

**DOCKETED**

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*Comment Received From: Johnson Controls*  
*Submitted On: 3/9/2021*  
*Docket Number: 19-BSTD-03*

**on California Title 24 Draft 2022 Energy Code Express Terms**

*Additional submitted attachment is included below.*

March 9, 2021

Mr. Payam Bozorgchami, P.E.  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

Re: Public Comments, California Title 24 Draft 2022 Energy Code Express Terms

Dear Mr. Bozorgchami:

Johnson Controls is grateful for the opportunity to comment on the California Energy Commission's (CEC) Title 24 Draft 2022 Energy Code Express Terms.

Johnson Controls (JCI) is a leading global provider of heating, ventilating and air conditioning equipment, building controls, security and fire/life safety solutions which includes brands such as York, Metasys, Simplex, Grinnell, Zettler and Tyco. The company has roughly 105,000 employees and 2,000 locations across six continents. JCI first set sustainability goals in 2002, and the company has reduced its greenhouse gas emissions intensity from our global operations by 64%. Since then, JCI has committed to meeting science-based targets by 2030 that are aligned with a 1.5°C pathway for global temperature rise, and to achieve net-zero carbon emissions from its operations before 2040. Further, we are AAA rated by MSCI and are recognized in the Climate Leader band by CDP.

JCI strongly supports CEC's efforts to decarbonize California's building stock in alignment with state goals and statutory requirements. The organization prides itself on providing solutions to help our customers reduce their carbon footprint while maintaining superior building performance, in alignment with our vision for healthy people, healthy places, and a healthy planet. With respect to the Title 24 Draft 2022 Energy Code Express terms, there are two areas where we wish to provide specific feedback, discussed below.

#### *Compliance Baseline revisions to include heat pumps*

JCI generally supports CEC's revisions to the compliance baselines that include heat pumps, while maintaining a mixed fuel approach. Ideally the proposed baselines would incentivize all-electric new construction in a logical fashion, while still preserving the ability to use gas or electric-gas hybrid solutions for the applications where going all-electric remains a significant burden. JCI has no doubt that these new baselines will significantly increase the market share of all-electric new buildings in California, thus smoothing the curve toward a future, mandatory requirement for all-electric new construction. From a practical perspective, some building applications may still need viable options for gas appliances in the immediate term. For those buildings that do use a gas, the additional prescriptive requirements will significantly decrease consumption, bringing an improvement in carbon emissions and indoor air quality over the 2019 standards.

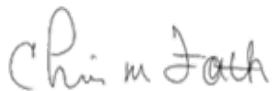
#### *Revision to Fan Power Budget*

JCI does not support the Fan Power Budget proposed in Section 140.4.c.1 of the 2022 Energy Code Express Terms. As proposed, the new Fan Power Budget would replace the Current Fan Power Limitation requirements in Title 24 with a formula-based approach to fan power allowance. While JCI appreciates the

spirit of this proposal, we are concerned that it will have the adverse impact of discouraging more complex airside applications that can ultimately save energy at the systems level, as well as deliver increased levels of clean air. JCI recognizes that this requirement is derived from a California Statewide CASE Team report, that allowances are provided for certain non-standard components, and that a similar requirement is under consideration for ASHRAE Standard 90.1. Despite this, it remains unclear exactly how the values for fan power allowances were developed, whether they are justified, and if the airflow categories are detailed enough to allow for unique design requirements across all potential HVAC system applications. JCI recommends that CEC revert to the Fan Power Limitation requirements in the 2019 version of Title 24 and adopt a Fan Power Budget approach after it has been vetted and approved in ASHRAE Standard 90.1. Following this process will help ensure that the methodology and values for fan power limit requirements are inclusive of all appropriate airside applications.

Thank you again for the opportunity to comment on this pre-rulemaking workshop. If you wish to discuss these comments any further, please do not hesitate to contact me at the information below.

Respectfully,

A handwritten signature in blue ink that reads "Chris M Forth".

Chris M Forth  
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