Date Filed: November 13, 2026

**Witness: Lavelle A. Freeman, Gerhard Walker, Juan F. Martinez and Amparo Nieto**
**Request from: Connecticut Industrial Energy Consumers**

**Question:**
Please refer to the MCOS Direct Testimony at page 6, lines 9-14; page 18, lines 4-13; and page 19, lines 1-4.

a. Please provide any analysis or forecast the Company has of when its system, or individual bulk or distribution substations, would become winter peaking as a result of heat pump adoption, including for years after 2031.
b. Please identify the bulk substations that experienced an annual peak load in December or January in any of the years 2022 through 2025.
c. Please provide the heat pump adoption assumptions used in the MCOS study's analysis of load shapes through 2031.
d. Please explain the statement at page 19, lines 3-4, that "[i]n the longer-term, additional electrification will shift more cost responsibility to the winter evening hours," including the time frame the Company expects.

**Response:**

a. The Company has not developed a substation-level forecast that identifies when its system or individual substations would transition to winter peaking as no such transition is currently projected to occur within the 10-year forecast horizon. However, starting with the 2028 vintage forecast, the Company is planning to develop a stand-alone substation-level winter coldest day load forecast.

b. The Company currently has only one substation where winter and summer peak are on par and no substations where the winter peak exceeds the summer. The station in question is in Waterbury.

c. Ms. Nieto used ISO-NE's 2026 CELT Report assumptions of heat pump winter peak MW additions for the state of CT (tab 1.7, *Table 3 Winter Peak*). ISO-NE estimates a winter peak load impact of 224 MW by 2030/31. The MCOS used 80% of that value (179.2 MW) reflecting the portion of the state load that is in Eversource's service area, as the highest hourly electrification load expected in Eversource by the 2030/31 winter.

d. Ms. Nieto's referenced statement in her direct testimony is alluding to the expected impact of increased adoption of heat pumps for space heating on hourly load shapes over time. The load profile for space heating used in the MCOS analysis assumes electric space

heating will increase winter loads in all 24 hours, but more markedly in the morning, between 5 and 8 am, followed by a less noticeable but still impactful increase in the evening hours after about 5 pm. The referenced statement in her testimony emphasizes the winter evening hours because the focus of her analysis is the next five years, and currently the highest winter loads occur in the evening of the coldest winter months of December and January. In the near term, the winter evening loads will hold higher cost responsibility relative to the winter morning, though this situation will begin to reverse after 2031.