Subject: ENERGY STAR 2020 Most Efficient Criteria

This letter is submitted on behalf of the Northwest Energy Efficiency Alliance (NEEA), the Pacific Gas & Electric Company (PG&E), and Sacramento Municipal Utility District (SMUD) in response to the request for input to the ENERGY STAR® Most Efficient (ESME) recognition criteria. NEEA is a non-profit organization representing an alliance of more than 140 Northwest utilities and energy efficiency organizations working on behalf of more than 13 million energy consumers, PG&E is an investor-owned utility, focused on providing safe, reliable, clean and affordable energy to 16 million Californians, and SMUD is a community-owned, electric utility providing reliable and affordable electricity to 1.5 million energy consumers. We are working to encourage the development and adoption of energy-efficient products and services.

NEEA, PG&E, and SMUD strongly support EPA’s ENERGY STAR program and the ESME designation. ENERGY STAR is a critically important federal program created with bi-partisan support that annually delivers billions of dollars of energy savings to consumers and business. As such, ENERGY STAR’s leadership in setting appropriate ESME voluntary specifications plays a critical role in advancing the efficiency of consumer products by recognizing those products that are superior at meeting consumer’s experiential expectations while saving them energy and money.

As key ENERGY STAR Retail Products Platform (ESRPP) program sponsors, we believe that the ESME product categories play a vital role in signaling to the market how product category technologies are evolving and the features and criteria most important to the market and consumers. Therefore, we applaud EPA for the proposed updates to product categories in the ESRPP. After review of the proposal, we submit the following comments on the proposed criteria.

Clothes Washers

We support EPA’s proposal to continue providing ESME recognition for clothes washers. Though the proposed criteria recognize the best products of the entire product category
average, we reiterate our previous comments for adding a recognition tier with reduced requirements for top-loading clothes washers.

In reviewing 2019 ESRPP sales data from NEEA and PG&E, we have found that 29 percent of front-load models and zero percent of top load models meet the proposed ESME 2020 criteria. Though these criteria cover 13 percent of overall models, this makes ESME recognition less meaningful for front-load washers and unattainable for top-load washers. Further, the 29 percent of front-load models that are covered by these criteria make up 56 percent of ESRPP front-loader ESRPP sales from NEEA and PG&E. As seen in Figure 1 below, if the ESME criteria remain as proposed for 2020, we expect over half of front-load models sold will be recognized and no top-loading models will be recognized, though there are more sales of top-loaders. To ensure that all consumers have access and ability to recognize the most efficient products within their market segments, we support developing criteria specific to top-loading washers and updating the criteria levels for front-loading washers.

![Figure 1. ESRPP clothes washer sales by configuration and efficiency tier (2019 ESRPP Sales in NEEA and PG&E Regions).](image)

Although the top-loading configuration is inherently less efficient than the front-loading configuration, there is significant opportunity to enhance the efficiency of the top-loader market. Providing recognition to the most efficient top-loading washers could help to shift the
top-loading market segment towards greater efficiency. This segmentation is consistent with the EPA’s previous decision to develop distinct ENERGY STAR criteria for top-load and front-load washers. If the ESME designation is meant to showcase the intended future for the ENERGY STAR specification, separate ESME criteria for top-loaders and front-loaders will more accurately communicate intentions for Clothes Washers v9.

Specifically, we recommend updating the criteria for standard top-loading washers to $\geq 2.38$ integrated modified energy factor (IMEF) and $\leq 3.7$ integrated water factor (IWF). This would enable six percent of top-loading 2019 sales from retailers in NEEA and PG&E regions to qualify for ESME. No top-loading washers can qualify under the current proposed criteria. Figure 2 shows the ESRPP sales that would meet each set of requirements.

![Diagram showing sales of top-loading clothes washers](image)

Figure 2. Sales of standard-size (> 2.5 ft³) top-loading clothes washers that would meet various IWF and IMEF requirements (2019 ESRPP Sales in NEEA and PG&E Regions). The position of each circle’s center denotes the water and energy efficiency, and the size of each circle indicates the number of sales at that efficiency level. There is a significant gap in efficiency between the top 2.5 percent of top-loading washers and the rest of the ENERGY STAR-qualifying models, so potential top-loader ESME criteria would need to recognize either 2.5 percent or 6 percent of top-loader sales.
We also recommend updating the criteria for standard front-loading washers to ≥ 3.0 integrated modified energy factor (IMEF) and ≤ 3.2 integrated water factor (IWF). Through our in-depth analysis of the high-efficiency models in the ESRPP sales data, we determined that 20% of front load sales could qualify for ESME at this level. These sales span multiple models, retailers, and manufacturers.

**Room Air Conditioners**

We appreciate EPA developing ESME criteria for room air conditioners, as it is helpful in market identification of top-tier efficient products. We are pleased to see that EPA is moving forward with allowing for optional refrigerant reporting but would also like this reporting to be a requirement.

The current ENERGY STAR specification includes optional connected criteria for products. We are very supportive of developing connected criteria and requirements for products so that they may be energy efficient and demand flexible. We would appreciate if the ESME criteria could have similar connected criteria guidelines so that connected products can be identified and supported.

**Televisions**

Though the televisions 2020 ESME criteria remains the same as the 2019 ESME criteria, we believe this is still an appropriate level. We are pleased to see EPA will maintain recognition of top performance and efficiency. In addition, we reaffirm our previous comments on televisions from the 2019 ESME criteria⁴.

**Other ESRPP Product Categories**

For ESRPP sponsors, it is critically important to have an ESME tier to support development of high-efficiency products across the portfolio. From our review and analysis, we support the proposed levels for clothes dryers and refrigerators. We appreciate that EPA has included criteria specifically for freezers, and we support the level that was chosen to recognize top products. We are also pleased to see that room air conditioners now have an ESME criteria. These designations will help our program to recognize the most efficient products, and it is encouraging to see that the products covered by ESME are expanding. Overall, the 2020 ESME

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⁴ https://www.energystar.gov/sites/default/files/ESME%202019%20Comments%20from%20NEEA%20and%20PG%20E.pdf
criteria do not offer designations for some products in the portfolio that could benefit from this higher tier, including room air cleaners and sound bars. Recognizing a higher efficiency level in these products could enable the ESRPP program to more precisely target a tier to the most efficient technologies in alignment with EPA and guide future revisions to the ENERGY STAR specifications.

Our hope is that ESME product designation sends clear market signals of what future energy efficiency recognition through ENERGY STAR or other federal appliance standards will look like. This is helpful messaging for retailers and manufacturers to understand. Having a Most Efficient level makes recognition of the best in class products easier to communicate. In continuing with that communication, we suggest EPA continue to work toward linking ESME criteria to future ENERGY STAR specifications. This will help better signal to industry how energy-efficient products may be recognized. Continuing to push initiatives like refrigerant reporting and connected criteria will help shape future products. We appreciate the progress EPA has made to date and hope to see more in the future.

We thank EPA for the opportunity to comment on these important changes to its proposed specification, and we very much appreciate the EPA’s responsiveness to stakeholder input. NEEA and PG&E look forward to continuing our work with the ENERGY STAR program.

Respectfully,

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