Date Filed: November 16, 2026

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

Question CIEC-4:

Please refer to Velez Direct Testimony at page 9, lines 1-7; page 17, lines 1-6; and page 18, lines 3-6.

a. Please confirm that, based on the figures in Velez Direct Testimony, the average fossil fuel-heated customer pays approximately $1,178 per year in distribution and transmission charges ($814 + $364) before installing a heat pump, while causing approximately $123 per year in marginal T&D costs.

b. Please explain why, under Mr. Velez's methodology, the difference of approximately $1,055 per year between those two amounts is not also an "overcharge" or "overpayment."

c. Please confirm that this difference represents the customer's contribution to the recovery of the embedded costs of the Company's existing transmission and distribution facilities. If Mr. Velez does not agree, explain what that difference represents.

Response:

a. Confirmed. Before installing a heat pump, the average fossil fuel-heated customer pays $1,178 a year in distribution and transmission charges,[1] while causing $123 a year in marginal T&D costs: $28 upstream distribution and $95 bulk transmission.[2]

b. Confirmed that, before installing a heat pump, the average fossil fuel-heated electric customer pays $1,055 a year more than the marginal T&D costs it causes. That amount is the customer's contribution to the embedded costs of the existing system (part (c)). Those costs are sunk: no customer's usage today causes them, but they still have to be paid, and nearly every customer pays something toward them.[3] The testimony does not call that contribution an overpayment.

Installing a heat pump transfers other customers' embedded costs onto the heat pump customer. Under Rate 1, the customer's T&D charges go up by $1,051 a year, but the heat pump causes only $10.30 a year in new T&D costs. The remaining $1,040 goes toward the existing system, nearly doubling the customer's contribution to it, from $1,055 to $2,095.[4] The existing system costs the same as before, so the heat pump customer has taken $1,040 of embedded costs off everyone else, who now pay that much less.[5]

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[1] Velez Direct at 9:3–6 (distribution and transmission charges under Rate 1).

[2] Velez Direct at 18:3–6.

[3] Velez Direct at 13:23–14:2 (existing "infrastructure does need to be paid for, those are *sunk* costs tied to old investments, not *marginal* costs").

[4] After installing: ($1,178 + $1,051 in added T&D charges) − ($123 + $10.30 in added marginal T&D cost) = $2,095. *Id.* at 20:5–8, 23:3–5.

[5] The overpayment reaches other customers through two channels. Between rate cases, the RDM credits distribution revenue collected above the approved target back to all rate classes as a flat ¢/kWh, and the TAC trues up transmission revenue to the Company's actual transmission costs (CIEC-2(d)). At the next rate case, the heat pump customer's added kWh, about 6,432 a

That is why the testimony calls the $1,040 an overpayment and not the $1,055: the $1,040 is a *transfer*.[6] The $1,055 is the fossil fuel-heated customer's pre-existing share of embedded costs, the average amount it paid before installing the heat pump. The $1,040 is part of the embedded costs that other customers used to pay, which the heat pump customer takes on without causing any new costs that would justify it. That transfer is what the testimony calls a cross-subsidy, and it violates intra-class equity.[7]

The transfer also works directly against state policy: Connecticut has committed to heat pumps making up 65% of residential HVAC sales by 2030 and 90% by 2040, and is spending hundreds of millions of dollars to get customers to switch. But today, Rate 1 charges the average customer who does switch $1,040 a year to lower the electric bills of customers who keep heating with fossil fuels.[8] And this transfer spoils the economics of switching for gas-heated customers: under Rate 1, only 13% would see lower total annual energy bills after installing a heat pump; without the overpayment, 86% would.[9]

c. Confirmed.

year for the average fossil fuel-heated home, are spread over the residential class's total kWh, which lowers the per-kWh rates that recover its revenue requirement. [Davis-Parsons Direct, Exhibit CLP-RATES-3] at 404 (RDM), 409 (TAC).

[6] Velez Direct at 24:8–10.

[7] *Id.* at 27:11–13, 29:7–17 (the cross-subsidy "violates intra-class equity").

[8] *Id.* at 34:1–3 (heat pump sales targets), 35:6–9 (Connecticut "is actively spending hundreds of millions of dollars to drive heat pump adoption"), 82:5–7 (the "ultimate objective of Rate HP is to fix the intra-class equity and building electrification policy problems that Rate 1 creates").

[9] *Id.* at 40:12–41:2, 41:3–5 (the overpayment is "the single largest barrier to favorable bill outcomes for natural gas-heated customers considering heat pumps").