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FGAI CEC RFI Energy Data Collection Phase 3 Letter

Additional submitted attachment is included below.





August 18, 2025

California Energy Commission (CEC) Docket Unit 715 P Street Sacramento, CA 95814

Emails: docket@energy.ca.gov

Re: Energy Data Collection – Phase 3; Docket Number 24-OIR-03

Dear CEC Docket Unit,

Fujitsu General America, Inc. (FGAI) appreciates the opportunity to submit this comment letter to address the California Energy Commission's (CEC) Request for Information (RFI) for *Energy Data Collection Phase 3 – Space Conditioning and Water Heating Equipment Data Tracking*. FGAI is the U.S.-based sales subsidiary of Fujitsu General Limited (FGL), a global leader in heat pump technology for both residential and commercial applications. As a member of the board of the Building Decarbonization Coalition's (BDC) California Heat Pump Partnership (CAHPP), FGAI is interested in helping CEC meet its energy and carbon savings goals through use of heat pumps and views this RFI as an integral part those efforts. In its RFI, CEC detailed 12 questions that it would like feedback on from stakeholders, and FGAI seeks to answer those to the best of its ability in this comment letter *from the perspective of a space heating/cooling heat pump manufacturer's affiliate*

Data Reporting Logistics Questions:

1. Which steps of the supply chain are most/least appropriate for reporting of accurate equipment data, and why?

FGAI believes that reporting throughout the entire supply chain is not appropriate for the type of reporting sought by CEC. FGAI believes the requested information would be overly broad and would contain competitively sensitive data. Providing it would require the CEC to implement adequate technological safeguards and could create additional work when responding to inquiries under the California Public Records Act (CPRA). This belief is based on FGAI's experience working closely with FGL, its manufacturer, and working with distributors operating within California. For example, heat pump shipments to distributors located in California can end up serving contractors and homeowners across state lines in Nevada, Oregon, or Arizona and vice versa. FGAI recommends that CEC seek supply chain reporting at





the level of sales from distributors to contractors based in CA. The most accurate data would come from the homeowners or building owners, but that level of data is the most difficult to consistently collect.

While sales from distributors to contractors would also have some inherent flaws (i.e., contractors based in California may install heat pumps in neighboring states if that is their operating area), FGAI still believes this level of reporting has several potential advantages:

- 1. **Minimizing instances of installations occurring across state lines.** Compares favorably when compared to manufacturers' sales to distributors within the state.
- 2. **Minimizing the number of reporting entities.** Compares favorably to reporting from the contractor or homeowner levels.
- 3. **Infrastructure and mechanisms to support reporting**. Compares favorably to reporting from the contractor or homeowner levels.
- 2. Should data be reported from more than one step of the supply chain? Why or why not?

As stated in the response to question 1 and in the RFI itself, all steps of the supply chain have distinct advantages/disadvantages that CEC must evaluate to get the best data to track their stated goals. FGAI believes that data from multiple steps in the supply chain could lead to more confusion than choosing one required level of reporting.

3. How often should data be reported? Should reported data be more granular than the frequency of reporting (e.g., a quarterly report that includes monthly sales figures)?

Data should be reported on an annual basis. No additional granularity should be included in the report, and it should be crafted to be as simple for the stakeholders involved as possible.

4. What types of information are infeasible to report on?

Based on the information included in the Data Reporting Content Tables under "Equipment Resolution" by CEC, and assuming CEC will request data reports from specified actors in the supply chain, FGAI believes that data including Capacity, Model Family, Model Numbers and Serial Number are infeasible for reporting, because these fields are based off variables out of the manufacturer's knowledge, like field-installation pairings of indoor and outdoor units. In the Spatial Resolution section of the same table, FGAI believes that Region, County, Zip Code and Address are also infeasible for reporting purposes from the level of manufacturer, as that information depends on the installation site.





- 5. How geographically accurate will the reported location of delivery be to its final installed location? Is there a category of geographic information, such as zip code or county, that would best or most accurately inform forecasting, policy and program efforts?
 - At the level of manufacturer to distributor, the reported location of delivery will most likely be inaccurate, as there are still often a couple of steps in the supply chain that impact where the installation is finished. Moving down the supply chain, that data becomes more accurate, but also comes with tradeoffs, as discussed in question 1 of this RFI response.
- 6. What cost impacts are incurred by reporting sales and distribution information consistent with a potential reporting requirement? What are the different electronic reporting capabilities of stakeholders at different points of the supply chain?
 - Cost impacts are substantial and difficult to estimate across the supply chain. Some participants may have specifically dedicated staff, while others may need to fill in gaps or carve out new roles to comply. In addition to supply chain impacts, extra work will need to happen at CEC to create a reliable database and train stakeholders in how to consistently use it.
- 7. Should businesses below a certain size threshold be excluded from data reporting requirements? If so, what should the size threshold be and why is it appropriate?
 - FGAI has no comment on this question.
- 8. Who else collects this data? In particular, are there other governmental entities (i.e., federal, state or local agencies) that require reporting of sales and distribution data?

No other governmental entities (federal or state) require the reporting of sales and distribution data on a regular basis like what is discussed in the RFI.

Data Reporting Content Questions:

9. How detailed should reported information be about the type or model of equipment? Should equipment counts be grouped or aggregated by model family, size or capacity, or by some other factor? Why or why not?





FGAI can include additional information about the type (outdoor vs. indoor) of equipment that is shipped to California distributors. However, due to the nature of split system heat pumps this data will be difficult to aggregate for what is installed at the end destination. Split system equipment can have many different combinations (i.e., mini-split vs multi-split) that can be installed using the same indoor and outdoor unit components. The final installation combinations are not known until the installation is completed, often out of FGAI's oversight. CEC will need to create a system that accounts for the differences in outdoor and indoor units, in order to have a better idea of what is installed at the final installation site. FGAI recommends that just outdoor units are tracked for this reporting because they are a better indicator of the true number installed split system heat pumps than tracking indoor units alone or tracking indoor units in addition to outdoor units.

10. How detailed should reported information be about the destination and purchaser / receiver of any equipment? Should sales to contractors record their contractor license number?

The most accurate data FGAI can provide would be the state of delivery to distributors. The purchaser/receiver of any equipment should not be included due to the nature of the equipment changing possession further down the supply chain. Contractor license numbers should not be reported by manufacturers to protect any customer confidential information.

11. How detailed should reported information be about when equipment was delivered?

As noted in the answer to question number 3, with annual reports delivery date of the equipment should only include the year of delivery to distributors from manufacturers.

12. Should refrigerants used by reported units be specified? Why or why not?

No. There may be other programs in the state government that could use this information, but the stated objectives of the RFI do not include anything specific to the refrigerant contained within the system. FGAI would prefer not to report data that includes refrigerants.

As an overall response to questions 9-12, FGAI believes that CEC should state its business purpose for requesting data outside of what appears to be required for the load forecasting and installation estimations described in the RFI.

In conclusion, FGAI urges CEC to shape its rulemaking to focus on creating a data collection methodology that limits burden on supply chain participants while still providing the desired





outcome. FGAI believes that focusing on streamlined online permitting, targeted field enforcement, and contractor education will deliver more reliable data at a far lower cost than creating a granular sales registry for the supply chain to report into. FGAI is open to any discussions that CEC may want to host to discuss the supply chain and how a request like this could impact a stakeholder like FGAI.

FGAI appreciates the opportunity to comment and provide input on this RFI. If CEC has any questions, please feel free to contact us for additional information.

Best Regards,

Ned Bent

Manager, Regulatory and Compliance

Fujitsu General America Inc.

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