Date Filed: September 18, 2026

Witness: Gerhard Walker
Request from: CLF and Sierra Club

Question:

If the Company cannot provide the item requested immediately above in CLF-SC-20 please explain the methodology the Company would use if required to isolate the heat-pump-specific contribution to winter and summer peak forecasts, if required to do so.

Response:

As outlined in CLF-SC-20[i] the Company is currently in the process of developing winter peak forecasts; however, these forecasts have not been fully completed. Under the current unreleased forecast only a preliminary substation level could be created. Feeder and transformer level forecasts will be available for the 2028 forecast.

Using the Company's internal customer demographic data, a model will be trained to predict whether a given customer has adopted a heat pump, serving as a proxy for adoption likelihood that can be applied to known non-adopters. Through GIS mapping, each customer will be assigned to a feeder, transformer, and substation, allowing the forecast to be aggregated to any level.

State-level adoption forecasts will be developed in similar fashion to previous forecast cycles, informed by historical adoption data and other state-level projections, such as the ISO-NE annual heat pump forecast. These state-level adoptions per year will then be allocated across the state to current non-adopters in order of each customer's individual propensity to adopt, until that forecasted year's level of adoption is reached. The result will be customer-level adoption status for each forecasted year that can then be aggregated to each level in the system.

These forecasted adoption levels will then be translated to winter and summer peak loads by multiplying the number of adopters by the corresponding load shapes generated for residential and commercial buildings.

Prior Referenced Response:

[i] CLF-SC-020 Question:

For each feeder and substation transformer identified in response to CLF-SC-12 through CLF-SC-19 to the extent the Company's feeder- and substation transformer-level load forecasts separately model, or can isolate, the incremental contribution of heat pump adoption to forecasted summer and winter peak demand, please provide that incremental

heat-pump contribution (in the same units used in response to CLF-SC-13 and/or CLF-SC-17, as applicable) by feeder / substation transformer, by year, for each year of the Company's long-term forecast horizon. If the Company does not possess the information to model or isolate the yearly contribution of heat pump adoption to forecasted summer and winter peaks at either the feeder and/or substation transformer levels, explain in detail why not, and describe in detail how heat pump adoption impacts are incorporated into the forecasts, if at all.

CLF-SC-020 Response:

The Company currently does not use a heat pump forecast to inform its substation capacity projects as the system remains summer peaking. Without more detailed data, such as AMI, the Company can currently make no detailed determination if heat pumps increase, keep flat, or decrease summer peaks. While they can be more efficient than central HVAC or window units, they can also introduce new cooling capabilities into houses that did not have any, or only partial, creating a wash.

The Company is currently in the progress of developing a winter peak load forecast but has not completed or released such a forecast and is currently not using it to trigger capacity projects. The methodology is currently being reviewed and further refined and will be implemented in future forecast applications.