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Lennox Comments on the California Energy Commission Request for Information (RFI) Energy Data Collection Phase 3 â€“ Space Conditi

Additional submitted attachment is included below.

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Submitted via: efiling.energy.ca.gov/EComment

Re: Lennox Comments on the California Energy Commission Request for Information (RFI) Energy Data Collection Phase 3 – Space Conditioning and Water Heating Equipment Data Tracking (Docket # 24-OIR-03).

Lennox International Inc. (Lennox) hereby submits comments on the California Energy Commission Request for Information (RFI) "Energy Data Collection Phase 3 – Space Conditioning and Water Heating Equipment Data Tracking" as posted to the Docket 24-OIR-03 on June 2, 2025 (the "RFI").

Lennox is a leading provider of climate control solutions for the heating, air-conditioning, and refrigeration (HVACR) equipment markets. Lennox is a U.S.-based publicly traded company focused on the HVACR industry. Lennox has thousands of employees and has significant U.S.-based manufacturing, engineering and R&D operations. Lennox manufactures space conditioning equipment subject to the potential data collection outlined in the RFI. Lennox and the company's downstream supply chain, as well as consumers that use these vital products, in California would be significantly adversely impacted if CEC were to impose the requirements discussed in the RFI.

Lennox has supported various initiatives of the California Energy Commission (CEC) to promote reasonable energy efficiency regulations that improve affordability and reduce energy consumption. However, the enhanced data reporting raised in the RFI is unduly burdensome, costly and the wrong approach to try to address the problem identified in the RFI of contractors failing to comply with the required permitting for equipment installations. Moreover, housing costs in California are already at near crisis levels, and CEC's imposing burdensome new reporting requirements would counter-productively raise costs for households in California, including for lower income households who are already severely stressed by housing affordability issues, as costs from these new bureaucratic reporting requirements would ultimately be passed through to households in the form of higher product costs.

A. General Comments on the Request for Information.

The CEC appears to be considering development of data collection regulations for space conditioning and water heating equipment for two main reasons as indicated in the RFI: (1) to

determine "the numbers and types" of installed equipment so "energy forecasts as well as policy and program recommendations by the CEC continue to meet the high bar needed for *effective state governance*" and (2) to "increase compliance with permitting and inspection requirements for central air conditioning and heat pumps, and associated sales and installations." (RFI at pp. 2, 4, emphasis added). The RFI presents no evidence that the increased data reporting at a more granular level discussed in the RFI would achieve either of these goals, and neither of these reasons justify burdensome increases in data reporting raised by the RFI. Such data collection runs contrary to the RFI's stated goal of "effective state governance."

The data collection outlined in the RFI would impose a significant reporting burden, the cost of which would ultimately be borne by California consumers. Space conditioning equipment is a major purchase for residential and commercial consumers alike, and housing costs in California are already at near crisis levels. CEC adding costly reporting requirements throughout the HVAC supply chain will further increase costs to already stressed consumers for these major purchases.

While well intended, measures outlined in the RFI are bad policy and do not address key issues related to permit compliance for equipment installations. Excessive costs imposed by California's bureaucracy regarding installation permitting is the primary reason for contractors not obtaining these permits—further increasing supply chain costs through unjustified data reporting will only make the cost situation worse for California businesses and households. If the primary barrier is cost, adding additional cost is counterproductive.

Simply stated, CEC continues to pursue policy approaches that will not solve the problem. The primary issue is an already overburdensome and costly permitting compliance regime that is expensive and unfairly burdens those who comply. To address the issue, CEC proposes additional costly burdens. While well-intended, adding additional burdens to an already burdensome policy would yield failure at a higher cost.

Meanwhile, CEC continues to ignore common-sense solutions to the state's permitting issues such as simplifying the permitting process, standardization, cost reduction, and requiring proof of permitting compliance to renew a contractor license.

While Lennox supports the California's effort to promote heat pump adoption, the primary barrier to heat pump adoption in California is cost. The combination of California's high electricity rates and costly permitting are the issue. CEC's proposed solution addresses neither. There are many areas throughout the U.S. that have significantly higher heat pump adoption rates than California, including leading states of Florida, South Carlina, North Carolina, Georgia and Texas that have much higher heat pump adoption rates than California. These states do not have the barriers of complex permitting and high utility rates making heat pump installation and operation affordable. California should look to these models to address the current barriers to heat pump adoption in California rather than doubling down on burdensome regulations that will increase cost further.

The RFI provides no evidence to justify enhanced data collection to improve energy demand forecasting.

As indicated in the RFI, the CEC is mandated by statute to conduct assessments and forecasts of all of energy industry supply, production, transportation, delivery and distribution, demand, and prices. (Pub. Resources Code section 25301(a)). The energy demand forecast is developed and published as part of the Integrated Energy Policy Report (IEPR) (Pub. Resources Code section 25302). The IEPR is developed utilizing extensive current actual California utility data and input for future forecasted energy use.

The RFI provides no concrete evidence or examples of how the potential data collection raised in the RFI will improve energy forecasting or how the burdens of enhanced data collection are outweighed by improved energy demand forecasting. The RFI notes that CEC can already perform data simulations and has been legally responsible to "conduct assessments and forecasts," but "over the years this type of information has been criticized as inaccurate and misleading." (RFI at pp. 2, 7). The RFI provides no specific examples of what these criticisms are, or how the increased burdens of the proposed data reporting would reasonably remedy these criticisms versus other ways that "CEC continues to improve its data analysis." (RFI at p. 7).

The energy use of space conditioning and water heating equipment also needs to be put into context as just one source of energy demand in the state, including sources of rapidly growing demand such as data centers and electric vehicle adoption. Space conditioning and water heating is a only a portion of the total energy use in homes and commercial buildings. Other significant energy uses including EV chargers, major appliances (like dishwashers, clothes washers and dryers), lighting, electronics, and other significant contributors to energy demand.

Further, the RFI requiring additional data collection on the installed types of space conditioning and water heating equipment alone will not improve CEC's ability to forecast energy use without CEC understanding many other factors. The current size, type, and efficiency of equipment prior to replacement, building loads, and consumer use profiles would all need to be understood to add accuracy to future energy demand projections. Even if this information were to be available, which would be an excessive reporting burden and require significant CEC resources to assemble, it would take extensive modeling to use this data to predict energy use and would always be a trailing indicator with questionable accuracy.

Further, space conditioning and water heating equipment has up to a 20-year lifespan that equates to a 5% annual turnover rate for buildings, which limits the modelling impact of the data collection on which the RFI seeks comment. It would take 10 to 15 years of data to start to be able to characterize the building stock with any level of accuracy using the granular data on which the RFI seeks comment. The CEC already collects an enormous amount of data from utilities operating in California under current Title 20 requirements that are included in forecasts of energy demand and should already know site-specific energy use from utilities who send monthly bills to customers inclusive of gas and electricity usage. CEC has simply not justified the need for still more extensive data collection at the equipment-level, nor shown how CEC has the ability to meaningfully use such data. CEC has also not demonstrated if the benefits of theoretical granular equipment data uses would justify the significant cost and burdens of data collection and analysis.

Instead of adding yet another costly regulatory burden, CEC should consider actions to reduce cost to better achieve CEC's own policy goals, including reducing the costs and burdens of installation permitting compliance.

Data collection raised in the RFI is not the solution to improve permit compliance.

California has among the most stringent building code requirements in the United States under Title 24, including extensive installation provisions that require testing and inspection. Lennox fully supports reasonable requirements to ensure the quality installation of space conditioning and water heating equipment, so consumers receive the expected performance of the equipment they purchased. However, the complex and costly California permitting requirements continue to further disincentivize contractor compliance. The RFI notes "the failure of many contractors to pull building permits and verify minimum quality installation when replacing air-conditioning systems." (RFI at p. 4). While Lennox supports efforts to improve contractor compliance with permitting requirements, the overly bureaucratic collection of data discussed in the RFI is not a solution.

The problem of contractors failing to obtain the necessary permits for installing HVAC equipment in California is well documented. Much time and much effort has been spent to identify barriers to permit compliance. A 2015 White Paper by the Western Heat Pump Alliance, *Serial Number Tracking: Key Issues* noted several key barriers to this permit compliance in California including the following (White Paper, p. 3):

1. The energy code is too complicated and/or not written clearly.
2. Paperwork is too complicated for industry stakeholders to fill out correctly and for the inspectors to understand what is required.
3. Building departments lack the time and resources to focus on energy code compliance.
4. Stakeholders do not take the time to understand what is required
5. The building department staff does not have the training they need.
6. Builders' field staffs do not pay attention to the energy requirements.
7. Building department staff's lack of interest in energy efficiency.
8. Code enforcement is inconsistent between jurisdictions.

Note that none of these identified issues in the 2015 Western Heat Pump Alliance white paper focus on data collection. None of these problems would be solved by adding still more costly bureaucracy and additional costs on the space conditioning and water heating products supply chain.

California law requires that regulatory actions are "an efficient and effective means of implementing the policy decisions enacted in statute or by other provisions of law in the least burdensome manner" and evaluate "the most cost-effective set of regulatory measures that are equally effective in achieving the purpose." See e.g., SB 617, Sections 4 and 6, as codified in the California Government Resources Code. To find an efficient and effective policy solution, CEC should follow California law by seeking solutions that are less burdensome. CEC requiring additional burdensome data reporting under the guise of energy modelling needs stated in the

RFI is not the most "cost-effective" or least burdensome approach, particularly when the real problem appears to be costly permitting and a lack of enforcement.

Furthermore, the burdensome data collection in the RFI is contrary to legislative admonitions for CEC to collect information from stakeholders "in the most cost-effective and efficient manner" and "give full consideration to the potential burdens these data requests impose on the resources of the stakeholders" (California Public Resources Code, Sec 25320(a)).

In short, the California permitting process for space conditioning installations is complex, expensive and enforcement is inconsistent. Lennox urges the CEC to focus its limited resources and time on reforming the existing compliance system to simplify the process and make compliance affordable, effective and attainable without adding still more costs through unjustified forays into more data collection.

B. Specific RFI Issues on Which CEC Seeks Comment.

Lennox offers responses to the following questions raised at pp. 5-8 of the RFI.

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

Increased data reporting required of original equipment manufacturers is not justified, as OEMs are not responsible for installation and associated permitting issues. Appropriately, the RFI does not consider imposing reporting requirements on OEMs. Furthermore, CEC is only to require necessary information that entities "can either be expected to acquire through their market activities, or possesses or controls" and is limited to that which relates to the "functional role of each category of market participant." (California Public Resources Code, Sec 25320(b)). Additionally, OEM shipments to distribution facilities within a state may or may not be installed within the state where the equipment was originally shipped. Thus, it is appropriate that the RFI excludes from consideration additional reporting by OEMs.

Issue 2. Should data be reported from more than one step of the supply chain? Why or why not?

See response to issue 1, regarding that fact that the RFI does not even consider requiring data from OEMs. The RFI appropriately excludes data collection from OEMs, because among other reasons OEMs do not maintain a complete database of information on contractor installations, nor is collecting such information the "functional role" of OEMs.

Issue 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)?

The RFI here raises the possibility of quarterly reporting that aggregates monthly sales figures within that quarterly reporting. (RFI at p. 6). Lennox questions the value of any of the additional reporting raised in the RFI, and certainly any reporting (on any portion of the supply

chain) even on a quarterly basis would be a severe bureaucratic overreach. The RFI mentions "weekly" and "daily" reporting possibilities (RFI at pp. 7-8), which would be an absurd bureaucratic overreach.

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

CEC staff's "recommendation is for distributors, wholesalers, and retailers to report the number of units delivered to other parties." (RFI at p. 6). Since the reporting obligations the RFI inquires on do not focus on OEMs such as Lennox, Lennox defers to the trade associations and representatives of distributors and other downstream entities in the space-conditioning supply chain regarding concerns regarding the excessive detail raised by data collection in the RFI.

As stated above, it would be infeasible for an OEM to determine where equipment is ultimately installed if equipment entering California is shipped to distributors or contractors in neighboring states. For example, Lennox has a distribution facility in Ontario, California that serves several other states including via purchases by contractors where Lennox does not know if the equipment installation will be within California or outside the state.

Lennox repeats its concerns regarding CEC adding still more costs and bureaucratic burdens that will further increase costs for already burdened California households. Making equipment more expensive makes it less likely that consumers will purchase new, more efficient equipment. Instead, consumers will seek to repair, rather than replace, outdated and inefficient equipment. Lennox further notes that various information such as model numbers and consumer information is confidential business information and/or may be subject to data privacy laws.

Issue 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?

See response to Issue 4. Lennox seriously questions how still more burdensome data collection would materially improve the State of California's ability to "accurately inform forecasting, policy and program efforts." See general Lennox comments in Part A above.

Issue 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?

See response to Issue 4. Since the reporting obligations the RFI inquires on do not focus on OEMs, Lennox defers to the trade associations and representatives of distributors and other downstream entities in the space-conditioning supply chain regarding concerns regarding details here, while noting that many downstream entities may not have "electronic reporting capabilities" that may interface in the way CEC may desire. Furthermore, Lennox questions the wisdom of imposing additional costs when cost is already the primary barrier to permitting compliance. CEC has not demonstrated how, and if it has the technical capacity, to make

meaningful use of additional collected data such that the benefits of such data collection (even if possible) would outweigh the burdens of such data collection. See general Lennox comments in Part A above.

Issue 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?

As previously stated, burdensome data collection resolves none of the CEC's stated issues and adds cost to a problem defined by cost. CEC cannot impose such burdens and then seek to justify the equity and fairness of the RFI's bureaucratic overreach by exempting small businesses, if those small businesses are a key source of the targeted permit non-compliance in the first place. Put another way, if CEC chooses to employ the RFI's ill-fated policy proposal, CEC cannot excuse from compliance those entities that are failing to pull permits for installing space conditioning and water heating equipment. That said, rather than increasing regulatory costs on businesses (including small businesses), Lennox recommends that CEC and appropriate coordinating government entities find ways to reduce regulatory costs so that small businesses are more incentivized, and less burdened, by complying with permitting requirements for installing space conditioning and water heating equipment.

Issue 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?

Lennox is not aware of any other governmental entity that requires reporting of sales and distribution data for the HVACR industry such as that contemplated by the RFI. That said, CEC would be better served by evaluating other jurisdictions where permitting compliance is higher and *permitting costs are lower* to model a successful program.

Issue 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?

CEC has provided no evidence regarding how collecting data by model family, size or capacity would improve compliance with contractors obtaining the necessary installation permits. Nor has CEC demonstrated how it could make use of such data to materially improve its energy forecasting. Lennox offers the assumption that contractors do not decide to comply or not comply with permitting requirements based on the model family, size or capacity of the equipment installed. Rather, non-compliance is highly correlated to the cost and burden associated with compliance.

Furthermore, the release of model information raises issues regarding confidential business information. The RFI says it "recognizes the privacy and competitive market implications present in collecting equipment sales or delivery data at any level of detail, and will adhere to all laws and policies regarding the collection, handling, use, and disclosure of sensitive or confidential data." (RFI, p. 7). Again, however, the CEC provides no details here, including

how robust its protocols are for protecting sensitive information and the extent to which data will be protected or the occurrence and severity of past data breaches.

The RFI indicates that "Staff determined that reporting units by model number would be desirable for enabling matching of equipment to energy use ratings stored in the CEC's certification database, allowing for highly precise estimation of electricity demand growth." (RFI, p. 8). Sales by model number represent highly confidential business information. Moreover, the usefulness of granular data for "highly precise estimation of electricity demand growth" seems to lack awareness of the trailing nature of such data, and the fact that demand growth projections and other forecasts may be inherently uncertain and much larger sources of electricity demand growth such as data centers and broader macroeconomic changes may overwhelm the benefits that might be obtained by collecting model numbers for space conditioning and water heating equipment.

Additionally, for estimations to be "highly precise," CEC would also need to know highly precise specifics regarding a building's structure, climate, and occupancy to determine heating and cooling needs. Key inputs would need to include building size, ceiling height, insulation levels, window and door specifications, occupancy, shading, structure orientation, and climate data in order to yield a "highly precise estimation." Failure to include these other inputs would lend further credence to the past criticism that "this type of information has been criticized as inaccurate and misleading." CEC is far better off not imposing the undue costs for data reporting outlined in the RFI, and instead finding other solutions such as lowering permit costs and reducing bureaucracy so that contractors obtain the proper installation permit.

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?

Lennox defers to the trade associations and representatives of distributors and installers regarding concerns regarding the excessive detail raised by data collection in the RFI, since OEMs are not the focus of this RFI. However, Lennox repeats its concerns regarding CEC adding still more costs and bureaucratic burdens that will further increase costs for already burdened California households and businesses.

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

See response to Issue 10.

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

CEC has not demonstrated the relevance of this data. The RFI says that "Staff understands that refrigerant data is highly valuable to several state-led programs, though it has limited direct utility for demand modeling." (RFI, p, 9). Lennox suggests that any such

collection of refrigerant information be left to other regulators that have a clear mandate for such information, as CEC staff appears to acknowledge the limited relevance of such information for purposes of this RFI.

In summary, CEC has not even remotely demonstrated the feasibility, benefits and cost-effectiveness of additional data collection for space conditioning and water heating equipment. Lennox is very concerned regarding CEC imposing additional regulatory costs on the space conditioning equipment supply chain, which will result in more expensive space conditioning equipment that imposes further costs and burdens on California households and businesses. Making equipment more expensive makes it less likely that consumers will purchase new, more efficient equipment. Instead, consumers will seek to repair, rather than replace, outdated and inefficient equipment. Increased costs will also further present barriers to affordable housing for California residents. CEC has not demonstrated how theoretical (and unexplained) improvements in energy modelling justify increased data collection. If permit compliance by installers is the key underlying concern for this RFI, then California regulators should improve compliance by reducing, rather than increasing, the costs of such compliance and addressing what appears to be a failure by regulators to enforce their own existing regulations.

Sincerely,

Dave Winningham,
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