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Exhibit No. 205

Public Counsel – Exhibit 205
Geoff Marke
Surrebuttal Testimony
File Nos. EO-2022-0040 & EO-2022-0193

Exhibit No.:	205
Issue(s):	Stranded Asset: Asbury Power Plant
Witness/Type of Exhibit:	Marke/Surrebuttal
Sponsoring Party:	Public Counsel
Case No.:	EO-2022-0193

SURREBUTTAL TESTIMONY

OF

GEOFF MARKE

Submitted on Behalf of the Office of the Public Counsel

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NOS. EO-2022-0193

May 27, 2022

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Petition of The Empire District Electric Company d/b/a Liberty to Obtain a Financial Order the Authorizes the Issuance of Securitized Utility Tariff Bonds for Qualified Extraordinary Costs	)))))	Case No. EO-2022-0040
In the Matter of the Petition of The Empire District Electric Company d/b/a Liberty to Obtain a Financing Order that Authorizes the Issuance of Securitized Utility Tariff Bonds for Energy Transition Costs Related to the Asbury Plant	))))))	Case No. EO-2022-0193

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Geoff Marke, of lawful age and being first duly sworn, deposes and states:

1. My name is Geoff Marke. I am a Chief Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Geoff Marke
Chief Economist

Subscribed and sworn to me this 27th day of May 2022.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI
TIFFANY HILDEBRAND
My Commission Expires
August 8, 2023
Cole County
Commission #15637121

My Commission expires August 8, 2023.

Tiffany Hildebrand
Notary Public

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SURREBUTTAL TESTIMONY

OF

GEOFF MARKE

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. EO-2022-0193

I. INTRODUCTION

Q. Please state your name.

A. Dr. Geoff Marke.

Q. Are you the same Dr. Marke who previously testified in rebuttal in both Case Nos. EO-2022-0040 and EO-2022-0193?

A. I am.

Q. What is the purpose of your surrebuttal testimony?

A. I am responding to the rebuttal testimony of Missouri Public Service Commission Staff ("Staff") witness J. Luebbert regarding benefits and costs behind both Empire's self-imposed utility stranded asset—its Asbury Power Plant—and Empire's new wind investments.

My silence regarding any other issue should not be construed as an endorsement of, agreement with, or consent to any witness' testimony or any party's filed position.

II. BENEFITS OF STRANDING ASBURY

Q. Do you agree with Staff witness Mr. Luebbert that for Empire management "the underlying decisions to retire Asbury are premised on benefits that can, and should, match the allocation of the Asbury costs which Liberty has proposed to securitize."[1]

A. Yes.

[1] Case Nos. EO-2022-0040 and EO-2022-0193 Rebuttal Testimony of J. Luebbert p. 3, 10-12.

Q. What immediate, explicit benefit is realized by retiring Asbury prematurely?

A. In a vacuum—avoidance of future coal costs; however, Empire's customers will still continue to pay for coal burned at Empire's more inefficient and environmentally detrimental power plants like Plum Point. They just won't have to buy as much coal.

Q. Is any benefit lost?

A. Yes. Empire could control both when Asbury generated electricity and how much electricity it generated, i.e., Asbury was dispatchable and as a source of electricity it was not dependent on when the wind was blowing or when the sun was shining. This meant that Asbury could produce electricity when demand was great and prices were high (e.g., during Storm Uri).

Q. Were there any avoided cost benefits?

A. Yes. Empire avoided some ash handling costs, but these were relatively minor. Empire obtained other environmental benefits in the form of reduced negative externalities (e.g., CO_2). These benefits have not been quantified and do not result in any explicit one-for-one monetary offset of the $1.2 billion in replacement generation from the wind farms, but they are a benefit.[2]

On this note, I would stress that it was Empire's management's decision to build the $113 million dollar coal plant in the first place and it was Empire's management's decision to spend $167 million to retrofit Asbury with environmental scrubbers and other efficiency gains to extend its useful life an additional twenty years.

Q. What about avoidance of carbon taxes?

A. There is no explicit carbon tax today in Empire's service territory. Any modeled variable that included this input is speculative.

Q. What about the avoidance of future environmental air or water quality regulation costs?

A. It is certainly possible that Asbury could be exposed to new, greater environmental risks in the future. If those hypothetical regulations were cost prohibitive, management would have to

[2] Of course any such analysis would need to offset emissions saved from the continued operation of Asbury with the carbon intensity and emissions created as a result of building, shipping and constructing the $1.2 billion in wind investment.

examine its options and weigh the costs and benefits of compliance against earlier retirement. There was no cost prohibitive environmental air or water (or other) regulation that necessitated the premature retirement of Asbury. Excess generation in the form of $1.2 billion in wind investments was the driving factor.

Q. Did Empire's wind investments benefit from it prematurely retiring Asbury?

A. Yes. Empire avoided some transmission interconnection costs for one of the three wind farms because it relied on the existing Asbury infrastructure. Moreover, the wind investment scheme is premised on selling excess wind generation into the Southwest Power Pool ("SPP") at a high profit to offset the $1.2 billion in costs. Under this arrangement, any other available generation (Company owned or not) is at odds with achieving that outcome.

Q. What other benefits is Empire seeking from its premature retirement of Asbury?

A. It is continuing to seek to eliminate shareholder risk by having ratepayers pay the remaining undepreciated balance of a unit that is no longer used and useful plus a weighted average cost of capital ("WACC") on that remaining balance for the life of the securitization.

Again, it is ratepayers that are overwhelmingly in a worse position being charged *three times* (each more expensive than the original) for actual usable capacity.

Any immediate future investment opportunity to secure more reliability would be the fourth *time ratepayers* would be called on to pay for actual usable capacity at the margins. Shareholders will also likely benefit with further investment opportunities (e.g., batteries on the wind farms) where none originally existed in the form of alleviating continued market volatility exposure for Empire's customers as seen from events like Storm Uri.

Q. Doesn't securitization align with Empire's desire to "green its fleet"?

A. In only the most general sense and at great excessive costs.

Q. Would you elaborate on your answer?

A. RSMo 393.1705. 2 (1) states:

> Except for electric generating facilities retired or abandoned prior to August 28, 2021, unless the commission issues an order rejecting a petition for a financing order filed under the provisions of section 393.1700 that was accompanied by a petition for approval of investment in replacement resources filed under the provisions of this section, **<u>the commission shall approve investment in replacement resources by the electrical corporation of an amount that is approximately equal to the undepreciated investment in the electric generating facilities covered by such petition to acquire or build an existing or new replacement resource to replace the retired or abandoned or to be retired or abandoned unit</u>**.[3] (emphasis added)

As I read it, this securitization and replacement generation statute envisioned a one-for-one replacement to the undepreciated investment in the electric generating facility.

Asbury had approximately $200 million in total company undepreciated investment on its books when it was retired (due to timing the Company is seeking $145 million to be securitize).[4] Its replacement generation was approximately $1.2 billion.

That is a billion dollar difference.

The statute envisions a one-for-one replacement not an eleven-for-one replacement.

III. COSTS OF STRANDING ASBURY

Q. What are the direct costs to ratepayers under Empire's securitization proposal?

A. $145,019,637.[5]

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[3] https://revisor.mo.gov/main/OneSection.aspx?section=393.1705&bid=49601&hl=

[4] Per MO PSC accounting schedules filed in Case No. ER-2019-0374. Approximate value for net rate base in plant-in-service less accumulated depreciation reserves through January 31, 2020. The Missouri jurisdictional net rate base at Feb. 29, 2020 would have been approximately $166,665,588.

[5] It should be noted that OPC's analysis and proposal in this case results in an updated amount of ($24,243,495) in overpaid costs related to Asbury that should either be used to offset the negative balance against the outstanding Storm Uri request or placed in a regulatory liability to be reconciled in Empire's next general rate case. See also the Surrebuttal Testimony of John C. Riley p. 1 through p. 8, 3 and JSR-S-1.

Q. Are there other costs to ratepayers?

A. Yes. The self-imposed stranding of Asbury resulted in reduced reliability and greater price exposure as seen during Storm Uri. OPC witness Mantle estimated that had Asbury not been retired, it would have created revenue of over $71.4 million in February 2021 if it has been available and generating electricity.

Moving forward ratepayers will continue to have increased risk exposure to volatile SPP market prices due to decreased reliability. On that note, I immediately have grave concerns about whether Empire's customers will be exposed to large price swings this summer (and next winter).[6]

Q. If the Commission denies Empire's securitization request as to Asbury will that negatively impact the incentive to retire and securitize coal plants in the future?

A. I fail to see how. Asbury was never eligible for the replacement component of the statute because Asbury was already retired before the securitization statute was signed into law. Putting aside for the moment that Empire already received an order of magnitude richer replacement value for Asbury outside of a securitization docket, Missouri's securitization statute is also more utility friendly than all states (that I am aware of) by merely having a one-for-one replacement option for the undepreciated balance of the coal plant. I have no doubt that utilities, who drafted and lobbied for the statute, will utilize the statute.

Q. Do the benefits of stranding Asbury outweigh the costs?

A. No. Especially if ratepayers are forced to pay for a unit that is no longer used and useful. The benefit of avoiding future fuel costs do not offset the costs of continuing to pay for a unit that is no longer used and useful nor do they offset the risk exposure to ratepayers from volatile fuel prices because the Company does not have sufficient reliable, dispatchable generation.

[6] These concerns are supported by the NERC 2022 Summer Reliability Assessment (https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_2022.pdf) and its 2021 Long-Term Reliability Assessment: https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2021.pdf

IV. WIND INVESTMENTS BENEFITS, COSTS, AND RISKS

Q. In his rebuttal testimony Mr. Luebbert emphasizes Empire's position that its wind investments are tied to its premature retirement of Asbury. Can you elaborate on how Empire has tied them together?

A. Yes. Over the course of two separate filings Empire conducted a Generation Fleet Savings Analysis ("GFSA") as well as a Customer Savings Plan ("CSP") portfolio scenario analysis that relied on certain price assumptions (and other assumed variables) over a twenty-year operational life. The final analysis purported to show $169M in savings (at the mid-range) over a twenty-year period based on a levelized cost of energy ("LCOE") perspective utilizing Empire's 2016 IRP's net present value revenue requirement assumptions.[7] It was considered high unlikely that these benefits would materialize in the first ten years and the delays in getting the wind farms operational further support that initial assessment.[8]

Q. Can you identify the costs of the wind farms?

A. Approximately $1.2 billion paid at different points over their lives.

Q. Are there any risks associated with these wind investments?

A. Yes, for ratepayers. Due to the unique nature of the financings arrangement and resource makeup, ratepayers now are in a position of risk similar to merchant generators under the wind arrangement by bearing the risk of revenue shortfalls due to poor performance (e.g., due to poor wind profiles, diminishing returns from a saturated market of wind generation, loss of load, etc…), extended shut-downs (see also the 300MW Neosho Wind Farm currently not in operation today or forced curtailments related to exceeding take limits of protected species—see also Ameren Missouri's High Prairie Wind Farm) and SPP market price volatility due to reduced reliable generation sources (see also Storm Uri).

[7] Empire's purported savings at the high market was $320M over twenty years and $67M at the low market level.
[8] Importantly, the wind investments were delayed at least one year due to the fact that Empire sought decisional preapproval before they submitted a CCN. After the Commission approved the CCN, Empire experienced delays from the Corps of Engineers, US Fish and Wildlife, the Southwest Power Pool and COVID-19 related supply chain constraints.

Q. From the perspective of Empire's retail customers do the benefits of prematurely retiring Asbury and replacing it with the wind farms outweigh the costs?

I do not believe so. As stated previously, this is especially true if ratepayers are forced to pay for a unit that is no longer used and useful at the same time they are paying for the wind investment. The benefit of avoiding future fuel costs do not offset the costs of continuing to pay for a unit that is no longer used and useful nor do they offset the risk exposure to ratepayers from volatile fuel prices because the Company does not have sufficient reliable, dispatchable generation.

The wind investments are speculative and cannot be reliably factored in one way or the other at this point. Time will tell if they prove to be a solid bet, but the early returns (e.g., delay in operations, Storm Uri fuel spikes, equipment failure) are not reassuring.

Q. What did Staff witness John Rogers say in his testimony in Case No. EO-2018-0092 that Mr. Luebbert relies on in his rebuttal testimony?

A. Mr. Rogers begins by stating:

> Traditionally, electric utility resource planning has centered on having enough demand-side and supply-side resources to meet forecasted customer load under all conditions. If approved, however, the CSP will rely heavily upon making high levels of future long-term off-system sales to other utilities in the competitive electricity marketplace to offset capital costs of the CSP. The CSP would significantly increase equity cost – paid by ratepayers – in the near term (10 years) to fully compensate a "tax equity partner," and is expected to only modestly reduce customers' bills primarily after 10 years when the "tax equity partner" has been paid in full. While customers are expected to realize a net savings from the CSP, customers' savings are very uncertain, because customers' savings are dependent upon the competitive electricity marketplace behaving over the next 20 to 30 years as it is presently modeled by Empire's analysts. I also discuss why the early retirement of the 186

> MW Asbury coal plant, as proposed in the CSP, may not be in the best interest of Empire and its customers.[9]

Mr. Rogers concludes with the following:

> Empire is seeking approval from the Commission for Empire to operate very much like a merchant generator in the competitive electricity marketplace (SPP). Because of the CSP's payments to the tax equity partner, little, if any, customers' savings are expected during most, if not all, of the first 10 years of the CSP, depending upon the levelized cost of electricity for the wind resources that are ultimately constructed. While Plan 10 does not present a compelling case for retiring Asbury early, Staff anticipates that Empire's response to Staff Data Request No. 0014.1 will result in a plan to keep Asbury in service until 2035 because doing so will result in greater customers' savings over 20 years and 30 years.[10]

Q. Do you share Mr. Rogers' concerns?

A. Yes, and I did even before he testified to them.

Q. Did Staff enter into settlement agreements which supported Empire's Customer Savings Plan?

A. It did. I cannot speak for why Staff's changed its position.

Q. Empire operates in other states. Have any of them addressed Empire's Customer Savings Plan?

A. Empire recently filed a general rate case in Kansas, Docket No. 21-EPDE-444-RTS. While most issues settled, what recovery to allow Empire for its new wind farms did not. There was a two-day evidentiary hearing on that issue. Parties filed briefs and reply briefs on the issue of whether or not the Wind investments should be included in rate base. Both the Kansas Staff and the Kansas Consumer Advocate ("CURB") recommended against including the assets in rate base. Ultimately, Empire withdrew the contested issue shortly after reply briefs were filed

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[9] Case No. EO-2018-0092 Rebuttal Testimony of John A. Rogers p. 1, 21-23 thru p. 2, 1-10.
[10] Ibid p. 17, 6-13.

but before the Kansas Corporation Commission ("KCC") made a ruling. Interested parties can review that two-day hearing online at the KCC YouTube webpage.[11]

Q. What principles guide your recommendations?

A. The fundamental purpose of economic regulation is to correct market failure in order to serve the public interest. Where competition will drive prices toward the marginal cost of production and returns towards the cost of capital, unchecked market power will allow service to suffer and prices to go higher than efficient levels, resulting in both windfall profits to shareholders and welfare losses to society. I believe this case represents an example of the latter.

The state granting exclusive franchises to a monopoly with captive customers has strings attached—economic regulation—to ensure safe and reliable service at just, reasonable and affordable rates, and it is incumbent on the Commission to say investors are getting enough and that Empire's ratepayers are paying enough. I continue to recommend the Commission order a disallowance on the remaining undepreciated balance of the AQCS and reject a WACC profit for Empire on the balance of the stranded Asbury investment remaining thereafter. OPC's updated analysis results in $24,243,495 in overpaid costs related to Asbury that should either be used to offset the negative balance against the outstanding Storm Uri request or placed in a regulatory liability to be reconciled in Empire's next general rate case.[12]

Q. Does this conclude your testimony?

A. Yes

[11] Day 1 can be found at: https://www.youtube.com/watch?v=w29UHV_ZnlM&list=PL3bfgkxiuDtfdHAZhi4P1ZYfI4XyC6pr2&index=3 and Day 2 can be found at: https://www.youtube.com/watch?v=QwIJ7ybHby0&list=PL3bfgkxiuDtfdHAZhi4P1ZYfI4XyC6pr2&index=2

[12] See also the Surrebuttal Testimony of John C. Riley p. 1 through p. 8, 3 and JSR-S-1.