

OFFICIAL
EXHIBITS

FILED
August 2, 2021
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANAPOLIS)
POWER & LIGHT COMPANY D/B/A AES)
INDIANA ("AES INDIANA") FOR (1) ISSUANCE)
TO AES INDIANA OF A CERTIFICATE OF)
PUBLIC CONVENIENCE AND NECESSITY FOR)
THE ACQUISITION AND DEVELOPMENT BY A)
WHOLLY OWNED AES INDIANA SUBSIDIARY)
OF A SOLAR POWER GENERATING FACILITY)
AND BATTERY ENERGY STORAGE SYSTEM)
PROJECT TO BE KNOWN AS THE PETERSBURG)
ENERGY CENTER ("THE PETERSBURG)
PROJECT"); (2) APPROVAL OF THE)
PETERSBURG PROJECT, INCLUDING A JOINT)
VENTURE STRUCTURE BETWEEN AN AES)
INDIANA SUBSIDIARY AND ONE OR MORE TAX)
EQUITY PARTNERS AND A CAPACITY)
AGREEMENT AND CONTRACT FOR)
DIFFERENCES BETWEEN AES INDIANA AND)
THE PROJECT COMPANY THAT HOLDS AND)
OPERATES THE SOLAR GENERATION AND)
STORAGE ASSETS, AS A CLEAN ENERGY)
PROJECT AND ASSOCIATED TIMELY COST)
RECOVERY UNDER IND. CODE § 8-1-8.8-11; (3))
APPROVAL OF ACCOUNTING AND)
RATEMAKING FOR THE PETERSBURG)
PROJECT, INCLUDING AN ALTERNATIVE)
REGULATORY PLAN UNDER IND. CODE § 8-1-)
2.5-6 TO FACILITATE AES INDIANA'S)
INVESTMENT IN THE PETERSBURG PROJECT)
THROUGH A JOINT VENTURE; AND (4) TO THE)
EXTENT NECESSARY, ISSUANCE OF AN)
ORDER PURSUANT TO IND. CODE § 8-1-2.5-5)
DECLINING TO EXERCISE JURISDICTION)
OVER THE JOINT VENTURE, INCLUDING THE)
PROJECT COMPANY, AS A PUBLIC UTILITY.)

IURC
PETITIONER'S
EXHIBIT NO. 9
10-25-21 AT
DATE REPORTER

CAUSE NO. 45591

PETITIONER'S SUBMISSION OF DIRECT TESTIMONY OF
JOHN J. REED

Indianapolis Power & Light Company d/b/a AES Indiana ("AES Indiana" or "Petitioner"),

by counsel, hereby submits the direct testimony and attachments of John J. Reed.

Respectfully submitted,



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D/B/A AES INDIANA

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing was served this 30th day of July, 2021, by electronic transmission or United States Mail, first class, postage prepaid on:

Jeffrey M. Reed
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ATTORNEYS FOR PETITIONER
INDIANAPOLIS POWER & LIGHT COMPANY
D/B/A AES INDIANA

**VERIFIED DIRECT TESTIMONY
OF
JOHN J. REED
ON BEHALF OF
INDIANAPOLIS POWER & LIGHT COMPANY ‘
D/B/A AES INDIANA**

SPONSORING AES INDIANA ATTACHMENTS JJR-1 and JJR-2

**VERIFIED DIRECT TESTIMONY OF JOHN J. REED
ON BEHALF OF AES INDIANA**

1. INTRODUCTION & QUALIFICATIONS

Q1. Please state your name and business address.

A1. My name is John J. Reed. My business address is 293 Boston Post Road West, Suite 500,
Marlborough, Massachusetts 01752.

Q2. By whom are you employed and in what position?

A2. I am the Chairman and Chief Executive Officer of Concentric Energy Advisors, Inc.
("Concentric").

Q3. Please describe Concentric.

A3. Concentric is a management consulting and economic advisory firm specializing in
financial and economic services to the North American energy and water industries.
Concentric specializes in regulatory and litigation support, transaction-related financial
advisory services, energy market strategies, market assessments, energy commodity
contracting and procurement, economic feasibility studies, and capital market analyses and
negotiations.

Q4. Please describe your background and professional experience.

A4. I have more than 40 years of experience in the North American energy industry. I and
others at the firm have assisted Florida Power and Light, Xcel Energy, Alliant Energy,
Black Hills Power, ISO New England, Northern Indiana Public Service, Oklahoma Gas &
Electric, Wisconsin Energy and others on electric resource planning, procurement,

1 contracting, and implementation issues. In these matters, we have served as independent
2 evaluators in all-source power supply procurement processes, evaluated numerous
3 alternative resource options, and offered testimony on the advantages and disadvantages of
4 several specific resources.

5 Prior to my current position with Concentric, I have served in executive positions with
6 various consulting firms and as Chief Economist with Southern California Gas Company,
7 North America's largest gas distribution utility. I have provided expert testimony on
8 regulatory, financial, and economic matters on more than 300 occasions before the Federal
9 Energy Regulatory Commission ("FERC") and the National Energy Board ("NEB") of
10 Canada, numerous state and provincial utility regulatory agencies, various state and federal
11 courts, and arbitration panels in the United States and Canada. A copy of my resume is
12 included as AES Indiana Attachment JJR-1. A listing of the testimony I have sponsored
13 in the past 20 years is included as AES Indiana Attachment JJR-2.

14 **Q5. Please describe Concentric's activities in energy and utility engagements.**

15 A5. Concentric provides regulatory, economic, market analysis, and financial advisory services
16 to a large number of energy and utility clients across North America. Our market analysis
17 services include energy market assessments, market entry and exit analyses, and energy
18 contract negotiations for gas-fired, solar, wind and battery resources. Our financial
19 advisory activities include merger, acquisition and divestiture assignments, due diligence
20 and valuation assignments, project and corporate finance services, and transaction support
21 services for both fossil and renewable generating assets. Our regulatory and economic
22 services include regulatory policy, utility ratemaking (e.g., cost of service, cost of capital,

1 rate design, alternative forms of ratemaking), and the implications of regulatory and
2 ratemaking policies. We also regularly assess how the application of varying regulatory
3 constructs can facilitate the utility's success in delivering reliable service to customers at
4 reasonable rates, as well as further public policy goals.

5 **Q6. Are you sponsoring any attachments in this case?**

6 A6. Yes. I am sponsoring the following attachments:

- 7 • AES Indiana Attachment JJR-1: Resume
- 8 • AES Indiana Attachment JJR-2: Testimony Listing

9 **Q7. On whose behalf are you testifying in this proceeding?**

10 A7. I am testifying on behalf of AES Indiana ("AES Indiana" or "the Company").

11 **2. PURPOSE OF TESTIMONY**

12 **Q8. What is the purpose of your direct testimony in this proceeding?**

13 A8. My direct testimony is focused on the factors that are appropriately considered when
14 evaluating power supply proposals that involve utility ownership arrangements (or utility
15 sponsorship and operation arrangements) against proposals to provide capacity under a
16 power purchase agreement ("PPA"). These issues have arisen in AES Indiana's recent all-
17 source Request for Proposals ("RFP") to address a near-term need for approximately 250
18 MW of unforced capacity ("UCAP") as identified in AES Indiana's updated 2019
19 Integrated Resource Plan ("IRP") analysis. Numerous proposals were submitted in
20 response to the RFP, including fossil fuel, renewable, battery storage and demand
21 response/energy efficiency resources under a mix of build-transfer structures, PPAs and
22 tolling agreements. These proposals were rigorously analyzed and screened down to a list

1 of seven distinct proposals for further analysis, due diligence, and negotiations. The
2 Petersburg Energy Center (“Petersburg Project” or “Project”) presented by the Company
3 for approval in this proceeding resulted from this process.¹

4 The Petersburg Project will be constructed by NextEra Energy Engineering &
5 Construction, LLC (“Contractor”) in accordance with an Engineering, Procurement and
6 Construction Agreement with the Project Company, which is an AES Indiana affiliate,
7 developing the Project. Once the Project nears commercial operation, the Project will be
8 sold to a Joint Venture between an AES Indiana subsidiary and one or more tax equity
9 partners (“TEP”). Upon commercial operation, the effect of this structure will be to place
10 the day-to-day operation and maintenance of the Project subject to AES Indiana control.
11 AES Indiana will remain subject to ongoing regulation by the Indiana Utility Regulatory
12 Commission (the “Commission”).

13 **Q9. When comparing various resource options in power supply solicitations, is it**
14 **reasonable to consider qualitative differences between PPAs and build-transfer**
15 **options?**

16 A9. Yes, there are many such differences that should be considered by the utility and its
17 regulator when evaluating options, including attributes of ownership, operation, and
18 regulatory oversight that are different across PPA and utility ownership and operation
19 arrangements. These differences are also addressed in the testimony of AES Witness

¹ As stated in AES Indiana Witness Cooper Direct Testimony (Q/A28), the Petersburg Project is a 250 MWac, 335 MWdc, solar photovoltaic electric generation facility, coupled with a 180 MWh DC battery energy storage system located in Pike County, Indiana.

1 Cooper.

2 **3. BENEFITS OF UTILITY OWNERSHIP OF GENERATION ASSETS**

3 **Q10. What factors should be considered by the utility and its regulator when seeking to fill**
4 **an identified capacity need?**

5 A10. Filling a capacity need involves balancing the objectives of cost minimization, risk
6 management, environmental compliance, portfolio diversity, and economic development
7 benefits for the Company, its customers, and the State of Indiana. Ultimately, a balanced
8 portfolio should reflect a set of resources that utilizes a variety of fuel technologies and can
9 be relied on under changing economic, environmental, and operational circumstances.
10 This is particularly important given the pace at which environmental changes and
11 technological advancements are taking place across the industry.

12 Here, the proposed Project allows for a cost-effective and environmentally responsible
13 fulfillment of the identified capacity need. It will utilize modern technology to provide an
14 efficient, reliable generating facility at reasonable cost. The overall transaction structure
15 minimizes risk by allocating development, ownership, and operational responsibilities to
16 parties that are best suited to these roles and produces projected long-term customer savings
17 relative to alternative generation expansion options, including PPA options, and substantial
18 anticipated economic benefits to Indiana.

19 **Q11. Are there non-price advantages to the Company's proposed ownership, through a**
20 **subsidiary, of the Petersburg Project?**

21 A11. Yes, there are. One of the most important benefits is the associated operational control of
22 the resource. There are a different set of risks in using long-term PPAs to meet a utility's

1 service obligation as compared to meeting that obligation through utility-owned and
2 operated resources. When entering into a PPA, the utility is relying on a counterparty for
3 specified amounts of power at pre-determined prices. If the entity does not fulfill its
4 obligations to the utility, the result can be very costly to both the utility and to customers,
5 especially if this failure occurs during a period of system stress when prices would be
6 expected to be significantly higher than those specified in the contract.

7 **Q12. What are the benefits to customers that can be associated with a utility's operational**
8 **control of a generating resource?**

9 A12. Operational control allows the utility to protect the interests of its customers through
10 accountability for, and direct control over, the performance of the asset. For example,
11 under the terms of the Project, the Company is responsible for all operating and
12 maintenance decisions and controls important decisions regarding capital expenditures
13 deemed necessary to ensure the continued safe and reliable operation of the facility for the
14 benefit of customers. These decisions are subject to local regulatory oversight to ensure
15 that the public interest standard is met. Alternatively, a generating resource under third-
16 party ownership is subject to little if any regulatory oversight, and the performance of the
17 asset is subject only to contractual responsibilities and remedies, which may not have fully
18 considered the reliability and economic consequences of a failure to perform.

19 In addition, ownership or control allows the Company to maintain the optionality to
20 continue operating the facility beyond its expected book life, thereby maximizing its
21 economic value to customers, or to expand or prematurely retire an asset when
22 circumstances warrant. This optionality is not possible under a PPA scenario where the
23 Company loses access to the resource's capacity and energy immediately following the

1 end of the contract term and where the asset owner controls future use of the asset. On this
2 point, it should be noted that several of the PPAs offered in AES Indiana's 2019 RFP had
3 terms of less than 20 years, which is significantly shorter than the expected useful lives of
4 the resources offered under build-transfer structures. Should the Company enter into a 20-
5 year PPA for a resource with an assumed useful life of 30 years, it would need to purchase
6 capacity from the market or secure additional capacity resources for years 21-30 in order
7 to meet the needs of its customers. Except for cases in which the PPA has a pre-determined
8 price extension option, procuring capacity beyond year 20 involves going back out into the
9 market. Having to re-enter the market more frequently can increase uncertainty and risks
10 to customers.

11 Furthermore, under an asset ownership structure rather than through a PPA, if the Company
12 has a future need for capacity, it often has the option to expand the facility and can modify
13 or retrofit the facility to address technological improvements or environmental mandates.
14 For example, in 2008, the Oklahoma Corporation Commission approved Oklahoma Gas
15 and Electric Company's ("OG&E") acquisition of the Redbud Energy generating facility
16 with which it had a PPA that was set to expire in 2009. At the time, OG&E stated that the
17 plant was the most cost-effective means to fill a 2011 capacity deficit, and that the facility
18 would help to continue delivering reliable power and provide long term cost savings to
19 customers. Regulators agreed with OG&E's assessment that the plant would serve as a
20 hedge against high fuel prices and possible carbon regulations, and that these benefits were
21 more achievable under utility ownership than under a PPA extension.² Subsequently, the

² SNL Market Intelligence, Oklahoma agrees to OG&E's Redbud gas plant purchase, recovery rider, September 24, 2008. Kerry Bleskan.

1 Company was able to install new technology at the Redbud plant in 2020, allowing the
2 facility to provide critical system reliability benefits and enhancing operational
3 efficiencies. If OG&E did not own the plant during this time, these benefits and
4 efficiencies would likely not have been realized by customers.

5 **Q13. Can utility ownership offer resource adequacy benefits?**

6 A13. Yes. In the Midcontinent Independent System Operator, Inc. ("MISO") region, Load
7 Serving Entities ("LSEs") are responsible for making sure they can meet their designated
8 capacity requirement. LSEs can procure capacity through multiple means necessary to
9 meet this need and multiple options exist for LSEs to demonstrate their compliance with
10 Resource Adequacy ("RA") requirements. These include self-supply, bilateral contracts
11 with another resource owner, capacity procurement in the MISO Planning Reserve Auction
12 ("PRA"), or the submittal of a fixed resource adequacy plan ("FRAP") to MISO.

13 Resource ownership provides control over the resource's contribution to the LSE's
14 resource adequacy needs. Under an ownership structure, the utility is not exposed to the
15 risk of a PPA counterparty's ability to meet its commitment for any number of reasons,
16 including financial distress or plant availability that is less than expected.

17 Under Indiana's public utility regulatory framework, utility ownership also places the
18 financial health of the asset owner in the hands of the local regulator. The Commission
19 can address credit and liquidity issues directly rather than relying on contractual terms and
20 civil or bankruptcy court remedies. For example, after wildfires were tied to PG&E's
21 infrastructure, PG&E needed to enter into settlements covering more than 387 PPA
22 contracts with approximately 350 counterparties and nearly 14 GW of capacity under

1 contract.³ These settlements were under the jurisdiction of the federal bankruptcy court
2 which has a materially different objective than local utility regulators. The standard
3 employed by bankruptcy courts when assessing a debtor's request to maintain or reject a
4 contract is the business judgement standard. A debtor merely has to demonstrate that its
5 request is in the best interest of the business. Alternatively, an asset that is subject to
6 regulatory oversight generally is subject to the public interest standard which protects the
7 overall interest of the public.

8 **Q14. What financial implications can PPAs have on a utility?**

9 A14. PPAs can be thought of as a surrogate for utility investment, but which carry a risk and
10 potential balance sheet impact, without any compensation to utility investors for accepting
11 that risk. A utility's reliance on debt-like instruments, including PPAs, above a certain
12 threshold of materiality, may be viewed as imputed debt by credit analysts, and the
13 potential need for greater financial strength, often in the form of a higher equity ratio, arises
14 as a consequence of reliance on PPAs. This has been acknowledged by the California
15 Public Utilities Commission, which recognized that rating agencies impute debt from long-
16 term PPAs and incorporate that in their credit analysis.⁴

17 When relying on PPAs to promote generation development, the power purchaser's credit
18 rating drives the PPA counterparty's cost of capital, and therefore the PPA price. The
19 implication of this is an enhanced need for financial strength since the buyer, in this case
20 the Company, is supporting the financial strength of the PPA counterparty through the

³ SNL Market Intelligence Data Dispatch, The numbers behind Pacific Gas and Electric's \$58B bankruptcy exit, June 22, 2020, Garrett Hering.

⁴ An Introduction to Debt Equivalency, 27 California Public Utilities Commission Policy & Planning Division, August 4, 2017.

1 Company's obligation to purchase and make payments under the PPA. Put another way,
2 the regulated public utility and the regulatory commission that approves the PPA enables
3 the developer to build and operate the generation facility while remaining beyond the
4 jurisdiction of the commission. Under this framework, the developer is able to make the
5 utility and the regulator approving the PPA the financial backstop of the power purchase
6 transaction and can effectively make the utility a silent investor in the generating facility
7 behind the PPA, albeit an investor with little, if any operational control. While the
8 generation facility tied to the PPA depends on the regulator to approve the PPA, the state
9 regulator has little, if any, regulatory control of the facility and its owner.

10 **Q15. Have other commissions recognized these risks?**

11 A15. Yes. Other commissions have recognized that long-term PPAs may impose costs and risks
12 on the purchasing utility beyond the price for power in the PPA:

- 13 • In Massachusetts, an Act to Promote Energy Diversity was enacted in 2016 to
14 promote offshore wind energy and clean energy generation (Section 83C and
15 Section 83D). Through the Massachusetts Department of Public Utilities ("DPU"),
16 the distribution utilities were required to contract for clean energy PPAs.
17 Recognizing that these PPAs imposed significant financial burdens on the utility,
18 without any opportunity for profit, the legislation enabled the DPU to provide
19 "annual remuneration" to the distribution utility of up to 2.75% of the annual
20 payments under contract to "compensate the company for accepting the financial

1 obligation of the long-term contract.”⁵

- 2 • In the Michigan Compiled Laws (“MCL”), Section 460.6t, paragraph 15 of the
3 MCL states, “For power purchase agreements that a utility enters into ... with an
4 entity that is not affiliated with that utility, the commission shall consider and may
5 authorize a financial incentive for that utility that does not exceed the utility's
6 weighted average cost of capital.”⁶ Consumers Energy and Upper Peninsula Power
7 Company both have an authorized Financial Compensation Mechanism (“FCM”)
8 for long-term PPAs. This also reflects that PPAs can impose significant financial
9 burdens on utilities and ultimately their customers, which should be recognized
10 when considering non-PPA alternatives.

11 **Q16. Do developers typically have lower or higher costs of capital than regulated utilities?**

12 A16. Developers typically have higher costs of capital than a utility, leading to higher required
13 returns. As noted above, a power seller’s and a power purchaser’s financial standing, credit
14 ratings, and overall hurdle rates are somewhat interdependent. A power purchaser’s credit
15 rating drives the developer’s or seller’s cost of capital for an individual project. Therefore,
16 the PPA price will reflect the need for the developer to meet its likely higher cost of debt
17 and/or equity. Due to inherent risks of generation development by independent power
18 producers (“IPPs”), a developer would be expected to require a higher cost of capital than
19 what is required for investment by a regulated utility. Therefore, it follows that a developer
20 who builds, owns, and operates a PPA-backed resource is likely to have a higher cost of

⁵ Session Law - Acts of 2016 Chapter 188, An Act to Promote Energy Diversity, Section 83C. (d) (3) and Section 83D. (d) (3), Approved, August 8, 2016, <https://malegislature.gov/laws/sessionlaws/acts/2016/chapter188>.

⁶ Michigan Public Service Commission (Excerpt) Act 3 of 1939, 460.6t Integrated resource plan. Sec. 6t. Paragraph 15, <http://legislature.mi.gov/doc.aspx?mcl-460-6t>.

1 capital than the utility buying the power. In this sense, PPAs are not necessarily the most
2 efficient use of capital. It should nonetheless be noted that in either case (PPA or utility
3 ownership), the owner-developer of the project is being provided some type of return,
4 either through a regulated return on rate base or a rate of return that is implicit in the PPA
5 price itself. PPAs are not a “return-free” investment option.

6 **Q17. Are there other risks associated with PPAs on the buyer’s side?**

7 A17. Yes, the buyer bears the risk that the power purchased under the PPA is above market
8 especially in a long-term PPA. While there is also the risk that the utility-owned asset may
9 be above market at some time in the future, there are far more off ramps for a utility-owned
10 asset to manage costs and optimize operation of the asset.

11 In addition, there are several operational risks carried by the buyer under a PPA. In cases
12 of *force majeure* and excused performance events where the seller does not provide
13 capacity payment relief for the buyer, the buyer is obligated to make payments without
14 performance by the seller. In the case of a utility-owned asset, while an equipment failure
15 can result in capacity being unavailable, the utility has a myriad of options to replace that
16 output or hedge the risks and costs of such outages.

17 **Q18. If one relies too heavily on utility-owned projects, would the benefits of competition**
18 **in the power supply solicitation be lost?**

19 A18. No, the benefits of competition can and should be preserved; this is part of the balancing
20 process. As was done in this case, the market should be tested for non-utility-owned
21 projects, and if PPA offers are received that offer favorable economics, those resources
22 should be given full consideration. My point is not that PPAs are inappropriate or that

1 utility-owned or build-transfer projects should always be preferred. The point is that the
2 evaluation of competing alternatives needs to go beyond price considerations.

3 **4. BENEFITS OF REGULATORY OVERSIGHT**

4 **Q19. What are the benefits of regulatory oversight in utility ownership of generating**
5 **capacity?**

6 A19. Utility ownership, whether direct or indirect, and whether full or a controlling share of
7 generating resources, affords state regulators fuller authority and flexibility in achieving
8 their state energy goals and ensuring the reliability of the resources. State regulators can
9 exercise influence or control over important energy policy issues like an evolving energy
10 supply mix, economic development, the importance of reliability, and the transition to low
11 and zero-carbon technologies where the assets that are needed to meet those policies are
12 utility controlled.

13 **Q20. How have regulators recognized the benefits of a generation portfolio that is balanced**
14 **between utility-owned and contracted generation?**

15 A20. Yes. Some regulatory commissions have imposed restrictions on the amount of contracted
16 capacity in a utility's generation portfolio. For example, the Virginia Clean Energy Act
17 provides for the following ownership allocations: Solar or Onshore Wind: 35% third party
18 ownership and 65% utility ownership; Storage: up to 35% third-party ownership and 65%-
19 100% utility ownership; Offshore Wind: 100% utility ownership.⁷ In addition, the Public
20 Service Company of Colorado (Xcel Energy) reached a stipulation with stakeholders in its
21 2016 Electric Resource Plan process requiring 50% utility, rate-based ownership of

⁷ Va. Code §56-585.5(D)(2), Va. Code §56- 585.5(E)(5), <https://law.lis.virginia.gov/vacode/56-585.5/> and Va. Code § 56-585.1:11(B), <https://law.lis.virginia.gov/vacode/56-585.1:11/>.

renewable resources and 75% utility, rate-based ownership of dispatchable resources.⁸

Q21. Can regulatory oversight help in ensuring reliability?

A21. Yes. Regulatory oversight over utility-owned generation can provide critical reliability benefits. As we saw in recently in Texas, a lack of direct and effective regulatory oversight over the performance of generating resources contributed to severe consequences to system reliability and resulted in unprecedented widespread and long-duration outages across much of Texas and rolling blackouts across Missouri and Kansas. One of the major contributors to the failure of the Texas bulk power system was the lack of weatherization of the generation fleet.⁹ While there were requirements for generators to file weatherization plans, the regulatory requirements did not include enforcement of these plans and failed to ensure that Texas power plants had adequately weatherized facilities to protect against cold weather. Legislation has now been proposed in Texas to implement mandatory weatherization requirements and help finance these upgrades to withstand more extreme weather in the wake of the February power crisis. This type of requirement to protect the reliability of the generation facility and larger power system would not be included in typical PPA contract provisions and it is unlikely that contract terms could be renegotiated for issues that were unknowable at the time of contract execution.

Q22. Does utility ownership allow regulators to provide some measure of price protection to consumers?

A22. Yes. PPAs typically have 10-to-20-year terms, and pricing under the contract would be

⁸ In the Matter of The Application of Public Service Company of Colorado for Approval of Its 2016 Electric Resource Plan, Proceeding No. 16A-0396E, Stipulation Attachment A at p. 8.

⁹ www.ercot.com/content/wcm/key_documents_lists/225373/2.2_REVISED_ERCOT_Presentation.pdf

1 subject to renegotiation if the utility sought to extend the PPA term. This exposes the utility
2 and its customers to the risk of higher contract prices and other unfavorable future contract
3 terms. While utility ownership could also result in a generating resource with operating
4 costs that are above market, the regulator has some measure of control over the utility in
5 managing and mitigating this risk. Utility ownership of a generating resource can assist in
6 avoiding an over-reliance on long-term contracts and wholesale power markets and
7 managing the risk of market volatility for the benefit of customers.

8 **5. CONCLUSION**

9 **Q23. Are there lessons that can be learned from the industry's experience with PPAs over**
10 **the past four decades?**

11 A23. Yes. I have been involved with the negotiation and renegotiation of numerous PPAs over
12 the past 35 years. Over this time, I have seen an extraordinary level of costs, market
13 disruption and risks associated with heavy reliance on long-term PPAs. These events have
14 included:

- 15 1. Billions of dollars of buyouts or above-market PPAs when generation markets
16 evolved in ways that were unfavorable to contractual assumptions;
- 17 2. Utilities that experienced extraordinary financial distress when PPA costs were not
18 able to be fully passed on to customers;
- 19 3. The use of securitization to fund customer relief when PPA costs became
20 unmanageable;

- 1 4. Market disruption when non-utility power project developers experienced financial
2 distress as well as distress imposed on those developers when utilities fell to below
3 investment grade credit ratings;
- 4 5. Independent System Operators (“ISOs”) and Regional Transmission Organizations
5 (“RTOs”) facing reliability threats when non-utility generators threatened to shut
6 down if public financial support was not forthcoming; and
- 7 6. Extensive litigation regarding how market changes should be accommodated under
8 the terms of PPAs that never contemplated such changes.

9 In fairness, I have also seen technological innovation and economic efficiency gains
10 through competition fostered by the alternatives brought forward by non-utility generators.
11 These benefits should be preserved through market-based consideration of both utility-
12 owned generation and PPAs.

13 While there certainly are risks associated with utility-owned generation, these risks are in
14 many instances outweighed by the advantages associated with utility ownership afforded
15 to both the regulators and the utility. Utility-owned generation provides state regulators
16 with the authority and flexibility to ensure reliability and achieve state energy policy
17 objectives. Similarly, utility-owned or controlled generation allows the utility to control
18 operational and investment decisions, and the regulator reviews these decisions on behalf
19 of customers to ensure that customers are responsible only for the costs associated with
20 decisions that are deemed to be prudent.

21 Considering all of this history, what I have concluded is that long-term power purchase
22 contracts are often a very inflexible means of meeting a rapidly changing set of needs and

1 expectations that our society is imposing on the electric generation sector. I have also
2 concluded that local regulatory and legislative oversight of utility-owned or controlled
3 resources often provides a greater degree of flexibility and responsiveness in adapting the
4 generation fleet to meet the interwoven objectives of cost effectiveness, reliability,
5 environmental stewardship, risk mitigation, and regional and local economic development.
6 The public's needs change significantly over time, and as I have come to conclude,
7 attempting to predict and address those needs through multi-decade contracts has proven
8 to be an extraordinarily difficult task.

9 **Q24. Does this conclude your direct testimony?**

10 A24. Yes.

VERIFICATION

I, John J. Reed, Chairman & CEO, affirm under penalties for perjury that the foregoing representations are true to the best of my knowledge, information, and belief.

Dated July 30, 2021.

A handwritten signature in black ink, appearing to read "John J. Reed", is positioned above a horizontal line.

John J. Reed



JOHN J. REED

Chairman and Chief Executive Officer

Mr. Reed is a financial and economic consultant with more than 42 years of experience in the energy industry. Mr. Reed has also been the CEO of an NASD member securities firm, and Co-CEO of the nation's largest publicly traded management consulting firm (NYSE: NCI). He has provided advisory services in the areas of mergers and acquisitions, asset divestitures and purchases, strategic planning, project finance, corporate valuation, energy market analysis, rate and regulatory matters and energy contract negotiations to clients across North and Central America. Mr. Reed's comprehensive experience includes the development and implementation of nuclear, fossil, and hydroelectric generation divestiture programs with an aggregate valuation in excess of \$20 billion. Mr. Reed has also provided expert testimony on financial and economic matters on more than 400 occasions before the FERC, Canadian regulatory agencies, state utility regulatory agencies, various state and federal courts, and before arbitration panels in the United States and Canada. After graduation from the Wharton School of the University of Pennsylvania, Mr. Reed joined Southern California Gas Company, where he worked in the regulatory and financial groups, leaving the firm as Chief Economist in 1981. He served as an executive and consultant with Stone & Webster Management Consulting and R.J. Rudden Associates prior to forming REED Consulting Group (RCG) in 1988. RCG was acquired by Navigant Consulting in 1997, where Mr. Reed served as an executive until leaving Navigant to join Concentric as Chairman and Chief Executive Officer.

REPRESENTATIVE PROJECT EXPERIENCE

Executive Management

- As an executive-level consultant, worked with CEOs, CFOs, other senior officers, and Boards of Directors of many of North America's top electric and gas utilities, as well as with senior political leaders of the U.S. and Canada on numerous engagements over the past 25 years. Directed merger, acquisition, divestiture, and project development engagements for utilities, pipelines and electric generation companies, repositioned several electric and gas utilities as pure distributors through a series of regulatory, financial, and legislative initiatives, and helped to develop and execute several "roll-up" or market aggregation strategies for companies seeking to achieve substantial scale in energy distribution, generation, transmission, and marketing.

Financial and Economic Advisory Services

- Retained by many of the nation's leading energy companies and financial institutions for services relating to the purchase, sale or development of new enterprises. These projects included major new gas pipeline projects, gas storage projects, several non-utility generation projects, the purchase and sale of project development and gas marketing firms, and utility acquisitions. Specific services provided include the development of corporate expansion plans, review of acquisition candidates, establishment of divestiture standards, due diligence on



acquisitions or financing, market entry or expansion studies, competitive assessments, project financing studies, and negotiations relating to these transactions.

Litigation Support and Expert Testimony

- Provided expert testimony on more than 400 occasions in administrative and civil proceedings on a wide range of energy and economic issues. Clients in these matters have included gas distribution utilities, gas pipelines, gas producers, oil producers, electric utilities, large energy consumers, governmental and regulatory agencies, trade associations, independent energy project developers, engineering firms, and gas and power marketers. Testimony has focused on issues ranging from broad regulatory and economic policy to virtually all elements of the utility ratemaking process. Also frequently testified regarding energy contract interpretation, accepted energy industry practices, horizontal and vertical market power, quantification of damages, and management prudence. Has been active in regulatory contract and litigation matters on virtually all interstate pipeline systems serving the U.S. Northeast, Mid-Atlantic, Midwest, and Pacific regions.
- Also served on FERC Commissioner Terzic's Task Force on Competition, which conducted an industry-wide investigation into the levels of and means of encouraging competition in U.S. natural gas markets and served on a "Blue Ribbon" panel established by the Province of New Brunswick regarding the future of natural gas distribution service in that province.

Resource Procurement, Contracting and Analysis

- On behalf of gas distributors, gas pipelines, gas producers, electric utilities, and independent energy project developers, personally managed or participated in the negotiation, drafting, and regulatory support of hundreds of energy contracts, including the largest gas contracts in North America, electric contracts representing billions of dollars, pipeline and storage contracts, and facility leases.
- These efforts have resulted in bringing large new energy projects to market across North America, the creation of hundreds of millions of dollars in savings through contract renegotiation, and the regulatory approval of a number of highly contested energy contracts.

Strategic Planning and Utility Restructuring

- Acted as a leading participant in the restructuring of the natural gas and electric utility industries over the past fifteen years, as an adviser to local distribution companies, pipelines, electric utilities, and independent energy project developers. In the recent past, provided services to most of the top 50 utilities and energy marketers across North America. Managed projects that frequently included the redevelopment of strategic plans, corporate reorganizations, the development of multi-year regulatory and legislative agendas, merger, acquisition and divestiture strategies, and the development of market entry strategies. Developed and supported merchant function exit strategies, marketing affiliate strategies, and detailed plans for the functional business units of many of North America's leading utilities.



PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2002 – Present)

Chairman and Chief Executive Officer

CE Capital Advisors (2004 – Present)

Chairman, President, and Chief Executive Officer

Navigant Consulting, Inc. (1997 – 2002)

President, Navigant Energy Capital (2000 – 2002)

Executive Director (2000 – 2002)

Co-Chief Executive Officer, Vice Chairman (1999 – 2000)

Executive Managing Director (1998 – 1999)

President, REED Consulting Group, Inc. (1997 – 1998)

REED Consulting Group (1988 – 1997)

Chairman, President and Chief Executive Officer

R.J. Rudden Associates, Inc. (1983 – 1988)

Vice President

Stone & Webster Management Consultants, Inc. (1981 – 1983)

Senior Consultant

Consultant

Southern California Gas Company (1976 – 1981)

Corporate Economist

Financial Analyst

Treasury Analyst

EDUCATION

Wharton School, University of Pennsylvania

B.S., Economics and Finance, 1976

Licensed Securities Professional: NASD Series 7, 63, 24, 79 and 99 Licenses

BOARDS OF DIRECTORS (PAST AND PRESENT)

Concentric Energy Advisors, Inc.

Navigant Consulting, Inc.

Navigant Energy Capital

Nukem, Inc.

New England Gas Association

R. J. Rudden Associates

REED Consulting Group



AFFILIATIONS

American Gas Association
Energy Bar Association
Guild of Gas Managers
International Association of Energy Economists
Northeast Gas Association
Society of Gas Lighters
Society of Utility and Regulatory Financial Analysts

ARTICLES AND PUBLICATIONS

"Maximizing U.S. federal loan guarantees for new nuclear energy," Bulletin of the Atomic Scientists
(with John C. Slocum), July 29, 2009
"Smart Decoupling – Dealing with unfunded mandates in performance-based ratemaking," Public
Utilities Fortnightly, May 2012



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Alaska Regulatory Commission				
Anchorage Municipal Light & Power	9/17	Anchorage Municipal Light & Power	U-16-094 U-17-008	Project Prudence
Municipality of Anchorage ("MOA") d/b/a Municipal Light and Power	8/19 10/19	Municipality of Anchorage ("MOA") d/b/a Municipal Light and Power	U-18-102 U-19-020 U-19-021	Merger Standard for Approval
Alberta Utilities Commission				
Alberta Utilities (AltaLink, EPCOR, ATCO, ENMAX, FortisAlberta, AltaGas)	1/13	Alberta Utilities	Application 1566373, Proceeding ID 20	Stranded Costs
Arizona Corporation Commission				
Tucson Electric Power	7/12	Tucson Electric Power	E-01933A-12-0291	Cost of Capital
UNS Energy and Fortis Inc.	1/14	UNS Energy, Fortis Inc.	E-04230A-00011 E-01933A-14-0011	Merger
Colorado Public Utilities Commission				
Xcel Energy	8/04	Xcel Energy	031-134E	Cost of Debt
Public Service Company of Colorado	6/17	Public Service Company of Colorado	17AL-0363G	Return on Equity (Gas)
CT Public Utilities Regulatory Authority				
Southern Connecticut Gas	2/04	Southern Connecticut Gas	00-12-08	Gas Purchasing Practices
Southern Connecticut Gas	4/05	Southern Connecticut Gas	05-03-17	LNG/Trunkline
Southern Connecticut Gas	5/06	Southern Connecticut Gas	05-03-17PH01	LNG/Trunkline



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Southern Connecticut Gas	8/08	Southern Connecticut Gas	06-05-04	Peaking Service Agreement
SJW Group and Connecticut Water Service	4/19	SJW Group and Connecticut Water Service	19-04-02	Customer Benefits, Public Interest
District of Columbia PSC				
AltaGas Ltd./WGL Holdings	4/17	AltaGas Ltd./WGL Holdings	1142	Merger Standards, Public Interest Standard
	8/17			
	10/17			
Federal Energy Regulatory Commission				
Wyckoff Gas Storage	12/02	Wyckoff Gas Storage	CP03-33-000	Need for Storage Project
Indicated Shippers/Producers	10/03	Northern Natural Gas	RP98-39-029	Ad Valorem Tax Treatment
Maritimes & Northeast Pipeline	6/04	Maritimes & Northeast Pipeline	RP04-360-000	Rolled-In Rates
ISO New England	8/04 2/05	ISO New England	ER03-563-030	Cost of New Entry
Transwestern Pipeline Company, LLC	9/06	Transwestern Pipeline Company, LLC	RP06-614-000	Business Risk
Portland Natural Gas Transmission System	6/08	Portland Natural Gas Transmission System	RP08-306-000	Market Assessment, Natural Gas Transportation, Rate Setting
Portland Natural Gas Transmission System	5/10 3/11 4/11	Portland Natural Gas Transmission System	RP10-729-000	Business Risks, Extraordinary and Non-recurring Events Pertaining to Discretionary Revenues
Morris Energy	7/10	Morris Energy	RP10-79-000	Impact of Preferential Rate



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Gulf South Pipeline	10/14	Gulf South Pipeline	RP15-65-000	Business Risk, Rate Design
BNP Paribas Energy Trading, GP South Jersey Resource Group, LLC	2/15	Transcontinental Gas Pipeline Corporation	RP06-569-008 RP07-376-005	Regulatory Policy, Incremental Rates, Stacked Rate
Tallgrass Interstate Gas Transmission, LLC	10/15 12/15	Tallgrass Interstate Gas Transmission, LLC	RP16-137-000	Market Assessment, Rate Design, Rolled-in Rate Treatment
Tennessee Valley Authority	2/21 3/21	Athens Utility Board, Gibson Electric Membership Corp., Joe Wheeler Electric Membership Corp., and Volunteer Energy Cooperative v. Tennessee Valley Authority	EL21-40-000 TX21-01-000	Public Policy, Competition, Economic Harm
Florida Impact Estimating Conference				
Florida Power and Light Co. on behalf of the Florida Investor-Owned Utilities	2/19 3/19	Florida Power and Light Co. on behalf of the Florida Investor-Owned Utilities	Right to Competitive Energy Market for Customers of Investor-Owned Utilities; Allowing Energy Choice	Economic and Financial Impact of Deregulation on Customers and Market Design and Function



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Florida Public Service Commission				
Florida Power and Light Co.	10/07	Florida Power & Light Co.	070650-EI	Need for New Nuclear Plant
Florida Power and Light Co.	5/08	Florida Power & Light Co.	080009-EI	New Nuclear Cost Recovery, Prudence
Florida Power and Light Co.	3/09 8/09	Florida Power & Light Co.	080677-EI	Benchmarking in Support of ROE
Florida Power and Light Co.	3/09 5/09 8/09	Florida Power & Light Co.	090009-EI	New Nuclear Cost Recovery, Prudence
Florida Power and Light Co.	3/10 5/10 8/10	Florida Power & Light Co.	100009-EI	New Nuclear Cost Recovery, Prudence
Florida Power and Light Co.	3/11 7/11	Florida Power & Light Co.	110009-EI	New Nuclear Cost Recovery, Prudence
Florida Power and Light Co.	3/12 7/12	Florida Power & Light Co.	120009-EI	New Nuclear Cost Recovery, Prudence
Florida Power and Light Co.	3/12 8/12	Florida Power & Light Co.	120015-EI	Benchmarking in Support of ROE
Florida Power and Light Co.	3/13 7/13	Florida Power & Light Co.	130009	New Nuclear Cost Recovery, Prudence
Florida Power and Light Co.	3/14	Florida Power & Light Co.	140009	New Nuclear Cost Recovery, Prudence
Florida Power and Light Co.	3/15 7/15	Florida Power & Light Co.	150009	New Nuclear Cost Recovery, Prudence
Florida Power and Light Co.	10/15	Florida Power and Light Co.	150001	Recovery of Replacement Power Costs



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Florida Power and Light Co.	3/16	Florida Power & Light Co.	160021-EI	Benchmarking in Support of ROE
Florida Senate Committee on Communication, Energy and Utilities				
Florida Power and Light Co.	2/09	Florida Power & Light Co.	-	Securitization
Hawai'i Public Utility Commission				
NextEra Energy, Inc. Hawaiian Electric Companies	4/15 8/15 10/15	Hawaiian Electric Company, Inc.; Hawaii Electric Light Company, Inc., Maui Electric Company, Ltd., NextEra Energy, Inc.	2015-0022	Merger Application
Idaho Public Utilities Commission				
Hydro One Limited and Avista Corporation	9/18 11/18	Hydro One Limited and Avista Corporation	AVU-E-17-09 AVU-G-17-05	Governance, Financial Integrity and Ring-fencing Merger Commitments
Illinois Commerce Commission				
Renewables Suppliers (Algonquin Power Co., EDP Renewables North America, Invenergy, NextEra Energy Resources)	3/14	Renewables Suppliers	13-0546	Application for Rehearing and Reconsideration, Long-term Purchase Power Agreements



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
WE Energies Corporation	8/14 12/14 2/15	WE Energies/Integrus	14-0496	Merger Application
Indiana Utility Regulatory Commission				
Northern Indiana Public Service Company	10/01	Northern Indiana Public Service Company	41746	Valuation of Electric Generating Facilities
Northern Indiana Public Service Company	1/08 3/08	Northern Indiana Public Service Company	43396	Asset Valuation
Northern Indiana Public Service Company	8/08	Northern Indiana Public Service Company	43526	Fair Market Value Assessment
Indianapolis Power & Light Company	12/14	Indianapolis Power & Light Company	44576	Asset Valuation
Indianapolis Power & Light Company	12/16	Indianapolis Power & Light Company	44893	Rate Recovery for New Plant Additions, Valuation of Electric Generating Facilities
Iowa Utilities Board				
Interstate Power and Light	7/05	Interstate Power and Light and FPL Energy Duane Arnold, LLC	SPU-05-15	Sale of Nuclear Plant
Interstate Power and Light	5/07	City of Everly, Iowa	SPU-06-5	Municipalization
Interstate Power and Light	5/07	City of Kalona, Iowa	SPU-06-6	Municipalization
Interstate Power and Light	5/07	City of Wellman, Iowa	SPU-06-10	Municipalization
Interstate Power and Light	5/07	City of Terril, Iowa	SPU-06-8	Municipalization
Interstate Power and Light	5/07	City of Rolfe, Iowa	SPU-06-7	Municipalization



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Kansas Corporation Commission				
Great Plains Energy Kansas City Power and Light Company	1/17	Great Plains Energy, Kansas City Power & Light Company, and Westar Energy	16-KCPE-593-ACQ	Merger Standards, Acquisition Premium, Ring-Fencing, Public Interest Standard
Great Plains Energy Kansas City Power and Light Company	8/17 2/18	Great Plains Energy, Kansas City Power & Light Company, and Westar Energy	18-KCPE-095-MER	Merger Standards, Transaction Value, Merger Benefits, Ring-Fencing,
Maine Public Utility Commission				
Maine Water Company	7/19 8/19	Maine Water Company	2019-00096	Merger Standards, Net Benefits to Customers, Ring-fencing
Maryland Public Service Commission				
AltaGas Ltd./WGL Holdings	4/17 9/17 1/18 2/18	AltaGas Ltd./WGL Holdings	9449	Merger Standards, Public Interest Standard
Washington Gas Light Company	8/20	Washington Gas Light Company	9622	Regulatory Policy
Mass. Department of Public Utilities				
NStar	9/07 12/07	NStar, Bay State Gas, Fitchburg G&E, NE Gas, W. MA Electric	DPU 07-50	Decoupling, Risk
NStar	6/11	NStar, Northeast Utilities	DPU 10-170	Merger Approval
Town of Milford	1/19 3/19 5/19	Milford Water Company	DPU 18-60	Valuation Analysis



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Michigan Public Service Commission				
Consumers Energy Company	8/06 1/07	Consumers Energy Company	U-14992	Sale of Nuclear Plant
WE Energies	12/11	Wisconsin Electric Power Co	U-16830	Economic Benefits, Prudence
Consumer Energy Company	7/13	Consumers Energy Company	U-17429	Certificate of Need, Integrated Resource Plan
WE Energies	8/14 3/15	WE Energies/Integrus	U-17682	Merger Application
Minnesota Public Utilities Commission				
Xcel Energy/No. States Power	9/04	Xcel Energy/No. States Power	G002/GR-04-1511	NRG Impacts
Interstate Power and Light	8/05	Interstate Power and Light and FPL Energy Duane Arnold, LLC	E001/PA-05-1272	Sale of Nuclear Plant
Northern States Power Company d/b/a Xcel Energy	11/05	Northern States Power Company	E002/GR-05-1428	NRG Impacts on Debt Costs
Northern States Power Company d/b/a Xcel Energy	09/06 10/06 11/06	NSP v. Excelsior	E6472/M-05-1993	PPA, Financial Impacts
Northern States Power Company d/b/a Xcel Energy	11/06	Northern States Power Company	G002/GR-06-1429	Return on Equity
Northern States Power	11/08 05/09	Northern States Power Company	E002/GR-08-1065	Return on Equity
Northern States Power	11/09 6/10	Northern States Power Company	G002/GR-09-1153	Return on Equity



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Northern States Power	11/10 5/11	Northern States Power Company	E002/GR-10-971	Return on Equity
Northern States Power Company	1/16	Northern States Power Company	E002/GR-15-826	Industry Perspective
Northern States Power Company	11/19	Northern States Power Company	E002/GR-19-564	Return on Equity
Missouri House Committee on Energy and the Environment				
Ameren Missouri	3/16	Ameren Missouri	HB 2816	Performance Based Ratemaking
Missouri Public Service Commission				
Missouri Gas Energy	1/03 04/03	Missouri Gas Energy	GR-2001-382	Gas Purchasing Practices, Prudence
Aquila Networks	2/04	Aquila-MPS, Aquila L&P	ER-2004-0034 HR-2004-0024	Cost of Capital, Capital Structure
Aquila Networks	2/04	Aquila-MPS, Aquila L&P	GR-2004-0072	Cost of Capital, Capital Structure
Missouri Gas Energy	11/05 2/06 7/06	Missouri Gas Energy	GR-2002-348 GR-2003-0330	Capacity Planning
Missouri Gas Energy	11/10 1/11	KCP&L	ER-2010-0355	Natural Gas DSM
Missouri Gas Energy	11/10 1/11	KCP&L GMO	ER-2010-0356	Natural Gas DSM
Laclede Gas Company	5/11	Laclede Gas Company	CG-2011-0098	Affiliate Pricing Standards
Union Electric Company d/b/a Ameren Missouri	2/12 8/12	Union Electric Company	ER-2012-0166	Return on Equity, Earnings Attrition, Regulatory Lag



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Union Electric Company d/b/a Ameren Missouri	6/14	Noranda Aluminum Inc.	EC-2014-0223	Ratemaking, Regulatory and Economic Policy
Union Electric Company d/b/a Ameren Missouri	1/15 2/15	Union Electric Company	ER-2014-0258	Revenue Requirements, Ratemaking Policies
Great Plains Energy Kansas City Power and Light Company	8/17 2/18 3/18	Great Plains Energy, Kansas City Power & Light Company, and Westar Energy	EM-2018-0012	Merger Standards, Transaction Value, Merger Benefits, Ring-Fencing,
Union Electric Company d/b/a Ameren Missouri	6/19	Union Electric Company d/b/a Ameren Missouri	EO-2017-0176	Affiliate Transactions, Cost Allocation Manual
Union Electric Company d/b/a Ameren Missouri	7/19 1/20 2/20	Union Electric Company d/b/a Ameren Missouri	ER-2019-0335	Reasonableness of Affiliate Services and Costs
Union Electric Company d/b/a Ameren Missouri	3/21	Union Electric Company d/b/a Ameren Missouri	GR-2021-0241	Affiliate Transactions
Union Electric Company d/b/a Ameren Missouri	3/21	Union Electric Company d/b/a Ameren Missouri	ER-2021-0240	Affiliate Transactions
Empire District Electric Company	5/21	Empire District Electric Company	ER-2021-0240	Return on Equity
Missouri Senate Committee on Commerce, Consumer Protection, Energy and the Environment				
Ameren Missouri	3/16	Ameren Missouri	SB 1028	Performance Based Ratemaking
National Energy Board (now the Canada Energy Regulator)				
Maritimes & Northeast Pipeline	2/02	Maritimes & Northeast Pipeline	GH-3-2002	Natural Gas Demand Analysis



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
TransCanada Pipelines	8/04	TransCanada Pipelines	RH-3-2004	Toll Design
Brunswick Pipeline	5/06	Brunswick Pipeline	GH-1-2006	Market Study
TransCanada Pipelines Ltd.	12/06 4/07	TransCanada Pipelines Ltd.: Gros Cacouna Receipt Point Application	RH-1-2007	Toll Design
Repsol Energy Canada Ltd	3/08	Repsol Energy Canada Ltd	GH-1-2008	Market Study
Maritimes & Northeast Pipeline	7/10	Maritimes & Northeast Pipeline	RH-4-2010	Regulatory Policy, Toll Development
TransCanada Pipelines Ltd	9/11 5/12	TransCanada Pipelines Ltd.	RH-3-2011	Business Services and Tolls Application
Trans Mountain Pipeline LLC	6/12 1/13	Trans Mountain Pipeline LLC	RH-1-2012	Toll Design
TransCanada Pipelines Ltd	8/13	TransCanada Pipelines Ltd	RE-001-2013	Toll Design
NOVA Gas Transmission Ltd	11/13	NOVA Gas Transmission Ltd	OF-Fac-Gas-N081-2013-10 01	Toll Design
Trans Mountain Pipeline LLC	12/13	Trans Mountain Pipeline LLC	OF-Fac-Oil-T260-2013-03 01	Economic and Financial Feasibility, Project Benefits
Energy East Pipeline Ltd.	10/14	Energy East Pipeline	Of-Fac-Oil-E266-2014-01 02	Economic and Financial Feasibility, Project Benefits
NOVA Gas Transmission Ltd	5/16	NOVA Gas Transmission Ltd	GH-003-2015	Certificate of Public Convenience and Necessity
TransCanada PipeLines Limited	4/17 9/17	TransCanada PipeLines Limited	Dawn LTFP Service Application	Public Interest, Toll Design



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
NOVA Gas Transmission Ltd	10/17	NOVA Gas Transmission Ltd	MH-031-2017	Toll Design
NOVA Gas Transmission Ltd	3/19 11/19	NOVA Gas Transmission Ltd	RH-001-2019	Tolling Changes
Enbridge Pipelines Inc.	12/19 6/20 8/20 4/21	Enbridge Pipelines Inc.	RH-001-2020	Market and Scarcity Conditions; Reasonableness of Tolls, Terms, and Conditions; Public Interest; Open Season Process
NOVA Gas Transmission LTD.	5/21	NOVA Gas Transmission LTD.	Service Application	Toll Design
New Brunswick Energy and Utilities Board				
Atlantic Wallboard/JD Irving Co	1/08	Enbridge Gas New Brunswick	MCTN #298600	Rate Setting for EGNB
Atlantic Wallboard/Flakeboard	9/09 6/10 7/10	Enbridge Gas New Brunswick	NBEUB 2009-017	Rate Setting for EGNB
Atlantic Wallboard/Flakeboard	1/14	Enbridge Gas New Brunswick	NBEUB Matter 225	Rate Setting for EGNB
New Hampshire Public Utilities Commission				
Public Service Co. of New Hampshire	7/14	Public Service Co. of NH	DE 11-250	Prudence
Public Service Co. of New Hampshire	7/15 11/15	Public Service Co. of NH	14-238	Restructuring and Rate Stabilization
New Jersey Board of Public Utilities				
Morris Energy Group	11/09	Public Service Electric & Gas	BPU GR 09050422	Discriminatory Rates



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
New Jersey American Water Co.	4/10	New Jersey American Water Co.	BPU WR 1040260	Tariff Rates and Revisions
Electric Customer Group	1/11	Generic Stakeholder Proceeding	BPU GR10100761 ER10100762	Natural Gas Ratemaking Standards and pricing
New Mexico Public Service Commission				
Southwestern Public Service Co., New Mexico	12/12	SPS New Mexico	12-00350-UT	Rate Case, Return on Equity
PNM Resources	12/13 10/14 12/14	Public Service Co. of New Mexico	13-00390-UT	Nuclear Valuation, In Support of Stipulation
New York State Public Service Commission				
Central Hudson, New York State Electric & Gas, Rochester Gas & Electric	5/01	Joint Petition of NiMo, NYSEG, RG&E, Central Hudson, Constellation and Nine Mile Point	01-E-0011	Section 70, Rebuttal Testimony
Rochester Gas & Electric	12/03	Rochester Gas & Electric	03-E-1231	Sale of Nuclear Plant
Rochester Gas & Electric	1/04	Rochester Gas & Electric	03-E-0765 02-E-0198 03-E-0766	Sale of Nuclear Plant; Ratemaking Treatment of Sale
Rochester Gas and Electric and NY State Electric & Gas Corp	2/10	Rochester Gas & Electric NY State Electric & Gas Corp	09-E-0715 09-E-0716 09-E-0717 09-E-0718	Depreciation Policy
National Fuel Gas Corporation	9/16 9/16	National Fuel Gas Corporation	16-G-0257	Ring-fencing Policy
NextEra Energy Transmission New York	8/18	NextEra Energy Transmission New York	18-T-0499	Certificate of Need for Transmission Line, Vertical Market Power



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
NextEra Energy Transmission New York	2/19 8/19	NextEra Energy Transmission New York	18-E-0765	Certificate of Need for Transmission Line, Vertical Market Power
Nova Scotia Utility and Review Board				
Nova Scotia Power	9/12	Nova Scotia Power	P-893	Audit Reply
Nova Scotia Power	8/14	Nova Scotia Power	P-887	Audit Reply
Nova Scotia Power	5/16	Nova Scotia Power	2017-2019 Fuel Stability Plan	Used and Useful Ratemaking
NSP Maritime Link ("NSPML")	12/16 2/17 5/17	NSP Maritime Link ("NSPML")	M07718 NSPML Interim Cost Assessment Application	Used and Useful Ratemaking
NSP Maritime Link ("NSPML")	10/19	NSP Maritime Link ("NSPML")	M09277 NSPML 2020 Interim Assessment Application	Recovery of Depreciation and Return, Costs and Customer Benefits, Debt Service Coverage Ratio
Nova Scotia Power	2/21	Nova Scotia Power	M10013 Annapolis Tidal Generation Station Retirement: Request for Accounting Treatment and Net Book Value Recovery	Generation Plant Cost Recovery
Oklahoma Corporation Commission				
Oklahoma Gas & Electric Company	5/05 9/05	Oklahoma Gas & Electric Company	PUD 200500151	Prudence of McLain Acquisition
Oklahoma Gas & Electric Company	3/08	Oklahoma Gas & Electric Company	PUD 200800086	Acquisition of Redbud Generating Facility
Oklahoma Gas & Electric Company	8/14 1/15	Oklahoma Gas & Electric Company	PUD 201400229	Integrated Resource Plan



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Ontario Energy Board				
Market Hub Partners Canada, L.P.	5/06	Natural Gas Electric Interface Roundtable	File No. EB-2005-0551	Market-based Rates for Storage
Ontario Power Generation	9/13 2/14 5/14	Ontario Power Generation	EB-2013-0321	Prudence Review of Nuclear Project Management Processes
Oregon Public Utilities Commission				
Hydro One Limited and Avista Corporation	8/18 10/18	Hydro One Limited and Avista Corporation	UM 1897	Reasonableness and Sufficiency of the Governance, Bankruptcy, and Financial Ring-Fencing Stipulated Settlement Commitments
Rhode Island Public Utilities Commission				
Providence Gas Company and The Valley Gas Company	1/01 3/02	Providence Gas Company and The Valley Gas Company	1673 1736	Gas Cost Mitigation Strategy
The New England Gas Company	3/03	New England Gas Company	3459	Cost of Capital
Texas Public Utility Commission				
Oncor Electric Delivery Company	8/07	Oncor Electric Delivery Company	34040	Regulatory Policy, Rate of Return, Return of Capital and Consolidated Tax Adjustment
Oncor Electric Delivery Company	6/08	Oncor Electric Delivery Company	35717	Regulatory policy
Oncor Electric Delivery Company	10/08 11/08	Oncor, TCC, TNC, ETT, LCRA TSC, Sharyland, STEC, TNMP	35665	Competitive Renewable Energy Zone
CenterPoint Energy	6/10 10/10	CenterPoint Energy/Houston Electric	38339	Regulatory Policy, Risk, Consolidated Taxes



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Oncor Electric Delivery Company	1/11	Oncor Electric Delivery Company	38929	Regulatory Policy, Risk
Cross Texas Transmission	8/12 11/12	Cross Texas Transmission	40604	Return on Equity
Southwestern Public Service	11/12	Southwestern Public Service	40824	Return on Equity
Lone Star Transmission	5/14	Lone Star Transmission	42469	Return on Equity, Debt, Cost of Capital
CenterPoint Energy Houston Electric, LLC	6/15	CenterPoint Energy Houston Electric, LLC	44572	Distribution Cost Recovery Factor
NextEra Energy, Inc.	10/16 2/17	Oncor Electric Delivery Company LLC, NextEra Energy	46238	Merger Application, Ring-fencing, Affiliate Interest, Code of Conduct
CenterPoint Energy Houston Electric, LLC	4/19 6/19	CenterPoint Energy Houston Electric, LLC	49421	Incentive Compensation
Sun Jupiter Holdings LLC ad IIF US Holding 2 LP	11/19	Sun Jupiter Holdings LLC and IIF US Holding 2 LP Acquisition of El Paso Electric Company	49849	Public Interest Standard, Ring-fencing, Regulatory Commitments, Rate Credit and Economic Considerations, Ownership and Governance Post-closing, Tax Matters
Texas-New Mexico Power Company and Avangrid, Inc. and NM Green Holdings, Inc.	3/21	Texas-New Mexico Power Company and Avangrid, Inc. and NM Green Holdings, Inc.	51547	Merger Approval Conditions
Texas Railroad Commission				
Atmos Pipeline Texas	9/10 1/11	Atmos Pipeline Texas	GUD 10000	Ratemaking Policy, Risk



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Texas State Legislature				
CenterPoint Energy	4/13	Association of Electric Companies of Texas	SB 1364	Consolidated Tax Adjustment Clause Legislation
Utah Public Service Commission				
Questar Gas Company	12/07	Questar Gas Company	07-057-13	Benchmarking in Support of ROE
Virginia Corporation Commission				
Virginia Electric and Power Company d/b/a Dominion Energy Virginia	3/21 5/21	Virginia Electric and Power Company d/b/a Dominion Energy Virginia	PUR-2021-00058	Regulatory Policy
Washington Utilities and Transportation Commission				
Hydro One Limited and Avista Corporation	9/18	Hydro One Limited and Avista Corporation	U-170970	Reasonableness and Sufficiency of the Governance, Bankruptcy, and Financial Ring-Fencing Stipulated Settlement Commitments
Wisconsin Public Service Commission				
Wisconsin Electric Power Company	1/07	Wisconsin Electric Power Co.	6630-EI-113	Sale of Nuclear Plant
Wisconsin Electric Power Company	10/09	Wisconsin Electric Power Co.	6630-CE-302	CPCN Application for Wind Project
Northern States Power Wisconsin	10/13	Xcel Energy (dba Northern States Power Wisconsin)	4220-UR-119	Fuel Cost Adjustments
Wisconsin Electric Power Company	11/13	Wisconsin Electric Power Co.	6630-FR-104	Fuel Cost Adjustment



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WE Energy	8/14 1/15 3/15	WE Energy/Integrus	9400-YO-100	Merger Approval
Wisconsin Public Service Corporation	1/19	Madison Gas and Electric Company and Wisconsin Public Service Corporation	5-BS-228	Evaluation of Models Used in Resource Investment Decisions



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Attala Generating Company	12/03	Attala Generating Co v. Attala Energy Co.	16-Y-198-00228-03	Power Project Valuation, Breach of Contract, Damages
Nevada Power Company	4/08	Nevada Power v. Nevada Cogeneration Assoc. #2	-	Power Purchase Agreement
Sensata Technologies, Inc./EMS Engineered Materials Solutions, LLC	1/11	Sensata Technologies, Inc./EMS Engineered Materials Solutions, LLC v. Pepco Energy Services	11-198-Y-00848-10	Change in Usage Dispute, Damages
Sandy Creek Energy Associates, L.P.	9/17	Sandy Creek Energy Associates, L.P. vs. Lower Colorado River Authority	01-16-0002-6892	Power Purchase Agreement, Analysis of Damages
Dynergy Midwest Generation, LLC	1/21	BNSF Railway Company and Norfolk Southern Railway Company v. Dynergy Midwest Generation, LLC	01-18-0001-3283	Electric Generation Asset Management
	2/21			
Canadian Arbitration Panel				
Hydro-Québec	4/15 5/16 7/16	Hydro-Fraser et al v. Hydro-Québec	-	Electric Price Arbitration
Commonwealth of Massachusetts, Appellate Tax Board				
NStar Electric Company	8/14	NStar Electric Company	F316346 F319254	Valuation Methodology
Western Massachusetts Electric Company	2/16	Western Massachusetts Electric Company v. Board of Assessors of The City of Springfield	315550 319349	Valuation Methodology



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State of Delaware, Court of Chancery, New Castle County				
Wilmington Trust Company	11/05	Calpine Corporation vs. Bank of New York and Wilmington Trust Company	C.A. No. 1669-N	Bond Indenture Covenants
Illinois Appellate Court, Fifth Division				
Norweb, PLC	8/02	Indeck No. America v. Norweb	97 CH 07291	Breach of Contract, Power Plant Valuation
Independent Arbitration Panel				
Ocean State Power	9/02	Ocean State Power vs. ProGas Ltd.	2001/2002 Arbitration	Gas Price Arbitration
Ocean State Power	2/03	Ocean State Power vs. ProGas Ltd.	2002/2003 Arbitration	Gas Price Arbitration
Ocean State Power	6/04	Ocean State Power vs. ProGas Ltd.	2003/2004 Arbitration	Gas Price Arbitration
Shell Canada Limited	7/05	Shell Canada Limited and Nova Scotia Power Inc.	-	Gas Contract Price Arbitration
International Court of Arbitration				
Mitsubishi Heavy Industries, Ltd., and Mitsubishi Nuclear Energy Systems, Inc.	12/15 2/16	Southern California Edison Company, Edison Material Supply LLC, San Diego Gas & Electric Co., and the City of Riverside vs. Mitsubishi Heavy Industries, Ltd., and Mitsubishi Nuclear Energy Systems, Inc.	19784/AGF/RD	Damages Arising Under a Nuclear Power Equipment Contract



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International Chamber of Commerce				
Senvion GmbH	4/17	Senvion GmbH v. EDF Renewable Energy, Inc.	01-15-0005-4590	Breach-Related Damages, Unfair Competition, Unjust Enrichment
Senvion GmbH	9/17	Senvion GmbH v. EEN CA Lac Alfred Limited Partnership, et al.	21535	Breach-Related Damages
Senvion GmbH	12/17	Senvion GmbH v. EEN CA Massif du Sud Limited Partnership, et al.	21536	Breach-Related Damages
EDF Inc.	3/21	Exelon Generating Company, LLC v. EDF Inc.	25479/MK	Valuation of Nuclear Power Plants
State of New Jersey, Mercer County Superior Court				
Transamerica Corp., et al.	7/07	IMO Industries Inc. vs. Transamerica Corp., et al.	L-2140-03	Breach-Related Damages, Enterprise Value
	10/07			
State of New York, Nassau County Supreme Court				
Steel Los III, LP	6/08	Steel Los II, LP & Associated Brook, Corp v. Power Authority of State of NY	Index No. 5662/05	Property Seizure
Province of Alberta, Court of Queen's Bench				
Alberta Northeast Gas Limited	5/07	Cargill Gas Marketing Ltd. vs. Alberta Northeast Gas Limited	Action No. 0501-03291	Gas Contracting Practices
Quebec Superior Court, District of Gaspé				
Senvion Canada and Senvion GmbH	2/19	Senvion Canada and Senvion GmbH v. Suspendem Rope Access	-	Breach-Related Damages, Reimbursement of Liquidated Damages, Reimbursement of Scheduled Maintenance Penalties



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State of New Hampshire, Board of Tax and Land Appeals				
Public Service Company of New Hampshire d/b/a Eversource Energy	11/18	Appeal of Public Service Company of New Hampshire d/b/a Eversource Energy	28873-14-15-16-17PT	Valuation of Transmission and Distribution Assets
State of New Hampshire, Judicial Court-Rockingham Superior Court				
Public Service Company of New Hampshire d/b/a Eversource Energy	10/18	Public Service Company of New Hampshire d/b/a Eversource Energy v. City of Portsmouth	218-2016-CV-00899 218-2017-CV-00917	Valuation of Transmission and Distribution Assets
State of New Hampshire, Superior Court-Merrimack County				
Public Service Company of New Hampshire d/b/a Eversource Energy	3/18	Public Service Company of New Hampshire d/b/a Eversource Energy v. Town of Bow	217-2015-CV-00469 217-2016-CV-00474 217-2017-CV-00422	Valuation of Transmission and Distribution Assets
State of Utah, Third District Court				
PacifiCorp & Holme, Roberts & Owen, LLP	1/07	USA Power & Spring Canyon Energy vs. PacifiCorp. et al.	Civil No. 050903412	Breach-Related Damages
U.S. Bankruptcy Court, District of New Jersey				
Ponderosa Pine Energy Partners, Ltd.	7/05	Ponderosa Pine Energy Partners, Ltd.	05-21444	Forward Contract Bankruptcy Treatment
U.S. Bankruptcy Court, No. District of New York				
Cayuga Energy, NYSEG Solutions, The Energy Network	09/09	Cayuga Energy, NYSEG Solutions, The Energy Network	06-60073-6-sdg	Going Concern



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U.S. Bankruptcy Court, So. District of New York				
Johns Manville	5/04	Enron Energy Mktg. v. Johns Manville; Enron No. America v. Johns Manville	01-16034 (AJG)	Breach of Contract, Damages
U.S. Bankruptcy Court, Northern District of Texas				
Southern Maryland Electric Cooperative, Inc., and Potomac Electric Power Company	11/04	Mirant Corporation, et al. v. SMECO	03-4659; Adversary No. 04-4073	PPA Interpretation, Leasing
U.S. Bankruptcy Court, Southern District of Texas				
Ultra Petroleum Corp. et al	3/17	Ultra Petroleum Corp. et al	16-32202 (MI)	Valuation
U.S. Court of Federal Claims				
Boston Edison Company	7/06 11/06	Boston Edison Company v. United States	99-447C 03-2626C	Spent Nuclear Fuel Breach, Damages
Consolidated Edison Company	7/07	Consolidated Edison Company	06-305T	Evaluation of Lease Purchase Option
Consolidated Edison Company	2/08 6/08	Consolidated Edison Company v. United States	04-0033C	Spent Nuclear Fuel Breach, Damages
Vermont Yankee Nuclear Power Corporation	6/08	Vermont Yankee Nuclear Power Corporation v. United States	03-2663C	Spent Nuclear Fuel Breach, Damages
Virginia Electric and Power Company d/b/a Dominion Virginia Power	3/19	Virginia Electric and Power Company d/b/a Dominion Virginia Power v. United States	17-464C	Double Recovery, Cost Recovery of Infrastructure Improvements



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Constellation Power Source, Inc.	12/04	Constellation Power Source, Inc. v. Select Energy, Inc.	Civil Action 304 CV 983 (RNC)	ISO Structure, Breach of Contract
U.S. District Court, Northern District of Illinois, Eastern Division				
U.S. Securities and Exchange Commission	4/12	U.S. Securities and Exchange Commission v. Thomas Fisher, Kathleen Halloran, and George Behrens	07 C 4483	Prudence, PBR
U.S. District Court, New Hampshire				
Portland Natural Gas Transmission and Maritimes & Northeast Pipeline	9/03	Public Service Company of New Hampshire vs. PNGTS and M&NE Pipeline	C-02-105-B	Impairment of Electric Transmission Right-of-Way
U. S. District Court, Southern District of New York				
Consolidated Edison	3/02	Consolidated Edison v. Northeast Utilities	Case No. 01 Civ. 1893 (JGK) (HP)	Industry Standards for Due Diligence
Merrill Lynch & Company	1/05	Merrill Lynch v. Allegheny Energy, Inc.	Civil Action 02 CV 7689 (HB)	Due Diligence, Breach of Contract, Damages
U. S. District Court, Eastern District of Virginia				
Aquila, Inc.	1/05 2/05	VPEM v. Aquila, Inc.	Civil Action 304 CV 411	Breach of Contract, Damages
U. S. District Court, Western District of Virginia				
Washington Gas Light Company	8/15 9/15	Washington Gas Light Company v. Mountaineer Gas Company	Civil Action No. 5:14-cv-41	Nominations and Gas Balancing, Lost and Unaccounted for Gas, Damages



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U.S. Tax Court in Illinois				
Exelon Corporation	4/15 6/15	Exelon Corporation, as Successor by Merger to Unicom Corporation and Subsidiaries et al. v. Commission of Internal Revenue	29183-13 29184-13	Valuation of Analysis of Lease Terms and Quantify Plant Values