Date Filed: September 28, 2026

**Witness: Lavelle A. Freeman and Gerhard Walker**
**Request from: Office of Consumer Counsel**

**Question:**

Refer to Exhibit CLP-TSP-1 at 49. For each proposed substation or feeder capacity project, provide the following information:

a. Traditional upgrade scope and total cost, including labor, materials, overheads, contingency, etc.
b. Study year and forecast year(s).
c. Traditional project's planned in-service date.
d. Earliest feasible NWA deployment year and the final year of the analysis period.
e. Substation, feeder and geographic location of the constraint and potential NWA.
f. For each forecast year, provide:
    i. Maximum capacity exceedance in MW;
    ii. Energy above the applicable equipment rating in MWh;
    iii. Annual increase in the exceedance in MW and MWh;
    iv. Maximum continuous duration of the exceedance in hours;
    v. Number of exceedance events and peak days;
    vi. Whether peak days are consecutive; and
    vii. Applicable normal or contingency equipment rating.
g. Identify the NWA technologies and resource mix evaluated, including the assumed percentage or capacity of battery storage, solar PV, demand response, energy efficiency and other resources.

Provide the information in native, machine-readable format, together with the hourly load forecast and applicable equipment rating used to calculate each annual MW, MWh and duration value.

**Response:**

**Substation Capacity Projects:**

a. CLP-TSP-1 at 49 refers to the capital projects in Company's Sustained Plan that are identified and will be developed to meet system needs and objectives. The specific projects related to peal load and capacity needs are listed in CLP-TSP-3 at 94-95. Presently, these projects are all at the conceptual stage and therefore are not yet at the stage where detailed engineering studies and evaluation of solutions and alternatives have been completed. Engineering scopes, cost estimates, and materials will be defined as the projects are

developed through the Eversource Capital Project Approval Process and receive project funding.

b. Please refer to OCC-591, Attachment 1. The excel worksheet contains a separate workbook with each substation forecast for the sustained performance plan.

c. The substation capacity projects identified in OCC-591, Attachment 1, do not currently have planned in-service dates as these projects are still in the conceptual stage and do not have approved scopes of work.

d. The forecast evaluation years are noted in column headers in OCC-591, Attachment 1 (2026-2035). As noted above, these projects are in the very early stage of development. As the Company evaluates and develops solutions and alternatives to meet the identified need, NWA solutions will be considered in accordance with the Company's distribution planning process in the DSPG (see CLF-SC-023, Attachment 1). A variety of solution alternatives will be developed to resolve the constraint including, but not limited to, increasing equipment ratings (e.g., using cooling techniques), transferring load, upgrading equipment, and applying non-wires solutions.

e. CLP-TSP-3 at 21-23 shows geographic location of constrained areas within the system. Substation capacity constraints that comprise the identified need are within the area served by the substation and are based on violation of substation equipment Emergency Thermal Limits during the loss of a single element within the substation fence. A typical example is the loss of the largest transformer for each voltage class within a substation.

f. Please refer to OCC-591, Attachment 1.

- For Part (i): Refer to "MVA Remaining", column (K)
- For Part (ii): Because these projects are still at the conceptual stage, this analysis has not yet been completed. However, it will be completed as part of the NWA solution development.
- For Part (iii): Because these projects are still at the conceptual stage, this analysis has not yet been completed. However, it will be completed as part of the NWA solution development.
- For Part (iv): Because these projects are still at the conceptual stage, this analysis has not yet been completed. However, it will be completed as part of the NWA solution development.

- For Part (v): Because these projects are still at the conceptual stage, this analysis has not yet been completed. However, it will be completed as part of the NWA solution development.
- For Part (vi): The Company's forecast is based on a 3-day weighted average temperature humidity index.
- For Part (vii): Refer to "LCC", column (I) and "Firm", column (L) for substation emergency rating, which is the trigger for the capacity projects in the Sustained Performance Plan.

g. The substation capacity projects identified in OCC-591 Attachment 1, do not currently have NWA solutions identified as these projects are still in early development stages. The projects will all undergo a full NW screening to determine the suitability of an NWA as a potential solution, and viable NWA solutions will be reviewed and analyzed.

**Feeder Capacity Projects:**

a. Please refer to OCC-594, Attachment 2 CONFIDENTIAL, Feeder Capacity Projects for traditional upgrade scope and total cost, including labor, materials, overheads, contingency, etc.

b. Please refer to OCC-594, Attachment 2 CONFIDENTIAL, for Feeder Capacity Projects for the study year. Distribution capacity projects are based on actual metered data and have been designed in accordance with the Distribution System Planning Guide to provide safe reliable power. Forecasting is not performed at the distribution line level as these capacity projects can be executed in a short timeframe when compared to substation capacity projects.

c. Please refer to OCC-594, Attachment 2 CONFIDENTIAL, for Feeder Capacity Projects for the Traditional project's planned in-service date.

d. Line projects within the 2027–2031 plan have been designed in accordance with the Distribution System Planning Guide to provide safe reliable power. Projects approved after January 2025 have undergone the newly established NWA process laid out by PURA and have been reviewed by the process monitor and PURA, both concluding no further investigation is required. Please refer to the Non-Wires Solutions Process Cycle 1, Docket 25-08-08, Final Decision.[1]

[1] https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/4b2aa80a45d5fe8185258d5c0051dfbf/$FILE/250808-121025.pdf

e. Please refer to OCC-594, Attachment 2 CONFIDENTIAL, for Feeder Capacity Projects for the substation, feeder and geographic location of the constraint.

f. Forecasting is not performed at the distribution line level as these capacity projects can be executed in a short timeframe when compared to substation capacity projects. Please refer to OCC-594, Attachment 2 CONFIDENTIAL, for Feeder Capacity Projects for the following based on actual metered data:

    i. Maximum capacity exceedance in MW;

    vii. Applicable normal or contingency equipment rating

    The following data is not currently available:

    ii. Energy above the applicable equipment rating in MWh;

    iii. Annual increase in the exceedance in MW and MWh;

    iv. Maximum continuous duration of the exceedance in hours;

    v. Number of exceedance events and peak days;

    vi. Whether peak days are consecutive; and

g. Capacity NWA alternatives were evaluated with battery storage.