



July 1, 2020

Via Electronic Mail

Attn: Abhilasha Wadhwa  
Energy Division  
California Public Utilities Commission  
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Re: VEIC and Ardenna Energy Informal Comments on SB 1477 Data Development

Dear Ms. Wadhwa,

VEIC and Ardenna Energy appreciate the opportunity to submit comments in response to the workshop hosted by the California Public Utilities Commission (Commission) regarding data and the TECH building decarbonization initiative on June 17, 2020. Data access is a top priority for facilitating sound program plans and expeditious launch time frames. We encourage the Commission to consider the following comments in its efforts to create policies and programs that support California's aggressive decarbonization timelines.

**Comment 1. Managing the impact of broad-scale electrification on the gas system is a second-order problem that should be addressed at a later stage; the focus at this stage should be on addressing the first-order problem of driving customer and market adoption through TECH.**

The workshop focused heavily on the strategic planning function with particular attention to strategic electrification; that is, the opportunities and challenges of targeting electrification investments (a) to avoid unnecessary investments in the existing gas distribution system and (b) to minimize gas rate impacts on customers who remain on the system. The rate impact concern is a second-order problem. It assumes as a pre-condition that customers engage in electrification on a mass scale. If customers do not switch, then the current status quo remains in effect and there is no rate impact issue to solve. Before investing proceeding time and energy to solve the second-order problem, the Commission should first assess the data requirements to solve the first-order problem of stimulating a significant heat pump and heat pump water heating market in California. Thus, the focus of this proceeding and data needs for the TECH initiative should start with understanding the data needs for effective customer acquisition and market transformation for heat pump technologies.

The California Solar Initiative offers a useful lesson on this point. It was recognized from an early date that wide-scale market penetration of rooftop solar systems would raise a host of new issues around grid integration and load balancing. Nevertheless, the program was able to initially focus on customer acquisition and achieving market scale. These secondary issues have been addressed over time as the rooftop solar market matured and gained sufficient volume to impact the grid.

Heat pump water heaters and heat pumps have a household saturation (% of total homes with heat pump space and water heating) in the low single-digits. As a first step for considering potential gas customer rate impacts from electrification, it would be helpful to know what threshold level of household saturation creates a meaningful rate impact. This would enable the TECH initiative to actively track adoption progress and plan with this threshold in mind. Such information would shed light on when policymakers should prioritize consideration of the strategic electrification questions raised at the workshop.

**Comment 2. Strategic electrification targeting specific gas lines is out of scope for TECH.**

TECH can support strategic electrification of targeted gas lines as a collaborating party, but the issues underlying strategic electrification are more appropriate for the Long-term Gas infrastructure Proceeding (R.20-01-007) and utility rate cases.

Targeting behind-the-meter decarbonization investments to avoid expensive gas distribution system investments is an important exercise but should be addressed outside of the TECH initiative. A number of inputs external to the TECH initiative would inform such a cost-benefit analysis, including the expected costs of the gas line upgrade, the number of customers served, the costs of incentivizing the customers to switch, and the cost of any electric system upgrades (transformers, substations, line drops, customer service panels, etc.).

Most critically for the TECH proceeding, TECH program success is expected to have little impact on the *number* of customers served on a gas line. That is because the TECH program only targets two end uses, space conditioning and hot water, whereas gas line decommissioning requires electrification of all end uses. At the same time, customer gas rates do not reflect the actual costs of maintaining their particular gas lines—those costs are socialized across the entire customer class—so there is currently no mechanism to strategically enhance customer value propositions for making behind-the-meter investments that help utilities avoid gas line investments. In principle, the utilities could offer targeted incentives or tariffs that internalize those costs and benefits to the customer, but TECH is not the appropriate funding source for that price signal.

**Comment 3. Bidders need assurance from the Commission as to the extent of data access and acceptable uses for data that is not publicly available. The Commission should focus initially on developing protocols to provide the TECH implementer with access to immediate-need IOU data that is critical to the success of the initiative.**

Conclusion of Law #29 in D 20-03-027 states: "It is reasonable for the pilot program implementers and the program evaluator to sign non-disclosure agreements with the CPUC in order to gain access to confidential customer data rather than sign separate non-disclosure agreements with each investor-owned utility (IOU)." However, the exact terms of the data usage to support TECH implementation remain unclear. The Commission should consider not only what data will be publicly available, but what data will be confidentially available to the selected program implementer and under what circumstances it can be used.

In general, the TECH program implementer should be granted broad access to customer data with appropriate protections for customer confidentiality and data security. Access should be comparable to data access that the utility and CCA program administrators themselves enjoy. Data access should not be contingent on bilateral negotiations between the TECH program implementer and the utilities, as that imposes substantial regulatory and scheduling risks on the program implementer.

We note at least four important program functions that will trigger data needs:

1. **Customer targeting.** Market transformation can be accelerated by identifying and targeting specific customers with the best value proposition for electrification, which relies on using customer utility data to actively target individuals with the best value proposition.
2. **Performance verification.** Long-term monitoring of customers installing electrification measures is needed to validate performance over time and ensure carbon savings are being achieved, particularly through the monitoring of gas consumption data. Performance verification also informs contractor performance and installation quality assurance to ensure customers are achieving savings as promised.
3. **Program reporting.** Data tracking is needed to document program performance relative to Key Performance Indicators (KPIs) and support evaluation, measurement, and verification efforts.
4. **Strategic planning.** Data should inform strategic planning to ensure that electrification first targets the highest potential, lowest cost customer opportunities (e.g., by geography or market segment) and then builds scale as costs come down.

The Commission should consider all of these program use cases in its assessment of program data needs, but the highest priority for the TECH initiative will be use cases 1-3. In order to successfully target customers, verify performance, and report on program results, **the top priority should be ensuring that the TECH implementer has full access to customer-specific usage data for both electric and gas meters.**

In addition to utility consumption data, the TECH initiative would also benefit from access to IOU data on physical characteristics to support customer targeting, where available. This includes both behind-the meter data such as presence of solar PV and EVs and past participation in efficiency programs and front-of-the-meter data such as service line size and feeder capacity.

**Comment 4. Data collection requirements should be carefully considered to avoid excessively burdening program participants and market actors.**

While we strongly agree that data collection is critical to TECH's success as a market transformation initiative, we caution the Commission against imposing excessive data collection requirements that may create barriers to program participation and market engagement. TECH bidders should have the flexibility to propose data collection practices that enable effective tracking of program performance relative to Key Performance Indicators (KPIs), while balancing the impact on private sector market actors. Additional data collection should occur through the program evaluation process to supplement data collected by the TECH implementer.

Thank you for the opportunity to comment on the CPUC data workshop. We encourage the Commission to focus initially on ensuring that the TECH initiative has access to the IOU energy data needed to drive market adoption of heat pump technologies, and look forward to reviewing the proposed resolution once it is released.

Sincerely,

/s/ Emily Levin

Emily Levin  
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VEIC

/s/ Bruce Mast

Bruce Mast  
Principal  
Ardenna Energy, LLC

cc: Service List for R.19-01-011