13		it with Atlantic's technical experts, including Mr. Hevert. While I conclude much of the
14		analysis is quite reasonable, there are certain aspects that I would disagree with or must
15		question. These areas of disagreement (or potential disagreement) can greatly change the
16		results of the analysis and conclusions concerning whether the sale to DLH is beneficial
17		to ratepayers compared to retaining the assets. These areas of concern include the
18		following:
19		• The study employs a discount rate of 13.0 percent, apparently on the grounds
20		that 13.0 percent is the pre-tax rate of return presently used in the revenue
21		requirements calculation. That figure, however, is unreasonably high as a
22		consumer discount rate. The use of a more reasonable and realistic discount
23		rate would reverse Atlantic's results and actually lead to a finding that
24		retention of the assets provides a larger ratepayer benefit than the sale.

2		for Atlantic's ratepayers, on the order of [begin confidential]
3		[end confidential] At a minimum, this is a questionable assumption.
4		• The 13.0 percent figure used in the modeling as a rate of return on rate base is
5		excessive, given that Atlantic's current pre-tax rate of return is 11.41 percent.
6		This leads to an overstatement of costs and an understatement of benefits by
7		[begin confidential]
8		[end confidential]
9		All three of these modeling issues are important and imply a significant
10		understatement of ratepayer benefits from Atlantic retaining the assets. Thus, I conclude
11		that Atlantic's Ratepayer Benefit modeling, by itself, does not necessarily support
12		approval of the sale.
13	Q.	PLEASE EXPLAIN FURTHER THE DISCOUNT RATE ISSUE.
14	A.	Atlantic's Ratepayer Benefit analysis calculates an annual stream of benefits (market
15		revenue minus asset revenue requirements) over the remaining life of the plants, assumed
16		to be approximately 30 years. In order to compare the computed stream of benefits to the
17		DLH sale, the analysis must convert this stream to a cumulative net present value total as
18		of the assumed date of the sale's closing (September 1, 2006). This requires the selection
19		and use of a discount rate. The use of discounting conforms with accepted economic
20		theory and recognizes that a dollar of benefit received next year has somewhat less value
21 22 23 24 25		to the consumer than a dollar received this year.
26	Q.	WHAT DISCOUNT RATE DID ATLANTIC USE?

The study assumes that the K&C assets will eventually become stranded costs

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1	A.	Atlantic used 13 percent, which is the rate of return (grossed up for income tax effects)
2		Atlantic uses to calculate the revenue requirements on the K&C assets.
3	Q.	IS THIS A REASONABLE DISCOUNT RATE?
4	A.	No, in my judgment, it is far too high as a consumer discount rate. It has been my
5		experience that in performing consumer benefit studies utilities in New Jersey typically
6		employ discount rates in the 6 to 8 percent range, using their net of tax (not tax grossed
7		up) cost of capital as the measure. Examples of such studies would include a benefit/cost
8		analysis of a NUG buyout or ratepayer savings from securitization. I would note that in
9		Docket No. EF03070532, Public Service Electric & Gas Company used 6.52 percent as
10		its discount rate to compute ratepayer net benefits from securitization. In that same case,
11		I employed a 7 percent discount rate (Direct Testimony, March 15, 2005).
12	Q.	IS THERE ANY REASON WHY THE CONSUMER DISCOUNT RATE
13		SHOULD BE GROSSED UP FOR INCOME TAX EFFECTS?
14	A.	I am not aware of any reason for using that procedure. The consumer's cost of capital
15		(e.g., cost of borrowing or return on investing savings) would not be grossed up for
16		income taxes, and in some instances (e.g., a home mortgage) it would be <u>reduced</u> for
17		income tax purposes. There is no reasonable basis for using a 13 percent discount rate in
18		the Ratepayer Benefit analysis or for employing a tax gross-up procedure.
19	Q.	HOW WOULD REDUCING THE DISCOUNT RATE IMPACT THE
20		RESULTS?
21	A.	I show the results of Atlantic's Ratepayer Benefits analysis at discount rates of 13.0
22		percent, 11.41 percent, 10 percent and 7 percent on Schedule MIK-1. Reducing the
23		discount rate (and making no other changes) increases the net present value (NPV)
24		benefit. [begin confidential]
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2		[end confidential]
3		The selection of the appropriate discount rate ultimately is a matter of analytic
4		judgment, and for present purposes I believe it would be reasonable to consider a range of
5		7 to 10 percent, with more emphasis on the lower end of the range.
6	Q.	WHY DO YOU SHOW RESULTS FOR 11.41 PERCENT?
7	A.	This is an additional result provided to the Ratepayer Advocate by Atlantic. The 11.41
8		percent corresponds to Atlantic's currently authorized cost of capital grossed up for
9		income taxes. Again, there is no reason to gross up a consumer discount rate for income
10		taxes, and therefore, I place little weight on this result.
11	Q.	ARE THERE OTHER ASPECTS OF THE ANALYSIS THAT YOU WOULD
12		QUESTION?
13	A.	Yes. In my opinion, the analysis improperly employs a 13 percent return on the rate base
14		when Atlantic is authorized 11.41 percent (with tax gross up). [begin confidential]
15		
16		
17		[end confidential]
18		Atlantic's study includes more than [begin confidential] [end
19		confidential] in "stranded cost" as a reduction in benefits in the terminal year of the
20		. 1 1 1 1
		study, which equates to roughly [begin confidential] [end
21		confidential] NPV at September 1, 2006. I understand the purpose of this stranded cost
21 22		
		confidential] NPV at September 1, 2006. I understand the purpose of this stranded cost

1	Q.	ARE THERE OTHER FACTORS THAT COULD AFFECT THE ACCURACY
2		OF THE ANALYSIS?
3	A.	Yes, I believe there are, but I am not in a position to quantify them. In particular, there
4		are a number of modeling assumptions that could lead to an overstatement of benefits.
5		The analysis assumes continued successful operation of the K&C assets with no major
6		operational failures; no major capital additions at either plant (other than FGD equipment
7		at Keystone) beyond an extrapolation of current budgets; and no future environmental
8		compliance initiatives beyond current regulations (e.g., CAIR). While these may be all
9		reasonable study assumptions, it indicates that there are some important risks associated
10		with actually realizing the NPV benefits calculated by the model and shown on Schedule
11		MIK-1.
12	Q.	WHAT DO YOU BELIEVE ARE THE MAJOR ENVIRONMENTAL
13		EXPOSURES FACING THESE ASSETS NOT BEING CAPTURED IN
14		ATLANTIC'S ANALYSIS?
15	A.	While there could be many, at this point in time I would identify two. First, I understand
16		that the analysis reflects compliance with present rules on mercury emissions (EPA's
17		Clean Air Mercury Rule), but this rule has been controversial, and there is the potential
18		for a more stringent rule or law in the future. It is not clear how the K&C assets would
19		comply with a more stringent requirement and at what costs.
20		A second important environmental exposure would be future laws or regulations
21		for the control of greenhouse gas emissions. While this would likely raise the market
22		energy prices at which the K&C asset output could be sold, it is likely to increase the
23		costs at those plants by even more, thereby reducing the ratepayer benefit.
24	Q.	WHAT DO YOU CONCLUDE?

1	Α.	The Ratepayer Benefit study, when corrected for a reasonable discount rate and possibly
2		other factors, produces a NPV result exceeding the net proceeds from the DLH sale.
3		However, the modeling also embodies assumptions regarding 30 years of highly
4		successful operations; it includes no major capital investments (other than a FGD); and it
5		assumes no future environmental initiatives. Retaining the assets would expose
6		customers to these risks compared to accepting a 100 percent certain benefit today of
7		\$136 million. While retaining the K&C assets for the remainder of their useful lives is an
8		entirely viable and potentially attractive option, I believe that it also would be reasonable
9		for the Board to approve the sale so that customers can lock in the certain net present
10		value benefit of \$136 million from the sale to DLH.
11		Given these circumstances and subject to the ratemaking mechanisms discussed in

Given these circumstances and subject to the ratemaking mechanisms discussed in the next section of my testimony, I do not object to the sale of the K&C assets.

Q. SUPPOSE THE BOARD CONCLUDES THAT THE K&C ASSETS SHOULD BE RETAINED. DO YOU HAVE ANY COMMENTS ON HOW THE BENEFITS SHOULD BE PROVIDED TO CUSTOMERS?

Yes. If the sale is not approved, the benefits from the assets should be 100 percent flowed through to customers in the same manner as is being done now. This should be dollar for dollar and subject to periodic audit to ensure that all market revenue is appropriately obtained and credited and that offsetting revenue requirements are correctly calculated.

In that regard, the rate of return used in the revenue requirements should be the <u>actual</u> authorized rate of return, not the overstated return of 13 percent that Atlantic currently uses. As mentioned, over the remaining life of the plants, the use of the improper 13 percent would cost ratepayers about \$20 million more than using the currently authorized pre-tax return (11.41 percent).

IV. USE OF NET SALES PROCEEDS

2 A. Estimation of the Net Sales Proceeds

- 3 Q. WHAT IS ATLANTIC'S ESTIMATE OF THE SALES PROCEEDS?
- 4 A. Assuming a September 1, 2006 closing, Atlantic estimated the net proceeds available to
- 5 benefit customers as:

1

- 6 Sale Proceeds: \$173.1 million
- 7 Minus Net Book Value: 38.7 million
- 8 Minus Deferred Taxes: 6.0 million
- 9 Minus Transaction Costs: 1.5 million
- Net Sales Proceeds: \$126.9 million
- 11 (See Testimony of Wayne W. Barndt, pages 4-6.)
- 12 Q. DO YOU AGREE WITH THIS ESTIMATE OF THE NET RATEPAYER
- 13 BENEFIT?
- 14 A. No, this estimate should be updated and modified. Atlantic itself has identified a revision
- to its estimated net book value at closing, and it now acknowledges that the deferred
- income tax balance (which reflects primarily book versus tax timing differences) should
- 17 not be deducted from the net proceeds. Atlantic now appears to believe that it is
- reasonable to assume "that the reserve for the reversal of deferred taxes is equal to the tax
- due for the reversal of deferred taxes" (response to RAR-74). In other words, Atlantic
- already has received rate recovery for the K&C deferred taxes.

1		According to data response RAR-74, Atlantic now estimates net proceeds
2		available to ratepayers as:
3		Sale Proceeds: \$173.1 million
4		Minus Net Book Value: 37.4 million
5		Minus Transaction Costs: 1.5 million
6		Net Sales Proceeds: \$134.2 million
7	Q.	DO YOU ACCEPT THIS ESTIMATE?
8	A.	This is an estimate, and there could be minor changes. Moreover, at this point in time, I
9		recommend against recovery of the \$1.5 million of transaction costs directly from the
10		sales proceeds. My understanding is that this is only an estimate and includes an
11		allocation of costs incurred jointly with the B. L. England plant (see response to RAR-
12		28). Consequently, I believe that it would be preferable to address cost recovery of all
13		transaction costs in connection with the final disposition of B. L. England. With this
14		change, the estimated net proceeds become \$135.7 million.
15		There is one other minor item that can slightly impact net proceeds. There is an
16		unamortized investment tax credit (ITC) of about \$0.2 million. Since these are not
17		investor-supplied funds, they should be provided to ratepayers as a part of the net
18		proceeds. Atlantic objects and seeks to retain these dollars for shareholders (see response
19		to RAR-26). However, it is my understanding that the ITC issue is being addressed in a
20		separate docket and therefore need not be resolved here. Accordingly, the Board should
21		reject Atlantic's ITC proposal at this time.
22	Q.	ARE YOU OBJECTING TO THE EVENTUAL RECOVERY OF THE
23		TRANSACTION COSTS?
24	A.	No. The transaction costs associated with the sale should be recoverable at the
25		appropriate time, subject to being prudently-incurred, verifiable, reasonable and reflective

only of incremental costs. That is, the claimed costs must be new costs incurred only in connection with the K&C asset and B. L. England sales. For example, costs eligible for special recovery would not include allocations of Atlantic's overhead costs, the expenses for existing Atlantic or PHI staff, etc.

B. Flowing the Benefits of the Sale to Customers

5

- Q. HOW DOES ATLANTIC PROPOSE TO FLOW THE NET PROCEEDS FROM
 THE SALE TO CUSTOMERS?
- A. As explained by Mr. Barndt, Atlantic proposed to place the net proceeds in an interest bearing account until the disposition of the B. L. England sale (or, in the alternative, its retirement) is fully resolved and any stranded costs determined. The K&C asset sale proceeds (plus accrued interest) then would be credited against the B. L. England stranded costs at that time. (Testimony, page 7.)
- 13 Q. WHEN WILL THIS OCCUR?
- 14 A. That is not entirely clear, but it appears that resolution would occur in late 2007 or early 2008, according to Mr. Barndt.
- 16 Q. DO YOU AGREE WITH HIS PROPOSAL?
- 17 A. The procedure outlined by Mr. Barndt is one possible approach, but I recommend that the 18 Board take direct action at this time to begin providing the benefit of the K&C asset sale 19 to ratepayers as soon as practicable after closing, not in 2008. New Jersey ratepayers are 20 experiencing very high costs for electric service (and the generation component in 21 particular), and this will continue throughout this year into next year. At the present time, 22 ratepayers are receiving the savings from the K&C assets (through credits to the deferred 23 balance) on the order of \$15 to \$20 million per year, but those cost savings will end after 24 the closing on the sale.

1	Q.	HOW CAN THE BENEFITS OF THE SALES PROCEEDS BE PROVIDED
2		MORE DIRECTLY?
3	A.	I recommend that Atlantic establish a rate credit mechanism to be implemented
4		immediately after the closing on the sale. For purposes of this mechanism, I recommend
5		a ten-year amortization of the net proceeds, with a return on the unamortized balance at
6		Atlantic's authorized rate of return.
7		I show this rate credit plan on Schedule MIK-2, based on net sales proceeds of
8		\$136 million. The first year ratepayer credit would be \$28.3 million, and it would
9		average \$21.4 million per year over ten years. This schedule is based on Atlantic's
10		current 11.41 percent (pre-tax) return, but I recommend that the rate credit be re-
11		calculated annually using Atlantic's authorized rate of return at that time. The rate credit
12		should be reset annually based on Atlantic's forecasted retail sales and subject to dollar-
13		for-dollar true-up.
14	Q.	THE RATE CREDIT AMOUNT ON SCHEDULE MIK-2 DECLINES OVER
15		TIME. COULD IT ALSO BE SET ON A LEVELIZED BASIS?
16	A.	Yes, levelized credit over ten years would be \$22.9 million (again, using 11.41 percent),
17		based on a standard mortgage-type calculation. This is somewhat lower than the first year
18		credit under straight-line amortization of \$28.3 million, but it is slightly higher than the
19		average annual \$21.4 million credit resulting from straight-line amortization.
20	Q.	WHY DID YOU SELECT TEN YEARS?
21	A.	It is a compromise between two considerations. First, the K&C assets themselves are
22		long term, and it therefore is appropriate to reflect the net benefit over some reasonably
23		long time period. Second, market energy costs that Atlantic customers pay now and can
24		expect to pay for the next several years are and will be quite high. Hence, I believe it is
25		appropriate to have a rate mechanism that provides substantial near term relief. Over the

1	next five years, my proposed credit will provide in excess of \$25 million per year of
2	ratepayer savings.

- 3 Q. WHAT SAVINGS AMOUNT WOULD A 20-YEAR AMORTIZATION
- 4 CREDIT MECHANISM PROVIDE?
- 5 A. I show that on Schedule MIK-3, again using the 11.41 percent rate of return. This
- 6 provides a first year savings of \$21.9 million and an average annual benefit of \$14.6
- 7 million per year. I believe ten years and twenty years would define reasonable upper and
- lower bound amortization periods for the Board's consideration.
- 9 Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?
- 10 Yes, it does.

APPENDIX A STATEMENT OF 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 Regulatory Information Conference</u>, 1984.

"Nuclear Power and Investor Perceptions of Risk," (with Ralph E. Miller), published in <u>The</u> Energy Industries in Transition: 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</u>: A Report to the Governor and General Assembly, 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 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.

<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)

<u>The AES Warrior Run Project: Impact on Western Maryland Economic Activity and Electric Rates</u>, 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).

<u>Modeling the Financial Impacts on the Bell Regional Holding Companies from Changes in</u> 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).

<u>Electric Restructuring and the Environment: Issue Identification for Maryland</u>, 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).

<u>The Economic Feasibility of Power Plant Retirements on the Entergy System</u>, 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).

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>	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

Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
7559 September 1982	Potomac Edison Company	Maryland	Commission Staff	Cogeneration
820150-EU September 1982	Gulf Power Company	Florida	Federal Executive Agencies	Rate of return, CWIP
82-057-15 January 1983	Mountain Fuel Supply Company	Utah	Federal Executive Agencies	Rate of return, capital structure
5200 August 1983	Texas Electric Service Company	Texas	Federal Executive Agencies	Cost of equity
28069 August 1983	Oklahoma Natural Gas	Oklahoma	Federal Executive Agencies	Rate of return, deferred taxes, capital structure, attrition
83-0537 February 1984	Commonwealth Edison Company	Illinois	U.S. Department of Energy	Rate of return, capital structure, financial capability
84-035-01 June 1984	Utah Power & Light Company	Utah	Federal Executive Agencies	Rate of return
U-1009-137 July 1984	Utah Power & Light Company	Idaho	U.S. Department of Energy	Rate of return, financial condition
R-842590 August 1984	Philadelphia Electric Company	Pennsylvania	Office of Consumer Advocate	Rate of return
840086-EI August 1984	Gulf Power Company	Florida	Federal Executive Agencies	Rate of return, CWIP
84-122-E August 1984	Carolina Power & Light Company	South Carolina	South Carolina Consumer Advocate	Rate of return, CWIP, load forecasting
CGC-83-G & CGC-84-G October 1984	Columbia Gas of Ohio	Ohio	Ohio Division of Energy	Load forecasting
R-842621 October 1984	Western Pennsylvania Water Company	Pennsylvania	Office of Consumer Advocate	Test year sales
R-842710 January 1985	ALLTEL Pennsylvania Inc.	Pennsylvania	Office of Consumer Advocate	Rate of return
	7559 September 1982 820150-EU September 1982 82-057-15 January 1983 5200 August 1983 28069 August 1983 83-0537 February 1984 84-035-01 June 1984 U-1009-137 July 1984 R-842590 August 1984 840086-EI August 1984 84-122-E August 1984 CGC-83-G & CGC-84-G October 1984 R-842621 October 1984 R-842710	7559 September 1982 820150-EU September 1982 82-057-15 January 1983 5200 August 1983 Company Comp	7559 September 1982 820150-EU September 1982 82-057-15 January 1983 5200 August 1983 Company Company Sebrember 1982 R-842621 October 1984 September 1982 Gulf Power Company Florida Mountain Fuel Supply Company Utah Utah Utah Oklahoma Oklahoma Oklahoma Oklahoma Oklahoma Utah Utah Oklahoma Illinois February 1984 Utah Utah Utah Power & Light Company Utah Utah Utah Pennsylvania Florida South Carolina Company Company Company Company Company Company Company Company Cocober 1984 R-842621 October 1984 R-842710 ALLTEL Pennsylvania Inc. Pennsylvania	Potomac Edison Company Maryland Commission Staff

			011/14/11/01/11/11/11/11		
	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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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	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<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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	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

Expert Testimony of Matthew I. Kahal Docket Number **Utility** Jurisdiction Client Subject 72. 8425 Houston Lighting & Power Texas U.S. Department of Energy Rate of return March 1989 Company EL89-30-000 Central Illinois **FERC** 73. Soyland Power Coop, Inc. Rate of return Public Service Company April 1989 74. R-891208 Pennsylvania American Pennsylvania Office of Consumer Rate of return May 1989 Water Company Advocate 75. 89-0033 Illinois Bell Telephone Illinois Citizens Utility Board Rate of return May 1989 Company 76. 881167-EI Gulf Power Company Florida Federal Executive Agencies Rate of return May 1989 77. R-891218 National Fuel Gas Pennsylvania Office of Consumer Advocate Sales forecasting July 1989 Distribution Company 78. 8063, Phase III Potomac Electric Maryland Depart. Natural Resources **Emissions Controls** Sept. 1989 Power Company 37414-S2 Rate of return, DSM, off-79. Public Service Company Indiana **Utility Consumer Counselor** October 1989 of Indiana system sales, incentive

U.S. House of Reps.

Indiana

FERC

FERC

Pennsylvania

Comm. on Ways & Means

NA

Utility Consumer Counselor

PA Office of Consumer

PA Office of Consumer

Consumer Counselor

Advocate

Advocate

Indiana Utility

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84.

October 1989

November 1989

RP89-49-000

R-891364

December 1989

December 1989

RP89-160-000

January 1990

38728

Generic

Indiana Michigan

Power Company

National Fuel Gas

Supply Corporation

Philadelphia Electric

Trunkline Gas Company

Company

regulation

Excess deferred

income tax

Rate of return

Rate of return

Financial impacts

(surrebuttal only)

Rate of return

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on

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

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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	

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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	

Virginia

FERC

Attorney General

Louisiana PSC

92PUE0037 September 1992

EC92-21-000 September 1992

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Commonwealth Gas Company

Entergy Services, Inc.

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Rate of return

Merger Impacts (Affidavit)

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of Matthew I. Kahal
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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	

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

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

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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	
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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

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

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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 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	

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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	

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	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
2	P-00011872 May 2002	Pike County Power & Light	Pennsylvania	Consumer Advocate	POLR Service Costs
2	237. U-26361, Phase I May 2002	Entergy Louisiana/ Gulf States	Louisiana	PSC Staff	Purchase Power Cost Allocations
2	238. R-00016849C001 e June 2002	t al. Generic	Pennsylvania	Pennsylvania OCA	Rate of Return
2	239. U-26361, Phase II July 2002	Entergy Louisiana/ Entergy Gulf States	Louisiana	PSC Staff	Purchase Power Contracts
2	240. U-20925(B) August 2002	Entergy Louisiana	Louisiana	PSC Staff	Tax Issues
2	241. U-26531 October 2002	SWEPCO	Louisiana	PSC Staff	Purchase Power Contract
2	242. 8936 October 2002	Delmarva Power & Lt.	Maryland	Energy Administration Dept. Natural Resources	Standard Offer Service
2	243. U-25965 November 2002	SWEPCO/AEP	Louisiana	PSC Staff	RTO Cost/Benefit
2	244. 8908 Phase I November 2002	Generic	Maryland	Energy Administration Dept. Natural Resources	Standard Offer Service
2	245. 02S-315EG November 2002	Public Service Co. of Colorado	Colorado	Fed. Executive Agencies	Rate of Return
2	246. EL02-111-000 December 2002	PJM/MISO	FERC	MD PSC	Transmission Ratemaking
2	247. 02-0479 February 2003	Commonwealth Edison	Illinois	Dept. of Energy	POLR Service
2	PL03-1-000 March 2003	Generic	FERC	NASUCA	Transmission Pricing (Affidavit)
2	249. U-27136 April 2003	Entergy Louisiana	Louisiana	Staff	Purchase Power Contracts
2	250. 8908 Phase II	Generic	Maryland	Energy Admin.	Standard Offer Service
1					

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of Matthew I. Kahal					
	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
	July 2003			Dept. of Natural Resources	
251.	U-27192 June 2003	Entergy Louisiana and Gulf States	Louisiana	LPSC Staff Cost Re	Purchase Power Contract ecovery
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

Expert Testimony

	of Matthew I. Kahal					
	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>	
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	
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	

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

BEFORE THE STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

I/M/O THE PETITION OF ATLANTIC CITY)	
ELECTRIC COMPANY FOR APPROVAL OF)	
THE SALE OF ITS KEYSTONE AND)	BPU DKT. NO. EM05121058
CONEMAUGH GENERATION STATION)	
ASSETS	·	

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

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P. O. Box 46005
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(973) 624-1047 - Fax
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Filed: April 6, 2006

THIS PAGE CONTAINS CONFIDENTIAL INFORMATION

ATLANTIC CITY ELECTRIC COMPANY

Net Present Value Benefits from Retaining the K&C Assets at Alternative Discount Rates (30 year NPV as of September 1, 2006 in millions \$)



ATLANTIC CITY ELECTRIC COMPANY

Ten-Year Amortization Plan (Millions \$)

Assumptions:

- \$136 million net proceeds at closing
- 11.41% pre-tax rate of return

<u>Year</u>	Average <u>Balance</u>	Return @ 11.41%	Annual <u>Amortization</u>	Total Ratepayer Benefit
1	\$129.2	\$14.74	\$13.6	\$28.34
2	115.6	13.19	13.6	26.79
3	102.0	11.64	13.6	25.24
4	88.4	10.09	13.6	23.69
5	74.8	8.53	13.6	22.13
6	61.2	6.98	13.6	20.58
7	47.6	5.43	13.6	19.03
8	34.0	3.88	13.6	17.48
9	20.4	2.33	13.6	15.93
10	6.8	0.78	<u>13.6</u>	14.38
Average	\$68.0	\$7.76	\$13.6	\$21.36

ATLANTIC CITY ELECTRIC COMPANY

Twenty-Year Amortization Plan (Millions \$)

Assumptions:

- \$136 million net proceeds at closing
- 11.41% pre-tax rate of return

<u>Year</u>	Average <u>Balance</u>	Return @ 11.41%	Annual <u>Amortization</u>	Total Ratepayer Benefit
1	\$132.6	\$15.13	\$6.8	\$21.93
2	125.8	14.35	6.8	21.15
3	119.0	13.58	6.8	20.38
4	112.2	12.80	6.8	19.60
5	105.4	12.03	6.8	18.83
6	98.6	11.25	6.8	18.05
7	91.8	10.47	6.8	17.27
8	85.0	9.70	6.8	16.50
9	78.2	8.92	6.8	15.72
10	71.4	8.15	6.8	14.95
11	64.6	7.37	6.8	14.17
12	57.8	6.60	6.8	13.40
13	51.0	5.80	6.8	12.62
14	44.2	5.04	6.8	11.84
15	37.4	4.27	6.8	11.07
16	30.6	3.49	6.8	10.29
17	23.8	2.72	6.8	9.52
18	17.0	1.94	6.8	8.74
19	10.2	1.16	6.8	7.96
20	3.4	0.39	6.8	7.19
Average	\$68.0	\$7.76	\$6.80	\$14.56