

DOCKETED

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AO Smith Comments on CEC, CPUC Joint Agency BUILD Program Workshop

Additional submitted attachment is included below.



June 29, 2020

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 20-DECARB-01
1516 Ninth Street
Sacramento, CA 95814

California Public Utilities Commission
Re: R.19-01-011
505 Van Ness Avenue
San Francisco, CA 94102

Re: A. O. Smith Corporation Comments on 20-DECARB-20 CEC-CPUC Joint Agency Workshop on Building Initiative for Low-Emissions Development (BUILD) Implementation Plan

Dear Chair Hochschild, Commissioner McAllister & Commissioner Randolph:

A. O. Smith Corporation (“A.O. Smith”) appreciates the opportunity to provide comments on the California Energy Commission’s (“CEC”) and the California Public Utilities Commission’s (“CPUC”) *Joint Agency Workshop on Building Initiative for Low-Emissions Development Implementation Plan* (“Joint Agency Workshop”), held jointly by the agencies on June 15, 2020.

The Building Initiative for Low-Emissions Development Program (“BUILD Program”) was designed to develop valuable market experience for the purpose of decarbonizing California’s residential buildings. The program, under CPUC policy oversight and CEC design and administration, aims to incent the deployment of near-zero building technologies in new residential buildings that reduce greenhouse gas (“GHG”) emissions significantly beyond what otherwise would be expected to result from the implementation of the prescriptive standards described in Part 6 of Title 24 of the California Code of Regulations.

As the BUILD Program rulemaking before the Joint Agencies has recognized, heat pump water heaters (“HPWHs”) are an essential technology that will help California reach its policy goals in the built environment. In order for the CEC and CPUC to design the program in a way that best fulfills the aggressive goals set forth by the Joint Agencies and the State Legislature to decarbonize the building sector, while ensuring that low-income residents have the opportunity to participate, A.O. Smith respectfully requests that the CEC and CPUC:

- **Establish Consistent, Easy-to-Implement and Understandable Program Rules that Promote the State’s Market Transformation Goals:** The CEC and CPUC should leverage design principles that are both proven and established for purposes of the BUILD Program. Namely, accessible design around rebates (i.e., an instant rebate for unitary systems) will be critical to program success.
- **Harmonize HPWH Program Administration across the State:** There are 11 HPWH-related programs across the State. In order for the Joint Agencies to streamline BUILD Program design, reduce redundancies and avoid undue costs, they must rely exclusively on established program standards relating to HPWHs. Specifically, the Joint Agencies should rely on HPHW regulatory frameworks to be developed within the CPUC’s Self-Generation Incentive Program (“SGIP” under CPUC R.20-05-012) and the CPUC’s Technology and Equipment for Clean Heating Initiative (“TECH Initiative”).
- **Ensure Program Eligibility and Access for all Types of HPWHs:** The BUILD Program should allow eligibility and accessibility for both unitary and central systems, particularly for low-income communities. Program design and technical qualifications, however, need to vary between HPWH classes:
 - **Unitary Systems:** The BUILD Program should establish an *instantaneous application process that includes an instant rebate* so as to not impose a barrier to low-income housing and project developers that need early access to funding.
 - **Central Systems:** Central HPWH systems serve a critical function in multifamily housing and low-income communities. The BUILD Program should establish a reservation system that allows each design engineer to reserve funding based on specific building design.

About A.O. Smith

A. O. Smith is a global leader in applying innovative technology and energy efficient solutions to products manufactured and marketed worldwide. The company is one of the world’s leading manufacturers of residential and commercial water heating and hydronic heating equipment, as well as a manufacturer of water treatment and air purification products. Along with its wholly owned subsidiary, Lochinvar LLC, A. O. Smith is the largest manufacturer and seller of residential and commercial water heating equipment, high efficiency residential and commercial boilers and pool heaters in North America.

Discussion

I. Market Transformation Depends on Easy-to-Implement and Understandable BUILD Program Design

A. O. Smith respectfully suggests that the following principles be deployed in designing the BUILD Program. These are consistent with principles proposed by a broad coalition of industry and the environmental community in the CPUC’s March 19, 2020 and May 27, 2020 SGIP public workshops on the integration of HPWH technology.

- **Ease of Validation:** Program eligibility for HPWH models should be linked to easily validated programs.
 - Eligible residential unitary HPWH models would be only those certified by NEEA as meeting the advanced water heating specification Tier 3 version 7.
 - Eligible commercial, multifamily unitary HPWH models should be only those certified by Environmental Protection Agency’s ENERGY STAR program.
 - Eligible central HPWH models should be only those included in the CEC’s Title 24 CBECC Software or equivalent notification.
- **Simple, Yet Verifiable Application Processes:** The BUILD Program should have different reservation processes depending on HPWH type, project size, and incentive amount.
 - **Unitary HPWH Systems – Unitary Residential Single Family & Multi-Family Systems:** Monies should be allocated via an instant rebate available at all channels (i.e., retail, wholesale, etc.).
 - **Larger HPWH Systems – Central Residential Single Family & Multi-Family Systems:** Monies should be allocated via a two-step process wherein (1) the incentive amount is reserved and (2) the project is built and verified funding is received by the developer or system owner. Due to longer project lifecycles (18-24 months) than smaller projects, developers need assurance that incentives will be available at the time of project completion.
- **Extra Incentives Should be Provided to Systems that Can Provide Additional Help to the Grid:** HPWHs that can shift load should be provided with an additional incentive because of the additional value they can provide to the grid.
 - Unitary “rebate” systems must meet pre-set eligibility requirements (e.g., CEC JA13 compliance).
 - Central systems and Unitary multifamily systems must coordinate the eligibility requirements with those being established in the CPUC’s SGIP proceeding (R. 20-05-012).
- **Additional Project Costs:** All HPWH projects should be eligible for additional project costs to include: labor, panel upgrades, wiring, supply and return plumbing, electrical components, expansion tanks, code required upgrades and construction costs.

Additionally, A. O. Smith respectively reminds the Joint Agencies that the CPUC recently ruled that space and water heating appliances of building projects funded by the BUILD Program or incentivized by the TECH Initiative shall not exceed the 750 GWP threshold by January 1, 2023. A. O. Smith appreciates the CPUC’s ruling on this matter that will consider a future date, but continues to encourage the Joint Agencies not to prematurely add a new incentive pegged to this metric as the models are not yet available on the market. If the CPUC decides to allow an adder for low-GWP refrigerants for water heating, A. O. Smith strongly encourages the BUILD Program to implement a single adder for anything 750 and below.

II. Harmonization of HPWH Programs across the State: Joint Agency Coordination on Related Incentive Programs Can Maximize Program Impact and Streamline Agency Efforts

Harmonization of Technical Requirements across the State’s Key HPWHs Programs

A. O. Smith suggests that the Joint Agencies rely on the already robust list of existing program technical requirements. Consistency across programs is critical so that manufacturers know what specifications to build HPWHs for. Below is a table outlining suggested technical eligibility proxies for the BUILD program that already exist today:

HPWH Type	Suggested Existing Eligibility Metric
Unitary (Residential)	NEEA Tier 3, version 7.0-compliant + JA13-compliant for load shifting adder
Unitary (Commercial)	EPA ENERGY STAR-certified + SGIP-developed requirements for load shifting adder
Central (Residential & Commercial)	Approval in CEC Title 24 CBECC software + SGIP-developed requirements for load shifting adder

Coordination Amongst SGIP, TECH Initiative & BUILD Program: Timeline Coordination and A Single Online Portal

In order to drive optimal success of the BUILD Program while eliminating the risk of inter-program redundancies, the agencies should commit to design coordination amongst related agency programs, specifically SGIP and the TECH Initiative.

The Joint Agency Workshop outlined a program timeline as follows:

Event	Date
Public comments due on this workshop	June 29, 2020
Submit Implementation Plan to CPUC	July 24, 2020
Public Comments on Implementation Plan Due	July 7, 2020
Issue RFP for Technical Assistance to Provider	3 rd Quarter 2020
Public draft BUILD Guidelines	4 th Quarter 2020
Publish Final BUILD Guidelines	1 st Quarter 2021
Launch BUILD Program	2 nd Quarter 2021

This timeline mirrors much of the key dates of the SGIP program outlined in the CPUC’s June 8, 2020 SGIP Order Instituting a Rulemaking (R.20-05-012, “OIR”):

Event	Date
Adoption of Order Instituting Rulemaking (OIR)	May 28, 2020
Comments on OIR	June 27, 2020
Reply comments on OIR	July 7, 2020
Prehearing Conference	July 29, 2020
Scoping Memo	August 2020
Ruling with HPWH Staff Proposal / Questions	Fall 2020
Comments / Reply on Staff HPWH Proposal	Winter 2020
Renewable Generation Technology Workshop	Fall 2020
Ruling with renewable generation technology staff proposal and/or questions	Winter 2020

Proposed Decision on HPWH and renewable generation technologies	Winter 2021
Decision on HPWH and renewable generation technologies	Winter 2021

Because the programs have significant overlap in their program goals, particularly as it relates to GHG emission reductions and the integration of HPWH technologies, A.O. Smith respectfully encourages the Joint Agencies to coordinate program design and implementation in a way that streamlines the two programs and allows them to build off of one another in their shared programmatic goals.

Further, an important and easy way for the agencies to streamline the related incentive programs beyond timeline coordination would be to establish a single portal for the BUILD Program, TECH Initiative and SGIP program. In doing so, both developers and regulating agencies will not be challenged by learning and the design of two redundant systems, while maximizing available State resources. Importantly, a single online portal will aid the agencies in monitoring leveraged funding across incentive programs to avoid double dipping. To the extent useful, the Joint Agencies can further consider the integration of other related incentive programs, such as the California Advanced Homes Program and Savings by Design, for purposes of a shared online portal.

III. Ensure Program Eligibility and Access for all Types of HPWH Technology

Unitary HPWH Systems Require Special Considerations for Program Design

The Joint Agency Workshop addressed at length its proposal for a two-step application process. As proposed, Step 1 of the process covers the Reservation where applicants can submit during the project planning stage and lock funding upon application approval. Step 2 of the process covers payment. Here, applicants verify project requirements and receive payment upon project completion. As the Joint Agency Workshop described, funding would be locked for an applicant upon reservation approval and the incentive amount would be issued in an “lump sum” at a whole-building level “upon project completion.”

While this process may be appropriate for the longer 18-24 month lead time for central systems, A.O. Smith fears that this structure cannot work for residential unitary HPWHs and would disadvantage low-income consumers and smaller project developers.

For unitary systems, A. O. Smith suggests an instant rebate process that can validate funding eligibility. The instant rebate system for unitary HPWHs has proven to be over ten times more effective than programs with other incentive designs. Accordingly, the BUILD Program reservation system must consider:

- The first step consists of confirming (reserving) funds and the also the simultaneous issuance of an instant rebate.
- The second step can be a more robust process for additional eligible costs that occur during installation.

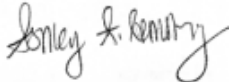
Care Must be Taken to Ensure that Central HPWH Systems are not Inadvertently Left Out of the Program

Central HPWHs are larger systems that serve multifamily applications. Unlike unitary HPWHs, central heat pumps do not have an integrated storage tank. These are custom-systems designed by specifying engineers to support a specific multifamily application. A. O. Smith strongly encourages the BUILD Program to include central HPWHs when detailing the eligibility requirements. Central HPWHs are not included in the NEEA Tier 3.0, version 7.0 specification and require a different set of eligibility requirements as outlined above. A. O. Smith urges the CEC and CPUC to utilize the program eligibility requirements as set forth above for all types of HPWHs as they each will play an important role in the BUILD Program.

Conclusion

A.O. Smith appreciates the opportunity to provide comments in support of the CEC and CPUC's leadership on the design and implementation of the BUILD Program and stands ready to work with the two agencies moving forward.

Respectfully submitted,



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