STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

SUBDOCKET FOR REVIEW OF DUKE ENERGY INDIANA, LLC'S GENERATION UNIT COMMITMENT DECISIONS	**)** **)** **)**	**CAUSE NO. 38707 FAC 123 S1**

ADVANCED ENERGY ECONOMY'S BRIEF IN SUPPORT OF PROPOSED ORDER

Advanced Energy Economy Inc. ("Advanced Energy Economy"), by counsel, respectfully submits its brief in support of its proposed order in this proceeding.

INTRODUCTION

The practice of allowing coal plants to operate at an economic loss and recovering those costs—even occasionally—from customers through the fuel adjustment clause ("FAC") raises electricity costs for Indiana ratepayers, impedes sound long-term resource planning, risks distorting the wholesale market, and deprives Hoosiers of the benefits of readily available lower-cost, highly reliable advanced energy resources. Duke Energy Indiana, LLC's ("Duke") practice of committing its coal plants into the Midcontinent Independent System Operator's ("MISO") energy market with a "must-run" designation and recovering its economic losses from its ratepayers through the FAC has demonstrably harmed Duke's ratepayers without providing any substantiated benefit to system reliability.

The FAC is a tool that deserves close Commission scrutiny, as its use can insulate the utility from economic losses that result from imprudent decision making. Evidence in this docket clearly demonstrates that Duke relies heavily on "must-run" commitment designations instead of letting economics guide its decisions. Because of these uneconomic choices, Duke's customers bore the burden of millions of dollars in operational losses during the FAC 123 reconciliation period. Duke

must refund these losses to its customers. Moreover, in all future FAC proceedings, Duke should be required to demonstrate prudence in its unit commitment practices.

REVIEW OF ADVANCED ENERGY ECONOMY'S TESTIMONY

During the FAC 123 reconciliation period, Duke's operational practices cost ratepayers an estimated $20.57 million more than if Duke had operated its coal plants in response to MISO price signals and selected the least-cost option for its ratepayers. Mr. Stoddard's testimony demonstrates that a significant portion of these losses were self-inflicted – 93% of operational losses during the FAC 123 period were a direct result of Duke's decision to self-commit its own resources for reasons other than system reliability.[1] His modeling also shows that losses would be markedly lower if the plants were operated on the basis of least-cost system operations, or with seasonal outages.

Further, Mr. Stoddard testified that Duke's self-commitment behavior discourages otherwise economic investments in a substitute resource portfolio that would significantly lower ratepayer costs over time. If Duke were to plan to serve its customers with a different portfolio of resources that included demand response, renewable energy generation, and energy storage, like its neighboring utilities Vectren and the Northern Indiana Public Service Company ("NIPSCO"), Mr. Stoddard's modeling shows that Duke could save ratepayers between $105.3 million and $423.7 million by 2025.[2]

After examining Duke's coal fleet in light of his experience operating coal plants under various FAC constructs, Mr. Jonagan testified that Duke has the opportunity to reduce its coal plant operations at times when doing so results in economic losses that are then passed on to customers, with practices such as seasonal outages, increased unit cycling, and reducing the

minimum operating load, but that there is little or no incentive for Duke to explore these opportunities.[3] Finally, Mr. Cicchetti offered alternative approaches to reduce the impact of the FAC with a different portfolio of resources.[4]

ARGUMENT

1. **Duke has not demonstrated prudence in its unit commitment decisions during FAC 123 and should refund its customers for foreseen financial losses.[5]**

To demonstrate prudence in FAC proceedings, utilities must "[make] every reasonable effort to acquire fuel for its own generation or to purchase power so as to provide electricity to its customers at the lowest fuel cost reasonably possible."[6] Further, utilities must "supplement[] internal coal generation of electricity with the purchase of less expensive supplies of electricity from neighboring utilities whenever operating conditions will permit this without adversely affecting the reliability of electrical services."[7]

In this subdocket, Duke has provided insufficient evidence to the Indiana Utility Regulatory Commission ("Commission") to demonstrate that it has made every reasonable effort to provide electricity to its customers at the lowest fuel cost reasonably possible. To justify coal unit operations when lower-cost options are available, Duke must provide to the Commission sufficient evidence to support each "must-run" unit commitment decision. It cannot do so by simply saying that in-person and undocumented meetings took place each morning, in which a number of factors were considered beyond the Daily Profit and Loss ("DPL") analyses that were provided to the Commission as part of this subdocket. These factors must be fully documented and explained, including their relative importance and underlying assumptions.

Further, Duke's reasons are not sufficiently documented to demonstrate that operating conditions were such that purchasing energy from the MISO market would have affected reliability. Duke also did not demonstrate that MISO market signals could not be followed more closely with its coal fleet, as merchant coal plants are able to do. While merchant coal plants obey all of the same physical and economic constraints as utility-owned plants, they must operate based on market energy prices or risk investor losses. For this reason, they have a much lower level of uneconomic dispatch.

Finally, Duke also did not demonstrate to the Commission that it had fully considered a range of alternative operating practices before declaring that its current strategy is the most cost-effective for its ratepayers.

In the rapidly evolving energy landscape, coal plants are increasingly becoming uneconomic and ill-suited to operate in the MISO market. Duke is aware of the macro-level trends causing this permanent shift, and the Commission has made similar findings in the past. The Commission denied Vectren's petition for a Certificate of Public Convenience and Necessity for 850 MW of new combined cycle gas turbine capacity, finding that we are in "an environment of rapid technological innovation on both the utility and customer side of the meter," and therefore, we should seek "[o]utcomes that reasonably minimize such potential risk and serve to foster utility and customer flexibility."[8] If utilities do not transition their portfolios in a way that meets the energy prices and flexibility needs of today's energy system, they will continue to incur imprudent losses. While these broader trends should be considered in proceedings moving forward, the Commission had not yet made requirements to meet this standard in light of changing energy system characteristics clear when Duke was making its operating decisions within the FAC 123 reconciliation period. As such, for the purposes of this FAC, Duke must provide refunds only for

those losses knowingly incurred from "must-run" commitment decisions when Duke's own DPL analyses predicted losses.

2. **Duke must adapt the evidence it presents to reflect the changing energy landscape to include studies of various alternative operating practices to meet the requisite legal standard for recovery of fuel costs in future FAC proceedings.[9]**

As noted in Vectren's generation transition case referenced above, the energy landscape is rapidly evolving. In future FAC proceedings, Duke must adapt the evidence it presents to justify prudence in its MISO commitment status decision making to this changing energy environment. Duke must provide more concrete documentation and a thorough written explanation of all of the factors it considers, including their relative importance, for each "must-run" designation. It must study the impacts to ratepayers of retiring the coal gasifiers at Edwardsport. It must review its steam contract, which requires at least one Cayuga unit to operate at a minimum of 300 MW net or greater at all times[10] (70 MW above the minimum operating level[11]), to determine whether the steam customer or its ratepayers are covering the incremental and variable costs associated with the contract. Finally, it must study the impacts of seasonal outages for all of its remaining coal-fired plants. The remainder of this section provides additional justification for the need for a study on seasonal outages.

Seasonal outages are becoming increasingly common for coal plants that remain in operation today, including those that participate in the MISO market and in circumstances substantially similar to that of Duke and its coal fleet. In late 2019, Xcel Energy filed a plan before the Minnesota Public Utilities Commission to begin seasonally and economically dispatching its

Allen S. King and Sherco Unit 2 coal plants into the MISO market. On July 15, 2020, the Minnesota Public Utilities Commission approved the plan, finding that:

> [T]he cost savings under either the year-round economic dispatch method or the seasonal dispatch method are significant when compared to the cost savings under either the year-round production that does not consider market conditions. And while the cost difference between the economic dispatch approach and the seasonal approach appear to be minimal, the Company emphasized that running the plants seasonally would increase operational certainty, making it more likely that the Company would achieve anticipated savings on Operations and Maintenance (O&M) costs, as well as capital costs.[12]

As a result of the Minnesota commission's order, Xcel will only operate its coal plants for six months each year, from June to August and December to February.[13]

As another MISO example, in 2018, Southwestern Electric Power Company, a subsidiary of American Electric Power that serves customers in Louisiana, Arkansas and Texas, and Cleco, of the Cleco Group also serving customers in Louisiana, announced that the utilities would switch the Dolet Hills facility in Louisiana to seasonal operations.[14]

Indeed, the MISO Independent Market Monitor noted in its *Review of the Commitment and Dispatch of Coal Generators in MISO* report that "[s]ome of MISO's regulated utilities are beginning to adopt improvements in operating procedures, such as taking extended outages during shoulder seasons when the resources are much less likely to be needed or economic. This would likely be beneficial for a number of utilities to consider."[15] Mr. Stoddard's modeling shows that had Duke put four of its least-economic coal plants into a seasonal outage during FAC 123, the cost to serve load would have been $9.37 million less.[16] Mr. Jonagan also testifies that any increased maintenance costs from cycling in the context of seasonal operations would be more than offset by the overall reduced cost of unit operations.[17]

A number of fundamental changes have made the consideration, and in a growing number of cases, implementation, of seasonal operations a new requirement to demonstrate prudent coal

plant operations. First, the relative economics of coal-based generation across the country have shifted drastically as new resources enter the market at all-in costs that are often competitive with the marginal operating costs of existing generation.[18] Simultaneously, natural gas prices have remained persistently below $6/BTU, with higher prices seen on just three days in 2018.[19]

Second, coal is no longer needed to maintain reliability. There are many other cost-effective supply and demand side resources available today that can provide electricity that is low cost, reliable, and resilient, while also providing essential grid management services. Grid operators are reliably integrating very high levels of variable renewable resources across the country, and two Indiana utilities have recently committed to a vision of the next decade that includes significant investment in advanced energy resources and little to no coal generation. In its 2018 Integrated Resource Plan ("IRP"), NIPSCO found that the most cost-effective plan for its ratepayers was to replace existing coal generation with new solar and wind, often paired with storage, while also investing in a mix of demand-side resources.[20] More recently, Vectren Energy filed an IRP with the Commission that includes the retirement of 730 MW of coal by 2023, taking coal from 78 percent of its generation portfolio today to 12 percent by 2025.[21] By 2025, the resource mix will be 62 percent renewable and 2 percent demand response.[22]

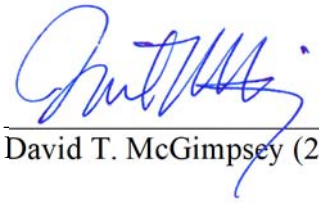
While resource planning decisions are outside of the scope of this proceeding, the FAC helps to reveal the true costs of existing generation relative to actual market conditions, which should inform said planning. Full consideration of all electricity resource options, both on the generation and the demand side, is required to demonstrate that Duke has provided electricity to its customers at the lowest fuel cost reasonably possible, especially given the significant changes taking place within the energy sector. Given these realities, we see no reason why Duke should not study the impact of seasonal outages of its Gibson, Edwardsport and Cayuga plants on

customer rates. If the study demonstrates ratepayer savings, Duke should then file a plan with the Commission to implement seasonal outages.

CONCLUSION

For all of the reasons detailed above, the Commission should direct Duke to refund its customers for the company's imprudent self-commitment decisions in the FAC 123 period. It should also require Duke to justify with greater evidentiary support the prudence of its unit commitment decisions in all future FACs, which includes additional documentation and detail to justify its "must-run" commitment decisions, and studies to assess the ratepayer impacts of various alternative operational practices.

Respectfully submitted,



David T. McGimpsey (21015-49)

DENTONS BINGHAM GREENEBAUM LLP
212 W. 6th Street
Jasper, Indiana 47546
(812) 482-5500 (telephone)
(812) 482-2017 (facsimile)
david.mcgimpsey@dentons.com

Attorney for Intervenor,
Advanced Energy Economy Inc.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following counsel of record by electronic service this 21st day of December, 2020.

OUCC
Lorraine Hitz-Bradley, Esq.
Michael Eckert, Esq.
lhitzbradley@oucc.in.gov
meckert@oucc.in.gov
infomgt@oucc.in.gov

DUKE
Melanie D. Price, Esq.
Andrew J. Wells, Esq.
melanie.price@duke-energy.com
andrew.wells@duke-energy.com

NUCOR
Anne E. Becker, Esq.
abecker@lewis-kappes.com

BETTER JOBS COALITION
Clayton Miller, Esq.
clay@claytonmillerlaw.com

SDI
Robert K. Johnson, Esq.
rjohnson@utilitylaw.us

INDIANA COAL COUNCIL
Jeffery A. Earl, Esq.
jearl@boselaw.com

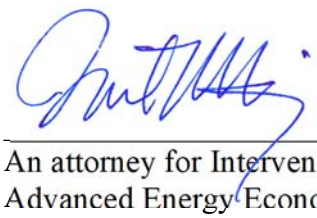
SIERRA CLUB
Kathryn A. Watson, Esq.
kwatson@kkclegal.com

Tony Mendoza, Esq.
Megan Wachspress, Esq.
Tony.mendoza@sierraclub.org
Megan.wachspress@sierraclub.org

CAC
Jennifer A. Washburn, Esq.
jwashburn@citact.org

Shannon Fisk, Esq.
Melissa Legge, Esq.
Cassandra McCrae, Esq.
sfisk@earthjustice.com
mlegge@earthjustice.com
cmccrae@earthjustice.com

BETTER JOBS COALITION
Clayton Miller, Esq.
clay@claytonmillerlaw.com



An attorney for Intervenor,
Advanced Energy Economy Inc.

ENDNOTES

[1] *Advanced Energy Economy's Exhibit 2: Verified Direct Testimony and Attachments of Robert B. Stoddard*, at 3-4, Table A.
[2] *Id.* at 5:10-12, Table B.
[3] *See generally Advanced Energy Economy's Exhibit 4: Verified Direct Testimony and Attachments of Michael Jonagan*.
[4] *See generally Advanced Energy Economy's Exhibit 3: Verified Direct Testimony and Attachments of Charles J. Cicchetti*.
[5] *See* Advanced Energy Economy's Proposed Order, Ordering Paragraph No. 1.
[6] *Application of Duke Energy Indiana,* Cause No. 38707 FAC 121, 2019 WL 4751573 *3 (IURC September 25, 2019).
[7] *Petition of Northern Indiana Public Service Co.,* Cause No. 37343, 1983 WL 882710 (IURC Dec. 27, 1983).
[8] *Verified Petition of Southern Indiana Gas and Electric Co.*, Cause No. 45052 2019 WL 6770066 *22 (IURC April 24, 2019).
[9] *See* Advanced Energy Economy's Proposed Order, Ordering Paragraph Nos. 3 through 8.
[10] *Duke Energy Indiana's Exhibit 1: Direct Testimony of John D. Swez*, at 10:17.
[11] *Cross-examination of John D. Swez.* Cause No. 38707 FAC 123 S1, October 30, 2020.
[12] *In the Matter of the Petition of Northern States Power Company*, Docket No. E-002/M-19-809, 2020 WL 4016766 (Minn.P.U.C. July 15, 2020).
[13] *Id.*
[14] *Advanced Energy Economy's Exhibit 1: Verified Direct Testimony of Sarah Steinberg*, at 6:11-17.
[15] *Duke Energy Indiana's Response to October 21, 2020 Docket Entry, Attachment 1* (*A Review of the Commitment and Dispatch of Coal Generators in MISO,* Potomac Economics, September 2020 at 2).
[16] *Advanced Energy Economy's Exhibit 2: Verified Direct Testimony and Attachments of Robert B. Stoddard*, at 4:21-23.
[17] *Advanced Energy Economy's Exhibit 4: Verified Direct Testimony and Attachments of Michael Jonagan*, at 2:20 to 3:3.
[18] *Advanced Energy Economy's Exhibit 1: Verified Direct Testimony of Sarah Steinberg*, at 7:7-11, footnote 7. Energy Innovation found that America has entered the "coal cost crossover" with cleaner alternatives such as local wind and solar able to replace approximately 74 percent of the country's coal fleet with immediate ratepayer savings today, and 86 percent by 2025. Indiana is no exception—over half of the coal plants in-state are no longer cost competitive with local renewable resources, and by 2025, all of Indiana's coal generation with be substantially at risk. This means that local wind and solar could replace total output at an all-in cost that is 25 percent lower than the existing plant's ongoing marginal costs. *The Coal Cost Crossover: Economic Viability of Existing Coal Compared to New Local Wind and Solar Resources.* Gimon et al. March, 2019. Energy Innovation and Vibrant Clean Energy; *Levelized Cost of Energy and Levelized Cost of Storage 2020*. Lazard. October 19, 2020.
[19] *Cross-examination of John D. Swez*, Cause No. 38707 FAC 123 S1, October 30, 2020.
[20] *Advanced Energy Economy's Exhibit 1: Verified Direct Testimony of Sarah Steinberg*, at 7:17-20.
[21] *Id.* at 7:20-24.
[22] *Id.* at 8:2-4.