Date Filed: November 16, 2026

Witness: **Juan-Pablo Velez**
Request from: **Connecticut Industrial Energy Consumers**

Question CIEC-12:

Please refer to Velez Direct Testimony at page 7, lines 3-8; page 93, lines 7-12; and page 96, lines 1-12.

a. Does Mr. Velez agree that the load of existing heat pump customers is already on the Company's system and reflected in the sales used to set the Company's rates in this proceeding? If not, explain why not.

b. Please identify any new load, or any reduction in the Company's costs, that would result from enrolling existing heat pump customers in Rate HP.

c. Please provide Mr. Velez's estimate of the annual reduction in distribution and transmission revenue attributable solely to the automatic enrollment of existing heat pump customers.

d. Please explain how the "pre-heat-pump T&D bill" referenced at page 85, lines 5-7 would be determined for an existing heat pump customer.

Response:

a. Yes. This is why I attribute the entire revenue reduction from Rate HP to existing heat pump customers, and none to new heat pump customers, who add load and revenue when they install (CIEC-1(a)). It is also why I recommend that the Authority set Rate 1 and Rate HP in this proceeding on billing determinants that already assign existing heat pump customers' load to Rate HP (CIEC-2(d)).

That their load is reflected in the sales used to set rates does not mean that their rates reflect the costs they cause. Under Rate 1, they overpay for T&D by an average of $1,040 a year (CIEC-1(a)).[1]

b. None. When existing heat pump customers enroll in Rate HP, their usage does not change; they pay a lower winter rate on the same usage (CIEC-2(d)). The purpose of enrolling them is to end the overpayment described in part (a), not to change the Company's load or costs.

c. As stated in CIEC-1(a), auto-enrolling the roughly 55,000 existing heat pump customers who received Energize CT rebates (CIEC-1(b)) would reduce the Company's revenue by about **$39.8 million** in distribution and **$17.4 million** in transmission a year, or $1,040.34 per customer. Tables 1 and 2 in CIEC-1(a) report this reduction separately from the revenue increase from new heat pump customers, in the "Revenue reduced" columns. If the Authority does not auto-enroll existing heat pump customers, I would expect the reduction to be an order of magnitude smaller (CIEC-1(a)).

d. It would not need to be determined. The pre-heat-pump T&D bill on page 85 is the *population-average* bill of the modeled fossil fuel-heated homes, which I used to calibrate the rate: I found the single winter

[1] Direct Testimony of Juan-Pablo Velez on behalf of Conservation Law Foundation and Sierra Club ("Velez Direct"), at 23:9–10 (Oct. 21, 2026) ("fossil fuel-heated customers that install heat pumps overpay by an average of $1,040 a year").

rate that makes their average T&D bill after installing a heat pump equal to that pre-heat-pump bill plus the incremental marginal T&D cost.[2] That one rate then applies to every enrolled customer, new or existing, without determining any individual customer's pre-heat-pump bill.

Charging only each customer's incremental heat pump load at its marginal cost, while ideal, would indeed require a baseline for each customer, and is not practical. As my testimony explains, there are three ways to set one, and each adds complexity. A separate meter on the heat pump would add cost and friction to enrollment, and rule out auto-enrollment entirely. Circuit-level energy monitors installed with each new heat pump could be compatible with auto-enrolling new customers, but not existing ones, and their savings would likely have to be delivered as credits by a third party rather than through the Company's bill. Billing software that estimates each customer's baseline from their past usage would avoid both problems, but only if the Company committed to building it.[3] Because the first two approaches would make auto-enrollment difficult or impossible, they would lead to low enrollment and leave the cross-subsidy largely in place.[4] I therefore propose a seasonal rate, which achieves largely the same result without a per-customer baseline.[5]

[2] *Id.* at 85:2–10 ("I found the single winter ¢/kWh rate that, applied to a sample of post-heat-pump load profiles, produces a population-average T&D bill equal to the customer's pre-heat-pump T&D bill plus the incremental marginal T&D cost"; "[b]ecause this is a single rate applied to all customers, it zeroes out overpayment *on average*").

[3] *Id.* at 79:14–81:4 ("There are at least three ways to implement per-customer thresholds."; "in order to achieve a block rate with per-customer thresholds that heat pump customers could be auto-enrolled into, the Company would either need to commit to a software-based solution, or to EnergizeCT contractors installing circuit-level energy monitors whenever they install heat pumps").

[4] *Id.* at 80:16–18 ("The first two make auto-enrollment difficult to impossible, which would lead to single-digit rate enrollment and leave the cross-subsidy largely in place.").

[5] *Id.* at 81:5–7 ("a simpler alternative to per-customer thresholds exists that achieves largely the same result: a seasonal rate design that lowers volumetric charges for heat pump customers in winter, without relying on a block threshold at all").