Date Filed: October 09, 2026

Witness: Lavelle A. Freeman and Elli Ntakou
Request from: Office of Education, Outreach, and Enforcement

Question:

(VEGETATION MANAGEMENT PROGRAM) Refer to Response to EOE-151. The interrogatory requested the Company to "provide the cost benefit analyses the Company performed for determining reliability projects for the 2025 Test Year"; however, no such BCA was provided.

a. Provide the 2024 Reliability Budget Optimization Tool (ReBOT) referenced in the response, along with the 2023 BCA.
b. Explain how the BCA was incorporated into the ReBOT and, if necessary, provide an exhibit demonstrating how the BCA inputs were used.

Response:

Please refer to EOE-364, Attachment 1, for details regarding the 2023 Benefit-Cost Analysis ("BCA") and an overview of the 2024 Reliability Budget Optimization Tool ("ReBOT") referenced in the Company's response to EOE-151[i].

The BCA was developed to evaluate the historical effectiveness of several reliability improvement strategies by analyzing the relationship between investment costs and observed reliability benefits. Specifically, the analysis examined more than $250 million of reliability investments completed between 2010 and 2020 and measured the resulting reliability impacts, including reductions in Customer Minutes Interrupted ("CMI") and Customers Interrupted ("CI"), by work type. The study produced estimates of the average reliability improvement and cost-effectiveness associated with each mitigation strategy.

The results of the BCA were subsequently incorporated into the ReBOT investment optimization model. ReBOT evaluates active outage zones, determines which mitigation strategies are applicable based on system configuration and operating characteristics, and applies the BCA-derived reliability improvement factors and cost assumptions to estimate the expected reliability benefits and cost-effectiveness of potential investments. For each outage zone, ReBOT calculates the anticipated reliability benefit associated with each applicable mitigation strategy and identifies the most cost-effective alternative. Recommended investments are then ranked across all programs based on estimated reliability benefit relative to cost and may be selected subject to budgetary constraints and reliability performance objectives.

Slides 16 through 23 illustrate how the BCA outputs are incorporated into ReBOT. As shown, historical outage and work management data were used in the BCA to develop cost and performance relationships by work type. These relationships, including estimated percentage reliability improvements and unit cost assumptions, serve as inputs to ReBOT and are applied to current outage zone performance data to estimate expected CMI reductions, project costs, and cost-effectiveness metrics. ReBOT then uses these calculations to prioritize investments and develop an optimized portfolio of reliability projects.

ReBOT is not a standalone application but rather a collection of SQL Server database tables, business rules, analytical calculations, and ETL (Extract, Transform, and Load) processes used to integrate and analyze outage, asset, and work management data. As such, the tool itself cannot reasonably be produced in response to this interrogatory. EOE-364, Attachment 2, provides a representative example of the most recent ReBOT output generated using the latest available system data.

The history of the BCA/ReBOT development Process is as follows:

- **December 2023**: Completion of the Benefit-Cost Analysis evaluating the historical effectiveness and cost-effectiveness of various reliability mitigation strategies.
- **January 2024 - October 2024**: Development of the ReBOT framework, including creation of database structures, analytical methodologies, and ETL processes necessary to address data quality, integration, and modeling challenges.
- **October 2024**: Preliminary recommendations were provided to Engineering for review and feasibility assessment, including evaluation of the top twenty device-level recommendations. Engineering feedback was subsequently incorporated into the model and prioritization logic.
- **2025 - June 2026**: Calibration and refinement period. Engineering feedback was continually incorporated to improve recommendation quality, increase the percentage of actionable recommendations, and enhance model performance. Additional analysis of the original BCA results was performed to normalize observed reliability impacts relative to overall Company reliability performance. ReBOT recommendations generated for the 2025 TripSaver program were used to support investment prioritization decisions.
- **June 2026**: First production-ready ReBOT output was used to develop proposed 2027 reliability work plans, including reconductoring projects, TripSaver installations, backbone sectionalizing projects, and radial recloser installations.

The Company has not included ReBOT outputs generated during 2024 because those results were produced during the initial development and testing phase of the tool and do not reflect subsequent model enhancements, calibration efforts, data quality improvements, and engineering feedback that were incorporated between 2025 and June 2026. During this period, the Company refined the underlying benefit assumptions, improved data integration processes, normalized historical

reliability results relative to overall Company performance, and incorporated engineering review of recommended investments to improve the quality and applicability of model outputs. Accordingly, the Company believes that the most recent 2026 ReBOT output, provided as EOE-364, Attachment 2, is the most representative and informative example of the tool's current functionality and investment prioritization methodology. Providing earlier developmental outputs could be misleading because they do not reflect the current model logic and capabilities used to support reliability investment planning.

Prior Referenced Response:

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[i] EOE-151 Question:

(VEGETATION MANAGEMENT PROGRAM) Refer to Exhibit CLP-ELP-1, p. 67. Please provide the cost benefit analyses the Company performed for determining reliability projects for the 2025 Test Year.

EOE-151 Response:

As part of compliance with Docket No. 17-12-03RE08, the Company performed the referenced Benefit-Cost Analysis ("BCA") in 2023 using historical reliability projects, their associated costs, and their observed impact on SAIDI and SAIFI.

In 2024, the BCA results were incorporated into the Reliability Budget Optimization Tool ("ReBOT"). ReBOT uses the BCA results as a baseline to determine the cost-optimal reliability mitigation measure for each zone. It first creates a list of zones eligible for reliability mitigation by evaluating historical outage performance at the individual-zone level. The tool then estimates the potential reduction in customer interruptions and customer minutes of interruption associated with various eligible remediation alternatives. The estimated reliability benefit of each alternative is then evaluated relative to its estimated project cost using $/SAIDI or SAIFI per unit reduction as the metric to determine the most cost-effective mitigation measure. This process identifies and prioritizes potential device deployments and other remediation alternatives that are expected to provide the greatest reliability improvement in a cost-effective manner.

The initial ReBOT recommendations were produced in late 2024. Due to the timing of the Company's project-planning cycle, the recommendations were used to support project selection for the 2025 and 2026 TripSaver Program. ReBOT's use was subsequently expanded to support both the TripSaver, Smart Switch and reconductoring Programs in 2027.

ReBOT is an evolving analytical tool, and the Company continues to refine its methodology and expand its application as additional experience and data become available.

The BCA and ReBOT are used as project-screening and prioritization tools and are not intended to predict the precise impact of future projects or programs. Final project selection also considers engineering judgment, constructability, local system conditions, operational requirements, and other project-specific factors. As such, benefits and costs of each project may differ from the tool's results for a multitude of reasons.