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Ms. Heather Farr Planning, Rule Development, and Implementation South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

Ms. Jen Vinh Planning, Rule Development, and Implementation South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

(Submitted electronically via jvinh@aqmd.gov and HFarr@aqmd.gov)

RE: Johnson Controls Comments in Response – South Coast Air Quality Management District (SCAQMD) Proposed Amended Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired Furnaces (PAR 1111)

Ms. Farr and Ms. Vinh:

Johnson Controls

With a global team of nearly 100,000 experts in more than 150 countries, Johnson Controls (JCI) offers the world`s largest portfolio of building technology and software as well as service solutions from some of the most trusted names in the industry. We are committed to helping our customers and industries around the world pursue goals for best-in-class environmental targets in carbon and water. Since our inception, our business has been a force for efficiency, resource conservation, decarbonization and water conservation.

Today, the trifecta of low-carbon, energy efficiency, electrification, and digitalization enable us to slash carbon and operating costs. By 2030, we have committed to cut our Scope 1 and 2 absolute emissions by 55% and in FY24 have reached 48% reduction since 2017. Our 2030 Scope 3 target is to reduce product in use emissions by 16% and as of FY24, we reduced

emissions 20% since 2017. These ambitious emissions reduction targets have been approved by the Science Based Targets initiative. We are also committed to achieving Net Zero Scope 1 and 2 emissions and 100% renewable electricity by 2040.

PAR 1111 Mitigation Fee Structure

JCI appreciates SCAQMD's efforts to balance consumer choice and the need for emissions reductions, however there are implementation concerns with the current proposed revisions. JCI cautions against adding the mitigation fees to ultralow NOx furnaces (e.g., 14 ng/J) as proposed by the alternative compliance option. The proposed mitigation fee structure will result in increased fees which are ill-defined and based on unknowable market conditions. Due to the plan uncertainties, there will be increased fees which the supply chain is likely to pass through to consumers. This result is contrary to the stated objective of reducing impact to low- and middle-income consumers. JCI feels a more definite mitigation fee structure, combined with recently resumed, rebates via the well-established TECH Clean California program¹ with supporting funding from the Inflation Reduction Act provides more than enough incentive for heat pump installations (up to \$45 million or \$8000 per income qualified households).

PAR 1111 Record Keeping and Reporting Requirements

As summarized in PAR 1111 manufacturers are required to collect and maintain records of the model number and serial number of each zero-NOx emission unit or ultralow NOx furnace, the number of units sold for each category, and the contact information of the distributor for at least five years and produce the information upon request. JCI believes the amount of confidential business information required is burdensome and, without specific protections by SCAQMD, data is at risk of being shared directly or indirectly with third parties. JCI urges SCAQMD to incorporate protective language that SCAQMD would treat the information as confidential business information and will not be shared by SCAQMD.

PAR 1111 Dual Fuel Systems

JCI is a strong supporter of Dual Fuel systems which combine the benefits of a heat pump with that of a suitable backup heating source such as ultralow NOx furnace offerings. Dual fuel systems have the benefits of lower source emissions as well as lower operating costs, avoiding the inefficient use of electric resistance backup heat. Further, they often have lower upfront infrastructure costs when replacing an existing furnace. JCI would like to thank SCAQMD for considering these benefits by including proposal guidelines which allow Dual

¹ https://techcleanca.com/about/news/heehra-rebates-resume-in-california/

Fuel systems. This will hasten the adoption of heat pumps by demonstrating their performance capabilities while avoiding the concerns by many of our customers of the extreme costs and inefficiencies associated with heat pumps with electric resistance back-up heating.

PAR 1111 Further Considerations

JCI appreciates staff's efforts to find amicable alternatives to achieve emissions reductions while considering the lower and mid-income population via their proposed "alternative compliance plans". However, due to the evolutionary nature of the proposed PAR 1111, the general public workshops failed to fully reach the impacted consumer body or address the PAR 1111 details which invariably cause problems such as how to include mini-split heat pumps without potentially increasing emissions.

The alternative compliance plan approach depends on balancing furnace and heat pump sales if the zero NOx emission unit count is based on number of compressors. For example, residential heat pumps typically have one compressor and, according to PAR 1111, will be counted as one unit. However, it is highly unlikely that only one mini-split heat pump – which tend to have maximum heating capacities of 24,000 Btu/hr. – will replace a typical furnace which can have a capacity of 100,000 Btu/hr. or higher. It is more likely that one furnace would be replaced by as many as four mini-split heat pumps, meaning that the regulated entity could install three additional furnaces elsewhere in the district, thus increasing NOx emissions overall. It is not clear that this outcome advances the environmental objectives of PAR 1111.

Conclusions

The enduring economic conditions have placed substantial burden on consumers, businesses, and all levels of the HVAC supply chain. Because this burden, combined with the majority of public comments opposing the PAR 1111, we suggest a pause in the rulemaking process to allow further public and business engagement and better assess the cost impact, technical, material and issues which have yet to be addressed by the currently proposed rule.

Due to the limited time for a thorough review of the final proposed rule draft, the proposed alternatives need further discussion with California businesses, manufacturers and SCAQMD staff before being finalized.

Johnson Controls thanks SCAQMD's staff for its work on this rule and expresses its willingness to continue working with staff to find amicable solutions which achieves both emissions reductions and lowers cost to California consumers.

If you have any questions, or would like to discuss this further, please contact us.

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