BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In The Matter Of The Determination Of The)
Existence Of Significantly Excessive Earnings For 2017)
Under The Electric Security Plans Of Ohio Edison) Case No. 18-857-EL-UNC
Company, The Cleveland Electric Illuminating)
Company, And The Toledo Edison Company.)
In The Matter Of The Determination Of The)
Existence Of Significantly Excessive Earnings For 2018)
Under The Electric Security Plans Of Ohio Edison) Case No. 19-1338-EL-UNC
Company, The Cleveland Electric Illuminating)
Company, And The Toledo Edison Company.	
In The Matter Of The Determination Of The)
Existence Of Significantly Excessive Earnings For 2019)
Under The Electric Security Plans Of Ohio Edison) Case No. 20-1034-EL-UNC
Company, The Cleveland Electric Illuminating)
Company, And The Toledo Edison Company.)
In the Matter of the Quadrennial Review Required)
By R.C. 4928.143(E) For The Electric Security Plans)
Of Ohio Edison Company, The Cleveland Electric) Case no. 20-1476-EL-UNC
Illuminating Company, And The Toledo Edison)
Company.)

DIRECT TESTIMONY OF MATTHEW I. KAHAL

On Behalf Of The Office Of The Ohio Consumers' Counsel

65 East State Street, 7th floor Columbus, Ohio 43215-3485

April 5, 2021

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APPENDIX A: Qualifications of Matthew I. Kahal and Past Testimony

1	I.	QUALIFICATIONS
2		
3	<i>Q1</i> .	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
4	<i>A1</i> .	My name is Matthew I. Kahal. I am employed as an independent consultant retained by
5		the Office of the Ohio Consumers' Counsel ("OCC") to address certain issues in these
6		cases. My business address is 1108 Pheasant Crossing, Charlottesville, VA 22901.
7		
8	<i>Q2</i> .	PLEASE STATE YOUR EDUCATIONAL BACKGROUND.
9	<i>A2</i> .	I hold B.A. and M.A. degrees in economics from the University of Maryland and have
10		completed course work and examination requirements for the Ph.D. degree in economics.
11		My areas of academic concentration included industrial organization, economic
12		development, and econometrics.
13		
14	<i>Q3</i> .	WHAT IS YOUR PROFESSIONAL BACKGROUND?
15	<i>A3</i> .	I have been employed in the area of energy, utility, and telecommunications consulting
16		for the past 35 years, working on a wide range of topics. Most of my work during my
17		consulting career has focused on electric utility integrated planning, power plant
18		licensing, environmental compliance issues, mergers, and utility financial issues.
19		
20		I was a co-founder of Exeter Associates, Inc., and from 1981 to 2001, and I was
21		employed at Exeter as a Senior Economist and Principal. During that time, I took the lead
22		role at Exeter in performing cost of capital and financial studies. In recent years, the

1		focus of much of my professional work has expanded to include electric utility markets,
2		power supply procurement, and industry restructuring.
3		Prior to entering consulting, I served on the Economics Department faculties at the
4		University of Maryland (College Park) and Montgomery College, teaching courses on
5		economic principles, development economics, and business. A complete description of
6		my professional background is provided in Appendix A.
7		
8	<i>Q4</i> .	HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT WITNESS BEFORE
9		UTILITY REGULATORY COMMISSIONS?
10	<i>A4</i> .	Yes. I have testified before approximately two dozen state and federal utility
11		commissions, federal courts, and the U.S. Congress in more than 440 separate regulatory
12		cases. My testimony has addressed a variety of subjects including fair rate of return,
13		resource planning, financial assessments, load forecasting, competitive restructuring, rate
14		design, purchased power contracts, environmental compliance, merger economics, and
15		other regulatory policy issues. These cases have involved electric, gas, water, and
16		telephone utilities. A list of these cases is set forth in Appendix A, with my statement of
17		qualifications.

1	<i>Q</i> 5.	WHAT PROFESSIONAL ACTIVITIES HAVE YOU ENGAGED IN SINCE
2		LEAVING EXETER AS A PRINCIPAL IN 2001?
3	A5.	Since 2001, I have worked on a variety of consulting assignments pertaining to electric
4		restructuring, purchase power contracts, environmental controls, cost of capital, and other
5		regulatory issues. Current and recent clients include the U.S. Department of Justice, U.S.
6		Air Force, U.S. Department of Energy, the Federal Energy Regulatory Commission,
7		Connecticut Attorney General, Pennsylvania Office of Consumer Advocate, the Ohio
8		Consumers' Counsel, New Jersey Division of Rate Counsel, Rhode Island Division of
9		Public Utilities, Louisiana Public Service Commission, Arkansas Public Service
10		Commission, the Maryland Public Service Commission, the California Public Utilities
11		Commission, the New Mexico Attorney General, the Maine Public Advocate, the New
12		Hampshire Consumer Advocate, the Maryland Department of Natural Resources, and the
13		Maryland Energy Administration.
14		
15	<i>Q6</i> .	HAVE YOU PREVIOUSLY TESTIFIED ON THE SUBJECTS OF ELECTRIC
16		RESTRUCTURING, TRANSITION TO COMPETITION, AND RETAIL DEFAULT
17		SERVICE IN OHIO?
18	<i>A6</i> .	Yes. I have testified on these topics on numerous occasions during the past 10 to 15
19		years. This includes the design of programs to provide generation supply service for those
20		retail electric customers requiring default service. During the past several years, I testified
21		before the Public Utilities Commission of Ohio (the "PUCO") in the Electric Security
22		Plan ("ESP") cases involving AEP Ohio (Case No. 13-2385-EL-SSO), Duke Energy

1		Ohio (Case No. 14-841-EL-SSO and Case Nos. 17-1263-SSO, et. al.), and the three
2		FirstEnergy Utilities (Case No. 14-1297-EL-SSO). I submitted testimony in the Dayton
3		Power and Light Company ESP case in 2016/2017 (Case Nos. 16-0395-EL-SSO, et. al.)
4		and more recently in Case Nos. 20-680-EL-SSO, et. al.
5		
6	II.	OVERVIEW AND SUMMARY
7		
8	<i>Q7</i> .	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
9	A7.	My testimony provides a recommendation on the level of utility profits that should be
10		considered "significantly excessive," in other words, the level above which customers
11		deserve a refund.
12		
13		A supposed consumer protection in Ohio's utility-friendly 2008 energy law requires
14		electric distribution utilities ("EDUs") that have rates set by the PUCO in Electric
15		Security Plans ("ESPs") must make annual filings with for the PUCO to determine
16		whether their earned return on equity (profits) in a given year can be considered
17		"significantly excessive." Any so-called significantly excessive profits are to be returned
18		by the electric utility to consumers who paid such high profits. The PUCO should be
19		especially sensitive to consumers in its use of this profits test because the 2008 law
20		allowed electric utilities with ESPs to keep charges to consumers for excessive profits.
21		Merely significantly excessive profits are to be refunded to consumers.

1 What constitutes significantly excessive profits is measured by comparing the profits that the utility actually earned to a benchmark value, where any profits at or exceeding the 2 benchmark value are considered significantly excessive. The benchmark value is 3 determined by the PUCO. And I am making a recommendation for what benchmark 4 value the PUCO should adopt. This process is described in the 2008 law as the 5 Significantly Excessive Earnings Test ("SEET"). If the PUCO finds that the utility had 6 7 significantly excessive earnings (profits), the excess is to be returned to the utility's customers. 8 9 The Cleveland Electric Illuminating Company ("CEI"), Ohio Edison Company ("OE"), 10 and The Toledo Edison Company ("TE"), collectively referred to as FirstEnergy 11 ("FirstEnergy" or the "Utilities") have been operating under the current Electric Security 12 Plan (referred to as "ESP IV") since mid-2016, and they have made SEET (profit) filings 13 for the years 2017, 2018, and 2019, which the PUCO is presently reviewing. 14 15 In all three cases, the FirstEnergy Utilities have calculated and asked the PUCO to adopt 16 SEET threshold values for return on equity ("ROE"). Based on their proposals, the 17 FirstEnergy Utilities ask the PUCO to find that there are no significantly excessive profits 18 19 for it to refund to customers. I disagree. 20 I have reviewed the FirstEnergy Utilities' SEET return on equity (profits) thresholds 21 22 proposed for 2017, 2018, and 2019. In my opinion, the thresholds proposed by the

1		FirstEnergy Utilities are too high, meaning the FirstEnergy thresholds could wrongly
2		deny refunds to consumers. I have developed an independent recommendation to the
3		PUCO for the appropriate SEET ROE (profits) threshold for each year. OCC witness Dr.
4		Daniel Duann will use my proposed SEET ROE thresholds for purposes of determining
5		the level of any significantly excessive earnings in each year and any appropriate refund
6		to consumers.
7		
8	<i>Q8</i> .	PLEASE SUMMARIZE YOUR RECOMMENDATIONS AS COMPARED TO THE
9		FIRSTENERGY UTILITIES' AND PUCO STAFF'S PROPOSALS.
10	A8.	The FirstEnergy Utilities are proposing SEET ROE threshold values of 19.2 percent for
11		2017, 19.3 percent for 2018 and 17.8 percent for 2019. The PUCO Staff is recommending
12		17.22 percent for 2017. Utility profit levels of this magnitude are extraordinarily high for
13		allowing an electric utility to keep.
14		
15		In my opinion, these threshold values are unreasonably high and will only serve to permit
16		unwarranted retention of monopoly profits by the FirstEnergy Utilities, to the detriment
17		of consumers. This is contrary to central principles of regulation which include protecting
18		consumers from the exercise of monopoly power and setting just and reasonable rates.
19		My analysis is that an ROE (profit) threshold under the statutory SEET consumer
20		protection test would be 13.8 percent in 2017, 12.5 percent in 2018 and 12.4 percent in
21		2019, meaning any FirstEnergy Utility profits above those levels should be considered
22		significantly excessive.

1	<i>Q9</i> .	IS THERE A LEGAL BASIS OF THE SEET REVIEW AND REFUND PROCESS
2		THAT PERMITS CUSTOMERS REFUNDS OF TOO HIGH (SIGNIFICANTLY
3		EXCESSIVE) PROFITS UNDER ELECTRIC SECURITY PLANS?
4	A9.	Yes, there is. This process is required by the Ohio Revised Code 4928.143(F) for Ohio
5		electric distribution utilities in each year of an Electric Security Plan. That statute
6		requires the PUCO conduct an annual review to determine whether the utility earned
7		profits "significantly in excess of the return on equity that was earned during the same
8		period by publicly traded companies, including utilities, that face comparable business
9		and financial risk, with such adjustments for capital structure as may be appropriate."
10		
11		Notably, the statutory language also makes clear that the electric distribution utility
12		making the annual filing has the burden of proof to demonstrate that its earnings were not
13		significantly excessive under this standard. The statute also provides for customer refunds
14		in the event of a PUCO finding of significantly excess earnings.
15		
16	Q10.	DO THE INSTANT SEET PROCEEDINGS OF THE FIRSTENERGY UTILITIES
17		RAISE ANY UNUSUAL CONCERNS FOR CONSUMERS?
18	A10.	Yes, the context and background of these three cases is unusual and raises some unique
19		considerations. As a matter of background, an unusual and controversial feature of the
20		FirstEnergy Utilities' ESP IV, approved by the PUCO in 2016, was the PUCO's allowing
21		FirstEnergy to charge consumers a subsidy for the so-called Distribution Modernization
22		Rider ("DMR"). This subsidy predated tainted House Bill 6. In an appeal by OCC and

others, the Ohio Supreme Court overturned the DMR charge, which gave consumers 1 some protection. But the Court's consumer protection did not arrive until after the 2 FirstEnergy Utilities had charged consumers about \$456 million of revenue (before tax) 3 during the years 2017 through 2019.¹ This highly lucrative revenue stream was unrelated 4 to any utility cost of service (meaning the subsidy charge was not for buying anything 5 needed for providing utility service to consumers). 6 7 On June 19, 2019, the Ohio Supreme Court issued its decision finding the FirstEnergy 8 Utilities' DMR to be unlawful and ordered the PUCO to remove it from the ESP IV 9 rates.² However, the Court's directive for the FirstEnergy Utilities to cease charging 10 consumers for the DMR was prospective only and customers did not receive a refund for 11 any of the unlawful DMR charges (nearly a half-billion dollars) that they paid. Hence, the 12 DMR funds collected from customers remain in the FirstEnergy Utilities' reported 13 earnings for 2017, 2018, and 2019. 14 15 There is more. In an appeal by OCC, the Ohio Supreme Court issued another decision 16 overturning a PUCO decision related to the distribution modernization charge. On 17 December 1, 2020, the Court ruled that it was unlawful for the PUCO to allow the 18 19 FirstEnergy Utilities to remove the DMR revenue and related profits from the

¹ Approximately \$204 million in 2017, \$168 million in 2018, and \$84 million for the first six months of 2019.(these numbers are in the Ohio Supreme Court decision invalidate the DMR).

² In re Application of Ohio Edison Co., 157 Ohio St. 3d 73 (2019).

FirstEnergy Utilities' book earnings for purposes of the SEET review.³ To be clear, the PUCO's exclusion of the DMR revenues from the calculation of significantly excessive profits made it much less likely that consumers of the FirstEnergy Utilities would qualify for profit refunds because excluding the DMR revenue would make the FirstEnergy Utilities' profits look lower *on paper*. Because the PUCO previously excluded DMR revenues from the 2017 SEET review, the Supreme Court remanded the case to the PUCO for further review and determination. The PUCO is apparently addressing the remand in this proceeding. The Supreme Court's remand for the 2017 case also includes a PUCO determination of the SEET ROE threshold as well as the level of Utilities' earnings.

The FirstEnergy Utilities made their 2017, 2018 and 2019 SEET (profits) filings prior to the Ohio Supreme Court's December 2020 overturning of the PUCO's treatment of distribution modernization rider revenue. FirstEnergy Utilities made adjustments to their earnings to remove the DMR revenue in each year, adjustments the Utilities asserted was permissible under the ESP IV stipulation approved in 2016.

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³ In re Determination of Significantly Excessive Earnings for 2017 Under Electric Security Plan of Ohio Edison Company", No. 2019-0961, December 1, 2020.

1	QII.	IS THE CONCEPT OF SEET-RELATED REPUNDS FOR ELECTRIC UTILITY
2		ELECTRIC SECURITY PLANS CONSISTENT WITH SOUND REGULATORY
3		PRINCIPLES THAT PROVIDE SOME PROTECTION FOR CONSUMERS?
4	A11.	Yes, but only in a limited way. Remember, consumers are being made to pay excessive
5		profits. Consumers merely have the potential to be protected from paying for
6		significantly excessive profits. In the context of a rate plan (here, the electric security
7		plan), I regard it as an important consumer protection against undue monopoly
8		enrichment that consumers have protection against paying for excessive utility profits.
9		
10		An unfortunate feature of an ESP for consumers is that this rate plan typically provides
11		for the inclusion of various single-issue rate riders (increases). That single-issue
12		ratemaking allows the utility to impose (including by cherry-picking) rate increases on
13		customers in between rate cases with general reviews of all rates. For example, in
14		addition to Rider DMR (which was certainly not cost-related), ESP IV allows for annual
15		rate increases under Rider DCR related to new distribution capital investment as it enters
16		service.
17		
18		The 2008 law is a departure from the traditional ratemaking. Traditional ratemaking is
19		where all rates are considered together and charges to consumers tend to be limited to the
20		cost of providing utility service, which is a more balanced between consumers and
21		utilities than electric security plans. Traditional rate cases can even result in rate
22		reductions for some or all consumers.

1		Another central feature of base rate cases is that they only permit rates to increase to the
2		extent that the increase is required to provide the utility with a reasonable level of
3		earnings (profits) going forward (i.e., based on the utility's cost of capital), For example,
4		the utility's base rate filing may identify \$100 million per year in new costs for the test
5		year, but the comprehensive base rate review may find that a rate increase far less than
6		that, say \$50 million, is needed to provide the utility with an adequate level of earnings.
7		
8		The rate riders under the electric security plan have no such built-in "earnings test" to
9		determine whether the rate adjustment is needed and justified. It is for this reason that a
10		properly structured SEET (profits) process is needed to ensure that the electric security
11		plan does not provide the utility with too-high earnings and thereby harm customers.
12		However, the SEET review can only protect consumers if it is conducted in a reasonable
13		manner, including employing a threshold for SEET (profits) that does not deny refunds to
14		consumers by being unreasonably high.
15		
16	Q12.	IS THIS REGULATORY PRINCIPLE APPLICABLE TO THE FIRSTENERGY
17		UTILITIES IN THESE THREE CASES WHERE CONSUMERS CAN
18		POTENTIALLY RECEIVE REFUNDS?
19	A12.	Yes, very much so. But there is an additional element that renders these cases highly
20		unusual, and in my opinion, heightens the importance of conducting careful SEET
21		reviews in a manner that is fair and reasonable manner and is equitable for consumers
22		under the law.

1		As noted above, in 2019 the Ohio Supreme Court ruled that the PUCO/FirstEnergy
2		Distribution Modernization Charge was unlawful. And the Court directed the PUCO to
3		remove those charges from what consumers were paying to FirstEnergy Utilities under
4		ESP IV. However, the Court's decision allowed the FirstEnergy Utilities to keep the
5		nearly half-billion dollars of DMR revenue they collected from customers during 2017,
6		2018, and at least part of 2019 (because the PUCO declined to make the DMR charge
7		refundable). Hence, this case provides for a prospective remedy for consumers after they
8		lost nearly half a billion dollars for an unlawful charge.
9		
10		Thus, this SEET review is the only remaining remedy for customers for the improper
11		DMR charges imposed on them during 2017-2019 and retained by the FirstEnergy
12		Utilities. If the SEET review is conducted using an unduly high ROE (profits) threshold
13		(such as that proposed by FirstEnergy Utilities' witnesses in these cases), then this result
14		would limit or eliminate the only available remedy to customers for the improper DMR
15		charges that FirstEnergy kept after charging consumers during 2017-2019. That is the
16		practical effect of the proposals in this case by the FirstEnergy Utilities.
17		
18	Q13.	WHAT ARE THE SEET ROE THRESHOLD VALUES RECOMMENDED BY THE
19		WITNESSES IN THE THREE CASES?
20	A13.	The SEET ROE threshold recommendation is sponsored by Joanne M. Savage for the
21		2017 review year and Thomas J. Dolezal for the 2018 and 2019 review years. These
22		witnesses recommend 19.2 percent for 2017, 19.3 percent for 2018 and 17.8 percent for

1		2019. These recommendations are claimed to be based on the statistical methodology
2		employed by the PUCO Staff in several past cases. These witnesses also identify a "safe
3		harbor" ROE values for each year based on the PUCO's safe harbor standard of 200 basis
4		points plus the average ROE for the identified comparable group – 14.3 percent for 2017,
5		13.3 percent for 2018 and 12.9 percent for 2019.
6		
7		Staff witness Joseph P. Buckley presents a SEET ROE threshold analysis for the review
8		year 2017. His analysis produces a SEET ROE value of 17.22 percent and a "safe harbor"
9		value of 11.89 percent. I explain the methodology used by these witnesses and the safe
10		harbor backstop in the next section of my testimony.
11		
12	Q14.	HOW DO THE SEET ROE THRESHOLD RECOMMENDATIONS OF THE
13		UTILITIES WITNESSES COMPARE WITH THE FE UTILITIES' RATE CASE
14		ROE AUTHORIZED BY THE PUCO?
15	A14.	The last base rate case for the FirstEnergy Utilities was completed in 2009, and in that
16		case the PUCO awarded a ROE of 10.5 percent and a capital structure of 49 percent
17		common equity and 51 percent debt. ⁴ I note that while the 10.5 percent may have been a
18		typical award for an electric utility in 2009, the authorized ROEs for distribution electric

⁴ In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illumination Company, The Toledo Edison Company for Authority to Increase Rates for Distribution Service, Modify Certain Accounting Practices, and for Tariff Approvals, Opinion and Order, Case Nos. 07-551-EL-AIR, et.al., January 29, 2009.

1		utilities have generally declined since 2009, and during the 2017-2019 period was, on
2		average, in the mid 9s. ⁵
3		
4		Thus, the FirstEnergy Utilities recommended SEET ROE threshold averaging nearly 19
5		percent exceeds the PUCO rate case authorized ROE by more than 800 basis points and
6		typical electric utility authorized ROEs during 2017-2019 by nearly 900 basis points.
7		This comparison provides a useful perspective regarding a judgment of what is
8		reasonable. The purpose of the SEET review is to determine a fair and reasonable result
9		and provide a consumer protection ensuring that the ESP does not provide the utility with
10		unreasonable monopoly profits at the expense of customers. By any definition, a
11		substantial premium over the authorized return of 800 to 900 basis points cannot be
12		considered just and reasonable.
13		
14	Q15.	YOUR RECOMMENDATIONS OF 13.8 PERCENT FOR 2017, 12.5 PERCENT FOR
15		2018 AND 12.4 PERCENT FOR 2019 ARE SUBSTANTIALLY LOWER THAN THE
16		UTILITIES' WITNESS RECOMMENDATIONS. WHAT ACCOUNTS FOR THE
17		DIFFERENCES?
18	A15.	The Utilities' witnesses developed their ROE recommendation for each year using a
19		statistical methodology that has previously been employed by the PUCO Staff, applied to
20		a comparable group of public companies (predominantly electric utilities) known as the

⁵ Data tables accompany the Regulatory Research Associates rate case survey report of February 2, 2021. RRA reports the average ROE for electric distribution as 9.55 percent for 2017, 9.50 percent for 2018 and 9.60 precent for 2019.

XLU group. In conducting my analysis, I use largely the same group of public companies and the company-by-company accounting ROE data set presented in testimony by the Utility witnesses. Using the same data set has the advantage of reducing controversy over data sources that otherwise would be difficult for the Commission to resolve. With this common starting point, I made three primary changes to their analyses.

1. The Utilities witnesses removed one company, NRG, from the analysis in each year. I agree with that exclusion, as NRG data is unusable (due to negative equity), and NRG is not risk-comparable to the FirstEnergy Utilities. In addition, I removed two additional companies, FirstEnergy Corporation and AES Corporation. It is not proper to include either company in the analysis for reasons I explain in the next section of my testimony. I refer to this group (minus NRG, AES and FirstEnergy) as the "Full XLU Group".

2. Noting that the Ohio Revised Code for the SEET ROE determination makes reference to employing a potential capital structure adjustment, I refine the Full XLU Group to screen out companies in that group that have capital structures substantially different from the FirstEnergy Utilities. As noted above, the approved capital structure from the 2009 rate case has 49 percent common equity which is typical for electric utilities. I therefore eliminate companies with equity ratios less than 40 percent and greater than 60 percent. This screen removes about a half dozen companies and thereby improves the comparability of the group,

consistent with the stature, and I refer to this group as the "Capital Structure 1 Screen". 2 3 3. I apply the PUCO Staff statistical method to both of Full XLU Group and the 4 Capital Structure Screen group. In addition, due to concerns over the Staff 5 statistical method, I apply a second method, the upper half median. This second 6 method displays the accounting ROEs for the group from highest to lowest, 7 selecting the half with the highest ROEs. I then calculate or identify the median of 8 9 that upper half. This is done for both comparable groups. To develop my recommendation, I average the results of the Staff statistical method and the upper 10 half median method, in both cases using the Capital Structure Screen group. In 11 12 addition, I calculate for each year, the PUCO's safe harbor value, i.e., the Capital Structure Screen group average ROE plus 200 basis points. I summarize these 13 results and my recommendations on page 1 of Schedule MIK-1. 14 15 DO YOU CONSIDER YOUR ROE THRESHOLD RESULTS TO BE REASONABLE? 16 *Q16*. A16. Yes. My calculation of threshold ROE values of 13.8 percent, 12.5 percent, and 12.4 17 percent have been calculated in a manner that falls within the framework of the Ohio 18 19 Revised Code and is consistent with the PUCO's safe harbor protection for utility

points higher than a typical 2017-2019 ROE rate case award to distribution electric

earnings. These ROE threshold values average about 13 percent, which is nearly 250

basis points above the 10.5 percent awarded in the 2009 rate case and is nearly 350 basis

20

21

22

1		utilities. There can be little question that a profits level above 12.4 percent to 13.8 percent
2		ROE during the period of 2017 to 2019 would provide a utility significantly excessive
3		earnings and is a fair threshold for calculating potential refunds for consumers.
4		
5	III.	CALCULATIONS OF THE SEET ROE THRESHOLD
6		
7	Q17.	PLEASE DESCRIBE HOW THE FIRSTENERGY UTILITIES WITNESSES HAVE
8		DERIVED THEIR RECOMMENDED SEET ROE THRESHOLD
9		RECOMMENDATIONS.
10	A17.	The Utilities' witnesses have chosen to employ what has been referred to as the Staff
11		statistical method, a method employed by the PUCO Staff in several past SEET cases.
12		This method requires the following steps: (1) identification of an initial comparable group
13		of publicly-traded companies; (2) if necessary and appropriate, removal from the initial
14		group companies deemed anomalous or problematic; (3) calculation of the earned return
15		on equity for the SEET year for each comparable company; (4) calculation of the (size-
16		weighted) average ROE for the comparable group; (5) calculation of the ROE standard
17		deviation for the comparable group companies; (6) multiply the standard deviation by
18		1.64 to obtain a 95 percent confidence interval "adder"; (7) combine the group size
19		weighted average ROE with the adder. For 2017, witness Savage obtained 19.2 percent
20		using this method as shown on her Schedule JMS-1.

1		Staff witness Buckley used the same method for 2017 and obtained a lower value of
2		17.22 percent as shown on Staff Exhibit 1.
3		
4	Q18.	HOW DID THE UTILITIES AND STAFF WITNESSES SELECT THE
5		COMPARABLE COMPANIES?
6	A18.	The comparable companies are derived from the SPDR Select Sector Fund ("XLU"),
7		which is an Exchange Traded Fund ("ETF"). This group is composed predominantly of
8		electric utilities (or combination electric/gas utilities), one major water utility, at least one
9		major gas utility and two companies that are mainly in the unregulated merchant power
10		generation business. In 2017, the XLU consisted of 28 companies.
11		
12		The Utilities witnesses excluded one XLU company, NRG which is in the merchant
13		generation business, in all three years. In addition, they excluded AES Corporation (in
14		2017 only), Pacific Gas & Electric Corporation (after 2017) due to bankruptcy, three
15		other companies in certain years (Evergy, SCANA and CenterPoint Energy) due to
16		merger activity.
17		
18		Similarly, Mr. Buckley in his 2017 analysis excluded NRG, AES, SCANA, and
19		FirstEnergy Corporation due to anomalous (negative) earnings in those years. All of these
20		exclusions from the comparable group were made for practical reasons related to data or
21		data distortion issues, and I do not contest these decisions.

Q19. HOW WERE THE COMPANY-BY-COMPANY ROES CALCULATED?

A19. The Utilities witness testimony provides almost no description regarding the company ROE calculations, but based on witness Savage's schedule, the common equity ratio (the ROE denominator) is calculated as the average of the beginning and end of year balance. Her source of common equity balances is the Bloomberg financial data base. The earnings figures (the ROE numerator) are from Value Line Investment Analyzer. From working with Value Line data over the years, it is my understanding that Value Line removes extraordinary items when reporting earnings to provide a more normal depiction of earnings. Witness Dolezal of the 2018 and 2019 SEET cases does not report his data sources, but I assume that he employed the same sources as witness Savage. Staff witness Buckley employs a different data source, SNL Financial, in his 2017 SEET testimony.

While I consider all three (Bloomberg, Value Line, and SNL Financial) of these to be reputable and widely used sources of financial data, the selection of the earnings data can affect the results. Notably, the earnings data and ROEs for the 2017 SEET year used by witnesses Savage and Buckley do differ significantly. While it appears that the Value Line data used by witness Savage removes extraordinary items, Mr. Buckley's data appear not to do so, and he reports earnings on more of a GAAP basis. While Value Line may not be a perfect source of earnings data, I believe it is preferable to employ earnings figures that remove the effects of extraordinary items when calculating the ROEs. For this reason, I have accepted and chosen to use the company ROE figures reported and calculated by Utilities witnesses for purposes of my own analyses.

1	<i>Q20</i> .	WHAT IS WITNESS SAVAGE'S SEET ROE RESULT USING THIS METHOD?
2	A20.	After removing NRG and AES, witness Savage calculates the ROEs for the remaining 26
3		XLU companies, ranging from 7.2 to 22.7 percent, with a group weighted (by profits and
4		common equity) average of 12.3 percent. Her testimony makes the point that the
5		unweighted average (i.e., weighting each company equally) may be an analytically more
6		valid approach and consistent with the use of a standard deviation. ⁶ However, she does
7		not present the results using the unweighted average. The standard deviation of the ROEs
8		in her study is 4.2 percent, and when modified by the 1.64 multiplier produces a SEET
9		adder of 6.9 percent. The sum of the 12.3 percent group average and the 6.9 percent adder
10		is 19.2 percent, which is her SEET ROE threshold recommendation.
11		
12		Witness Dolezal uses an identical calculation method for 2018 and 2019 (albeit with a
13		slightly different comparable group) obtaining 19.3 percent for 2018 and 17.8 percent for
14		2019.
15		
16	Q21.	ARE THE XLU GROUPS USED BY THESE WITNESSES COMPARABLE IN
17		BUSINESS AND FINANCIAL RISK TO THE FE UTILITIES?
18	A21.	With the modifications set forth in my testimony, the XLU group is not unreasonable as a
19		comparable group for SEET purposes, although it probably is slightly riskier. The
20		FirstEnergy Utilities operate as pure distribution utilities, regulated by the PUCO,

 $^{^6}$ Direct Testimony of witness Savage, at 5-6 . Witness Dolezal's testimony in the 2018 and 2019 cases makes a similar argument.

operating under a very favorable ESP. They have very low business risk and strong investment grade credit ratings during this period. As mentioned earlier, the XLU companies are predominantly electric utilities, but most are vertically integrated (which is at least slightly riskier than pure distribution), and some of the companies also have substantial unregulated generation investments (e.g., Exelon Energy, NextEra, Public Service Enterprise Group, Entergy Corp., Dominion Energy), which would also be riskier, in general, than distribution-only utilities. While I do not contest the use of these companies, the PUCO should recognize that the comparable group may be somewhat riskier than the FirstEnergy Utilities when arriving at a judgment regarding the appropriate SEET ROE threshold.

A22.

Q22. WHAT COMPANY EXCLUSIONS DO YOU BELIEVE ARE NEEDED?

All witnesses agree to the exclusion of NRG from the analysis, and both the Utilities witnesses and Staff exclude AES Corporation at least in 2017. I believe AES should be excluded in all three years. AES is primarily engaged in the merchant plant business and in power plant development in overseas markets. While it does have some U.S. utility operations, they are a relatively small portion of its total business operations and assets. During 2017-2019, AES was generally not rated investment grade for credit rating purposes, and its capital structure was approximately 80 to 85 percent debt leverage. AES clearly is not risk comparable to the FirstEnergy Utilities.

⁷ See the testimony of FirstEnergy Utilities witness Stephen Staub in Case No. 19-361-EL-RDR, March 1, 2019, at page 8, where he presents the credit ratings of the FirstEnergy Utilities. The issuer or corporate ratings are generally triple B with the secured debt ratings high triple B to medium single A.

In addition, FirstEnergy also must be excluded in all three years, and not merely in 2017. During this time period, FirstEnergy was going through a bankruptcy and corporate restructuring as a result of the failure of its unregulated merchant power operations. As a result of this process and adverse market conditions it was forced to take massive writeoffs. Value Line reports that the FirstEnergy's book value per share (a measure of common equity) declined from \$29.33 at year-end 2015 to \$8.81 by year-end 2017 and only partly recovered to \$12.90 by the end of 2019.8 This is a loss of about 60 to 70 percent of book value per share during this period. This massive loss of equity resulted in an extraordinarily low equity ratio – less than 25 percent of total capital – which has the mechanical effect of inflating the return on equity calculation. This is why the FirstEnergy Utilities witnesses are reporting ROEs for FirstEnergy in their studies of more than 20 percent during this period, providing the misleading interpretation that FirstEnergy must be an extremely profitable company. It certainly was not. The inclusion of FirstEnergy in the analysis can only serve to provide misleading results and cannot serve as the basis for the SEET ROE threshold. There is an additional compelling reason why FirstEnergy cannot be included as a comparable company in this case. During 2017-2019, a significant share of the FirstEnergy profits came from the unlawful DMR revenues. The profits retained by

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FirstEnergy due to the DMR charges cannot be the basis for the setting of the SEET ROE

threshold, which is to be used to determine customer refunds of that same DMR revenue.

⁸ Value Line Investment Survey, report for FirstEnergy Corporation, February 12, 2021.

1		That is, the DMR charges that flowed to FirstEnergy earnings would be used through the
2		SEET ROE threshold to reduce customer refunds if FirstEnergy is retained in the
3		comparable group. This would certainly be an unreasonable and thus, unacceptable result
4		
5	Q23.	HAS THE PUCO RECENTLY EXCLUDED NRG, AES AND FIRSTENERGY IN A
6		SEET ANALYSIS?
7	A23.	Yes. In a recent AEP Ohio SEET review, the PUCO chose to exclude from the analysis
8		all three of these companies as not being comparable to AES Ohio.9
9		
10	Q24.	DO YOU PROPOSE ANY OTHER EXCLUSIONS?
11	A24.	I have prepared my SEET ROE analyses with the same comparable group as used by
12		Utilities' witnesses, with the exception of AES and FirstEnergy as explained above.
13		However, I also have conducted my analyses using a Capital Structure Screen to remove
14		XLU companies that do not have capital structures reasonably comparable to the
15		FirstEnergy Utilities' PUCO approved capital structure of 49 percent equity and 51
16		percent debt.
17		
18		This approved capital structure, based on my experience, is typical of the electric utility
19		industry practice and what credit rating agencies generally expect for utilities when
20		assigning investment grade ratings. To develop this second comparable group, I exclude
21		companies in each year with a common equity ratio of less than 40 percent and more than

⁹ Opinion and Order, Case No. 17-1230-EL-UNC, February 27, 2019, at 13 (paragraph 33).

1 60 percent. I show the equity ratios, as reported by Value Line, for the XLU companies on my Schedule MIK-2 for 2017, 2018 and 2019. The equity ratios are calculated as 2 average year, i.e., the average of beginning and end of year. 3 4 I believe that it is important to utilize a capital structure screen because a very unusual 5 capital structure can distort the calculation of the ROE. The vast majority, if not all, of 6 7 the XLU companies are utility holding companies with utility subsidiaries. The utility subsidiaries may be operating with normal (e.g., approximately 50/50) capital structures. 8 9 The holding company then may add substantial debt to its balance sheet to finance its investment in its utility subsidiaries, and this leveraged financing tends to artificially 10 magnify the calculated ROE since the low equity balance is the denominator of the 11 calculation. In the alternative, the holding company may have a low equity ratio due to 12 write offs associated with its current or former non-regulated operations. But the effect of 13 the low equity ratio on magnifying the reported ROE is the same. This appears to be the 14 case with several XLU companies that have unduly low equity ratios and as a result 15 relatively high reported ROEs. The inclusion of such companies tends to distort the 16 analysis. 17 18 19 My capital structure screen removes approximately a half dozen of the XLU companies 20 from the comparable group. For 2017, this screen removes CMS Energy, CenterPoint Energy, Dominion Energy, Entergy Corporation, NiSource, Inc., PPL Corporation and 21 22 Southern Company. The exclusions in 2018 and 2019 are quite similar.

1 In addition, as discussed in Section II of my testimony, the Ohio Revised Code on the SEET process specifically contemplates potential adjustments to the analysis for capital 2 structure, if appropriate. I believe that in this case and this context, the use of a capital 3 structure screen to avoid distorting the ROE calculations is appropriate and needed. I 4 have applied the SEET ROE methods to the XLU group minus the companies that do not 5 6 pass the capital structure screen. 7 IS THE STAFF METHOD AN APPROPRIATE WAY TO IDENTIFY A *O25*. 8 REASONABLE SEET ROE THRESHOLD VALUE? 9 A25. No. These witnesses are correct that this method has been used in recent cases by the 10 Staff to determine the SEET ROE threshold, and it has received some acceptance by the 11 12 PUCO as one method that is useful. In this case, however, I believe that it produces outlandishly high ROE results with a threshold value that averages around 19 percent. A 13 literal interpretation of this result would be that any ROE earned by the Utilities less than 14 15 19 percent should not be considered significantly excessive. This is obviously absurd. 16 While the Staff method can provide useful insights by focusing on both the group average 17 and the statistical dispersion of comparable company ROEs, it also has pitfalls and 18 19 shortcomings. This is best illustrated by Staff witness Buckley's own analysis for 2017. 20 His exhibits show a recommended ROE value of 17.22 precent after his exclusion of four companies (NRG, AES, SCANA and FirstEnergy). However, he also provides an exhibit 21 22 (Staff Exhibit 1A) to show what the results would be with no exclusions. That result is

30.28 percent which he correctly recognizes is an unreasonable and even meaningless result. His purpose in presenting the comparison is to demonstrate why his four exclusions of the anomalous companies are needed, and I agree. However, it also provides some insight into the limitations of the Staff statistical method.

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A closer inspection of the results illustrates the problem with the method. All four of the excluded observations are, in fact, negative earnings. The group average with the four companies is 8.73 percent, and the average without those companies is a significantly higher 9.69 percent. Mr. Buckley's demonstration is counter intuitive. It shows that very low or even negative earnings by comparable companies does not reduce the SEET ROE result under this method, as one might expect, but it paradoxically increases it. This is because the effects of the increase in the company ROE dispersions (as measured by the standard deviation) overwhelms the lower ROE average. This creates a dilemma that I believe Mr. Buckley recognizes – if the results of the analysis are clearly unreasonable, then it simply becomes necessary to remove ROE figures judged to be anomalous, often anomalously low, in order to salvage the study. Mr. Buckley does not state that he has removed the offending companies due to a lack of risk comparability or a capital structure distortion, but only because their ROEs differ so much (on the low side in this case) from the group average. Under the circumstances, it is appropriate that Mr. Buckley remove these anomalies, but this also illustrates the problem. The results of the Staff statistical method can be driven by extreme observations, and this will sharply drive up

the ROE threshold result by the extremely high value of standard deviation regardless of 1 whether the extreme observation is a high or low ROE. 2 3 My additional concern with the Staff method is that the 1.64 multiplier is essentially 4 arbitrary and involves a misuse of statistical principles. It is cloaked in the respectability 5 of reflecting a "95 percent confidence interval" or test. It is true that analysts frequently 6 7 use a 95 percent confidence interval for purposes of hypothesis testing, for example testing whether A causes B. But the setting of the SEET ROE threshold is not an exercise 8 9 in testing hypotheses as a scientist would do, but rather it is an examination of earnings data from comparable companies to determine what level of earnings and earnings 10 cushion a utility with an ESP should be permitted to earn before the utility's return is 11 judged to be unreasonable and unduly monopolistic. For example, the PUCO's safe 12 harbor 200 basis points above the group average ROE is intended to do exactly that. 13 While the use of some measure of dispersion of company ROEs makes some sense, there 14 simply is no objective or public policy basis for a 1.64 standard deviation multiplier or 15 the use of a 95 percent confidence interval. 16 17 Further, consider the results obtained by Utilities witnesses using this method. Schedule 18 JMS-1 shows the calculation of the SEET ROE threshold of 19.2 percent. However, that 19 schedule also shows that only two of the XLU companies experienced ROEs at or above 20

that level – Dominion at 21.1 percent and FirstEnergy at 22.7 percent. The remaining 24

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1		companies had ROEs far lower than 19.2 percent. The pattern is similar for the Utilities
2		2018 and 2019 analyses.
3		
4	Q26.	HOW CAN THE SHORTCOMINGS WITH THE STATISTICAL METHOD BE
5		ADDRESSED?
6	A26.	If the Staff method is to be used, it is important to exclude companies identified as not
7		being risk comparable to the subject utility. The PUCO has recognized this in the recent
8		AEP Ohio case cited earlier.
9		
10		In addition, it also may be necessary to remove companies with unusual capital structures
11		that distort the ROE calculations. I have made these corrections in conducting my
12		analyses. In addition, I have averaged the results using the Staff statistical method with
13		results using an alternative method that I believe the PUCO should consider. This second
14		method identifies the upper half of the company ROEs, and it then selects the median of
15		the upper half range. In effect, the method identifies the SEET ROE threshold as being
16		essentially the 75 th percentile value ROE. That is, under this method 25 percent of the
17		comparable companies would have a higher ROE, and 75 percent would have a lower
18		ROE. The upper half median result largely eliminates the problem of an anomalously
19		high or low ROE skewing or distorting the SEET ROE calculation result.

1	Q 27.	WHAT RESULTS DID YOU OBTAIN WHEN APPLYING THE STAFF'S
2		STATISTICAL METHOD TO YOUR TWO COMPARABLE GROUPS?
3	A27.	I apply this method both to the full XLU Group (i.e., excluding NRG, AES and
4		FirstEnergy) and to that group after removing companies that do not pass the capital
5		structure screen. This analysis is shown for SEET review years 2017, 2018 and 2019 on
6		Schedule MIK-3. The data set used in this analysis consists of the ROEs calculated for
7		each XLU company and in each year by the Utilities witnesses Savage and Dolezal and
8		shown on their schedules. I show those ROE data on page 1 of Schedule MIK-3, with the
9		ROEs for companies not passing the capital structure screen in a given year indicated in
10		bold.
11		
12		Page 2 of Schedule MIK-3 shows the actual calculations of the SEET ROE threshold
13		value for each year and both comparable groups. For example, for 2017 for the Full XLU
14		Group the size weighted average is 12.1 percent, the standard deviation of the ROEs is
15		3.7 percent, or 6.1 percent after applying the 1.64 multiplier, and the SEET ROE
16		threshold value is $18.2 \text{ percent} - 12.1\% + 6.1\%$. This same method applied to this same
17		group produces 14.2 percent in 2018 and 13.5 percent for 2019, as shown on this
18		schedule.
19		
20		Applying this method to the comparable group with the capital structure screen produces
21		16.3 percent in 2017, 12.1 percent in 2018, and 12.5 percent in 2019. Hence, the use of

the capital structure screen using this method reduces the SEET ROE threshold by about one to two percentage points in each year.

A28.

O28. PLEASE EXPLAIN THE STATISTICAL CONCEPT OF MEDIAN.

The median is a measure of the central tendency of a series of quantitative observations, and this measure is widely used by economists, statisticians, and scientists. It is defined as point of the distribution of observations such that half of the observations are higher than the median and half are lower. In order to determine or calculate the median, one begins by arraying all observations in the series in rank order (e.g., from highest to lowest). With this ranking, the median is merely selected as the observation in the series such that half are higher than that observation, and half are lower. For example, if the observations are company ROEs, and the group consists of 25 companies, then observation number 13 is the median. That is, 12 are higher than the median value and 12 are lower. If there are 24 observations instead of 25, then the median is the simple average of observations 12 and 13.

While the median and the average (referred to as the "mean") often produce similar quantitative results, the use of the median can be advantageous as being the more representative measure. Specifically, the advantage of the median is that it will not be unduly affected by a small number of numerically unusual observations referred to as "anomalies" or "outliers."

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For example, consider a series of 25 ROE company observations that are arrayed from a low of 6 percent to a high of 14 percent. In this example, the median and mean measures might both produce the same result, say 10 percent. Now assume that instead of the lowest figure being an ROE of six percent, it is a negative 20 percent. This data outlier could have a significant impact, substantially lowering the mean, but it would have no impact whatsoever, on the median. This is because the median is based on the middle observation in the array, i.e., observation 13, and it makes no difference if the lowest observation is six percent, negative 20 percent or negative 50 percent. The advantage of the median is that it is it mitigates highly unusual observations as posing a measurement problem. Of course, when using the median it still may be appropriate to remove certain companies from the group due to factors such as risk comparability to the utility. But when using the median as a measure of central tendency, there is far less concern that a company that is otherwise risk (or capital structure) comparable needs to be removed from the group merely because its measured ROE in a year happens to be highly unusual. *Q29*. HOW DID YOU CONDUCT YOUR UPPER HALF MEDIAN ANALYSIS? A29. Using the company-by-company ROE data from page 1 of Schedule MIK-3, I selected the half of the comparable companies with the highest ROEs. I show this for each year, 2017-2019 for the company comparable group developed using the capital structure

screen. For 2017, there are 18 comparable companies in this group, and the nine highest

1		have ROEs ranging from 10.4 to 18.6 percent. The other nine comparable companies all
2		have ROEs equal to or lower than 10.4 percent and therefore are excluded from the upper
3		half median determination. The median value is the fifth highest ROE observation in this
4		group of nine companies, specifically Alliant Energy with an ROE of 11.3 percent. The
5		upper half median for 2018 for this comparable group is 11.4 percent and for 2019 is 11.3
6		percent.
7		
8		Schedule MIK-5 shows the same analysis for the Full XLU group absent the capital
9		structure screen. This analysis produces an upper half median of 13.5 percent for 2017,
10		11.8 percent for 2018, and 11.3 percent for 2019.
11		
12	Q30.	DID YOU CALCULATE THE SAFE HARBOR SEET ROE FOR 2017, 2018, AND
12 13	Q30.	DID YOU CALCULATE THE SAFE HARBOR SEET ROE FOR 2017, 2018, AND 2019?
	Q30.	
13	~	2019?
13 14	~	2019? Yes, I did so using both the size weighted and simple average ROEs along with the
13 14 15	~	2019? Yes, I did so using both the size weighted and simple average ROEs along with the PUCO's 200 basis point premium over the comparable group average ROE. I performed
13141516	~	Yes, I did so using both the size weighted and simple average ROEs along with the PUCO's 200 basis point premium over the comparable group average ROE. I performed these calculations using both comparable groups. I show the safe harbor ROE results on
13 14 15 16 17	~	Yes, I did so using both the size weighted and simple average ROEs along with the PUCO's 200 basis point premium over the comparable group average ROE. I performed these calculations using both comparable groups. I show the safe harbor ROE results on Schedule MIK-1, page 1 of 2. This shows an ROE range for each year and proxy group
13 14 15 16 17	~	Yes, I did so using both the size weighted and simple average ROEs along with the PUCO's 200 basis point premium over the comparable group average ROE. I performed these calculations using both comparable groups. I show the safe harbor ROE results on Schedule MIK-1, page 1 of 2. This shows an ROE range for each year and proxy group because I employed two definitions of the group average ROE – the weighted and simple
13 14 15 16 17 18	~	Yes, I did so using both the size weighted and simple average ROEs along with the PUCO's 200 basis point premium over the comparable group average ROE. I performed these calculations using both comparable groups. I show the safe harbor ROE results on Schedule MIK-1, page 1 of 2. This shows an ROE range for each year and proxy group because I employed two definitions of the group average ROE – the weighted and simple

the capital structure screen, the safe harbor SEET ROE threshold is 13.5 percent for 2017, 12.5 percent for 2018, and 12.4 percent 2019. The safe harbor ROE results are considered to be a floor ROE threshold regardless of the results of the other two methods.

A31.

Q31. WHAT IS YOUR SEET ROE THRESHOLD RECOMMENDATION FOR EACH

YEAR?

I base my recommendation for each year on the comparable group subject to the capital structure screen, giving equal weight to the Staff statistical method and the upper half median method. The safe harbor calculations, however, provide a floor value. Using the summary of my results shown on page 1 of Schedule MIK-1, page 1 of 2, the average of the two methods is 13.8 percent in 2017, 11.7 percent in 2018, and 11.9 percent in 2019. However, the safe harbor figures provide the ROE floor, and that floor is actually higher than the 2018 and 2019 modeling results. Hence, when the safe harbor floor is factored in my recommendation becomes 13.8 percent for 2017, 12.5 percent in 2018 (instead of 11.7 percent), and 12.4 percent in 2019 (instead of 11.9 percent). I believe these results to be reasonable and provide a substantial earnings cushion for the Utilities prior to triggering any refund obligation. These ROE figures, which average to nearly 13 percent, also provide a substantial premium relative to the FirstEnergy Utilities authorized ROE from 2009 and ROEs typically granted to distribution utilities during 2017-2019.

1	Q32.	WHAT WOULD YOUR SEET ROE THRESHOLD VALUES BE IF YOU GAVE
2		EQUAL WEIGHT TO THE FULL XLU GROUP AND THE CAPITAL STRUCTURE
3		SCREEN GROUP?
4	A32.	In each year, this would be the average of four studies (Staff statistical method and upper
5		half median method using both groups). The results would be 14.9 percent for 2017, 12.4
6		percent for 2018 (or 12.9 percent using the safe harbor floor), and 12.2 percent for 2019
7		(or 12.6 percent using the safe harbor floor).
8		
9	IV.	CONCLUSION
10		
11	Q33.	WHAT ARE YOUR MAIN CONCLUSIONS FROM YOUR REVIEW AND
12		ANALYSIS OF THE THRESHOLDS FOR THE SEET RETURN ON EQUITY
13		(PROFITS) ISSUE IN THESE CASES, WHICH WILL AFFECT WHETHER THE
14		FIRSTENERGY UTILITIES WILL BE REQUIRED TO MAKE REFUNDS TO
15		CONSUMERS?
16	A33.	I have reached several key conclusions.
17		
18		First, the return on equity thresholds recommended by FirstEnergy Utilities' witnesses,
19		for the PUCO's SEET (profits) review, average nearly 19 percent. This is a completely
20		unreasonable level of earnings (profits) for the FirstEnergy Utilities to be allowed to
21		charge to consumers and then keep without refunds to consumers, prior to consumers
22		being given any refunds. A return on equity (profits) that high should be considered to be

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1	a monopoly level of earnings that sound regulation is intended to prevent from being
2	charges to consumers.
3	
4	Second, the PUCO, in setting the ROE (profits) threshold, should consider that one of the
5	reasons for establishing a more reasonable lower threshold for consumer refunds is to
6	address the unfairness to consumers of the FirstEnergy Utilities charging them the nearly
7	half-billion dollars of unlawful DMR charges and then not giving consumers any refunds
8	after the Court's reversal. Another equity and fairness consideration for the PUCO should
9	be that this process provides some opportunity for at least a portion of the unlawful DMR
10	charges (that the FirstEnergy Utilities kept) to be returned to customers as refunds of
11	SEET charges. The unusual circumstances of this case especially warrants that the SEET
12	ROE threshold not be set an unreasonably high level.
13	
14	Third, the PUCO Staff statistical method may be one approach to determining a SEET
15	ROE threshold, but it does raise some concerns. Moreover, its 1.64 standard deviation
16	multiplier is of questionable validity. I recommend combining this method with the upper
17	half median method to avoid reliance on one approach.
18	
19	Fourth, in identifying comparable companies, an adjustment for capital structure
20	differences may be needed.

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3		information becomes available.
7	A34.	Yes, it does. However, I reserve the right to update and supplement my testimony as new
5	Q34.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
5		
1		traditional safe harbor adder.
3		12.4 percent for 2019. This reflects not just my study results but also the PUCO's
2		determining refunds to consumers, are 13.8 percent for 2018, 12.5 percent for 2018, and
L		Fifth, my analysis finds that appropriate SEET ROE threshold values, for use in

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Direct Testimony of Matthew I. Kahal,* on *Behalf of the Office of the Ohio Consumers' Counsel* was served via electronic transmission to the persons listed below on this 5th day of April 2021.

/s/ Christopher Healey
Christopher Healey (0086027)
Assistant Consumers' Counsel

The PUCO's e-filing system will electronically serve notice of the filing of this document on the following parties:

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APPENDIX A

QUALIFICATIONS OF

MATTHEW I. KAHAL

MATTHEW I. KAHAL

Since 2001, Mr. Kahal has worked as an independent consulting economist, specializing in energy economics, public utility regulation, and utility financial studies. Over the past three decades, his work has encompassed electric utility integrated resource planning (IRP), power plant licensing, environmental compliance, and 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 expanded to electric power markets, mergers, and various aspects of regulation.

Mr. Kahal has provided expert testimony in more than 400 cases before state and federal regulatory commissions, federal courts, 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 and public policy issues.

Education

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

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

Ph.D. candidacy – University of Maryland, completed all course work and qualifying examinations.

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Previous Employment

1981-2001	Exeter Associates, Inc. Columbia, MD
1980-1981	Member of the Economic Evaluation Directorate The Aerospace Corporation Washington, D.C.
1977-1980	Consulting Economist Washington, D.C. consulting firm
1972-1977	Research/Teaching Assistant and Instructor (part time) Department of Economics, University of Maryland (College Park) Lecturer in Business and Economics Montgomery College (Rockville and Takoma Park, MD)

Professional Experience

Mr. Kahal has more than thirty-five 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 of the firm. During that time, he supervised multi-million dollar support contracts with the State of Maryland and directed the technical work conducted by both 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.

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

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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).

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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.

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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).

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

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			Expert Testimony of Matthew I. Kahal		
	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>
1.	27374 & 27375 Economic Impacts	Long Island Lighting Com of Proposed	pany	New York Counties	Nassau & Suffolk
	October 1978				Rate Increase
2.	6807 January 1978	Generic	Maryland	MD Power Plant Siting Program	Load Forecasting
3. Reve	78-676-EL-AIR enues February 1978	Ohio Power Company	Ohio	Ohio Consumers' Counsel	Test Year Sales and
4.	17667	Alabama Power Company	Alabama	Attorney General	Test Year Sales, Revenues,
Costs	s, May 1979				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 Compan	•	Pennsylvania	Office of Consumer
Advo	ocate	Load Forecasting, Margina	al Cost		pricing
7.	7259 (Phase I) October 1980	Potomac Edison Company	Maryland	MD Power Plant Siting Pro	gram Load Forecasting
8.	7222 December 1980	Delmarva Power & Light Company	Maryland	MD Power Plant Siting Pro	gram Need for Plant, Load Forecasting
9.	7441	Potomac Electric	Maryland	Commission Staff	PURPA Standards

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	June 1981	Power Company			
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. Load	7259 (Phase II)	Potomac Edison Company	Maryland	MD Power Plant Siting Prog	gram Load Forecasting,
2040	November 1981				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 Advoca	ate Rate of Return
15.	82-0152 July 1982	Illinois Power Company	Illinois	U.S. Department of Defense	eRate of Return, CWIP

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16.	7559 September 1982	Potomac Edison Company	Maryland	Commission Staff	Cogeneration
17.	820150-EU September 1982	Gulf Power Company	Florida	Federal Executive Agencies	Rate of Return, CWIP
18.		Mountain Fuel Supply Cor	mpany	Utah	Federal Executive Agencies
	Rate of Return, Capit January 1983	tai			Structure
19.	5200 August 1983	Texas Electric Service Company	Texas	Federal Executive Agencies	Cost of Equity
20.		Oklahoma Natural Gas	Oklahoma	Federal Executive Agencies	Rate of Return, deferred
taxes	August 1983				capital structure, attrition
21.		Commonwealth Edison Co	ompany	Illinois	U.S. Department of Energy
	Rate of Return, capit February 1984	al structure,			financial capability
22.	84-035-01 Rate of Return June 1984	Utah Power & Light Comp	oany	Utah	Federal Executive Agencies
23.	U-1009-137 Rate of Return, finan July 1984	Utah Power & Light Compcial	oany	Idaho	U.S. Department of Energy condition
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24. Advo	R-842590 ocate August 1984	Philadelphia Electric Com Rate of Return	pany	Pennsylvania	Office of Consumer
25.	840086-EI August 1984	Gulf Power Company	Florida	Federal Executive Agencies	s Rate of Return, CWIP
26.	84-122-E August 1984	Carolina Power & Light Company	South Carolina	South Carolina Consumer Advocate	Rate of Return, CWIP, load forecasting
27. Ener	CGC-83-G & CGC-gy October 1984	-84-G Load forecasting	Columbia Gas of Ohi	io	Ohio Ohio Division of
28. Advo	R-842621 ocate October 1984	Western Pennsylvania Wa Test year sales Company	iter	Pennsylvania	Office of Consumer
29. Advo	R-842710 ocate January 1985	ALLTEL Pennsylvania In Rate of Return	c.	Pennsylvania	Office of Consumer
30. Advo	ER-504 ocate February 1985	Allegheny Generating Cor Rate of Return	mpany	FERC	Office of Consumer

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31. Advo	R-842632	West Penn Power Compar Rate of Return, conservati	•	Pennsylvania	Office of Consumer
	March 1985	,	,		time-of-use rates
32.	83-0537 & 84-0555 Rate of Return, incer	Commonwealth Edison Contive	ompany	Illinois	U.S. Department of Energy
	April 1985				rates, rate base
33.	Rulemaking Docket No. 11, May 1985	Generic	Delaware	Delaware Commission Staf	f Interest rates on refunds
34.	29450	Oklahoma Gas & Electric	Oklahoma	Oklahoma Attorney Genera	al Rate of Return, CWIP in
1000	July 1985	Company			base
35.	1811 Pate of Paturn conic	Bristol County Water Con	npany	Rhode Island	Division of Public Utilities
	Rate of Return, capit August 1985	tai			Structure
36. Advo		045 Quaker State & Contine Rate of Return	ental	Pennsylvania	Office of Consumer
71470	August 1985	Telephone Companies			
37. finan	R-850174	Philadelphia Suburban	Pennsylvania	Office of Consumer Advoc	ate Rate of Return,
THIN	November 1985	Water Company			conditions
38. mode	U-1006-265 els	Idaho Power Company	Idaho	U.S. Department of Energy	Power supply costs and
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	March 1986				
39. Advo		-38 Allegheny Generating C Rate of Return	Company	FERC	PA Office of Consumer
40.	R-850287 June 1986	National Fuel Gas Distribution Corp.	Pennsylvania	Office of Consumer Advoca	ate 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. in	U-16945	Louisiana Power & Light	Louisiana	Public Service Commission	Rate of Return, rate phase-
111	December 1986	Company			plan
44.	Case No. 7972	Potomac Electric Power	Maryland	Commission Staff	Generation capacity
planr	February 1987	Company			purchased power contract
45. Retu		-59 System Energy Resourc	es and	FERC	Louisiana PSC Rate of
	March 1987	Middle South Services			

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46.	ER-87-72-001 April 1987	Orange & Rockland	FERC	PA Office of Consumer Ac	dvocate Rate of Return
47.	U-16945 April 1987	Louisiana Power & Light Company	Louisiana	Commission Staff	Revenue requirement update phase-in plan
48. Advo	P-870196 ocate May 1987	Pennsylvania Electric Con Cogeneration contract	npany	Pennsylvania	Office of Consumer
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 Compan	yRhode Island	Commission Staff	Rate of Return
53.	WO 8606654 July 1987	Atlantic City Sewerage Company	New Jersey	Resorts International	Financial condition
54.	7510 Rate of Return, pha August 1987	West Texas Utilities Compase-in	pany	Texas	Federal Executive Agencies
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55.	8063 Phase I	Potomac Electric Power	Maryland	Power Plant Research Progr	ram Economics of power
	October 1987	Company			selection
56.	00439 November 1987	Oklahoma Gas & Electric Company	Oklahoma	Smith Cogeneration	Cogeneration economics
57.	RP-87-103	Panhandle Eastern Pipe Li	ne	FERC	Indiana Utility Consumer
	Rate of Return February 1988	Company		Counselor	
58.	EC-88-2-000 February 1988	Utah Power & Light Co. PacifiCorp	FERC	Nucor Steel	Merger economics
59.	87-0427 Financial projections February 1988	Commonwealth Edison Cos	ompany	Illinois	Federal Executive Agencies
60. Advo	870840 ocate February 1988	Philadelphia Suburban Wa Rate of Return Company	nter	Pennsylvania	Office of Consumer

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61. Adve	870832 ocate March 1988	Columbia Gas of Pennsylv Rate of Return	vania	Pennsylvania	Office of Consumer
62.	8063 Phase II July 1988	Potomac Electric Power Company	Maryland	Power Plant Research Prog	ram Power supply study
63. Prog	8102 ram July 1988	Southern Maryland Electri Power supply study Cooperative	c	Maryland	Power Plant Research
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-176 February 1989	49 Louisiana Power & Light Company	Louisiana	Commission Staff	Disposition of litigation proceeds

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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
72.	8425 March 1989	Houston Lighting & Power Company	rTexas	U.S. Department of Energy	Rate of Return
73.	EL89-30-000 April 1989	Central Illinois Public Service Company	FERC y	Soyland Power Coop, Inc.	Rate of Return
74.	R-891208 May 1989	Pennsylvania American Water Company	Pennsylvania	Office of Consumer Advocate	Rate of Return

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75.	89-0033 May 1989	Illinois Bell Telephone Company	Illinois	Citizens Utility Board	Rate of Return
76.	881167-EI May 1989	Gulf Power Company	Florida	Federal Executive Agencie	s Rate of Return
77.	R-891218 July 1989	National Fuel Gas Distribution Company	Pennsylvania	Office of Consumer Advoc	ate Sales forecasting
78.	8063, Phase III Sept. 1989	Potomac Electric Power Company	Maryland	Depart. Natural Resources	Emissions Controls
79.	37414-S2 October 1989	Public Service Company of Indiana	Indiana	Utility Consumer Counselo	or Rate of Return, DSM, off- system sales, incentive regulation
80.	October 1989	Generic	U.S. House of Reps. Comm. on Ways & M		Excess deferred income tax
81.	38728 November 1989	Indiana Michigan Power Company	Indiana	Utility Consumer Counselo	or Rate of Return
82.	RP89-49-000 December 1989	National Fuel Gas Supply Corporation	FERC	PA Office of Consumer Advocate	Rate of Return
83.	R-891364 December 1989	Philadelphia Electric Company	Pennsylvania	PA Office of Consumer Advocate	Financial impacts (surrebuttal only)
84.	RP89-160-000	Trunkline Gas Company	FERC	Indiana Utility	Rate of Return

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	January 1990			Consumer Counselor	
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

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89.	38868 March 1990	Indianapolis Water Company	Indiana	Utility Consumer Counselo	r 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	New Jersey				

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	January 1991	Natural Gas	New Jersey	Rate Counsel	Rate of Return
99.	90-256 January 1991	South Central Bell Telephone Company	Kentucky	Attorney General	Rate of Return
100.	U-17949A February 1991	South Central Bell Telephone Company	Louisiana	Louisiana PSC	Rate of Return
101.	ER90091090J April 1991	Atlantic City Electric Company	New Jersey	Rate Counsel	Rate of Return
102.	8241, Phase I April 1991	Baltimore Gas & Electric Company	Maryland	Dept. of Natural Resources	Environmental controls

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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 Purchased power co P910502	Metropolitan Edison Com ontract	pany	Pennsylvania Advocate	Office of Consumer and related ratemaking
	May 1991	Pennsylvania Electric Cor	mpany	Navocate	and related ratemaking
107.	GR901213915 May 1991	Elizabethtown Gas Compa	any	New Jersey	Rate Counsel Rate of Return
108.	91-5032 August 1991	Nevada Power Company	Nevada	U.S. Dept. of Energy	Rate of Return
109.	EL90-48-000 November 1991	Entergy Services	FERC	Louisiana PSC	Capacity transfer
110.	000662 September 1991	Southwestern Bell Telephone	Oklahoma	Attorney General	Rate of Return
111.	U-19236 October 1991	Arkansas Louisiana Gas Company	Louisiana	Louisiana PSC Staff	Rate of Return
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112.	U-19237 December 1991	Louisiana Gas Service Company	Louisiana	Louisiana PSC Staff	Rate of Return
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, et al. March 1992	Pennsylvania Electric Company	Pennsylvania	Office of Consumer Advocate	Cogeneration contracts

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117.	8413 March 1992	Potomac Electric Power Company	Maryland	Dept. of Natural Resources	IPP purchased power contracts
118.	39236 March 1992	Indianapolis Power & Light Company	Indiana	Utility Consumer Counselor	Least-cost planning Need for power
119.	R-912164 April 1992	Equitable Gas Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
120.	ER-91111698J May 1992	Public Service Electric & Gas Company	New Jersey	Rate Counsel	Rate of Return
121.	U-19631 June 1992	Trans Louisiana Gas Company	Louisiana	PSC Staff	Rate of Return
122.	ER-91121820J July 1992	Jersey Central Power & Light Company	New Jersey	Rate Counsel	Rate of Return
123.	R-00922314 August 1992	Metropolitan Edison Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
124.	92-049-05 September 1992	US West Communications	Utah	Committee of Consumer Services	Rate of Return
125.	92PUE0037 September 1992	Commonwealth Gas Company	Virginia	Attorney General	Rate of Return
126.	EC92-21-000	Entergy Services, Inc.	FERC	Louisiana PSC	Merger Impacts

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	September 1992				(Affidavit)
127.	ER92-341-000 December 1992	System Energy Resources	FERC	Louisiana PSC	Rate of Return
	U-19904	Louisiana Power &	Louisiana	Staff	Merger analysis,
comp	petition November 1992	Light Company			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

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	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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 er	Bell Telephone Company of Pennsylvania	Pennsylvania	Office of Consumer Advocate	Rate of Return, Financial Projections, Bell/TCI
138.	R-00932670 February 1994	Pennsylvania-American Water Company	Pennsylvania	Office of Consumer Advocate	Rate of Return
139.	8583	Conowingo Power Compa	any	Maryland	Dept. of Natural
	Competitive Biddin February 1994	g		Resources	for Power Supplies
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			of Matthew I. Kahal			
	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject	
140.	E-015/GR-94-001 April 1994	Minnesota Power & Light Company	Minnesota	Attorney General	Rate of Return	
141.	CC Docket No. 94-1 May 1994	Generic Telephone	FCC	MCI Comm. Corp.	Rate of Return	
	92-345, Phase II	Central Maine Power Con	npany	Maine	Advocacy Staff	Price
Cap	Regulation June 1994				Fuel Costs	
143.	93-11065 April 1994	Nevada Power Company	Nevada	Federal Executive Agencies	Rate of Return	
144. Retur	94-0065	Commonwealth Edison Co	ompany	Illinois	Federal Executive	Rate of
	May 1994			Agencies		
145.	GR94010002J June 1994	South Jersey Gas Compan	у	New Jersey	Rate Counsel Rate of	f Return

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146.	WR94030059 July 1994	New Jersey-American Water Company	New Jersey	Rate Counsel	Rate of Return
147.	RP91-203-000 June 1994	Tennessee Gas Pipeline Company	FERC	Customer Group	Environmental Externalities (oral testimony only)
148.	ER94-998-000 July 1994	Ocean State Power	FERC	Boston Edison Company	Rate of Return
	R-00942986	West Penn Power Compa	ny	Pennsylvania	Office of Consumer Rate of
Retui	rn, July 1994			Advocate	Emission Allowances
150.	94-121 August 1994	South Central Bell Telephone Company	Kentucky	Attorney General	Rate of Return
151.	35854-S2 November 1994	PSI Energy, Inc.	Indiana	Utility Consumer Counsel	Merger Savings and Allocations
152.	IPC-E-94-5 November 1994	Idaho Power Company	Idaho	Federal Executive Agencies	s 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 Company	Kentucky	Attorney General	Incentive Plan True-Ups
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of Matthew I. Kahal								
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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. only)	March 1995	Generic	Maryland	Dept. Natural Resources	Electric Competition Incentive Regulation (oral			
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			

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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
	2304 very of Capital Spend July 1995	Providence Water Supply ing	Board	Rhode Island	Division Staff Cost Program
163.	ER95-625-000, et al August 1995	1. PSI Energy, Inc.	FERC	Office of Utility Consumer	Counselor Rate of Return
	P-00950915, et al. ract Amendment September 1995	Paxton Creek Cogeneration Assoc.	Pennsylvania	Office of Consumer Advoca	ate Cogeneration
	8702 only) September 1995	Potomac Edison Company	Maryland	Dept. of Natural Resources	Allocation of DSM Costs
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 Counselo	r Rate of Return Retail wheeling
168.	P-55, SUB 1013	BellSouth	North Carolina	AT&T	Rate of Return
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	January 1996							
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			

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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. Capita	WR96100768 al March 1997	Consumers NJ Water Com	npany	New Jersey	Ratepayer Advocate Cost of
179.	WR96110818 April 1997	Middlesex Water Co.	New Jersey	Ratepayer Advocate	Cost of Capital
	U-11366 n/financial condition April 1997	Ameritech Michigan	Michigan	MCI	Access charge
181. condi	97-074 tion May 1997	BellSouth	Kentucky	MCI	Rate Rebalancing financial
182.	2540 June 1997	New England Power	Rhode Island	PUC Staff	Divestiture Plan
183.	96-336-TP-CSS	Ameritech Ohio	Ohio	MCI	Access Charge reform 33

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	June 1997				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. Polic		Generic	Maryland	Dept. of Natural Resources	Electric Restructuring
	August 1997	(oral testimony only)			
187.	Docket No. 2592 September 1997	Eastern Utilities	Rhode Island	PUC Staff	Generation Divestiture
	Septemoer 1997	Zustern etimies	Tilloue Island	100 5.411	Seneration B1 (estitute
188.	Case No.97-247 September 1997	Cincinnati Bell Telephone	Kentucky	MCI	Financial Condition

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189.	Docket No. U-2092 November 1997	5Entergy Louisiana	Louisiana	PSC Staff	Rate of Return
190.	Docket No. D97.7.9 November 1997	Montana Power Co.	Montana	Montana Consumers Couns	sel Stranded Cost
191. Advo	Docket No. EO970' ocate November 1997	70459 Stranded Cost	Jersey Central Power	& Light Co.	New Jersey Ratepayer
192. Advo	Docket No. R-0097 ocate November 1997	4104 Stranded Cost	Duquesne Light Co.	Pennsylvania	Office of Consumer
193. Advo	Docket No. R-0097 ocate November 1997	3981 Stranded Cost	West Penn Power Co	. Pennsylvania	Office of Consumer
	Docket No. A-1101 umer Advocate November 1997	150F0015 Merger Issues DQE, Inc.	Allegheny Power Sys	stem	Pennsylvania Office of
195. Advo	Docket No. WR970 ocate January 1998	080615 Rate of Return	Consumers NJ Water	Company	New Jersey Ratepayer
	Docket No. R-0097 umer Advocate January 1998	4149 Stranded Cost	Pennsylvania Power	Company	Pennsylvania Office of

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197. Case No. 8774 Allegheny Power System Maryland Dept. of Natural Resources Merger Issues

January 1998 DQE, Inc. MD Energy Administration

198. Docket No. U-20925 (SC) Entergy Louisiana, Inc. Louisiana Commission

Staff Restructuring, Stranded

March 1998 Costs, Market Prices

199. Docket No. U-22092 (SC) Entergy Gulf States, Inc. Louisiana Commission

Staff Restructuring, Stranded

March 1998 Costs, Market Prices

200. Docket Nos. U-22092 (SC) Entergy Gulf States Louisiana Commission Staff

Standby Rates

and U-20925(SC) and Entergy Louisiana

May 1998

201. Docket No. WR98010015 NJ American Water Co. New Jersey Ratepayer

Advocate Rate of Return

May 1998

202. Case No. 8794 Baltimore Gas & Electric Co. Maryland MD Energy Admin./Dept.

Of Stranded Cost/

December 1998 Natural Resources Transition Plan

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203. Of	Case No. 8795 Stranded Cost/	Delmarva Power & Light	Co.	Maryland	MD Energy	Admin.	Dept.
	December 1998			Natural Resources	Transition P	lan	
204.	Case No. 8797 January 1998	Potomac Edison Co.	Maryland	MD Energy Admin./Dept. ON Natural Resources	Of Strand Transition P	ded Cost lan	/
205. Retur	Docket No. WR9809 n March 1999	90795	Middlesex Water Co.	New Jersey	Ratepayer A	dvocate	Rate of
206.	Docket No. 99-02-05 Stranded Costs April 1999	5 Connecticut Light & Po	ower	Connecticut	Attorney Ge	eneral	
207.	Docket No. 99-03-04 Stranded Costs May 1999	4 United Illuminating Con	mpany	Connecticut	Attorney Ge	eneral	
208. Struct	Docket No. U-20925 ture June 1999	5 (FRP)	Entergy Louisiana, In	c.	Louisiana	Staff	Capital
209.	Docket No. EC-98-4 Market Power	0-000,	American Electric Po	wer/	FERC	Arkans	sas PSC
	<u>et al</u> . May 1999	Central & Southwest			Mitigation		

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210.	Docket No. 99-03-35 Restructuring July 1999	5 United Illuminating Cor	mpany	Connecticut	Attorney General			
211.	211. Docket No. 99-03-36 Connecticut Light & Power Co. Restructuring July 1999			Connecticut	Attorney General			
	212. WR99040249 Environmental Disposal Corp. Return Oct. 1999		New Jersey	Ratepayer Advocate Rate of				
213.	2930 Nov. 1999	NEES/EUA	Rhode Island	Division Staff	Merger/Cost of Capital			
	DE99-099 tal Issues Nov. 1999	Public Service New Hamp	shire	New Hampshire	Consumer Advocate Cost of			
215.	00-01-11 Feb. 2000	Con Ed/NU	Connecticut	Attorney General	Merger Issues			
	Case No. 8821 ations May 2000	Reliant/ODEC	Maryland	Dept. of Natural Resources	Need for Power/Plant			

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	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subject
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, et a July 2000	al. 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 a February 2001	al. CLECO	Louisiana	PSC Staff	Stranded Costs
223.	P-00001860 and P-0000181 March 2001	GPU Companies	Pennsylvania	Office of Consumer Advoca	ate Rate of Return
	CVOL-0505662-S davit) March 2001	ConEd/NU	Connecticut Superior	Court	Attorney General Merger
225.	U-20925 (SC) March 2001	Entergy Louisiana	Louisiana	PSC Staff	Stranded Costs
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	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	<u>C1</u>	<u>ient</u>	<u>Subject</u>	
226.	U-22092 (SC) March 2001	Entergy Gulf States	Louisiana	P	SC Staff	Stranded Co	sts
227.	U-25533 May 2001	Entergy Louisian Gulf States	a/	Louisiana Interruptible	PSC Staff e Service	Purchas	e Power
228.	P-00011872 May 2001	Pike County Pike	Penns	ylvania	Office of Cons	umer Advocate	Rate of Return
229.	8893 Corporate Restruct July 2001	Baltimore Gas & Electric C turing	0.	Maryland	MD En	ergy Administration	
230. Issue	8890 s September 2001	Potomac Electric/Connectiv	vity	Maryland	MD En	ergy Administration	Merger

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231. Conta		Entergy Louisian	na / Louisian	a Staff	Purchase Power
	August 2001	Gulf States			
232.	U-25965 November 2001	Generic	Louisiana	Staff	RTO Issues
233.	3401 March 2002	New England Gas Co.	Rhode Island	Division of Public V	Utilities Rate of Return
234. Source	99-833-MJR te Review April 2002	Illinois Power Co.	U.S. District Co	urt U.S. Depart	ment of Justice New
235.	U-25533 March 2002	Entergy Louisiana/ Gulf States	Louisiana	PSC Staff	Nuclear Uprates Purchase Power
236.	P-00011872 May 2002	Pike County Power & Light	Pennsylvania	Consumer Advocat	e POLR Service Costs
237.	U-26361, Phase I May 2002	Entergy Louisiana/ Gulf States	Louisiana	PSC Staff	Purchase Power Cost Allocations
238.	R-00016849C001, 6 Rate of Return June 2002	et al. Generic	P	ennsylvania	Pennsylvania OCA
239.	U-26361, Phase II July 2002	Entergy Louisiana/ Entergy Gulf States	Louisiana	PSC Staff	Purchase Power Contracts

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			of Matthew I. Kahal		
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240.	U-20925(B) August 2002	Entergy Louisiana	Louisiana	PSC Staff	Tax Issues
241. Contr	U-26531 ract October 2002	SWEPCO	Louisiana	PSC Staff	Purchase Power
242.	8936 Standard Offer Serv October 2002	Delmarva Power & Light vice	Maryland	Energy Admini Dept. Natural Resources	istration
243.	U-25965 November 2002	SWEPCO/AEP	Louisiana	PSC Staff	RTO Cost/Benefit
	8908 Phase I	Generic	Maryland	Energy Administration	Standard Offer
Servi	November 2002			Dept. Natural Resourc	es
245. Retur	02S-315EG	Public Service Company	Colorado	Fed. Executive	Agencies Rate of
Ketui	November 2002	of Colorado			

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246. Raten	EL02-111-000 making December 2002	PJM/MISO	FERC	MD PSC	Transmission
247.	02-0479 February 2003	Commonwealth Edison	Illinois	Dept. of Energy	POLR Service
248.	PL03-1-000 March 2003	Generic	FERC	NASUCA	Transmission Pricing (Affidavit)
249. Contr	U-27136 racts April 2003	Entergy Louisiana	Louisiana	Staff	Purchase Power
250. Servi		Generic	Maryland	Energy Administration Dept. of Natural	ation Standard Offer aral Resources
251. Contr	U-27192 cact June 2003	Entergy Louisiana and Gulf States	Louisiana	LPSC Staff	Purchase Power Cost Recovery
252.	C2-99-1181 Clean Air Act Con October 2003	Ohio Edison Company npliance	U.S. Dis	trict Court	U.S. Department of Justice, et al. Economic Impact (Report)
253. Retur	RP03-398-000	Northern Natural Gas Co.	FERC	Munic	cipal Distributors Rate of
	December 2003			Group/Gas Task F	Force 43

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	8738 osure December 2003	Generic	Maryland	Energy Admin Department	t Environmental (oral only)
	U-27136 er Contracts December 2003	Entergy Louisiana, Inc.	Louisian		Purchase
256. Conta	U-27192, Phase II racts October/December 2	Entergy Louisiana & 2003 Entergy Gulf St	Louisiana	PSC Staff	Purchase Power
257. (TEL	WC Docket 03-173 RIC) December 2003	6 Generic	FCC	MCI	Cost of Capital
258.	ER 030 20110 January 2004	Atlantic City Electric	New Jersey	Ratepayer Advocate	Rate of Return
259.	E-01345A-03-0437 Rate of Return January 2004	Arizona Public Service	Company A	rizona	Federal Executive Agencies
260.	03-10001 January 2004	Nevada Power Compan	y Nevada	U.S. Dept. of I	Energy Rate of Return

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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		e of Return pacity Resources
263.	U-27866 Purchase Power Co September 2004	Southwest Electric Power ontract	Co.	Louisiana PSC S	Staff	
264. Contr	U-27980 ract September 2004	Cleco Power	Louisiana	PSC Staff	Pur	chase Power
265. Contr	U-27865 ract October 2004	Entergy Louisiana, Inc. Entergy Gulf States	Louisiana	PSC Staff	Puro	chase Power
266.		Northern Natural Gas Company	FERC	Municipal Distribute Group/Gas Task Force	ors Rate	e of Return
267.	U-27836 January 2005	Entergy Louisiana/ Gulf States	Louisiana	PSC Staff		ver plant Purchase Cost Recovery
268.	U-199040 et al. February 2005	Entergy Gulf States/ Louisiana	Louisiana	PSC Staff		bal Settlement, ate proceedings
	EF03070532 eferred Costs	Public Service Electric & Gas	s New Jerse	ey Ratepayers A	dvocate	Securitization 45

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	March 2005				
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
	U-28155	Entergy Louisiana	Louisiana	LPSC Staff	Independent
Coor	dinator August 2005	Entergy Gulf States			of Transmission Plan

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276. Conti	U-27866-A	Southwestern Electric	Louisiana	LPSC Staff	Purchase Power
	September 2005	Power Company			
277. Conti	U-28765 ract October 2005	Cleco Power LLC	Louisiana	LPSC Staff	Purchase Power
	U-27469 odology October 2005	Entergy Louisiana Entergy Gulf States	Louisiana	LPSC Staff	Avoided Cost
	A-313200F007 ucturing October 2005	Sprint (United of PA)	Pennsylvania	Office of Consumer A	dvocate Corporate
280.	EM05020106 November 2005	Public Service Electric & Gas Company	New Jersey	Ratepayer Advocate	Merger Issues
281.	U-28765 Financing, Rate P December 2005	Cleco Power LLC	Louisiana	LPSC Staff	Plant Certification,
282. Finan	U-29157 acing February 2006	Cleco Power LLC	Louisiana	LPSC Staff	Storm Damage
283.	U-29204 acts	Entergy Louisiana	Louisiana	LPSC Staff	Purchase power

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	March 2006	Entergy Gulf States			
	A-310325F006 orate Restructuring March 2006	Alltel	Pennsylvania	Office of Consumer A	Advocate Merger,
	9056	Generic	Maryland	Maryland Energy	Standard Offer
Servi	ce March 2006			Administration	Structure
	C2-99-1182	American Electric	U. S. District Co	urt U. S. Department of Ju	ustice New Source
Revie (expe	April 2006 ert report)	Power Utilities	Southern District	, Ohio	Enforcement
287.	EM05121058 April 2006	Atlantic City Electric	New Jersey	Ratepayer Advocate	Power plant Sale
288. Reco		Jersey Central Power	New Jersey	Ratepayer Advocate	NUG Contracts Cost
	June 2006	& Light Company			
289.	U-21496, Subdocke Rate Stabilization P. June 2006		.C	Louisiana Commi	ission Staff
	GR0510085 services)	Public Service Electric	New Jerse	ey Ratepayer Adv	vocate Rate of Return
(Sus s	June 2006	& Gas Company			48

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	R-000061366 July 2006	Metropolitan Ed. Company Penn. Electric Compan	•	Office of Consumer	Advocate Rate of Return
292. Servic		Generic	Maryland	Energy Administration	Standard Offer
Power	U-29599 r Contracts September 2006	Cleco Power LLC	Louisiana	Commission Staff	Purchase
-	WR06030257 September 2006	New Jersey American Wate Company	er New Jers	sey Rate Counsel	Rate of Return
Power	U-27866/U-29702 r/Power Plant Certifi October 2006	Southwestern Electric Pocation Company	ower Louisian	a Commission Staff	Purchase
296.		Generic	Maryland	Energy Administration	Generation Supply
Polici	es October 2006			Department of Natural Re	esources
	EM06090638 November 2006	Atlantic City Electric	New Jersey	Rate Counsel	Power Plant Sale
Service	C-2000065942 ce November 2006	Pike County Light & Powe	er Pennsylvania	Consumer Advocate	Generation Supply
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299.	ER06060483 November 2006	Rockland Electric Company	New Jersey	Rate Counsel	Rate of Return
300.	A-110150F0035 Merger Issues December 2006	Duquesne Light Company	Per	nnsylvania	Consumer Advocate
	U-29203, Phase II age Cost Allocation January 2007	Entergy Gulf States Entergy Louisiana	Louisiana	Commission Staff	Storm
302.	06-11022 February 2007	Nevada Power Company	Nevada	U.S. Dept. of Energy	Rate of Return
	U-29526 sactions March 2007	Cleco Power	Louisiana	Commission Staff	Affiliate
	P-00072245 Resort Service March 2007	Pike County Light & Power	Pennsylvania	Consumer Adv	vocate Provider of
305.	P-00072247 Provider of Last Re March 2007	Duquesne Light Company sort Service	Per	nnsylvania	Consumer Advocate

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306.	EM07010026 May 2007	Jersey Central Power & Light Company	New Jersey	Rate Counsel	Power Plant Sale
	U-30050 or Contract June 2007	Entergy Louisiana Entergy Gulf States	Louisiana	Commission Staff	Purchase
200					DI 1.0
Unit	U-29956 June 2007	Entergy Louisiana	Louisiana	Commission Staff	Black Start
	U-29702 fication	Southwestern Electric Powe	er Louisian	a Commission Staff	Power Plant
	June 2007	Company			
	U-29955 or Contracts	Entergy Louisiana	Louisiana	Commission Staff	Purchase
	July 2007	Entergy Gulf States			
	2007-67 acial Issues July 2007	FairPoint Communications	Maine	Office of Public Ad	vocate Merger
312.	P-00072259 Purchase Power Cor July 2007	Metropolitan Edison Co. ntract Restructuring	Pennsylv	vania Office of Co	onsumer Advocate
	EO07040278 ram Financial	Public Service Electric &	Gas New Jer	sey Rate Counse	el Solar Energy
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September 2007				Issues	
314. U-30192 Certification Ratemaking, September 2007	Entergy Louisiana	Louisiana	Commission Staff	Financing	Power Plant
•	Generic (Electric)	Maryland	Energy Administrati	_	lard Offer
316. U-30050 Acquisition November 2007	Entergy Gulf States	Louisiana	Commission Staff		Power Plant
317. IPC-E-07-8 Capital December 2007	Idaho Power Co.	Idaho	U.S. Department of	Energy	Cost of
318. U-30422 (Phase I) Power Contract January 2008	Entergy Gulf States	Louisiana	Commission Staff		Purchase
319. U-29702 (Phase II) Certification February, 2008	Southwestern Electric Power Co.	Louisiana	Commission Staff		Power Plant
320. March 2008 Wind Energy Econor	Delmarva Power & Ligh	t	Delaware State Senate	Senate Com	mittee

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	U-30192 (Phase II) y, Credit Ratings March 2008	Entergy Louisiana	Louisiana	Commissio	on Staff	Cash CWIP
322.	U-30422 (Phase II) Power Plant Acquisi April 2008	Entergy Gulf States - LA ition	·	Louisiana	Commission Staff	
	U-29955 (Phase II) er Contract April 2008	Entergy Gulf States - LA Entergy Louisiana	Louisiana	a Commissio	on Staff	Purchase
324.	GR-070110889 April 2008	New Jersey Natural Gas Company	New Jersey	Rate Couns	sel Cost	of Capital
325.	WR-08010020 July 2008	New Jersey American Water Company	New Jersey	Rate Couns	sel Cost	of Capital
326. Contr	U-28804-A ract August 2008	Entergy Louisiana	Louisiana	Commissio	on Staff	Cogeneration
	IP-99-1693C-M/S	Duke Energy Indiana	Federal District	U.S. Depar	tment of Justice/	Clean Air Act
Repo	August 2008		Court	Environme	ntal Protection Agency	(Expert
	U-30670 pment	Entergy Louisiana	Louisiana	Commission	on Staff	Nuclear Plant
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September 2008				Replacemen	t
329. 9149 Adequacy/Reliability October 2008	Generic	Maryland	Department of	Natural Resources Capac	city
330. IPC-E-08-10 Capital October 2008	Idaho Power Company	Idaho	U.;	S. Department of Energy	Cost of
331. U-30727 Power Contract October 2008	Cleco Power LLC	Louisiana	Commissi	on Staff	Purchased
332. U-30689-A Upgrade Project December 2008	Cleco Power LLC	Louisiana	Commissi	on Staff	Transmission
333. IP-99-1693C-M/S Compliance	Duke Energy Indiana	Federal District	U.S. Depa	rtment of Justice/EPA	Clean Air Act
February 2009		Court		(Oral	Testimony)
334. U-30192, Phase II Request	Entergy Louisiana, LLC	Louisiana	a Commissi	on Staff	CWIP Rate
February 2009				Plant Alloca	ntion
335. U-28805-B Cogeneration Contr February 2009	Entergy Gulf States, LL ract	С	Louisiana	Commission Staff	
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			Expert Testimony of Matthew I. Kahal				
	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subjec	<u>t</u>	
336. Advo	P-2009-2093055, e ocate Default Se May 2009		litan Edison ectric	Pennsylvania	Offic	ce of Consume	er
	U-30958 er Contract July 2009	Cleco Power	Louisiana	Commission	on Staff	Purc	hase
338.	EO08050326 Demand Response August 2009	Jersey Central F Cost Recovery	ower Light Co.	New Jersey	Rate Counsel		
339.	GR09030195 August 2009	Elizabethtown Gas	New Jersey	New Jerse	y Rate Counsel	Cost	of Capital
340. Purcl	U-30422-A hase August 2009	Entergy Gulf St	ates Louisiana	Staff		Generating	Unit
	CV 1:99-01693	Duke Energy India	na Federal District	U. S. DOJ	/EPA, et al.	Environmen	tal
Repo	pliance Rate August 2009 ort)		Court – Indiana			Impacts	(Expert
342.	4065 September 2009	Narragansett Elect	ric Rhode Island	Division S	taff	Cost of Capi	ital
	U-30689 gn, Other	Cleco Power	Louisiana	Staff		Cost of Cap	pital, Rate

			Expert Testimony of Matthew I. Kahal			
	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>	
	September 2009				Rate Case Issues	
	U-31147 cracts October 2009	Entergy Gulf States Entergy Louisiana	Louisiana	Staff	Purchase	Power
	U-30913 erating Unit November 2009	Cleco Power	Louisiana	Staff	Certification	of
	M-2009-2123951 of Capital November 2009	West Penn Power	Pennsylvania	Office of Consu	ımer Advocate Smai (Surrebuttal Only)	t Meter
347.	GR09050422 November 2009	Public Service Electric & Gas Company	New Jersey	Rate Counsel	Cost of Capi	tal
348.	D-09-49 November 2009	Narragansett Electric	Rhode Island	Division Staff	Securities Is	suances
349. Reco	U-29702, Phase II overy November 2009	Southwestern Electric Power Company	Louisiana	Commission Sta	aff Cash	CWIP
Dam	U-30981 age Cost December 2009 U-31196 (ITA Phas Purchase Power Co	,	Louisiana a	Commission State Louisiana S	Allocation Staff	n

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	Docket Number	<u>Utility</u>	<u>Jurisdiction</u> <u>C</u>	lient S	<u>ubject</u>
	February 2010				
352.	ER09080668 March 2010	Rockland Electric	New Jersey	Rate Counsel	Rate of Return
353.	GR10010035 May 2010	South Jersey Gas Co.	New Jersey	Rate Counsel	Rate of Return
	P-2010-2157862 ce Program May 2010	Pennsylvania Power Co.	Pennsylvan	ia Consumer Advoc	eate Default
	10-CV-2275 recement June 2010	Xcel Energy	U.S. District Court Minnesota	U.S. Dept. Justice/EPA	Clean Air Act
356.	WR09120987 June 2010	United Water New Jersey	New Jersey	Rate Counsel	Rate of Return
	U-30192, Phase III ellation Costs June 2010	Entergy Louisiana	Louisiana	Staff	Power Plant
358.	31299 July 2010	Cleco Power	Louisiana	Staff	Securities Issuances
359. Capit	App. No. 1601162 tal July 2010	EPCOR Water	Alberta, Canada	Regional Customer Grou	p Cost of

		Expert Testimony of Matthew I. Kahal		
<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u> <u>C</u>	<u>Sub</u>	<u>sject</u>
360. U-31196 Contract July 2010	Entergy Louisiana	Louisiana	Staff	Purchase Power
361. 2:10-CV-13102 Enforcement	1 Detroit Edison	U.S. District Court	U.S. Dept. of Justice/EPA	Clean Air Act
August 2010		Eastern Michigan	n	
362. U-31196	Entergy Louisiana	Louisiana	Staff	Generating Unit
Purchase and August 2010	Entergy Gulf States			Cost Recovery
363. Case No. 9233 October 2010	Potomac Edison Company	Maryland E	Energy Administration	Merger Issues
364. 2010-2194652 November 201	Pike County Light & Power 0	r Pennsylvania	Consumer Advocate	Default Service Plan
365. 2010-2213369 April 2011	Duquesne Light Company	Pennsylvan	ia Consumer Advoca	te Merger Issues
366. U-31841 Agreement May 2011	Entergy Gulf States	Louisiana	Staff	Purchase Power
367. 11-06006 Capital September 201	Nevada Power	Nevada	U. S. Department of Energ	gy Cost of
				58

			Гestimony ew I. Kahal		
Docket Nur	nber <u>Utility</u>	<u>Jurisdiction</u>	Client	Subject	
368. 9271 Savings Septemb	Exelon/Constellat	tion Maryla	and MD E	Energy Administration	Merger
369. 4255 Septemb	United Water Rhoper 2011	ode Island Rhode	Island Divisi	ion of Public Utilities	Rate of Return
370. P-2011- October	3	Pennsy	ylvania Consu	ımer Advocate Defa	ault service plan
371. U-3209: contract		ctric Louisi	ana Comn	nission Staff	Wind energy
372. U-3203 Power Contrac Novemb	1 Entergy Gulf Stat	es Louisi	ana Comn	mission Staff	Purchased
373. U-32088 evaluation January	C7	a Louisi	ana Comn	mission Staff	Coal plant
374. R-2011- Februar	1	Pennsy	ylvania Office	e of Consumer Advocate	Cost of capital
375. P-2011- service plan Februar		ompanies	Pennsylvania	Office of Consumer Advoc	cate Default
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			Expert Testimony of Matthew I. Kahal			
	<u>Docket Number</u>	<u>Utility</u>	Jurisdiction	<u>Client</u> <u>S</u>	<u>ubject</u>	
	U-32223 or Contract and March 2012	Cleco Power	Louisiana	Commission Staff	Rate	Purchase Recovery
	U-32148 bership March 2012	Entergy Louisiana Energy Gulf States	Louisiana	Commission Staff		RTO
378.	ER11080469 April 2012	Atlantic City Electric	New Jersey	Rate Counsel	Cost	of capital
379.	R-2012-2285985 May 2012	Peoples Natural Gas Company	Pennsylvania	Office of Consumer Adv	ocate	Cost of capital
	U-32153 pliance July 2012	Cleco Power	Louisiana	Commission Staff	Plan	Environmental
381. (gas)	U-32435 August 2012	Entergy Gulf States Louisiana LLC	Louisiana	Commission Staff	11411	Cost of equity
382.	ER-2012-0174 August 2012	Kansas City Power & Light Company	Missouri	U. S. Department of Energy	rgy	Rate of return
	U-31196	Entergy Louisiana/	Louisiana	Commission Staff		Power Plant
Joint	August 2012	Entergy Gulf States			Owne	ership
384.	ER-2012-0175	KCP&L Greater	Missouri	U.S. Department of Energy	Rate	of Return

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	Docket Number	<u>Utility</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>	
	August 2012	Missouri Operations				
385.	4323 August 2012	Narragansett Electric Company	Rhode Island	Division of Publ and Carriers		Rate of Return etric and gas)
386.	D-12-049 October 2012	Narragansett Electric Company	Rhode Island	Division of Publ and Carriers	ic Utilities	Debt issue
387.	GO12070640 October 2012	New Jersey Natural Gas Company	New Jersey	Rate Counsel	Cost	of capital
388.	GO12050363 November 2012	South Jersey Gas Company	New Jersey	Rate Counsel	Cost	of capital
389.	R-2012-2321748 January 2013	Columbia Gas of Pennsylvania	Pennsylvania	Office of Consu	mer Advocate	Cost of capital
390. Plan	U-32220	Southwestern	Louisiana	Commission Sta	ff	Formula Rate
Fian	February 2013	Electric Power Co.				
391.	CV No. 12-1286 February 2013	PPL et al.	Federal District Court	MD Public Serv Commission		Market Impacts osition)
392.	EL13-48-000 February 2013	BGE, PHI subsidiaries	FERC	Joint Customer	- · · I	smission of Equity
393.	EO12080721 March 2013	Public Service Electric & Gas	New Jersey	Rate Counsel	Sola	r Tracker ROE
						61

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Docket Number	<u>Utility</u>	<u>Jurisdiction</u> <u>C</u>	<u>llient</u>	Subject
394. EO12080726 March 2013	Public Service Electric & Gas	New Jersey	Rate Counsel	Solar Tracker ROE
395. CV12-1286MJG Market Issues	PPL, PSEG	U.S. District Court	Md. Public Service	e Commission Capacity
March 2013 396. U-32628 methodology	Entergy Louisiana and	for the District of I Louisiana	Md. Staff	(trial testimony) Avoided cost
April 2013	Gulf States Louisiana			
397. U-32675 Issues	Entergy Louisiana and	Louisiana	Staff	RTO Integration
June 2013	Entergy Gulf States			
398. ER12111052 June 2013	Jersey Central Power & Light Company	New Jersey	Rate Counsel	Cost of capital
399. PUE-2013-00020	Dominion Virginia	Virginia	Apartment & Offic	ce Building Cost of capital
July 2013	Power	F	Assoc. of Met. Washin	gton
400. U-32766 acquisition August 2013	Cleco Power	Louisiana	Staff	Power plant
401. U-32764 September 2013	Entergy Louisiana and Entergy Gulf States	Louisiana	Staff	Storm Damage Cost Allocation
				(

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	Docket Number	<u>Utility</u>	Jurisdiction C	<u>Client</u>	Subject
402.	P-2013-237-1666 September 2013	Pike County Light and Power Co.	Pennsylvania	Office of Consumer Advocate	Default Generation Service
403.	E013020155 and G013020156 October 2013	Public Service Electric and Gas Company	New Jersey	Rate Counsel	Cost of capital
	U-32507 pliance Plan November 2013	Cleco Power	Louisiana	Staff	Environmental
	DE11-250	Public Service Co.	New Hampshire	Consumer Advocate	Power plant
inves	tment prudence December 2013	New Hampshire			
406.	4434 February 2014	United Water Rhode Island	Rhode Island	Staff	Cost of Capital
407.	U-32987 February 2014	Atmos Energy	Louisiana	Staff	Cost of Capital
	EL 14-28-000	Entergy Louisiana	FERC	LPSC	Avoided Cost
Meth	odology February 2014	Entergy Gulf States			(affidavit)
409.	ER13111135 May 2014	Rockland Electric	New Jersey	Rate Counsel	Cost of Capital
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	<u>Docket Number</u>	<u>Utility</u> <u>Juri</u>	sdiction	Client	Subject	
	13-2385-SSO, et al. ce Issues May 2014	AEP Ohio	Ohio	Ohio	o Consumers' Counsel	Default
411.	U-32779 May 2014	Cleco Power, LLC	Louisiana	Staf	f	Formula Rate Plan
412.	CV-00234-SDD-SC Avoided Cost Determ	23		U.S. Dist	trict Court Louisiana Pub	olic
	June 2014	Entergy Gulf	Middle District L	ouisiana	Service Commission	Court Appeal
	U-32812 Prudence	Entergy Louisiana	Louisiana	Lou	isiana Public	Nuclear Power
1 100110	July 2014			Serv	vice Commission	
	14-841-EL-SSO ce Issues September 2014	Duke Energy Ohio	Ohio	Ohio	o Consumer' Counsel	Default
	EM14060581 icial Issues November 2014	Atlantic City Electric Compar	ny New Jerse	ey	Rate Counsel	Merger
416.	EL15-27 December 2014	BGE, PHI Utilities	FERC	Join	t Complainants	Cost of Equity
	14-1297-EL-SSO ce Issues	First Energy Utilities	Ohio	Ohio	o Consumer's Counsel	Default
551 (1	December 2014			and NOF	PEC	64

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	<u>Docket Number</u>	<u>Utility</u>	<u>Jurisdiction</u>	Client	Subjec	<u>et</u>
418.	EL-13-48-001 January 2015	BGE, PHI Utilities	FERC	Joint (Complainants	Cost of Equity
419.	EL13-48-001 and EL15-27-000 April 2015	BGE and PHI Utilities	FERC		Joint Complainants	Cost of Equity
420. Cont	U- 33592 ract November 2015	Entergy Louisiana	Louisiana Public	Service	Commission Staff	PURPA PPA
421. Merg	GM15101196 ger April 2016	AGL Resources	New Jersey	Rate Couns	sel	Financial Aspects of
422.	U-32814 April 2016	Southwestern Electric Power	Louisiana	Staff		Wind Energy PPAs
423. Issue	A-2015-2517036, et es April 2016	a.al. Pike County	Pennsylva	ania	Office of Consumer	Advocate Merger

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	Docket Number	<u>Utility</u>	Jurisdiction	Client	Subject	
	EM15060733 stiture	Jersey Central Power &	New Jersey	Rate Cou	nsel Trai	nsmission
	August 2016	Light Company				
425.	16-395-EL-SSO Electric Security Pla November 2016	Dayton Power & Light Co an	ompany	Ohio	Ohio Cons	sumer's Counsel
426.	PUE-2016-00001 January 2017	Washington Gas Light	Virginia	a AOBA	Cost of Ca	pital
427.	U-34200 Design of Formula 1 April 2017	Southwestern Electric Pov Rate Plan	ver Co.	Louisiana	Commission Staff	
428. Capit	ER-17030308 tal August 2017	Atlantic City Electric Co.	New Je	rsey R	ate Counsel	Cost of
429.	U-33856 Power Plant Pruden October 2017	Southwestern Electric Povice	ver Co.	Louisiana	Commission Staff	
	4:11 CV77RWS Retrofit December 2017	Ameren Missouri	U.S. District Co	ourt U.S. Dep	artment of Justice	Expert Report
431. Auth	D-17-36 ority	Narragansett Electric Co.	Rhode l	sland D	ivision Staff	Debt Issuance
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	<u>Docket Number</u>	<u>Utility</u> <u>Ju</u>	urisdiction Clien	<u>t</u> <u>Subj</u>	<u>ect</u>
	January 2018				
432. Capit	4770 al April 2018	Narragansett Electric Co.	Rhode Island	Division Staff	Cost of
433.	4800 June 2018	Suez Water	Rhode Island	Division Staff	Cost of Capital
	17-32-EL-AIR et.al. rity Plan June 2018	Duke Ohio	Ohio	Ohio Consumer's Counsel	Electric
435.	Docket No. ER1801 Rate of Return GR18010030 August 2018	O029/ Public Service Electronic Gas Co.	ctric &	New Jersey Div	vision of Rate Counsel
Testin	4:11 CV77RWS mony— April 2019 pliance	Ameren Missouri	U.S. District Court	U.S. Department of Justice	Oral Trial Environmental
437. Issue	A-2018-3006061 s April 2019	Aqua American/Peoples C	Gas Pennsylvania	Office of Consumer	r Advocate Merger
438.	4929	Narragansett Electric	Rhode Island	Division Staff	Wind Energy PPA 67

		Expert Testimony of Matthew I. Kahal			
Docket Number	<u>Utility</u> <u>J</u>	<u>Jurisdiction</u>	Client	<u>Subject</u>	
April 2019					
439. ER19050552 October 2019	Rockland Electric Co.	New Jersey	Division o	of Rate Counsel	Rate of Return
440. 19-00170-UT Return November 2019	Southwest Public Service Co	o. New Mex	ico Att	torney General	Rate of
441. D-19-17 November 2019	Narragansett Electric	Rhode Island	Division o	of Public Utilities	Debt Issuance
442. ER-20-1074-000 Structure March 2020	Marsh Landing	FERC	Ca	lifornia PUC	Capital
443. 19-00317-UT July 2020	New Mexico Gas Company	New Mexico	Attorney (General	Rate of Return
444. EO1801115 Return August 2020	Public Service Electric &	Gas Co.	New Jersey	Rate Counsel	Rate of
445. 20-00104-UT Return October 2020	El Paso Electric Company	New Mex	ico Att	torney General	Rate of
446. 20-680-EL-UNC Security Case	Dayton Power & Light Co	o. Ohio	Co	onsumers' Counsel	Electric
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			Exper of Mat	rt Testimony thew I. Kahal				
	Docket Number	<u>Utility</u>	Jurisdiction		Client	Si	<u>ubject</u>	
	October 2020							
447.	ER16-2320-002 December 2020	Pacific Gas & Electric Co).	FERC		California PUC		Cost of Equity

SEET ROE Results and Recommendation

		<u>2017</u>	<u>2018</u>	<u>2019</u>
1.	Safe Harbor Result			
	Full XLU Group	13.8-14.1%	12.8-13.3%	12.6-12.8%
	Cap. Structure Screen	13.2-13.5%	12.1-12.5%	12.3-12.4%
2.	Staff Method			
	Full XLU Group	18.2%	14.2%	13.5%
	Cap. Structure Screen	16.3%	12.0%	12.5%
3.	Upper Half Median Method			
	Full XLU Group	13.6%	11.8%	11.3%
	Cap. Structure Screen	11.3%	11.4%	11.3%
4.	Recommendation	13.8%	12.5%	12.4%

Notes

- (1) Full XLU Group is all companies except for NRG, AES and FirstEnergy.
- (2) Cap. Structure Screen excludes all XLU companies with common equity ratios above 60.0% and below 40% in each year. See Schedule MIK-2.
- (3) Recommendation is the average of Staff method and the Upper Half Median, employing the Capital Structure Screen, and using the Safe Harbor (using Capital Structure Screen) as a floor. The Safe Harbor result is the group average ROE plus 200 basis points. Ranges are shown because the average figures used are based on both the simple and weighted average calculations.
- (4) Source: See Schedules MIK-2, -3, -4 and -5.

Group Average ROEs Weighted vs. Unweighted

	<u>2017</u>	<u>2018</u>	<u>2019</u>
Weighted – Full Group	12.1%	10.8%	10.6%
Unweighted – Full Group	11.8%	11.3%	10.8%
Weighted - Cap. Structure Screen	11.5%	10.1%	10.3%
Unweighted – Cap. Structure Screen	11.2%	10.5%	10.4%

Note: "Full Group" excludes AES, NRG, and FirstEnergy.

Common Equity Ratios

XLU Companies	<u>2017</u>	<u>2018</u>	<u>2019</u>	Average
Alliant Energy	47.9%	47.6%	47.6%	47.8%
Ameren Corp.	50.6	49.3	48.0	49.3
Am. Electric Power	48.8	47.7	45.4	47.3
Am. Water Works	46.4	44.5	42.5	44.5
Atmos Energy	-	-	63.8	63.8
CMS Energy	32.5	31.6	30.1	31.3
CenterPoint Energy	34.0	37.0	33.3	33.6
Dominion Energy	34.1	37.4	42.1	38.1
DTE Energy	44.1	44.8	44.1	44.3
Duke Energy	46.7	46.1	45.2	45.9
Consolidated Edison	50.2	50.0	49.1	49.6
Edison International	47.5	42.1	39.1	43.3
Entergy Corp.	35.5	35.8	36.5	36.0
Evergy Inc.	-	-	54.7	54.7
Exelon Corp.	46.2	47.5	48.8	47.5
Eversource Energy	51.3	47.6	46.8	49.0
FirstEnergy	20.6	21.6	26.8	23.7
NextEra Energy	47.0	51.7	52.8	49.9
NiSource Inc.	38.4	37.2	37.4	37.9
Pacific Gas & Electric	49.0	-	-	49.0
Public Service	54.1	52.8	52.3	53.2
Pinnacle West	52.8	52.1	53.0	52.9
PPL Corp.	35.5	36.0	37.6	36.5
Southern Co.	35.4	36.3	38.6	37.0
SCANA Corp.	47.0	-	-	47.0
Sempra Energy	43.4	41.0	40.9	41.8
WEC Corp.	50.6	50.7	48.4	49.5
Xcel Energy	43.9	43.9	43.4	43.7

Source: Value Line Investment Survey, 2021 company reports. Figures are average of beginning and end of year.

Note: Value Line does not provide common equity ratios for AES or NRG.

Company ROEs Per Utility Witnesses

XLU Companies	<u>2017</u>	<u>2018</u>	<u>2019</u>
Alliant Energy	11.3%	11.6%	11.3%
Ameren Corp.	9.6	11.2	10.6
Am. Electric Power	10.0	10.4	10.8
Am. Water Works	10.1	10.5	10.9
Atmos Energy	-	-	9.7
CMS Energy	14.0	14.3	14.5
CenterPoint Energy	16.7	-	10.9
Dominion Energy	21.1	14.2	13.2
DTE Energy	11.1	11.6	10.6
Duke Energy	7.2	7.8	8.2
Consolidated Edison	8.5	8.4	8.3
Edison International	13.5	12.2	13.4
Entergy Corp.	11.8	15.9	11.2
Evergy Inc.	-	-	7.5
Exelon Corp.	15.4	10.0	10.0
Eversource Energy	9.1	9.2	9.3
Next Era Energy	18.6	11.8	11.4
NiSource Inc.	3.1	9.2	8.4
Pacific Gas & Electric	9.7	-	-
Public Service	16.6	11.2	11.3
Pinnacle West	10.1	10.0	10.1
PPL Corp.	13.4	15.2	14.7
Southern Co.	12.7	11.5	10.7
SCANA Corp.	10.6	-	-
Sempra Energy	9.1	10.1	10.3
WEC Corp.	10.9	11.0	11.4
Xcel Energy	10.4	10.7	10.8

<u>2017</u>	<u>2018</u>	<u>2019</u>
12.1%	10.8%	10.6%
3.7	2.0	1.8
6.1	3.3	3.0
18.2%	14.2%	13.5%
11.5%	10.1%	10.3%
2.9	1.2	1.4
4.8	2.0	2.3
	12.1% 3.7 6.1 18.2% 11.5% 2.9	12.1% 10.8% 3.7 2.0 6.1 3.3 18.2% 14.2% 11.5% 10.1% 2.9 1.2

Notes

- 1. Staff method is average ROE + $1.64 \times S.D$. Results shown use weighted average rather than unweighted average. Weighted average is slightly lower than unweighted average in 2018 and 2019 and slightly higher in 2017.
- 2. Source: Schedule JMS-1 for 2017, Schedule TJD-1 for 2018 and Schedule TJI-1 for 2019 for ROE figures.
- 3. ROE figures in bold are removed under the capital structure screen.

ROE Using Upper Median Method Capital Structure Screen

2017		2018		2019	
Next Era	18.6%	Edison Inc.	12.2%	Dominion	13.2%
Public Service	16.6	Next Era	11.8	Next Era	11.4
Exelon Corp.	15.4	Alliant	11.6	WEC Energy	11.4
Edison Inc.	13.5	DTE Energy	11.6	Public Service	11.3
Alliant	11.3	Public Service	11.2	Alliant	11.3
DTE Energy	11.1	Ameren	11.2	Am. Water	10.9
WEC Energy	10.9	WEC Energy	11.0	Am. Electric	10.8
SCANA	10.6	Xcel Energy	10.7	Xcel Energy	10.6
Xcel Energy	<u>10.4</u>				
Median	11.3%		11.4%		11.3%
Mean	13.2%		11.4%		11.3%

Source: Schedule MIK-3.

ROE Using the Upper Median Method No Capital Structure Screen

2017		2018		2019	
Dominion	21.1%	Entergy Corp.	15.9%	PPL Corp.	14.7%
NextEra	18.6	PPL Corp.	15.2	CMS Energy	14.5
CenterPoint	16.7	CMS Energy	14.3	Edison Inc.	13.4
Public Service	16.6	Dominion	14.2	Dominion	13.2
Exelon	15.4	Edison Inc.	12.2	WEC Energy	11.4
CMS Energy	14.0	Next Era	11.8	Next Era	11.4
Edison Inc.	13.5	Alliant	11.6	Alliant	11.3
PPL Corp.	13.4	DTE Energy	11.5	Public Service	11.3
Southern Co.	12.7	Southern Co.	11.5	Entergy	11.2
Entergy	11.8	Ameren	11.2	Am. Water Works	10.9
Alliant	11.3	Public Service	<u>11.2</u>	Am. Electric	10.8
DTE Energy	11.1			Xcel Energy	10.8
WEC Energy	<u>10.9</u>			Southern Co.	<u>10.7</u>
Median	13.5%		11.8%		11.3%
Mean	14.4%		12.8%		12.0%

Source: Schedule MIK-3.

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in

Case No(s). 18-0857-EL-UNC, 19-1338-EL-UNC, 20-1034-EL-UNC, 20-1476-EL-UNC

Summary: Testimony Direct Testimony of Matthew I. Kahal on Behalf of the Office of the Ohio Consumers' Counsel electronically filed by Ms. Deb J. Bingham on behalf of Healey, Christopher Mr.