

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of the 2022 Triennial )  
Compliance Filing Pursuant to 20 CSR )  
4240-22 by The Empire District Electric )  
Company d/b/a Liberty )

Case No. EO-2021-0331

**OPC’S REPORT IN RESPONSE TO 2022 TRIENNIAL  
INTEGRATED RESOURCE PLAN**

**COMES NOW** the Office of the Public Counsel (the “OPC”) and pursuant to 20 CSR 4240-22.080(8) and the Public Service Commission of the State of Missouri’s (the “Commission”) Order Granting Extension of Time (Doc. 16)<sup>1</sup> submits this Report in response to The Empire District Electric Company d/b/a Liberty’s (“Liberty”) Letter of Transmittal and 2022 Integrated Resource Plan (the “2022 Triennial IRP,” Doc. 11). As set forth in more detail in the attached memorandum, the OPC has identified three concerns with Liberty’s 2022 Triennial IRP. Due to the interdependence of the concerns, the OPC has identified a single suggested remedy. The OPC respectfully states as follows:

**I. Background**

On April 1, 2022, Liberty filed its 2022 Triennial IRP. (Doc. 11).

On August 29, 2022, the Staff of the Commission (“Staff”) filed its Report. (Doc. 14).

On that same day, the OPC filed a Motion for Extension, requesting a ten-day extension of time in which to file its report or comments regarding the 2022 Triennial IRP. (Doc. 15). The Commission granted the OPC’s request and stated that “[t]he time for filing a report or comments in accordance with 20 CSR 4240-22.080(8) is extended to September 8, 2022.” (Aug. 31, 2022 Order 1, Doc. 16).

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<sup>1</sup> References to document numbers represent the document numbers assigned in the Electronic Filing Information System (“EFIS”).

## **II. Applicable Legal Standard**

The Commission's electric utility resource planning rules require each "electric utility which sold more than one (1) million megawatt-hours to Missouri retail electric customers for calendar year 2009 [to] . . . make a filing with the commission every three (3) years on April 1." 20 CSR 4240-22.080(1). The rule sets forth a schedule directing when specific electric utilities will make these filings. *See id.*

The OPC may "file a report or comments" within 150 days after an electric utility's triennial compliance filing. 20 CSR 4240-22.080(8). "The report may . . . identify concerns with the utility's triennial compliance filing and may identify concerns related to the substantive reasonableness of the preferred resource plan or resource acquisition strategy." *Id.* As set forth in the rule, the OPC "shall make a good faith effort to provide at least one (1) suggested remedy for each identified . . . concern." *Id.*

## **III. Analysis**

As explained more fully in the attached memorandum authored by Ms. Lena Mantle, Dr. Geoff Marke, and Mr. John Robinett, the OPC has three (3) interdependent concerns with Liberty's 2022 Triennial IRP.

These concerns are:

- (1) Liberty did not properly evaluate its ability to provide reliable service;
- (2) Liberty did not evaluate the risk of Southwest Power Pool ("SPP") market volatility; and
- (3) Algonquin's goal of net-zero by 2050 has improperly guided Liberty's Resource Planning Process.

Also explained in the attached memorandum, due to the interdependence of these issues, the OPC has a single suggested remedy that is applicable to each of the identified concerns. *See*

20 CSR 4240-22.080(8) (requiring the OPC to “make a good faith effort to provide at least one (1) suggested remedy for each identified . . . concern.”). Specifically, the OPC suggests that for each plan modeled, Liberty should rerun the plan and limit the SPP energy available to meet Liberty’s energy requirements to ten percent of Liberty’s annual peak load. The number of hours and the amount of energy required but not provided from Liberty’s resources should be reported and included in the evaluation of its IRP and included in Liberty’s decision of preferred plan.

**IV. Conclusion**

WHEREFORE, the OPC submits the Report included in the attached Memorandum.

Respectfully submitted,

/s/ Lindsay VanGerpen  
Lindsay VanGerpen (#71213)  
Associate Counsel

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**CERTIFICATE OF SERVICE**

I hereby certify that copies of the forgoing have been mailed, emailed, or hand-delivered to all counsel of record this 8th day of September 2022.

/s/ Lindsay VanGerpen

## MEMORANDUM

To: Missouri Public Service Commission  
Official Case File: Case No. EO-2021-0331

From: Lena Mantle, Senior Analyst  
Geoff Marke, Chief Economist  
John Robinett, Utility Engineering Specialist  
Missouri Office of the Public Counsel

Subject: OPC Report to The Empire District Electric Company d/b/a Liberty 2022 Triennial Integrated Resource Plan

Date: 9/8/2022

### Overview of Concerns and Suggested Remedy

The Office of the Public Counsel (“OPC”) appreciates the opportunity to provide comments, concerns and a suggested remedy to the Commission in response to The Empire District Electric Company d/b/a Liberty’s (“Liberty” or the “Company”) 2022 Triennial Integrated Resource Plan (“IRP”). This memo outlines three separate but interdependent issues OPC has concerns about that need to be accounted for. Due to the interdependence of the issues, OPC has a single suggested remedy for the Commission’s consideration.

#### Concern #1: Liberty did not properly evaluate its ability to provide reliable service

The metric used by Liberty for measuring the reliability of each plan is how much dispatchable capacity is included in each plan in the year 2041. (Volume 7 Figure 7-2) It did not measure the ability to provide reliable service at any time before 2041. The ability of various plans to provide reliable service for Liberty’s customers should be a primary consideration across the twenty years of the resource plan when determining the preferred resource plan.

#### Concern #2: Liberty did not evaluate the risk of Southwest Power Pool (“SPP”) market volatility

While Liberty did evaluate certain risks and uncertainties associated with its resource plan, it did not include an evaluation of the risk of SPP market volatility. In its section regarding Extreme Weather Capability, Liberty stated that its “ability to serve load in extreme weather scenarios relies primarily on the fact that the utility meets the SPP reserve margin.” Liberty’s fuel and purchased

power costs in February 2021 shows that this reliance on the SPP reserve margin did not fare well, resulting in an extreme cost customers will be paying for the next 13 years.

The cost impact of a volatile market is directly tied to the availability of Liberty's resources at times of market volatility and that in turn is dependent upon the fuel source, and in the case of wind and solar resources, the amount of wind and sunlight available. Therefore, the resource plans that are the least reliable are also the plans that most expose customers to the volatility of the market.

### Concern #3 Algonquin's goal of net-zero by 2050 has improperly guided Liberty's Resource Planning Process

OPC is concerned that Algonquin's goal of net-zero by 2050 for Scope 1 and Scope 2 emissions across its business operations has driven Liberty's resource planning process and not the provision of energy services that are safe, reliable, and efficient, at just and reasonable rates, as required by Commission rule.

The fundamental objective of the Commission's resource planning process is to provide the public with energy services that are safe, reliable, and efficient, at just and reasonable rates, in compliance with all legal mandates. Algonquin's goal is not a legal mandate and should not be a primary consideration of the resource planning process.

The only true net zero resources are renewable resources. These resources are intermittent and the addition of net-zero resources decreases the ability of Liberty's resources to meet its customers' energy service requirements. While OPC is not adverse to a corporate goal of zero emissions, a corporate goal should not override Liberty's statutory requirement to provide safe, reliable, and efficient electricity at just and reasonable rates.

OPC's reliability concerns are not unfounded. Renewables make up roughly 30% of the generating capacity in the SPP but contribute only 12.4% of peak hour generation.<sup>1</sup> The introduction of performance-based accreditation and an increase in planning reserve margin from 12% to 15%

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<sup>1</sup> Lenoir, T. (2022) As renewable energy expands, focus turns to reliability contributions. *S&P Global Market Intelligence*. <https://www.spglobal.com/marketintelligence/en/news-insights/research/as-renewable-energy-expands-focus-turns-to-reliability-contributions>; and Southwest Power Pool (2022) Fast Facts: An Overview of the SPP System <https://spp.org/about-us/fast-facts/>

underscores the current green energy limitations when households and businesses need electricity the most.<sup>2</sup>

Within the past month, reliability concerns and supply chain issues have forced five U.S. utilities to delay planned power plant retirements including: CenterPoint Energy, Inc., Alliant Energy Corp., We Energies, Omaha Power District, NiSource Inc., and Ameren Missouri.<sup>3</sup>

Suggested Remedy to Concerns:

The suggested remedy for each of these concerns is, for each plan modeled, Liberty should rerun the plan and limit the SPP energy available to meet Liberty's energy requirements to ten percent of Liberty's annual peak load. The number of hours and the amount of energy required but not provided from Liberty's resources should be reported and included in the evaluation of its IRP and included in Liberty's decision of preferred plan. This will provide more transparent and reasonable data to inform prudent decision-making.

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<sup>2</sup> SPP anticipates an additional 33GW of wind installation into its market by the end of 2025. Absent technological advances, the law of diminishing returns will increasingly become more pronounced as a result of basic supply-and-demand dynamics. That is, an increase in wind penetration will result in lower average revenues per kW of installed wind capacity.

<sup>3</sup> See OPC-1.


**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

**AFFIDAVIT OF LENA M. MANTLE**

STATE OF MISSOURI    )  
                                  )    SS.  
COUNTY OF COLE    )

**COMES NOW LENA M. MANTLE** and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *OPC Report to The Empire District Electric Company d/b/a Liberty 2022 Triennial Integrated Resource Plan* and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

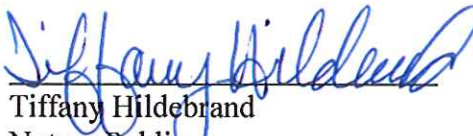
  
Lena M. Mantle  
Senior Analyst

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 8th day of September, 2022.



TIFFANY HILDEBRAND  
My Commission Expires  
August 8, 2023  
Cole County  
Commission #15637121

  
Tiffany Hildebrand  
Notary Public

My Commission expires August 8, 2023.

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

**AFFIDAVIT OF GEOFF MARKE**

STATE OF MISSOURI    )  
                                  )    SS.  
COUNTY OF COLE    )

**COMES NOW GEOFF MARKE** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *OPC Report to The Empire District Electric Company d/b/a Liberty 2022 Triennial Integrated Resource Plan* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

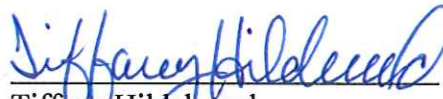
  
\_\_\_\_\_  
Geoff Marke  
Chief Economist

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 8th day of September, 2022.



TIFFANY HILDEBRAND  
My Commission Expires  
August 8, 2023  
Cole County  
Commission #15637121

  
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Tiffany Hildebrand  
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OF THE STATE OF MISSOURI**

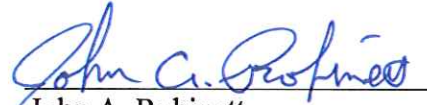
**AFFIDAVIT OF JOHN A. ROBINETT**

STATE OF MISSOURI    )  
                                  )  
                                  )  
COUNTY OF COLE    )

SS.

**COMES NOW JOHN A. ROBINETT** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *OPC Report to The Empire District Electric Company d/b/a Liberty 2022 Triennial Integrated Resource Plan* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

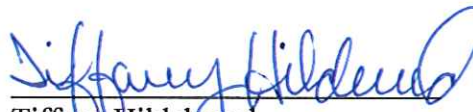
  
\_\_\_\_\_  
John A. Robinett  
Utility Engineering Specialist

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 8th day of September, 2022.



TIFFANY HILDEBRAND  
My Commission Expires  
August 8, 2023  
Cole County  
Commission #15637121

  
\_\_\_\_\_  
Tiffany Hildebrand  
Notary Public

My Commission expires August 8, 2023.