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November 23, 2021

Abigail Daken
Office of Air and Radiation
U.S. Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460

Topic: ENERGY STAR® Central Air Conditioner/Heat Pump Specification Version 6.0 Amendments

Dear Ms. Daken:

This letter comprises the comments of the Pacific Gas and Electric Company (PG&E), San Diego Gas and Electric (SDG&E), and Southern California Edison (SCE) in response to the United States (U.S.) Environmental Protection Agency (EPA) proposal to amend the recently completed Version 6.0 ENERGY STAR® Central AC/Heat Pump (CAC/HP) Specification, which will be reflected in a Version 6.1 Specification.

The signatories of this letter, collectively referred to herein as the California Investor-Owned Utilities (CA IOUs), represent some of the largest utility companies in the Western U.S., serving over 32 million customers. As energy companies, we understand the potential of appliance efficiency standards to cut costs and reduce consumption while maintaining or increasing consumer utility of products. We have a responsibility to our customers to advocate for standards that accurately reflect the climate and conditions of our respective service areas, so as to maximize these positive effects.

We appreciate the EPA's responsiveness to market feedback and this opportunity to provide the following comments about the proposed amendments to the ENERGY STAR CAC/HP Specification:

1. **In order to meet the ENERGY STAR Program's goals, we recommend that EPA align EER/EER2 energy-efficiency criteria for variable capacity air conditioner and heat pump systems with federally required minimum EER/EER2 performance requirements for air conditioner systems sold in the U.S. South-West region.**

The U.S. South-West region as defined by Department of Energy (DOE) Energy Conservation Standards for Residential CAC/HPs includes the states of Arizona, California, Nevada, and New Mexico. This region includes the only EER/EER2 requirements of anywhere in the U.S. Manufacturers have little incentive to design equipment with EER/EER2 values that substantially exceed the requirements of the U.S. South-West region. These states represent approximately 16 percent of the U.S. population, and therefore, we anticipate that equipment meeting the proposed EER/EER2 levels will include equipment with the highest EER/EER2 levels on the market. We note that the South-West's population of 16 percent of the nation would correspond to a market share less than the ENERGY STAR Program's target of 25 percent of the market.

Although the DOE appliance standard only includes EER/EER2 requirements for central air conditioners in the South-West, we appreciate EPA's decision to include EER/EER2 for both air

conditioners and heat pumps. This decision will result in efficient heat pump performance at high ambient temperatures.

- 2. The proposal to remove EER/EER2 requirements for heat pumps seeking Cold Climate recognition is consistent with the ENERGY STAR Program’s goals for this certification, by guiding consumers to products optimized for heating performance and efficiency.**

The Northeast Energy Efficiency Partnerships (NEEP) noted in a letter to ENERGY STAR in 2019¹ that they “support ENERGY STAR reducing EER requirements for colder climates,” recognizing “that the specification should focus on differentiating systems optimized for heating performance and efficiency,” and enabling “a stronger focus on heating efficiency (steady-state and seasonal).” As such, we expect that the ENERGY STAR Program’s proposal to remove EER2/EER requirements for heat pumps seeking Cold Climate recognition is consistent with the ENERGY STAR Program’s goals.

- 3. The CA IOUs encourage the ENERGY STAR Program to define Horizontally Ducted Mini-Split Systems.**

In the section of the CAC/HP Specification Draft Version 6.1 related to Energy-Efficiency Criteria for Certified Residential Cold Climate Heat Pumps, the Draft Version 6.1 states that “EPA proposes to require that Horizontally Ducted Mini-Split Systems meet the same requirements as Ductless Systems.” We respectfully request that EPA define “Horizontally Ducted Mini-Split Systems.”

We also note that, while ducted systems connected to a limited length of ductwork have a substantial advantage when compared to ducted split systems connected to a central ductwork network, ducted systems of all types offer consumers the opportunity to install higher quality air filters than the filter options available with non-ducted systems. As a result, even ducted systems connected to short runs of ductwork must be able to overcome higher static pressures than the static pressures observed for ductless systems. As such, we recommend that the ENERGY STAR Program consider a performance requirement for systems connected to short runs of ductwork that is intermediate between the requirements for ducted and non-ducted systems.

- 4. We encourage the ENERGY STAR Program to consider approaches that will encourage development of installation capabilities in centrally ducted CAC/HPs, mini-splits and multi-splits that have three or more capacities, or are continuously variable, while ensuring the widest possible participation in the Program for this equipment.**

We enthusiastically supported the ENERGY STAR Program’s decision to establish Installation Capability requirements in Version 6.0 of the CAC/HP Specification;² however, incorporation of these Installation Capabilities is not likely by January 1, 2023, the effective date of the ENERGY STAR CAC/HP Specification.

In the interest of ensuring the widest-possible participation in the ENERGY STAR Program for this highly efficient equipment, we respectfully request that the ENERGY STAR Program engage with manufacturers to find a path forward. One option could be to reserve the Installation

¹ <https://www.energystar.gov/sites/default/files/NEEP%20Comments%20on%20CACASHP%20Draft%201%20V6.0.pdf>

² <https://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Version%206.0%20Central%20Air%20Conditioner%20and%20Heat%20Pump%20Final%20Specification%20and%20Partner%20Commitments.pdf>

Capability criteria for ENERGY STAR's Most Efficient list. This approach would encourage manufacturers to prioritize development of these Installation Criteria while ensuring that ENERGY STAR continues to raise consumer awareness of the energy efficiency benefits of equipment with three or more capacities, or continuously variable operation.

In conclusion, we would like to reiterate our support for EPA's amendments to the Version 6.0 CAC/HP Specification and thank EPA for the opportunity to be involved in this process.

Sincerely,



Patrick Eilert
Manager, Codes & Standards
Pacific Gas and Electric Company



Karen Klepack
Senior Manager, Building Electrification and
Codes & Standards
Southern California Edison



Kate Zeng
ETP/C&S/ZNE Manager
Customer Programs
San Diego Gas & Electric Company