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Witness: Chris Kerr
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Electric Company d/b/a Liberty
Case No.: ER-2024-0261
Date Testimony Prepared: September 2025

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

Surrebuttal Testimony

of

Chris Kerr

on behalf of

The Empire District Electric Company d/b/a Liberty

September 17, 2025



Liberty™

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THE EMPIRE DISTRICT ELECTRIC COMPANY D/B/A LIBERTY
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
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1 **I. INTRODUCTION**

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

3 A. My name is Chris Kerr. My business address is 354 Davis Road, Oakville, Ontario,
4 Canada.

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

6 A. I am the Director, Grid Modernization Analysis for Liberty Utilities (Canada) Corp.
7 which is a subsidiary of Algonquin Power & Utilities Corp. (“APUC”).

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

9 A. I am testifying on behalf of The Empire District Electric Company d/b/a Liberty
10 (“Liberty” or the “Company”).

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

12 A. I hold a bachelor’s degree in electrical engineering from Western University which I
13 completed in 2007.

14 In 2009, I joined Toronto Hydro as an engineer on the maintenance team, assessing
15 equipment reliability and optimizing maintenance programs. In 2011, I began leading
16 the capital planning team for the west side of the city focusing on targeted reliability
17 improvement, including the first deployments of a new distribution automation
18 technology in 2013. In 2014, I began leading the long-term strategy group focused on
19 overarching asset management strategy development for all \$4B+ of distribution assets.
20 In 2016, I was selected to join the team responsible for deploying a new enterprise
21 resource planning (ERP) system where my role was to lead the implementation of the
22 enterprise asset management (EAM) component.

1 In 2018, I joined the Ontario Energy Board (OEB), the province's independent
2 economic regulator of electricity and natural gas utilities, as a project advisor on the
3 performance analytics team. From 2019 to 2022, I led the team through ensuring utility
4 compliance with annual reporting requirements and using that data from 50+ electric
5 distributors to calculate & assign stretch factors for annual ratemaking. My team also
6 brought a greater focus to ensuring that regulatory decisions were more data-driven,
7 through projects such as the institution of liquidity reporting requirements which
8 occurred during the COVID pandemic and through transforming the static distributor
9 yearbooks to an open-data approach, an achievement that was showcased through the
10 Information and Privacy Commissioner's Transparency Challenge.

11 In 2022, I joined Liberty as the Director of Grid Modernization Analysis focusing
12 on development of data-driven investment plans primarily across our electric operating
13 regions.

14 **Q. Are you adopting any direct testimony that was prefiled in this case?**

15 A. Yes. I am adopting the direct testimony of Dmitry Balashov, as Mr. Balashov has left
16 his position with Liberty.

17 **Q. What is the purpose of your surrebuttal testimony in this proceeding before the**
18 **Missouri Public Service Commission ("Commission")?**

19 A. I address the rebuttal testimony submitted by Staff witness Amanda Arandia and the
20 Office of Public Counsel ("OPC") witnesses Dr. Geoff Marke and Manzell Payne on
21 the following matters:

- 22 • Value of Lost Load study;
- 23 • PISA Cost-Benefit Analysis for Projects >\$1M; and
- 24 • Transportation Electrification Pilot Program.

1 **II. VALUE OF LOST LOAD (“VOLL”) STUDY**

2 **Q. What is the status of the study?**

3 A. The VOLL study being referenced in this case is a component of the broader
4 Interruption Cost Estimate (“ICE”) Calculator update, a three-phase project spanning a
5 number of utilities all across the continental United States. Phase II of the update
6 specifically includes the surveying of Missouri utility customers and inclusion of their
7 results into the ICE Calculator. Results of those surveys are currently being collated
8 and refined, with the final results to be incorporated into the Phase II release of the ICE
9 Calculator.

10 **Q. What is the timing of the ICE Calculator update with the study results?**

11 A. On August 4, 2025, Lawrence Berkeley National Laboratory (“LBNL”) hosted a
12 webinar to formally release the updated ICE Calculator with Phase I results. In the
13 presentation they indicated that the Phase II update with Missouri utility results is
14 expected in late 2025 or early 2026. A copy of that presentation is being provided as
15 Surrebuttal Schedule CK-1.

16 **Q. What are the proposed next steps after the ICE Calculator is updated in Phase II?**

17 A. As requested by Amanda Arandia from Staff, Liberty agrees that a meeting to jointly
18 review the results would be valuable. Testimony from Dr. Marke of OPC indicates a
19 desire to leverage these results as an input to the emergency conservation plan tariff for
20 Liberty, Ameren Missouri, Evergy Metro, and Evergy west. While Liberty agrees with
21 the idea of working collaboratively on this, there are important details that need to be
22 considered.

23 **Q. How are the results of the VOLL study proposed to impact the emergency**
24 **conservation plan tariff?**

1 A. The results of the VOLL study can impact the plan proposed by Dr. Marke in two
2 distinct ways, one being the timing of the new tariff and the other being the feasibility
3 of changes to it. Regarding the timing, Dr. Marke proposed that the VOLL curtailment
4 price thresholds be in place “no later than the end of the first quarter of 2026 for
5 approval.”¹ Given the commitment from LBNL to update the ICE Calculator with
6 Missouri specific survey results by early 2026, the timeline proposed by Dr. Marke
7 likely isn’t feasible. Liberty proposes that OPC take part in the meeting proposed by
8 Staff to assess the VOLL results once they are published and work collaboratively with
9 the Company to propose a timeline that works for all. The feasibility of changes to the
10 tariff using the VOLL results in the manner suggested by Dr. Marke is a separate issue
11 with many factors of complexity and is discussed in detail in the surrebuttal testimony
12 of Company witness Aaron J. Doll.

13 **III. COST-BENEFIT ANALYSIS FOR PISA PROJECTS >\$1M**

14 **Q. Please outline the work that was done on this prior to the 2025 PISA submission.**

15 A. In accordance with the Fourth Partial Stipulation and Agreement in Case No. ER-2021-
16 0312 (the “stipulation”) two meetings were held between Liberty and stakeholders
17 about the approach to cost-benefit analysis (“CBA”) including dependencies on the
18 VOLL study and the expected timeline for filing the CBA. The first meeting took place
19 in September 2022, and the second meeting was in February 2023. At meeting #2 it
20 was made clear that the first filing of CBA for projects >\$1M would be in the 2025
21 PISA report. Dr. Marke and all other stakeholders had agreed to this timeline as noted
22 in Dr. Marke’s testimony.

23 **Q. Has the CBA been filed in accordance with the stipulation?**

¹ Marke rebuttal testimony, p.15.

1 A. Yes. In February of 2025, Liberty filed its 2025 PISA Report and within the report is
2 Exhibit 4, “Cost-Benefit Analyses and Performance Metrics for Planned Capital
3 Investments of Greater than \$1 Million.” Dr. Marke acknowledges in his testimony that
4 Liberty, OPC, and Staff had all agreed to postpone a cost-benefit analysis submission
5 until two conditions were met: (1) that the results of the VOLL study could be used,
6 and (2) that the newly integrated software could be put into place. Even though the
7 VOLL study results have not yet been finalized, Liberty has still delivered on its
8 commitment to file its CBA with its 2025 PISA report.

9 **Q. Has any information to compliment the filed CBA been provided directly to**
10 **stakeholders including OPC?**

11 A. Yes. A stakeholder meeting was held on March 21, 2025, where Liberty presented a
12 summary of the contents of the PISA filing including a slide where I personally spoke
13 on the CBA contained within Exhibit 4. Invited to the meeting were numerous members
14 of OPC including Marc Poston, Nathan Williams, Dr. Marke, and Lena Mantle. Also
15 present at that meeting was Dmitry Balashov, a former Liberty employee who left the
16 Company in 2025, but was able to attend to help with the transition of CBA ownership.
17 At the meeting, OPC stated that they hadn’t yet reviewed the CBA component of the
18 report in detail and might follow-up with questions.

19 **Q. Were any questions raised by stakeholders about the CBA component of the 2025**
20 **PISA filing?**

21 A. Yes, on two occasions. Firstly, during the March 21st meeting where OPC specifically
22 stated that they hadn’t read the filing in detail and would need some time to digest it,
23 but did ask some questions about metrics regarding topics of transformer consolidation,
24 how the average age of equipment is trending, and how much aged equipment will be

1 replaced as a result of the IJJA project (specifically conductor replacement and smart
2 switch installation). Secondly, in April 2025, a series of questions on the PISA filing
3 was submitted to Liberty by John Robinett of OPC. The nature of the questions was
4 largely similar to the questions posed during the March 21, 2025, meeting and provided
5 an opportunity for detailed responses backed by additional data beyond that which was
6 already provided in the PISA filing. The CBA component of the filing was referenced
7 specifically for a question asking about the average age of assets. The responses to all
8 of OPC's questions were provided on April 21, 2025, in Docket EO-2019-0046.

9 **Q. Is OPC's claim that none of the foregoing actions of the stipulation have occurred**
10 **yet² accurate?**

11 A. No, that claim is incorrect. As demonstrated by the timeline of events, Liberty has taken
12 multiple steps consistent with the stipulation. The Company has met with both Staff
13 and OPC on at least two occasions to discuss key parameters and assumptions, has filed
14 the CBA as part of the 2025 PISA Report as committed, and has provided detailed
15 responses to OPC's follow-up questions regarding that filing. These actions reflect
16 Liberty's good-faith effort to comply with the stipulation and maintain transparency
17 throughout the process. OPC's assertion that none of these steps have occurred is
18 factually inaccurate.

19 **IV. TRANSPORTATION ELECTRIFICATION PILOT PROGRAM ("TEPP")**

20 **Q. Have any specific changes been proposed to the TEPP to take effect before the**
21 **current expiration date of October 2027?**

22 A. Yes. In recognition of the challenges the Residential Smart Charge Program ("RSCP")
23 is experiencing as a result of the charger vendor, ENEL, abruptly exiting the market,

² Marke rebuttal testimony, p.16.

1 Staff member Sarah Lange proposed in direct testimony that the date to suspend new
2 enrollments be advanced from the existing date of October 15, 2026, to the effective
3 date of rates in this case.³ In rebuttal testimony, Staff member Amanda Arandia
4 referenced Ms. Lange's testimony and agreed with the proposal for the same reasons
5 and in addition, recommended that Liberty hold an additional mid-term check-in to
6 review program results thus far and assess if further adjustments are required before
7 the program is concluded.

8 **Q. Does Liberty agree with the proposed path forward?**

9 A. Yes. Liberty agrees that an additional check-in with all interested parties would be
10 valuable to review any developments since the submission of direct testimony in this
11 case. Liberty is in general agreement with the idea to suspend enrollments in the RSCP
12 earlier than currently stipulated in the tariff and as such is willing to work with Staff
13 and any other interested parties to revise the tariff accordingly.

14 **Q. Has the program demonstrated value to date?**

15 A. Yes. As highlighted in Dmitry Balashov's direct testimony and further supported by
16 numerous data request responses elaborating on the program's uptake and insights
17 generated, the program has been valuable in enabling the deployment of EV chargers
18 and providing Liberty with insights on charger usage that can be extrapolated to assist
19 with broader system planning. Liberty materially disagrees with comments in the
20 rebuttal testimony from Manzell Payne of OPC claiming that "the TEPP is not cost-
21 effective"⁴ and that the low adoption rate makes the program unreliable for measuring
22 things like utilization, load impacts, and emissions reduction. Liberty's TEPP has been

³ Sarah L.K. Lange direct testimony, p. 76.

⁴ Manzell Payne rebuttal testimony, p.16.

1 the very definition of a pilot program, which is a small-scale study to evaluate factors
2 of feasibility, cost, and adverse events used to improve program design before
3 deployment of a full-scale project.⁵ The fact that the adoption rates achieved are far
4 from what was originally contemplated when the program thresholds were developed
5 is only reflective of a gap between future expectations and actual market conditions.
6 Numerous factors impacting EV ownership outside of Liberty's control evolved
7 quickly since the program started, including rising interest rates, the removal of rebates
8 or incentives to purchase EVs, and the proliferation of new EV chargers. Had those
9 factors moved in the opposite direction, it's highly likely that TEPP adoption rates
10 would be far higher than they are today. The purpose of the TEPP was to facilitate
11 charging infrastructure for our customers' EVs in light of market conditions, not deploy
12 charging infrastructure to drive EV adoption in spite of market conditions. To this end
13 the TEPP has been successful in providing chargers when and where needed, collecting
14 information on customer uptake of EVs, gaining analytical system demand insight from
15 charging patterns, and ensured that Liberty is actively providing options for customers.

16 **Q. Were other changes proposed for the program in rebuttal testimony?**

17 A. Yes. Testimony from Manzell Payne of OPC proposed that "the Commission stop
18 Liberty's Transportation Electrification Pilot Program at this time."⁶ It's unclear to
19 Liberty if this proposal means to suspend new enrollments to all programs within the
20 TEPP, similar to what Staff member Lange proposed for the RSCP, or if OPC is
21 proposing that the official end date of the program be advanced from October 2027 to
22 now. Liberty would like to seek clarification on this and proposes that the additional

⁵ https://en.wikipedia.org/wiki/Pilot_experiment

⁶ Manzell Payne rebuttal testimony, p.18.

1 check-in session previously discussed would be an ideal time for discussion. The
2 Company would like to note that abruptly ending the program nearly two years in
3 advance is not demonstrative of keeping the customers' interest in mind and could
4 cause harm to customers who either recently enrolled or were thinking of enrolling
5 soon. Liberty would prefer to focus on what has been learned thus far through the TEPP
6 and use that feedback from customers to adjust its offerings to better suit customer
7 needs. A great example of this is the high number of residential customers who had
8 approached the Company to take part in the RSCP, but were ineligible as they had
9 already purchased their own charger. Incorporating a "bring your own device" option
10 to the TEPP would not only enable further uptake of the program as OPC would prefer
11 to see, but also reduce the operating burden of the program if the chargers are third-
12 party owned.

13 **V. CONCLUSION**

14 **Q. Does this conclude your surrebuttal testimony at this time?**

15 **A. Yes.**

VERIFICATION

I, Chris Kerr, under penalty of perjury, on this 17th day of September, 2025, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Chris Kerr