
**BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Electric Distribution Rates.

Case No. 17-32-EL-AIR

In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.

Case No. 17-33-EL-ATA

In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods.

Case No. 17-34-EL-AAM

In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Modify Rider PSR.

Case No. 17-872-EL-RDR

In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Amend Rider PSR.

Case No. 17-873-EL-ATA

In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods.

Case No. 17-874-EL-AAM

In the Matter of the Application of Duke Energy Ohio, Inc., for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan, Accounting Modifications and Tariffs for Generation Service.

Case No. 17-1263-EL-SSO

In the Matter of the Application of Duke Energy Ohio, Inc., for Authority to Amend its Certified Supplier Tariff, P.U.C.O. No. 20.

Case No. 17-1264-EL-ATA

In the Matter of the Application of Duke Energy Ohio, Inc., for Authority to Defer Vegetation Management Costs.

Case No. 17-1265-EL-AAM

In the Matter of the Application of Duke Energy Ohio, Inc., to Establish Minimum Reliability Performance Standards Pursuant to Chapter 4901:1-10, Ohio Administrative Code.

Case No. 16-1602-EL-ESS

**Direct Testimony of
Jeremy I. Fisher, PhD**

**On Behalf of
Sierra Club**

PUBLIC VERSION

June 25, 2018

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1 **1. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q Please state your name, business address, and position.**

3 **A**My name is Jeremy I. Fisher. I am a Senior Strategic and Technical Advisor at
4 Sierra Club, at 2101 Webster Street, Oakland, California.

5 **Q Please describe your role at Sierra Club.**

6 **A**My role at Sierra Club is to provide an expert viewpoint on energy systems
7 economics, emerging electric-sector issues, and provide technical review of
8 policy matters with which Sierra Club engages, including electricity system
9 resource planning and public utilities regulation.

10 **Q Please summarize your work experience and educational background.**

11 **A**Prior to joining Sierra Club at the end of 2017, I was employed as a Principal
12 Associate at Synapse Energy Economics, where I worked in electricity systems
13 issues for a decade. At Synapse, I evaluated and helped to shape resource
14 planning efforts, engaged in electric-sector planning on behalf of states and
15 municipalities, helped regulators navigate environmental rules, and assisted states
16 in crafting or revising resource planning rules. In addition, I led the resource
17 planning group at Synapse, which engages in the assessment of planning
18 processes across a wide cohort of states and regions.

19 While at Synapse, I provided services for a wide variety of public sector and
20 public interest clients, including the U.S. Environmental Protection Agency
21 (“EPA”), the National Association of Regulatory Utility Commissioners
22 (“NARUC”), the National Association of State Utility Consumer Advocates
23 (“NASUCA”), National Rural Electric Cooperative Association (“NRECA”), the
24 energy offices and public utility commissions of Alaska, Arkansas, Michigan, and
25 Utah, the Commonwealth of Puerto Rico, Tennessee Valley Authority Office of
26 Inspector General (“TVA OIG”), the California Division of Ratepayer Advocates

1 (“CADRA”), the California Energy Commission (“CEC”), the Regulatory
2 Assistance Project (“RAP”), and various environmental public interest groups,
3 including Sierra Club. As a consultant, I provided training to federal regulators on
4 resource planning practice and issues, led an intensive statewide planning process
5 on behalf of the Michigan Public Service Commission (“MPSC”), and worked on
6 behalf of the Puerto Rico Energy Commission (“CEPR”) to develop state-of-the-
7 art integrated resource plan (“IRP”) rules, lead the evaluation of the island’s first
8 IRP, and audit the public utility in a first-ever rate case.

9 I have provided testimony in electricity planning and general rate case dockets in
10 California, Georgia, Idaho, Indiana, Kansas, Kentucky, Louisiana, Nevada, New
11 Mexico, Oklahoma, Oregon, Puerto Rico, Utah, Washington, Wisconsin, and
12 Wyoming.

13 I hold a doctorate in Geological Sciences from Brown University, and I received
14 my bachelor degrees from University of Maryland in Geology and Geography.

15 My curriculum vitae is attached as Exhibit JIF-01.

16 **Q Have you previously provided comments to or testified before the Public**
17 **Utilities Commission of Ohio (“Commission”) previously?**

18 **A** No, I have not.

19 **Q What is the purpose of your testimony?**

20 **A** My testimony addresses Duke Energy Ohio’s (“Company” or “Duke”) proposal to
21 incorporate its Inter-Company Power Agreement (“ICPA”) with Ohio Valley
22 Electric Corporation (“OVEC”) under the Price Stabilization Rider (“Rider
23 PSR”). My testimony examines the value of the ICPA to Duke’s ratepayers as
24 offered by Company witness Mr. Judah Rose, and evaluates both his and
25 Company witness Mr. Steven Fetter’s claims that Rider PSR represents an
26 effective hedge to Duke’s ratepayers. I also examine Mr. Fetter’s claim that
27 rejecting Rider PSR will endanger Duke’s credit ratings and impose undue costs. I

1 offer observations about the compatibility of a non-competitive generation-based
2 charge like Rider PSR in Ohio's deregulated generation system.

3 **Q What has Duke proposed with respect to Rider PSR?**

4 **A** The Stipulation includes a provision that, if approved by the Commission, would
5 allow Duke to recover the net costs from wholesale-market transactions relating
6 to Duke Energy Ohio's ownership share of OVEC.¹ Through Rider PSR, Duke
7 has proposed that it bid 100% percent of the OVEC energy, capacity, and
8 ancillary services to which Duke is entitled under the ICPA into the PJM
9 wholesale markets. For the time period January 1, 2018 to May 31, 2025, Duke
10 would pass the costs allocated to it from OVEC on to its customers, less market
11 revenue generated from sales. If market revenues from the sale of the OVEC
12 output are greater than Duke's share of OVEC costs, the amount would be
13 credited to Duke's customers; but if Duke's OVEC costs are greater than market
14 revenues, then customers would be charged the difference.

15 **Q Under the ICPA, does Duke control OVEC or the costs it incurs?**

16 **A** No,² and under Rider PSR, ratepayers would similarly have no control or review
17 of OVEC decisions.

18 **Q What are your conclusions with respect Rider PSR?**

19 **A** Overall, Rider PSR is not in the public interest, does not provide either monetary
20 value or hedge value to Duke's ratepayers, and represents a substantial loss to
21 Duke's ratepayers if adopted. I show that the ICPA, the core of Rider PSR, was
22 undertaken as a private venture by Duke and other entities, and is only being
23 passed to ratepayers because the utility perceives it as a substantial loss to
24 shareholders today. The adoption of Rider PSR would turn Duke's ratepayers into

¹ See Stipulation and Recommendation ("Stipulation"), pages 18-20; *see also* Second Supplemental Testimony of William Don Wathen Jr. In Support of Stipulation ("Wathen Second Supplemental Testimony"), pages 19-21.

² Refer, for example, to Commission Order in Case No. 14-841-EL-SSO, April 2015, page 21.

1 co-owners of a merchant generator, without the protections afforded rate-
2 regulated ratepayers. Finally, the adoption of Rider PSR, in addition to not being
3 in the best interests of Duke's ratepayers, is antithetical to Ohio's separation of
4 generation assets and distribution utilities.

5 My specific conclusions are as follows:

- 6 1. The OVEC units and the ICPA have been non-economic (i.e. , have been
7 more expensive to Duke than revenues generated) from at least 2010 through
8 today;
- 9 2. The ICPA is unequivocally non-economic over the period of Rider PSR
10 (2018-2025) according to Duke's most up-to-date analysis, which shows
11 ratepayers will net a loss of \$77 million over that time period;
- 12 3. The substantial losses incurred and expected under the ICPA are a core feature
13 of FirstEnergy Solutions' ("FES") current bankruptcy proceeding;
- 14 4. Duke's witnesses fail to address the risk and lack of stability associated with
15 the ICPA due to potentially [REDACTED], as
16 well as higher borrowing costs at OVEC due to the credit risk of other OVEC
17 Sponsoring Companies;
- 18 5. OVEC energy is more expensive than market prices [REDACTED]
19 [REDACTED] the projected market cost of energy 2018-2025, and the
20 ICPA offers no hedge value to Duke's customers;
- 21 6. The current form of the ICPA is a private venture undertaken by Duke on
22 behalf of its shareholders, the initiating Department of Energy contract having
23 been terminated well before Duke extended its joint venture in 2004 and 2011;

- 1 7. The Commission's prior decisions on riders for other electric distribution
2 utilities stand as independent decisions based in fact as provided at that time,
3 and have no bearing on the Commission's decision in this docket;
- 4 8. The Company's claim that the adoption of Rider PSR will net a benefit to
5 ratepayers because it protects the Company's credit ratings is unsupported by
6 any form of evidence;
- 7 9. The Company's implied claim that the Commission's primary objective
8 should be the support of utility financial metrics above ratepayer protection is
9 antithetical to the purpose and authority of the Commission;
- 10 10. Rider PSR undermines the separation of generation assets and distribution
11 service required under Ohio's competitive retail electric structure; and
- 12 11. The protections offered by the Company under the Stipulation are not
13 meaningful or balanced.

14 **Q What are your recommendations to the Commission with respect to the**
15 **Rider PSR?**

16 **A The Commission should unequivocally deny Rider PSR and continue to require**
17 that Duke seek to exit the ICPA or terminate its obligations thereunder. Further,
18 the Commission should require that Duke do everything in its power to insulate
19 Duke's customers from the detrimental effects of the ICPA.

20 To the extent that the Commission is concerned about the protection of Duke's
21 financial credit ratings, I recommend that the Commission consider the issue in a
22 distribution rate case or a special-purpose docket to develop a regulatory
23 framework for the assessment and treatment of utility credit ratings. Concerns
24 about Duke's credit ratings should be addressed, if at all, in a separate proceeding.
25 I make further recommendations about the key questions of such a proceeding
26 later in my testimony.

1 **2. THE OVEC PLANTS ARE FUNDAMENTALLY NON-ECONOMIC ON A GOING-**
2 **FORWARD BASIS**

3 **Q Are the OVEC power plants fundamentally sound investments on a going-**
4 **forward basis?**

5 **A**No, according to Duke witness Rose’s assessment, the OVEC units are unsound
6 investments. In other words, a rational investor or market participant would pay
7 exactly nothing to acquire and operate the OVEC plants. Irrespective of the
8 substantial debt obligations of these units, Duke could not sell their obligation for
9 these units through 2025 at a positive market value and I highly doubt that Mr.
10 Rose would recommend to any market participant that they acquire a share of
11 these units over that time period at a positive value.

12 Mr. Rose’s testimony appears to confound this message, but his analysis findings
13 are clear—and overly generous to the value of the OVEC units. In Exhibit 1 of
14 Mr. Rose’s testimony, he demonstrates that under his base case assumptions, the
15 net margins of Duke’s share of the OVEC plants—excluding sunk costs—are
16 **zero** dollars on a net present value basis.³ This means that, according to Mr. Rose,
17 the plant will cost as much to operate as it generates in revenue in that time
18 period.

19 **Q Would Duke’s ratepayers be investing zero dollars to take on Duke’s ICPA**
20 **obligations if authorized under Rider PSC?**

21 **A**No. Again, according to Mr. Rose’s testimony, Duke’s ratepayers would be
22 paying \$77 million to acquire a short-term lease worth quite literally nothing.

³ Supplemental Testimony of Judah L. Rose on Behalf of Duke Energy Ohio (“Rose Supplemental Testimony”), Exhibit 1, page 20.

1 **Q How are you coming up with that figure?**

2 **A**Mr. Rose reports that Duke’s share of OVEC is worth zero dollars excluding sunk
3 costs,⁴ and has a present value of negative \$77 million when accounting for sunk
4 costs.⁵ Because Duke would be asking its customers to take on the debt
5 obligations of OVEC (i.e., the sunk costs), this is akin to customers paying \$77
6 million today to discharge those debt obligations and acquire the asset—and
7 receive nothing in return.

8 **Q Can you clarify the difference between Mr. Rose’s reported zero value and**
9 **negative \$77 million valuation of Duke’s share of the ICPA?**

10 **A**Mr. Rose does a tremendous disservice to the clarity of the docket and the
11 Company’s request by fluidly flipping back and forth between two analyses, one
12 in which he includes the full cost of the ICPA to Duke’s ratepayers, and one in
13 which he assesses only “cash going forward costs.”⁶

14 Typical utility planning is conducted looking only on a going forward basis. In
15 this case, however, Rider PSR has almost nothing to do with a utility planning,
16 and the ratepayers are not making a forward-looking decision about an asset that
17 they already own. Instead, ratepayers are being asked to take on the full
18 obligations of a private contract, the OVEC ICPA. From the perspective of a
19 ratepayer today, all of the costs that would be incurred are prospective, and not
20 sunk. OVEC does not distinguish between forward-looking costs and the cost of
21 debt—instead the demand charge includes both elements and they are not
22 separable. Importantly, Duke is asking in this proceeding to recover all its OVEC
23 costs, including sunk costs, through Rider PSR, rendering Rose’s forecasts that
24 exclude sunk costs irrelevant to the Commission’s decision here.

⁴ Rose Supplemental Testimony, Exhibit 1, page 20.

⁵ Rose Supplemental Testimony, Exhibit 2, page 20.

⁶ Rose Supplemental Testimony, page 4 at 1-4.

1 Rather than considering the debt component of the ICPA demand charge “sunk,”
2 it should more appropriately be considered the investment cost that ratepayers
3 would bear to acquire the ICPA through May 2025. Mr. Rose projects that
4 customers will effectively invest \$77 million to acquire a contract with no value.

5 **Q Does Mr. Rose offer a projection of the value of Duke’s share of OVEC other**
6 **than his base case assessment?**

7 **A**Yes, he also assesses the value of Duke’s share of OVEC with use of the Energy
8 Information Agency’s Annual Energy Outlook 2018 Reference Case gas price
9 forecast. This projection shows that Duke’s customers would lose \$62 million if
10 Rider PSR were approved.⁷

11 **Q Do you think Duke’s customers could lose even more under Rider PSR than**
12 **Rose has projected?**

13 **A**Yes. While Mr. Rose calls his assessment “[REDACTED]”⁸ I think Mr. Rose’s
14 assessment is overly generous to the OVEC units in a number of arenas, including
15 failures to take into account:

- 16 • the borrowing risk of OVEC,
- 17 • the imminent risk of co-sponsor defection, and
- 18 • [REDACTED] the risk of existing environmental obligations at the
19 OVEC units

20 In addition, there are other risks, including OVEC generation-unit reliability and a
21 [REDACTED] that were not taken into account in Mr. Rose’s
22 assessment of the costs of the ICPA to Duke’s customers. In total, these risks
23 make the value of contract well below just the \$77 million loss estimated by Mr.
24 Rose. In other words, if Rider PSR were approved, Duke’s customers could pay
25 more than \$77 million in total losses.

⁷ Rose Supplemental Testimony, page 18, lines 14-16 and Exhibit 1, page 20.

⁸ Rose Supplemental Testimony, page 76, line 7.

1 **Borrowing Risk**

2 **Q What is the borrowing risk at OVEC that Mr. Rose neglected to take into**
3 **account?**

4 **A OVEC operates as an independent generation company and incurs debt and**
5 associated borrowing costs. The ICPA requires that the Sponsoring Companies
6 pay all of OVEC's borrowing costs, but the credit ratings governing those
7 borrowing costs are OVEC's. As OVEC's credit ratings fall, borrowing costs
8 increase, increasing the cost of existing and new debt held by OVEC—and paid
9 for by Duke under the ICPA. Mr. Rose's forward-looking projections of the cost
10 of the ICPA do not reflect the potential for substantially higher borrowing costs.
11 Thus, what might look like a \$77 million loss today may be substantially more as
12 other OVEC co-owners or seek to pull out of the OVEC contract.
13 OVEC describes this risk in its preemptive response to FES recent bankruptcy
14 filing at FERC (emphasis added):

15 As an initial matter, because the Sponsoring Companies'
16 obligations are several and not joint, if FirstEnergy is able to reject
17 its obligations under the ICPA, the resulting cost shortfalls are not
18 payable by the other Sponsoring Companies and will go
19 unreimbursed every month over the life of the contract (i.e., until at
20 least 2040), absent the types of ameliorative changes to the filed
21 rate discussed in Section IV.B, *infra*. This will further impact
22 OVEC's credit rating (which already has been impacted by the
23 prospect of contract rejection), further raising OVEC's borrowing
24 costs. Those higher borrowing costs will directly result in higher
25 costs to the remaining Sponsoring Companies and their customers.
26 In the case of OVEC's rural electric cooperative Sponsoring

1 Companies, for example, whose customers are their owners, all of
2 these increased costs will be borne by the ultimate ratepayers.⁹

3 In recent years, OVEC's credit rating has been downgraded and is on a "negative"
4 outlook watch from both Standard and Poor ("S&P") and Moody's credit rating
5 agencies. In December 2016, Moody's downgraded OVEC's rating from "Baa3,"
6 the lowest investment grade, to "Ba1," a non-investment grade. Mr. Rose's
7 projections of OVEC's borrowing do not appear to take into account further
8 downgrades.

9 **Q How much debt is outstanding at OVEC?**

10 **A** As of October 31, 2017, OVEC had \$85 million in short term debt and \$1,365
11 million in long-term debt. As far as I can discern, half of this long-term debt, \$826
12 million, is due by early 2026.¹⁰ To put that number in context, the 63 year-old
13 OVEC units have \$640/kW outstanding—close to the overnight cost of a new
14 generator.¹¹ It is worth noting, given some of the commentary of Rose and Fetter
15 (discussed further below), that all of currently held debt appears to have been
16 issued after the termination of the Department of Energy contract, with the oldest
17 of the long-term debt listed by OVEC being of 2006 vintage.¹²

18 **Q Under Rider PSR, would OVEC's credit rating and risk have a direct impact**
19 **on Duke's ratepayers?**

20 **A** Yes. In a recent complaint against FES, filed at FERC but in response to a
21 contemporaneous bankruptcy court proceeding, OVEC explains that its credit risk
22 is contingent on that of the Sponsoring Companies. This credit risk redounds to

⁹ OVEC v. FES, FERC Complaint, March 26, 2018, Exhibit JIF-02, page 13.

¹⁰ OVEC Subpoena Responsive Documents, No. OVEC0033, Exhibit JIF-03.

¹¹ Lazard Levelized Cost of Energy v11. November 2017. Key assumptions, total capital costs for reciprocating engines (\$500-\$800/kW), peakers (\$750-\$1,000/kW), and combined cycle (\$700-\$1,300/kW), <https://www.lazard.com/media/450337/lazard-levelized-cost-of-energy-version-110.pdf>

¹² Exhibit JIF-03, page OVEC0033.

OVEC's borrowing costs and would thus be reflected in Rider PSR. In that complaint, OVEC states:

In Moody's [credit rating agency] view, because each of the OVEC's Sponsoring Company's obligations are several, OVEC is similar in nature to a municipal joint action agency, and thus Moody ascribes a credit rating to OVEC tied to its weakest link, or (in other words) OVEC's lowest rated Sponsoring Company, FirstEnergy Solutions Corp., which contributes just under 5% of revenues.¹³

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]¹⁴ In the most recent version of OVEC's ICPA billable cost summary,¹⁵ OVEC projects that its combined short and long-term debt [REDACTED] relative to the version provided to Duke in support of the Company's 2017 application, and relied on by Rose in his Supplemental Testimony.¹⁶ This risk assumes that FES and all other Sponsoring Companies remain in the ICPA. If a Sponsoring Company exits the contract, the result could be even more substantial.

¹³ Exhibit JIF-02, page 8.

¹⁴ Exhibit JIF-03, page OVEC0048.

¹⁵ SIERRA-INT-02-007 Confidential Attachment C, Exhibit JIF-04.

¹⁶ SIERRA-INT-01-003 CONF Attachment, Exhibit JIF-05.

1 **OVEC Sponsoring Company Defection**

2 **Q What is the risk of OVEC Sponsoring Company defection that Mr. Rose**
3 **neglected to take into account in his assessment of the costs of the ICPA?**

4 **A** Similarly to OVEC's borrowing cost risk issue (addressed above), if an OVEC
5 Sponsoring Company defects from the ICPA, the remaining owners will be
6 impacted as the ICPA may require that, practically speaking, they pick up existing
7 debt and other costs. In particular, FES's attempts to exit the ICPA would result in
8 additional costs to all other parties, including Duke. If Duke's customers are
9 required to hold the ICPA through Rider PSR, that risk then falls to ratepayers.

10 OVEC describes this defection risk clearly in its complaint against FES that was
11 filed at FERC, in which OVEC attempts to block FES from exiting the ICPA
12 (emphasis added):

13 If FirstEnergy is allowed to reject its obligations under the ICPA,
14 OVEC and the remaining Sponsoring Companies would need to
15 come up with some way to close the gap in OVEC's recovery of its
16 costs, which would likely result in further increased debt and
17 borrowing costs for OVEC's remaining Sponsoring Companies,
18 with a disproportionately adverse effect on the costs of OVEC's
19 power and energy to them and their customers. OVEC would be
20 faced with a number of options, including potentially borrowing
21 additional funds (including to refinance FirstEnergy's portion of
22 maturities as they come due at ever-increasing borrowing costs),
23 attempting to locate a new Sponsoring Company to replace
24 FirstEnergy's ownership interest a discount, and/or a renegotiation
25 of the ICPA with all Sponsoring Companies to reallocate the
26 revenue shortfall associated with FirstEnergy's rejection of the

1 contract. All of these options would raise and reallocate the costs
2 of power and energy generated by the OVEC facilities.¹⁷

3 OVEC explains that this risk is significant for remaining owners (emphasis
4 added):

5 The direct result of contract rejection would be to change to the
6 filed rate currently reflected in the ICPA and to increase costs to
7 OVEC's remaining customers (and in certain circumstances
8 ratepayers) which could equal hundreds of millions of dollars over
9 the remaining life of the contract.¹⁸

10 Clearly this risk is not *de minimus*. Mr. Rose's assessment does not account for
11 the potential departure of one or more co-sponsors of the ICPA, or the incumbent
12 costs associated with such departures. While it is not clear just how much more
13 OVEC's borrowing costs would increase if other Sponsoring Companies rejected
14 the ICPA, OVEC's borrowing costs are clearly neither certain nor stable.

15 **Environmental Obligation Costs**

16 **Q What OVEC records did Mr. Rose fail to examine in his projection of future**
17 **environmental obligations at the OVEC units?**

18 **A** Mr. Rose relied on OVEC's projections of impending capital costs in his analysis,
19 but according to OVEC itself, those forecast charges relied on by Rose are very
20 optimistic with respect to the cost of pending environmental obligations.

21 Mr. Rose notes that "Duke Energy Ohio provided ICF the forecast of OVEC's
22 projected demand charges,"¹⁹ and includes a footnote that the "Demand Charges
23 are from OVEC '20yearbillable.xls' spreadsheet."²⁰ An examination of that

¹⁷ Exhibit JIF-02, page 14.

¹⁸ Exhibit JIF-02, pages 22-23.

¹⁹ Rose Supplemental Testimony, page 16, lines 6-7.

²⁰ *Id.*, footnote 17.

1 spreadsheet, provided to Sierra Club both as discovery from the Company²¹ as
2 well as in a subpoena from OVEC,²² shows a footnote that indicates an
3 [REDACTED] environmental compliance obligations, starting in
4 2021.²³ Therefore, Mr. Rose's assessment of future obligations at OVEC reflects
5 an assumption of [REDACTED] in environmental obligations. However, a review of
6 other OVEC documentation clearly shows OVEC believes the costs could be
7 substantially [REDACTED].

8 In response to a subpoena, OVEC provided a presentation from a December 8,
9 2017 Board of Directors' Meeting entitled "OVEC and IKEC Environmental
10 Compliance Update," by Mike Brown, OVEC's Environmental, Safety & Health
11 Director. That presentation shows **two** scenarios for projected environmental
12 investments—the [REDACTED] scenario, labeled "best case"—and a [REDACTED]
13 scenario labeled "worst case."²⁴ A review of the footnotes indicates that the "best
14 case" assumes that the current administration will successfully overturn a
15 substantial fraction of the effluent limitation guidelines and coal combustion
16 residual rules—in other words, OVEC's base case assumes that the current state
17 of law is not applicable.

18 I believe that on balance the fair value of the ICPA is likely far lower than
19 characterized by Rose. Rather than a \$77 million loss, the existing-law
20 environmental compliance obligation alone would result in a [REDACTED] to
21 Duke's ratepayers if Rider PSR were approved, not including incremental
22 financing costs and operations and maintenance costs for more complex control
23 equipment. In my opinion, a reliance on the current administration's ability to

²¹ SIERRA-INT-01-003 CONF Attachment, Exhibit JIF-05.

²² Exhibit JIF-03, page OVEC0048.

²³ Footnote reads [REDACTED]

²⁴ Exhibit JIF-03, pages OVEC0017-18, Boards of Directors Meeting, December 8, 2017.

1 overturn existing rules to result in a lower cost of compliance is a risky
2 proposition and speculative in nature.

3 **Other Issues with the OVEC Plants**

4 **Q Have you identified any other issues with the OVEC plants that make them**
5 **particularly risky units?**

6 **A** Yes. I'm concerned that OVEC, realizing that its plants are non-economic for
7 owners, are reducing operations and maintenance costs by [REDACTED]
8 [REDACTED], potentially resulting in potentially large-scale problems in the
9 future.

10 In a recent presentation to the co-owners, OVEC indicates that it intends on trying
11 to [REDACTED]

12 [REDACTED]
13 [REDACTED]²⁵ The presentation
14 states that the "optimization [will] improve [the] overall cost structure and
15 minimize [the] need to finance future environmental capital investments." The
16 practical upshot is that OVEC is trying to buffer losses to its owners by [REDACTED]
17 [REDACTED] in the form of [REDACTED]
18 [REDACTED] Rose's forecast already includes these projected cost savings, whether
19 or not they materialize.

20 The same OVEC chart indicates that the effective forced outage rate ("EFOR") or
21 the amount of time that generation has been halted due to a mechanical or
22 operator error (rather than for scheduled maintenance or economic conditions) has
23 fluctuated between 8 and 19 percent from 2013 to 2017. A reduction of O&M will
24 not serve to increase the reliability of these units.

25 Reviewing the O&M projection budget from OVEC used in Mr. Rose's
26 assessment, OVEC anticipates [REDACTED]

²⁵ Exhibit JIF-03, page OVEC0010.

1 [REDACTED]²⁶ I believe that this [REDACTED] in operations and
2 maintenance budget poses a risk of higher forced outage rates, which equate to
3 more losses for customers if Rider PSR is approved.

4 **3. THE OVEC PLANTS DO NOT PROVIDE ANY DEMONSTRATED HEDGE VALUE TO**
5 **DUKE'S CONSUMERS**

6 **Q Does Mr. Rose acknowledge that the ICPA is substantially above the cost of**
7 **market available energy and capacity?**

8 **A** Yes, but he qualifies his finding by theorizing that the OVEC contract provides an
9 “additional” hedge value. He states that the “OVEC contract energy costs more
10 than [the] market, but provides for less volatility and a hedge against even higher
11 costs.”²⁷ He repeats this thesis several times, even adding a notional hedge value
12 to the contract:

13 The lower volatility of [the] OVEC contract is an advantage and
14 the contract acts like a hedge. Adding any hedge value would make
15 the plants positive or better than market on a cash going forward
16 basis.²⁸

17 Note that Mr. Rose states that any hedge value would make the plants “positive”
18 on a “cash going forward basis.” Mr. Rose does not demonstrate that the ICPA is
19 a hedge, nor will the ICPA be incurred on a “cash going forward basis.”

20 **Q Is the ICPA a proper hedge?**

21 **A** No. Rose shows only that the Rider PSR would increase customer costs [REDACTED]
22 [REDACTED] Duke is not giving the customer's a hedge, but instead an almost guaranteed
23 higher cost. The Duke contract is as much of a hedge as buying a used car at new

²⁶ Author's calculation from OCC-POD-02-008 Highly Conf SUPP Attachment B.xlsx, using
Rose inflation assumption from OCC-POD-02-008 Highly Conf SUPP Attachment A.xlsx

²⁷ Rose Supplemental Testimony, page 77, lines 11-12.

²⁸ Rose Supplemental Testimony, page 21, lines 18-21.

1 car prices because you didn't bother to check if the dealer had the new car you
2 actually want. You still have a car, but it is probably worse than anything else in
3 the lot—much less the car you actually wanted.

4 The ICPA has resulted in losses each and every year from 2010 to 2017, and is
5 projected to be a substantial loss to ratepayers. The idea that ratepayers should
6 secure this known loss to avoid the outside risk of an even bigger loss is absurd on
7 its face. To put it in context, I calculate that market energy prices would have to
8 be [REDACTED] Mr. Rose's projections for the ICPA [REDACTED],
9 which in turn implies gas prices [REDACTED]
10 [REDACTED]²⁹

11 **Q Did Mr. Rose calculate a numeric “added” value of his supposed hedge**
12 **proposition?**

13 **A** No. Mr. Rose made no effort to quantify the value that the Commission should
14 consider for the hedge, nor did he assess if the hedge was effective, efficient, or
15 cost-effective.³⁰ As noted above, Rose did not calculate the level that energy
16 prices would have to reach for the OVEC contract to be below market, though I
17 have attempted to do so.

18 **Q What is Mr. Rose's justification for assigning a hedge value to the ICPA?**

19 **A** Mr. Rose simply calculates what he terms the “volatility” of the market and the
20 ICPA. He states that because historically the ICPA costs have remained relatively
21 constant while the market has fluctuated, the ICPA presents a better hedge
22 value—apparently without respect to the level of cost.

23 In discussing volatility, Mr. Rose points out that the highest annual all-hour
24 electricity price at the AEP Dayton Hub from 2012-2017 was \$44.1/MWh, or

²⁹ Calculated based on Mr. Rose's implied heat rates. See Rose Supplemental Testimony, Exhibit 28, page 57.

³⁰ Response to SIERRA-INT-02-001(a), Exhibit JIF-06.

1 \$47.6/MWh, accounting for capacity purchases.³¹ And while he does not show
2 them side by side, he notes that the lowest OVEC cost during that period was
3 [REDACTED]³² The fact that the market price had a
4 wider range during this period is effectively irrelevant: [REDACTED]
5 [REDACTED], and in Mr. Rose’s projections
6 the all-in market cost will [REDACTED]
7 [REDACTED].³³ In other words, assuming Rose’s projections are
8 correct (and I think they may understate OVEC’s losses), the ICPA has no hedge
9 value to Duke’s customers.

10 **Q Duke witness Mr. Steven Fetter also calls the ICPA a hedge, and states that**
11 **“the approval of Rider PSR will provide long-lasting protection for years**
12 **beyond when any financial entity would even hazard a guess as to electricity**
13 **costs.”³⁴ What is your response?**

14 **A**This statement is incorrect on multiple levels, and is unsupported by evidence in
15 this case. Mr. Rose’s calculations clearly demonstrate that Rider PSR does not
16 provide “protection,” unless Mr. Fetter means that Rider PSR provides protection
17 to Duke and OVEC, and not ratepayers. Second, Mr. Rose “projects” and
18 “forecasts” (words appearing more than 300 times in his supplemental testimony)
19 as to electricity costs in out years as the core purpose of his testimony, and finds
20 that Rider PSR is above those costs [REDACTED]. Further, Mr. Rose’s curriculum
21 vitae claims that he “has supported the financing of tens of billions of dollars of
22 new and existing power plants and is a frequent counselor to the financial

³¹ Rose Supplemental Testimony, page 68, lines 2-7.

³² Rose Supplemental Testimony, page 20, lines 5-7.

³³ Derived from Rose estimate of AEP-Dayton All-hour Firm Price in Exhibit 35 (nominal) and OVEC projections for the ICPA (see OCC-POD-02-008 Highly Conf SUPP Attachment B.xlsx).

³⁴ Direct Testimony of Steven M. Fetter in Support of Stipulation (“Fetter Direct Testimony”), page 16, lines 7-11.

1 community in restructuring and financing.”³⁵ I am certain that Mr. Rose, working
2 on behalf of the financial community, is often in the position of “hazard[ing] a
3 guess as to electricity costs” in the future.

4 **Q Did Mr. Fetter do any calculations on the value of the IPCA as a hedge?**

5 **A** No.³⁶

6 **Q Does Duke believe that the IPCA is a fixed price contract?**

7 **A** No. Duke’s 2017 10-K filing with the Securities and Exchange Commission
8 (“SEC”) includes a brief but important disclaimer that confirms OVEC costs vary
9 over time (emphasis added):

10 As a counterparty to an inter-company power agreement (ICPA),
11 Duke Energy Ohio has a contractual arrangement to receive
12 entitlements to capacity and energy from OVEC’s power plants
13 through June 2040 commensurate with its power participation
14 ratio, which is equivalent to Duke Energy Ohio’s ownership
15 interest. Costs, including fuel, operating expenses, fixed costs, debt
16 amortization and interest expense, are allocated to counterparties to
17 the ICPA, including Duke Energy Ohio, based on their power
18 participation ratio. The value of the ICPA is subject to variability
19 due to fluctuations in power prices and changes in OVEC’s costs
20 of business. Deterioration in the credit quality or bankruptcy of one
21 or more parties to the ICPA could increase the costs of OVEC. In
22 addition, certain proposed environmental rulemaking costs could
23 result in future increased cost allocations.³⁷

³⁵ Rose Supplemental Testimony, Supplemental Attachment JLR-1, page 1.

³⁶ Response to SIERRA-INT-02-014(b).

³⁷ Duke Corporation, 2017 10-K, page 41, https://www.duke-energy.com/annual-report/_/media/pdfs/our-company/investors/de-annual-reports/2017/2017annualreport.pdf

1 While the OVEC ICPA is projected by OVEC as a steady cost, there are clearly a
2 number of factors that could change the cost of the ICPA before 2025
3 dramatically. The high cost and the uncertainty in future costs are two reasons
4 why the ICPA cannot be considered a reasonable hedge.

5 **Q Does Duke view the ICPA or the outlook of the contract favorably?**

6 **A** No. As a rational and profit-seeking entity, Duke has no interest in retaining the
7 ICPA on behalf of shareholders. This view is confirmed by Duke's attempt in this
8 proceeding to pass the costs through to ratepayers via Rider PSR.

9 Duke confirms that "costs [of the ICPA] exceeded revenue in each year from
10 2010 to 2017,"³⁸ and that "between 2012 and 2014 the Company made numerous
11 attempts to transfer or exit its ownership including responding to numerous RFPs
12 and direct offers of sale to counterparties."³⁹ Duke notes that "none of such offers
13 were accepted," however. Assessing Mr. Rose's workpapers, the economics of
14 this contract [REDACTED]. The ICPA represents a private venture by
15 Duke that went poorly, not a reasonable hedge by any means.

16 **Q What would be considered a reasonable hedge?**

17 **A** A reasonable hedge should have roughly the same net present value as the
18 contract or security it seeks to provide a hedge against, but is insulated from the
19 same factors that drive the value of that contract or security. Buying a multi-year
20 fixed cost power purchase agreement at roughly the projected levelized cost of
21 energy on a going forward basis would be one form of hedge: the PPA would
22 have no short-term market exposure and would be projected to provide roughly
23 the same value to consumers as spot purchases. This is effectively the process that
24 the Company uses in its standard offer of service ("SSO") process for

³⁸ See response to SIERRA-INT-02-016, Exhibit JIF-07.

³⁹ See response to SIERRA-INT-02-015, Exhibit JIF-08.

1 procurement. The Company confirms that “Duke Energy Ohio’s SSO auction is
2 structured to provide some limited hedge against market volatility.”⁴⁰

3 As another example, signing a contract with a qualified facility for projected
4 avoided costs also acts as a hedge—the contract is designed to pay the qualified
5 facility no more than the forward-looking avoided cost (i.e., at no loss to the
6 utility), and is relatively insulated from the market.

7 If the Company is interested in procuring a hedge product, it is very likely that
8 any one of numerous contracts could be procured that do not cost [REDACTED]
9 [REDACTED] the expected cost of market energy. If Duke were interested in a cost-
10 effective hedge, it would have pursued different options other than reliance on its
11 existing OVEC joint venture.

12 **Q Mr. Rose argues that ratepayers should incur OVEC’s “recovery of costs**
13 **including sunk costs because they were prudently incurred.” What evidence**
14 **does Mr. Rose rely on to assess that OVEC’s costs at Kyger Creek and Clifty**
15 **Creek were prudently incurred?**

16 **A** Mr. Rose relies on no evidentiary record to make his assessment that costs were
17 prudently incurred. In a typical prudence assessment, parties and regulators would
18 assess capital decisions on the basis of what was known at the time by the utility,
19 including the benefit of the expenditure relative to alternatives. Such assessments
20 of prudence are typically intensive, adversarial reviews, particularly when
21 economics are marginal and capital expenditures are high cost.

22 When asked which records or assessments by either OVEC or Duke he relied
23 upon to argue that sunk costs were prudently incurred, Mr. Rose responded that
24 he “did not review any specific assessment conducted by either OVEC or Duke
25 Energy Ohio on OVEC CapEx. Rather Mr. Rose replied [*sic*] on OVEC’s

⁴⁰ See response to SIERRA-INT-02-017, Exhibit JIF-09.

1 projection of those costs.”⁴¹ It should go without saying that it is unreasonable for
2 Rose to make a prudence assessment without either having participated in the
3 decision to incur costs in the first place, or having assessed the basis, purpose, and
4 alternatives to the costs incurred by OVEC.

5 **4. FES CITES THE OVEC CONTRACT AS A CORE COMPONENT OF ITS FINANCIAL**
6 **WOES**

7 **Q You stated that the ICPA is a liability for the shareholders of the Sponsoring**
8 **Companies. What evidence do you have that the ICPA is considered a**
9 **liability?**

10 **A** Aside from the clear findings of Mr. Rose that the ICPA is substantially above
11 market cost, I refer to an April 2018 motion by FirstEnergy Solutions (“FES”)
12 seeking to exit its share of the OVEC contract in a bankruptcy proceeding that has
13 been filed in federal court. Typically, an entity undergoing bankruptcy would seek
14 to hold or sell any profitable ventures, and shed those that incur losses. FES made
15 it clear that the ICPA with OVEC is a substantial component of its losses, stating
16 the following (emphasis added):

17 By this Motion, the Movants seek to reject an extraordinarily
18 burdensome executory power purchase agreement, effective as of
19 the Petition Date (defined below). During 2017 this contract—
20 combined with nine other power purchase agreements the Movants
21 separately seek to reject—accounted for just approximately 3% of
22 the power FES bought and sold into the wholesale market. Yet
23 movants are losing approximately \$12 million per year, and are

⁴¹ See response to SIERRA-INT-02-002(a), Exhibit JIF-10.

1 expected to lose \$268 million over the remaining 22 years left on
2 the OVEC ICPA...⁴²

3 The motion specifies that:

4 The OVEC ICPA obligates FG [FirstEnergy Generation] to
5 purchase 4.85% of the power that OVEC's fossil-fuel plants
6 generate at an uneconomic rate until either the year 2040 or until
7 OVEC ceases to operate. Based on current expectations, FG will
8 lose approximately \$268 million on an undiscounted basis over the
9 remaining term of the OVEC ICPA.⁴³

10 And that:

11 Rejection of the OVEC ICPA will relieve the Movants of the near
12 term losses of approximately \$12 million on an annual average
13 basis (2018 to 2023) and will eliminate the approximately \$268
14 million in continuing losses over the remaining life of the
15 contracts. Rejection of the OVEC ICPA is thus a sound exercise of
16 the Movants' business judgment and will benefit the Debtors'
17 estates and their creditors.⁴⁴

18 **Q Are FES's claims of substantial near-term losses consistent with the**
19 **valuation provided by Mr. Rose in this case?**

20 **A**Yes, generally. Directionally they are fully consistent—the ICPA represents a
21 substantial loss—although Duke's filing only estimates about half the losses as
22 estimated by FES (on a ratable basis). More specifically, Mr. Rose, on behalf of

⁴² Motion to Reject a Certain Multi-Party Intercompany Power Purchase Agreement with the Ohio Valley Electric Corporation, FirstEnergy Solution Corp et al., v. Debtors, Case 18-50757. April 1, 2018, Exhibit JIF-11, pages 1-2.

⁴³ *Id.*, page 6.

⁴⁴ *Id.*, page 12.

1 Duke in the instant filing, appears to have estimated about half the losses as he
2 estimated on behalf of FES in their motion to exit the OVEC agreement.

3 **Q Did Mr. Rose have a role in calculating the losses estimated by FES in their**
4 **motion to exit the OVEC agreement?**

5 **A** Yes. Mr. Rose filed a declaration in support of FES's motion, and states that "ICF
6 was retained by counsel of the Debtors [FES] in April of 2017 to calculate the
7 losses to the Debtors associated with ...(b) a certain multi-party intercompany
8 power purchase agreement with the Ohio Valley Electric Corporation" ⁴⁵

9 Mr. Rose testifies that his firm, ICF, ran a similar analysis on behalf of FES as
10 used in the instant docket:

11 ICF has individually assessed the Executory PPAs to determine the
12 estimated losses to FES and FG of performing such contracts over
13 their lifetime. These calculations took into account the length of
14 the contracts, the contract price, the expected volume using
15 historical data, and the expected revenue streams. With respect to
16 the OVEC ICPA, ICF took into account both fixed and variable
17 costs such as fuel, coal, variable and fixed operations and
18 management costs, capital expenditures, financing costs and
19 emissions costs associated with that agreement. ICF's calculations
20 used an internal production cost model which simulated the
21 specific power markets in which the Ohio Valley Electric
22 Corporation ("OVEC") and the other contract counterparties
23 operate.

⁴⁵ Declaration of Judah Rose in Support of OVEC Contract Motion, FirstEnergy Solution Corp et al., v. Debtors, Case 18-50757, April 1, 2018, Exhibit JIF-12, page 3.

1 FES Chief Financial Officer Kevin Warvell testified that “in April 2017, [FES’s]
2 counsel retained ICF to perform more exacting calculations,”⁴⁶ and that “ICF has
3 calculated that FG [FirstEnergy Generation] would lose \$268 million on an
4 undiscounted basis if FG was required to perform under the OVEC ICPA through
5 the end of the contract term.”⁴⁷ This value is identical to the value stipulated in
6 FES’s motion. It is clear that Mr. Rose provided a nearly identical valuation
7 service to FES, which found the losses from the OVEC so substantial that it has
8 requested relief from the ICPA under bankruptcy protection.

9 **Q What were the results of Mr. Rose’s analysis on behalf of FES?**

10 **A** In his declaration, Mr. Rose only reports the aggregate losses from nine power
11 purchase agreements, including the OVEC ICPA. He estimates that “in the near
12 term (i.e., 2019-2023), the cost to the [FES] estate would be approximately \$58
13 million per year”⁴⁸ from those nine PPAs. However, in the motion to reject the
14 contract, FES isolates the OVEC ICPA, stating that its rejection would save an
15 annual \$12 million from 2018-2023.⁴⁹

16 Duke holds nine percent of the OVEC ICPA, while FES holds a 4.85 percent
17 share, or a little more than half of Duke’s ownership share. Scaling FES’s
18 bankruptcy-court estimated losses at OVEC to Duke’s share, FES estimates that a
19 nine percent share would lose \$22 million per year from 2018-2023. [REDACTED]

20 [REDACTED]
21 [REDACTED]. Accordingly, the estimate that Rose
22 provided to Duke is [REDACTED] to OVEC than the one he provided for FES.

⁴⁶ Declaration of Kevin Warvell in Support of OVEC Contract Motion, FirstEnergy Solution Corp et al., v. Debtors. Case 18-50757, April 1, 2018, Exhibit JIF-13, page 7.

⁴⁷ *Id.*, page 8.

⁴⁸ Exhibit JIF-12, page 6.

⁴⁹ Exhibit JIF-11, page 12.

1 **Table 1. Estimated annual losses from ICPA contract, 2018-2023**

	4.85% share	9% share
Duke		\$ [REDACTED] ⁵⁰
FES	\$12 million ⁵¹	\$22.3 million

2 It is unclear why Mr. Rose would have [REDACTED]

3 [REDACTED] in filings separated by only two months.

4 **Q For FES’s bankruptcy filing, did Mr. Rose provide an assessment relying on**
5 **the Annual Energy Outlook 2018 Reference Case gas price forecast as he did**
6 **in this proceeding?**

7 **A At least according to the public documents filed with the bankruptcy court, it does**
8 **not appear that Rose provided such an assessment.**

9 **Q What do you make of FES’s filing?**

10 **A FES has recognized that this contract is untenable. Unlike Duke, who seeks to**
11 **have the ICPA adopted by ratepayers, FES is seeking to end their participation**
12 **outright. FES characterizes the state of the problem succinctly (emphasis):**

13 Here, the OVEC ICPA Rejection Motion clearly reflects the sound
14 exercise of the Debtors’ business judgment. Under the OVEC
15 ICPA, which is wholly unnecessary for FG’s business, the Debtors
16 are today paying more than double the market value of capacity
17 and power, and are expected to for the remaining life of this
18 executory contract.⁵²

19 In my opinion, it is unconscionable to assign this massive liability to Duke’s
20 ratepayers under the guise of stability or as a hedge.

⁵⁰ Author’s calculation from Mr. Rose’s workpapers, OCC-POD-02-008 Highly Conf SUPP Attachment B.xlsx. Average of cells in D23:I23 in tab “NPV and Net Margins.”

⁵¹ Exhibit JIF-11, page 12.

⁵² Exhibit JIF-11, page 9.

1 **Q Are there any other problems associated with the FES exit from the OVEC**
2 **agreement from Duke's perspective?**

3 **A Yes.** As I noted earlier, if FES exits the contract, the obligations of the remaining
4 Sponsoring Companies, including Duke (or its customers under Rider PSR), could
5 be substantially impacted through either a substantially increased borrowing rate
6 for OVEC, or by having to absorb the shares abandoned by FES, substantially
7 increasing costs. Either way (or both), the exposure risk of OVEC to the defection
8 of any given Sponsoring Company is tremendous.

9 **Q Why would OVEC be exposed to an increased borrowing rate if FES defects**
10 **from the ICPA?**

11 **A Each** of the Sponsoring Companies holds a share of OVEC, and none are
12 obligated to make payments to OVEC to specifically cover the share of another
13 Sponsoring Company. Therefore, if a Sponsor Company departs, OVEC is left
14 with no opportunity to cover such shortfall other than by incurring more debt or
15 by relying on existing cash reserves, as OVEC explains in its FERC complaint
16 related to the FES exit:

17 The obligation of the off-takers under the ICPA is several but not
18 joint, exposing OVEC to the risk of nonpayment in the event of a
19 defaulting Sponsoring Company because the nondefaulting
20 Sponsoring Companies are not obligated to cover the shortfall.
21 Because of the several, not joint, liabilities of the Sponsoring
22 Companies under the ICPA, even Moody's points out that a
23 FirstEnergy rejection of its obligations, coupled with no other
24 changes to the ICPA would likely lead to a further downgrade in
25 OVEC's credit rating. A similar downgrade risk would result if
26 there was a payment default by a Sponsoring Company that OVEC
27 would not be able to cover by its existing reserves or through a
28 replacement of the defaulting Sponsoring Company. But coverage
29 through use of OVEC's existing reserves would be a mere

1 temporary fix, and OVEC would not only need to seek a
2 replacement for FirstEnergy, it may have to offer any such
3 replacement Sponsoring Company a substantial discount—in effect
4 a different filed rate.⁵³

5 **Q Do you think that OVEC would be able to find a replacement Sponsoring**
6 **Company if FES departed?**

7 **A**Taking into account FES’s perception of the cost of the ICPA, I think that the
8 discount OVEC would have to offer to a replacement sponsoring party would
9 have to be so substantial as to be non-useful to OVEC over any period—so likely
10 no. OVEC’s cost of energy, even ignoring the cost of debt (or as Mr. Rose terms
11 it, the “sunk costs”) are at or above the cost of market energy.⁵⁴ Therefore, while
12 OVEC might be able to sell its energy to an offtaker, it is unlikely to be able to do
13 so at a rate that any offtaker would find attractive relative to market prices.
14 Therefore I do not think that OVEC would be able to find a replacement
15 Sponsoring Company even at a “discount.”

16 **Q What would be a circumstance in which OVEC’s remaining Sponsoring**
17 **Companies would have to absorb the share abandoned by FES?**

18 **A**In their complaint against FES, OVEC explains that an alternative option for
19 keeping OVEC solvent would be to have all the remaining Sponsoring Companies
20 take on the abandoned shares, “which for many of these remaining Sponsoring
21 Companies will result in increased rates passed on to their customers and to the
22 public.”⁵⁵ In either circumstance, the risk—and loss—associated with the ICPA
23 that Duke proposes to pass to ratepayers could be substantially larger than
24 characterized by Mr. Rose in this instant case.

⁵³ Exhibit JIF-02, page 23.

⁵⁴ Rose Supplemental Testimony, Exhibit 1 (finding a zero net margin value excluding sunk costs).

⁵⁵ Exhibit JIF-02, page 23.

1 **Q Do you draw any conclusions from FES's motion to exit the ICPA?**

2 **A** FES's clear intent to exit the ICPA is as strong a signal as needed that the ICPA
3 offers no monetary benefit, is not competitive, cannot be considered a reasonable
4 hedge, and is neither certain nor stable. More to the point, however, OVEC's
5 complaint against FES makes it clear that OVEC believes a re-negotiation of the
6 terms of the ICPA are possible. Indeed, a modification would be absolutely
7 necessary if FES successfully exited the ICPA as OVEC would either need to
8 identify a new Sponsoring Company at a new rate, or re-allocate shares to the
9 remaining Sponsoring Companies.

10 The actions of FES to exit the contract, and the actions of the Sponsoring
11 Companies, including Duke, to pass the ICPA's responsibilities to retail electric
12 customers are clear indications that OVEC contract is not in the best interest of
13 Duke's ratepayers. Rather than continuing to find interim bandages, the FES
14 filing should be a call to find a graceful exit for all parties involved. I would have
15 no reason to believe that Duke would be motivated to help find that graceful exit
16 if the ICPA is successfully passed to ratepayers via Rider PSR. Of course, if Duke
17 wanted to continue its OVEC joint venture as a risk to shareholders only it would
18 be free to continue as such, but Duke's proposed Rider PSR makes clear that
19 Duke does not want to continue such a private venture with the risks born by its
20 shareholders.

1 **5. OVEC HAS BEEN A PRIVATE VENTURE FOR AT LEAST SEVENTEEN YEARS**

2 **Q Mr. Fetter states that OVEC’s “unique arrangement might dictate that [the**
3 **ICPA] contract be treated different than the norm.”⁵⁶ Mr. Rose implies the**
4 **same.⁵⁷ What is your reaction to Mr. Fetter’s view of the origins of the**
5 **OVEC contract?**

6 **A Mr. Fetter is incorrect to assume that ratepayers owe any special obligation to**
7 Duke shareholders because of the origin of the contract. Mr. Fetter implies that
8 somehow it is a patriotic duty of ratepayers to make Duke whole. If this contract
9 were entirely altruistic or outside of the Company’s reasonable control, then Duke
10 is holding a substantial regulatory liability—a deferred balance owed to its
11 ratepayers that must first be settled, as I explain below.

12 **Q What is the “unique arrangement” to which Mr. Fetter refers?**

13 **A It is not actually clear. Mr. Fetter answers his own question by both referring to**
14 the “unique history of OVEC” and “the complexity of the structure of the multi-
15 entity contract.” He then more extensively describes the history of the contract, so
16 I’ll assume, for the moment, that Mr. Fetter is more interested in that history.
17 Indeed, I hope that neither Mr. Fetter nor Mr. Rose would propose that just
18 because a corporate contract is multi-party means that it is somehow incumbent
19 on ratepayers to relieve a corporate entity of the burdens of that contract. The
20 implications of such a proposal would be extraordinary.

21 The history to which Mr. Fetter refers is that “OVEC was formed in 1952 to
22 address pressing U.S. needs for uranium enrichment facilities,” and that Duke’s
23 “participation in an Inter-Company Power Agreement ...ensure[d] that the

⁵⁶ Fetter Direct Testimony, page 13, lines 13-17.

⁵⁷ Rose Supplemental Testimony, page 79, lines 9-11.

1 Atomic Energy Commission would have available all power necessary to meet its
2 responsibilities for the nation's security."⁵⁸

3 Mr. Fetter goes on to speculate that "years after the fact, it is this [1952]
4 commitment to purchase power that is at issue in this proceeding."⁵⁹

5 Mr. Fetter implies that this proceeding is somehow about national security, a
6 contract drafted in the Eisenhower Administration, or a debt owed to Duke's
7 predecessor companies for having supported the Atomic Energy Commission
8 sixty-six years ago.

9 **Q Is this proceeding about national security?**

10 No. The OVEC units, and the ICPA, are decoupled from uranium enrichment
11 activities or any other Department of Energy ("DOE") activities. According to
12 OVEC, "the contract to provide OVEC-generated power to the DOE was
13 terminated in 2003 and all obligations were settled at that time."⁶⁰ OVEC
14 maintained a residual contract with DOE to "arrange for the purchase of power . .
15 . under the direction of the DOE, for resale directly to the DOE. The residual
16 agreement with DOE, which has nothing to do with the OVEC units, expires on
17 July 31, 2018."⁶¹ Duke and other joint venture participants decided to extend the
18 term of the OVEC contract twice after the DOE program ended. All of OVEC's
19 currently held long-term debt was incurred after the DOE program ended, and
20 OVEC has undertaken significant capital spending efforts since that time as well.
21 This proceeding is about Duke's interest in having its ratepayers take on the
22 obligation for the OVEC contract, rather than its shareholders.

⁵⁸ Fetter Direct Testimony, page 13, line 22 through page 14, line 4.

⁵⁹ Fetter Direct Testimony, page 14, line 4-6.

⁶⁰ OVEC 2017 FERC Form 1, page 123.2 (emphasis added)

<https://www.ovec.com/OVECFERC/OVEC2017FERCForm1Annual.pdf>

⁶¹ *Id.*

1 **Q Is the agreement being discussed today the same agreement that bound**
2 **Duke's predecessor companies?**

3 **A No.** The original July 1953 contract was amended many times over the decades.
4 In 2004, after the termination of the Department of Energy agreement, the
5 Sponsoring Companies extended the ICPA by another 20 years, from March 2006
6 to March 2026.⁶² In August 2011, the Sponsoring Companies once again
7 extended the ICPA, this time to 2040.⁶³ At that time, the ICPA had not supported
8 DOE activities for over seven years. According to OVEC's 2016 Annual Report
9 (emphasis added):

10 OVEC and the Sponsoring Companies signed an Inter-Company
11 Power Agreement (ICPA) on July 10, 1953, to support the DOE
12 Power Agreement and provide for excess energy sales to the
13 Sponsoring Companies of power not utilized by the DOE or its
14 predecessors. Since the termination of the DOE Power Agreement
15 on April 30, 2003, OVEC's entire generating capacity has been
16 available to the Sponsoring Companies under the terms of the
17 ICPA. The Sponsoring Companies and OVEC entered into an
18 Amended and Restated ICPA, effective as of August 11, 2011,
19 which extends its term to June 30, 2040.⁶⁴

20 After DOE's termination became effective in 2003, Duke and the other
21 Sponsoring Companies were fully entitled to sell the power generated by the
22 OVEC units on the open market, to their own benefit. During the re-negotiation of
23 the ICPA, Duke and the other Sponsoring Companies were under no obligation to
24 extend their own contracts or retain their involvement at OVEC. Indeed, one of
25 the Sponsoring Companies, Allegheny Energy sold its nine percent ownership

⁶² OVEC 205 FERC Form 1, page 123.2.

<https://www.ovec.com/OVECFERC/OVEC2005FERCForm1Annual.pdf>

⁶³ OVEC 2016 Annual Report, <https://www.ovec.com/FinancialStatements/AnnualReport-2016-Signed.pdf>

⁶⁴ *Ibid.* (emphasis added).

1 interest to Buckeye Power in 2004, receiving positive value.⁶⁵ The Sponsoring
2 Companies were under no obligation to stay part of this agreement in perpetuity.
3 Mr. Fetter's proposition that this case is about any 1952 commitment is incorrect.

4 **Q Did Duke seek the Public Utilities Commission of Ohio's approval when it**
5 **extended the ICPA in 2004 and again in 2011?**

6 **A** No, not of which I am aware.

7 **Q If the Sponsoring Companies had no obligation to remain in the contract,**
8 **and the OVEC units weren't being held for ratepayer benefit, why did Duke**
9 **and other Sponsoring Companies extend the ICPA in 2004 and 2011?**

10 **A** I have to assume that Duke and the other Sponsoring Companies looked at the
11 ICPA as a potentially profitable entrepreneurial venture, with an opportunity for
12 favorable arbitrage against market prices. A co-owner in 2004 may have
13 perceived that after 50 years, a substantial fraction of the plants' initial debt was
14 paid off, natural gas prices were at \$6/MMBtu and climbing,⁶⁶ and while
15 renewable energy prices were dropping, many traditional utilities did not consider
16 renewables as the same competitive option as today. In stark contrast to today,
17 Duke did not offer to transfer the rights and obligations of ICPA to ratepayers in
18 2004 or 2011, when the Company still likely had a positive outlook on the
19 disposition of the contract.

⁶⁵ See <https://www.sec.gov/divisions/investment/opur/filing/35-27897.htm>.

⁶⁶ U.S. Energy Information Administration. Henry Hub Natural Gas Price,
<https://www.eia.gov/dnav/ng/hist/rngwhhdd.htm>.

1 **Q Mr. Fetter implies that because Duke’s predecessor companies “provided**
2 **support for [AEC’s] national priority,”⁶⁷ the Company’s entry into the**
3 **ICPA—and the subsequent extension of the ICPA—have always been in the**
4 **public interest, and the Rider PSR is simply a correction to allocate back to**
5 **ratepayers. Do you agree?**

6 **A Not at all. If Duke or its predecessor were under the impression that this contract**
7 were a public interest obligation to be funded by ratepayers, that designation and
8 application should have occurred in 2004, when the contract clearly no longer
9 provided service to the Department of Energy (“all [DOE] obligations were
10 settled at that time”),⁶⁸ and the Company had an opportunity to change the terms
11 of the contract and exit the contract if necessary. The Company chose none of
12 those options.

13 Mr. Fetter claims that “approval [of Rider PSR] would respect the altruistic intent
14 underlying entry into the OVEC commitment,”⁶⁹ thereby implying that the ICPA
15 has always been a public interest undertaking, rather than an entrepreneurial
16 venture. Again, Mr. Fetter creates a logical error: had the Company’s interest in
17 the ICPA truly been in the public interest, the contract should have been vetted by
18 the Commission in 2004 and 2011 and any resulting benefits ascribed to
19 ratepayers. Mr. Fetter’s claim that the contract has always been on behalf of
20 ratepayers suggests that the Company prior withheld a public interest venture, and
21 has deferred revenues properly due Duke’s ratepayers. Mr. Fetter, however,
22 chooses a lopsided accounting and fails to recommend that the Company return to
23 ratepayers any improperly held regulatory liabilities. Mr. Fetter also failed to
24 recommend that ratepayers be provided the opportunity to review or reject the
25 contract or its obligations, as would have been their due for an asset held in the
26 public interest.

⁶⁷ Fetter Direct Testimony, page 13, line 23 through page 14, line 4.

⁶⁸ OVEC 2017 FERC Form 1, page 123.2

⁶⁹ Fetter Direct Testimony, page 16, lines 11-13.

1 **Q Are you recommending that the Commission require Duke to create a**
2 **regulatory liability tracker for prior revenues not distributed from 2004 to**
3 **2017?**

4 **A No.** I do not suggest that the Commission go back to 2004 and assess the value of
5 the ICPA at that time. I offer this counter-factual regulatory history to show to
6 extent to which Mr. Fetter’s OVEC’s history is incomplete.

7 OVEC was created as a single purpose entity to power a federal program during
8 the Cold War. Duke’s predecessor participated in that process, and was fairly
9 compensated through an agreement with the Atomic Energy Commission and
10 later the Department of Energy and its vendors. Once that contract ended in 2003,
11 all federal obligations were accounted for at that time. Duke’s predecessor was
12 provided an opportunity to exit or sell that contract, but chose to retain its
13 ownership fraction as a speculative private venture. Today, the ICPA is simply an
14 inconvenient liability for the shareholders of the Sponsoring Companies.

15 **6. THE COMMISSION’S DECISION ON RIDER PSR IS INDEPENDENT OF PRIOR**
16 **DECISIONS FOR OTHER DISTRIBUTION UTILITIES**

17 **Q Company witness Mr. Wathen states that “because [AEP Ohio and Dayton**
18 **Power & Light] are similarly impacted by participating in the ICPA, it is**
19 **important, in the interest of fairness and equity, that the Commission treat**
20 **each EDU in a similar manner from a regulatory and cost recovery**
21 **perspective.”⁷⁰ Is he right?**

22 **A No.** The Commission makes decisions based on the best possible information
23 available at the time of its decision, irrespective of prior decisions. At the time the
24 Commission assessed the Dayton Power & Light and AEP Ohio ICPA recovery
25 riders in 2016 and 2017, respectively, the Commission decided that they were in

⁷⁰ Wathen Second Supplemental Testimony, page 21, lines 3-9.

1 the interest of ratepayers. Presented with new evidence and new information, the
2 Commission can and should come to an independent decision in this case.

3 It is clear from the extensive evidentiary record in this case that Rider PSR is not
4 in the best interests of ratepayers, and [REDACTED] in the
5 period since Duke's initial application. Mr. Rose testifies that in just the last
6 several months, his forecasted natural gas prices have gone down,⁷¹ [REDACTED]
7 [REDACTED] In much the same way that if the
8 Commission were evaluating two identical capital projects, staggered by a year,
9 the first project might pan out based on forward-looking data at the time, while
10 the second project might fail the same test conducted a year later. No "fairness" or
11 "equity" test should force the Commission to require ratepayers absorb
12 unreasonable costs.

13 **7. COMMISSION'S CONSIDERATIONS OF DUKE'S CREDIT RATINGS SHOULD BE**
14 **ADDRESSED SEPARATELY FROM RIDER PSR**

15 **Q Mr. Fetter claims that Duke's credit ratings, and thus the cost of capital**
16 **available to the Company, are at risk if the Commission rejects Rider PSR.**
17 **Do you agree?**

18 **A** No. First, Mr. Fetter commits a deep logical error by characterizing the rejection
19 of Rider PSR as the straw that breaks the camel's back, and incorrectly burdens
20 this singular decision amongst the numerous other factors governing Duke's
21 credit ratings. Second, Mr. Fetter fails to provide any evidence that the public
22 interest is served better through the support or improvement of the Company's
23 credit ratings than through the rejection of the ICPA, a key threshold question
24 under his thesis. Finally, the notion that the Commission's primary objective
25 should be to support utility financial metrics at an unabated cost to the public
26 interest is antithetical to purpose and authority of the Commission.

⁷¹ Rose Supplemental Testimony, page 5, lines 20-22.

1 The Commission has the ability, and responsibility, to authorize returns sufficient
2 to attract capital and minimize ratepayer costs, but Mr. Fetter's singular focus on
3 the impact of a Rider PSR approval decision on credit ratings inappropriately
4 convolves a prudency determination and the utility's requirement for solvency. If
5 the Commission wishes to address Duke's credit ratings at all, I would
6 recommend that the Commission open a separate docket with the specific intent
7 of developing regulatory policy towards evaluating Duke's credit ratings.

8 **Q What is Mr. Fetter's logical error with respect to the impact of Rider PSR?**

9 **A** Mr. Fetter discusses two factors that he believes could lead to a downgrade of
10 Duke, the rejection of Rider PSR and the impact of the Tax Cuts and Jobs Act of
11 2017 ("tax reform"). However, he makes the Commission's OVEC decision in
12 this case the exclusive factor that would degrade the Company's credit rating.
13 Specifically, he states:

14 The bottom line is that rejection of the proposed settlement and
15 Rider PSR, exacerbated by negative impacts from tax reform,
16 would likely bring Duke Energy Ohio's cash flow measures below
17 the 19% level. That factor, along with the perception of a less
18 supportive regulatory environment, would likely lead Moody's to
19 initiate a review for downgrade of the Company's "Baal" rating.⁷²

20 Mr. Fetter has no way of knowing, nor has he quantified the joint or independent
21 impacts of tax reform and Rider PSR on the Company's credit ratings. Mr. Fetter
22 provides no evidence to suggest that Duke's credit ratings would not degrade
23 under tax reform alone, or would degrade if Rider PSR is rejected in the absence
24 of tax reform.

25 The Moody's report cited by Mr. Fetter is from August 2017, before the passage
26 of the 2017 tax reform bill, and does not reference any potential impacts of a

⁷² Fetter Direct Testimony, page 13, lines 7-12.

1 corporate tax reduction. However the Moody's report from January 2018, cited by
2 Mr. Fetter, explicitly discusses the impact of the tax reform on the utility sector,
3 and calls out "twelve electric utilities with weakened, or weakening, financial
4 profiles due to tax reform."⁷³ As Mr. Fetter points out, Duke Energy Corporation
5 is one of a few utilities specifically identified as having a negative outlook due to
6 tax reform alone. Mr. Fetter's logical error is that he ascribes the Company's
7 credit risk to the Commission's actions with respect to Rider PSR, rather than the
8 multitude of other factors that affect ratings, despite evidence to the contrary.

9 **Q Does the Commission have the opportunity to mitigate the impact of the tax**
10 **reform act?**

11 **A** Yes. The Commission could elect to set Duke's rates such that the excess
12 revenues collected as an outcome of tax reform are recycled toward productive
13 use within the Company, such as the reduction of debt or construction of key
14 infrastructure, thereby mitigating the pre-tax cash-flow shortfall identified by
15 Moody's as an outcome of tax reform. Mr. Fetter makes no recommendations to
16 otherwise mitigate credit issues.

17 **Q Mr. Fetter states that the "regulatory support" provided by passage of Rider**
18 **PSR "accrues to the benefit of both Duke Energy Ohio customers and**
19 **investors."**⁷⁴ **Did Mr. Fetter demonstrate that customers are benefitted**
20 **through the passage of Rider PSR?**

21 **A** No, not at all. Mr. Fetter provides a hypothesis, but fails to test his hypothesis or
22 otherwise support his theory. Mr. Fetter's statement can be broken into three
23 independent hypotheses, none of which were tested or quantified by Mr. Fetter.

24 1. By rejecting Rider PSR, the Commission will independently push Duke
25 Energy Ohio from a credit rating of "Baa1" to "Baa2."

⁷³ Moody's, "Tax reform is credit negative for sector, but impact varies by company," January 24, 2018, Exhibit JIF-14.

⁷⁴ Fetter Direct Testimony, page 16, lines 13-17.

1 2. That a credit rating of Baa2 would substantially increase the cost of borrowing
2 over a sustained period.

3 3. That the benefits to ratepayers of maintaining a “Baa1” rating are greater than
4 the net ratepayer losses of accepting Rider PSR.

5 Answering these three questions definitively, or at least convincingly, is a
6 minimum threshold question for Mr. Fetter, but he addresses none of them. The
7 evidentiary record indicates that absorbing Rider PSR will cost ratepayers at least
8 \$77 million with no hedge benefit. In contrast, we have no evidence that the
9 rejection of Rider PSR would lead to credit rating outcomes that would degrade
10 ratepayer costs by any value, much less \$77 million. Mr. Fetter simply failed to
11 do the math, and in fact performed no calculations to support his credit rating
12 theory.⁷⁵

13 **Q What role does Mr. Fetter’s imply for the Commission with respect to a**
14 **utility’s credit ratings?**

15 **A**Mr. Fetter appears to be of the opinion that the Commission is fettered by the
16 credit ratings of the utility it regulates, to the detriment of making reasonable
17 decisions. In reality, the Commission bears an obligation to ensure that investor-
18 owned utilities are afforded the opportunity for a reasonable return and have a
19 return sufficient to attract new capital as needed. However, the Commission is
20 under no obligation to approve all utility proposals for the purpose of satisfying
21 investors.

22 Following Mr. Fetter’s logic, this form of financial sector leverage over the
23 Commission has no reasonable end point and degrades, or completely absorbs, the
24 regulatory authority of the Commission. In a world where credit scores have
25 primacy, a regulated utility is free to make decisions as it sees fit, irrespective of

⁷⁵ Refer to Mr. Fetter’s responses to SIERRA-POD-02-008 and SIERRA-INT-02-013 and 014, Exhibits JIF-15 and Exhibit JIF-16, respectively.

1 the public's interest, as long as the Commission later provides "supportive
2 treatment." For example, in the extreme case, Mr. Fetter's view allows that a
3 utility may make a deeply non-economic or inappropriately high-risk investment,
4 and yet would still expect a return on that investment. In this hypothetical, an
5 evidentiary record would show that the investment was imprudent and should be
6 removed from rates, but the Commission is informed that such a decision impairs
7 credit ratings and thus cannot be disallowed. Mr. Fetter's treatment provides
8 neither for logic nor balance. While credit ratings are informative for the impacts
9 of regulatory decisions, I do not believe they should be the foundation underlying
10 those decisions.

11 **Q Do you have any recommendations with respect to the treatment of credit**
12 **ratings for Duke?**

13 **A** Given Duke's stated concerns about its credit ratings, and its assertion that its
14 credit is a key component of public interest, I recommend that the Commission—
15 if it agrees that Duke's credit ratings are a concern—consider either a special-
16 purpose docket or the Company's general rate case to explore this issue and
17 develop a regulatory framework for the assessment and treatment of Duke's credit
18 ratings. If it proceeds, this docket should separate from the instant proceedings,
19 such that the proposed Rider PSR can be assessed on its own merits. I recommend
20 that if pursued, the docket seek to answer the following questions:

- 21 1. Can credit risk be quantified, and if so, how should the Commission assess the
22 impact of specific decisions on credit risk?
- 23 2. How should the Commission balance credit risk with other ratepayer costs or
24 benefits when making specific decisions?
- 25 3. What tools or mechanisms are available to the Commission to protect utility
26 credit ratings if necessary, and under what circumstances should they be
27 employed?

1 4. How can the Commission assure that any interventions to protect Duke's
2 credit rating are cost-effective?

3 As one outcome of such a proceeding, the Commission may, in fact, decide that
4 rate adjustments are warranted to improve credit metrics, and that such an
5 adjustment provides a net benefit to Duke's ratepayers. However, that type of
6 reasoned adjustment should be separated from the Commission's decision on
7 Rider PSR and other specific decisions, and should be undertaken, if at all, in a
8 holistic manner.

9 **8. DUKE RATEPAYERS SHOULD NOT BE TREATED AS MERCHANT PROVIDERS**

10 **Q Do you have any concluding thoughts with respect to the structure of Rider**
11 **PSR and its impacts on Duke's ratepayers?**

12 **A**Yes. Rider PSR seeks to pass the full costs of the ICPA—minus any revenues
13 resulting from the ICPA—onto customers, which has the net effect of turning the
14 customers into effectively merchant owners of OVEC, with none of the
15 protections that would otherwise be afforded to either merchant owners or rate-
16 regulated customers. In re-signing the ICPA in 2004 and 2011, Duke Energy Ohio
17 set out into a private venture, outside of the authorization of the Commission and
18 without notice or input from consumers. That venture was a bet made by Duke on
19 behalf of shareholders, and represents a risk taken that is deeply problematic on a
20 number of fronts. Duke should not be afforded the opportunity to offload this
21 private venture onto ratepayers. Duke's ratepayers should not be treated as
22 merchant power plant owners, out to make bets on the future of the electric
23 market—much less be set up with a deeply undesirable contract under the false
24 pretense of a “hedge.”

25 **Q Are there any other problems with Rider PSR that warrant comment?**

26 **A**Yes. There are several issues aside from the fundamentals that must be addressed.

1 First, Rider PSR seeks to encumber Duke's ratepayers with generation revenue
2 and costs acquired outside of the competitive standard offer of service ("SSO"),
3 and undermines the separation of generation assets and distribution service
4 required under Ohio's competitive retail electric structure.

5 Second, the majority of the stipulation "conditions" offered by the Company that
6 purport to protect Duke's customers from Rider PSR are effectively meaningless
7 and provide no balance (i.e., do not accrue an incremental benefit to ratepayers).
8 These conditions are listed on page 19 of the Stipulation.

9 **Q Why are the conditions on Rider PSR in the Stipulation meaningless?**

10 **A** I address four of six conditions that provide no protection or balance.

11 First, the Stipulation states that OVEC costs related to "forced outages exceeding
12 ninety consecutive days shall not be recovered via Rider PSR," and defines such
13 forced outages as one in "which no kWhs are delivered by OVEC to [Duke]."
14 This provision provides no meaningful protection to Duke's customers because
15 the likelihood that all 11 OVEC's coal-fired units would be simultaneously forced
16 out of service for 90 days—and thus provide zero kWhs to Duke—is extremely
17 low.⁷⁶ As a performance guarantee, this condition is nearly useless, absent a
18 catastrophic occurrence that impacted both OVEC plants 180 miles away from
19 each other.

20 Second, the Stipulation provides that Duke "shall be subject to an annual
21 prudence review of its practices liquidating its contractual entitlements under the
22 ICPA in the wholesale market." This provision offers no meaningful protection

⁷⁶ To quantify that likelihood, a 90-day outage at a single unit would be equivalent to a 24 percent forced outage rate. Forced outages are considered random on a prospective basis, and unless triggered by a catastrophic event should in all likelihood be uncorrelated between all 11 units. In order for this condition to even have a one percent chance of occurring in the remaining 6.5 years of the Rider PSR, each of the 11 units would have to have a 50/50 chance of going out of service for 90 days every year. ($55\%^{11} \times 6.5 = 1\%$). In order for this condition to be meaningful, Duke would have to have the expectation that the units are nearly guaranteed (80%) to go offline for 90 days or more every year, which is a terrible performance guarantee.

1 for customers either, because the Commission would audit Duke’s sales practices
2 only—not the underlying OVEC costs or OVEC’s operations. Duke’s ability to
3 sell the power procured from OVEC on the wholesale market is not at issue, but
4 the expenditures incurred at OVEC are. However, Duke has no control over
5 OVEC,⁷⁷ so any of OVEC’s imprudent decisions and operations would be passed
6 to Duke’s customers unabated, regardless of this condition. There is no
7 meaningful prudence review that the Commission could undertake with respect to
8 Duke that would impact OVEC’s costs or operations.

9 Third, the Stipulation provides that “credits or charges shall be based on the
10 difference between prudently incurred costs and the revenues from liquidating
11 Duke Energy Ohio’s OVEC entitlement in PJM’s capacity, energy and ancillary
12 services market.” Like the bullet referenced above, Duke’s ability to sell energy
13 on the wholesale market as required is unlikely at issue: the costs and operations
14 of OVEC are not under Duke’s control, and Duke is charged with simply selling
15 the energy provided by OVEC. There is no prudence review of OVEC’s
16 operations or costs.

17 Finally, the Stipulation purports to provide that the Duke shall make “reasonable”
18 efforts to transfer its entitlement under the ICPA. This condition also has no real
19 meaning because Duke is already under an obligation to divest from OVEC, and
20 has failed to do so. If Rider PSR is approved, Duke would have no incentive to
21 seek to transfer its ICPA share—in fact, the value of that share would be
22 dramatically lower for an entity that did not have guaranteed cost recovery as
23 provided via Rider PSR.

24 The conditions purported to protect ratepayers are not meaningful and should be
25 rejected as such.

⁷⁷ Commission Order in Case No. 14-841-EL-SSO, April 2015, page 34.

1 **Q** **Does this conclude your testimony?**

2 **A** It does.

EXHIBIT JIF-01

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Consulting on economic analysis of climate change and energy, carbon, and emissions policies. Developed successful clean energy regulatory strategy. Provides detailed technical and strategic analysis on behalf of public interest groups in US. Provides training to regulators on best practices in energy system planning. Develops quantitative evaluations of regional climate change impact, long- and short-term electric industry planning, carbon reduction strategies, and emissions compliance programs. Lead investigator on avoided emissions tool (AVERT) for US EPA; collaborator on health benefits assessments.

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Modeled carbon balance in forest ecosystems through satellite data and dynamic models. Developed new techniques to assess large-scale forest morbidity and mortality. Tracking impacts of Hurricane Katrina (US Gulf Coast) and large-scale disturbances in Amazon basin. (Brazil).

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Tracked impact of climate change on New England forests from satellites. Worked with West African communities to determine impact of climate change and practice on landscape. Modeled coastal power plant effluent from satellite data.

FELLOWSHIPS & AWARDS

- *Visiting Fellow*, Watson Institute for International Studies, Brown University, 2007
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REPORTS

Fisher, J. 2017. Sierra Club Preliminary and Reply Comments on PacifiCorp's 2017 Integrated Resource Plan. Synapse Energy Economics for Sierra Club.

Fisher J. Allison, A. 2017. Sierra Club Comments on Tucson Electric Power's 2017 Integrated Resource Plan. Synapse Energy Economics for Sierra Club.

Allison, A., **J. Fisher.** 2017. Sierra Club Comments on Arizona Public Service Company's 2017 Integrated Resource Plan. Synapse Energy Economics for Sierra Club.

Fisher, J. 2017. *Chasing the Elusive Benefits of Navajo Generating Station: A Review of Peabody & Navigant's Navajo Economic Assessment*. Prepared for Sierra Club, May 2, 2017

Fisher, J. and A. I. Horowitz. 2016. *Expert Report: State of PREPA's System, Load Forecast, Capital Budget, Fuel Budget, Purchased Power Budget, Operations Expense Budget*. Prepared for the Puerto Rico Energy Commission regarding Matter No. CEPR-AP-2015-0001, November 23, 2016.

Fisher, J., P. Luckow, A. Horowitz, T. Comings, A. Allison, E.A. Stanton, S. Jackson, K. Takahashi. 2016. *Michigan Compliance Assessment for the Clean Power Plan: MPSC/MDEQ EPA 111(d) Impact Analysis*. Prepared for Michigan Public Service Commission, Michigan Department of Environmental Quality, and Michigan Agency for Energy.

Comings, T., S. Jackson, **J. Fisher.** 2016. *The Economic Case for Retiring North Valmy Generating Station*. Synapse Energy Economics for Sierra Club.

Fisher, J., A. Horowitz, J. Migden-Ostrander, T. Woolf. 2016. *Puerto Rico Electric Power Authority's 2015 Integrated Resource Plan*. Prepared for Puerto Rico Energy Commission.

Luckow, P., E.A. Stanton, S. Fields, W. Ong, B. Biewald, S. Jackson, **J. Fisher.** 2016. *Spring 2016 National Carbon Dioxide Price Forecast*. Synapse Energy Economics.

Fisher, J., N. Santen, P. Luckow, F. De Sisternes, T. Levin, A. Botterud. 2016. *A Guide to Clean Power Plan Modeling Tools: Analytical Approaches for State Plan CO₂ Performance Projections*. Prepared by Synapse Energy Economics and Argonne National Library.

Jackson, S., **J. Fisher,** B. Fagan, W. Ong. 2016. *Beyond the Clean Power Plan: How the Eastern Interconnection Can Significantly Reduce CO₂ Emissions and Maintain Reliability*. Prepared by Synapse Energy Economics for the Union of Concerned Scientists.

Fisher, J., R. DeYoung, N. R. Santen. 2015. *Assessing the Emission Benefits of Renewable Energy and Energy Efficiency Using EPA's Avoided Emissions and generation Tool (AVERT)*. Prepared for 2015 International Emission Inventory Conference.

Fisher, J., P. Luckow, N. R. Santen. 2015. *Review of the Use of the System Optimizer Model in PacifiCorp's 2015 IRP*. Synapse Energy Economics for Sierra Club, Western Clean Energy Campaign, Powder River Basin Resource Council, Utah Clean Energy, and Idaho Conservation League.

- Fisher, J.**, T. Comings, F. Ackerman, S. Jackson. 2015. *Clearing Up the Smog: Debunking Industry Claims that We Can't Afford Healthy Air*. Synapse Energy Economics for Earthjustice.
- Biewald, B., J. Daniel, **J. Fisher**, P. Luckow, A. Napoleon, N. R. Santen, K. Takahashi. 2015. *Air Emissions Displacement by Energy Efficiency and Renewable Energy*. Synapse Energy Economics.
- Takahashi, K., **J. Fisher**, T. Vitolo, N. R. Santen. 2015. *Review of TVA's Draft 2015 Integrated Resource Plan*. Synapse Energy Economics for Sierra Club.
- Luckow, P., E. A. Stanton, S. Fields, B. Biewald, S. Jackson, **J. Fisher**, R. Wilson. 2015. *2015 Carbon Dioxide Price Forecast*. Synapse Energy Economics.
- Vitolo, T., **J. Fisher**, J. Daniel. 2015. *Dallman Units 31/32: Retrofit or Retire?* Synapse Energy Economics for the Sierra Club.
- Vitolo, T., **J. Fisher**, K. Takahashi. 2014. *TVA's Use of Dispatchability Metrics in Its Scorecard*. Synapse Energy Economics for Sierra Club.
- Luckow, P., E. A. Stanton, B. Biewald, S. Fields, S. Jackson, **J. Fisher**, F. Ackerman. 2014. *CO₂ Price Report, Spring 2014: Includes 2013 CO₂ Price Forecast*. Synapse Energy Economics.
- Daniel, J., T. Comings, **J. Fisher**. 2014. *Comments on Preliminary Assumptions for Cleco's 2014/2015 Integrated Resource Plan*. Synapse Energy Economics for Sierra Club.
- Fisher, J.**, T. Comings, and D. Schlissel. 2014. *Comments on Duke Energy Indiana's 2013 Integrated Resource Plan*. Synapse Energy Economics and Schlissel Consulting for Mullet & Associates, Citizens Action Coalition of Indiana, Earthjustice, and Sierra Club.
- Fisher, J.**, P. Knight, E. A. Stanton, and B. Biewald. 2014. *Avoided Emissions and Generation Tool (AVERT): User Manual*. Version 1.0. Synapse Energy Economics for the U.S. Environmental Protection Agency.
- Luckow, P., E. A. Stanton, B. Biewald, **J. Fisher**, F. Ackerman, E. Hausman. 2013. *2013 Carbon Dioxide Price Forecast*. Synapse Energy Economics.
- Knight, P., E. A. Stanton, **J. Fisher**, B. Biewald. 2013. *Forecasting Coal Unit Competitiveness: Coal Retirement Assessment Using Synapse's Coal Asset Valuation Tool (CAVT)*. Synapse Energy Economics for Energy Foundation.
- Takahashi, K., P. Knight, **J. Fisher**, D. White. 2013. *Economic and Environmental Analysis of Residential Heating and Cooling Systems: A Study of Heat Pump Performance in U.S. Cities*. Proceeding of the 7th International Conference on Energy Efficiency in Domestic Appliances and Lighting (EEDAL'13), September 12, 2013.
- Fagan, R., **J. Fisher**, B. Biewald. 2013. *An Expanded Analysis of the Costs and Benefits of Base Case and Carbon Reduction Scenarios in the EIPC Process*. Synapse Energy Economics for the Sustainable FERC Project.
- Fisher, J.** *Sierra Club's Preliminary Comments on PacifiCorp 2013 Integrated Resource Plan*. Oregon Docket LC 57. Synapse Energy Economics for Sierra Club.
- Fisher, J.**, T. Vitolo. 2012. *Assessing the Use of the 2011 TVA Integrated Resource Plan in the Retrofit Decision for Gallatin Fossil Plant*. Synapse Energy Economics for Sierra Club.
- Fisher, J.**, K. Takahashi. 2012. *TVA Coal in Crisis: Using Energy Efficiency to Replace TVA's Highly Non-Economic Coal Units*. Synapse Energy Economics for Sierra Club.

- Fisher J.**, S. Jackson, B. Biewald. 2012. *The Carbon Footprint of Electricity from Biomass: A Review of the Current State of Science and Policy*. Synapse Energy Economics.
- Fisher, J.**, C. James, N. Hughes, D. White, R. Wilson, and B. Biewald. 2011. *Emissions Reductions from Renewable Energy and Energy Efficiency in California Air Quality Management Districts*. Synapse Energy Economics for California Energy Commission.
- Fisher, J.**, F. Ackerman. 2011. *The Water-Energy Nexus in the Western States: Projections to 2100*. Synapse Energy Economics for Stockholm Environment Institute.
- Averyt, K., **J. Fisher**, A. Huber-Lee, A. Lewis, J. Macknick, N. Madden, J. Rogers, S. Tellinghuisen. 2011. *Freshwater use by US power plants: Electricity's thirst for a precious resource*. Union of Concerned Scientists for the Energy and Water in a Warming World Initiative.
- White, D. E., D. Hurley, **J. Fisher**. 2011. *Economic Analysis of Schiller Station Coal Units*. Synapse Energy Economics for Conservation Law Foundation.
- Fisher, J.**, R. Wilson, N. Hughes, M. Wittenstein, B. Biewald. 2011. *Benefits of Beyond BAU: Human, Social, and Environmental Damages Avoided Through the Retirement of the US Coal Fleet*. Synapse Energy Economics for Civil Society Institute.
- Fisher, J.**, B. Biewald. 2011. *Environmental Controls and the WECC Coal Fleet: Estimating the forward-going economic merit of coal-fired power plants in the West with new environmental controls*. Synapse Energy Economics for Energy Foundation and Western Grid Group.
- Hausman, E., V. Sabodash, N. Hughes, **J. Fisher**. 2011. *Economic Impact Analysis of New Mexico's Greenhouse Gas Emissions Rule*. Synapse Energy Economics for New Energy Economy.
- Fisher, J.** 2011. *A Green Future for Los Angeles Department of Water and Power: Phasing out Coal in LA by 2020*. Synapse Energy Economics for Sierra Club.
- Fisher, J.**, J. Levy, Y. Nishioka, P. Kirshen, R. Wilson, M. Chang, J. Kallay, C. James. 2010. *Co-Benefits of Energy Efficiency and Renewable Energy in Utah: Air Quality, Health and Water Benefits*. Synapse Energy Economics, Harvard School of Public Health, Tufts University for State of Utah Energy Office.
- Biewald, B., D. White, **J. Fisher**, M. Chang, L. Johnston. 2009. *Incorporating Carbon Dioxide Emissions Reductions in Benefit Calculations for Energy Efficiency: Comments on the Department of Energy's Methodology for Analysis of the Proposed Lighting Standard*. Synapse Energy Economics for the New York Office of Attorney General.
- Hausman, E., **J. Fisher**, L.A. Mancinelli, B. Biewald. 2009. *Productive and Unproductive Costs of CO₂ Cap-and-Trade: Impacts on Electricity Consumers and Producers*. Synapse Energy Economics for the National Association of Regulatory Utility Commissioners, The National Association of State Utility Consumer Advocates (NASUCA), The National Rural Electric Cooperative Association (NRECA), The American Public Power Association (APPA).
- Biewald, B., **J. Fisher**, C. James, L. Johnston, D. Schlissel, R. Wilson. 2009. *Energy Future: A Green Energy Alternative for Michigan*. Synapse Energy Economics for Sierra Club.
- James, C., **J. Fisher**, K. Takahashi. 2009. "Energy Supply and Demand Sectors." *Alaska Climate Change Strategy's Mitigation Advisory Group Final Report: Greenhouse Gas Inventory and Forecast and Policy Recommendations Addressing Greenhouse Gas Reduction in Alaska. Submitted to the Alaska Climate Change Sub-Cabinet*. Synapse Energy Economics for the Center for Climate Strategies.

- James, C., **J. Fisher**, K. Takahashi, B. Warfield. 2009. *No Need to Wait: Using Energy Efficiency and Offsets to Meet Early Electric Sector Greenhouse Gas Targets*. Synapse Energy Economics for Environmental Defense Fund.
- James, C., **J. Fisher**. 2008. *Reducing Emissions in Connecticut on High Electric Demand Days (HEDD)*. Synapse Energy Economics for the Connecticut Department of Environmental Protection and the US Environmental Protection Agency.
- Napoleon, A., **J. Fisher**, W. Steinhurst, M. Wilson, F. Ackerman, M. Resnikoff. 2008. *The Real Costs of Cleaning up Nuclear Waste: A Full Cost Accounting of Cleanup Options for the West Valley Nuclear Waste Site*. Synapse Energy Economics et al.
- James, C., F. Fisher. 2008. *Reducing Emissions in Connecticut on High Electric Demand Days (HEDD)*. Synapse Energy Economics for the CT Department of Environmental Protection and the U.S. Environmental Protection Agency.
- Hausman, E., **J. Fisher**, B. Biewald. 2008. *Analysis of Indirect Emissions Benefits of Wind, Landfill Gas, and Municipal Solid Waste Generation*. Synapse Energy Economics for US. Environmental Protection Agency.
- Schlissel, D., **J. Fisher**. 2008. *A preliminary analysis of the relationship between CO₂ emission allowance prices and the price of natural gas*. Synapse Energy Economics for Energy Foundation.

PEER-REVIEWED ARTICLES

- Buonocore, J. J., P. Luckow, **J. Fisher**, W. Kempton, J. I. Levy. 2016. "Health and climate benefits of offshore wind facilities in the Mid-Atlantic United States." *Environmental Research Letters*, 11 (2016) 074019. doi: 10.1088/1748-9326/11/7/074019
- Buonocore, J. J., P. Luckow, G. Norris, J. D. Spengler, B. Biewald, **J. Fisher**, J. I. Levy. 2015. "Health and climate benefits of different energy-efficiency and renewable energy choices." *Nature Climate Change*, August 2015: doi:10.1038/nclimate2771.
- Ackerman, F., **J.I. Fisher**. 2013. "Is there a water–energy nexus in electricity generation? Long-term scenarios for the western United States." *Energy Policy*, August: 235–241.
- Averyt, K., J. Macknick, J. Rogers, N. Madden, **J. Fisher**, J.R. Meldrum, and R. Newmark. 2012. "Water use for electricity in the United States: An analysis of reported and calculated water use information for 2008." *Environmental Research Letters*. In press (accepted Nov. 2012).
- Morisette, J. T., A. D. Richardson, A. K. Knapp, **J.I. Fisher**, E. Graham, J. Abatzoglou, B.E. Wilson, D. D. Breshears, G. M. Henebry, J. M. Hanes, and L. Liang. 2009. "Tracking the rhythm of the seasons in the face of global change: Challenges and opportunities for phenological research in the 21st Century." *Frontiers in Ecology* 7 (5): 253–260.
- Biewald, B., L. Johnston, **J. Fisher**. 2009. "Co-benefits: Experience and lessons from the US electric sector." *Pollution Atmosphérique*, April 2009: 113-120.
- Fisher, J.I.**, G.C. Hurtt, J.Q. Chambers, Q. Thomas. 2008. "Clustered disturbances lead to bias in large-scale estimates based on forest sample plots." *Ecology Letters* 11 (6): 554–563.
- Chambers, J.Q., **J.I. Fisher**, H. Zeng, E.L. Chapman, D.B. Baker, and G.C. Hurtt. 2007. "Hurricane Katrina's Carbon Footprint on US Gulf Coast Forests." *Science* 318 (5853): 1107. DOI: 10.1126/science.1148913.
- Fisher, J.I.**, A.D. Richardson, and J.F. Mustard. 2007. "Phenology model from surface meteorology does not capture satellite-based greenup estimations." *Global Change Biology* 13:707–721.

- Fisher, J.I., J.F. Mustard.** 2007. "Cross-scalar satellite phenology from ground, Landsat, and MODIS data." *Remote Sensing of Environment* 109:261–273.
- Fisher, J.I., J.F. Mustard, and M. Vadeboncoeur.** 2006. "Green leaf phenology at Landsat resolution: Scaling from the field to the satellite." *Remote Sensing of Environment* 100 (2): 265–279.
- Fisher, J.I., J.F. Mustard.** 2004. "High spatial resolution sea surface climatology from Landsat thermal infrared data." *Remote Sensing of Environment* 90:293–307.
- Fisher, J.I., J. F. Mustard, and P. Sanou.** 2004. "Policy imprints in Sudanian forests: Trajectories of vegetation change under land management practices in West Africa." *Submitted, International Remote Sensing*.
- Fisher, J.I., S.J. Goetz.** 2001. "Considerations in the use of high spatial resolution imagery: an applications research assessment." Proceedings at the American Society for Photogrammetry and Remote Sensing (ASPRS) Conference in St. Louis, MO.

SELECTED ABSTRACTS

- Fisher, J.I.,** "Phenological indicators of forest composition in northern deciduous forests." *American Geophysical Union*. San Francisco, CA. December 2007.
- Fisher, J.I., A.D. Richardson, and J.F. Mustard.** "Phenology model from weather station meteorology does not predict satellite-based onset." *American Geophysical Union*. San Francisco, CA. December 2006.
- Chambers, J., **J.I. Fisher**, G. Hurtt, T. Baker, P. Camargo, R. Campanella, *et al.*, "Charting the Impacts of Disturbance on Biomass Accumulation in Old-Growth Amazon Forests." *American Geophysical Union*. San Francisco, CA. December 2006.
- Fisher, J.I., A.D. Richardson, and J.F. Mustard.** "Phenology model from surface meteorology does not capture satellite-based greenup estimations." *American Geophysical Union. Eos Trans.* 87(52). San Francisco, CA. December 2006.
- Fisher, J.I., J.F. Mustard, and M. Vadeboncoeur.** "Green leaf phenology at Landsat resolution: scaling from the plot to satellite." *American Geophysical Union. Eos Trans.* 86(52). San Francisco, CA. December 2005.
- Fisher, J.I., J.F. Mustard.** "Riparian forest loss and landscape-scale change in Sudanian West Africa." *Ecological Association of America*. Portland, Oregon. August 2004.
- Fisher, J.I., J.F. Mustard.** "High spatial resolution sea surface climatology from Landsat thermal infrared data." *American Society for Photogrammetry and Remote Sensing (ASPRS) New England Region Technical Meeting*. Kingston, Rhode Island. November, 2004.
- Fisher, J.I., J.F. Mustard, and P. Sanou.** "Trajectories of vegetation change under controlled land-use in Sudanian West Africa." *American Geophysical Union. Eos Trans.* 85(47). San Francisco, CA. December 2004.
- Fisher, J.I., J.F. Mustard.** "Constructing a climatology of Narragansett Bay surface temperature with satellite thermal imagery." *The Rhode Island Natural History Survey Conference*. Cranston, RI. March, 2003.
- Fisher, J.I., J.F. Mustard.** "Constructing a high resolution sea surface climatology of Southern New England using satellite thermal imagery." *New England Estuarine Research Society*. Fairhaven, MA. May, 2003.

Fisher, J.I., J.F. Mustard. “High spatial resolution sea surface climatology from Landsat thermal infrared data.” *Ecological Society of America Conference*. Savannah, GA. August, 2003.

Fisher, J.I., S.J. Goetz. “Considerations in the use of high spatial resolution imagery: an applications research assessment.” *American Society for Photogrammetry and Remote Sensing (ASPRS) Conference Proceedings*, St. Louis, MO. March, 2001.

SEMINARS AND PRESENTATIONS

Fisher, J. 2015. “Planning for Clean Power Plan: Top Five Points for States.” Presentation at the National Governor’s Association Policy Academy on Clean Power Plan in Salt Lake City, UT, October 14, 2015.

Fisher, J. 2015. “Environmental Regulations in Integrated Resource Planning.” Presentation at EUCI Conference in Atlanta, GA, May 14, 2015.

Fisher, J.I., R. DeYoung. 2015. “EPA’s AVERT: Avoiding Emissions from the Electric Sector through Efficiency and Renewable Energy.” Presentation at the 18th Annual Energy, Utility & Environment Conference & Expo (EUEC2015) in San Diego, CA, February 17, 2015.

Fisher, J. 2014. “Planning in Vertically Integrated Utilities.” Presentation to the U.S. Environmental Protection Agency in Washington, DC, May 22, 2014.

Fisher, J. 2013. “IRP Best Practices Stakeholder Perspectives.” Presentation at Indiana Utility Regulatory Commission Emerging Issues in IRP conference. October 17, 2013.

Fisher, J., P. Knight. 2013. Avoided Emissions and Generation Tools (AVERT): An Introduction.” Presentation for EPA and various state departments of environmental quality/protection.

Takahashi, K., **J. Fisher.** 2013. “Greening TVA: Leveraging Energy Efficiency to Replace TVA’s Highly Uneconomic Coal Units.” Presentation at the ACEEE National Conference on Energy Efficiency as a Resource, September 23, 2013.

Fisher, J. 2011. “Emissions Reductions from Renewable Energy and Energy Efficiency in California Air Districts.” Presentation for EPA State Climate and Energy Program, June 14, 2011.

Fisher, J., B. Biewald. 2011. “WECC Coal Plant Retirement Based On Forward-Going Economic Merit.” Presentation for Western Grid Group, January 10, 2011.

Fisher, J. 2010. “Protecting Electricity and Water Consumers in a Water-Constrained World.” Presentation to the National Association of State Utility Consumer Advocates, November 16, 2010.

James, C., **J. Fisher**, D. White, and N. Hughes. 2010. “Quantifying Criteria Emissions Reductions in CA from Efficiency and Renewables.” CEC / PIER Air Quality Webinar Series, October 12, 2010.

Fisher, J. 2008. “Climate Change, Water, and Risk in Electricity Planning.” Presentation at National Association of Regulatory Utility Commissioners (NARUC) Conference in Portland, OR, July 22, 2008.

Fisher, J., E. Hausman, and C. James. 2008. “Emissions Behavior in the Northeast from the EPA Acid Rain Monitoring Dataset.” Presentation at Northeast States for Coordinated Air Use Management (NESCAUM) conference in Boston, MA, January 30, 2008.

Fisher, J.I., J.F. Mustard, and M. Vadeboncoeur. 2006. “Climate and phenological variability from satellite data. Ecology and Evolutionary Biology,” Presentation at Tulane University, March 24, 2006.

Fisher, J.I., J.F. Mustard, and M. Vadeboncoeur. 2005. "Anthropogenic and climatic influences on green leaf phenology: new observations from Landsat data." Seminar presentation at the Ecosystems Center at the Marine Biological Laboratory in Woods Hole, MA, September 27, 2005.

Fisher, J.I., J.F. Mustard, "High resolution phenological modeling in Southern New England." Seminar at the Woods Hole Research Center in Woods Hole, MA, March 16, 2005.

EXPERT TESTIMONY

Mississippi Public Service Commission (Docket No. 2017-AD-112): Direct testimony regarding settlement with Mississippi Power Company on value of Kemper County Combined Cycle plant. On behalf of Sierra Club. October 23, 2017.

Utah Public Service Commission (Docket 14-035-114): Direct and surrebuttal testimonies in the investigation into the costs and benefits of PacifiCorp's proposed Net Metering program, with respect to long-term resource value and environmental benefits. On behalf of Heal Utah. June 8, 2017.

Indiana Utility Regulatory Commission (Cause No. 44872): Direct and rebuttal testimonies regarding Northern Indiana Public Service Company's application for a Certificate of Public Convenience and Necessity for environmental compliance projects at Schahfer units 14 & 15 and Michigan City unit 12. On behalf of Sierra Club. April 3, 2017.

Indiana Utility Regulatory Commission (Cause No. 44871): Direct and rebuttal testimonies regarding Indiana Michigan Company's application for a Certificate of Public Convenience and Necessity to install Selective Catalytic Reduction at Rockport Power Plant Unit 2. On behalf of Citizens Action Coalition of Indiana, Sierra Club, and Valley Watch. February 3, 2017.

Public Utilities Commission of Nevada (Docket Nos. 16-07001, 16-07007, and 16-08027): Direct testimony regarding the economic viability of the North Valmy coal plant. On behalf of Sierra Club. September 30, 2016.

California Public Utilities Commission (Docket 15-09-007): Direct testimony regarding PacifiCorp's application for authority to sell Utah mining assets on a post-hoc basis. On behalf of Sierra Club. July 11, 2016.

Washington Utilities and Transportation Commission (Docket UE-152253): Response, cross-answer, and supplementary cross-answer testimony regarding the general rate case on behalf of Pacific Power & Light Company. On behalf of Sierra Club. June 1, 2016.

Georgia Public Service Commission (Docket 40161): Direct testimony regarding Georgia Power Company's 2016 Integrated Resource Plan. On behalf of Sierra Club. May 18, 2016.

Oregon Public Utility Commission (Docket UM-1712): Direct testimony regarding PacifiCorp's application for approval of Deer Creek Mine transaction. On behalf of Sierra Club. March 5, 2015.

Oklahoma Corporation Commission (Case No. PUD 201400): Direct and rebuttal testimony comparing the modeling performed by Oklahoma Gas & Electric in support of its request for authorization and cost recovery of a Clean Air Act compliance plan and Mustang modernization against best practices in resource planning. On behalf of Sierra Club. December 16, 2014 and January 26, 2015.

New Mexico Public Regulation Commission (Case 12-00390-UT): Direct and surrebuttal testimony evaluating the economic modeling performed by Public Service Company of New Mexico in support of its application for certificate of public convenience and necessity for the acquisition of

San Juan Generating Station and Palo Verde units. On behalf of New Energy Economy. August 29, 2014; December 29, 2014.

Wyoming Public Service Commission (Docket No. 20000-446-ER-14): Direct testimony in the matter of the application of Rocky Mountain Power for authority to increase its retail electric utility service rates in Wyoming approximately \$36.1 million per year or 5.3 percent. On behalf of Sierra Club. July 25, 2014.

Indiana Utility Regulatory Commissions (Cause No. 44446): Direct testimony evaluating the economic modeling performed on behalf of Vectren South in support of its application for certificate of public convenience and necessity for various retrofits at Brown 1 & 2, Culley 3 and Culley plant, and Warrick 4. On behalf of Sierra Club, Citizens Action Coalition, and Valley Watch. May 28, 2014.

Utah Public Service Commission (Docket No. 13-035-184): Direct testimony In the matter of the application of Rocky Mountain Power for authority to increase its retail electric utility service rates in Utah and for approval of its proposed electric service schedules and electric service regulations. On behalf of Sierra Club. May 1, 2014.

Louisiana Public Service Commission (Docket No. U-32507): Direct and cross answering testimony regarding the application of Cleco Power LLC for: (i) authorization to install emissions control equipment at certain of its generating facilities in order to comply with the federal national emissions standards for hazardous air pollutants from coal and oil-fired electric steam units rule; and (ii) authorization to recover the costs associated with the emissions control equipment in jurisdictional rates. On behalf of Sierra Club. November 8, 2013 and December 9, 2013.

Nevada Public Utilities Commission (Docket No. 13-07021): Direct testimony regarding a joint application of Nevada Power Company d/b/a NV Energy, Sierra Pacific Power Company d/b/a NV Energy (referenced together as "NV Energy, Inc.") and MidAmerican Energy Holdings Company ("MidAmerican") for approval of a merger of NV Energy, Inc. with MidAmerican. On behalf of Sierra Club. October 24, 2013.

Indiana Utility Regulatory Commission (Cause No. 44339): Direct testimony in the matter of Indianapolis Power & Light Company's application for a Certificate of Public Convenience and Necessity for the construction of a combined cycle gas turbine generation facility. On behalf of Citizens Action Coalition of Indiana. August 22, 2013.

Indiana Utility Regulatory Commission (Cause No. 44242): Direct and surrebuttal testimony regarding Indianapolis Power & Light Company's petition for approval of clean energy projects and qualified pollution control property. On behalf of Sierra Club. January 28, 2013; April 3, 2013.

Wyoming Public Service Commission (Docket 2000-418-EA-12): Direct testimony regarding the application of PacifiCorp for approval of a certificate of public convenience and necessity to construct selective catalytic reduction systems on the Jim Bridger Units 3 and 4. On behalf of Sierra Club. February 1, 2013.

Public Service Commission of Wisconsin (Docket No. 6690-CE-197): Direct, rebuttal, and surrebuttal testimony regarding Wisconsin Public Service Corporation's application for authority to construct a multi-pollutant control technology system for Unit 3 of Weston Generating Station. On behalf of Clean Wisconsin. Direct testimony submitted November 15, 2012, rebuttal testimony submitted December 14, 2012, surrebuttal testimony submitted January 7, 2013.

Utah Public Service Commission (Docket 12-035-92): Direct, surrebuttal, and cross-answering testimony regarding Rocky Mountain Power's request for approval to construct Selective Catalytic Reduction systems at Jim Bridger units 3 and 4. On behalf of Sierra Club. November 30, 2012.

- Oregon Public Utility Commission (Docket UE 246):** Direct testimony in the matter of PacifiCorp's filing of revised tariff schedules for electric service in Oregon. On behalf of Sierra Club. June 20, 2012.
- Kentucky Public Service Commission (Docket 2011-00401):** Direct testimony regarding the application of Kentucky Power Company for approval of its 2011 environmental compliance plan, for approval of its amended environmental cost recovery surcharge tariff, and for the granting of a certificate of public convenience and necessity for the construction and acquisition of related facilities. On behalf of Sierra Club. March 12, 2012.
- Kentucky Public Service Commission (Dockets 2011-00161/2011-00162):** Direct testimony regarding the application of Kentucky Utilities/Louisville Gas and Electric Company for certificates of public convenience and necessity and approval of its 2011 compliance plan for recovery by environmental surcharge. On behalf of Sierra Club and Natural Resources Defense Council (NRDC). September 16, 2011.
- Kansas Corporation Commission (Docket 11-KCPE-581-PRE):** Direct testimony in the matter of the petition of Kansas City Power & Light (KCP&L) for determination of the ratemaking principles and treatment that will apply to the recovery in rates of the cost to be incurred by KCP&L for certain electric generating facilities under K.S.A. 66-1239. On behalf of Sierra Club. June 3, 2011.
- Utah Public Service Commission (Docket 10-035-124):** Direct testimony in the matter of the application of Rocky Mountain Power for authority to increase its retail electric utility service rates in Utah and approval of its proposal electric service schedules and electric service regulations. On behalf of Sierra Club. May 26, 2011.
- Wyoming Public Service Commission (Docket 20000-384-ER-10):** Direct testimony in the matter of the application of Rocky Mountain Power for authority to increase its retail electric utility rates in Wyoming approximately \$97.9 million per year or an average overall increase of 17.3 percent. On behalf of Powder River Basin Resource Council. April 11, 2011.

EXHIBIT JIF-02

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Ohio Valley Electric Corporation,)	
)	
Complainant,)	
)	Docket No. EL18-
v.)	
)	
FirstEnergy Solutions Corp.,)	
)	
Respondent.)	

**COMPLAINT OR, IN THE ALTERNATIVE,
REQUEST FOR DECLARATORY ORDER**

Pursuant to section 306 of the Federal Power Act (“FPA”)¹ and Rule 206 of the Federal Energy Regulatory Commission’s (“FERC” or the “Commission”) Rules of Practice and Procedure,² Ohio Valley Electric Corporation and its wholly-owned subsidiary, Indiana-Kentucky Electric Corporation (collectively, “OVEC”), respectfully submits this Complaint (“Complaint”) against FirstEnergy Solutions Corp. (“FirstEnergy”). FirstEnergy is a counterparty to the Inter-Company Power Agreement (“ICPA”)³, a long-term power supply and cost-recovery agreement under which FirstEnergy is obligated to pay for its contractual share of the costs incurred by OVEC to meet its obligations under the ICPA. The Complaint asks the Commission to find that FirstEnergy’s anticipated breach of the ICPA would amount to a termination of FirstEnergy’s purchase obligation in violation of the filed rate doctrine and

¹ 16 U.S.C. § 825e.

² 18 C.F.R. § 385.206.

³ The ICPA is included as Attachment A to this pleading.

the ICPA. FirstEnergy has announced its intention to declare bankruptcy in the next few weeks and is expected to seek rejection of the ICPA in the bankruptcy court.⁴

The Commission has the authority and obligation to ensure enforcement of the ICPA⁵ because the ICPA is a wholesale power arrangement subject to FERC's exclusive jurisdiction – and not jurisdiction of a bankruptcy court – and because the ICPA, as a filed rate, is “binding upon the seller and purchaser alike.” Neither commercial nor equitable concerns are a defense by the purchaser against its obligation to pay the filed rate.⁶ In fact, the Commission's failure to enforce the filed tariff rate against a customer, even where parties had agreed to a different rate, would amount to unlawful discrimination.⁷ As discussed *infra*, moreover, if the Commission failed to intercede, the result would necessitate a change to the filed rate reflected in the ICPA, a potential increase in costs to OVEC's other customers, and in some cases resultant higher consumer rates, all in the amount of hundreds of millions of dollars over the remaining life of the contract.

The United States District Court for the Southern District of New York – the court to have most recently addressed the question – has held that a bankruptcy court's rejection of a FERC-jurisdictional power supply contract “directly interferes with FERC's exclusive jurisdiction and regulatory authority over wholesale power contracts or otherwise constitutes

⁴ See Samuel Riehn, “FirstEnergy Confirms FES Bankruptcy,” Seeking Alpha (Mar. 1, 2018), available at <https://seekingalpha.com/article/4152235-firstenergy-confirms-fes-bankruptcy>.

⁵ Section 309 of the FPA, 16 U.S.C. § 825h, gives the Commission the power “perform any and all acts...necessary or appropriate to carry out” its obligations under the Act, including its obligation to ensure adherence to the filed rate. Thus, for example, if the Commission has erroneously permitted a utility to undercharge a customer, the Commission has the inherent authority to correct its error and order the customer to pay a surcharge as a means to address the resulting undercollection. See, e.g., *Cambridge Electric Light Co.*, 66 FERC ¶61,346 at 62,162 (1994) (citing *United Gas Improvement Co. v. Callery Properties, Inc.*, 382 U.S. 223, 229 (1965)).

⁶ *Maislin Indus., US, Inc. v. Primary Steel, Inc.*, 497 U.S. 116, 126-28 (1990).

⁷ *Id.* at 130.

a collateral attack on the filed rate.”⁸ But even under the narrowest reading of FERC’s authority vis-à-vis that of the bankruptcy courts, FERC’s authority is exclusive where the actions of the debtor would result in changes to a FERC-filed rate.⁹

If the Commission declines to act on OVEC’s Complaint, OVEC alternatively requests, under Rule 207(a)(2) of FERC’s Rules of Practice and Procedure¹⁰ and section 554(e) of the Administrative Procedure Act (“APA”),¹¹ that the Commission issue a declaratory order finding that it has exclusive jurisdiction over the ICPA. Such an order is within the Commission’s authority as it would resolve the substantial marketplace uncertainty created by FirstEnergy’s anticipated bankruptcy filing and potential attempt to reject the ICPA.

Even assuming, *arguendo*, under the broadest possible interpretation of a bankruptcy court’s jurisdiction to authorize rejection of the ICPA, the bankruptcy court nonetheless must consider determinations by this Commission whether or not rejection of the contract would be in the public interest.¹² Thus, OVEC also makes this alternative request for declaratory order: Should the Commission determine that it does not have exclusive authority over the ICPA, OVEC requests that the Commission issue a declaratory order advising the bankruptcy court that rejection of the ICPA would be contrary to the public interest. And, should the Commission conclude that it needs more information to make that determination, OVEC would support FERC’s initiation of proceedings in which affected parties could submit comments and briefs on the issue.

⁸ *In re Calpine Corp.*, 337 B.R. 27, 36 (S.D.N.Y. Jan. 27, 2006).

⁹ *In re Mirant Corp.*, 378 F.3d 511, 519 (5th Cir. 2004).

¹⁰ 18 C.F.R. § 385.207(a)(2).

¹¹ 5 USC § 554(e) (2012).

¹² *In re Mirant Corp.*, 378 F.3d at 524-26; *In re Mirant Corp.*, 318 B.R. 100, 108 (N.D. Tx. 2004) (on remand).

All of these points are discussed in more detail, *infra*. Briefly, OVEC requests the following relief:

1. A Commission order granting OVEC's Complaint (1) by making a finding that FirstEnergy's anticipatory breach of the ICPA constitutes a violation of its obligations under that agreement, and (2) by making a determination that permitting FirstEnergy to terminate its obligations under the ICPA would be contrary to the public interest in violation of the *Mobile Sierra* doctrine (and to establish such additional procedures as may be necessary to make the latter determination);
2. Alternatively, a Commission order declaring that it has exclusive jurisdiction to ascertain whether FirstEnergy's anticipatory breach of its purchase obligation under the ICPA, by rejection of the contract in bankruptcy or otherwise, (1) is a matter exclusively within the jurisdiction of the Commission, and (2) that such termination would be contrary to the public interest in violation of the *Mobile Sierra* doctrine (and to establish such additional procedures as may be necessary to make the latter determination); and
3. Alternatively, should the Commission determine that it lacks exclusive jurisdiction, to initiate proceedings to ascertain whether termination of FirstEnergy's purchase obligations under the ICPA would be contrary to the public interest in violation of the *Mobile Sierra* doctrine (and to establish such additional procedures for the development of a record as may be necessary to make the latter determination) and to advise the bankruptcy court both of its intention to make such a determination and of its ultimate conclusions.

I. SERVICE AND COMMUNICATIONS

All correspondence and communications to the Complainant in this docket should be addressed to the following individuals, whose names should be entered on the official service list maintained by the Secretary in connection with these proceedings:¹³

¹³ OVEC requests waiver of 18 C.F.R. § 385.203(b)(3), to the extent necessary, to allow the placement of four OVEC representatives on the official service list in this docket.

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II. BACKGROUND

OVEC owns and operates two coal-fired generating power plants, the Kyger Creek plant in Ohio and the Clifty Creek plant in Indiana, with a combined capacity of approximately 2,400 MW. OVEC has approximately 660 employees (and has approximately 650 retired employees and surviving spouses receiving pension and other benefits from OVEC). OVEC and its wholly-owned subsidiary, Indiana-Kentucky Electric Corporation ("IKEC"), were formed on October 1, 1952 for the purpose of providing electric power in support of the operation of uranium enrichment facilities then under construction by the Atomic Energy Commission ("AEC") near Portsmouth, Ohio. The AEC's facilities are now operated by the Department of Energy ("DOE"), as successor to the AEC. OVEC and AEC entered into a power supply agreement supporting the AEC's Portsmouth facilities on October 15, 1952 ("DOE Power Agreement").

OVEC and OVEC's owners or their utility-company affiliates (called "Sponsoring Companies") signed the ICPA on July 10, 1953 to support the DOE Power Agreement and provide for excess energy sales to the Sponsoring Companies of power and energy not utilized by DOE or its predecessors. Initially set for 25 years, this agreement was later

extended through December 31, 2005. The current term of the ICPA extends through June 30, 2040. On September 29, 2000, DOE notified OVEC of its cancellation of the DOE Power Agreement, effective April 30, 2003. Since the termination of the DOE Power Agreement, OVEC's entire generating capacity has been exclusively available to the Sponsoring Companies under the terms of the ICPA. The ICPA, and all amendments thereto, constitute a FERC-filed, cost-based power agreement.¹⁴ The current Sponsoring Companies of OVEC are as follows (and share the following OVEC "power participation ratio" benefits and payment obligations under the ICPA):

Sponsoring Company	% Share	Parent Entity¹⁵
Allegheny Energy Supply Company LLC	3.01%	FE
Appalachian Power Company	15.69%	AEP
Buckeye Power Generating, LLC	18.00%	Buckeye
The Dayton Power and Light Company	4.90%	AES
Duke Energy Ohio, Inc.	9.00%	Duke
FirstEnergy Solutions Corp.	4.85%	FE
Indiana Michigan Power Company	7.85%	AEP
Kentucky Utilities Company	2.50%	PPL
Louisville Gas and Electric Company	5.63%	PPL
Monongahela Power Company	0.49%	FE
Ohio Power Company	19.93%	AEP
Peninsula Generation Cooperative	6.65%	Wolverine
Southern Indiana Gas and Electric Company	<u>1.50%</u>	Vectren
	100.00%	

Under the ICPA, OVEC must "make Available Energy available to each Sponsoring Company in proportion to said Sponsoring Company's Power Participation Ratio."¹⁶ While no

¹⁴ The Commission accepted the ICPA in a delegated letter order issued on May 23, 2011. *Ohio Valley Elec. Corp.*, Docket Nos. ER11-3181-000, ER11-3440-000 and ER11-3441-000 (May 23, 2011) (delegated letter order).

¹⁵ The abbreviations of the Sponsoring Companies' parent entities are as follows: American Electric Power Company, Inc. ("AEP"); The AES Corporation ("AES"); Buckeye Power, Inc. ("Buckeye"); Duke Energy Corporation ("Duke"); FirstEnergy Corp. ("FE"); PPL Corporation ("PPL"); Vectren Corporation ("Vectren"); Wolverine Power Supply Cooperative, Inc. ("Wolverine").

¹⁶ ICPA, Section 4.03.

Sponsoring Company is “obligated to avail itself of any Available Energy,”¹⁷ they are each individually responsible for their proportionate share of the fixed and operating costs of the project, including the costs of additions, upgrades, repairs, employee benefits (including post-retirement benefits obligations) and eventually decommissioning.¹⁸ In addition, they are responsible for adjustment charges for “Minimum Loading Event Costs” if they fail to take their “Power Participant Ratio” share of the facilities’ energy output.¹⁹ Their obligations under the ICPA are individual, not joint.²⁰ That is, each Sponsoring Company is responsible only for its assigned *pro rata* portion of the OVEC’s costs. FirstEnergy’s proportionate share of the OVEC costs – including the eventual and substantial costs of environmentally sound decommissioning is just under 5%.²¹ In these respects the ICPA is more accurately viewed not as a conventional purchased power agreement, but a joint venture whose participants have committed to support the operation of OVEC’s facilities from “cradle to grave.”

The unique nature of the agreement – the fact that the rights and obligations of all the parties to the ICPA are “several and not joint or joint and several”²² for the life of the generating facilities – is directly related to OVEC’s breach claim in the event FirstEnergy is able to reject the ICPA in bankruptcy. In November 2016, Moody’s announced that it had “placed the ratings of the Ohio Valley Electric Corporation (OVEC) under review for downgrade,” an action it said was prompted by “the downgrade of FirstEnergy Corp’s (FirstEnergy) subsidiaries FirstEnergy Solutions Corp. (FES: Caa1 negative) and Allegheny Energy Supply Company, LLC (AES: B1

¹⁷ *Id.*

¹⁸ *See id.*, Sections 7.01, 7.02, 7.03 and 8.04.

¹⁹ *Id.*, Section 5.05.

²⁰ *Id.*, Section 9.11.

²¹ *Id.*, Section 1.0117 (identifying FirstEnergy’s Power Participation Ratio as 4.85%).

²² *Id.*, Section 9.11.

negative) which together are contractually obligated to cover about 8% of OVEC's expenditures."²³ FirstEnergy, Moody's noted, had publicly announced its "intention to exit its merchant business entirely within 18 months even if it requires a restructuring or bankruptcy at FES."²⁴ In Moody's view, because each of the OVEC's Sponsoring Company's obligations are several, OVEC is similar in nature to a municipal joint action agency, and thus Moody ascribes a credit rating to OVEC tied to its weakest link, or (in other words) OVEC's lowest rated Sponsoring Company, FirstEnergy Solutions Corp., which contributes just under 5% of revenues.

FirstEnergy's efforts to exit the merchant generation business continue to have real impact on OVEC. Just last month, FirstEnergy Corporation's CEO announced that "the company's merchant generation business is likely headed for bankruptcy protection by the end of March."²⁵ "While I cannot speak for the unregulated business," he stated, "I would be shocked if they go beyond the end of March without some type of filing."²⁶ Based on this announcement – and the clear implication that FirstEnergy would reject the ICPA in bankruptcy – "Moody's lowered the subsidiary's rating from below investment grade to likely in default."²⁷ Standard & Poor's Financial Services LLC had already downgraded FirstEnergy's bond rating for the same

²³ Moody's Investor Services Rating Action (November 4, 2016), included as Attachment B to this filing.

²⁴ *Id.*

²⁵ Gavin Bade, "FirstEnergy CEO says generation subsidiary headed for bankruptcy protection," Utility Dive (Feb. 23, 2018), available at <https://www.utilitydive.com/news/firstenergy-ceo-says-generation-subsiadiary-headed-for-bankruptcy-protection/517743/>.

²⁶ Samuel Riehn, "FirstEnergy Confirms FES Bankruptcy," Seeking Alpha (Mar. 1, 2018), available at <https://seekingalpha.com/article/4152235-firstenergy-confirms-fes-bankruptcy>.

²⁷ *Id.*

reason last summer.²⁸ That a bankruptcy filing by FirstEnergy would likely be coupled with an attempt to reject the ICPA is obvious and widely expected. OVEC's negative outlook from Fitch Ratings Inc.'s rating service expressly "reflects the risk of revenue shortfall should one of OVEC's sponsors opt to file for bankruptcy and reject their obligation under OVEC's...ICPA."²⁹ OVEC is making this filing in direct response to the expectation that FirstEnergy will seek to reject the ICPA in its bankruptcy case.

III. JURISDICTION

The Commission should exercise exclusive jurisdiction over this Complaint because FirstEnergy's anticipated bankruptcy rejection of the ICPA has already harmed OVEC, will adversely affect OVEC's other Sponsoring Companies and their customers, and because the Commission has exclusive jurisdiction to address changes to the ICPA, including termination of FirstEnergy's purchase obligation.

In cases involving contract interpretation, the Commission generally possesses concurrent jurisdiction with courts with respect to a legal action for breach of a filed contract.³⁰ The Commission enjoys primary jurisdiction over disputes involving construction of a contract subject to its jurisdiction.³¹ Whether the Commission should exercise primary jurisdiction in such cases is within its own discretion.³² The Commission considers the following three factors

²⁸ John Funk, "FirstEnergy Solutions downgraded on bankruptcy expectation, FE parent seen as stable," Cleveland Plain Dealer (Aug. 21, 2017), *available at* http://www.cleveland.com/business/index.ssf/2017/08/firstenergy_solutions_downgrad.html.

²⁹ Fitch Ratings Inc., Press Release on OVEC (Aug 9, 2017), included as Attachment C to this filing. The press release adds Fitch's view that "the obligations held by FirstEnergy Solutions Corp (FES; CC; 4.85% share) and Allegheny Energy Supply Co (AES; B/Stable; 3.01% share) pose a greater concern in Fitch's opinion, given FirstEnergy Corp.'s (FE; 'BBB-/Outlook Stable) plans to exit the merchant power business."

³⁰ *Pan Am. Petrol. Corp. v. Super. Ct. of Del.*, 366 U.S. 656 (1961).

³¹ *See, e.g., United States v. W. Pac. R.R. Co.*, 352 U.S. 59 (1956); *AEP Generating Co.*, 32 FERC ¶ 61,364 (1985), *reh'g granted on other grounds*, 36 FERC ¶ 61,226 (1986).

³² *W. Pac. R.R. Co.*, *supra*, 352 U.S. at 64-66.

in deciding whether to assert primary jurisdiction over contractual issues otherwise pending before the courts:

- i. whether the Commission possesses some special expertise which makes the case peculiarly appropriate for Commission decision;
- ii. whether there is a need of uniformity of interpretation of the type of question raised by the dispute; and
- iii. whether the case is important in relation to the regulatory responsibilities of the Commission.³³

Where, as in this case, there is no dispute about the meaning of the contract, however, the usual considerations about whether the Commission should exert primary jurisdiction (or defer to the courts for ordinary contract interpretation issues) are not present.³⁴ Instead, as in this case, the issue is exclusively the Commission's to resolve. As discussed *infra*, FirstEnergy's anticipated rejection of the ICPA is effectively a collateral attack on the filed rate in the contract. In such instances, the Commission's jurisdiction is not merely primary, but exclusive. The only question, therefore, is whether the Commission should consider OVEC's Complaint before the anticipatory breach occurs.³⁵ The answer is that "[t]he disclaimer of a contractual duty *is* a breach of contract even if the time specified in the contract for performing the duty has not yet arrived. It is what is called anticipatory breach."³⁶ And here, it is obvious that FirstEnergy will attempt to seek to reject the ICPA in bankruptcy. Thus, this dispute involves FirstEnergy's anticipated breach of the ICPA, a filed rate subject to the Commission's exclusive jurisdiction.

³³ *Ark. La. Gas Co. v. Hall*, 7 FERC ¶ 61,175, 61,322 (1979).

³⁴ See *In re Calpine Corp.*, 337 B.R. at 36, discussed in Section IV, *infra*.

³⁵ Under bankruptcy law, rejection of a contract constitutes an anticipatory breach of the contract giving rise to rejection damages as a result of the rejecting party's (here FirstEnergy) future non-performance.

³⁶ *Combs v. Int'l Ins. Co.*, 354 F.3d 568, (6th Cir. 2004), quoting *Wis. Power & Light Co. v. Century Indem. Co.*, 130 F.3d 787, 793 (7th Cir.1997) (emphasis added).

IV. COMPLAINT FOR ANTICIPATORY BREACH

This Commission has the authority and obligation to ensure enforcement of the ICPA,³⁷ because the ICPA is a wholesale power arrangement subject to FERC's exclusive jurisdiction – and not jurisdiction of a bankruptcy court – and because the ICPA, as a filed rate, is "binding upon the seller and purchaser alike."³⁸ Neither commercial nor equitable concerns are a defense by the purchaser against its obligation to pay the filed rate.³⁹ In fact, the Commission's failure to enforce the filed tariff rate against a customer, even where parties had agreed to a different rate, would amount to unlawful discrimination.⁴⁰ The foregoing does not mean that the Commission lacks the authority itself to modify or terminate a filed rate, but where that filed rate is embodied in, and fixed, by a voluntary agreement, the burden – a very steep one – is on the party seeking the change to demonstrate that the change is in the public interest.⁴¹ That is the situation here, as ICPA Article 9.09 expressly provides that absent the consent of all parties, those seeking changes to the provisions of the agreement must meet the *Mobile-Sierra* public interest test.

A. The Public Interest Standard

Regarding the public interest standard, OVEC urges the Commission to find, not only that it has exclusive jurisdiction over any attempt by FirstEnergy to reject its

³⁷ Section 309 of the FPA, 16 U.S.C. § 825h, gives the Commission the power "perform any and all acts ...necessary or appropriate to carry out" its obligations under the Act, including its obligation to ensure adherence to the filed rate. Thus, for example, if the Commission has erroneously permitted a utility to undercharge a customer, the Commission has the inherent authority to correct its error and order the customer to pay a surcharge as a means to address the resulting undercollection. *See, e.g., Cambridge Electric Light Co.*, 66 FERC ¶61,346 at 62,162 (1994) (citing *United Gas Improvement Co. v. Callery Properties, Inc.*, 382 U.S. 223, 229 (1965)).

³⁸ *Nw. Pub. Serv. Co. v. Montana-Dakota Utils. Co.*, 181 F.2d 19 (8th Cir. 1950), *aff'd*, 341 U.S. 246 (1951).

³⁹ *Maislin Indus. US, Inc. v. Primary Steel, Inc.*, 497 US 116, 126-28 (1990).

⁴⁰ *Id.* at 130.

⁴¹ *See United Gas Pipeline Co. v. Mobile Gas Serv. Corp.*, 350 U.S. 332 (1956), *Federal Power Comm'n v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956) and *NRG Power Mktg. v. Maine Pub. Utils. Comm'n*, 585 U.S. 165 (2010).

obligations under the ICPA, but that doing so would run contrary to the public interest in violation of the *Mobile-Sierra* doctrine. “Under the *Mobile-Sierra* doctrine, [FERC] must presume that the [electricity] rate set in a freely negotiated wholesale-energy contract meets the ‘just and reasonable’ requirement [of the [FPA], see 16 U.S.C. § 824d(a)], and the “presumption may be overcome only if FERC concludes that the contract seriously harms the public interest.”⁴² This follows from the Federal Power Act’s regulatory system, which “is premised on contractual agreements voluntarily devised by the regulated companies; it contemplates abrogation of these agreements only in circumstances of unequivocal public necessity.”⁴³ Hence, the presumption is that “[i]n wholesale markets, the party charging the rate and the party charged [are] often sophisticated businesses enjoying presumptively equal bargaining power, who could be expected to negotiate a ‘just and reasonable’ rate as between the two of them.”⁴⁴ There are only limited circumstances under which changing rates fixed by a voluntarily negotiated contract would be in the public interest under *Mobile Sierra* – such as when “there is unfair dealing at the contract formation stage,” or where contracts were executed during periods of market dysfunction and the market dysfunctions “were caused by illegal action of one of the parties.”⁴⁵ Those circumstances are not present here.

Not only would FirstEnergy be unable to satisfy the *Mobile Sierra* burden that termination of its obligations would be in the public interest, but FirstEnergy’s rejection of the contract in bankruptcy would *adversely* affect the public interest in several ways.

⁴² *Morgan Stanley v. Pub. Util. Dist. No. 1*, 554 U.S. 527, 530, 128 S. Ct. 2733, 2736 (2008).

⁴³ *Permian Basin Area Rate Cases*, 390 U.S. 747, 822 (1968).

⁴⁴ *Morgan Stanley*, *supra*, 128 S. Ct. at 2746 (quoting *Verizon Commc’n, Inc. v. FCC*, 535 U.S. 467, 479 (2002)).

⁴⁵ *Morgan Stanley*, 128 S. Ct. at 2747.

As an initial matter, because the Sponsoring Companies' obligations are several and not joint, if FirstEnergy is able to reject its obligations under the ICPA, the resulting cost shortfalls are not payable by the other Sponsoring Companies and will go unreimbursed every month over the life of the contract (i.e., until at least 2040), absent the types of ameliorative changes to the filed rate discussed in Section IV.B, *infra*.⁴⁶ This will further impact OVEC's credit rating (which already has been impacted by the prospect of contract rejection), further raising OVEC's borrowing costs. Those higher borrowing costs will directly result in higher costs to the remaining Sponsoring Companies and their customers. In the case of OVEC's rural electric cooperative Sponsoring Companies, for example, whose customers are *their* owners, all of these increased costs will be borne by the ultimate ratepayers.

Moreover, the ICPA contemplates that the Sponsoring Companies will cover the eventual and substantial cost of environmentally sound decommissioning of the OVEC plants when they are retired from service in 2040 or thereafter. When assessing the potential environmental remediation costs – including the clean closure of the site's landfills and ponds – and all other ancillary charges that will be associated with restoring each location to a condition suitable for industrial use, OVEC has estimated that the costs for both sites currently exceed \$240 million, assuming all expenditures would have occurred in 2017. Because the retirement of the units will not take place until 2040 under the ICPA, however, the final decommissioning costs are simply too difficult to quantify with any reasonable measure of certainty, though this figure will only increase in the future given

⁴⁶ More specifically, OVEC is referring to replacing FirstEnergy with a new Sponsoring Company at a discount, and/or renegotiation of the ICPA to reallocate the revenue shortfall associated with FirstEnergy's rejection of the contract.

potential changes in environmental regulations and other escalation of costs. And without FirstEnergy's ongoing contributions, those projected decommissioning costs are likely to escalate even further and by amounts that neither OVEC (nor any other party) can currently predict with an exact level of certainty.

As indicated, OVEC currently has approximately 660 employees (and has approximately 650 retired employees and surviving spouses receiving pension and other benefits from OVEC). The ICPA requires the Sponsoring Companies to pay all salaries and benefits of such employees, as well as pensions and post-retirement benefits through 2040 and thereafter. Such obligations are likely to be significant and very difficult to estimate.

Further, the ICPA similarly requires the Sponsoring Companies to pay all of OVEC's borrowing costs. As result of OVEC's construction of significant emissions' control equipment at both of its plants, as of December 31, 2017, OVEC's outstanding debt obligations were approximately \$1.4 billion. FirstEnergy's 4.85% *pro rata* responsibility for this debt amounts to \$67.9 million. However, if FirstEnergy is allowed to reject its obligations under the ICPA, OVEC and the remaining Sponsoring Companies would need to come up with some way to close the gap in OVEC's recovery of its costs, which would likely result in further increased debt and borrowing costs for OVEC's remaining Sponsoring Companies, with a disproportionately adverse effect on the costs of OVEC's power and energy to them and their customers. OVEC would be faced with a number of options, including potentially borrowing additional funds (including to refinance FirstEnergy's portion of maturities as they come due at ever-increasing borrowing costs), attempting to locate a new Sponsoring Company to replace FirstEnergy's ownership interest a discount, and/or a renegotiation of the ICPA with all Sponsoring Companies to reallocate

the revenue shortfall associated with FirstEnergy's rejection of the contract. All of these options would raise and reallocate the costs of power and energy generated by the OVEC facilities. Furthermore, OVEC understands that many of OVEC's Sponsoring Companies bid their entitlement to OVEC's power and energy into nearby markets (principally, PJM). While power and energy from OVEC is currently economic to dispatch, there is no guaranty that if OVEC's costs continue to increase, this proposition will continue to remain true, may result in upward pressure on market prices in the PJM market.

All of these consequences would be adverse to the public interest.

B. FERC's Authority Over Termination of FirstEnergy's Purchase Obligation is Exclusive.

For a number of years, the Commission took the position that parties seeking relief from the terms of filed wholesale contracts must seek such relief in proceedings before FERC, and that any effort by one party to reject a FERC-regulated contract in a bankruptcy proceeding "is actually a collateral attack upon a filed rate."⁴⁷ The United States District Court for the Southern District of New York expressly endorsed that position in *In re Calpine*.⁴⁸ It held that a bankruptcy court's rejection of a power purchase agreement "directly interferes with FERC's exclusive jurisdiction and regulatory authority over wholesale power contracts or otherwise constitutes a collateral attack of the filed rate."⁴⁹

The rationale for the court's holding is instructive. It recognized that the Commission has exclusive jurisdiction "over the rates, terms, conditions, and *duration* of

⁴⁷ *In re Mirant*, 378 F.3d at 518.

⁴⁸ *In re Calpine Corp.*, 337 B.R. at 36.

⁴⁹ *Id.*

wholesale energy contracts,”⁵⁰ and that rejection of wholesale power purchase agreements “would directly interfere” with that jurisdiction.⁵¹

In arguing that the bankruptcy court nonetheless had jurisdiction, Calpine, the debtor in that case, maintained that:

bankruptcy courts have a broad power to reject executory contracts, rejection constitutes breach, FERC has exclusive jurisdiction over approval, modification, or termination of wholesale energy contracts, not over breaches, and as such rejection is outside of FERC’s exclusive jurisdiction.⁵²

The district court rejected this argument. Instead, the cases in which FERC “has declined jurisdiction over breach issues,” it said, “involved alleged breaches the resolution of which called for simple contract interpretation well within the jurisdiction of the courts.”⁵³ “The breach here,” it held, “is not a dispute, nor does it require any contract interpretation, it is a complete cessation of performance under the terms and conditions of the Power Agreements.”⁵⁴ “Against FERC’s vast authority over filed rate energy contracts,” the district court’s search of the Bankruptcy Code found “little evidence of congressional intent to limit FERC’s regulatory authority.”⁵⁵ “Absent overriding language,” it held, “the Bankruptcy Code should not be read to interfere with FERC jurisdiction.”⁵⁶

To be sure, the District Court’s decision in *In re Calpine* conflicts with, but also separately distinguishes, an earlier decision of the Fifth Circuit in *In re Mirant*. In the

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.* at 33.

⁵⁶ *Id.*

Mirant case, the Fifth Circuit stated that the Commission’s authority is exclusive only with respect to the application of the filed rate doctrine where there is a change to the filed rate.⁵⁷ Thus, it ruled that “while the FPA does preempt breach of contract claims that challenge a filed rate, district courts are permitted to grant relief in situations where the breach of contract claim is based upon another rationale.”⁵⁸ If rejecting a contract has only an “indirect effect” on the filed rate, the bankruptcy court’s authority is not preempted.⁵⁹

This jurisdictional conflict was again considered by United States District Court for the Southern District of New York in the matter of *In re Boston Generating LLC*, a subsequent bankruptcy case involving the proposed rejection of a contract for the transportation of natural gas. In a preliminary ruling (“*Algonquin I*”), the district court explained that natural gas contracts “require consideration of the Natural Gas Act [(‘NGA’)],” which “grants FERC ‘exclusive jurisdiction over the transportation and sale of natural gas in interstate commerce for resale.’”⁶⁰ Noting the rulings from both the *Mirant* and *Calpine* courts, *Algonquin I* recognized that there was “*no binding precedent* that applies a bankruptcy court’s authority to reject an executory contract to a contract regulated by FERC under the NGA.”⁶¹ In a subsequent ruling in those proceedings (“*Algonquin II*”), the Southern District of New York concluded that while the bankruptcy court did enjoy the authority to reject a contract governed by the NGA, “the Debtors *must also* obtain a ruling

⁵⁷ *In re Mirant, supra*, 378 F.3d at 519.

⁵⁸ *Id.*

⁵⁹ *Id.* at 519-20.

⁶⁰ *In re Boston Generating, LLC*, No. 10 CIV. 6528 DLC, 2010 WL 4288171 at *4 (S.D.N.Y. Nov. 1, 2010) (quoting *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 300-01 (1988)).

⁶¹ *In re Boston Generating, LLC*, No., 2010 WL 4288171 at *6 (emphasis added).

from FERC that abrogation of the contract does not contravene the public interest.”⁶² *Algonquin II* afforded FERC the *exclusive* authority to make this public interest determination, and went on to hold that if “FERC does not approve the Debtors’ rejection of the [transportation contract], *the Debtors may not reject the contract.*”⁶³

OVEC acknowledges that in a January 2006 case – *Cal. Oversight Bd. et al. v. Calpine Energy Servs., et al.*⁶⁴ FERC had stated its intention to “follow” *Mirant*: finding that the Fifth Circuit had “spoken to the issue” in *Mirant*, FERC stated that it planned “to follow that authority.”⁶⁵ FERC added, however, that it nonetheless would make a determination whether the rejection of the Calpine wholesale contract at issue before it would be in the public interest “and then inform the Bankruptcy Court of its views.”⁶⁶ But there are ample reasons for the Commission to conclude, based on more recent precedent, both that (1) it should not continue to follow *Mirant* and that (2) in any event, *Mirant* does not preclude the relief sought in OVEC’s Complaint.

First, it was only a few weeks after the Commission’s decision in *Cal. Oversight Bd.* that the United States District Court for the Southern District of New York – addressing the same Calpine contracts at issue in that case – issued the opinion, discussed *supra*, that FERC’s rate authority preempted the bankruptcy court’s authority to reject FERC-jurisdictional contracts.⁶⁷ To OVEC’s knowledge, the Commission has not considered the

⁶² *In re Boston Generating, LLC*, No. 10 CIV. 6528 DLC, 2010 WL 4616243 at *1 (S.D.N.Y. Nov. 12, 2010) (emphasis added).

⁶³ *Id.* at *3 (emphasis added).

⁶⁴ 114 FERC ¶ 61,003 (2006).

⁶⁵ *Id.* at P 11.

⁶⁶ *Id.* at P 12.

⁶⁷ *In re Calpine Corp., supra*, 337 B.R. at 36.

impact of the Southern District of New York's opinions (*i.e.*, *Calpine* and *Algonquin I and II*), in any other case and therefore has not expressly revisited its decision to follow *Mirant*. The District Court decision in *Calpine*, however, did lift the restraining order that was then "restricting FERC from determining the disposition of energy contracts,"⁶⁸ a constraint that undoubtedly influenced the Commission's decision, a few weeks earlier, to follow *Mirant*.

Second, the *Calpine* opinion also explained, in detail, the reasons why the District Court concluded that the Fifth Circuit's *Mirant* decision was incorrect and indistinguishable, not least of which is the fact that a bankruptcy court rejection hearing would likely provide an inadequate forum in which to consider public interest factors. The court's analysis bears recitation here:

The Court is aware that its holding here is in obvious conflict with the holding of the Fifth Circuit in *Mirant*, 378 F.3d 511, and the conclusions of the FERC Order.[10] *Mirant* is not controlling here and relies heavily on Fifth Circuit cases that have no Second Circuit corollaries. Nevertheless, were the Court to adopt and apply *Mirant* faithfully, it would still find that FERC has exclusive jurisdiction over the fate of the Power Agreements.

In *Mirant*, public utility PEPCO, pursuant to deregulation legislation, sold its electric generation facilities and assigned most of its power purchase agreements to *Mirant*, a power purchaser and provider. 378 F.3d at 515. Because some of the power purchase agreements contained language that foreclosed PEPCO from assigning them, PEPCO and *Mirant* entered into a separate agreement (also FERC-regulated), which provided that PEPCO would continue to buy energy under the unassigned agreements and that *Mirant* would purchase that energy from PEPCO at the filed rates set in those contracts. *Id.* When *Mirant* later filed for Chapter 11 bankruptcy, it sought to reject the contracts that bound it to buy the energy from PEPCO. *Id.* at 516. The district court withdrew the reference to the bankruptcy court of the rejection motions and later found, *inter alia*, that the FPA deprived it of jurisdiction. *Id.* at 516-17.

The Fifth Circuit reversed the district court. It recognized first that a rejection of a contract under § 365 constitutes a breach, not a modification of the

⁶⁸ *Id.* at 30.

contract. *Id.* at 519. Central to the Fifth Circuit’s holding is the notion that “[w]hile the FPA does preempt breach of contract claims that challenge a filed rate, district courts are permitted to grant relief in situations where the breach of contract claim is 38*38 based upon another rationale.” *Id.* Though above-market rates were part of Mirant’s decision to reject the contracts, the court found that Mirant’s main justification was that it did not need the energy it was purchasing from PEPCO to fulfill its own obligations to supply electricity; “Mirant may choose to reject this agreement as unnecessary to its reorganized business because it represents excess capacity in its system to supply electricity.” *Id.* at 520. The only thing separating Mirant’s rejection motion from being an unlawful collateral attack on the rate was the fact that it did not want the energy at all. Indeed, in reaching its holding, the Mirant Court quoted Fifth Circuit precedent that held: “The district court would have jurisdiction if [the debtor] claimed that it cannot take [the supplier’s] electricity regardless of price. If, however, [the debtor] can fulfill its purchase obligations at lower rate, then [the debtor] merely seeks rate relief not available in district court.” *Id.* (quoting *Gulf States Utils. Co. v. Ala. Power Co.*, 824 F.2d 1465, 1472 (5th Cir. 1987)). The Court concluded that, under the circumstances, the rejection of the contracts would only have an “indirect effect” on the rate, and thus the FPA would not preempt the district court from exercising its jurisdiction under the Bankruptcy Code.

As noted, this Court does not construe the filed rate doctrine so narrowly as to only reach modifications of the rate. Just the same, Mirant’s holding militates against Calpine. Here, while Calpine expressly states that it seeks relief from the Power Purchase Agreements because it is forced to sell energy at rates far below market, it does not offer “another rationale.” *Id.* at 519. Calpine remains “ready and willing to supply the same amount of wholesale electric power—but at competitive market prices”(Posoli Aff. P28), so there is no excess capacity issue presented, but merely a desire to get a better rate.[11] The Mirant Court clearly held that it would find FPA preemption where, as here, a debtor was able to fulfill its obligations but only at a lower rate. *Mirant*, 378 F.3d at 520. Rejection in such a situation does not “indirectly effect” the filed rate; it is a collateral attack on it.

The Court’s conclusion in this case is consistent with general policy considerations, including the proper allocation of power in our system of separated powers. The Supreme Court has held that “[t]he clear assignment of power to a branch . . . allows the citizen to know who may be called to answer for making, or not making, those delicate and necessary decisions essential to governance.” *Loving v. United States*, 517 U.S. 748, 758, 116 S.Ct. 1737, 135 L.Ed.2d 36 (1996). This principle seems particularly applicable here. By holding that FERC has exclusive jurisdiction to modify or terminate the Power Agreements in this case, an issue of great public interest will be heard in a branch accountable to the electorate in a forum that specializes in considering the public interest.

To this end, although the Court takes no formal position on what standard would apply were it to have jurisdiction, the Court does note that the standard issue may very well compel the Court's finding that it lacks jurisdiction altogether to authorize the rejection of the Power Agreements. Both the *Mirant* decision and the FERC Order predicate bankruptcy court jurisdiction to reject energy contracts on the belief that the public interest is adequately considered at a rejection hearing, at least in part through FERC's participation. See *Mirant*, 378 F.3d at 525 39*39 ("Use of the business judgment standard would be inappropriate because it would not account for the public interest inherent in the transmission and sale of electricity. . . . We presume that the district court would also welcome FERC's participation. . . ."); FERC Order ¶ 12 (displaying willingness to "inform the Bankruptcy Court [on] the impact on the public interest of a potential rejection"). This process would allow the bankruptcy court to sit in judgment of FERC's determination of the public interest, a prospect prohibited by established case law. See *MCorp Fin. Inc.*, 502 U.S. at 41, 112 S.Ct. 459 (disallowing the bankruptcy court to scrutinize the legitimacy of federal agency action); *In re Federal Communications Commission*, 217 F.3d 125, 135 (holding that a federal agency "need not defend its regulatory calculus in the bankruptcy court"); *In re NRG Energy*, 2003 WL 21507685 at *3 (holding that, under the FPA, actions taken by FERC are reviewable only by a court of appeals). To the extent that, under the FPA, the fate of wholesale power contracts cannot be determined without consideration of the public interest, the executive agency FERC should determine that interest. Cf. *Smith v. Hoboken R.R. Warehouse & S.S. Connecting Co.*, 328 U.S. 123, 131, 66 S.Ct. 947, 90 L. Ed. 1123 (1946) ("When the public interest, as distinguished from private, bulks large in the problem, the solution is largely a function of the legislative and administrative agencies of government with their facilities and experience in investigating all aspects of the problem and appraising the general interest.")⁶⁹

OVEC submits that the more recent District Court decision is better reasoned and that FERC should follow it in addressing OVEC's Complaint. Like the *Calpine* case, this is not a case involving a matter of contract interpretation. No party is seeking bankruptcy rejection because the other party has failed to comply with the ICPA's terms nor is it a circumstance where this contract provides a unilateral right of termination. Breaching an obligation under the ICPA involves public interest considerations that are within FERC's special competence and exclusive jurisdiction. The special circumstances in this case

⁶⁹ *Id.* at 37-39.

involve a multi-party contract between OVEC and the Sponsoring Companies to pay the fixed cost of OVEC's generating facilities through June 2040. Beyond that date, the Sponsoring Companies also are responsible for the costs incurred for the demolition and decommissioning of such facilities. The decision by one of the Sponsoring Companies to exit its merchant generation business through bankruptcy should not provide a basis for avoiding the contractual commitment that it made to pay its proportionate share of the costs of the facilities and its consequent impact on OVEC, its remaining Sponsoring Companies and their customers. The District Court's opinion better accommodates these uniquely FERC-related public interest concerns than does the *Mirant* opinion.

But even if the Commission continues to follow the *Mirant* holding, this case falls within the area of exclusive Commission jurisdiction recognized in *Mirant*. As noted earlier, *Mirant* finds no Commission preemption of bankruptcy court jurisdiction where rejection of a contract would have only an indirect effect on filed rates.⁷⁰ Even under the narrowest reading of FERC's authority vis-à-vis that of the bankruptcy courts, FERC's authority is exclusive where the debtor's actions would result in changes to a FERC-filed rate.⁷¹ Unlike the *Mirant* case, rejection of the ICPA will have a *direct* effect on the filed rate and, as discussed below, a resulting adverse effect on customers.

In this case the *ICPA* is the filed rate. The direct result of contract rejection would be to change to the filed rate currently reflected in the ICPA and to increase costs to OVEC's remaining customers (and in certain circumstances ratepayers) which could equal

⁷⁰ *In re Mirant, supra*, 378 F.3d at 519-20.

⁷¹ *Id.* at 519.

hundreds of millions of dollars over the remaining life of the contract.⁷² This eventuality is a direct consequence of the structure of that agreement itself. As discussed earlier, the ICPA is akin to a joint venture arrangement (including “cradle to grave” coverage of all costs regardless of usage) and is viewed as such by the markets and the rating agencies. The obligation of the off-takers under the ICPA is several but not joint, exposing OVEC to the risk of nonpayment in the event of a defaulting Sponsoring Company because the non-defaulting Sponsoring Companies are not obligated to cover the shortfall. Because of the several, not joint, liabilities of the Sponsoring Companies under the ICPA, even Moody’s points out that a FirstEnergy rejection of its obligations, coupled with no other changes to the ICPA would likely lead to a further downgrade in OVEC’s credit rating.⁷³ A similar downgrade risk would result if there was a payment default by a Sponsoring Company that OVEC would not be able to cover by its existing reserves or through a replacement of the defaulting Sponsoring Company.⁷⁴ But coverage through use of OVEC’s existing reserves would be a mere temporary fix, and OVEC would not only need to seek a replacement for FirstEnergy, it may have to offer any such replacement Sponsoring Company a substantial discount – in effect a different filed rate. Or, to keep OVEC “whole” in the absence of a new replacement Sponsoring Company, the remaining existing Sponsoring Companies would need to increase their proportionate ownership shares *and* corresponding cost responsibilities, which for many of these remaining Sponsoring Companies will result in increased rates passed on to their customers and to the public. All of these consequences

⁷² What could follow is a legal “out” of the ICPA for other Sponsoring Companies. As costs increase towards the end of the useful life of the ICPA, the obligation to demolish and clean up the facilities may be saddled upon only those Sponsoring Companies who have not rejected the agreement.

⁷³ Attachment B.

⁷⁴ *Id.*

stem not from a mere “simple” rejection by a bankrupt debtor who no longer needs power at any price, like the *Mirant* debtor. Rather, these consequences — which are the direct effect of rejection of the ICPA by FirstEnergy — reflect multiple, multi-party, interconnected changes to the filed rate, with a direct impact on rates paid by the consuming public.

Bankruptcy rejection serves as the functional equivalent to determination that the obligations under the ICPA are unjust and unreasonable from the debtor’s perspective, thus permitting termination. Under applicable FERC case law, however, this requires consideration of the public interest in terminating a contract obligation. Only FERC can make the determination whether FirstEnergy’s termination of its obligations under the ICPA would be consistent with the public interest. As a result, this Commission should hold that a bankruptcy court lacks jurisdiction to consider rejection of the ICPA.

V. COMPLIANCE WITH RULE 206 COMPLAINT FILING REQUIREMENTS

A. Description of Alleged Violation and Quantification of Impacts (18 C.F.R. § 385.206(b)(1)-(5)).

Parts I – IV of this Complaint set forth the required information. As stated therein, FirstEnergy’s anticipated rejection of the ICPA would constitute a breach of its obligations under a rate schedule on file with the Commission, the threat of which has already resulted in a downgrade to OVEC’s credit rating. FirstEnergy’s rejection of its obligations will ultimately saddle OVEC’s remaining Sponsoring Companies and their customers with hundreds of millions of dollars in additional costs over the remaining life of the agreement.

B. Other Pending Proceedings (18 C.F.R. § 385.206(b)(6)).

The issues presented herein are not pending in an existing Commission proceeding or a proceeding in any other forum in which OVEC is a party.

C. Specific Relief or Remedy Requested (18 C.F.R. § 385.206(b)(7)).

OVEC's specific request for relief is set forth in more detail in the body of this Complaint.

D. Supporting Documentation (18 C.F.R. § 385.206(b)(8)).

All documents supporting the facts set forth in this Complaint are included as attachments hereto.

E. Use of Alternate Dispute Resolution Mechanism (18 C.F.R. § 385.206(b)(9)).

OVEC has not used the Commission's Enforcement Hotline, Dispute Resolution Service or tariff-based dispute resolution mechanisms. The exigencies of the situation facing OVEC – FirstEnergy's threatened imminent bankruptcy filing – have made any attempt to pursue other alternatives impractical.

F. Form of Notice (18 C.F.R. § 385.206(b)(10)).

A form of notice of this Complaint suitable for publication in the Federal Register is provided as an attachment hereto and submitted in electronic form.

G. Basis for Fast Track Request (18 C.F.R. § 385.206(b)(11)).

OVEC does not request fast-track processing of its Complaint under Rule 206(b)(11) of the Commission's Rules of Practice and Procedure.

H. Service (18 C.F.R. § 385.206(c)).

OVEC has served a copy of this Complaint upon the Respondent simultaneous with its filing of the Complaint with the Commission. OVEC has also served copies of the Complaint upon all other Sponsoring Companies to the ICPA and to the relevant state authorities.

VI. PETITION FOR DECLARATORY ORDER

A. The Commission Should Issue a Declaratory Order Finding that FirstEnergy's Breach of the ICPA Would Result in a Change to the Filed Rate.

Under Rule 207(a)(2) of the Commission's Rules of Practice and Procedure⁷⁵ and section 554(e) of the APA,⁷⁶ the Commission may issue declaratory orders "to terminate a controversy or remove uncertainty."⁷⁷ Any person seeking to terminate a controversy or remove uncertainty regarding a matter within the Commission's jurisdiction may file a request for a declaratory order....⁷⁸ Because "a declaratory order represents a binding statement of policy,"⁷⁹ it is "useful to persons seeking reliable, definitive guidance from the Commission."⁸⁰

While the Commission's decision whether to grant a declaratory order is discretionary,⁸¹ the Commission has exercised that discretion where, as here, its guidance is needed to address a matter of important public policy. As discussed in Sections II – IV, *supra*, the Commission has ample legal basis to conclude that a breach of the ICPA by FirstEnergy would trigger a change to the filed rate embodied in that agreement.

Accordingly, if the Commission concludes that a complaint is the wrong vehicle to address OVEC's concerns, OVEC alternatively requests a declaration that the Commission has exclusive

⁷⁵ 18 C.F.R. § 385.207(a)(2).

⁷⁶ 5 USC § 554(e) (2012).

⁷⁷ *ITC Grid Dev't, LLC*, 154 FERC P 61,206, P 42 (2016); *Pioneer Wind Park I LLC*, 145 FERC 61,215, P 35 (2013) (granting in part petition for declaratory order, stating that Section 554(e) of the Administrative Procedure Act and section 207(a)(2) of the Commission's Rules of Practice and Procedure provide us the authority and discretion to rule on a petition for declaratory order in order to "remove uncertainty.").

⁷⁸ *Informal Staff Advice on Regulatory Requirements*, 113 FERC ¶ 61,174, P 17 (2005). *Am. Elec. Power Serv. Corp.*, 82 FERC ¶ 61,131, 61,472 (1998) (stating that "[f]or definitive rulings, interested persons may seek declaratory orders from the Commission, which have binding effect").

⁷⁹ *Obtaining Guidance on Regulatory Requirements*, 123 FERC ¶ 61,157, P 19 (2008).

⁸⁰ *Id.*

⁸¹ *Pioneer Wind Park I, LLC*, 145 FERC at P 35.

jurisdiction to address FirstEnergy's rejection of the ICPA and to determine that such a rejection would result in a change to the filed rate reflected in that agreement. Such a determination would avoid prolonged litigation over FirstEnergy's obligations under the ICPA and the ensuing damage to OVEC's credit rating while this issue plays out in the bankruptcy court.

B. Alternatively, the Commission Should Issue a Declaratory Order Finding that FirstEnergy's Rejection of the ICPA Would Be Contrary to the Public Interest.

As noted at the outset of this pleading, OVEC also requests a declaratory order even if the Commission concludes that its authority is not exclusive. A declaratory order addressing whether rejection of the ICPA contract is in the public interest would be of significant value to the bankruptcy court. More than that, even a bankruptcy court following *Mirant*, at a minimum, would be *obliged* to consider determinations by this Commission whether rejection of the ICPA would be in the public interest. "Supreme Court precedent supports applying a more rigorous standard" than the "business judgment standard" to motions to reject contracts of a "special nature," like collective bargaining agreements.⁸² And as the Fifth Circuit noted, "the nature of a contract for the interstate sale of electricity at wholesale is also unique."⁸³ "Use of the business judgment standard," it stated, "would be inappropriate in this case because it would not account for the public interest inherent in the transmission and sale of electricity."⁸⁴ In remanding the case back to the bankruptcy court,

⁸² *In re Mirant Corp.*, 378 F.3d at 524-25.

⁸³ *Id.* at 525.

⁸⁴ *Id.*

the Fifth Circuit advised that FERC would be able to assist it in balancing the public interest equities.⁸⁵

On remand, the lower court embraced the Fifth Circuit's directives, stating that it would:

carefully scrutinize the impact of rejection upon the public interest and would, *inter alia*, ensure that rejection will not cause any disruption in the supply of electricity to other public utilities or to consumers or lead to unjust or excessive rates. If rejection would compromise the public interest in any respect, it would not be authorized unless Debtors show that they cannot reorganize without the rejection. Before authorizing a rejection, the court would give the FERC an opportunity to participate as a party in interest for all purposes in this case under 11 U.S.C. § 1109(b) and FED. R. BANKR. P. 2018(a), and would afford the FERC an opportunity to engage in appropriate inquiry to enable it to evaluate the effect that such a rejection would have on the public interest.⁸⁶

OVEC believes the Commission has sufficient information to declare that rejection of the ICPA would, in fact, be contrary to the public interest. As discussed earlier, the ICPA is not a bilateral agreement, but, as the rating agencies have viewed it, the agreement is more in the nature of a joint venture arrangement. Rejection of the ICPA will thus impact not only OVEC, but the other joint venture participants. In the short run, it raises OVEC's borrowing costs and, over the remaining life of the contract would shift hundreds of millions of dollars of OVEC's expenses for which FirstEnergy is now responsible to OVEC's remaining owners and their customers.

But even if the Commission were to conclude that it needs more information to ascertain where the public interest lies if FirstEnergy is permitted to reject the ICPA, it should still determine that it would address the question in a declaratory order. The Commission could do so

⁸⁵ *Id.* at 526. See also, *Cal. Oversight Bd. et al. v. Calpine Energy Servs., L.P. et al.*, 114 FERC ¶ 61,003, PP 5-11 (2006).

⁸⁶ *In re Mirant Corp.*, 318 B.R. at 108.

after opening the proceeding to the filing of comments and briefs so that it has the record it needs to address the issue.

VII. CONCLUSION

For the reasons set forth above, OVEC seeks the following relief from the Commission:

1. A Commission order granting OVEC's Complaint (1) by making a finding that FirstEnergy's anticipatory breach of the ICPA constitutes a violation of its obligations under that agreement, and (2) by making a determination that permitting FirstEnergy to terminate its obligations under the ICPA would be contrary to the public interest in violation of the *Mobile Sierra* doctrine (and to establish such additional procedures as may be necessary to make the latter determination);
2. Alternatively, a Commission order declaring that it has exclusive jurisdiction to ascertain whether FirstEnergy's termination of its purchase obligation under the ICPA, by rejection of the contract in bankruptcy or otherwise, (1) is a matter exclusively within the jurisdiction of the Commission, and (2) that such termination would be contrary to the public interest in violation of the *Mobile Sierra* doctrine (and to establish such additional procedures as may be necessary to make the latter determination); and
3. Alternatively, should the Commission determine that it lacks exclusive jurisdiction, to initiate proceedings to ascertain whether termination of FirstEnergy's purchase obligations under the ICPA would be contrary to the public interest in violation of the *Mobile Sierra* doctrine (and to establish such additional procedures for the development of a record as may be necessary to make the latter determination) and to advise the bankruptcy court both of its intention to make such a determination and of its ultimate conclusions.

Respectfully submitted,

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Dated: March 26, 2018

notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: 5:00 pm Eastern Time on [DATE], 2018.

Kimberly D. Bose,
Secretary.

Attachment A

AMENDED AND RESTATED
INTER-COMPANY POWER AGREEMENT
DATED AS OF SEPTEMBER 10, 2010
AMONG

OHIO VALLEY ELECTRIC CORPORATION,
ALLEGHENY ENERGY SUPPLY COMPANY, L.L.C.
APPALACHIAN POWER COMPANY,
BUCKEYE POWER GENERATING, LLC,
COLUMBUS SOUTHERN POWER COMPANY,
THE DAYTON POWER AND LIGHT COMPANY,
DUKE ENERGY OHIO, INC.,
FIRSTENERGY GENERATION CORP.,
INDIANA MICHIGAN POWER COMPANY,
KENTUCKY UTILITIES COMPANY,
LOUISVILLE GAS AND ELECTRIC COMPANY,
MONONGAHELA POWER COMPANY,
OHIO POWER COMPANY,
PENINSULA GENERATION COOPERATIVE, and
SOUTHERN INDIANA GAS AND ELECTRIC COMPANY

AMENDED AND RESTATED
INTER-COMPANY POWER AGREEMENT

THIS AGREEMENT, dated as of September 10, 2010 (the "Agreement"), by and among OHIO VALLEY ELECTRIC CORPORATION (herein called OVEC), ALLEGHENY ENERGY SUPPLY COMPANY, L.L.C. (herein called Allegheny), APPALACHIAN POWER COMPANY (herein called Appalachian), BUCKEYE POWER GENERATING, LLC (herein called Buckeye), COLUMBUS SOUTHERN POWER COMPANY (herein called Columbus), THE DAYTON POWER AND LIGHT COMPANY (herein called Dayton), DUKE ENERGY OHIO, INC. (formerly known as The Cincinnati Gas & Electric Company and herein called Duke Ohio), FIRSTENERGY GENERATION CORP. (herein called FirstEnergy), INDIANA MICHIGAN POWER COMPANY (herein called Indiana), KENTUCKY UTILITIES COMPANY (herein called Kentucky), LOUISVILLE GAS AND ELECTRIC COMPANY (herein called Louisville), MONONGAHELA POWER COMPANY (herein called Monongahela), OHIO POWER COMPANY (herein called Ohio Power), PENINSULA GENERATION COOPERATIVE (herein called Peninsula), and SOUTHERN INDIANA GAS AND ELECTRIC COMPANY (herein called Southern Indiana, and all of the foregoing, other than OVEC, being herein sometimes collectively referred to as the Sponsoring Companies and individually as a Sponsoring Company) hereby amends and restates in its entirety, the Inter-Company Power Agreement dated as of March 13, 2006, as amended by Modification No. 1, dated as of March 13, 2006 (herein called the Current Agreement), by and among OVEC and the Sponsoring Companies.

WITNESSETH THAT:

WHEREAS, the Current Agreement amended and restated the original Inter-Company Power Agreement, dated as of July 10, 1953, as amended by Modification No. 1, dated as of June 3, 1966; Modification No. 2, dated as of January 7, 1967; Modification No. 3, dated as of November 15, 1967; Modification No. 4, dated as of November 5, 1975; Modification No. 5, dated as of September 1, 1979; Modification No. 6, dated as of August 1, 1981; Modification No. 7, dated as of January 15, 1992; Modification No. 8, dated as of January 19, 1994; Modification No. 9, dated as of August 17, 1995; Modification No. 10, dated as of January 1, 1998; Modification No. 11, dated as of April 1, 1999; Modification No. 12, dated as of November 1, 1999; Modification No. 13, dated as of May 24, 2000; Modification No. 14, dated as of April 1, 2001; and Modification No. 15, dated as of April 30, 2004 (together, herein called the Original Agreement); and

WHEREAS, OVEC designed, purchased, and constructed, and continues to operate and maintain two steam-electric generating stations, one station (herein called Ohio Station) consisting of five turbo-generators and all other necessary equipment, at a location on the Ohio River near Cheshire, Ohio, and the other station (herein called Indiana Station) consisting of six turbogenerators and all other necessary equipment, at a location on the Ohio River near Madison,

Indiana, (the Ohio Station and the Indiana Station being herein called the Project Generating Stations); and

WHEREAS, OVEC also designed, purchased, and constructed, and continues to operate and maintain necessary transmission and general plant facilities (herein called the Project Transmission Facilities) and OVEC established or cause to be established interconnections between the Project Generating Stations and the systems of certain of the Sponsoring Companies; and

WHEREAS, OVEC entered into an agreement, attached hereto as Exhibit A, with Indiana-Kentucky Electric Corporation (herein called IKEC), a corporation organized under the laws of the State of Indiana as a wholly owned subsidiary corporation of OVEC, which has been amended and restated as of the date of this Agreement and embodies the terms and conditions for the ownership and operation by IKEC of the Indiana Station and such portion of the Project Transmission Facilities which are to be owned and operated by it; and

WHEREAS, transmission facilities were constructed by certain of the Sponsoring Companies to interconnect the systems of such Sponsoring Companies, directly or indirectly, with the Project Generating Stations and/or the Project Transmission Facilities, and the Sponsoring Companies have agreed to pay for Available Power, as hereinafter defined, as may be available at the Project Generating Stations; and

WHEREAS, the parties hereto desire to amend and restate in their entirety, the Current Agreement to define the terms and conditions governing the rights of the Sponsoring Companies to receive Available Power from the Project Generating Stations and the obligations of the Sponsoring Companies to pay therefor.

NOW, THEREFORE, the parties hereto agree with each other as follows:

ARTICLE 1

DEFINITIONS

1.01. For the purposes of this Agreement, the following terms, wherever used herein, shall have the following meanings:

1.011 "Affiliate" means, with respect to a specified person, any other person that directly or indirectly through one or more intermediaries controls, is controlled by, or is under common control with, such specified person; provided that "control" for these purposes means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract or otherwise.

1.012 "Arbitration Board" has the meaning set forth in Section 9.10.

1.013 "Available Energy" of the Project Generating Stations means the energy associated with Available Power.

1.014 "Available Power" of the Project Generating Stations at any particular time means the total net kilowatts at the 345-kV busses of the Project Generating Stations which Corporation in its sole discretion will determine that the Project Generating Stations will be capable of safely delivering under conditions then prevailing, including all conditions affecting capability.

1.015 "Corporation" means OVEC, IKEC, and all other subsidiary corporations of OVEC.

1.016 "Decommissioning and Demolition Obligation" has the meaning set forth in Section 5.03(f) hereof.

1.017 "Effective Date" means September 10, 2010, or to the extent necessary, such later date on which Corporation notifies the Sponsoring Companies that all conditions to effectiveness, including all required waiting periods and all required regulatory acceptances or approvals, of this Agreement have been satisfied in form and substance satisfactory to the Corporation.

1.018 "Election Period" has the meaning set forth in Section 9.183(a) hereof.

1.019 "Minimum Generating Unit Output" means 80 MW (net) for each of the Corporation's generation units; provided that such "Minimum Generating Unit Output" shall be confirmed from time to time by operating tests on the Corporation's generation units and shall be adjusted by the Operating Committee as appropriate following such tests.

1.0110 "Minimum Loading Event" means a period of time during which one or more of the Corporation's generation units are operating at below the Minimum Generating Output as a result of the Sponsoring Companies' failure to schedule and take delivery of sufficient Available Energy.

1.0111 "Minimum Loading Event Costs" means the sum of the following costs caused by one or more Minimum Loading Events: (i) the actual costs of any of the Corporation's generating units burning fuel oil; and (ii) the estimated actual additional costs to the Corporation resulting from Minimum Loading Events, including without limitation the incremental costs of additional emissions allowances, reflected in the schedule of charges prepared by the Operating Committee and in effect as of the commencement of any Minimum Loading Event, which schedule may be adjusted from time to time as necessary by the Operating Committee.

1.0112 “Month” means a calendar month.

1.0113 “Nominal Power Available” means an individual Sponsoring Company’s Power Participation Ratio share of the Corporation’s current estimate of the maximum amount of Available Power available for delivery at any given time.

1.0114 “Offer Notice” means the notice required to be given to the other Sponsoring Companies by a Transferring Sponsor offering to sell all or a portion of such Transferring Sponsor’s rights, title and interests in, and obligations under this Agreement. At a minimum, the Offer Notice shall be in writing and shall contain (i) the rights, title and interests in, and obligations under this Agreement that the Transferring Sponsor proposes to Transfer; and (ii) the cash purchase price and any other material terms and conditions of such proposed transfer. An Offer Notice may not contain terms or conditions requiring the purchase of any non-OVEC interests.

1.0115 “Permitted Assignee” means a person that is (a) a Sponsoring Company or its Affiliate whose long-term unsecured non-credit enhanced indebtedness, as of the date of such assignment, has a Standard & Poor’s credit rating of at least BBB- and a Moody’s Investors Service, Inc. credit rating of at least Baa3 (provided that, if the proposed assignee’s long-term unsecured non-credit enhanced indebtedness is not currently rated by one of Standard & Poor’s or Moody, such assignee’s long-term unsecured non-credit enhanced indebtedness, as of the date of such assignment, must have either a Standard & Poor’s credit rating of at least BBB- or a Moody’s Investors Service, Inc. credit rating of at least Baa3); or (b) a Sponsoring Company or its Affiliate that does not meet the criteria in subsection (a) above, if the Sponsoring Company or its Affiliate that is assigning its rights, title and interests in, and obligations under, this Agreement agrees in writing (in form and substance satisfactory to Corporation) to remain obligated to satisfy all of the obligations related to the assigned rights, title and interests to the extent such obligations are not satisfied by the assignee of such rights, title and interests; provided that, in no event shall a person be deemed a “Permitted Assignee” if counsel for the Corporation reasonably determines that the assignment of the rights, title or interests in, or obligations under, this Agreement to such person could cause a termination, default, loss or payment obligation under any security issued, or agreement entered into, by the Corporation prior to such transfer.

1.0116 “Postretirement Benefit Obligation” has the meaning set forth in Section 5.03(e) hereof.

1.0117 “Power Participation Ratio” as applied to each of the Sponsoring Companies refers to the percentage set forth opposite its respective name in the tabulation below:

Company	Power Participation Ratio—Percent
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Allegheny	3.01
Appalachian.....	15.69
Buckeye.....	18.00
Columbus	4.44
Dayton.....	4.90
Duke Ohio.....	9.00
FirstEnergy.....	4.85
Indiana.....	7.85
Kentucky	2.50
Louisville	5.63
Monongahela.....	0.49
Ohio Power	15.49
Peninsula	6.65
Southern Indiana	<u>1.50</u>
Total	100.0

1.0118 “Tariff” means the open access transmission tariff of the Corporation, as amended from time to time, or any successor tariff, as accepted by the Federal Energy Regulatory Commission or any successor agency.

1.0119 “Third Party” means any person other than a Sponsoring Company or its Affiliate.

1.0120 “Total Minimum Generating Output” means the product of the Minimum Generating Unit Output times the number of the Corporation’s generation units available for service at that time.

1.0121 “Transferring Sponsor” has the meaning set forth in Section 9.183(a) hereof.

1.0122 “Uniform System of Accounts” means the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission as in effect on January 1, 2004.

ARTICLE 2

TRANSMISSION AGREEMENT AND FACILITIES

2.01. *Transmission Agreement.* The Corporation shall enter into a transmission service agreement under the Tariff, and the Corporation shall reserve and schedule transmission service, ancillary services and other transmission-related services in accordance with the Tariff to provide for the delivery of Available Power and Available Energy to the applicable delivery point under this Agreement.

2.02. *Limited Burdening of Corporation's Transmission Facilities.*

Transmission facilities owned by the Corporation, including the Project Transmission Facilities, shall not be burdened by power and energy flows of any Sponsoring Company to an extent which would impair or prevent the transmission of Available Power.

ARTICLE 3

[RESERVED]

ARTICLE 4

AVAILABLE POWER SUPPLY

4.01. *Operation of Project Generating Stations.* Corporation shall operate and maintain the Project Generating Stations in a manner consistent with safe, prudent, and efficient operating practice so that the Available Power available from said stations shall be at the highest practicable level attainable consistent with OVEC's obligations under ReliabilityFirst Reliability Standard BAL-002-RFC throughout the term of this Agreement.

4.02. *Available Power Entitlement.* The Sponsoring Companies collectively shall be entitled to take from Corporation and Corporation shall be obligated to supply to the Sponsoring Companies any and all Available Power and Available Energy pursuant to the provisions of this Agreement. Each Sponsoring Company's Available Power Entitlement hereunder shall be its Power Participation Ratio, as defined in *subsection 1.0117*, of Available Power.

4.03. *Available Energy.* Corporation shall make Available Energy available to each Sponsoring Company in proportion to said Sponsoring Company's Power Participation Ratio. No Sponsoring Company, however, shall be obligated to avail itself of any Available Energy. Available Energy shall be scheduled and taken by the Sponsoring Companies in accordance with the following procedures:

4.031 Each Sponsoring Company shall schedule the delivery of all or any portion (in whole MW increments) of its entitlement to Available Energy in accordance with scheduling procedures established by the Operating Committee from time to time.

4.032 In the event that any Sponsoring Company does not schedule the delivery of all of its Power Participation Ratio share of Available Energy, then each such other Sponsoring Company may schedule the delivery of all or any portion (in whole MW increments) of any such unscheduled share of Available Energy (through successive allotments if necessary) in proportion to their Power Participation Ratios.

4.033 Notwithstanding any Available Energy schedules made in accordance with this Section 4.03 and the applicable scheduling procedures, (i) the Corporation shall adjust all schedules to the extent that the Corporation's actual generation output is less than or more than the expected Nominal Power Available to all Sponsoring Companies, or to the extent that the Corporation is unable to obtain sufficient transmission service under the Tariff for the delivery of all scheduled Available Energy; and (ii) immediately following a Minimum Loading Event, any Sponsoring Company causing (in whole or part) such Minimum Loading Event shall have its Available Energy schedules increased after the schedules of the Sponsoring Companies not causing such Minimum Load Event, in accordance with the estimated ramp rates associated with the shutdown and start-up of the Corporation's generation units as reflected in the schedules prepared by the Operating Committee and in effect as of the commencement of any Minimum Loading Event, which schedules may be adjusted from time to time as necessary by the Operating Committee.

4.034 Each Sponsoring Company availing itself of Available Energy shall be entitled to an amount of energy (herein called billing kilowatt-hours of Available Energy) equal to its portion, determined as provided in this Section 4.03, of the total Available Energy after deducting therefrom such Sponsoring Company's proportionate share, as defined in this Section 4.03, of all losses as determined in accordance with the Tariff incurred in transmitting the total of such Available Energy from the 345-kV busses of the Project Generating Stations to the applicable delivery points, as scheduled pursuant to Section 9.01, of all Sponsoring Companies availing themselves of Available Energy. The proportionate share of all such losses that shall be so deducted from such Sponsoring Company's portion of Available Energy shall be equal to all such losses multiplied by the ratio of such portion of Available Energy to the total of such Available Energy. Each Sponsoring Company shall have the right, pursuant to this Section 4.03, to avail itself of Available Energy for the purpose of meeting the loads of its own system and/or of supplying energy to other systems in accordance with agreements, other than this Agreement, to which such Sponsoring Company is a party.

4.035 To the extent that, as a result of the failure by one or more Sponsoring Companies to take its respective Power Participation Ratio share of the applicable Total Minimum Generating Output during any hour, a Minimum Loading Event shall occur, then such one or more Sponsoring Companies shall be assessed charges for any Minimum Loading Event Costs in accordance with Section 5.05.

ARTICLE 5

CHARGES FOR AVAILABLE POWER AND MINIMUM LOADING EVENT COSTS

5.01. *Total Monthly Charge.* The amount to be paid to Corporation each month by the Sponsoring Companies for Available Power and Available Energy supplied under this

Agreement shall consist of the sum of an energy charge, a demand charge, and a transmission charge, all determined as set forth in this *Article 5*.

5.02. *Energy Charge*. The energy charge to be paid each month by the Sponsoring Companies for Available Energy shall be determined by Corporation as follows:

5.021 Determine the aggregate of all expenses for fuel incurred in the operation of the Project Generating Stations, in accordance with Account 501 (Fuel), Account 506.5 (Variable Reagent Costs Associated With Pollution Control Facilities) and 509 (Allowances) of the Uniform System of Accounts.

5.022 Determine for such month the difference between the total cost of fuel as described in subsection 5.021 above and the total cost of fuel included in any Minimum Loading Event Costs payable to the Corporation for such month pursuant to Section 8.03. For the purposes hereof the difference so determined shall be the fuel cost allocable for such month to the total kilowatt-hours of energy generated at the Project Generating Stations for the supply of Available Energy. For Available Energy availed of by the Sponsoring Companies, each Sponsoring Company shall pay Corporation for each such month an amount obtained by multiplying the ratio of the billing kilowatt-hours of such Available Energy availed of by such Sponsoring Company during such month to the aggregate of the billing kilowatt-hours of all Available Energy availed of by all Sponsoring Companies during such month times the total cost of fuel as described in this subsection 5.022 for such month.

5.03. *Demand Charge*. During the period commencing with the Effective Date and for the remainder of the term of this Agreement, demand charges payable by the Sponsoring Companies to Corporation shall be determined by the Corporation as provided below in this Section 5.03. Each Sponsoring Company's share of the aggregate demand charges shall be the percentage of such charges represented by its Power Participation Ratio.

The aggregate demand charge payable each month by the Sponsoring Companies to Corporation shall be equal to the total costs incurred for such month by Corporation resulting from its ownership, operation, and maintenance of the Project Generating Stations and Project Transmission Facilities determined as follows:

As soon as practicable after the close of each calendar month the following components of costs of Corporation (eliminating any duplication of costs which might otherwise be reflected among the corporate entities comprising Corporation) applicable for such month to the ownership, operation and maintenance of the Project Generating Stations and the Project Transmission Facilities, including additional facilities and/or spare parts (such as fuel processing plants, flue gas or waste product processing facilities, and facilities reasonably required to enable the Corporation to limit the emission of pollutants or the discharge of wastes in compliance with governmental requirements) and

replacements necessary or desirable to keep the Project Generating Stations and the Project Transmission Facilities in a dependable and efficient operating condition, and any provision for any taxes that may be applicable to such charges, to be determined and recorded in the following manner:

(a) Component (A) shall consist of fixed charges made up of (i) the amounts of interest properly chargeable to Accounts 427, 430 and 431, less the amount thereof credited to Account 432, of the Uniform System of Accounts, including the interest component of any purchase price, interest, rental or other payment under an installment sale, loan, lease or similar agreement relating to the purchase, lease or acquisition by Corporation of additional facilities and replacements (whether or not such interest or other amounts have come due or are actually payable during such Month), (ii) the amounts of amortization of debt discount or premium and expenses properly chargeable to Accounts 428 and 429, and (iii) an amount equal to the sum of (I) the applicable amount of the debt amortization component for such month required to retire the total amount of indebtedness of Corporation issued and outstanding, (II) the amortization requirement for such month in respect of indebtedness of Corporation incurred in respect of additional facilities and replacements, and (III) to the extent not provided for pursuant to clause (II) of this clause (iii), an appropriate allowance for depreciation of additional facilities and replacements.

(b) Component (B) shall consist of the total operating expenses for labor, maintenance, materials, supplies, services, insurance, administrative and general expense, etc., properly chargeable to the Operation and Maintenance Expense Accounts of the Uniform System of Accounts (exclusive of Accounts 501, 509, 555, 911, 912, 913, 916, and 917 of the Uniform System of Accounts), minus the total of all non-fuel costs included in any Minimum Loading Event Costs payable to the Corporation for such month pursuant to Section 8.03, minus the total of all transmission charges payable to the Corporation for such month pursuant to Section 5.04, and plus any additional amounts which, after provision for all income taxes on such amounts (which shall be included in Component (C) below), shall equal any amounts paid or payable by Corporation as fines or penalties with respect to occasions where it is asserted that Corporation failed to comply with a law or regulation relating to the emission of pollutants or the discharge of wastes.

(c) Component (C) shall consist of the total expenses for taxes, including all taxes on income but excluding any federal income taxes arising from payments to Corporation under Component (D) below, and all operating or other costs or expenses, net of income, not included or

specifically excluded in Components (A) or (B) above, including tax adjustments, regulatory adjustments, net losses for the disposition of property and other net costs or expenses associated with the operation of a utility.

(d) Component (D) shall consist of an amount equal to the product of \$2.089 multiplied by the total number of shares of capital stock of the par value of \$100 per share of Ohio Valley Electric Corporation which shall have been issued and which are outstanding on the last day of such month.

(e) Component (E) shall consist of an amount to be sufficient to pay the costs and other expenses relating to the establishment, maintenance and administration of life insurance, medical insurance and other postretirement benefits other than pensions attributable to the employment and employee service of active employees, retirees, or other employees, including without limitation any premiums due or expected to become due, as well as administrative fees and costs, such amounts being sufficient to provide payment with respect to all periods for which Corporation has committed or is otherwise obligated to make such payments, including amounts attributable to current employee service and any unamortized prior service cost, gain or loss attributable to prior service years ("Postretirement Benefit Obligation"); provided that, the amount payable for Postretirement Benefit Obligations during any month shall be determined by the Corporation based on, among other factors, the Statement of Financial Accounting Standards No. 106 (Employers' Accounting For Postretirement Benefits Other Than Pensions) and any applicable accounting standards, policies or practices as adopted from time to time relating to accruals with respect to all or any portion of such Postretirement Benefit Obligation.

(f) Component (F) shall consist of an amount that may be incurred in connection with the decommissioning, shutdown, demolition and closing of the Project Generating Stations when production of electric power and energy is discontinued at such Project Generating Stations, which amount shall include, without limitation the following costs (net of any salvage credits): the costs of demolishing the plants' building structures, disposal of non-salvageable materials, removal and disposal of insulating materials, removal and disposal of storage tanks and associated piping, disposal or removal of materials and supplies (including fuel oil and coal), grading, covering and reclaiming storage and disposal areas, disposing of ash in ash ponds to the extent required by regulatory authorities, undertaking corrective or remedial action required by regulatory authorities, and any other costs incurred in putting the facilities

in a condition necessary to protect health or the environment or which are required by regulatory authorities, or which are incurred to fund continuing obligations to monitor or to correct environmental problems which result, or are later discovered to result, from the facilities' operation, closure or post-closure activities ("Decommissioning and Demolition Obligation") provided that, the amount payable for Decommissioning and Demolition Obligations during any month shall be calculated by Corporation based on, among other factors, the then-estimated useful life of the Project Generating Stations and any applicable accounting standards, policies or practices as adopted from time to time relating to accruals with respect to all or any portion of such Decommissioning and Demolition Obligation, and provided further that, the Corporation shall recalculate the amount payable under this Component (F) for future months from time to time, but in no event later than five (5) years after the most recent calculation.

5.04. *Transmission Charge.* The transmission charges to be paid each month by the Sponsoring Companies shall be equal to the total costs incurred for such month by Corporation for the purchase of transmission service, ancillary services and other transmission-related services under the Tariff as reserved and scheduled by the Corporation to provide for the delivery of Available Power and Available Energy to the applicable delivery point under this Agreement. Each Sponsoring Company's share of the aggregate transmission charges shall be the percentage of such charges represented by its Power Participation Ratio.

5.05. *Minimum Loading Event Costs.* To the extent that, as a result of the failure by one or more Sponsoring Companies to take its respective Power Participation Ratio share of the applicable Total Minimum Generating Output during any hour, a Minimum Loading Event shall occur, then the sum of all Minimum Loading Event Costs relating to such Minimum Loading Event shall be charged to such Sponsoring Company or group of Sponsoring Companies that failed take its respective Power Participation Ratio share of the applicable Total Minimum Generating Output during such period, with such Minimum Loading Event Costs allocated among such Sponsoring Companies on a pro-rata basis in accordance with such Sponsoring Company's MWh share of the MWh reduction in the delivery of Available Energy causing any Minimum Loading Event. The applicable charges for Minimum Loading Event Costs as determined by the corporation in accordance with Section 5.05 shall be paid each month by the applicable Sponsoring Companies.

ARTICLE 6

Metering of Energy Supplied

6.01. *Measuring Instruments.* The parties hereto shall own and maintain such metering equipment as may be necessary to provide complete information regarding the delivery of power and energy to or for the account of any of the parties hereto; and the ownership and

expense of such metering shall be in accordance with agreements among them. Each party will at its own expense make such periodic tests and inspections of its meters as may be necessary to maintain them at the highest practical commercial standard of accuracy and will advise all other interested parties hereto promptly of the results of any such test showing an inaccuracy of more than 1%. Each party will make additional tests of its meters at the request of any other interested party. Other interested parties shall be given notice of, and may have representatives present at, any test and inspection made by another party.

ARTICLE 7

COSTS OF REPLACEMENTS AND ADDITIONAL FACILITIES; PAYMENTS FOR EMPLOYEE BENEFITS; DECOMMISSIONING, SHUTDOWN, DEMOLITION AND CLOSING CHARGES

7.01. *Replacement Costs.* The Sponsoring Companies shall reimburse Corporation for the difference between (a) the total cost of replacements chargeable to property and plant made by Corporation during any month prior thereto (and not previously reimbursed) and (b) the amounts received by Corporation as proceeds of fire or other applicable insurance protection, or amounts recovered from third parties responsible for damages requiring replacement, plus provision for all taxes on income on such difference; provided that, to the extent that the Corporation arranges for the financing of any replacements, the payments due under this Section 7.01 shall equal the amount of all principal, interest, taxes and other costs and expenses related to such financing during any month. Each Sponsoring Company's share of such payment shall be the percentage of such costs represented by its Power Participation Ratio. The term cost of replacements, as used herein, shall include all components of cost, plus removal expense, less salvage.

7.02. *Additional Facility Costs.* The Sponsoring Companies shall reimburse Corporation for the total cost of additional facilities and/or spare parts purchased and/or installed by Corporation during any month prior thereto (and not previously reimbursed), plus provision for all taxes on income on such costs; provided that, to the extent that the Corporation arranges for the financing of any additional facilities and/or spare parts, the payments due under this Section 7.02 shall equal the amount of all principal, interest, taxes and other costs and expenses related to such financing during any month. Each Sponsoring Company's share of such payment shall be the percentage of such costs represented by its Power Participation Ratio.

7.03. *Payments for Employee Benefits.* Not later than the effective date of termination of this Agreement, each Sponsoring Company will pay to Corporation its Power Participation Ratio share of additional amounts, after provision for any taxes that may be applicable thereto, sufficient to cover any shortfall if the amount of the Postretirement Benefit Obligation collected by the Corporation prior to the effective date of termination of the Agreement is insufficient to permit Corporation to fulfill its commitments or obligations with respect to both postemployment benefit obligations under the Statement of Financial Accounting Standards No. 112 and postretirement benefits other than pensions, as determined by Corporation

with the aid of an actuary or actuaries selected by the Corporation based on the terms of the Corporation's then-applicable plans.

7.04. *Decommissioning, Shutdown, Demolition and Closing.* The Sponsoring Companies recognize that a part of the cost of supplying power to it under this Agreement is the amount that may be incurred in connection with the decommissioning, shutdown, demolition and closing of the Project Generating Stations when production of electric power and energy is discontinued at such Project Generating Stations. Not later than the effective date of termination of this Agreement, each Sponsoring Company will pay to Corporation its Power Participation Ratio share of additional amounts, after provision for any taxes that may be applicable thereto, sufficient to cover any shortfall if the amount of the Decommissioning and Demolition Obligation collected by the Corporation prior to the effective date of termination of the Agreement is insufficient to permit Corporation to complete the decommissioning, shutdown, demolition and closing of the Project Generating Stations, based on the Corporation's recalculation of the Decommissioning and Demolition Obligation in accordance with Section 5.03(f) of this Agreement no earlier than twelve (12) months before the effective date of termination of this Agreement.

ARTICLE 8

BILLING AND PAYMENT

8.01. *Available Power, and Replacement and Additional Facility Costs.* As soon as practicable after the end of each month Corporation shall render to each Sponsoring Company a statement of all Available Power and Available Energy supplied to or for the account of such Sponsoring Company during such month, specifying the amount due to the Corporation therefor, including any amounts for reimbursement for the cost of replacements and additional facilities and/or spare parts incurred during such month, pursuant to *Articles 5 and 7* above. Such Sponsoring Company shall make payment therefor promptly upon the receipt of such statement, but in no event later than fifteen (15) days after the date of receipt of such statement. In case any factor entering into the computation of the amount due for Available Power and Available Energy cannot be determined at the time, it shall be estimated subject to adjustment when the actual determination can be made.

8.02. *Provisional Payments for Available Power.* The Sponsoring Companies shall, from time to time, at the request of the Corporation, make provisional semi-monthly payments for Available Power in amounts approximately equal to the estimated amounts payable for Available Power delivered by Corporation to the Sponsoring Companies during each semi-monthly period. As soon as practicable after the end of each semi-monthly period with respect to which Corporation has requested the Sponsoring Companies to make provisional semi-monthly payments for Available Power, Corporation shall render to each Sponsoring Company a separate statement indicating the amount payable by such Sponsoring Company for such semi-monthly period. Such Sponsoring Company shall make payment therefor promptly upon receipt of such statement, but in no event later than fifteen (15) days after the date of receipt of such

statement and the amounts so paid by such Sponsoring Company shall be credited to the account of such Sponsoring Company with respect to future payments to be made pursuant to *Articles 5 and 7* above by such Sponsoring Company to Corporation for Available Power.

8.03. *Minimum Loading Event Costs.* As soon as practicable after the end of each month, Corporation shall render to each Sponsoring Company a statement indicating any applicable charges for Minimum Loading Event Costs pursuant to Section 5.05 during such month, specifying the amount due to the Corporation therefor pursuant to *Article 5* above. Such Sponsoring Company shall make payment therefor promptly upon the receipt of such statement, but in no event later than fifteen (15) days after the date of receipt of such statement. In case the computation of the amount due for Minimum Loading Event Costs cannot be determined at the time, it shall be estimated subject to adjustment when the actual determination can be made, and all payments shall be subject to subsequent adjustment.

8.04. *Unconditional Obligation to Pay Demand and Other Charges.* The obligation of each Sponsoring Company to pay its specified portion of the Demand Charge under Section 5.03, the Transmission Charge under Section 5.04, and all charges under *Article 7* for any Month shall not be reduced irrespective of:

(a) whether or not any Available Power or Available Energy are supplied by the Corporation during such calendar month and whether or not any Available Power or Available Energy are accepted by any Sponsoring Company during such calendar month;

(b) the existence of any claim, set-off, defense, reduction, abatement or other right (other than irrevocable payment, performance, satisfaction or discharge in full) that such Sponsoring Company may have, or which may at any time be available to or be asserted by such Sponsoring Company, against the Corporation, any other Sponsoring Company, any creditor of the Corporation or any other Person (including, without limitation, arising as a result of any breach or alleged breach by either the Corporation, any other Sponsoring Company, any creditor of the Corporation or any other Person under this Agreement or any other agreement (whether or not related to the transactions contemplated by this Agreement or any other agreement) to which such party is a party); or

(c) the validity or enforceability against any other Sponsoring Company of this Agreement or any right or obligation hereunder (or any release or discharge thereof) at any time.

ARTICLE 9

GENERAL PROVISIONS

9.01. *Characteristics of Supply and Points of Delivery.* All power and energy delivered hereunder shall be 3-phase, 60-cycle, alternating current, at a nominal unregulated voltage designated for the point of delivery as described in this *Article 9*. Available Power and Available Energy to be delivered between Corporation and the Sponsoring Companies pursuant to this Agreement shall be delivered under the terms and conditions of the Tariff at the points, as scheduled by the Sponsoring Company in accordance with procedures established by the Operating Committee and in accordance with Section 9.02, where the transmission facilities of Corporation interconnect with the transmission facilities of any Sponsoring Company (or its successor or predecessor); provided that, to the extent that a joint and common market is established for the sale of power and energy by Sponsoring Companies within one or more of the regional transmission organizations or independent system operators approved by the Federal Energy Regulatory Commission in which the Sponsoring Companies are members or otherwise participate, then Corporation and the Sponsoring Companies shall take such action as reasonably necessary to permit the Sponsoring Companies to bid their entitlement to power and energy from Corporation into such market(s) in accordance with the procedures established for such market(s).

9.02. *Modification of Delivery Schedules Based on Available Transmission Capability.* To the extent that transmission capability available for the delivery of Available Power and Available Energy at any delivery point is less than the total amount of Available Power and Available Energy scheduled for delivery by the Sponsoring Companies at such delivery point in accordance with Section 9.01, then the following procedures shall apply and the Corporation and the applicable Sponsoring Companies shall modify their delivery schedules accordingly until the total amount of Available Power and Available Energy scheduled for delivery at such delivery point is equal to or less than the transmission capability available for the delivery of Available Power and Available Energy: (a) the transmission capability available for the delivery of Available Power and Available Energy at the following delivery points shall be allocated first on a pro rata basis (in whole MW increments) to the following Sponsoring Companies up to their Power Participation Ratio share of the total amount of Available Energy available to all Sponsoring Companies (and as applicable, further allocated among Sponsoring Companies entitled to allocation under this Section 9.02(a) in accordance with their Power Participation Ratios): (i) to Allegheny, Appalachian, Buckeye, Columbus, FirstEnergy, Indiana, Monongahela, Ohio Power and Peninsula (or their successors) for deliveries at the points of interconnection between the Corporation and Appalachian, Columbus, Indiana or Ohio Power, or their successors; (ii) to Duke Ohio (or its successor) for deliveries at the points of interconnection between the Corporation and Duke Ohio or its successor; (iii) to Dayton (or its successor) for deliveries at the points of interconnection between the Corporation and Dayton or its successor; and (iv) to Kentucky, Louisville and Southern Indiana (or their successors) for deliveries at the points of interconnection between the Corporation and Louisville or Kentucky, or their successors; and (b) any remaining transmission capability available for the delivery of

Available Power and Available Energy shall be allocated on a pro rata basis (in whole MW increments) to the Sponsoring Companies in accordance with their Power Participation Ratios.

9.03. *Operation and Maintenance of Systems Involved.* Corporation and the Sponsoring Companies shall operate their systems in parallel, directly or indirectly, except during emergencies that temporarily preclude parallel operation. The parties hereto agree to coordinate their operations to assure maximum continuity of service from the Project Generating Stations, and with relation thereto shall cooperate with one another in the establishment of schedules for maintenance and operation of equipment and shall cooperate in the coordination of relay protection, frequency control, and communication and telemetering systems. The parties shall build, maintain and operate their respective systems in such a manner as to minimize so far as practicable rapid fluctuations in energy flow among the systems. The parties shall cooperate with one another in the operation of reactive capacity so as to assure mutually satisfactory power factor conditions among themselves.

The parties hereto shall exercise due diligence and foresight in carrying out all matters related to the providing and operating of their respective power resources so as to minimize to the extent practicable deviations between actual and scheduled deliveries of power and energy among their systems. The parties hereto shall provide and/or install on their respective systems such communication, telemetering, frequency and/or tie-line control facilities essential to so minimizing such deviations; and shall fully cooperate with one another and with third parties (such third parties whose systems are either directly or indirectly interconnected with the systems of the Sponsoring Companies and who of necessity together with the parties hereto must unify their efforts cooperatively to achieve effective and efficient interconnected systems operation) in developing and executing operating procedures that will enable the parties hereto to avoid to the extent practicable deviations from scheduled deliveries.

In order to foster coordination of the operation and maintenance of Corporation's transmission facilities with those facilities of Sponsoring Companies that are owned or functionally controlled by a regional transmission organization or independent system operator, Corporation shall use commercially reasonable efforts to enter into a coordination agreement with any regional transmission organization or independent system operator approved by the Federal Energy Regulatory Commission that operates transmission facilities that interconnect with Corporation's transmission facilities, and to enter into a mutually agreeable services agreement with a regional transmission organization or independent system operator to provide the Corporation with reliability and security coordination services and other related services.

9.04. *Power Deliveries as Affected by Physical Characteristics of Systems.* It is recognized that the physical and electrical characteristics of the transmission facilities of the interconnected network of which the transmission systems of the Sponsoring Companies, Corporation, and other systems of third parties not parties hereto are a part, may at times preclude the direct delivery at the points of interconnection between the transmission systems of one or more of the Sponsoring Companies and Corporation, of some portion of the energy supplied under this Agreement, and that in each such case, because of said characteristics, some

of the energy will be delivered at points which interconnect the system of one or more of the Sponsoring Companies with systems of companies not parties to this Agreement. The parties hereto shall cooperate in the development of mutually satisfactory arrangements among themselves and with such companies not parties hereto whereby the supply of power and energy contemplated hereunder can be fulfilled.

9.05. *Operating Committee.* There shall be an "Operating Committee" consisting of one member appointed by the Corporation and one member appointed by each of the Sponsoring Companies electing so to do; provided that, if any two or more Sponsoring Companies are Affiliates, then such Affiliates shall together be entitled to appoint only one member to the Operating Committee. The "Operating Committee" shall establish (and modify as necessary) scheduling, operating, testing and maintenance procedures of the Corporation in support of this Agreement, including establishing: (i) procedures for scheduling delivery of Available Energy under Section 4.03, (ii) procedures for power and energy accounting, (iii) procedures for the reservation and scheduling of firm and non-firm transmission service under the Tariff for the delivery of Available Power and Available Energy, (iv) the Minimum Generating Unit Output, and (v) the form of notifications relating to power and energy and the price thereof. In addition, the Operating Committee shall consider and make recommendations to Corporation's Board of Directors with respect to such other problems as may arise affecting the transactions under this Agreement. The decisions of the Operating Committee, including the adoption or modification of any procedure by the Operating Committee pursuant to this Section 9.04, must receive the affirmative vote of at least two-thirds of the members of the Operating Committee, regardless of the number of members of the Operating Committee present at any meeting.

9.06. *Acknowledgment of Certain Rights.* For the avoidance of doubt, all of the parties to this Agreement acknowledge and agree that (i) as of the effective date of the Current Agreement, certain rights and obligations of the Sponsoring Companies or their predecessors under the Original Agreement were changed, modified or otherwise removed, (ii) to the extent that the rights of any Sponsoring Company or their predecessors were thereby changed, modified or otherwise removed as of the effective date of the Current Agreement, such Sponsoring Company may be entitled to rights under applicable law, regulation, rules or orders under the Federal Power Act or otherwise adopted by the Federal Energy Regulatory Commission ("FERC"), (iii) as a result of the elimination as of the effective date of the Current Agreement of the firm transmission service previously provided during the term of the Original Agreement to Sponsoring Companies or their predecessors whose transmission systems were only indirectly connected to the Corporation's facilities through intervening transmission systems by certain Sponsoring Companies or their predecessors whose transmission systems were directly connected to the Corporation's facilities, such Sponsoring Companies or their predecessors whose transmission systems were only indirectly connected to the Corporation's facilities through intervening transmission systems shall have been entitled to such "roll over" firm transmission service for delivery of their entitlement to their Power Participation Ratio share of Surplus Power and Surplus Energy under this Agreement, to the border of such Sponsoring Company system and intervening Sponsoring Company system, as would be accorded a long-

term firm point-to-point transmission service reservation under the then otherwise applicable FERC Open Access Transmission Tariff ("OATT"), (iv) the obligation of any Sponsoring Company to maintain or expand transmission capacity to accommodate another Sponsoring Company's "roll over" rights to transmission service for delivery of their entitlement to their Power Participation Ratio share of Surplus Power and Surplus Energy under this Agreement shall be consistent with the obligations it would have for long-term firm point-to-point transmission service provided pursuant to the then otherwise applicable OATT, and (v) the parties shall cooperate with any Sponsoring Company that seeks to obtain and/or exercise any such rights available under applicable law, regulation, rules or orders under the Federal Power Act or otherwise adopted by the FERC.

9.07. *Term of Agreement.* This Agreement shall become effective upon the Effective Date and shall terminate upon the earlier of: (1) June 30, 2040 or (2) the sale or other disposition of all of the facilities of the Project Generating Stations or the permanent cessation of operation of such facilities; provided that, the provisions of *Articles 5, 7 and 8*, this Section 9.07 and Sections 9.08, 9.09, 9.10, 9.11, 9.12, 9.14, 9.15, 9.16, 9.17 and 9.18 shall survive the termination of this Agreement, and no termination of this Agreement, for whatever reason, shall release any Sponsoring Company of any obligations or liabilities incurred prior to such termination.

9.08. *Access to Records.* Corporation shall, at all reasonable times, upon the request of any Sponsoring Company, grant to its representatives reasonable access to the books, records and accounts of the Corporation, and furnish such Sponsoring Company such information as it may reasonably request, to enable it to determine the accuracy and reasonableness of payments made for energy supplied under this Agreement.

9.09. *Modification of Agreement.* Absent the agreement of all parties to this Agreement, the standard for changes to provisions of this Agreement related to rates proposed by a party, a non-party or the Federal Energy Regulatory Commission (or a successor agency) acting sua sponte shall be the "public interest" standard of review set forth in *United Gas Pipeline Co. v. Mobile Gas Serv. Corp.*, 350 U.S. 332 (1956) and *Federal Power Comm'n v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956).

9.10. *Arbitration.* Any controversy, dispute or claim arising out of this Agreement or the refusal by any party hereto to perform the whole or any part thereof, shall be determined by arbitration, in the City of Columbus, Franklin County, Ohio, in accordance with the Commercial Arbitration Rules of the American Arbitration Association or any successor organization, except as otherwise set forth in this Section 9.10.

The party demanding arbitration shall serve notice in writing upon all other parties hereto, setting forth in detail the controversy, dispute or claim with respect to which arbitration is demanded, and the parties shall thereupon endeavor to agree upon an arbitration board, which shall consist of three members ("Arbitration Board"). If all the parties hereto fail so to agree within a period of thirty (30) days from the original notice, the party demanding

arbitration may, by written notice to all other parties hereto, direct that any members of the Arbitration Board that have not been agreed to by the parties shall be selected by the American Arbitration Association, or any successor organization. No person shall be eligible for appointment to the Arbitration Board who is an officer, employee, shareholder of or otherwise interested in any of the parties hereto or in the matter sought to be arbitrated.

The Arbitration Board shall afford adequate opportunity to all parties hereto to present information with respect to the controversy, dispute or claim submitted to arbitration and may request further information from any party hereto; provided, however, that the parties hereto may, by mutual agreement, specify the rules which are to govern any proceeding before the Arbitration Board and limit the matters to be considered by the Arbitration Board, in which event the Arbitration Board shall be governed by the terms and conditions of such agreement.

The determination or award of the Arbitration Board shall be made upon a determination of a majority of the members thereof. The findings and award of the Arbitration Board shall be final and conclusive with respect to the controversy, dispute or claim submitted for arbitration and shall be binding upon the parties hereto, except as otherwise provided by law. The award of the Arbitration Board shall specify the manner and extent of the division of the costs of the arbitration proceeding among the parties hereto.

9.11. *Liability.* The rights and obligations of all the parties hereto shall be several and not joint or joint and several.

9.12. *Force Majeure.* No party hereto shall be held responsible or liable for any loss or damage on account of non-delivery of energy hereunder at any time caused by an event of Force Majeure. "Force Majeure" shall mean the occurrence or non-occurrence of any act or event that could not reasonably have been expected and avoided by exercise of due diligence and foresight and such act or event is beyond the reasonable control of such party, including to the extent caused by act of God, fire, flood, explosion, strike, civil or military authority, insurrection or riot, act of the elements, or failure of equipment. For the avoidance of doubt, "Force Majeure" shall in no event be based on any Sponsoring Company's financial or economic conditions, including without limitation (i) the loss of the Sponsoring Company's markets; or (ii) the Sponsoring Company's inability economically to use or resell the Available Power or Available Energy purchased hereunder.

9.13. *Governing Law.* This Agreement shall be governed by, and construed in accordance with, the laws of the State of Ohio.

9.14. *Regulatory Approvals.* This Agreement is made subject to the jurisdiction of any governmental authority or authorities having jurisdiction in the premises and the performance thereof shall be subject to the following:

- (a) The receipt of all regulatory approvals, in form and substance satisfactory to Corporation, necessary to permit Corporation to perform all the duties and obligations to be performed by Corporation hereunder.

(b) The receipt of all regulatory approvals, in form and substance satisfactory to the Sponsoring Companies, necessary to permit the Sponsoring Companies to carry out all transactions contemplated herein.

9.15. *Notices.* All notices, requests or other communications under this Agreement shall be in writing and shall be sufficient in all respects: (i) if delivered in person or by courier, upon receipt by the intended recipient or an employee that routinely accepts packages or letters from couriers or other persons for delivery to personnel at the address identified above (as confirmed by, if delivered by courier, the records of such courier), (ii) if sent by facsimile transmission, when the sender receives confirmation from the sending facsimile machine that such facsimile transmission was transmitted to the facsimile number of the addressee, or (iii) if mailed, upon the date of delivery as shown by the return receipt therefor.

9.16. *Waiver.* Performance by any party to this Agreement of any responsibility or obligation to be performed by such party or compliance by such party with any condition contained in this Agreement may by a written instrument signed by all other parties to this Agreement be waived in any one or more instances, but the failure of any party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights, but the same shall continue and remain in full force and effect.

9.17. *Titles of Articles and Sections.* The titles of the Articles and Sections in this Agreement have been inserted as a matter of convenience of reference and are not a part of this Agreement.

9.18. *Successors and Assigns.* This Agreement may be executed in any number of counterparts, all of which shall constitute but one and the same document.

9.181 This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns, but a party to this Agreement may not assign this Agreement or any of its rights, title or interests in or obligations (including without limitation the assumption of debt obligations) under this Agreement, except to a successor to all or substantially all the properties and assets of such party or as provided in Section 9.182 or 9.183, without the written consent of all the other parties hereto.

9.182 Notwithstanding the provisions of Section 9.181, any Sponsoring Company shall be permitted to, upon thirty (30) days notice to the Corporation and each other Sponsoring Company, without any further action by the Corporation or the other Sponsoring Companies, assign all or part of its rights, title and interests in, and obligations under this Agreement to a Permitted Assignee, provided that, the assignee and assignor of the rights, title and interests in, and obligations under, this Agreement have executed an assignment agreement in form and substance acceptable to the Corporation

in its reasonable discretion (including, without limitation; the agreement by the Sponsoring Company assigning such rights, title and interests in, and obligations under, this Agreement to reimburse the Corporation and the other Sponsoring Companies for any fees or expenses required under any security issued, or agreement entered into, by the Corporation as a result of such assignment, including without limitation any consent fee or additional financing costs to the Corporation under the Corporation's then-existing securities or agreements resulting from such assignment).

9.183 Notwithstanding the provisions of Section 9.181, any Sponsoring Company shall be permitted to, subject to compliance with all of the requirements of this Section 9.183, assign all or part of its rights, title and interests in, and obligations under this Agreement to a Third Party without any further action by the Corporation or the other Sponsoring Companies.

(a) A Sponsoring Company (the "Transferring Sponsor") that desires to assign all or part of its rights, title and interests in, and obligations under this Agreement to a Third Party shall deliver an Offer Notice to the Corporation and each other Sponsoring Company. The Offer Notice shall be deemed to be an irrevocable offer of the subject rights, title and interests in, and obligations under this Agreement to each of the other Sponsoring Companies that is not an Affiliate of the Transferring Sponsor, which offer must be held open for no less than thirty (30) days from the date of the Offer Notice (the "Election Period").

(b) The Sponsoring Companies (other than the Transferring Sponsor and its Affiliates) shall first have the right, but not the obligation, to purchase all of the rights, title and interests in, and obligations under this Agreement described in the Offer Notice at the price and on the terms specified therein by delivering written notice of such election to the Transferring Sponsor and the Corporation within the Election Period; provided that, irrespective of the terms and conditions of the Offer Notice, a Sponsoring Company may condition its election to purchase the interest described in the Offer Notice on the receipt of approval or consent from such Sponsoring Company's Board of Directors; provided further that, written notice of such conditional election must be delivered to the Transferring Sponsor and the Corporation within the Election Period and such conditional election shall be deemed withdrawn (as if it had never been provided) unless the Sponsoring Company that delivered such conditional election subsequently delivers written notice to the Transferring Sponsor and the Corporation on or before the tenth (10th) day after the expiration of the Election Period that all necessary approval or consent of such Sponsoring Company's Board of Directors have been obtained. To the extent that more than one Sponsoring Company exercises its right to purchase all of the rights, title and interests in, and

obligations under this Agreement described in the Offer Notice in accordance with the previous sentence, such rights, title and interests in, and obligations under this Agreement shall be allotted (successively if necessary) among the Sponsoring Companies exercising such right in proportion to their respective Power Participation Ratios.

(c) Each Sponsoring Company exercising its right to purchase any rights, title and interests in, and obligations under this Agreement pursuant to this Section 9.183 may choose to have an Affiliate purchase such rights, title and interests in, and obligations under this Agreement; provided that, notwithstanding anything in this Section 9.183 to the contrary, any assignment to a Sponsoring Company or its Affiliate hereunder must comply with the requirements of Section 9.182.

(d) If one or more Sponsoring Companies have elected to purchase all of the rights, title and interests in, and obligations under this Agreement of the Transferring Sponsor pursuant to the Offer Notice, the assignment of such rights, title and interests in, and obligations under this Agreement shall be consummated as soon as practical after the delivery of the election notices, but in any event no later than fifteen (15) days after the filing and receipt, as applicable, of all necessary governmental filings, consents or other approvals and the expiration of all applicable waiting periods. At the closing of the purchase of such rights, title and interests in, and obligations under this Agreement from the Transferring Sponsor, the Transferring Sponsor shall provide representations and warranties customary for transactions of this type, including those as to its title to such securities and that there are no liens or other encumbrances on such securities (other than pursuant to this Agreement) and shall sign such documents as may reasonably be requested by the Corporation and the other Sponsoring Companies. The Sponsoring Companies or their Affiliates shall only be required to pay cash for the rights, title and interests in, and obligations under this Agreement being assigned by the Transferring Sponsor.

(e) To the extent that the Sponsoring Companies have not elected to purchase all of the rights, title and interests in, and obligations under this Agreement described in the Offer Notice, the Transferring Sponsor may, within one-hundred and eighty (180) days after the later of the expiration of the Election Period or the deemed withdrawal of a conditional election by a Sponsoring Company under Section 9.183(b) hereof (if applicable), enter into a definitive agreement to, assign such rights, title and interests in, and obligations under this Agreement to a Third Party at a price no less than 92.5% of the purchase price specified in the Offer Notice and on other material terms and conditions no more

favorable to the such Third Party than those specified in the Offer Notice; provided that such purchases shall be conditioned upon: (i) such Third Party having long-term unsecured non-credit enhanced indebtedness, as of the date of such assignment, with a Standard & Poor's credit rating of at least BBB- and a Moody's Investors Service, Inc. credit rating of at least Baa3 (provided that, if such Third Party's long-term unsecured non-credit enhanced indebtedness is not currently rated by one of Standard & Poor's or Moody, such Third Party's long-term unsecured non-credit enhanced indebtedness, as of the date of such assignment, must have either a Standard & Poor's credit rating of at least BBB- or a Moody's Investors Service, Inc. credit rating of at least Baa3); (ii) the filing or receipt, as applicable, of any necessary governmental filings, consents or other approvals; (iii) the determination by counsel for the Corporation that the assignment of the rights, title or interests in, or obligations under, this Agreement to such Third Party would not cause a termination, default, loss or payment obligation under any security issued, or agreement entered into, by the Corporation prior to such transfer; and (iv) such Third Party executing a counterpart of this Agreement, and both such Third Party and the Sponsoring Company which is assigning its rights, title and interests in, and obligations under, this Agreement executing such other documents as may be reasonably requested by the Corporation (including, without limitation, an assignment agreement in form and substance acceptable to the Corporation in its reasonable discretion and containing the agreement by such Sponsoring Company to reimburse the Corporation and the other Sponsoring Companies for any fees or expenses required under any security issued, or agreement entered into, by the Corporation as a result of such assignment, including without limitation any consent fee or additional financing costs to the Corporation under the Corporation's then-existing securities or agreements resulting from such assignment). In the event that the Sponsoring Company and a Third Party have not entered into a definitive agreement to assign the interests specified in the Offer Notice to such Third Party within the later of one-hundred and eighty (180) days after the expiration of the Election Period or the deemed withdrawal of a conditional election by a Sponsoring Company under Section 9.183(b) hereof (if applicable) for any reason or if either the price to be paid by such Third Party would be less than 92.5% of the purchase price specified in the Offer Notice or the other material terms of such assignment would be more favorable to such Third Party than the terms specified in the Offer Notice, then the restrictions provided for herein shall again be effective, and no assignment of any rights, title and interests in, and obligations under this Agreement may be made thereafter without again offering the same to Sponsoring Companies in accordance with this Section 9.183.

ARTICLE 10

REPRESENTATIONS AND WARRANTIES

10.01. *Representations and Warranties.* Each Sponsoring Company hereby represents and warrants for itself, on and as of the date of this Agreement, as follows:

(a) it is duly organized, validly existing and in good standing under the laws of its state of organization, with full corporate power, authority and legal right to execute and deliver this Agreement and to perform its obligations hereunder;

(b) it has duly authorized, executed and delivered this Agreement, and upon the execution and delivery by all of the parties hereto, this Agreement will be in full force and effect, and will constitute a legal, valid and binding obligation of such Sponsoring Company, enforceable in accordance with the terms hereof, except as enforceability may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally;

(c) Except as set forth in Schedule 10.01(c) hereto, no consents or approvals of, or filings or registrations with, any governmental authority or public regulatory authority or agency, federal state or local, or any other entity or person are required in connection with the execution, delivery and performance by it of this Agreement, except for those which have been duly obtained or made and are in full force and effect, have not been revoked, and are not the subject of a pending appeal; and

(d) the execution, delivery and performance by it of this Agreement will not conflict with or result in any breach of any of the terms, conditions or provisions of, or constitute a default under its charter or by-laws or any indenture or other material agreement or instrument to which it is a party or by which it may be bound or result in the imposition of any liens, claims or encumbrances on any of its property.

ARTICLE 11

EVENTS OF DEFAULT AND REMEDIES

11.01. *Payment Default.* If any Sponsoring Company fails to make full payment to Corporation under this Agreement when due and such failure is not remedied within ten (10) days after receipt of notice of such failure from the Corporation, then such failure shall constitute a "Payment Default" on the part of such Sponsoring Company. Upon a Payment Default, the

Corporation may suspend service to the Sponsoring Company that has caused such Payment Default for all or part of the period of continuing default (and such Sponsoring Company shall be deemed to have notified the Corporation and the other Sponsoring Companies that any Available Energy shall be available for scheduling by such other Sponsoring Companies in accordance with Section 4.032). The Corporation's right to suspend service shall not be exclusive, but shall be in addition to all remedies available to the Corporation at law or in equity. No suspension of service or termination of this Agreement shall relieve any Sponsoring Company of its obligations under this Agreement, which are absolute and unconditional.

11.02. *Performance Default.* If the Corporation or any Sponsoring Company fails to comply in any material respect with any of the material terms, conditions and covenants of this Agreement (and such failure does not constitute a Payment Default under Section 11.01), the Corporation (in the case of a default by any Sponsoring Company) and any Sponsoring Company (in the case of a default by the Corporation) shall give the defaulting party written notice of the default ("Performance Default"). To the extent that a Performance Default is not cured within thirty (30) days after receipt of notice thereof (or within such longer period of time, not to exceed sixty (60) additional days, as necessary for the defaulting party with the exercise of reasonable diligence to cure such default), then the Corporation (in the case of a default by any Sponsoring Company) and any Sponsoring Company (in the case of a default by the Corporation) shall have all of the rights and remedies provided at law and in equity, other than termination of this Agreement or any release of the obligation of the Sponsoring Companies to make payments pursuant to this Agreement, which obligation shall remain absolute and unconditional.

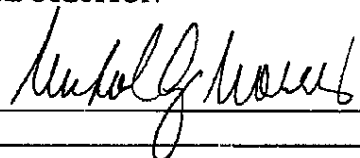
11.03. *Waiver.* No waiver by the Corporation or any Sponsoring Company of any one or more defaults in the performance of any provision of this Agreement shall be construed as a waiver of any other default or defaults, whether of a like kind or different nature.

11.04. *Limitation of Liability and Damages.* TO THE FULLEST EXTENT PERMITTED BY LAW, NEITHER THE CORPORATION, NOR ANY SPONSORING COMPANY SHALL BE LIABLE UNDER THIS AGREEMENT FOR ANY CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST REVENUES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, OR OTHERWISE.

[Signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Amended and Restated Inter-Company Power Agreement to be duly executed and delivered by their proper and duly authorized officers as of September 10, 2010.

**OHIO VALLEY ELECTRIC
CORPORATION**

By 
Its _____

APPALACHIAN POWER COMPANY

By _____
Its _____

**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By _____
Its _____

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**OHIO VALLEY ELECTRIC
CORPORATION**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____

APPALACHIAN POWER COMPANY

By 
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By _____
Its _____

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**OHIO VALLEY ELECTRIC
CORPORATION**

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Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____


APPALACHIAN POWER COMPANY

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

**COLUMBUS SOUTHERN POWER
COMPANY**

By 
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By _____
Its _____

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**OHIO VALLEY ELECTRIC
CORPORATION**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____

APPALACHIAN POWER COMPANY

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

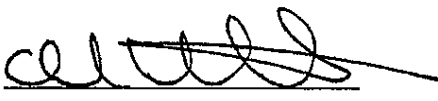
**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By 
Its VACE PRSCOTW

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By _____
Its _____

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**OHIO VALLEY ELECTRIC
CORPORATION**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____

APPALACHIAN POWER COMPANY

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By *Mark E. Lewis*
Its *Vice President*

**KENTUCKY UTILITIES
COMPANY**

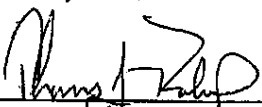
By _____
Its _____

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**OHIO VALLEY ELECTRIC
CORPORATION**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By 
Its VICE PRESIDENT

APPALACHIAN POWER COMPANY

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By _____
Its _____

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**OHIO VALLEY ELECTRIC
CORPORATION**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____

APPALACHIAN POWER COMPANY

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By Anthony J. Ahern
Its President & CEO

**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By _____
Its _____

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**OHIO VALLEY ELECTRIC
CORPORATION**

By _____
Its _____

APPALACHIAN POWER COMPANY

By _____
Its _____

**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By *Gary Stephenson*
Its EXECUTIVE VICE PRESIDENT
Gary Stephenson

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By _____
Its _____

IN WITNESS WHEREOF, the parties hereto have caused this Amended and Restated Inter-Company Power Agreement to be duly executed and delivered by their proper and duly authorized officers as of September 10, 2010.

**OHIO VALLEY ELECTRIC
CORPORATION**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____

APPALACHIAN POWER COMPANY.

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**FIRSTENERGY GENERATION
CORP.**

By Mary R. Lerdahl
Its President

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By _____
Its _____

Amended and Restated Inter-Company Power Agreement
S-1

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IN WITNESS WHEREOF, the parties hereto have caused this Amended and Restated Inter-Company Power Agreement to be duly executed and delivered by their proper and duly authorized officers as of September 10, 2010.

**OHIO VALLEY ELECTRIC
CORPORATION**

By _____
Its _____

APPALACHIAN POWER COMPANY

By _____
Its _____

**COLUMBUS SOUTHERN POWER
COMPANY**

By _____
Its _____

DUKE ENERGY OHIO, INC.

By _____
Its _____

**INDIANA MICHIGAN POWER
COMPANY**

By _____
Its _____

**ALLEGHENY ENERGY SUPPLY
COMPANY, L.L.C.**

By _____
Its _____

**BUCKEYE POWER GENERATING,
LLC**

By _____
Its _____

**THE DAYTON POWER AND
LIGHT COMPANY**

By _____
Its _____

**FIRSTENERGY GENERATION
CORP.**

By _____
Its _____

**KENTUCKY UTILITIES
COMPANY**

By *[Signature]*
Its *Sr Vice President*

**LOUISVILLE GAS AND ELECTRIC
COMPANY**

By *John N. Taylor Jr.*
Its *VP Trans. & Generation*
SERVICES

**MONONGAHELA POWER
COMPANY**

By _____
Its _____

OHIO POWER COMPANY

By _____
Its _____

**SOUTHERN INDIANA GAS AND
ELECTRIC COMPANY**

By _____
Its _____

**LOUISVILLE GAS AND ELECTRIC
COMPANY**

By _____
Its _____

**MONONGAHELA POWER
COMPANY**

By _____
Its _____

OHIO POWER COMPANY

By  _____
Its _____

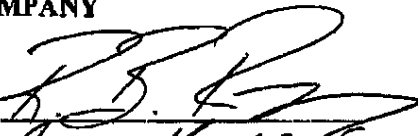
**SOUTHERN INDIANA GAS AND
ELECTRIC COMPANY**

By _____
Its _____

LOUISVILLE GAS AND ELECTRIC
COMPANY

By _____
Its _____

MONONGAHELA POWER
COMPANY

By 
Its GENERAL MANAGER, ELECTRIC SUPPLY

OHIO POWER COMPANY

By _____
Its _____

SOUTHERN INDIANA GAS AND
ELECTRIC COMPANY

By _____
Its _____

**LOUISVILLE GAS AND ELECTRIC
COMPANY**

By _____
Its _____

**MONONGAHELA POWER
COMPANY**

By _____
Its _____


OHIO POWER COMPANY

By _____
Its _____

**SOUTHERN INDIANA GAS AND
ELECTRIC COMPANY**

By Ronald E. Christen
Its President

PENINSULA GENERATION COOPERATIVE


By Daniel H. DeCoeur
Its President

APPROVED AS TO FORM:


BRIAN E. VALICE
ATTORNEY FOR PENINSULA
GENERATION COOPERATIVE

SCHEDULE 10.01(c)

Allegheny Energy Supply Company, L.L.C.

and

Monongahela Power Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

SCHEDULE 10.01(c)

Appalachian Power Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

Approval of the Virginia State Corporation Commission

Filing with the Public Service Commission of West Virginia

SCHEDULE 10.01(c)

Buckeye Power Generating, LLC

None

SCHEDULE 10.01(c)

Columbus Southern Power Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

SCHEDULE 10.01(c)

The Dayton Power and Light Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

SCHEDULE 10.01(c)

Duke Energy Ohio, Inc.

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

SCHEDULE 10.01(c)

FirstEnergy Generation Corp.

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

SCHEDULE 10.01(c)

Indiana Michigan Power Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

Filing with the Indiana Utility Regulatory Commission

SCHEDULE 10.01(c)

Kentucky Utilities Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

Consent or approval of, or filings or registrations with, the Kentucky Public Service Commission
may be required

SCHEDULE 10.01(c)

Louisville Gas and Electric Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

Consent or approval of, or filings or registrations with, the Kentucky Public Service Commission
may be required

SCHEDULE 10.01(c)

Ohio Power Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

SCHEDULE 10.01(c)

Peninsula Generation Cooperative

None

SCHEDULE 10.01(c)

Southern Indiana Gas and Electric Company

Filing with, or consent or approval of, the Federal Energy Regulatory Commission

AMENDED AND RESTATED
POWER AGREEMENT

BETWEEN

OHIO VALLEY ELECTRIC CORPORATION

AND

INDIANA-KENTUCKY ELECTRIC CORPORATION

Dated as of September 10, 2010

THIS AGREEMENT, dated as of September 10, 2010 by and between OHIO VALLEY ELECTRIC CORPORATION (herein called OVEC) and INDIANA-KENTUCKY ELECTRIC CORPORATION (herein called IKEC), hereby amends and restates in its entirety, the Power Agreement (herein called the Current Agreement), dated March 13, 2006, between OVEC and IKEC.

WITNESSETH THAT:

WHEREAS, IKEC, a wholly owned subsidiary of OVEC, designed, purchased, and constructed, and continues to own, operate and maintain a steam-electric generating station (herein called Indiana Station) consisting of six turbogenerators and all other necessary equipment, at a location on the Ohio River near Madison, Indiana; and

WHEREAS, OVEC designed, purchased, and constructed, and continues to own, operate and maintain a steam-electric generating stations (herein called Ohio Station) consisting of five turbo-generators and all other necessary equipment, at a location on the Ohio River near Cheshire, Ohio (the Ohio Station and the Indiana Station being herein called the Project Generating Stations); and

WHEREAS, OVEC also designed, purchased, and constructed, and continues to operate and maintain necessary transmission and general plant facilities (herein called the Project Transmission Facilities) and OVEC established or cause to be established interconnections between the Project Generating Stations and/or the Project Transmission Facilities, and the systems of certain of the Sponsoring Companies; and

WHEREAS, IKEC owns and operates the portion of the Project Transmission Facilities located in the State of Indiana; and

WHEREAS, IKEC entered into the Current Agreement with OVEC which embodies the terms and conditions for the ownership and operation by IKEC of the Indiana Station and such portion of the Project Transmission Facilities which are to be owned and operated by it; and

WHEREAS, the owners of OVEC or their affiliates that are parties to an Inter-Company Power Agreement, have amended and restated such Inter-Company Power Agreement as of the date hereof, which defines the terms and conditions governing the rights of the "Sponsoring Companies" (as defined thereunder) to receive "Available Power" (as defined thereunder) from the Project Generating Stations and the obligations of the Sponsoring Companies to pay therefor; and

WHEREAS, concurrent with the amendment and restatement of the Inter-Company Power Agreement, IKEC and OVEC hereto desire to amend and restate in their entirety, the Current Agreement in order for IKEC to continue to sell to OVEC any and all power available at the Indiana Station, and energy associated therewith, and to transmit power and energy as provided herein.

NOW, THEREFORE, the parties hereto agree with each other as follows:

ARTICLE 1

POWER AND ENERGY TRANSACTIONS

1.01 IKEC shall transmit any and all power generated at the Indiana Station by any of the generating units thereof in commercial operation and deliver such power, together with the energy associated therewith, but less the transmission losses in the facilities of IKEC applicable thereto from the 330 kV busses of the Indiana Station, at the points of delivery hereinafter designated in *Section 1.03* hereof, and sell such power and energy at said points of delivery to OVEC. OVEC shall purchase from IKEC all such power so delivered by IKEC to OVEC at said points of delivery, together with the energy associated therewith, and shall from time to time pay IKEC therefor, amounts which, when added to revenues received by IKEC from other sources, will be sufficient to enable IKEC to pay all of its operating and other expenses, including all income and other taxes and any interest and regular amortization requirements applicable to any indebtedness for borrowed funds incurred by IKEC. For the purposes of this *Section 1.01* the term "operating and other expenses" shall also include, without limitation, all amounts payable to suppliers of fuel requirements (including the handling and shipment thereof) in connection with the cancellation of commitments and the extension of delivery schedules, as well as all expenses accrued to pay for postemployment and postretirement benefits and the costs of the decommissioning, shutdown, demolition and closing of the Project Generating Stations.

1.02 IKEC shall transmit and deliver to OVEC at the points of delivery hereinafter designated in *Section 1.03* hereof, all power and the energy associated therewith supplied to IKEC by Sponsoring Companies at the points of delivery hereinafter designated in *Section 1.03* hereof, less the transmission losses in the facilities of IKEC applicable thereto. IKEC shall transmit and deliver to Sponsoring Companies designated by OVEC at the points of delivery hereinafter designated in *Section 1.03* hereof, all power, and the energy associated therewith, supplied to IKEC by OVEC at the points of delivery hereinafter designated in *Section 1.03* hereof, less the transmission losses in the facilities of IKEC applicable thereto.

1.03 All power and energy sold, purchased, transmitted or delivered hereunder shall be 3-phase, 60-cycle, alternating current, at nominal unregulated voltage, designated for the points of delivery hereinbelow described. Power and energy transmitted, delivered and sold by IKEC to OVEC pursuant to the provisions of *Section 1.01* hereof shall be delivered at the points where the transmission facilities of OVEC and the transmission facilities of IKEC interconnect and title to such power and energy shall pass from IKEC to OVEC at said points. Power and energy supplied to IKEC by a Sponsoring Company for transmission to OVEC pursuant to the provisions of *Section 1.02* hereof, shall be delivered by said Sponsoring Company to IKEC at the points where the transmission facilities of said Sponsoring Company and the transmission facilities of IKEC interconnect and shall be delivered by IKEC to OVEC and title thereto shall pass from said Sponsoring Company to OVEC at the points where the transmission facilities of OVEC and the transmission facilities of IKEC interconnect. Power and energy supplied to IKEC

by OVEC for transmission to a Sponsoring Company pursuant to the provisions of *Section 1.02* hereof shall be delivered by OVEC to IKEC at the points where the transmission facilities of OVEC and the transmission facilities of IKEC interconnect and title to such power and energy shall pass from OVEC to said Sponsoring Company at said points. Such power and energy shall be delivered by IKEC to said Sponsoring Company at the points where the transmission facilities of IKEC and the transmission facilities of said Sponsoring Company interconnect.

1.04 The parties hereto shall exercise due diligence and foresight in carrying out all matters related to the providing and operating of their respective power resources so as to minimize to the extent practicable deviations between actual and scheduled deliveries of power and energy among their systems. The parties hereto shall provide and/or install on their respective systems such communication, telemetering, frequency and/or tie-line control facilities essential to so minimizing such deviations; and shall fully cooperate with one another and with third parties (such third parties whose systems are either directly or indirectly interconnected with the systems of the Sponsoring Companies and who of necessity together with the Sponsoring Companies and the parties hereto must unify their efforts cooperatively to achieve effective and efficient interconnected system operation) in developing and executing operating procedures that will enable the parties hereto to avoid to the extent practicable deviations from scheduled deliveries.

1.05 OVEC shall reimburse IKEC for the difference between (a) the total cost of replacements chargeable to property and plant made by IKEC, and the total cost of additional facilities and/or spare parts purchased or installed by Corporation, during any month or prior thereto (and not previously reimbursed) and (b) the amounts paid for by IKEC out of proceeds of fire or other applicable insurance protection, or out of amounts recovered from third parties responsible for damages requiring replacement. OVEC shall pay to IKEC such amount in lieu of the amounts to be paid as above provided, which, after provision for all taxes on income, shall equal the costs of the replacements reimbursable by OVEC to IKEC as above provided. The term cost of replacements, as used herein, shall include all components of costs, plus removal expense, less salvage. The amounts reimbursed by OVEC to IKEC for such replacements shall be accounted for on the books of IKEC in a special balance sheet account provided for such purposes.

ARTICLE 2

MISCELLANEOUS

2.01 This Agreement shall become effective on September 10, 2010, or to the extent necessary, such later date on which all conditions to effectiveness, including all required waiting periods and all required regulatory acceptances or approvals, of this Agreement have been satisfied in form and substance satisfactory to OVEC, and shall terminate upon the earlier of: (1) June 30, 2040 or (2) the sale or other disposition of all of the facilities of the Project Generating Stations or the permanent cessation of operation of such facilities.

2.02 No party hereto shall be held responsible or liable for any loss or damage on account of non-delivery of energy hereunder at any time caused by act of God, fire, flood, explosion, strike, civil or military authority, insurrection or riot, act of the elements, failure of equipment, or for any other cause beyond its control.

2.03 This Agreement is made subject to the jurisdiction of any governmental authority or authorities having jurisdiction in the premises and the performance thereof shall be subject to the receipt of all regulatory approvals, in form and substance satisfactory to the parties hereto, necessary to permit the parties hereto to perform all the duties and obligations to be performed by such parties hereunder.

2.04 This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns, but this Agreement shall not be assigned by either party hereto without the written consent of the other, except (a) to a successor to all or substantially all the properties and assets of such party, or (b) to a trustee under an indenture securing any indebtedness of such party.

2.05 All notices and requests under this Agreement shall be in writing and shall be sufficient in all respects if delivered in person or sent by registered mail addressed to the party to be served at such party's general office or at such other address as such party may from time to time in writing designate.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

OHIO VALLEY ELECTRIC CORPORATION

By _____
Its

INDIANA-KENTUCKY ELECTRIC CORPORATION

By _____
Its

Attachment B

MOODY'S

INVESTORS SERVICE

Rating Action: **Moody's reviews OVEC for downgrade**

Global Credit Research - 04 Nov 2016

Approximately \$1.5 billion of debt outstanding

New York, November 04, 2016 -- Moody's Investors Service ("Moody's") today placed the ratings of the Ohio Valley Electric Corporation (OVEC) under review for downgrade. The action follows the downgrade of FirstEnergy Corp's (FirstEnergy) subsidiaries FirstEnergy Solutions Corp. (FES: Caa1 negative) and Aegheny Energy Supply Company, LLC (AES: B1 negative) which together are contractually obligated to cover about 8% of OVEC's expenditures.

RATINGS RATIONALE

The rating review is prompted by today's downgrade of FES to Caa1 from Ba2 and AES to B1 from Ba1, which followed FirstEnergy's announced intention to exit its merchant business entirely within 18 months even if it requires a restructuring or bankruptcy at FES. Although the proportion of OVEC's revenues that are derived from FES (4.85%) and AES (3.01%) are relatively modest, the payment obligations under the Inter-Company Power Agreement (ICPA), which is the basis for OVEC's revenue, are joint - not several. In addition, in the event of a payment default, there is no requirement for the non-defaulting sponsor companies to "step-up" the payments to cover any shortfall. As the ICPA essentially provides a straight pass through of the costs of operating and maintaining the plant, without the collection of any additional funds to provide a financial reserve, any payment default would result in an immediate shortfall of revenue available to fully cover expenditures for operations and maintenance, debt service, and planned capital expenditures. Although OVEC does have a significant amount of long-term investments on its balance sheet, the funds are being held for future postretirement benefits and decommissioning and demolition costs.

During the review process we will explore the options and potential actions available to the OVEC board that may mitigate the company's exposure to the declining credit quality of the FirstEnergy subsidiaries, including the possibility of an FES bankruptcy. In our view, these options could include determining if there is interest on the part of other investment grade entities to assume the FES and AES obligations, or the establishment of a financial reserve to cover a potential future shortfall in payments. The review will also further assess the magnitude of OVEC's exposure to potential payment shortfalls, and evaluate the company's available liquidity sources, including balance sheet investments and revolving credit availability.

Rating Outlook

The ratings are under review for downgrade.

Factors that Could Lead to an Upgrade

Given the review for downgrade, the ratings are highly unlikely to move upward in the near-to-medium term.

Factors that Could Lead to a Downgrade

Given the severe deterioration in the credit quality of FES and AES, and the severe nature of payment obligations under the ICPA, absent a definitive near-term plan to address a potential permanent gap in project revenue, the OVEC ratings are likely to move downward.

On Review for Downgrade:

..Issuer: Ohio Valley Electric Corp

....Senior Unsecured Regulated Bond/Debenture, Placed on Review for Downgrade, currently Baa3

..Issuer: Indiana Finance Authority

....Senior Unsecured Revenue Bonds, Placed on Review for Downgrade, currently Baa3

..Issuer: Ohio Air Quality Development Authority

....Senior Unsecured Revenue Bonds, Placed on Review for Downgrade, currently Baa3

Outlook Actions:

..Issuer: Ohio Valley Electric Corp

....Outlook, Changed To Rating Under Review From Negative

The principal methodology used in these ratings was US Municipal Joint Action Agencies published in October 2016. Please see the Rating Methodologies page on www.moody.com for a copy of this methodology.

OVEC owns and operates two coal-fired generating power plants, Kyger Creek in Ohio and Catty Creek in Indiana, that have a combined capacity of approximately 2,400 MW. OVEC is sponsored by nine investor-owned regulated electric utilities, two independent generating companies (subsidiaries of a utility holding company) and two affiliates of generation and transmission cooperatives (collectively, the Sponsors). The Sponsors purchase OVEC's power at wholesale, cost-based, rates. The ownership structure is governed by a long-term Inter-Company Power Agreement (ICPA) expiring in 2040.

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MJKK and MSFJ a so ma nta n po c es and procedures to address Japanese regu atory requ rements.

Attachment C

Ohio Valley Electric Corporation (/gws/en/esp/issr/90236875)



Fitch Rates Ohio Valley Electric Corp's Term Loan 'BBB-'; Outlook Negative

Fitch Ratings-Chicago-09 August 2017: Fitch Ratings has assigned a 'BBB-' rating to Ohio Valley Electric Corporation (OVEC) \$100 million five-year term loan due Aug. 4, 2022. The Rating Outlook is Negative. The notes rank pari passu with OVEC's existing and future senior unsecured debt. Net proceeds from the offering, along with other recently completed financing activities, will be used by the company to repay debt scheduled to mature in 2017 - 2018.

KEY RATING DRIVERS

Negative Rating Outlook: The Negative Outlook reflects the risk of revenue shortfall should one of OVEC's sponsors opt to file for bankruptcy and reject their obligation under OVEC's intercompany power agreement (ICPA). While three of OVEC's sponsors have slipped to speculative credit profiles, the obligations held by FirstEnergy Solutions Corp (FES; CC; 4.85% share) and Allegheny Energy Supply Co (AES; B/Stable; 3.01% share) pose a greater concern in Fitch's opinion, given FirstEnergy Corp.'s (FE; 'BBB-/Outlook Stable) plans to exit the merchant power business. Financial restructuring at FES, or at any sponsor, could subject OVEC to a revenue shortfall given that sponsors' responsibilities are several under the ICPA.

Short-Term Disruption Manageable: OVEC had sufficient liquidity at the end of first-quarter 2017 to meet a temporary revenue shortfall. Fitch estimates FES and AES's combined share of the demand charges at less than \$30 million annually, while the short 15-day billing cycle for energy charges limits OVEC's credit exposure in the event of financial restructuring. A prolonged revenue shortfall, however, could impair OVEC's credit profile absent mitigating actions from the remaining sponsors.

ICPA Enforceability Is Key: OVEC's credit profile derives from the legal enforceability of the ICPA between OVEC and its sponsors. Sponsors are severally responsible to reimburse all of OVEC's expenditures regardless of total electricity generated and supplied by OVEC. Due to the diversity of the sponsor base, Fitch Ratings takes into consideration the average credit profile of the sponsors rather than tying OVEC's ratings to that of the lowest-rated sponsor.

Off-Takers' Ability to Recover Costs: The continued ability of the sponsors to recover OVEC-related costs is an important rating driver, because OVEC's all-in costs generally exceed prevailing wholesale energy prices. Nearly 80% of sponsors/off-takers can recover OVEC-related costs either through a regulatory construct or through sponsors' membership charter.

Efficient Operating Performance: OVEC's coal plants maintain favorable availability and utilization factors despite their age, averaging about 70% and 77%, respectively, in 2014-2016. Furthermore, capacity utilization has trended upward since the integration of OVEC's generation capacity into the PJM Interconnection, LLC region in May 2016.

Compliance with a stream of environmental regulation over the past decade has precipitated incremental capex and put upward pressure on demand costs. However, management forecasts modest environmental capex in 2017 - 2024, as the plants are currently compliant with MATS and CSAPR requirements. The impact of the Clean Power Plan currently falls outside the rating horizon. Nonetheless, Fitch will closely monitor the evolution of legislative challenges and compliance plans presented by Ohio and Indiana as these will influence OVEC's operating costs and capacity utilization over the long term.

KEY ASSUMPTIONS

Fitch's key assumptions within the rating case for OVEC include:

- Average usage factor of 75% in 2017-2019;
- Operating costs increasing by 1% annually;
- Debt repayments limited to amortization schedule.

RATING SENSITIVITIES

Positive Rating Sensitivities

Fitch would affirm the ratings should the financially stressed sponsors transfer their obligations to entities with investment grade profiles.

Modification of the ICPA, incremental contributions or other similar mitigating actions from remaining sponsors or shareholders to permanently offset the loss a sponsor could also stabilize the ratings. Ratings upgrade is unlikely given that OVEC's credit profile is constrained by its sponsors' credit ratings and increasingly stringent environmental emission mandates.

Negative Rating Sensitivities

Any attempt by a sponsor to terminate the ICPA would most likely lead to a negative rating action. Alternatively, prolonged revenue shortfall leading to a material deterioration of OVEC's liquidity and financial resources would likely result in negative rating actions. Although not contemplated at this time, failure to replace a defaulted sponsor or to establish a reserve to meet permanent recovery shortfalls could result in a more-than-one-notch downgrade. Fitch would also take a negative rating action if compliance with new environmental rules materially limits OVEC's ability to achieve a high capacity factor and render the ICPA very expensive for the sponsors.

LIQUIDITY

At March 31, 2017, OVEC had \$168million of available liquidity, including \$53 million in cash and cash equivalents and \$115 million available under its \$200 million revolving credit facility (expiry on Nov. 17, 2019). OVEC could also draw on \$122 million of long-term financial investments, if needed, to bolster liquidity. Semi-monthly settlement of accounts receivable from sponsors/off-takers reduces OVEC's working capital needs. Debt maturities in 2017 -2019 are minimal following refinancing activities completed on Aug. 4, 2022.

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Date of Relevant Rating Committee: Nov. 17, 2016

Summary of Financial Statement Adjustments - There were no financial statement adjustments made that were material to the rating rationale outlined above.

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Applicable Criteria

Criteria for Rating Non-Financial Corporates - Effective from 27 September 2016 to 10 March 2017 (pub. 27 Sep 2016)
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respect to credit rating agencies, can be found on the EU Regulatory Disclosures (<https://www.fitchratings.com/regulatory>) page. The endorsement status of all International ratings is provided within the entity summary page for each rated entity and in the transaction detail pages for all structured finance transactions on the Fitch website. These disclosures are updated on a daily basis.

CERTIFICATE OF SERVICE

I hereby certify that I have on this 26th day of March, 2018, caused a copy of the foregoing Complaint or, in the alternative, Request for Declaratory Order to be served via electronic mail or first class mail (postage prepaid) upon the list representatives of the respondent, the affected regulatory agency and others who may be affected by the Complaint, as required under Commission Rule 206(c), 18 C.F.R. § 385.206(c).

RESPONDENT

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--	---

AFFECTED REGULATORY AGENCY

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---	--

OTHER AFFECTED ENTITIES

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/s/ M. Denyse Zosa

OVEC Complaint 03262018 Final.PDF.....1-113

EXHIBIT JIF-03

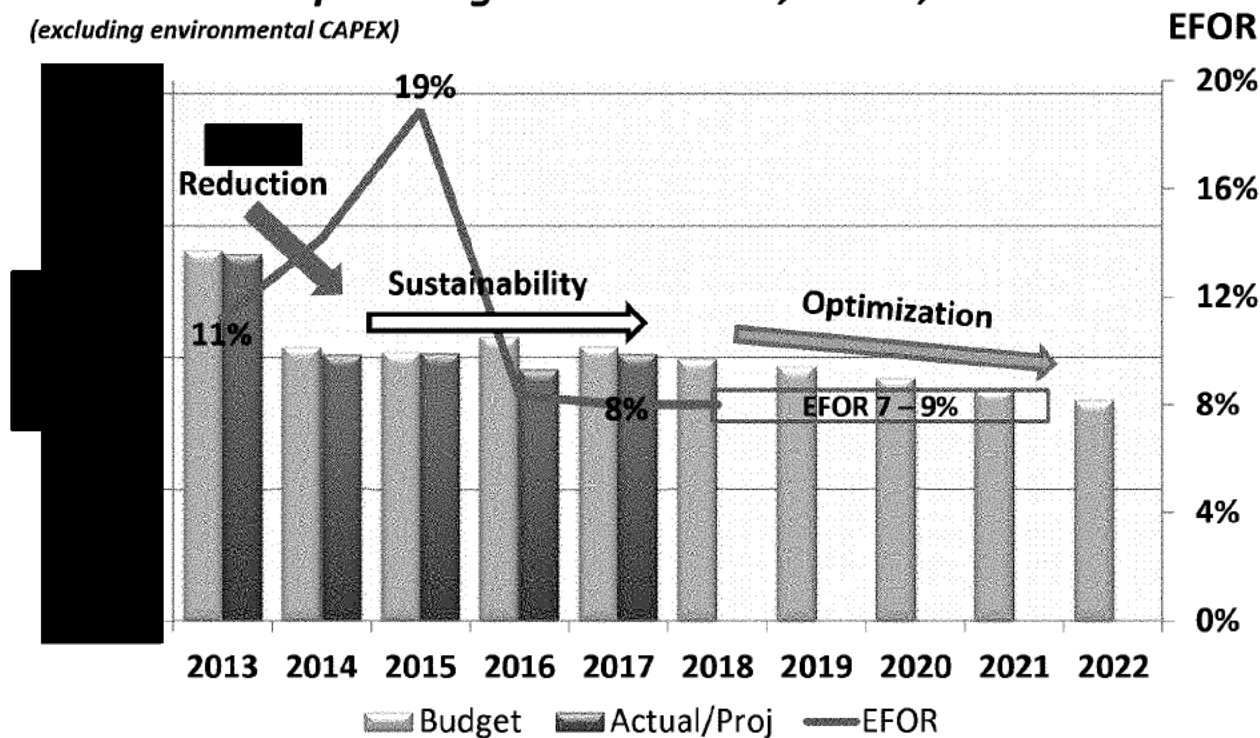
REDACTED



2018 LEAN – Demand Costs

Focus on Operating Cost Optimization

*OVEC 5 Year Budget Plan includes optimizing controllable
Generation Operating Costs: CAPEX, O&M, and A&G
(excluding environmental CAPEX)*



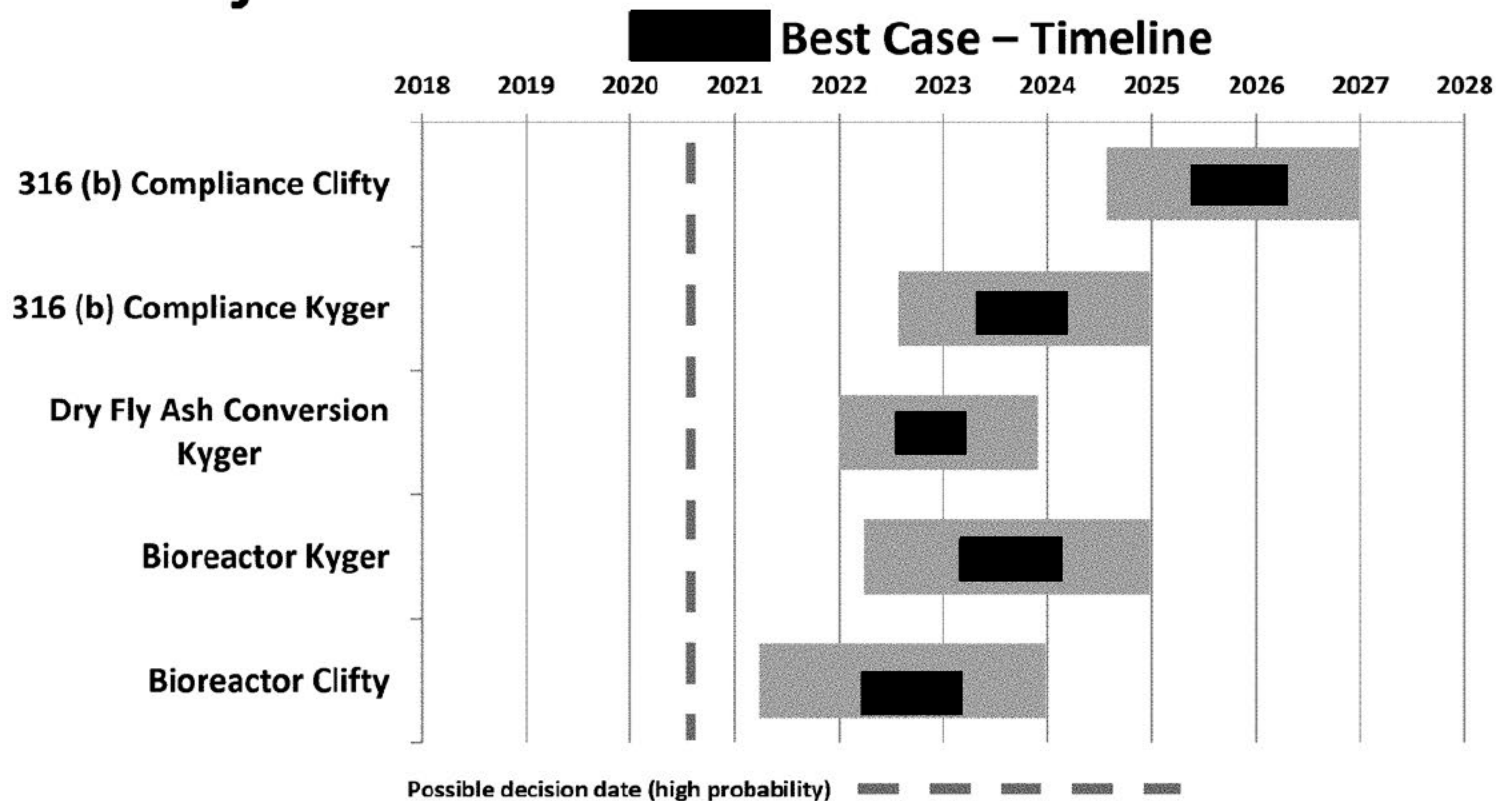
Optimization to improve overall cost structure and minimize need to finance future environmental capital investments

Key Elements to Reach Targets

- Continuous Improvement Tools: Idea Generation, Kaizens, Process Improvements
 - Approx. [REDACTED] in CI cost savings since 2013
 - 2017 - Over 1,000 Process Improvements
 - 2017 - Approx. [REDACTED] of cost savings ideas implemented
- Standard Work Development and Utilization
 - 2017 - Over 500 new standard work documents
- Staffing Optimization
 - 18% reduction since 2012
 - [REDACTED]
- Prioritized Investment and Maintenance Spending



Projected Environmental Investment



Assumptions:

Current ELG reconsideration results in a revision of the rule:

- **FGD Wastewater Treatment requirements will have less stringent limits**
 - Possible approval of current Wastewater Treatment as best technology
 - ***Potential to Reduce Best Case by [REDACTED]**
- **Boiler Slag Dry Conversion (Bottom Ash) not required**

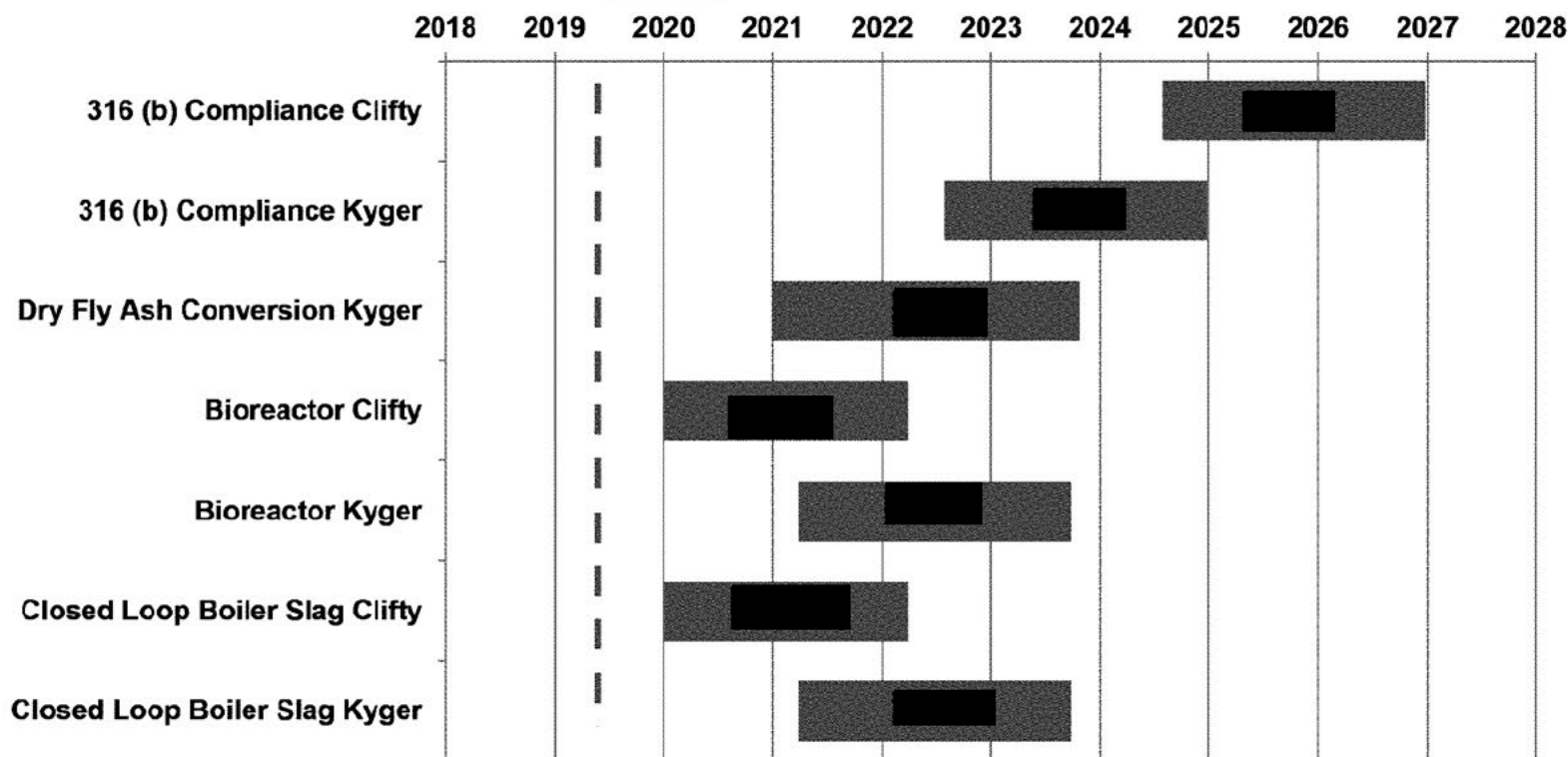
Any pond closure requirements will be funded through decommissioning reserves

1) Graph excludes approx. [REDACTED] of conceptual engineering studies for Boiler Slag while reissue of the ELG rule is pending



Projected Environmental Investment

Worst Case – Timeline



Assumptions:

- Current ELG reconsideration results in reaffirming current rule and requirements
- Any pond closure requirements will be funded through decommissioning reserves

Potential Future Impacts:

- Current ELG reconsideration results in revision of the rule (as shown in Best Case): **Reduction of Worst Case**
 - FGD Wastewater Treatment requirements will have less stringent limits
 - Boiler Slag Dry Conversion (Bottom Ash) not required

**OHIO VALLEY ELECTRIC CORPORATION (OVEC)
INDIANA-KENTUCKY ELECTRIC CORPORATION (IKEC)
Treasurer and Finance Report
Boards of Directors' Meeting
December 8, 2017**

PUBLIC
Exhibit JIF-03

	<u>OVEC</u>	<u>IKEC</u>	<u>Consolidated</u>
<u>CASH AND INVESTMENTS</u>			
Cash and Short-Term Investments	\$ 53,878,779		\$ 53,878,779
Employee PRB Benefits Reserve Account	71,625,576		71,625,576
Debt Reserve Account	20,306,082		20,306,082
Total Cash and Investments at October 31, 2017	<u>\$ 145,810,437</u>		<u>\$ 145,810,437</u>
<u>PLANT DECOMMISSIONING & DEMOLITION (D&D) FUND</u>			
Total D&D Assets at October 31, 2017	<u>\$ 21,892,091</u>	<u>\$ 30,195,452</u>	<u>\$ 52,087,543</u>
<u>EMPLOYEE BENEFIT PLAN ASSETS</u>			
Pension Plan			
Supplemental Pension & Savings Plan			
Union Retiree Medical VEBA Trust			
Retiree Medical VEBA Trust			
Retiree Life Insurance VEBA Trust			
Retiree Medical 401(h)			
Total Benefit Plan Assets at October 31, 2017			
<u>EQUITY</u>			
Common Stock, 100,000 shares outstanding	\$ 10,000,000	\$ 3,400,000	\$ 10,000,000
Retained Earnings	9,893,759	-	9,893,759
Total Equity at October 31, 2017	<u>\$ 19,893,759</u>	<u>\$ 3,400,000</u>	<u>\$ 19,893,759</u>
(OVEC's ownership of IKEC's Capital Stock (17,000 shares) is eliminated in consolidation.)			
<u>LONG-TERM DEBT</u>			
2006 Senior Unsecured Notes, Series A, 5.80%, due February 15, 2026	\$ 209,037,387		\$ 209,037,387
2006 Senior Unsecured Notes, Series B, 6.40% due June 15, 2040	56,503,080		56,503,080
2007 Senior Unsecured Notes, Series AA, AB & AC, 5.90%, due February 15, 2026	147,593,370		147,593,370
2007 Senior Unsecured Notes, Series BA, BB & BC, 6.50% due June 15, 2040	42,890,007		42,890,007
2008 Senior Unsecured Notes, Series A, 5.92%, due February 15, 2026	30,595,859		30,595,859
2008 Senior Unsecured Notes, Series B & C, 6.71%, due February 15, 2026	120,374,809		120,374,809
2008 Senior Unsecured Notes, Series D & E, 6.91% due June 15, 2040	82,747,579		82,747,579
2017 Senior Unsecured Notes, Series A, Floating Rate, due August 4, 2022	100,000,000		100,000,000
2009 Tax Exempt Bonds, \$100M Series A-D, Floating Rate, due February 1, 2026	75,000,000		75,000,000
2009 Tax Exempt Bonds, \$100M Series E, 5.625%, due October 1, 2019	100,000,000		100,000,000
2010 Tax Exempt Bonds, \$100M Series A & B, Floating Rate, due February 1, 2040	100,000,000		100,000,000
2012 Tax Exempt Bonds, \$200M Series A, 5%, due June 1, 2039	200,000,000		200,000,000
2012 Tax Exempt Bonds, \$100M Series B & C, Floating Rate, due June 1, 2040	100,000,000		100,000,000
Total Long-Term Debt Outstanding at October 31, 2017	<u>\$ 1,364,742,091</u>		<u>\$ 1,364,742,091</u>
<u>SHORT-TERM DEBT</u>			
\$200M Revolving Credit Facility (extension date November 14, 2019)			
Total Short-Term Debt Outstanding at October 31, 2017	<u>\$ 85,000,000</u>		<u>\$ 85,000,000</u>
<u>CORPORATE UNSECURED CREDIT RATINGS</u>			
Standard & Poor's (rating affirmed February 13, 2017)	BBB-, Stable Outlook		
Fitch (rating affirmed November 14, 2017)	BBB-, Negative Outlook		
Moody's (rating downgrade December 20, 2016)	Ba1, Negative Outlook		
<u>FINANCE WORKING GROUP</u>			
Comprised of Finance representatives from OVEC Owners.			
Planning next steps for OVEC finance plan for 2018 through 2019.			

Ohio Valley Electric Corporation
Projected Inter-Company Power Agreement (ICPA) Billable Cost Summary
Calendar Years 2018 - 2040
in thousands of dollars

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Generation Sales																
Estimated Delivered Power Sales from OVEC Generation (MWhr)																
Projected Energy Use Factor %																
Demand Charge																
Projected Annual Capital Improvement Costs (excluding financed projects - major environmental project)																
Projected Debt Expense and Short-Term Debt Costs (including financed projects - major environmental project)																
Projected Long-Term Debt Costs (including financed projects - major environmental projects)																
Projected Advance Billing of Debt Service (Debt Reserve)																
Projected Capital Improvements and Debt Costs (ICPA Component A)																
Projected Operation and Maintenance Costs (ICPA Component E)																
Projected Administration and General Costs (ICPA Component B)																
Projected Transmission and Dispatch Costs (ICPA Component E)																
Projected Taxes (ICPA Component C)																
Projected ROE Costs (ICPA Component D)																
Projected Postretirement Benefit Obligation (ICPA Component E)																
Projected Decommissioning and Demolition Obligation (ICPA Component F)																
Total Projected Demand Costs (ICPA Components A, B, C, D, E & F)																
Projected Demand Costs - \$/MWhr																
Energy Charge																
Projected Coal Cost (delivered)																
Projected Allowance Cost (based on projected weighted average inventory)																
Projected Other Fuel-Related Costs (reagents, fuel oil & coal handling less byproduct sale)																
Total Projected Energy Costs																
Projected Energy Costs - \$/MWhr																
Transmission Charge																
Projected Transmission Charge																
Less Transmission Charges Credit to Demand Charge (ICPA Component E)																
Total Transmission Costs																
Projected Transmission Costs - \$/MWhr																
Summary of ICPA Billable Power Production Costs																
Total Projected Power Production Costs																
Dividend																
Projected Dividend																
Summary of ICPA Billable Power Production Costs Less Projected Dividend																
Total Projected Power Production Costs Less Projected Dividend																
Projected Power Production Costs - \$/MWhr																

Critical Assumptions:

Forecast assumes ICPA termination is 6/30/2040.

EXHIBIT JIF-04

CONFIDENTIAL

EXHIBIT JIF-05

CONFIDENTIAL

EXHIBIT JIF-06

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
SIERRA Second Set of Interrogatories - Stipulation
Date Received: June 14, 2018

SIERRA-INT-02-001
PUBLIC

REQUEST:

Refer to the Supplemental Testimony of Judah L. Rose on Behalf of Duke Energy Ohio ("Rose Supplemental Testimony") at page 19, lines 3-6 with respect to any hedge value of the contracts.

- a. Does Mr. Rose's assessment of the hedge value of the contract include the sunk costs of the OVEC power plant? If not, why not?
- b. Please state the numerical hedge value of the contracts as calculated by Mr. Rose.
- c. Please provide any workpapers or assessments conducted by Mr. Rose to arrive at the numerical hedge value of the contracts as calculated by Mr. Rose.
- d. Is it Mr. Rose's assessment that a hedge using the Inter-Company Power Agreement is effective for Duke's ratepayers?
- e. Provide Mr. Rose's numeric assessment of hedge effectiveness.

RESPONSE:

- a. Mr. Rose did not assess or calculate the hedge value of the OVEC contract.
- b. N/A
- c. N/A
- d. N/A
- e. N/A

PERSON RESPONSIBLE: Judah Rose

EXHIBIT JIF-07

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
SIERRA Second Set of Interrogatories - Stipulation
Date Received: June 14, 2018

SIERRA-INT-02-016
PUBLIC

REQUEST:

Confirm that in each calendar year from 2001 to 2012, Duke Energy Ohio's total revenues on its share of the Inter-Company Power Agreement exceed its total share of costs. If denied, identify the year(s) in which costs exceeded revenues.

RESPONSE:

Objection. This request is overbroad, unduly burdensome, and unreasonable in terms of time, scope and duration as it seeks information that is not available. Moreover, this request is irrelevant as it seeks information that is beyond the scope of this proceeding and thus is not likely to lead to the discovery of any admissible or relevant evidence. Without waiving said objection and to the extent discoverable, costs exceeded revenue in each year from 2010 through 2017. Because of the Company's record retention policy, complete data for years prior to 2010 is unavailable.

PERSON RESPONSIBLE: As to objection – Legal
As to response - John Swez

EXHIBIT JIF-08

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
SIERRA Second Set of Interrogatories - Stipulation
Date Received: June 14, 2018

SIERRA-INT-02-015
PUBLIC

REQUEST:

Since September 2000, has Duke Energy Ohio attempted to sell or otherwise transfer or exit from its ownership share of the Inter-Company Power Agreement? If yes, describe each such effort(s).

RESPONSE:

Objection. Overbroad, unduly burdensome, irrelevant and not likely to lead to the discovery of relevant admissible evidence. Additionally, this Interrogatory seek to elicit a narrative response and is thus better suited for deposition. See Generally, *Penn Central Transportation Co. v. Armco Steel Corp.*, 27 Ohio Misc 76 (Montgomery Cty. 1971).

Without waiving said objection and to the extent discoverable, between 2012 and 2014 the Company made numerous attempts to transfer or exit its ownership including responding to numerous RFPs and direct offers of sale to counterparties. None of such offers were accepted.

PERSON RESPONSIBLE: As to Objection - Legal
As to response - Greg Cecil

EXHIBIT JIF-09

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
SIERRA Second Set of Interrogatories - Stipulation
Date Received: June 14, 2018

SIERRA-INT-02-017
PUBLIC

REQUEST:

Has Duke Energy Ohio considered any other options—including, without limitation, issuance of a request for proposals— other than reliance on the Inter-Company Power Agreement for providing a hedge for its customers? If so, describe the other options considered.

RESPONSE:

Objection, this Interrogatory seek to elicit a narrative response and is thus better suited for deposition. See Generally, *Penn Central Transportation Co. v. Armco Steel Corp.*, 27 Ohio Misc 76 (Montgomery Cty. 1971). Without waiving said objection, and to the extent discoverable, Duke Energy Ohio's SSO auction is structured to provide some limited hedge against market volatility.

PERSON RESPONSIBLE:

Objection- Legal.

EXHIBIT JIF-10

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
SIERRA Second Set of Interrogatories - Stipulation
Date Received: June 14, 2018

SIERRA-INT-02-002
PUBLIC

REQUEST:

Refer to the Rose Supplemental Testimony at page 17, lines 14-17 with respect to sunk costs.

- a. State if Mr. Rose reviewed any assessment conducted by either OVEC or Duke Energy Ohio with respect to the prudence of capital expenditures at OVEC's power plants. If yes, list all capital expenditures that Mr. Rose reviewed.
- b. Identify any assessments reviewed or relied upon by Mr. Rose and conducted by either OVEC or Duke Energy Ohio with respect to the prudence of capital expenditures at OVEC's power plants.
- c. Provide any assessment reviewed or relied upon by Mr. Rose and conducted by either OVEC or Duke Energy Ohio with respect to the prudence of capital expenditures at OVEC's power plants.

RESPONSE:

- a. Mr. Rose did not review any specific assessment conducted by either OVEC or Duke Energy Ohio on OVEC CapEx. Rather Mr. Rose replied upon OVEC's projection of those costs (i e., "20yearbillable_v1-1-2018.xls". Please see Mr. Rose's confidential supplemental response to OCC-POD-02-009, Supp CONF Attachment (31) for the document.)
- b. See response to a.
- c. See response to a.

PERSON RESPONSIBLE: Judah Rose

EXHIBIT JIF-11

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TABLE OF AUTHORITIES

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Cases	
<i>In re Albrechts Ohio Inns, Inc.</i> , 152 B.R. 496 (Bankr. S.D. Ohio 1993).....	8
<i>Class Five Nev. Claimants v. Dow Corning Corp. (In re Dow Corning Corp.)</i> , 280 F.3d 648 (6th Cir. 2002)	6
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<i>Grp. of Instl. Inv'rs v. Chi., M., St. P. & Pac. R.R. Co.</i> , 318 U.S. 523 (1943).....	11
<i>In re HQ Glob. Holdings</i> , 290 B.R. 507 (Bankr. D. Del. 2003)	9
<i>Leasing Serv. Corp. v. First Tenn. Bank N.A.</i> , 826 F.2d 434 (6th Cir. 1987)	7
<i>In re Level Propane Gases, Inc.</i> , 297 B.R. 503 (Bankr. N.D. Ohio 2003), <i>aff'd</i> , No. 02-16172, 2007 WL 1821723 (N.D. Ohio June 22, 2007).....	9
<i>Cal. ex rel. Lockyer v. FERC</i> , 383 F.3d 1006 (9th Cir. 2004)	11
<i>Midway Motor Lodge of Elk Grove v. Innkeepers Telemgmt. & Equip. Corp.</i> , 54 F.3d 406 (7th Cir. 1995)	7
<i>In re Mirant Corp.</i> , 318 B.R. 100, 107-08 (N.D. Tex. 2004)	11
<i>Mirant Corp. v. Potomac Elec. Power Co. (In re Mirant Corp.)</i> , 378 F.3d 511 (5th Cir. 2004)	10, 11, 12, 13

<i>In re Murexco Petrol., Inc.</i> , 15 F.3d 60 (5th Cir. 1994)	6
<i>In re N. Am. Royalties, Inc.</i> , 276 B.R. 860 (Bankr. E.D. Tenn. 2002)	7
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<i>Phar-Mor, Inc. v. Strouss Bldg. Assocs.</i> , 204 B.R. 948 (N.D. Ohio 1997)	8, 9
<i>In re QSL Medina, Inc.</i> , No. 15-52722 (AMK) (Bankr. N.D. Ohio Dec. 15, 2015), ECF No. 105	13
<i>In re Richendollar</i> , No. 04-70774, 2007 WL 1039065 (Bankr. N.D. Ohio Mar. 31, 2007)	8
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FirstEnergy Solutions Corp. (“FES”) and FirstEnergy Generation, LLC (“FG,” and together with FES, “Movants”), debtors in the above-captioned chapter 11 cases (together with their affiliated debtors, the “Debtors”), file this motion (the “Motion”) for an order, substantially in the form attached hereto as Exhibit A (the “Order”), authorizing the Debtors to reject a certain multi-party intercompany power purchase agreement. In support of the Motion, the Movants incorporate by reference the *Declaration of Donald R. Schneider in Support of Chapter 11 Petitions and First Day Motions* (the “Schneider First Day Declaration”),¹ the *Declaration of Kevin T. Warvell in Support of the Motion to Reject* (the “Warvell Declaration”), the *Declaration of Judah L. Rose in Support of the Motion to Reject* (the “Rose Declaration”), and the *Declaration of David Gerhardt in Support of the Motion to Reject* (the “Gerhardt Declaration”). The Movants respectfully represent as follows:

JURISDICTION AND VENUE

1. The United States Bankruptcy Court for the Northern District of Ohio (the “Court”) has jurisdiction over this matter pursuant to 28 U.S.C. §§ 157 and 1334. This matter is a core proceeding within the meaning of 28 U.S.C. § 157(b)(2).
2. Venue is proper in this district pursuant to 28 U.S.C. §§ 1408 and 1409.
3. The statutory bases for the relief requested in this Motion are sections 105(a), 365, 1107(a), and 1108 of title 11 of the United States Code (the “Bankruptcy Code”) and rules 2002, 6006 and 9014 of the Federal Rules of Bankruptcy Procedure.

RELIEF REQUESTED

4. By this Motion, the Movants seek to reject an extraordinarily burdensome executory power purchase agreement, effective as of the Petition Date (defined below). During

¹ Capitalized terms not defined herein are defined in the First Day Declaration.

2017 this contract—combined with nine² other power purchase agreements the Movants separately seek to reject—accounted for just approximately 3% of the power FES bought and sold into the wholesale market. Yet movants are losing approximately \$12 million per year, and are expected to lose \$268 million over the remaining 22 years left on the OVEC ICPA (defined below).

5. The Movants further request that the Court grant the relief requested in this Motion without a further hearing on a final basis if no objection is timely filed and served. If any objection(s) to the Motion is timely and properly filed and served with respect to the multi-party intercompany power purchase agreement, the parties shall attempt to reach a consensual resolution of the objection. If the parties are unable to so resolve any objection, the Debtors request that the Court hear such objection at the final hearing on this Motion.

6. The Movants further request that the Court set the deadline by which time the counterparty to the executory power purchase agreement must file a proof of claim relating to the rejection of the executory power purchase agreement as the later of (a) the claims bar date established in the Debtors' chapter 11 cases and (b) thirty (30) days after the entry of an order granting the relief sought in the instant motion.

BACKGROUND

7. On March 31, 2018 (the "Petition Date"), each of the Debtors filed a voluntary petition with the Court under chapter 11 of the Bankruptcy Code. The Debtors continue to operate their businesses and manage their property as debtors and debtors-in-possession pursuant to sections 1107(a) and 1108 of the Bankruptcy Code. The Debtors have requested joint administration of these chapter 11 cases pursuant to Bankruptcy Rule 1015(b). The Court has

² This includes eight "renewable" energy bundled power purchase agreements and one nonrenewable power purchase agreement.

not appointed a trustee and the Office of the United States Trustee for the Northern District of Ohio (the “US Trustee”) has not yet formed any official committees in these chapter 11 cases.

8. Non-Debtor FirstEnergy Corp. (“FE Corp.”), an Ohio corporation, is the ultimate parent company for each of the Debtors in these chapter 11 cases and certain of FE Corp.’s non-Debtor affiliates (collectively, “FirstEnergy” or “FirstEnergy Group”). Debtor FirstEnergy Solutions Corp. (“FES”), an Ohio corporation, is the parent company for Debtors FE Aircraft Leasing Corp. (“FEALC”), an Ohio corporation, FirstEnergy Generation, LLC (“FG”), an Ohio limited liability company, and FirstEnergy Nuclear Generation, LLC (“NG”), an Ohio limited liability company. Debtor FG is the parent company for Debtors FirstEnergy Generation Mansfield Unit 1 Corp. (“FGMUC”), an Ohio corporation, and Norton Energy Storage L.L.C. (“NES”), a Delaware limited liability company.³

9. FES sells power and provides energy-related products and services to retail and wholesale customers primarily in Illinois, Maryland, Michigan, New Jersey, Ohio, and Pennsylvania.

10. FG owns and operates three fossil generation plants⁴, two in Ohio and one in Pennsylvania.⁵ Additionally, FG operates the fossil generation plant owned by non-Debtor Bay Shore Power Company.

³ FG also owns a 99% limited partnership interest in Nautica Phase 2 Limited Partnership, which has \$10 million in outstanding debt.

⁴ FG also owns a steam turbine and combustion turbine at the Bay Shore Power Plant in Oregon, OH and a combustion turbine at the Eastlake Plant in Eastlake, OH.

⁵ FG owns and operates the W.H. Sammis Plant in Stratton, OH, which is composed of seven units and the West Lorain Plant in Lorain, OH, which is composed of six units that run on heating oil. FG operates the entire Bruce Mansfield Plant in Shippingport, PA, where it owns two of the three units. FG owns approximately 6.17% of Unit 1 of the Bruce Mansfield Plant while approximately 93.83% of Unit 1 is under a leasehold interest.

11. A detailed description of the Debtors' business, capital structure, and the events leading to the chapter 11 cases is fully set forth in the Schneider First Day Declaration filed contemporaneously herewith and incorporated by reference as if fully set forth herein.

I. Overview of the Debtors' Business Operations

12. FES offers energy-related products and services to retail and wholesale customers (the "Customers"). FES provides energy products and services to retail Customers under various provider-of-last-resort ("POLR"), shopping, competitive-bid and non-affiliated contractual obligations. FES also participates in deregulated energy markets in Ohio, Pennsylvania, Maryland, Michigan, New Jersey and Illinois, competing to: (1) provide retail generation service directly to end users; (2) provide wholesale generation service to utilities, municipalities and co-operatives, which, in turn, resell to end users; and (3) sell power and capacity in the wholesale market.

13. FES, along with its non-debtor, unregulated generation affiliate, Allegheny Energy Supply Company, LLC ("AE Supply"), constitutes FirstEnergy's Competitive Energy Services ("CES") segment. Of FirstEnergy's three reportable operating segments, only the CES segment contains Debtor entities.⁶ The CES segment's operating results are derived primarily from electric generation sales less the related costs of electricity generation, including fuel, purchased power and net transmission and ancillary costs and capacity costs charged by regional

⁶ FirstEnergy's Regulated Distribution segment distributes electricity to approximately six million customers within 65,000 square miles of Ohio, Pennsylvania, West Virginia, Maryland, New Jersey and New York through FirstEnergy's ten non-debtor operating companies. FirstEnergy's Regulated Transmission segment transmits electricity through transmission facilities owned and operated by American Transmission Systems, Incorporated and Trans-Allegheny Interstate Line Company, and certain of FirstEnergy's utilities. FirstEnergy derives its revenue for its Regulated Transmission segment primarily from transmission services provided to load-serving entities pursuant to the PJM Open Access Transmission Tariff.

transmission organizations (each, a “RTO”) to deliver energy to the CES segment’s Customers, as well as other operating and maintenance costs.

14. FES is party to various contracts (the “RTO Agreements”) with RTOs, specifically PJM Interconnection, L.L.C. (“PJM”) and the Midcontinent Independent System Operator, Inc. (“MISO”). RTOs are responsible for coordinating, controlling and monitoring a regional high-voltage transmission grid. They administer markets to ensure safe and reliable operation and delivery of electricity. On a real-time basis, the RTO ensures that sufficient generation capacity exists to meet Customers’ needs. Through the RTO Agreements, FES has made commitments to use good utility practices to assist the RTOs in meeting their operational commitments. Additionally, RTOs require payment and collateral obligations pursuant to the RTO Agreements. FES collects fees for its generation and pays the RTOs for expenses incurred in serving its Customers. In the event of an energy shortage or capacity failure in the region, PJM or the relevant RTO will pay power providers to remain in operation either by actively producing power or remaining available to offer capacity. As a result of the role RTOs play in administering markets, no reliability concern (and therefore no issue for consumers) is implicated by a breach of the executory power purchase agreements. The counterparties can resell the energy, bring a claim for damages and, in the unlikely event that a breach results in the shutdown of a counterparty, the relevant RTO would step in to prevent a shortage. Since no reliability issue would result from the rejection of the executory power purchase agreements, they are truly no different from any long-term money losing contract.

II. The OVEC Intercompany Power Purchase Agreement

15. FG is a party to a multi-party intercompany power purchase agreement (the “OVEC ICPA,”) pursuant to which FES and several other power companies “sponsor” and

purchase power generated by fossil fuel from the Ohio Valley Electric Corporation (“OVEC”). The OVEC ICPA obligates FG to purchase 4.85% of the power that OVEC’s fossil-fuel plants generate at an uneconomic rate until either the year 2040 or until OVEC ceases to operate. Based on current expectations, FG will lose approximately \$268 million on an undiscounted basis over the remaining term of the OVEC ICPA.

16. The Movants can operate their businesses without the OVEC ICPA.

17. None of the Debtors’ Customers—or any consumer for that matter—will go without power or capacity if the Movants are permitted to reject the OVEC ICPA. In 2017, the power generated under the OVEC ICPA totaled 0.6 TWh—just 0.1% of the total 767 TWh generated from all power plants selling in PJM. Further, OVEC will be able to sell its power generated for FG to other wholesale purchasers or into the regional wholesale electric spot markets (in this case, the markets operated by PJM).

BASIS FOR RELIEF

18. Section 365(a) of the Bankruptcy Code provides that a debtor-in-possession “subject to the court’s approval, may . . . reject any executory contract or unexpired lease of the debtor.” 11 U.S.C. § 365(a). “This provision allows a trustee to relieve the bankruptcy estate of burdensome agreements which have not been completely performed.” *Stewart Title Guar. Co. v. Old Republic Nat’l Title Co.*, 83 F.3d 735, 741 (5th Cir. 1996) (citing *In re Murexco Petrol., Inc.*, 15 F.3d 60, 62 (5th Cir. 1994)). Bankruptcy courts have broad authority and considerable discretion under this provision. *See Class Five Nev. Claimants v. Dow Corning Corp. (In re Dow Corning Corp.)*, 280 F.3d 648, 656 (6th Cir. 2002).

19. The Supreme Court has recognized that “the authority to reject an executory contract” is not merely incidental, but rather it “is vital to the basic purpose of a Chapter 11 reorganization, because rejection can release the debtor’s estate from burdensome obligations

that can impede a successful reorganization.” *NLRB v. Bildisco & Bildisco*, 465 U.S. 513, 528 (1984). Courts have similarly held that “[t]he right of a debtor in possession to reject certain contracts is fundamental to the bankruptcy system because it provides a mechanism through which severe financial burdens may be lifted while the debtor attempts to reorganize.” *Westbury Real Estate Ventures, Inc. v. Bradlees Stores, Inc. (In re Bradlees Stores, Inc.)*, 194 B.R. 555, 558 n.1 (Bankr. S.D.N.Y. 1996). Rejection of an executory contract under 11 U.S.C. § 365(a) constitutes a breach of the contract—not a modification or termination. *Osprey-Troy Officentre, LLC v. World All. Fin. Corp.*, 502 F. App’x 455, 456-57 (6th Cir. 2012); *see also In re N. Am. Royalties, Inc.*, 276 B.R. 860, 865 (Bankr. E.D. Tenn. 2002) (“Rejection is independent of the contract terms.”).

20. Rejection is “vital” and “fundamental,” because in many cases, the debtor could not emerge from bankruptcy as a going concern if it were forced to specifically perform under burdensome executory contracts. *Leasing Serv. Corp. v. First Tenn. Bank N.A.*, 826 F.2d 434, 436 (6th Cir. 1987) (“Rejection denies the right of the contracting creditor to require the bankrupt estate to specifically perform...”); *see also Midway Motor Lodge of Elk Grove v. Innkeepers Telemgmt. & Equip. Corp.*, 54 F.3d 406, 407 (7th Cir. 1995) (“Rejection avoids specific performance, but the debtor assumes a financial obligation equivalent to damages for breach of contract.”); *Bradlees Stores*, 194 B.R. at 558 (“Specific performance should not be permitted where the remedy would in effect do what section 365 meant to avoid, that is, impose burdensome contracts on the debtors.”) (quoting *In re Fleishman*, 138 B.R. 641, 648 (Bankr. D. Mass. 1992)).

21. The Bankruptcy Code permits the debtor to breach the burdensome contracts, transforming those obligations into a pre-petition claim for damages, which may be satisfied and

discharged together with all claims against the estate. *See* 11 U.S.C. § 365(g); *see also In re Richendollar*, No. 04-70774, 2007 WL 1039065 (Bankr. N.D. Ohio Mar. 31, 2007) (“The purpose of section 365(g) is to make clear that, under the doctrine of relation back, the other party to a contract that has not been assumed Section 365(g) is simply a general unsecured creditor.”) (quoting 3 Collier on Bankruptcy § 365.09[1] (15th ed. 2006)).

22. Rejection thereby allows for ratable treatment of a debtors’ unsecured lenders/creditors and its counterparties on executory contracts. *In re Albrechts Ohio Inns, Inc.*, 152 B.R. 496, 501–02 (Bankr. S.D. Ohio 1993) (noting the business judgment rule is satisfied for rejection purposes where “rejection will result in benefit to the debtor’s general unsecured creditors”). Here, ensuring ratable treatment amongst such parties is essential to an equitable outcome. Requiring the Debtors to perform the remaining up to 22 years of the OVEC ICPA (as opposed to rejection), thereby paying OVEC in full, would be incredibly unfair and inequitable.

A. Rejection of the OVEC ICPA is a Proper Exercise of the Debtors’ Business Judgment

23. The “business judgment” standard applies to determine whether the rejection of an executory contract or unexpired lease should be authorized. *See Orion Pictures Corp. v. Showtime Networks, Inc. (In re Orion Pictures Corp.)*, 4 F.3d 1095, 1098-99 (2d Cir. 1993); *see also Bildisco*, 465 U.S. at 524 (acknowledging that business judgment is the “traditional” standard for rejection of executory contracts); *Phar-Mor, Inc. v. Strouss Bldg. Assocs.*, 204 B.R. 948, 951-52 (N.D. Ohio 1997) (“Whether an executory contract is ‘favorable’ or ‘unfavorable’ is left to the sound business judgment of the debtor.”); *In re Fashion Two Twenty, Inc.*, 16 B.R. 784, 787 (Bankr. N.D. Ohio 1982) (adopting the business judgment standard as “the proper standard” to determine a motion for rejection).

24. Rejection of an executory contract is appropriate where such rejection would benefit the estate. *See In re Orion Pictures Corp.*, 4 F.3d at 1098-99; *Sharon Steel Corp. v. Nat'l Fuel Gas Distrib. Corp.*, 872 F.2d 36, 40 (3d Cir. 1989); *In re HQ Glob. Holdings*, 290 B.R. 507, 511 (Bankr. D. Del. 2003); *In re Pesce Baking Co., Inc.*, 43 B.R. 949, 956 (Bankr. N.D. Ohio 1984).

25. Thus, upon finding that FG has exercised their sound business judgment in determining that rejection of the OVEC ICPA is in the best interests of the Debtors, their creditors and all parties in interest, the Court should approve the rejection under section 365(a) of the Bankruptcy Code. *See, e.g., In re Level Propane Gases, Inc.*, 297 B.R. 503, 509 (Bankr. N.D. Ohio 2003) (granting rejection where debtors “set forth a sound business judgment”), *aff'd*, No. 02-16172, 2007 WL 1821723 (N.D. Ohio June 22, 2007); *In re Fashion Two Twenty, Inc.*, 16 B.R. at 787 (same). If a debtor’s business judgment has been reasonably exercised, a court should approve the assumption or rejection of an executory contract. *See, e.g., Phar-Mor, Inc.*, 204 B.R. at 952 (“Courts should generally defer to a debtor’s decision whether to reject an executory contract.”); *Summit Land Co. v. Allen (In re Summit Land Co.)*, 13 B.R. 310, 315 (Bankr. D. Utah 1981) (holding that absent extraordinary circumstances, court approval of a debtor’s decision to assume or reject an executory contract “should be granted as a matter of course”).

26. Here, the OVEC ICPA Rejection Motion clearly reflects the sound exercise of the Debtors’ business judgment. Under the OVEC ICPA, which is wholly unnecessary for FG’s business, the Debtors are today paying more than double the market value of capacity and power, and are expected to for the remaining life of this executory contract. As discussed more fully in the Warvell Declaration, the Debtors and ICF conducted an analysis of the potential business

impact of continuing to perform under the OVEC ICPA and determined that such performance would serve to decimate the Debtors' finances, to the tune of \$268 million. The Debtors, assisted by financial advisors at Alvarez & Marsal and energy industry consultants at ICF International, have concluded that without rejection of the OVEC ICPA the Debtors' ability to reorganize would be jeopardized and their estates would be irreparably damaged.

27. The U.S. Court of Appeals for the Fifth Circuit has suggested that rejection of a FERC-regulated contract under section 365 should be subject to a more rigorous standard than the business judgment standard because of the "public interest" in the "transmission and sale of electricity," including "the continuity of electrical service to the customers of public utilities," that is recognized in the Federal Power Act ("FPA"). *Mirant Corp. v. Potomac Elec. Power Co. (In re Mirant Corp.)*, 378 F.3d 511, 525 (5th Cir. 2004) (citing 16 U.S.C. § 824(a)). While the Fifth Circuit correctly decided the core jurisdictional issue (*i.e.*, that FERC-regulated contracts could be rejected in bankruptcy), its suggestion that the bankruptcy court should apply a heightened standard is wrong as a matter of law—especially in the circumstances now before the Court. Moreover, even if the standard outlined in *Mirant* was deemed applicable here, the Movants would easily satisfy it.

28. The Fifth Circuit suggested that a debtor should be required to show that the contract "burdens the estate, that after careful scrutiny, the equities balance in favor of rejecting th[e] power contract, and that rejection of the contract would further the Chapter 11 goal of permitting the successful rehabilitation of debtors." *Id.* (citing *Bildisco*, 465 U.S. at 526-27).

29. There is no basis to apply a more rigorous standard than the business judgment standard to the OVEC ICPA. As explained above, the business judgment standard has long governed the rejection of executory contracts, except in a rare circumstance dictated by

Congressional intent that is not found in the FPA. In *Mirant*, the Fifth Circuit suggested without any basis in precedent that a more rigorous standard should apply to wholesale power contracts by analogizing those contracts to collective bargaining agreements subject to National Labor Relations Board regulation, which the Supreme Court held should be subject to more rigorous scrutiny because of the “special nature of a collective bargaining contract.” *In re Mirant Corp.*, 378 F.3d at 524-25 (quoting *Bildisco*, 465 U.S. at 524). In *Bildisco*, however, appellate courts had applied different variations of a heightened standard prior to Congress’s enactment of section 365(a), and the Court determined that “Congress intended” a higher standard to apply to collective bargaining contracts. *Bildisco*, 465 U.S. at 525-26. There is no evidence that Congress intended a more rigorous standard to apply to wholesale power contracts. And it is not sufficient to state that FERC-regulated contracts are important—so are many contracts in many important areas of the economy subject to federal regulation that are nonetheless governed by the business judgment standard. *See, e.g., Grp. of Instl. Inv’rs v. Chi., M., St. P. & Pac. R.R. Co.*, 318 U.S. 523, 550 (1943) (railroad); *In re Trans World Airlines, Inc.*, 261 B.R. 103, 123 (Bankr. D. Del. 2001) (aviation); *In re Enron Corp.*, No. 01 B 16034, 2006 WL 898033, at *4 (Bankr. S.D.N.Y. Mar. 24, 2006) (telecom).

30. It is even more doubtful that Congress could have intended a more rigorous standard to apply to rejections by electricity *customers* (such as FES and FG as purchasers under the OVEC ICPA) given that the FPA was enacted to protect such customers, not regulate them—much less force them to continue purchasing electric service they neither need, want, or can afford. *Pa. Water & Power Co. v. Fed. Power Comm’n*, 343 U.S. 414, 418 (1952) (“A major purpose of the whole [Federal Power] Act is to protect power consumers against excessive prices.”); *Cal. ex rel. Lockyer v. FERC*, 383 F.3d 1006, 1017 (9th Cir. 2004) (describing

“protecting consumers” as the FPA’s “primary purpose”). In sum, there is no heightened or otherwise different bankruptcy-related standard applying to wholesale electric contracts. Nothing in the text of the FPA states or implies such a standard. No Supreme Court case suggests such a standard. And no case actually *applies* such a standard, as *Mirant* was decided on other grounds on remand.

31. Even if the Court determined that the heightened standard suggested by the Fifth Circuit should apply, however, Debtors would clearly meet it. The OVEC ICPA is extremely burdensome to Debtors’ estates, and the cost of continuing to perform under it would threaten the viability of Debtors’ restructuring efforts. And importantly, the public interest in “continuity of electrical service” is not implicated by rejection of the OVEC ICPA because rejection would not “cause any disruption in the supply of electricity to other public utilities or to consumers.” *In re Mirant*, 378 F.3d at 525. As noted above, FES and FG are not electric suppliers under the OVEC ICPA; they are customers. Their rejection of the OVEC ICPA therefore will not cause any “disruption in the supply of electricity” because FES and FG do not supply electricity under these contracts in the first instance. Put simply, no customers will have their power supply threatened as a result of the Movants’ rejection of the OVEC ICPA.

32. Rejection of the OVEC ICPA will relieve the Movants of the near term losses of approximately \$12 million on an annual average basis (2018 to 2023) and will eliminate the approximately \$268 million in continuing losses over the remaining life of the contracts. Rejection of the OVEC ICPA is thus a sound exercise of the Movants’ business judgment and will benefit the Debtors’ estates and their creditors.

B. This Court Should Grant the Requested Relief *Nunc Pro Tunc*

33. The Movants request that the Court deem the rejection, if granted, to have retroactive effect to the date of the filing of this Motion on April 1, 2018. Under section 105 of

the Bankruptcy Code, the Court has expansive equitable powers to fashion any order or decree that is necessary to carry out the provisions of the Bankruptcy Code. 11 U.S.C. § 105(a). This includes a grant of *nunc pro tunc* relief on a debtor's motion to reject a lease, when such relief is equitable. *EOP-Colonnade of Dall. LP v. Faulkner (In re Stonebridge Techs., Inc.)*, 430 F.3d 260, 273 (5th Cir. 2005) (noting that "most courts have held that lease rejection may be retroactively applied"); *Pac. Shores Dev., LLC v. At Home Corp. (In re At Home Corp.)*, 392 F.3d 1064, 1071-72 (9th Cir. 2004) (affirming bankruptcy court's exercise of its equitable authority to approve retroactive rejection under section 365); *Thinking Machs. Corp. v. Mellon Fin. Servs. Corp. # 1 (In re Thinking Machs. Corp.)*, 67 F.3d 1021, 1028 (1st Cir. 1995) (recognizing that bankruptcy courts have discretion to approve rejection retroactive under section 365 "when the balance of the equities preponderates in favor of such remediation"); *see also In re QSL Medina, Inc.*, No. 15-52722 (AMK) (Bankr. N.D. Ohio Dec. 15, 2015), ECF No. 105 (authorizing rejection effective as of the petition date).

34. Courts determine whether retroactive effect is appropriate on a case-by case basis. *See In re Thinking Machs. Corp.*, 67 F.3d at 1029 n.9 ("[W]e eschew any attempt to spell out the range of circumstances that might justify the use of a bankruptcy court's equitable powers in this fashion. That exercise is best handled on a case-by-case basis.").

35. Here, equitable considerations support the retroactive rejection of the OVEC ICPA effective as of the Petition Date. First, the Court's decision whether to grant rejection on a *nunc pro tunc* basis has potentially significant consequences to the Debtors' estates. Performance under unprofitable, non-essential contracts such as the OVEC ICPA, for any period of time, even for a few months at a loss of about \$1 million per month in the near term, will hamper the Debtors' efforts to maximize value and pursue a successful emergence from chapter

11. The Movants' continued performance under the OVEC ICPA would pose a substantial threat to a successful restructuring of the Debtors.

36. Finally, the Movants have not delayed in seeking to reject the OVEC ICPA, but moved for rejection immediately upon filing for chapter 11 relief. These facts support granting retroactive relief. *In re At Home Corp.*, 392 F.3d at 1072-73 (granting retroactive effect in part because debtor filed its motion on the first day of the case and scheduled the hearing for the "earliest practicable date"). There is no legitimate basis for delaying rejection, and OVEC will suffer no material prejudice from a grant of retroactive relief.

RESERVATION OF RIGHTS

37. Nothing contained in this Motion or any actions taken by the Debtors pursuant to the relief granted in the Order is intended or should be construed as: (a) an admission as to the validity of any particular claim against a Debtor entity; (b) a waiver of the Debtors' rights to dispute any particular claim on any grounds; (c) a promise or requirement to pay any particular claim; (d) an implication or admission that any particular claim is of a type specified or defined in this Motion; (e) a request or authorization to assume any agreement, contract, or lease pursuant to 11 U.S.C. § 365; or (f) a waiver or limitation of any of Debtors' rights under the Bankruptcy Code or any other applicable law.

NOTICE

38. No trustee, examiner or official committee has been appointed in the Debtors' chapter 11 cases. Notice of this Motion has been served on the following parties and/or their counsel, if known, via facsimile, overnight delivery, regular U.S. Mail, e-mail, and/or hand delivery: (a) the Office of the U.S. Trustee for the Northern District of Ohio; (b) the entities listed on the Consolidated List of Creditors Holding the 50 Largest Unsecured Claims filed pursuant to Bankruptcy Rule 1007(d); (c) counsel to the Bank of New York Mellon Trust

Company, N.A., in its capacity as indenture trustee under various indenture agreements; (d) counsel to UMB Bank, National Association, in its capacity as indenture trustee, paying agent, and collateral trustee under various indenture agreements, including, without limitation, certain pollution control revenue bond indentures and certain first mortgage bond indentures, and trust agreements; (e) counsel to Wilmington Savings Fund Society, FSB, in its capacity as indenture trustee and pass through trustee under various indenture agreements and trust agreements in connection with the Bruce Mansfield Unit 1 sale-leaseback; (f) counsel to the Ad Hoc Group of Holders of the 6.85% Pass Through Certificates due 2034; (g) counsel to the ad hoc group of certain holders of (i) pollution control revenue bonds supported by notes issued by FG and NG and (ii) certain unsecured notes issued by FES (collectively, the “Ad Hoc Noteholder Group”); (h) counsel to FirstEnergy Corp.; (i) counsel to MetLife Capital, Limited Partnership; (j) the District Director of the Internal Revenue Service; (k) the Securities and Exchange Commission; (l) the Office of the United States Attorney for the Northern District of Ohio; (m) the United States Environmental Protection Agency; (n) the Nuclear Regulatory Commission; (o) the United States Department of Energy; (p) the Federal Energy Regulatory Commission; (q) the Office of the Attorney General for Ohio; (r) the Office of the Attorney General for Pennsylvania; (s) the Office of the Attorney General for Illinois; (t) the Office of the Attorney General for Maryland; (u) the Office of the Attorney General for Michigan; (v) the Office of the Attorney General for New Jersey; (w) the National Association of Attorneys General; and (x) the Ohio Valley Electric Corporation. The Debtors submit that, in light of the nature of the relief requested, no other or further notice need be given.

CONCLUSION

WHEREFORE, the Movants respectfully request that the Court enter an order granting the relief requested by this Motion and such further relief as may be just and necessary under the circumstances.

Dated: April 1, 2018

Respectfully submitted,

/s/ Marc B. Merklin

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**IN THE UNITED STATES BANKRUPTCY COURT
FOR THE NORTHERN DISTRICT OF OHIO
AKRON DIVISION**

In re:)	Chapter 11
)	
FIRSTENERGY SOLUTIONS CORP., <i>et al.</i> , ¹)	Case No. 18-50757
)	(Request for Joint Administration
)	Pending)
Debtors.)	
)	Hon. Judge Alan M. Koschik
)	

**[PROPOSED] ORDER (I) AUTHORIZING THE DEBTORS TO REJECT
CERTAIN A CERTAIN MULTI-PARTY INTERCOMPANY POWER PURCHASE
AGREEMENT WITH THE OHIO VALLEY ELECTRIC CORPORATION
NUNC PRO TUNC TO THE PETITION DATE AND
(II) GRANTING CERTAIN RELATED RELIEF**

Upon the motion of FirstEnergy Solutions Corp. (“FES”) and FirstEnergy Generation, LLC (“FG”), debtors in the above-captioned chapter 11 cases (together with their affiliated debtors the “Debtors”), for the entry of the Proposed Order (i) authorizing and approving the rejection, *nunc pro tunc* to the date of commencement of these chapter 11 cases, of a certain multi-party intercompany power purchase agreement with the Ohio Valley Electric Corporation (the “OVEC ICPA”) and (ii) granting related relief; and the Court having jurisdiction to consider the motion and the relief requested therein in accordance with 28 U.S.C. § 1334; and consideration of the motion and the relief requested therein being a core proceeding in accordance with 28 U.S.C. §§ 157(b)(2); and venue being proper in this jurisdiction pursuant to

The Debtors in these chapter 11 cases, along with the last four digits of each Debtor's federal tax identification number, are: FE Aircraft Leasing Corp. (9245), case no. 18-50759; FirstEnergy Generation, LLC (0561), case no. 18-50762; FirstEnergy Generation Mansfield Unit 1 Corp. (5914), case no. 18-50763; FirstEnergy Nuclear Generation, LLC (6394), case no. 18-50760; FirstEnergy Nuclear Operating Company (1483), case no. 18-50761; FirstEnergy Solutions Corp. (0186); and Norton Energy Storage L.L.C. (6928), case no. 18-50764. The Debtors' address is: 341 White Pond Dr., Akron, OH 44320.

28 U.S.C. §§ 1408 and 1409; and due and proper notice of the motion being adequate and appropriate under the particular circumstances; and a hearing having been held to consider the relief requested in the motion; and upon the First Day Declaration, the record of the hearing and all proceedings had before the Court; and the Court having found and determined that the relief sought in the motion is in the best interests of the Debtors' estates, their creditors, and other parties in interest, and that the legal and factual bases set forth in the motion establish just cause for the relief granted herein; and any objections to the requested relief having been withdrawn or overruled on the merits; and after due deliberation and sufficient cause appearing therefor, it is hereby **ORDERED**:

1. The motion is granted to the extent set forth herein.
2. The OVEC ICPA is hereby rejected. Such rejection shall be effective *nunc pro tunc* to the Petition Date.
3. Any claims based on the rejection of the OVEC ICPA shall be filed in accordance with any applicable order establishing a bar date for filing proofs of claim in these cases, to be established by the Court at a later date.
4. Notwithstanding the relief granted herein and any actions taken hereunder, nothing contained in this Order shall constitute, nor is it intended to constitute, an admission as to the validity or priority of any claim against the Debtors, the creation of an administrative priority claim on account of the pre-petition obligations sought to be paid, or the assumption or adoption of any contract or agreement under Bankruptcy Code section 365.
5. Notice of the motion as provided herein shall be deemed good and sufficient and such notice satisfies the requirements of Bankruptcy Rule 6004(a) and the Local Rules.

6. Notwithstanding the possible applicability of Bankruptcy Rule 6004(h), this order shall be immediately effective and enforceable upon its entry.

7. The Debtors are authorized to take all actions necessary to effectuate the relief granted pursuant to this order.

SUBMITTED BY:

/s/

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*Proposed Counsel for Debtors
and Debtors in Possession*

EXHIBIT JIF-12

**IN THE UNITED STATES BANKRUPTCY COURT
FOR THE NORTHERN DISTRICT OF OHIO
AKRON DIVISION**

<p style="text-align: center;">In re:</p> <p style="text-align: center;">FIRSTENERGY SOLUTIONS CORP., <i>et al.</i>,¹</p> <p style="text-align: center;">Debtors.</p>	<p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p>	<p style="text-align: right;">Chapter 11</p> <p style="text-align: right;">Case No. 18-50757</p> <p style="text-align: right;">(Request for Joint Administration Pending)</p> <p style="text-align: right;">Hon. Judge Alan M. Koschik</p>
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EXPERT DECLARATION OF JUDAH L. ROSE IN SUPPORT OF: (1) THE MOTION OF FIRSTENERGY SOLUTIONS CORP. AND FIRSTENERGY GENERATION, LLC FOR PRELIMINARY AND PERMANENT INJUNCTION AND *EX PARTE* TEMPORARY RESTRAINING ORDER AGAINST THE FEDERAL ENERGY REGULATORY COMMISSION; (2) THE MOTION FOR ENTRY OF AN ORDER AUTHORIZING FIRSTENERGY SOLUTIONS CORP. AND FIRSTENERGY GENERATION, LLC TO REJECT CERTAIN ENERGY CONTRACTS; AND (3) THE MOTION FOR ENTRY OF AN ORDER AUTHORIZING FIRSTENERGY SOLUTIONS CORP. AND FIRSTENERGY GENERATION, LLC TO REJECT A CERTAIN MULTI-PARTY INTERCOMPANY POWER PURCHASE AGREEMENT WITH THE OHIO VALLEY ELECTRIC CORPORATION

I, Judah L. Rose, hereby declare under penalty of perjury:

1. My name is Judah L. Rose. I am an Executive Director of ICF International (“ICF”). My business address is 9300 Lee Highway, Fairfax, Virginia 22031.

2. I respectfully submit this expert Declaration in support of (i) *the Motion of FirstEnergy Solutions Corp. (“FES”) and FirstEnergy Generation, LLC (“FG”) for Permanent and Preliminary Injunction and Ex Parte Temporary Restraining Order Against the Federal Energy Regulatory Commission (“FERC”)* in the above captioned adversary proceeding; (ii) *the Motion of FES and FG for Entry of an Order Authorizing FES and FG to Reject Certain Energy*

¹ The Debtors in these chapter 11 cases, along with the last four digits of each Debtor’s federal tax identification number, are: FE Aircraft Leasing Corp. (9245), case no. 18-50759; FirstEnergy Generation, LLC (0561), case no. 18-50762; FirstEnergy Generation Mansfield Unit 1 Corp. (5914), case no. 18-50763; FirstEnergy Nuclear Generation, LLC (6394), case no. 18-50760; FirstEnergy Nuclear Operating Company (1483), case no. 18-50761; FirstEnergy Solutions Corp. (0186); and Norton Energy Storage L.L.C. (6928), case no. 18-50764. The Debtors’ address is: 341 White Pond Dr., Akron, OH 44320.

Contracts; and (iii) the Motion of FES and FG for Entry of an Order Authorizing FES and FG to Reject a Certain Multi-Party Intercompany Power Purchase Agreement with the Ohio Valley Electric Corporation.

3. I received a degree in economics from the Massachusetts Institute of Technology and a Master's Degree in Public Policy from the John F. Kennedy School of Government at Harvard University. I have worked at ICF for over 35 years. I am an Executive Director and Chair of ICF's Energy Advisory and Solutions practice. I have also served as a member of the Board of Directors of ICF International and am one of three people among ICF's roster of approximately 5,000 professionals to have received ICF's honorary title of Distinguished Consultant.

4. ICF works with a variety of clients across the private and public energy sectors including governmental entities (such as the Federal Energy Regulatory Commission, the U.S. Department of Energy, state regulators and energy agencies), and private companies such as American Electric Power, Allegheny, Arizona Power Service, Dominion Power, Delmarva Power & Light, Dominion, Duke Energy, FirstEnergy, Entergy, Exelon, Florida Power & Light, Long Island Power Authority, National Grid, Northeast Utilities, Southern California Edison, Sempra, PacifiCorp, Pacific Gas and Electric, Public Service Electric and Gas, PEPCO, Public Service of New Mexico, Nevada Power, and Tucson Electric. ICF also works with Regional Transmission Organizations and similar organizations. I have personally consulted with or testified as an energy industry expert on behalf of most of the listed clients.

5. I have extensive experience in assessing wholesale electric power market design and regulation. I also have extensive experience forecasting wholesale electricity prices, power plant operations and revenues, transmission flows, and fuel prices (e.g., coal, natural gas,

renewable energy). I also have extensive experience in valuing individual power plants in the context of projected market conditions.

6. ICF was retained by counsel to the Debtors in April of 2017 to calculate the losses to the Debtors associated with: (a) eight burdensome executory power purchase agreements (the “PPAs”) under which FES buys energy, capacity, and renewable energy credits (“RECs”); and (b) a certain multi-party intercompany power purchase agreement with the Ohio Valley Electric Corporation (as amended and restated, the “OVEC ICPA” and together with the PPAs, the “Executory PPAs”). Specifically, ICF was retained to determine the short and long-term costs of continued performance. ICF performed an initial analysis of the Executory PPAs in mid-2017, and then updated its work commencing in January 2018.

7. The background of the Executory PPAs, which expire between 2024 and 2040, is described in greater detail in the Declaration of Kevin T. Warvell. At the time ICF was retained, the Debtors had already identified these contracts as burdensome and unnecessary to their business, and had performed preliminary calculations. I, along with my colleague David Gerhardt, have reviewed documents made available to me by counsel, including the Executory PPAs, and numerous operational and financial reports from the Debtors, and performed other investigations to determine the facts and circumstances in this declaration. This declaration is based on my personal knowledge and a review of relevant documents and various calculations and data. I have used principles generally accepted in the energy markets for estimating the costs to the Debtors of the Executory PPAs and forecasting the future value of energy and renewable energy credits. If called as a witness, I could and would testify competently thereto.

8. Market circumstances have resulted in an extended period of commodity prices and REC prices much below those prices found in the Executory PPAs. The main drivers to the collapse in prices include:

- Lower natural gas prices due to continued improvements in natural gas fracking;
- Excess generating capacity due in part to lower than expected load growth;
- Lower cost of construction for renewable technologies, and/or improved performance (*e.g.*, higher capacity factors); and
- Surplus of RECs.

Taken together, these market forces have decreased wholesale electricity prices, and prices of RECs, to levels not envisioned at the time the Executory PPAs were signed. Such market forces have prevailed for the last three to four years and are now expected to continue for the next few years, at a minimum.

9. ICF has individually assessed the Executory PPAs to determine the estimated losses to FES and FG of performing such contracts over their lifetime. These calculations took into account the length of the contracts, the contract price, the expected volume using historical data, and the expected revenue streams. With respect to the OVEC ICPA, ICF took into account both fixed and variable costs such as fuel, coal, variable and fixed operations and management costs, capital expenditures, financing costs and emissions costs associated with that agreement. ICF's calculations used an internal production cost model which simulated the specific power markets in which the Ohio Valley Electric Corporation ("OVEC") and the other contract counterparties operate.

10. To determine the future losses, ICF compared the cost of the contracts over their lifetime with the forecasted future power prices in the market. In forecasting these rates, ICF looked separately at energy price, capacity price, and REC price. For the years 2018-2020, ICF was able to use the actual PJM auction price for capacity prices.² For energy prices and for capacity prices in later years, ICF used both a long-term 30-year pricing model and an annual model maintained in the ordinary course of business by ICF specific to the PJM marketplace which takes into account the individual players in that marketplace.

11. The assumptions underlying all calculations in the model are the results of external inputs such as OVEC production cost projections and NYMEX futures, as well as internal inputs which reflect the views of ICF's nationally recognized power practice group, which includes decorated experts in natural gas, coal, renewable energy, power modeling and energy markets. The inputs drawn from ICF's data and model are used by ICF generally (as then currently maintained) in all of its advisory, consulting and expert testimony work related to the future performance of the PJM market.

12. Based on the above-described analysis, I concluded that the estimated cost of maintaining the Executory PPAs to the estate would be \$765 million on an undiscounted basis from April 1, 2018 to December 31, 2040. On a net present value ("NPV") basis over this same time period, and using a 7% discount rate, the estimated cost to the estate would be \$475 million.

² "PJM" is PJM Interconnection, LLC. FES and FG conduct all of their business operations within the regional transmission organizations overseen by PJM, which is a regional transmission organization that covers all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia. PJM coordinates, controls, and monitors multi-state electricity grids, and controls generation and transmission operations 24 hours a day, providing instructions to producers to ensure that the electric grid performs as desired.

In the near term (i.e., 2019-2023), the cost to the estate would be approximately \$58 million per year.

13. Based on my review of the Warvell Declaration and diligence respecting FES generally, the capacity, power and RECs purchased under the Executory PPAs are unnecessary to FES's business, and the rejection of such agreements will not adversely impact FES's compliance with any other capacity, generation or retail obligations or the price or availability of power within PJM.

14. The estimated costs reflect an expected or base case. This case is based on available information about market and regulatory conditions. I have also examined sensitivity cases and all cases show high estimated damages. In the event of new information becoming available, I may update or refine these estimates.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

DATED:

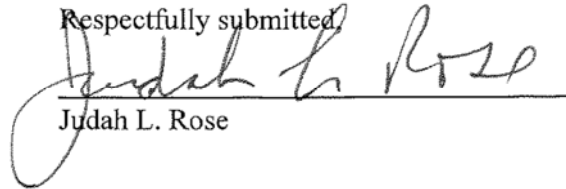
Respectfully submitted,

Judah L. Rose

EXHIBIT JIF-13

**UNITED STATES BANKRUPTCY COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION**

<p>In re:</p> <p>FIRSTENERGY SOLUTIONS CORP., <i>et al.</i>,¹</p> <p style="text-align: center;">Debtors.</p>	<p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p> <p>)</p>	<p>Chapter 11</p> <p>Case No. 18-50757</p> <p>(Request for Joint Administration Pending)</p> <p>Hon. Judge Alan M. Koschik</p>
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DECLARATION OF KEVIN T. WARVELL IN SUPPORT OF: (1) THE MOTION OF FIRSTENERGY SOLUTIONS CORP. AND FIRSTENERGY GENERATION, LLC FOR PRELIMINARY AND PERMANENT INJUNCTION AND *EX PARTE* TEMPORARY RESTRAINING ORDER AGAINST THE FEDERAL ENERGY REGULATORY COMMISSION; AND (2) THE MOTION FOR ENTRY OF AN ORDER AUTHORIZING FIRSTENERGY SOLUTIONS CORP. AND FIRSTENERGY GENERATION, LLC TO REJECT CERTAIN ENERGY CONTRACTS; AND (3) THE MOTION FOR ENTRY OF AN ORDER AUTHORIZING FIRSTENERGY SOLUTIONS CORP. AND FIRSTENERGY GENERATION, LLC TO REJECT A CERTAIN MULTI-PARTY INTERCOMPANY POWER PURCHASE AGREEMENT WITH THE OHIO VALLEY ELECTRIC CORPORATION

I, Kevin T. Warvell, hereby declare under penalty of perjury:

1. I am the Vice President, Chief Financial Officer, Treasurer and Corporate Secretary for FirstEnergy Solutions Corp. (“FES”). I have been employed by the Debtors since 2001, initially as a Manager of Business Services, and I subsequently served as Director of Planning Analysis, Director of Wholesale Power/Transmission Utilization, and Director of Rate Strategy. I was promoted to my current position in January 2011. I am familiar with the Debtors’ day-to-day operations and business affairs, and I am specifically familiar with the

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Debtors' negotiation, execution and performance of its wholesale energy contracts, including the Executory PPAs, defined below.

2. I submit this declaration in Support of (i) the *Motion of FES and FirstEnergy Generation, LLC ("FG") for Permanent and Preliminary Injunction and Ex Parte Temporary Restraining Order Against the Federal Energy Regulatory Commission ("FERC")* in the above captioned adversary proceeding; and (ii) the *Motion of FES and FG for Entry of an Order Authorizing FES and FG to Reject Certain Energy Contracts* (the "Rejection Motion"); and (iii) the *Motion of FES and FG for Entry of an Order Authorizing FES and FG to Reject a Certain Multi-Party Intercompany Power Purchase Agreement with the Ohio Valley Electric Corporation* (the "OVEC ICPA Rejection Motion", collectively, with the Rejection Motion, the "Rejection Motions").

3. By the Rejection Motions, the Debtors are seeking to reject certain long-term power purchase agreements (the "Executory PPAs"). As explained below, the Executory PPAs are executory contracts, running many years into the future, and are wholly unnecessary to the Debtors' business. The Executory PPAs constitute a very small and insignificant part of the Debtors' overall business, but impose a very significant financial burden that threatens the Debtors' ability to restructure. The Executory PPAs comprise the PPAs (defined in Paragraph 6) and the OVEC ICPA (defined in Paragraph 17).

The Renewable Power Purchase Agreements

4. Renewable portfolio standards ("RPS") obligate *retail* sellers of electricity to obtain a certain percentage or amount of their power supply from renewable energy sources. States develop their RPS programs individually, and each RPS mandate has its own parameters, rules, and requirements, especially with respect to qualifying generation sources, renewable

resource goals (usually expressed as a percentage of total load), and target dates for compliance. RPS requirements may be met by obtaining renewable energy credits (“RECs”) that provide evidence that power has been generated by a qualifying renewable resource.

5. RECs provide evidence of the generation of electricity from a qualifying renewable facility. Typically, one REC is created for every megawatt-hour (MWh) of energy produced from a qualifying facility. The RECs may be sold with the power or separately. The ability to realize income from the sale of RECs is a contributor to the economics of a renewable facility.

6. FES presently sells power to retail customers in Illinois, Maryland, Michigan, New Jersey, Ohio, and Pennsylvania. Historically, FES obtained the necessary RECs through eight power purchase agreements that Plaintiffs entered with various counterparties between 2003 and 2011 (collectively, the “PPAs”),² each of which obligates FES to purchase renewable energy and the accompanying RECs at specified prices during the term of the agreement. These PPAs have remaining terms running to various end dates between 2024 and 2033. The counterparties supply their power directly to the grid; under the terms of the PPAs it is deemed as a financial matter to have been bought by Plaintiffs (at the contract price) and re-wholesaled back into the local Regional Transmission Organization at current market prices.

7. The contract price in each of the PPAs is a “bundled” price that includes the cost of power, RECs, capacity and ancillary services. The PPAs together represent a very small portion of the aggregate energy (less than 3%) the Debtors generate and/or acquire from others.

8. The PPAs and a summary of their material terms is below:

² Also included in the definition of “PPAs” as used herein is a certain power purchase agreement with Forked River Power, LLC, a dual-fuel fired cycle combustion turbine power producer.

- a. Wind Power Purchase Agreements between FES and Allegheny Ridge Wind Farm, LLC (Phase 1 and Phase 2)
Contract Date: March 21, 2006
Termination Date: December 31, 2030
Contract Price: \$65.00/MWh
- b. Power Purchase Agreement between FES and Blue Creek Wind Farm LLC³
Contract Date: February 8, 2011
Termination Date: December 31, 2032
Contract Price: \$61.91-88.08/MWh⁴
- c. Wholesale Purchase and Sale Agreement for Wind Energy between FES and Casselman Windpower LLC
Contract Date: November 30, 2006
Termination Date: 23rd Anniversary of Delivery Commencement Date
Contract Price: \$72.49-94.72/MWh⁵
- d. Renewable Resource Power Purchase Agreement between FES and High Trail Wind Farm, LLC

³ Blue Creek Wind Farm is presently in default on this agreement. FES reserves all rights under this agreement, including the right to terminate the contract per its terms, rendering rejection unnecessary.

⁴ Contract Price escalates during each year of the term as follows: January 1, 2018 through December 31, 2018: \$61.91/MWh; January 1, 2019 through December 31, 2019: \$63.49/MWh; January 1, 2020 through December 31, 2020: \$65.11/MWh; January 1, 2021 through December 31, 2021: \$66.77/MWh; January 1, 2022 through December 31, 2022: \$68.48/MWh; January 1, 2023 through December 31, 2023: \$70.22/MWh; January 1, 2024 through December 31, 2024: \$72.01/MWh; January 1, 2025 through December 31, 2025: \$73.85/MWh; January 1, 2026 through December 31, 2026: \$75.73/MWh; January 1, 2027 through December 31, 2027: \$77.67/MWh; January 1, 2028 through December 31, 2028: \$79.64/MWh; January 1, 2029 through December 31, 2029: \$81.67/MWh; January 1, 2030 through December 31, 2030: \$83.76/MWh; January 1, 2031 through December 31, 2031: \$85.89/MWh; January 1, 2032 through December 31, 2032: \$88.08/MWh.

⁵ Contract Price escalates during each year of the term as follows: December 1, 2017 through November 30, 2018: \$72.49/MWh; December 1, 2018 through November 30, 2019: \$74.00/MWh; December 1, 2019 through November 30, 2020: \$75.53/MWh; December 1, 2020 through November 30, 2021: \$77.10/MWh; December 1, 2021 through November 30, 2022: \$78.71/MWh; December 1, 2022 through November 30, 2023: \$80.35/MWh; December 1, 2023 through November 30, 2024: \$82.00/MWh; December 1, 2024 through November 30, 2025: \$83.70/MWh; December 1, 2025 through November 30, 2026: \$85.50/MWh; December 1, 2026 through November 30, 2027: \$87.30/MWh; December 1, 2027 through November 30, 2028: \$89.10/MWh; December 1, 2028 through November 30, 2029: \$91.0/MWh; December 1, 2029 through November 30, 2030: \$92.90/MWh; December 1, 2030 through end of Term: \$94.72/MWh.

Contract Date: September 14, 2007
 Termination Date: 18th Anniversary of Facilities Completion
 Date/Facilities Completion Termination Deadline
 Contract Price: varies by year, month and hour; average annual price is approximately \$70.8/MWh

- e. Power Purchase Agreement between FES and Krayn Wind LLC
 Contract Date: August 20, 2008
 Termination Date: December 31, 2030
 Contract Price: \$91.02-105.13/MWh⁶
- f. Power Purchase Agreement between FES and Maryland Solar LLC
 Contract Date: October 14, 2011
 Termination Date: 20th Anniversary of Commercial Operation Date
 Contract Price: \$230.00/MWh
- g. Master Power Purchase and Sale Agreement between FES and Meyersdale Windpower LLC
 Contract Date: April 21, 2003
 Termination Date: 20 year anniversary of Commercial Operation Date
 Contract Price: \$39.60/MWh
- h. Wind Power Purchase Agreements between FES and North Allegheny Wind LLC (Phase 3 and Phase 4)
 Contract Date: September 18, 2006
 Termination Date: 23rd Anniversary of Commercial Operation Date
 Contract Price: \$74.00/MWh for years 1-12, \$68.00/MWh thereafter
- i. Master Power Purchase & Sale Agreement between FES and Forked River Power, LLC⁷
 Contract Date: April 17, 2008
 Termination Date: April 17, 2018
 Contract Price: Variable based upon specified ratio

9. At the time the PPAs were entered between 2003-2011, they were necessary and appropriate for FES's business because: (a) FES's actual and projected retail sales were greater

⁶ Contract Price escalates during each year of the term as follow: 2018: \$91.90/MWh; 2019: \$92.08/MWh; 2020: \$93.74/MWh; 2021: \$94.71/MWh; 2022: \$95.72/MWh; 2023: \$96.76/MWh; 2024: \$97.83/MWh; 2025: \$98.95/MWh; 2026: \$100.10/MWh; 2027: \$101.29/MWh; 2028: \$102.53/MWh; 2029: \$103.81/MWh; 2030: \$105.13/MWh.

⁷ The damages calculations discussed in this declaration do not include those associated with the Master Power Purchase & Sale Agreement between FES and Forked River Power, LLC. This contract will terminate by its own terms on April 17, 2018.

than they are today; (b) market prices and outlook for power and RECs were materially greater than the current environment; (c) RPS mandates were more demanding than today; and (d) the supply of RECs was more limited. At that time, a bundled PPA was typically the only way to contract for RECs in the long-term at a fixed price. Additionally, many states had requirements that a certain percentage of the RECs had to be generated in-state.

10. However, many state-specific RPS mandates have since been relaxed and there are now an abundance of RECs available for purchase. While the PPAs made sense to FES at the time they were entered into, a dramatic downturn in the energy market and prices of RECs now renders these contracts extremely burdensome and uneconomic to FES.

11. For example, pursuant to its PPA with Krayn Wind LLC for 2018, FES is obligated to pay a fixed amount of \$91.02 per MWh (and associated REC), escalating to \$105.13 per MWh (and associated REC) by 2030. This is nearly three times today's market value of \$36.00 for such power and REC. Based on current expectations, FES will lose approximately \$103 million over the remaining term of this one PPA alone.

12. The PPAs are all the more burdensome to the Debtors because FES does not have any business or regulatory need for the power, the RECs or the standby capacity that the Debtors receive under the PPAs. FES previously made the determination to phase out its retail business, and currently sells substantially less power in the retail market than it did just four years ago. In 2013, FES sold more than 110 terawatt hours (“TWh”) of power. This year, FES expects to sell less than half of that amount. Crucially, FES's need for RECs is tied directly to its retail business, and such need will be eliminated entirely once FES has fully exited that business (at the conclusion of a successful bankruptcy process.)⁸

⁸ FES is in the process of marketing its retail business for sale (the “Retail Book Sale”).

13. Today, FES has enough of a surplus of RECs in inventory to engage in its retail business for three years. In fact, FES has such an excess of RECs in its inventory that it is currently selling those excess RECs in the open market. However, as FES expects to sell its entire retail business in the near term, it does not need to purchase additional RECs. Nor does FES have any other need for the power or capacity provided by the PPAs.

14. In 2016, FES determined that the PPAs were burdensome and began to attempt to quantify the losses to FES associated with these agreements over the near term. We estimated that such losses would be approximately \$40 million to \$50 million per year. In April 2017, Debtors' counsel retained ICF to perform more exacting calculations and to conduct such analysis through the end date of the PPAs, *i.e.* 2024-2033. I am familiar with ICF and believe they are well qualified to perform these calculations.

15. The power bought and sold under the PPAs constituted approximately less than 3% of FES's total wholesale business in 2017, yet the PPAs impose enormous losses. ICF has projected that FES will lose approximately \$500 million on an undiscounted basis if FES is required to perform under the PPAs through the end of the contract terms. Those calculations are summarized in the accompanying Declaration of Judah Rose. I have reviewed that declaration and the attached calculations and I concur with ICF's assumptions, methodology and conclusions.

16. Because losses of this magnitude would impose an unsustainable financial burden on the Debtors, and because FES no longer has a need for the RECs which justified its entry into the PPAs in the first place, I concluded that the PPAs should be rejected.

The OVEC Intercompany Power Purchase Agreement

17. FG is a party to a multi-party intercompany power purchase agreement (the “OVEC ICPA”) pursuant to which it and several other power companies “sponsor” and purchase power generated by fossil fuel from the Ohio Valley Electric Corporation (“OVEC”).⁹ The OVEC ICPA obligates FG to purchase 4.85% of the power that OVEC’s fossil-fuel plants generate at an uneconomic rate until either the year 2040 or until OVEC ceases to operate. Last year, this resulted in FG purchasing approximately 0.6 TWh.

18. In 2017, the OVEC ICPA accounted for roughly 1.1% of the power FES sold at wholesale, yet the losses associated with this contract are enormous. ICF has calculated that FG would lose \$268 million on an undiscounted basis if FG was required to perform under the OVEC ICPA through the end of the contract term.

19. As with the PPAs, losses of this magnitude would impose an unsustainable financial burden on the Debtors. Accordingly, I concluded the OVEC ICPA should be rejected.

No Effect on Power Supply

20. FES and FG conduct all of their business operations within the regional transmission organizations (“RTOs”) overseen by PJM Interconnection LLC (“PJM”), which is a regional transmission organization that covers all or parts of Ohio, Pennsylvania, Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Tennessee, Virginia, West Virginia, and the District of Columbia. PJM coordinates, controls, and monitors

⁹ OVEC is owned jointly by: American Electric Power; Buckeye Power Generating; Dayton Power and Light Company; Duke Energy Ohio; LG&E and KU Energy; FirstEnergy; Vectren South; and Peninsula Generating Cooperative.

multi-state electricity grids, and controls generation and transmission operations 24 hours a day, providing instructions to producers to ensure that the electric grid performs as desired.

21. The total amount of energy bid/sold into PJM during 2017 was approximately 767 TWh. The power that FES and FG purchased under the Executory PPAs during 2017 was just 1.9 TWh, or 0.2% of the available energy in PJM. Further, the energy, capacity and RECs previously purchased by FES or FG will remain available for sale by the producers to PJM or to other wholesale suppliers because all such counterparties are connected directly to the PJM grid.

22. Given the foregoing, I cannot conceive how the rejection of the Executory PPAs will cause any disruption to the continued supply of wholesale electricity within our areas of operation, or impact the reliability of the transmission grid.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Dated:

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kevin T. Warvell", written over a horizontal line.

Kevin T. Warvell
Vice President, Chief Financial Officer,
Treasurer and Corporate Secretary,
FirstEnergy Solutions Corp.

EXHIBIT JIF-14

MOODY'S

INVESTORS SERVICE

SECTOR COMMENT

24 January 2018

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Regulated Utilities - US

Tax reform is credit negative for sector, but impact varies by company

The wide-ranging tax legislation passed by the US Congress on December 20, 2017 cut the statutory corporate tax rate to 21% from 35%. The legislation was broadly credit positive for corporate cash flows but for regulated investor-owned utilities, which include electric, gas and water utilities, the effect was the opposite.

- » **The legislation is credit negative for investor-owned utilities.** A lower tax rate will reduce the difference between the amount that utilities collect from rate payers to cover taxes and their payments to tax authorities, reducing cash flow.
- » **Tax reform is neutral for earnings but negative for cash flow.** Utilities collect revenue based on book tax but cash tax is much lower. A lower tax rate lowers revenue, while loss of bonus depreciation increases cash tax.
- » **Cash flow to debt ratio could decline by 150-250 basis points.** We estimate that regulated utilities could experience a decline in the ratio of cash flow from operations pre-working capital to debt (CFO pre-WC/debt) of 150 bps to 250 bps, assuming no corrective action is taken.
- » **Utilities with weaker than expected financials are most affected.** The potential for lower cash flows hurts the credit profile of numerous regulated utilities that already have weakening financial projections. Major holding companies affected include American Electric Power Company (AEP, Baa1 stable), Consolidated Edison, Inc. (ConEd A3 negative), Dominion Energy (Dominion, Baa2 negative), Duke Energy Corporation (Duke, Baa1 negative), Entergy Corporation (Entergy, Baa2 negative) and The Southern Company (Southern, Baa2 negative).
- » **Most utilities are still well positioned within their credit profiles.** The vast majority of utilities and their holding companies are well positioned within their credit profiles thanks to supportive regulatory relationships and a capital structure balanced between both debt and equity.

Tax reform negatively affects utility cash flows

For the investor-owned utilities sector, the 2017 tax reform legislation will have an overall negative credit impact on regulated operating companies and their holding companies. Moody's calculates that the recent changes in tax laws will dilute a utility's ratio of cash flow before changes in working capital to debt by approximately 150-250 basis points on average, depending to some degree on the size of the company's capital expenditure program.

Although the regulated utility sector is carved out in terms of the treatment of interest deductibility and expensing of capital expenditures, from an earnings perspective the effect on regulated entities is neutral because savings on the lower tax expense are passed on to their customers, as required by regulation. However, from a cash flow perspective, the legislation is credit negative.

Investor-owned utilities' rates, revenue and profits are heavily regulated. The rate regulators allow utilities to charge customers based on a cost-plus model, with tax expense being one of the pass-through items. In practice, regulated utilities collect revenues from customers based on book tax expense but typically pay much less tax in cash. Under the new tax regime, utilities will collect less revenue associated with tax expenses and pay out more cash tax, squeezing its cash flows.

With the lower tax rate and the loss of bonus depreciation treatment, utility cash flows will be negatively affected by three tax dynamics:

1. A fall in the tax rate means that regulated entities will collect less revenue from customers for the purpose of tax expense compensation. Going to a tax rate of 21% from 35% represents about a 40% fall in revenue collection related to tax expense. Although this revenue is ultimately paid out as an expense, under the new law utilities will lose the timing benefit, thereby reducing cash that may have been carried over many years.
2. The loss of bonus depreciation treatment means that most utilities will start paying cash tax in 2019 or 2020, earlier than under the current tax law. The loss of bonus depreciation treatment means that utilities can claim less in depreciation expenses and will therefore have higher taxable income. We still expect utilities to pay little or no cash tax in 2018 because most have significant accumulated net operating losses driven by past claims of bonus depreciation.
3. Lowering the tax rate also means that utilities will have over-collected for tax expense in the past because they charged for future tax expense, assuming a 35% tax rate. As utilities refund the excess collection to customers, it will reduce cash flows, likely spread out over the remaining life of the assets associated with the depreciation.

Significant credit deterioration for many utilities

Since the tax reform was passed at the end of last year, numerous utilities will experience a weakening in their credit profiles because of declining financial metrics (see Exhibit 1). Major holding companies affected include AEP, ConEd, Dominion, Duke, Entergy and Southern.

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Exhibit 1

Utilities with weakened, or weakening, financial profiles due to tax reform

Company	Senior Unsecured Rating	CFO pre-WC / Debt 3-yr Avg as of 3Q17	CFO Pre-WC / Debt 2018-2019 ^[1]	Downgrade Guidance
Holding Companies				
Consolidated Edison, Inc.	A3 / Negative	21.2%	15-18%	18%
American Electric Power Company, Inc.	Baa1 / Stable	20.8%	15-17%	15%
Duke Energy Corporation	Baa1 / Negative	14.7%	13-15%	15%
Dominion Energy, Inc.	Baa2 / Negative	12.9%	12-15%	15%
Entergy Corporation	Baa2 / Negative	18.0%	13-15%	15%
Southern Company (The)	Baa2 / Negative	13.8%	13-15%	15%
Vertically Integrated				
Alabama Power Company	A1 / Negative	25.7%	20-22%	22%
Public Service Company of Oklahoma	A3 / Negative	18.2%	15-18%	19%
Avista Corp.	Baa1 / Negative	20.6%	15-17%	17%
Southwestern Public Service Company	Baa1 / Negative	22.2%	16-18%	18%
Local Distribution Companies				
New Jersey Natural Gas Company	Aa2 / Negative ^[2]	25.3%	17-20%	20%
Brooklyn Union Gas Company, The	A2 / Negative	12.2%	14-17%	17%
KeySpan Gas East Corporation	A2 / Negative	15.8%	15-18%	17%
Piedmont Natural Gas Company, Inc.	A2 / Negative	20.9%	14-17%	17%
ONE Gas, Inc	A2 / Negative	22.0%	16-19%	20%
South Jersey Gas Company	A2 / Negative	18.1%	15-17%	20%
Wisconsin Gas LLC	A2 / Negative	25.5%	16-19%	19%
Questar Gas Company	A2 / Negative	22.2%	17-20%	20%
Northwest Natural Gas Company	A3 / Negative	18.3%	14-17%	16%
Transmission & Distribution				
Consolidated Edison Company of New York, Inc.	A2 / Negative	21.7%	19-21%	20%
Orange and Rockland Utilities, Inc.	A3 / Negative	19.8%	15-17%	17%
Water				
American Water Works Company, Inc. ^[3]	A3 / Negative	17.2%	14-16%	15%

[1] 2018-2019 Moody's estimates are pro forma for tax reform and do not incorporate current rate plan collection at 35%.

[2] Senior Secured Rating.

[3] The Regulated Water Utilities Methodology uses FFO to net debt as a key cash flow metric.

Source: Moody's Investors Service

Tax reform mainly affects companies that already had limited cushion in their credit profile. The tax reform usually resulted in a further 150-250 bps drop in CFO pre-WC/debt.

Moody's expects that most utilities will attempt to manage any negative financial implications of tax reform through regulatory channels. Corporate financial policies could also change. The actions taken by utilities will be incorporated into our credit analysis on a prospective basis. It is conceivable that some companies will sufficiently defend their credit profiles.

In practice, we believe that most companies will actively manage their cash flow to debt ratios by issuing more equity or obtaining relief by working through regulatory channels. For example, to offset a decline in cash flow, utilities could propose to regulators additional investments that benefit customers or accelerate recovery of regulatory assets. Some of the corporate measures could have

a more immediate boost to projected metrics than certain regulatory provisions, which may take time to approve and implement. They could also propose to increase the equity layer in rates or the level of the authorized return on equity. In these cases, a cooperative regulatory relationship matters most for a given utility.

The majority of US regulated utilities and utility holding companies continue to maintain stable credit profiles despite weakening financials. Some of the larger holding companies in this category include PPL Corp. (Baa2 stable), Fortis Inc. (Baa3 stable) and Xcel Energy, Inc. (A3 stable) and Alliant Energy Corporation (Baa1 stable). We did not take action on NiSource, Inc. (Baa2 stable), despite the fact that they are weakly positioned even before the tax reform, because we believe that the management will address their financial ratios sufficiently in a timely manner to strengthen their credit profile.

Several companies were already on negative outlook or on review for downgrade before the effects of tax reform occurred, including Emera Inc. (Baa3 negative), Georgia Power Company (A3 negative), NorthWestern Corporation (Baa1 negative), OGE Energy Corp (A3 negative), SCANA Corporation (SCANA, Baa3 RUR-down), Sempra Energy (Baa1 negative), WEC Energy Group, Inc. (A3 negative), and WGL Holdings, Inc. (A3 negative).

Company-specific comments

All companies below have had their outlooks revised to negative due to the recent tax reform, except AEP, whose outlook was revised to stable from positive.

American Electric Power

AEP will continue to produce CFO pre-WC to debt in the mid-teens range, incorporating the effects of tax reform.

AEP could strengthen its credit profile if there are credit supportive regulatory actions at the state level to mitigate the impact of tax reform, or if there is a change in AEP's corporate finance policies such that cash-flow credit metrics could be sustained near their recent levels, in the high-teens range.

AEP could weaken its credit profile if a more contentious regulatory environment were to develop in any of its key jurisdictions; if ongoing capital investments cannot be recovered on a timely basis; or if recent tax reform or other developments cause a sustained deterioration in financial metrics—if, for example, the ratio of CFO pre-WC to debt were to remain below 15%.

American Water Works Company, Inc.

American Water Work Company, Inc.'s (American Water, A3 negative) cash flow to debt metrics were already expected to decline due to debt-funded growth and dividends over the next five years. Now, in the absence of any corrective action, the incremental deterioration in metrics due to tax reform could affect its credit quality.

American Water's debt is expected to increase due to its \$8.0-\$8.6 billion 5-year capital program, dividend growth approaching 10% and no additional equity issuance through 2022. Following the company's 11 December guidance call, we project funds from operations (FFO) to net debt ratios will decline from current levels. Using LTM 3Q17 as a base, we project that FFO to net debt will fall from 17% to 16% over the next couple of years. Losing an estimated \$150 million of cash flow to deferred taxes, as a result of tax reform, will further pressure FFO to net debt to around 15%, a level that we have highlighted as potentially affecting the company's credit profile.

American Water's credit profile could be maintained if its FFO to net debt and RCF to net debt were to stabilize around 16% and 11%, respectively, and without an increase in parent debt levels (currently at around 23% of consolidated debt).

Avista Corp.

Avista Corp. (Avista, Baa1 negative) has over the last few years maintained steady credit metrics with CFO pre-WC to debt consistently in the 18-20% range. However, deferred income taxes have constituted a significant portion of Avista's operating cash flow, about a third in 2016. Further, Avista has experienced delays with its Washington rate case, presenting uncertainty around the utility's regulatory relationships and future financial profile.

The negative outlook reflects the expected reduced contribution of deferred taxes to operating cash flow and regulatory uncertainty related to the Washington rate case. We expect weaker credit metrics going forward, with CFO pre-WC to debt falling to or below the

17%, which would represent a significant credit deterioration in the absence of actions to mitigate tax reform impacts and without adequate regulatory relief in Washington.

In addition, Avista's credit profile would be negatively affected by any indication that it would be required to support Hydro One Ltd.'s (not rated) acquisition debt. The credit profile could be stabilized if Avista receives sufficient regulatory relief and if state-level regulatory and corporate financial actions are taken to offset the negative tax reform impact such that CFO pre-WC to debt remains consistently at or above 18%.

Brooklyn Union Gas Company

Brooklyn Union Gas Company (KEDNY, A2 negative) has been weakly positioned against our guidance for several years, with CFO pre-WC to debt of 13.7% in the year to March 2017 and 7.9% in the year to March 2016, compared with guidance in the mid to high teens.

Since deferred taxes represented 18% of KEDNY's CFO pre-WC in the year to March 2017, we expect that the lower corporate tax rate will translate into a lower revenue requirement, making it more difficult for the company to maintain its current credit profile in absent of significant mitigating actions or relief offered by the New York Public Service Commission (NYPSC). The credit profile could be maintained if the National Grid Plc (Baa1 stable) chose to reduce leverage at KEDNY or if the NYPSC allowed the company to offset the customer benefit of the lower tax rate with some other allowances.

Consolidated Edison, Inc.

Consolidated Edison Company of New York's (CECONY, A2 negative) is Consolidated Edison's principle subsidiary and contributed about 90% of consolidated cash flows. Deferred taxes have represented nearly 20% of CECONY CFO over the past three years; therefore the tax rate reduction to 21% will reduce this deferred tax benefit and CECONY's cash flow generation over the next several years. While the utility is expected to maintain relatively stable financial metrics, such as CFO to debt at around 20%, in the remaining two years of its current rate plan, we expect tax reform will have negative cash flow implications over the longer term, all else being equal.

When normalizing CECONY's cash flow for the new tax law, we see the potential for the company to generate CFO pre-WC to debt in the high-teens range on an ongoing basis. This reflects a 21% tax rate, reduced revenue requirement, low cash tax payments and normalized refunds of excess deferred tax liabilities to customers.

We see uncertainty over the amount and pace of any "unprotected" deferred tax liability refunds that CECONY may be required to pay, over the nature and timing of customer benefits and over the potential to offset cash flow leakage with some other cash-generative measure. The NYPSC is investigating methods of approaching the tax reform and we expect increasing clarity in the coming months.

Dominion Energy, Inc.

Dominion's (Baa2 negative) CFO pre-WC to debt ratios have been weak for its rating since 2012, for which we had expected an upward trend to begin in 2018. However, the impact of tax reform will offset the improvement we expected, as the utility base of the company will have less deferred tax benefit to boost cash flow. We see a risk that CFO pre-WC to debt will remain around 14% until that time.

The acquisition of SCANA would keep Dominion's metrics lower for longer, since they will have sizeable customer credits. SCANA has its own cash leakage from tax reform, and incremental debt is to be issued in the SCANA family.

Duke Energy Corporation

Duke's consolidated cash flow credit metrics are currently weakly positioned and likely to be incrementally pressured by tax reform. We currently expect the company's CFO pre-WC to debt ratio will remain below 15% through 2019 without assuming any action to counter the effects of the tax reform.

The company's credit profile could be strengthened if Duke achieves credit supportive outcomes in its current rate proceedings and if it is able to mitigate the cash-flow impact of tax reform through regulatory treatment or financial policies such that it can sustain a ratio of CFO pre-WC to debt above 15%, for example. In the longer term, a ratio of CFO pre-WC to debt closer to 20% could result in a material improvement in the credit profile.

Duke's credit profile could weaken if there were a deterioration in the regulatory relationship at one or more of its key utility subsidiaries; if recent tax reform or other developments cause the ratio of CFO pre-working capital to debt to remain below 15% for an extended period; or if parent company debt levels rise above 35% of total Moody's adjusted consolidated debt for an extended period.

Entergy Corporation

Entergy's (Baa2 negative) CFO pre-WC to debt through LTM was 15%, which is on the low end of the financial range expected for its credit profile. We consistently normalize Entergy's cash flow for variability in tax payments and deferred tax contributions to CFO. However, recent federal tax reform has brought incremental risks to the company's financial profile.

The primary risk relates to the revaluation of deferred tax liabilities and ensuing customer refunds for the excess amounts collected. At 30 September 2017, Entergy had roughly \$7.5 billion of deferred tax liabilities on its balance sheet, which we estimate will fall to around \$4.5 billion under a 21% tax rate. The \$3.0 billion of excess deferred taxes will likely be refunded to customer. However, the timing and source of financing of this refund is uncertain. This carries the risk of reducing cash flow beyond our typical sensitivities and increasing the funding needs of the consolidated entity.

Keyspan Gas East Corporation

Deferred taxes have been a strong contributor to Keyspan Gas East Corporation's (KEDLI, A2 negative) CFO pre-WC to debt ratio, accounting for 22% of CFO pre-WC in 2017. The lowering of the corporate tax rate and the attendant decline in cash-flow will result in credit deterioration for KEDLI in the absence of any mitigating action by the company or additional allowances offered by the NYPSC.

The company's credit profile could be maintained if the National Grid group chose to reduce leverage at KEDLI or if the NYPSC chose to offset the customer benefit of the lower tax rate with some other allowances.

New Jersey Natural Gas Company

New Jersey Natural Gas's (NJNG, Aa2 secured rating, negative) metrics are projected to weaken because of the expected funding of its capital plans primarily with debt, compounded by the estimated cash flow impact of tax reform. The lower projected cash flows combined with increasing absolute debt levels will result in CFO pre-WC/debt to range in the 18% to 19% range over the next two years.

NJNG's credit profile could weaken if there is a significant deterioration in NJNG's business profile, in its regulatory environment or an increase in regulatory lag. The profile could also be negatively affected if NJNG reports CFO pre-WC to debt below 20% for an extended period of time. NJNG's credit profile could be strengthened by demonstrated consistency in the company's current regulatory framework or if there are mitigating regulatory actions or corporate fiscal policies such that its CFO pre-WC to debt ratio is maintained above 20%.

Northwest Natural Gas Company

Northwest Natural Gas Company's (A3 negative) current financial profile is strong, with CFO pre-WC to debt around 19% through 30 September 2017. However, the combination of tax reform impacts to deferred tax cash flow and rate relief needed through a general rate case could reduce this metric to below 16% over the next two years.

The company has a rate case filing currently outstanding with the Oregon Public Utility Commission and could receive the necessary rate relief to maintain cash flow to debt ratios in the high-teen's range, which would support its current credit profile.

ONE Gas, Inc.

We expect the ONE Gas, Inc.'s (A2 negative) already weak cash flow to debt ratios will further deteriorate with the reduction in the corporate tax rate and the loss of bonus depreciation. We anticipate that its CFO pre-W/C to debt will be in the 17%-18% range without any offsetting action.

The credit profile could improve if regulatory actions are taken at the state level to mitigate the cash flow impact of tax reform and if the company makes changes to its corporate financial policies such that financial metrics improve, including a CFO pre-WC to debt ratio consistently at or above 22%.

ONE Gas' credit profile could weaken if CFO pre-WC to debt is sustained below 20%; if there is a significant decline in the support provided by the utility's regulators; or if the company pursues an aggressive dividend payout policy as it executes its elevated capital program.

Piedmont Natural Gas Company

We expect that tax reform legislation will pressure Piedmont Natural Gas Company's (Piedmont, A2 negative) financial metrics, which in the absence of mitigation measures could adversely affect Piedmont's ability to maintain CFO pre-WC to debt ratio above 17%.

Piedmont's credit profile could be stabilized if the company is able to mitigate the cash flow impacts of tax reform through regulatory treatment or financial policies. For example, if the company is able to sustain a ratio of CFO pre-WC near 20%. In the longer term, a ratio of CFO pre-WC to debt above 23% could also boost credit quality.

Piedmont's credit profile could weaken if there were to be a significant deterioration in the company's regulatory environments, or if recent tax reform or other developments cause the ratio of CFO pre-WC to debt ratio to remain below 17% for an extended period.

Public Service Company of Oklahoma

Public Service Company of Oklahoma's (PSO, A3 negative) historically strong financial metrics have been negatively impacted by a combination of lower load growth, elevated capital expenditures for environmental compliance and increased regulatory lag. We expect that tax reform will add downward pressure on the utility's cash flow credit metrics. We anticipate the company's CFO pre-WC to debt ratio will remain below 19%, which is weak for PSO's current credit quality.

PSO's credit profile would stabilize if there were to be an increase in cash flow or a reduction in leverage, or if the company is able to mitigate the cash flow impact of tax reform such that we could expect key financial credit metrics to strengthen with, for example, a ratio of CFO pre-WC to debt remaining in the low 20% range. In the longer term, a ratio of CFO pre-WC to debt sustained above 25% could boost the profile.

PSO's credit profile could weaken if the regulatory environment took a more adversarial tone; if there were a significant increase in capital or operating expenditures that were not able to be recovered on a timely basis; or if key financial credit metrics exhibited a sustained deterioration over a period of time—for example, a ratio of CFO pre-WC to debt remaining below 19%.

Questar Gas Company

Questar Gas Company's (Questar Gas, A2 negative) financial profile is expected to decline amid a rate freeze through 2020. While the company will continue to recover costs through decoupling and infrastructure riders, we see cash flow to debt metrics declining from 22% through LTM 3Q17 to the high-teens range because of increasing debt and a lack of general rate increases. We expect that cash leakage from tax reform impacts will be implemented at the end of this rate freeze, which will reduce cash that Questar Gas collects from customers and will keep the company's cash flow to debt metrics lower for longer.

South Jersey Gas Company

South Jersey Gas Company's (South Jersey Gas, A2 negative) debt coverage metrics have weakened over the last few years in part due to a significant increase in environmental remediation costs. The negative outlook is based on our expectation that South Jersey Gas' already weak credit metrics will be sustained in the mid-to-high teens as a result of the negative cash flow impact of tax reform.

South Jersey Gas' credit profile can be maintained with further improvements in regulatory transparency and if state-level regulatory or corporate financial policy actions are taken to alleviate the negative impacts of tax reform such that CFO pre-WC to debt is maintained at or above 22% on a consistent basis.

The credit profile would be negatively affected if CFO pre-WC to debt remains below 20% on a sustained basis; if there is pressure to support debt incurred by the parent to acquire Elizabethtown Gas and Elkton Gas; if South Jersey Gas' regulatory jurisdiction becomes less credit supportive; or if the company and its affiliates fail to maintain adequate liquidity across the utility family.

The Southern Company

Tax reform will pressure Southern's financial metrics. Absent mitigation measures, it will hinder Southern's ability to maintain CFO pre-working capital to debt at or above 15%.

Southern's credit profile would be strengthened if there are credit supportive regulatory actions at the state level to mitigate the impact of tax reform, or if parent level debt is reduced or cash flow coverage metrics improve materially, including CFO pre-WC to debt in the high teens to 20%.

Southern's credit profile is heavily dependent on the credit quality of the Alabama Power Company (A1 negative), Georgia Power Company (A3 negative) and Southern Company Gas/Southern Company Gas Capital (Baa1 stable) subsidiaries. It could also suffer if there are additional delays or cost increases at the Vogtle nuclear project, or if recent tax reform legislation or other developments cause consolidated coverage metrics to show a sustained decline, including CFO pre-WC to debt below 15%.

Southwestern Public Service Company

Southwestern Public Service Company (SPS, Baa1 negative) faces lower financial metrics because of tax reform as well as a deteriorating regulatory environment in New Mexico. The company's CFO pre-WC to debt ratio has been 20% or above in the past few years, but we estimate that CFO pre-WC to debt will fall below 18% without any corrective action. SPS' parent company Xcel Energy has indicated that it plans to work directly with regulators of their operating utilities to offset the cash-flow impact of tax reform, including the potential for a higher equity layer, a higher authorized return on equity and accelerated recovery of regulatory assets. SPS' credit profile would strengthen if the company succeeds in bolstering its CFO pre-WC to debt ratio to above 20% on completion of its material capital program.

Wisconsin Gas LLC

Wisconsin Gas LLC's (A2 negative) CFO pre-WC to debt metric has averaged around 25% in the past three years, but tax reform could cause it to decline to 16% to 19%. We believe that Wisconsin Gas has a reasonable chance of receiving regulatory support because Wisconsin Public Service Commission approved the company filing a plan for accelerated recovery of regulatory assets for Wisconsin Electric Power Company (A2 stable), Wisconsin Gas' sister company, to offset the effect of tax reform.

Moody's related publications

- » [Corporate tax cut is credit positive, while effects of other provisions vary by sector \(21 December 2017\)](#)
- » [Trump Tax Blueprint Would Raise US Debt, But Be Credit Positive for Many Sectors \(9 May 2017\)](#)
- » [Tax Reform Likely to Increase Credit Risk, Impact Dependent on Regulatory Response \(15 March 2017\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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EXHIBIT JIF-15

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
SIERRA Second Set of Interrogatories - Stipulation
Date Received: June 14, 2018

SIERRA-INT-02-008
PUBLIC

REQUEST:

Refer to Rose Supplemental Testimony page 7, lines 12-13.

- a. Provide a complete list of “other parameters demand, capacity results, and other parameters” that Rose updated from his Direct testimony.

RESPONSE:

The parameters Mr. Rose updated from his Direct Testimony include demand assumptions, gas prices, coal prices, firm builds and firm retirements, new renewable capital cost, financial assumptions, CO2 prices, BRA capacity auction results, and renewable portfolio standards. For complete details see Mr Rose's Supplemental response to Highly Confidential OCC-POD-02-008.

PERSON RESPONSIBLE: Judah Rose

EXHIBIT JIF-16

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
SIERRA Second Set of Interrogatories - Stipulation
Date Received: June 14, 2018

SIERRA-INT-02-013
PUBLIC

REQUEST:

Refer to the Direct Testimony of Steven M. Fetter in Support of the Stipulation ("Fetter Direct Testimony"), at page 13, lines 7-12.

- a. Did Mr. Fetter conduct or rely on any numeric analysis indicating that the rejection of the Price Stabilization Rider alone or in conjunction with tax reform would bring Duke Energy Ohio's cash flow measures below the referenced 19% level. If yes, describe such analysis.

RESPONSE:

- a. Mr. Fetter did not carry out numeric analysis vis-à-vis the 19% figure. Based upon his experience heading up Fitch's utility ratings practice, he believes that rejection of the Price Stabilization Rider and the tax reform legislation, barring mitigation steps being taken, would likely lower Duke Energy Ohio's FFO to Debt measure below the 19% figure.

PERSON RESPONSIBLE: Steven M. Fetter

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
SIERRA Second Set of Interrogatories - Stipulation
Date Received: June 14, 2018

SIERRA-INT-02-014
PUBLIC

REQUEST:

Refer to the Fetter Direct Testimony at page 14, lines 7-11.

- a. Does Mr. Fetter's assessment of the hedge value of the contract include the sunk costs of the OVEC power plant? If not, why not?
- b. Please state the numerical hedge value of the contracts as calculated by Mr. Fetter.
- c. Please provide any workpapers or assessments conducted by Mr. Fetter to arrive at the numerical hedge value of the contracts as calculated by Mr. Fetter.
- d. Is it Mr. Fetter's assessment that a hedge using the Inter-Company Power Agreement is effective for Duke Energy Ohio's customers?
- e. Provide Mr. Fetter's numeric assessment of hedge effectiveness.

RESPONSE:

- a. No. For the reasons stated in his testimony, Mr. Fetter believes that the Price Stabilization Rider should be approved. As part of that approval, the Rider will serve as a long-term hedge of a type not normally accessible within the traditional financial markets.
- b. Mr. Fetter has not calculated the numerical hedge value of the contracts.
- c. No such workpapers exist.
- d. For the reasons stated in his testimony, Mr. Fetter believes that the Price Stabilization Rider should be approved. As part of that approval, the Rider will serve as a long-term hedge, on behalf of Duke Energy Ohio's customers, of a type not normally accessible within the traditional financial markets.
- e. Mr. Fetter has not done such a numeric assessment.

PERSON RESPONSIBLE: Steven M. Fetter

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Case No(s). 17-0032-EL-AIR, 17-0033-EL-ATA, 17-0034-EL-AAM, 17-0872-EL-RDR, 17-0873-EL-ATA, 1

Summary: Testimony of Jeremy I. Fisher, Phd, on behalf of Sierra Club (Public Version)
electronically filed by Mr. Tony G. Mendoza on behalf of Sierra Club