

Exhibit No.: \_\_\_\_\_  
Issues: Asbury History, Decommissioning,  
and Repurposing  
Witness: Drew W. Landoll  
Type of Exhibit: Direct Testimony  
Sponsoring Party: The Empire District  
Electric Company  
Case No.: EO-2022-0193  
Date Testimony Prepared: March 2022

**Before the Public Service Commission  
of the State of Missouri**

**Direct Testimony**

**of**

**Drew W. Landoll**

**on behalf of**

**The Empire District Electric Company d/b/a Liberty**

**March 2022**



**\*\*DENOTES CONFIDENTIAL\*\***  
20 CSR 4240-2.135(2)(A)4,5,6

**PUBLIC VERSION**

TABLE OF CONTENTS  
FOR THE DIRECT TESTIMONY OF DREW W. LANDOLL  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION  
CASE NO. EO-2022-0193

<b>SUBJECT</b>	<b>PAGE</b>
I. INTRODUCTION.....	1
II. THE ASBURY POWER PLANT .....	2
III. ASBURY DECOMMISSIONING AND REPURPOSING.....	5
A. Creating a Safe and Compliant Facility .....	6
B. Developing a Decommissioning Plan .....	9
C. Repurposing Existing Asbury Assets.....	15

DIRECT TESTIMONY OF DREW W. LANDOLL  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION  
CASE NO. EO-2022-0193

1 **I. INTRODUCTION**

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

3 A. Drew W. Landoll; 602 S Joplin Ave. Joplin, MO, 64801.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Liberty Utilities Service Corp. (“LUSC”), a subsidiary of Liberty  
6 Utilities Co. (“LUCo”), as the Director of Strategic Projects for The Empire District  
7 Electric Company d/b/a Liberty (“Liberty” or the “Company”).

8 **Q. On whose behalf are you testifying in this proceeding?**

9 A. I am testifying on behalf of Liberty.

10 **Q. Please describe your educational and professional background.**

11 A. I completed my Bachelor of Science in Civil Engineering at the University of Missouri  
12 – Rolla, now known as Missouri University of Science and Technology. My civil  
13 engineering emphasis was in construction and environmental with a minor in  
14 communications. I am a registered Professional Engineer within the State of Missouri.

15           Until 2012, I was employed by Aquaterra Environmental Solutions, a civil and  
16 environmental consulting firm within the Midwest as a Project Engineer. As a Project  
17 Engineer, I designed and permitted landfill expansions, wastewater pumping systems,  
18 air emissions permit applications, and operational support for multiple clients within  
19 the waste and environmental industries.

20           In May of 2012, I joined The Empire District Electric Company at the Asbury  
21 Power Plant as a Local Projects Manager planning and managing projects and outages

1 for the plant. In May of 2015, I was promoted to Manager of Strategic Projects. In that  
2 role, I was the lead for: the demolition of Riverton Units 7, 8, and 9; the completion of  
3 the Riverton 12 Combined Cycle Conversion Project; the early development of the  
4 Missouri wind farms, Kings Point and North Fork Ridge; and multiple other smaller  
5 projects within the Company. Then, in July of 2019, I was promoted to my current  
6 position of Director of Strategic Projects. As Director of Strategic Projects, I oversee  
7 environmental compliance, certain large projects, capital expenditure budgeting,  
8 project accounting and forecasting, and I provide support for regulatory filings related  
9 to certain projects.

10 **Q. Have you previously testified before the Missouri Public Service Commission**  
11 **(“Commission”) or any other regulatory agency?**

12 A. Yes. I provided testimony in Liberty’s last general rate case, Case No. ER-2021-0312.  
13 I have also provided testimony before the Kansas Corporation Commission and the  
14 Oklahoma Corporation Commission.

15 **Q. What is the purpose of your Direct Testimony in this proceeding?**

16 A. I provide a brief history of the Asbury Power Plant (“Asbury”), the electric generating  
17 facility that Liberty retired prior to the date that all undepreciated investment relating  
18 thereto had been recovered through rates and is the subject of Liberty’s securitization  
19 petition filed pursuant to RSMo. §393.1700.2(1). With my Direct Testimony, I also  
20 detail the retirement actions taken at Asbury, including addressing the creation of the  
21 Asbury Renewable Operations Center and the Company’s Asbury decommissioning  
22 plans.

23 **II. THE ASBURY POWER PLANT**

24 **Q. Please describe the characteristics of Asbury at the time of its retirement?**

1 A. At the time of de-designation from SPP the plant was operating in the Integrated  
2 Marketplace, as it had since March 2014. The facility had very favorable availability  
3 metrics but continued to see reduced capacity factors. Company witness Shaen T.  
4 Rooney provides additional information regarding the operations of the unit in its final  
5 years. The plant was fully compliant with the applicable federal and state rules  
6 governing its operations but was facing many mandated environmental upgrades in the  
7 near future. The Company worked on creating those plans for investments to remain  
8 compliant, but ultimately determined through the Company's "Customer Savings Plan"  
9 that retiring the unit was more favorable than continued investment into a 50-year-old  
10 power plant.

11 **Q. When was the Asbury plant first developed?**

12 A. Development of the plans for Asbury began in the late 1960s, and Asbury Unit 1, a  
13 Babcock & Wilcox cyclone steam generator, was commissioned in 1970. When it  
14 began operations, it had a nominal rating of 206 MW and sourced its coal onsite via  
15 mine mouth operation.

16 **Q. Did Asbury Unit 1 continue to operate as a mine mouth facility until retirement?**

17 A. No. In 1990, the plant was converted to use a blend of low-sulfur Wyoming coal and  
18 local bituminous coal. This included the installation of a rotary car dumper to unload  
19 railcars traveling from the Powder River Basin in Wyoming.

20 **Q. Did Asbury Unit 1 burn other fuels besides coal?**

21 A. Yes. It utilized fuel oil as a startup fuel. In addition, in the early 2000s, the unit began  
22 burning tire derived fuel ("TDF") as part of its fuel mix. TDF made up roughly 1% of  
23 the fuel usage.

24 **Q. How did Asbury Unit 1 perform throughout its history?**

1 A. For decades, Asbury consistently exhibited an availability factor in excess of 90% and  
2 a low forced outage rate. In its final years, however, its heat rate (*i.e.*, efficiency) was  
3 not as competitive as new, larger coal-fired facilities thus impacting its dispatch profile  
4 in the SPP market. It began to see short periods of economic shutdown that it had not  
5 seen throughout its history due to low cost natural gas and wind generation available  
6 in the Southwest Power Pool (“SPP”) Integrated Marketplace (“IM”). This is discussed  
7 in detail in the Direct Testimonies of Liberty witnesses Aaron J. Doll and Shaen T.  
8 Rooney.

9 **Q. Did Asbury Unit 1 undergo any environmental compliance projects during the**  
10 **later years?**

11 A. Yes. A selective catalytic reduction system was installed in 2008 to reduce nitrogen  
12 oxide emissions. This was required to comply with provisions of the Clean Air  
13 Interstate Rule. In 2014, in order to continue operating in compliance with the Mercury  
14 Air Toxic Standards and the Cross State Air Pollution Rule, Asbury was required to  
15 retrofit the plant with an Air Quality Control Systems (“AQCS”) that included the  
16 addition of a circulating dry scrubber to reduce sulfur dioxide emissions, a pulsejet  
17 fabric filter to reduce particulate emissions, powder activated carbon injection to  
18 control mercury emissions, conversion from forced draft to balanced draft, a new stack,  
19 and the upgrade of the steam turbine to increase efficiency. The upgraded steam turbine  
20 increased nominal output to 218 MW.

21 **Q. Were those capital improvements discussed during previous rate cases or resource**  
22 **planning (IRP) proceedings?**

23 A. Yes. The need for the 2014 AQCS capital improvements at Asbury was discussed in  
24 the Company’s 2010 IRP filing (Commission Case No. EO-2011-0066). Within that

1 filing, the Company outlined actions needed to implement its compliance plan and  
2 strategy (the “Compliance Plan”), which largely followed the “preferred plan”  
3 presented at that time. The Company also filed its 2012 IRP Annual Update with the  
4 Commission (Case No. EO-2012-0294) describing the updated costs and schedule  
5 based on actual contracts and approved five-year business plan. The 2013 triennial IRP  
6 (Case No. EO-2013-0547) again included discussion of the AQCS retrofit and updated  
7 modeling. These capital improvements were then the subject of testimony in the  
8 Company’s 2014 and 2016 general rate cases filed with the Commission, and the  
9 cost of the capital improvements were included in rates (Commission Cases Nos.  
10 ER-2014-0351 and ER-2016-0023). These improvements were also discussed in  
11 Arkansas Public Service Commission Docket 15-010-U, Kansas Corporation  
12 Commission Docket 15-EPDE-233-TAR, and Oklahoma Corporation Commission  
13 Cause PUD 201600468.

14 **III. ASBURY DECOMMISSIONING AND REPURPOSING**

15 **Q. What is the current status of Asbury?**

16 A. Asbury Unit 1 was de-designated from the Southwest Power Pool (“SPP”) and retired  
17 in March of 2020.

18 **Q. Is the decommissioning and repurposing at the Asbury site complete?**

19 A. No. It is estimated that it will take another approximately two years to decommission  
20 and dismantle the plant.

21 **Q. Please briefly describe the scope and status of Asbury decommissioning and  
22 repurposing activities.**

23 A. The Company has been working toward three goals: creating a safe and compliant work  
24 location; developing a decommissioning plan for the final disposition of the unused

1 physical facilities on site; and repurposing certain facilities onsite to support the  
2 operations and maintenance activities of the Wind Projects, the Prosperity Solar  
3 Facility, and other renewable generation facilities as they are envisioned.

4 **A. Creating a Safe and Compliant Facility**

5 **Q. What activities have been done on site since Asbury Unit 1's de-designation in**  
6 **March of 2020?**

7 A. Once the unit was de-designated, the Company prioritized removal of environmentally  
8 sensitive items. This first step was needed to protect the environment, increase safety  
9 to employees and neighbors, reduce risks of potential contamination, and meet, and in  
10 some instances, reduce the Company's environmental permit obligations. The work  
11 completed to date includes:

- 12 a. removal of anhydrous ammonia;
- 13 b. removal of oil from equipment;
- 14 c. removal of Coal Combustion Residuals ("CCR") waste within plant ductwork;
- 15 d. removal of certain chemicals stored onsite and within equipment;
- 16 e. removal of residual coal from the coal piles;
- 17 f. modifications to water discharge Outfalls;
- 18 g. isolation and Lock-Out Tag-Out on certain plant systems; and
- 19 h. modifications of environmental and operating permits.

20 **Q. Please describe the ongoing modifications of environmental and operating**  
21 **permits.**

22 A. The facility's air emission Part 70 Permit to Operate (OP2018-001), enforced through  
23 the Missouri Department of Natural Resources ("MDNR") Air Program, became non-  
24 effective on March 1, 2020. This action also removed all other associated air permits



1 including, but not limited to, the facility's Acid Rain Permit and construction permits.  
2 The facility is in the process of renewing its National Pollutant Discharge Elimination  
3 System Permit (NPDES) MO-0095362 with the MDNR that will expire March 31,  
4 2022. The Company and MDNR have been working together to remove certain  
5 operating parameters that no longer apply to the facility since it is no longer a coal-  
6 fired electric generating facility. This will eliminate certain monitoring and testing  
7 requirements of water discharges from the facility. In response to recent changes and  
8 extensions to the federal Coal Combustion Residuals ("CCR") Rule, the Company has  
9 updated the operating record and is revising the closure plan for the applicable ash  
10 impoundment. Also, since the Company is not storing anhydrous ammonia on site,  
11 there is no longer a requirement to maintain a Risk Management Plan ("RMP"). For  
12 that reason, Asbury's RMP has been deregistered with the Environmental Protection  
13 Agency.

14 **Q. What tasks remain to accomplish the goal of maintaining a safe and compliant**  
15 **facility?**

16 A. The Company has obligations to comply with all safety requirements, remaining  
17 permits, and all regulations pertaining to the facility, and will meet these requirements  
18 as we have for the last fifty years at Asbury. The Company and onsite personnel will  
19 continue permit compliance reporting and keep the facility maintained to provide a  
20 workplace that is safe for our employees, contractors and the general public.

21 As the above work proceeds, Liberty will continue identifying and proactively  
22 mitigating (where feasible) any risks posed by the age and condition of the remaining  
23 equipment and facilities. Some examples that may require emergency intervention (and  
24 may affect the scope and timing of the overall project) include ruptured piping, broken

1 hoses, leaking roofs, inoperable elevators, exposed asbestos, or other items that require  
2 immediate attention.

3 The Company recently completed the process of removing the residual  
4 coal from the previous two coal piles and creating a rainwater detention  
5 pond that will comply with the NPDES permit. Additional  
6 improvements may be necessary to comply with the terms of the new  
7 permit and are not known at this time. In addition, ongoing stormwater  
8 sampling remains a requirement. The NPDES permit renewal  
9 application was submitted to the MDNR in late 2021 and will follow the  
10 public comment process as required by federal and state regulations,  
11 with an anticipated effective date of May 1, 2022.

12 **Q. Does the work described above include the work required for the ash**  
13 **impoundment closure?**

14 A. No, the ash impoundment closure is required regardless of whether Asbury Unit 1 was  
15 retired or not. The ongoing compliance for the ash impoundment under the CCR Rule,  
16 in general, has not changed over the last several years. The Company still plans to close  
17 the impoundment in place and complete this work by the compliance deadline of  
18 December 31, 2023. The final Impoundment Closure Plan is being revised to comply  
19 with the most recently promulgated changes in deadlines and reporting obligations to  
20 the CCR Rule<sup>1</sup> and its updated NPDES permit.

21 **Q. Has the Company developed a plan and cost estimate for the ash impoundment**  
22 **closure?**

23 A. Yes, the Company has been working to finalize the design and execution plans with its  
24 consultant Midwest Environmental Consultants. The CCR rule provided a compliance  
25 path since 2015 to develop the Closure Plan for the ash impoundments. The Company

---

<sup>1</sup>See <https://www.federalregister.gov/documents/2020/08/28/2020-16872/hazardous-and-solid-waste-management-system-disposal-of-coal-combustion-residuals-from-electric>  
Phase one part one: <https://www.federalregister.gov/documents/2018/07/30/2018-16262/hazardous-and-solid-waste-management-system-disposal-of-coal-combustion-residuals-from-electric>. *"A Holistic Approach to Closure Part A: Deadline to Initiate Closure and Enhancing Public Access to Information."*<sup>1</sup>

1 has posted its work as it developed the Closure Plan and all other related compliance  
2 reports on our public website. The most recent version of the Closure Plan is updated  
3 to reflect the Company's new NPDES Permit that, in accordance with Effluent Limit  
4 Guidelines, does not allow for the discharge of any legacy contact water from the  
5 impoundments after December 31, 2023. The company currently has a Class 4 Cost  
6 Estimate, per the AACE Guidelines, of \*\* [REDACTED] \*\* to complete the closure.  
7 This estimate does not currently include the rapidly rising cost of fuel, petroleum  
8 distillates, or other commodities that may impact the work.

9 **Q. What has the Company done to refine that estimate?**

10 A. The Company issued a purchase order to the manufacturer of the geosynthetic closure  
11 cap materials in early March 2022, which is approximately \*\* [REDACTED] \*\* of the total cost.  
12 The Company is currently performing some ash grading activities to allow for  
13 dewatering of the impoundment and move ash close to final design grades. When this  
14 activity is near completion a request for proposals (RFP) will be released to qualified  
15 geosynthetic installers for the remaining work to be bid. Upon receipt of the bids the  
16 cost estimates will be revised to a Class 1 Estimate and the work will commence.

17 **B. Developing a Decommissioning Plan**

18 **Q. Has the Company developed a plan of final disposition for the facility?**

19 A. Yes, with a three-phased plan to be executed over the coming years. The Company  
20 completed Phase 1, the initial decommissioning analysis and studies of the facility. The  
21 studies completed were to determine the final disposition of Unit 1 within the  
22 Company's overall decommissioning plan. Based on these findings, the Company  
23 plans to demolish the unused portions of Unit 1 while maintaining operations of the  
24 Asbury Renewable Operations Center for the Company's renewable generation plants.

1 The memo contained in **Confidential Direct Schedule DWL-1** includes the summary,  
2 findings, schedule, preliminary cost estimates, and supporting reports for the Phase 1  
3 Studies.

4 Phase 2 includes the development of work plans, schedules, engineering plans,  
5 and specifications, expound on and execution of the Isolation Study, asbestos removal,  
6 completion of NPDES modifications, and risk register mitigations. Phase 2 will  
7 conclude with the preparation of the bid documents for the demolition of the selected  
8 facilities and is anticipated to be complete by the Q2-2022 timeframe. The Company  
9 is currently working on certain scopes of Phase 2.

10 Phase 3 is planned to include finalization of bid documents, revision of cost  
11 estimates, bid administration, construction management, demolition of the facilities,  
12 reporting, and project accounting. Phase 3 is tentatively scheduled to be completed in  
13 2024, subject to the scope and timing of required engineering work and the results of  
14 Phase 2.

15 **Q. Did the Company engage a qualified consulting firm to assist in developing the**  
16 **Phase 1 plan?**

17 A. Yes, the Company retained Black and Veatch (“B&V”), one of the top-ranked design  
18 firms in fossil fuel generation and the original engineering firm that designed Asbury  
19 Unit 1. B&V was retained in August 2019 to perform a multi-part study to support  
20 Phase 1 of the Asbury decommissioning. This work included the initial retirement  
21 planning process and provided technical guidance and support to the Company’s  
22 decision-making process for the final disposition of the facility.

23 **Q. Please describe the findings of Phase 1.**

1 A. Phase 1 included an internal meeting to discuss the possibility of repurposing Asbury  
2 into the Asbury Renewable Operations Center and document major items to be  
3 cognizant of should the process move forward. Phase 1 also included two market  
4 studies to determine “bookend” values of the facility; one if the operating facility was  
5 to be sold on the open market to another owner-operator and the other to determine an  
6 estimate of razing the facility.

7 The Fair Market Valuation Report found that the facility had a \*\* [REDACTED]  
8 [REDACTED] \*\* meaning the Company would have to pay someone \*\* [REDACTED]  
9 [REDACTED] \*\* to purchase and operate the facility in its state at the time and assume all  
10 associated liabilities. The Demolition Order of Magnitude Report estimated the cost to  
11 raze the in-scope facilities to be approximately \*\* [REDACTED]  
12 [REDACTED] \*\*. While not part of Phase 1, it  
13 is important to note that this estimate was further refined in late 2021 to a Class 4  
14 Intermediate estimate, per the AACE guidelines, to a cost of approximately  
15 \*\* [REDACTED]  
16 [REDACTED] \*\*. Please see the memo contained in **Confidential Direct Schedule**  
17 **DWL- 2**. This updated estimate does not include the work performed under Phase 1  
18 and 2. An aerial photograph from this report which depicts these facilities is provided  
19 below:



1

2

Figure 1 – Facilities Identified for Demolition

3

4

5

6

7

8

9

A study of Unit 1’s equipment was performed to establish potential for secondary markets and begin the work for isolating Unit 1 from the remaining onsite facilities to support Asbury Renewable Operations Center. The Equipment Study was also shared with external vendors through B&V to explore whether any additional markets existed for the unit. This endeavor was not successful. Upon identifying no viable markets for the operating facility, the Company then explored the middle-ground of the “bookends”, Abandon-In-Place (“AIP”).

10

11

12

13

14

15

AIP uses a minimalistic approach for securing the plant and equipment that will no longer be used. A cost estimate and summary report were performed to analyze the scope of work needed to safely abandon the structures while still operating the Asbury Renewable Operations Center over the coming ten years. Risk registers were then created to summarize and document the risks associated with demolition and abandoning Unit 1. Finally, a summary letter was prepared by B&V of the work

1 completed. The B&V reports are found in attachments within **Confidential Direct**  
2 **Schedule DWL-1**.

3 **Q. Why was demolition chosen over abandoning-in-place?**

4 A. While the AIP scenario has a lower initial cost, the ongoing safety and environmental  
5 risks outweigh the temporary savings. To maintain an abandoned fifty-year-old power  
6 plant at an operating facility, the Asbury Renewable Operations Center, there would be  
7 an initial expense and ongoing expenses to keep the facility compliant and safe. These  
8 expenses borne by the Company, and ultimately our customers, over the next ten years  
9 has been estimated at approximately \*\* [REDACTED] \*\* – see  
10 **Confidential Direct Schedule DWL-1**, Abandon-In-Place Cost Estimate (2020), p.  
11 115. The AIP scenario should also not be considered an in lieu of demolition plan, but  
12 instead delaying the eventual demolition of Unit 1. Within the Abandon-In-Place Cost  
13 Estimate Report, B&V provided the following:

14 It should be noted that the cumulative cost in 2030 at the end of the 10-  
15 year period does not significantly approach the estimated demolition  
16 cost of \*\* [REDACTED] \*\*. However, these should be considered costs  
17 to Liberty Utilities (and the rate payers) for deferral of the demolition  
18 project, thus adding to the overall cost of the Asbury Plant.

19  
20 In addition to increasing the ultimate cost of retirement and removal of the plant, a ten-  
21 year delay in final removal would also further contribute to inter-generational customer  
22 inequity, by distancing the customers that benefitted from Asbury's Unit 1 energy  
23 production from those customers paying for its demolition.

24 To support options analysis and prioritize the scope and sequencing of  
25 activities, the Company and B&V developed risk registers for both AIP and demolition  
26 scenarios, see **Confidential Direct Schedule DWL-1**, Abandon-In-Place Risk  
27 Register (2020), p. 116-120 and Demolition Risk Register (2020), p. 121-128. When

1 comparing the risks of each scenario, the demolition scenario appears to carry less long-  
2 term risk exposure to employees, contractors, customers, and the Company. The  
3 greatest risks identified for this option involve the potential of physical harm to humans  
4 from deteriorating structures and potential exposure to remaining environmentally  
5 sensitive items, which may get worse over time. The AIP scenario would have also  
6 required frequent re-assessments and risk register updates in the event of future events  
7 affecting the site, such as regulation changes, damage to remaining facilities, extreme  
8 weather or other events impacting the Company's decisions.

9 Having considered these risks and their economic implications, the Company  
10 decided to proceed with the demolition of Unit 1.

11 **Q. What activities are involved in Phase 2?**

- 12 A. Over the next year, we anticipate performing the following scopes of work:
- 13 a. asbestos identification and quantification study;
  - 14 b. Unit 1 engineering for isolation of the utilities;
  - 15 c. Construction work to isolate and repower the Asbury Renewable Operations  
16 Center from Unit 1;
  - 17 d. continued compliance-driven modifications;
  - 18 e. certain risk register mitigations; and
  - 19 f. on-going development of demolition plans and associated work specifications;
  - 20 g. Removal of asbestos.

21 **Q. When does the Company expect to complete Phase 3 and at what cost?**

- 22 A. Upon completion of Phase 2, the Company will prepare an execution strategy, which  
23 will include the demolition scope of work. The Company will follow an approach for  
24 contracting and execution of the demolition of Asbury similar to the approach used for



1 the Riverton Units 7, 8, and 9 demolition performed in 2017. Currently, the Company  
2 anticipates completing the demolition of Unit 1 in 2024. Current Phase 3 cost estimates  
3 have been provided within Confidential Direct Schedule DWL-2; Asbury Station  
4 Demolition/ Decommissioning Estimate Table 3. This estimate amounts to \*\*  
5   
6   
7   
8   
9   
10   
11   
12   
13   
14   
15   
16   
17   
18   
19   
20   
21   
22   
23

the Riverton Units 7, 8, and 9 demolition performed in 2017. Currently, the Company anticipates completing the demolition of Unit 1 in 2024. Current Phase 3 cost estimates have been provided within Confidential Direct Schedule DWL-2; Asbury Station Demolition/ Decommissioning Estimate Table 3. This estimate amounts to \*\* in costs and is a Class 4 Budget Estimate per the Association of Cost Engineering guidelines, or -30% to +50% accuracy. Cost estimates will be updated as the scope of work is established, quantities are determined, and bids are received. The Company will continue exploring cost savings, contracting, and execution strategies while developing these plans. Work for Phase 1 and Phase 2 is expected to be completed by Q2-2022 and is forecasted to cost approximately \*\* - which is not part of the Phase 3 estimate of \*\*. The Company is proposing these costs be included in its energy transition costs balance. In addition, the Company will continue to track these costs for the decommissioning and retirement of Asbury Unit 1 as previously ordered by the Commission. Refer to Company witness Charlotte T. Emery's direct testimony for further discussion on this item.

**C. Repurposing Existing Asbury Assets**

**Q. What is the Asbury Renewable Operations Center?**

A. The Company repurposed certain Asbury facilities to host the operations and maintenance activities of the Kings Point, North Fork Ridge, and Neosho Ridge wind farms (collectively, the "Wind Projects"), the Prosperity Solar Facility, and other renewable generation facilities that may be contemplated in the future. To support the personnel that are operating and maintaining the Wind Projects, the Asbury Renewable Operations Center is using the former Asbury office and break room facilities, the

1 maintenance buildings, parking areas, and supporting infrastructure. An aerial  
2 photograph showing the assets remaining in use is provided in Figure 2 below.

3 **Q. Please continue to explain how the Asbury Renewable Operations Center is being**  
4 **utilized.**

5 A. The facility houses approximately 26 employees responsible for inventory  
6 management, engineering, operations, purchasing, and maintenance of these facilities.  
7 It also is the location of the primary warehouse for inventory, tools, and equipment.  
8 The Vestas long-term maintenance-contract employees and their associated equipment  
9 and inventory are located on the site as well.

10 **Q. What renewable generation resources will be operated from the Asbury**  
11 **Renewable Operations Center?**

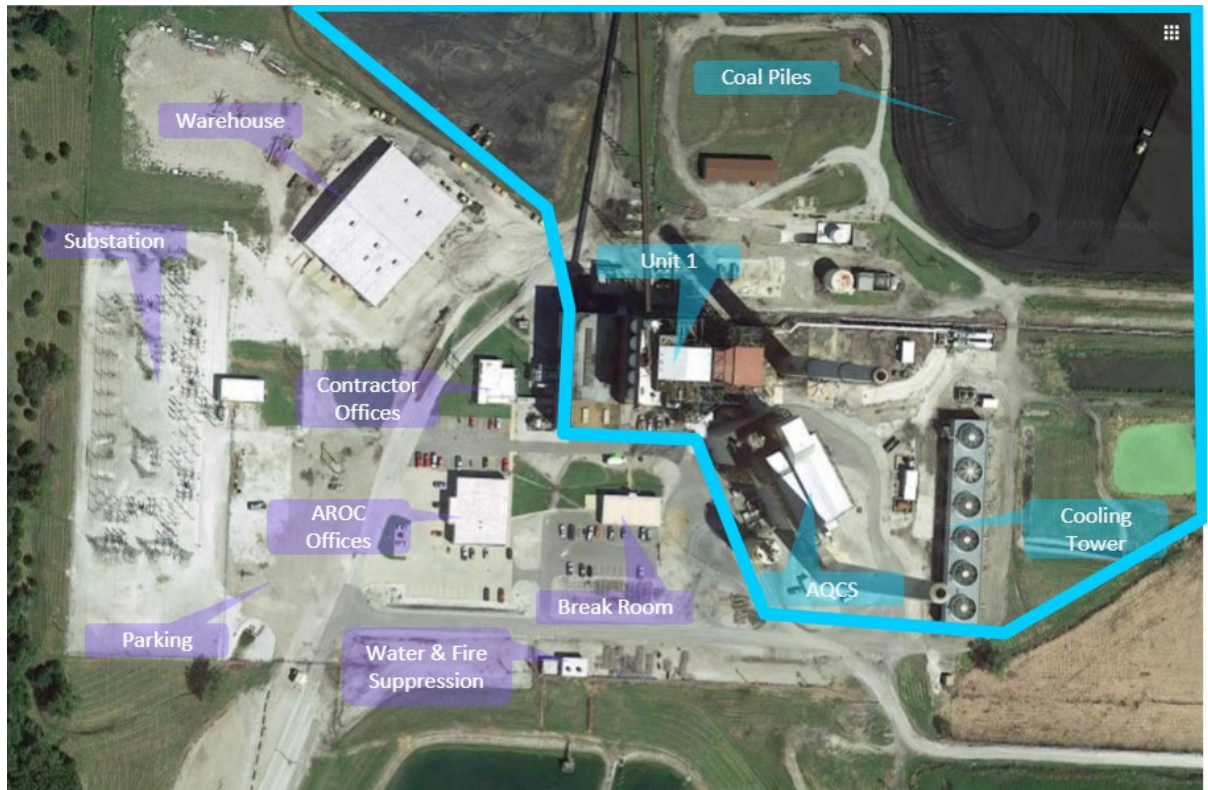
12 A. The Company's Wind Projects, the Prosperity Solar Facility, other future community  
13 solar facilities, and future solar and battery distributed energy resources will be  
14 operated from the former Asbury plant site.

15 A control room has been established in the administration building that will be  
16 operated 24/7 and currently has control of the Wind Projects and the Prosperity Solar  
17 Facility. The control room can be expanded to include future renewable generation  
18 assets, if necessary.

19 **Q. What specific facilities have been repurposed?**

20 A. The following items are being utilized by the Asbury Renewable Operations Center:  
21 administration building, maintenance building, break room building, old admin  
22 building, land, fire suppression and detection, rail spur, warehouses, and the related  
23 infrastructure supporting these facilities. These repurposed in-service facilities

1 represented approximately \$12.8M of net plant (excluding general plant assets<sup>2</sup>) at  
2 March 31, 2020. An aerial photograph, with items identified in purple remaining in use,  
3 is provided in Figure 2.



4  
5 Figure 2 – Remaining Facilities Indicated in Purple

6 **Q. Why was the Asbury site chosen for the Renewable Operations Center?**

7 A. Asbury’s centralized location relative to the Wind Projects made the site an ideal  
8 candidate on location alone. Other attributes that led to the decision to host the  
9 renewable operations center at Asbury include warehouse and office facilities that met  
10 Vestas’ minimum space requirements, ample parking, no schedule impacts due to  
11 building construction, existing fiber communication lines, co-located point of  
12 interconnection with North Fork Ridge, existing Company networking infrastructure,

---

<sup>2</sup> General plant assets include items such as office furniture/equipment and computer, communication, and transportation equipment.

1 offices and break rooms meeting Company requirements, and no additional permitting  
2 or zoning requirements. The repurposing of these assets came with minimal additional  
3 investment which would have otherwise been required nearly immediately, saving our  
4 customers money.

5 A large part of the workforce that previously supported Asbury Unit 1 had spent  
6 most of their careers there, and, as such, had housing and family plans built around  
7 working from the Asbury location. Maintaining the operations center at Asbury and  
8 primarily staffing with legacy employees allowed an easy and welcomed transition for  
9 those employees.

10 For all of these reasons, Liberty chose the Asbury campus for repurposing.

11 **Q. What work must be completed to operate the Asbury Renewable Operations**  
12 **Center?**

13 A. Currently, the Asbury Renewable Operations Center is fully operational. Minimal  
14 improvements were made to create a new control room in the existing office building.  
15 However, as the decommissioning and demolition plan proceeds for Unit 1, the  
16 infrastructure providing power, water, sewer, fire protection, etc. to the plant must be  
17 de-energized and isolated to safely perform the demolition work. This will create the  
18 need to install a new 12kV power source and install new utilities at the Asbury  
19 Renewable Operations Center. These items are identified and described within the  
20 **Confidential Direct Schedule DWL-1**, Isolation Study, p. 78-97. The Asbury  
21 Renewable Operations Center staff are currently expanding upon the Isolation Study  
22 as part of Phase 2 work to create engineered plans and specifications to perform the  
23 isolations. The work to repower the facility is expected to be completed in 2022. The  
24 cost of this new equipment and improvements will be treated as a typical capital

1 investment for the Company and not planned to be captured in the energy transition  
2 costs.

3 **Q. What other items will the Asbury Renewable Operations Center support for the**  
4 **Company?**

5 A. The Asbury Renewable Operations Center will also host the Company's Site Services  
6 Group. This is a group of skilled union employees that will maintain the balance of  
7 plant for the Wind Projects and support the Company's other generation plants. These  
8 employees report to the Plant Director – Wind.

9 The Site Services Group supports the Company's other generation plants with  
10 specialized services not available at each individual plant. The activities that this group  
11 performs include, but are not limited to the following:

- 12 • Confined Space Rescue Support Services
- 13 • Plant Outage Support Services
- 14 • Asbestos Remediation Services
- 15 • Mold Remediation Services
- 16 • Machine Shop Services
- 17 • Compliance Assistance
- 18 • Staff augmentation

19 **Q. Has the Company explored other options for the facility?**

20 A. Yes, during the Phase 1 study a lot of effort was put into the potential to repurpose  
21 Asbury Unit 1 to host additional renewables and/or battery storage. The Company went  
22 as far as soliciting proposals to perform an energy storage assessment to repurpose the  
23 structure for flow batteries and other technologies. These efforts to reuse the plant  
24 systems and the steel and concrete structure of Unit 1 were abandoned before

1 performing any detailed study or engineering. It did not take long to find that reusing  
2 specific purpose-built systems and structures that contain asbestos, fifty-year-old  
3 motors, valves, wires and pipes, with limited detailed digital drawings did not align  
4 with the Company's current preferred plan for renewable generation additions. The  
5 Company continues to search for economic and value-enhancing proposals for  
6 expanding the reuse of the remaining facilities and infrastructure and expects to do so  
7 well into the future. The Company's Integrated Resource Plan will continue to be the  
8 platform by which these opportunities are analyzed. It is one of Liberty's key focuses  
9 to continue the drive of sustainability and reuse of our natural resources. Finding a  
10 secondary use for a mine-mouth coal-fired power plant's land, substructure,  
11 superstructure, and campus would be a great reuse of our resources. Should an  
12 opportunity present itself, the Company will keep stakeholders informed.

13 **Q. Does this conclude your Direct Testimony at this time?**

14 A. Yes.

**VERIFICATION**

I, Drew W. Landoll, under penalty of perjury, on this 21st day of March, 2022, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Drew W. Landoll