Exhibit No.: _____ Issues: Asbury Dismantlement, Decommissioning, and AROs Witness: Drew W. Landoll Type of Exhibit: Surrebuttal Testimony Sponsoring Party: The Empire District Electric Company Case Nos.: EO-2022-0040; EO-2022-0193 Date Testimony Prepared: May 2022

Before the Public Service Commission of the State of Missouri

Surrebuttal Testimony

of

Drew W. Landoll

on behalf of

The Empire District Electric Company d/b/a Liberty

May 2022



DENOTES CONFIDENTIAL 20 CSR 4240-2.135(2)(A)4, 6

PUBLIC VERSION

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1	I.	INTRODUCTION
-		<u>manabellion</u>

2	Q.	Please state your name and business address.
3	A.	My name is Drew W. Landoll. My business address is 602 Joplin Street, Joplin,
4		Missouri 64801.
5	Q.	Are you the same Drew W. Landoll who provided Direct Testimony in Case No.
6		EO-2022-0193 (Asbury) on behalf of The Empire District Electric Company d/b/a
7		Liberty ("Liberty" or the "Company")?
8	A.	Yes.
9	Q.	What is the purpose of your Surrebuttal Testimony in these now consolidated
10		securitization proceedings?
11	A.	I am responding to the Office of Public Counsel's ("OPC") rebuttal testimony
12		regarding the Company's decisions post retirement of the Asbury Power Plant with
13		regard to decommissioning and dismantlement of the asset.
14	Q.	Before you present your Surrebuttal Testimony, do you have any corrections to
15		your Direct Testimony?
16	A.	Yes, two items:
17		• On page 10, line 5, "asbestos removal" should be stricken.
18		• On page 14, line 20, item g "Removal of asbestos" should be removed from
19		the list of activities.
20		The scope of work for Phase 2 of the decommissioning plan should only include the
21		identification and quantification of asbestos containing materials, not the removal of

said materials. The scope of this work is included in the Phase 3 cost estimates (Direct
 Schedule DWL-2). Further clarification of this is discussed below.

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II. <u>POST-RETIREMENT ACTIVITIES AND OPTIONS</u>

Q. OPC witness Marke stated in his rebuttal testimony that he believes the Company

did not try to sell the Asbury Power Plant. Do you agree with his assertion?

A. No. As my Direct Testimony explains, Empire retained Black & Veatch Management
Consulting, LLC ("BVMC") to perform an analysis of the market value of the Asbury
plant. That analysis determined that not only did Asbury have no sale value, *Empire would have to pay* a third party approximately \$134 million to take ownership of the
operating plant given the market conditions and environmental obligations to continue
operations and ultimately decommission it.

12 Q. Did the Company perform any marketing of the Asbury Power Plant?

A. Yes. As discussed in my Direct Testimony and summarized on page 7 of Direct
Schedule DWL-1, the Company engaged BVMC to determine if there were any viable
parties interested in purchasing the equipment for another use. This process included
a review of the inventory of major equipment, spares, and all large assets, gathering of
operational information, and site visits. This work found that there is not a market for
a fifty-year-old cyclone boiler coal plant that would require dismantling, packaging,
shipping, re-engineering, rebuilding, and the requisite permitting.

20 **Q.**

Should the Company have 'mothballed' Asbury, as Dr. Marke asserts in his

21 testimony?

A. No, Dr. Marke's assertion is without support. As I explain in my Direct Testimony,
the total cost of mothballing the facility for 10 years would have been approximately
\$5.7 million, expressed in 2020 dollars, which is the total of an Abandon-in-Place Cost

1		Estimate, Abandon-in-Place Risk Register, and the Asbury Station Abandon-in-Place
2		Study.t. None of those costs include demolition, so the cost to retire Asbury would
3		simply increase by that amount. There was no reason to think that it would ever be in
4		our customers' best interests to reactive the plant at the time the decision was made to
5		retire it, nor is there any reason to think so now.
6	Q.	Are you aware of any utility that has recently mothballed a plant and brought it
7		back into service?
8	A.	No, I am not.
9	Q.	Have any new coal plants entered the market recently?
9 10	Q. A.	Have any new coal plants entered the market recently? No, there hasn't been a new coal plant brought online in the United States since 2014, ¹
10		No, there hasn't been a new coal plant brought online in the United States since 2014, ¹
10 11		No, there hasn't been a new coal plant brought online in the United States since 2014, ¹ and the regulations governing coal plant operations have only increased since then,
10 11 12		No, there hasn't been a new coal plant brought online in the United States since 2014, ¹ and the regulations governing coal plant operations have only increased since then, which has increased the cost to operate. In addition to the changing regulations and
10 11 12 13		No, there hasn't been a new coal plant brought online in the United States since 2014, ¹ and the regulations governing coal plant operations have only increased since then, which has increased the cost to operate. In addition to the changing regulations and renewable energy standards, coal plant support vendors are increasingly abandoning

 ¹ <u>https://www.carbonbrief.org/mapped-worlds-coal-power-plants/</u>
 ² <u>https://www.bv.com/news/black-veatch-decarbonization-driving-repowering-power-industry</u>

1	and the world's leading coal boiler manufacturer has pivoted to renewables,
2	decarbonization, and set a 2050 net-zero greenhouse gas emissions goal. ³

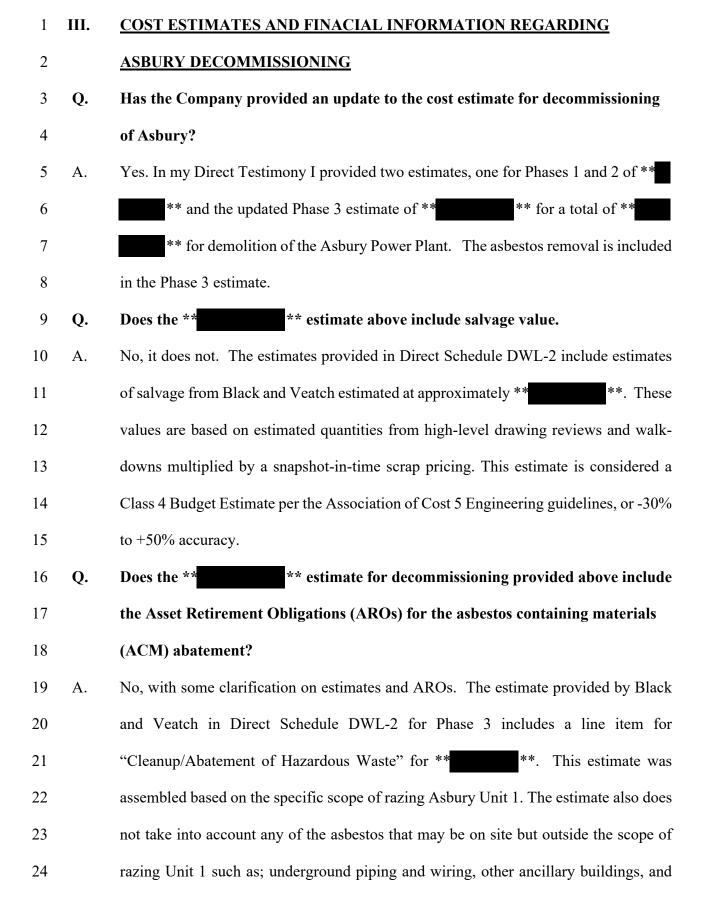
3 Q. Is the Company looking to expand its generation or "other options" at Asbury, or 4 did the Company not even explore the options, as Dr. Marke asserts?

5 A. Dr. Marke is not correct; it appears he choose to ignore my Direct Testimony. The 6 Company is always looking for the correct blend of generation and technology to 7 maintain a safe and reliable source of energy for our customers. In doing so, we spent a lot of time in the first phase of the retirement planning to explore all options that were 8 9 available on site. This was described in my Direct Testimony, page 19, lines 19-24 and 10 page 20, lines 1-12. This is further, and more recently, illustrated in our recent 11 submission of the Integrated Resource Plan, in which we included specific generators 12 for reliability and a plan to co-locate resources at existing interconnection points 13 including Asbury.

14 Q. Did the Company take all reasonable steps to come to the decision to dismantle?

A. Yes. The Company performed a host of studies and cost estimates that informed its
decision to dismantle Asbury. These have been provided over the last three years
through this and other dockets, including in responses to data requests, and the
Company has kept stakeholders up to date with its plans.

³ https://www.babcock.com/assets/Uploads/BW_2022_Sustainability_ESG.pdf



1 ACM containing materials remaining not within Unit 1. In response to Mr. Riley's 2 dispute on page 15 starting on line 14 of his Rebuttal Testimony, the line item 3 "Cleanup/Abatement of Hazardous Waste" is expected to be 'funded' from the 4 Company's Missouri jurisdictional "Additional Asbury Asset Retirement Obligation Costs – Asbestos" of ** ** is more appropriate estimate of the total Asbestos 5 costs. Acknowledging OPC's objection, the Company has removed the ** ** 6 7 line item from the Phase 3 cost estimate and left the Asbury Asset Retirement Obligation Costs - Asbestos in the forecasted expenditures in its securitization 8 9 balances. For additional discussion related to the Company's total proposed 10 securitization amounts related to Asbury costs, please refer to the Surrebuttal testimony 11 of Charlotte. T. Emery.

12 Q. Does the ** estimate for decommissioning provided above include 13 the Asset Retirement Obligations (AROs) for the coal ash impoundments?

14 A. No. The impoundments have been part of the compliance plan for Asbury since the 15 Combustion Residuals Rule (CCR) and the Steam Electric Power Generating Effluent 16 Guidelines (ELG) rule were promulgated and were irrespective of the retirement 17 decisions for Asbury, as discussed in ER-2021-0312, OPC Data Request 31. The 18 impoundment closure process has been estimated within our ARO budgets, and the 19 Company publicly updated the plan on our Company website⁴. The Company is 20 currently in the contract negotiation stage with the dirt work contractor for the closure 21 impoundment, with the bulk materials already procured. At this time the project is 22 expected to be within the ARO budget of approximately ** **

⁴https://central.libertyutilities.com/uploads/2022%20Updated%20Asbury%20CCR%20Impoundment%20Closu re%20Plan.pdf

1 Q. How will the Company contract the razing of Asbury Unit 1, and what is the

2 current net cost estimate when including salvage and the asbestos ARO?

3 On May 13, 2022 the Company submitted a contract bid package that was designed to A. 4 have the demolition as a lump sum contract, inclusive of salvage value to be retained 5 by the contractor, with a bid due date of July 15, 2022. This contract bid approach was 6 utilized on the Riverton 7, 8, and 9 demolition and resulted in very competitive bids 7 and it also lets the contractor bear the risk of the fluctuating scrap market, not the 8 customers. Demolition companies are able to hedge scrap commodity pricing and/or 9 stockpile in a way that the utility companies are not, therefore increasing their value of 10 scrap and reducing cost risks to our customers. The contract is expected to include the 11 ACM abatement as a lump sum bid as well. The ACM abatement price shall be based 12 on the estimated quantities developed by a third-party ACM inspection company. 13 These estimates are based on historical drawings and non-intrusive site walks. Based 14 on the Company's experience at Riverton the contract will also contain provisions for 15 unit rate additions for out of scope ACM removal. In simpler terms, if the ACM 16 quantity exceeds the bid package information then a unit rate will be utilized for change 17 orders. The ACM work will be tracked separately and 'funded' through the ARO as 18 discussed above.

19The results of this bid process will be shared with stakeholders through the appropriate20processes. Current Company estimates for the net cost of this work can be summarized

21 in the table below:

Phase/Task	Line Items	Estimated Cost
Phase 1 & 2		
	Engineering, studies, permit and facility modifications, universal waste removal, safety measures	\$ 4,000,000

Phase 3 - Demolition		
	Direct Costs	\$ 6,700,000
	Indirect Costs	\$ 1,700,000
	Total Direct and Indirect:	\$8,400,000
	Less ACM Line Item (ARO Covered)	\$ (2,000,000)
	Total:	\$6,400,000
	Less Scrap Value	\$ (4,705,000)
Asbestos ARO		
	Removal of asbestos	\$ 3,205,360

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Please refer to the Surrebuttal Testimony of Company witness Ms. Emery for further
details on the proposed treatment of salvage value and any differences between the
amount included for securitization and actual values.

5 Q. To remain operational was closure of the impoundment the only action that was 6 required to keep Asbury compliant with CCR and ELG?

7 No. While developing the compliance plan for Asbury, it was determined that the A. 8 impoundment would need to be closed to comply with the ELG and CCR as early as 9 2016.⁵ This was further confirmed with the failure of the location restrictions (40 CFR 257.64) for the impoundment.⁶ The compliance plan also required planning for a new 10 11 landfill and a wet-to-dry bottom ash handling system conversion. These projects were 12 originally budgeted to require an additional \$20-30 million of investments to comply 13 with federal mandates. As the plans matured, the budget was refined to approximately 14 \$20 million and included actual vendor bids and a phased approach to smaller landfill 15 cell construction. This additional investment was able to be avoided when Asbury was 16 retired; resulting in a benefit of reducing additional costs to customers.

⁵https://central.libertyutilities.com/uploads/ccr/Asbury%20CCR%20Impoundment%20Closure%2010-2016.pdf ⁶ https://central.libertyutilities.com/uploads/ccr/Location%20Restriction%2010.17.2018.pdf

Q. How will the Company contract the closure of the impoundment, and what is the current cost estimate?

3 The Company received the bids for the impound construction work and is currently in A. 4 the contractor selection and vetting phase. The contract was bid as a lump sum with 5 certain unit rates included. The Company's internally approved business case is ** for total cost and is expected to be 'funded' utilizing the currently ** 6 7 ARO - CCR Impoundment balance. This cost is expected to be included in the 8 securitization. The Company's business case is attached as Surrebuttal Schedule 9 <u>DWL-1</u>.

10 Q. Does this conclude your Surrebuttal Testimony at this time?

11 A. Yes.

VERIFICATION

I, Drew W. Landoll, under penalty of perjury, on this 27th day of May, 2022, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Drew W. Landoll