



January 11, 2024

Ryan Fogle
Office of Air and Radiation
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Topic: ENERGY STAR® Computers Specification Version 9.0, Draft 1

Dear Mr. Fogle:

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), collectively referred to herein as the California Investor-Owned Utilities (CA IOUs), in response to the United States (U.S.) Environmental Protection Agency (EPA) request for comments on the ENERGY STAR® Computers Specification Version 9.0, Draft 1.

The CA IOUs comprise some of the largest utility companies in the nation, serving over 32 million customers in the Western U.S. We are committed to helping customers reduce energy costs and consumption while striving to meet their evolving needs and expectations. Therefore, we advocate for standards that accurately reflect the climate and conditions of our respective service areas.

We appreciate this opportunity to provide EPA with comments on the first draft of the Computers Specification Version 9.0. We support the draft's updates and revisions, recognizing the most efficient products in this ever-changing market. We support the proposed specification updates, particularly the following:

1. The CA IOUs support the simplified base allowance and adders structure.

EPA analysis indicates the performance score (p-score) is no longer a reliable indicator for computer energy use in idle, sleep, and off modes. Consequently, EPA proposes implementing a uniform base allowance across all products within the three categories: desktops, integrated desktops, and notebooks. This approach contrasts with the previous method of determining the base allowance derived from the performance score function within each category. EPA also proposes to fold the memory, storage, and high-speed Ethernet adders into the base allowance for notebook computers.

CA IOU analysis of computers featured in the ENERGY STAR Data Package (package) indicates that EPA's proposed base allowance and adders structure effectively measure computer energy use, as depicted in Figure 1. We are in favor of this proposed structure. However, our analysis finds that under the proposed specification, a significant proportion of the models listed in the package still qualify: 37% of desktops, 28% of integrated desktops, and 58% of notebooks.. Considering the rapid advancements in

computer technology, we urge EPA to adopt more stringent base allowance and adders for Version 9.0, ensuring that at most 20 to 30% of the market qualifies in the beginning of the Version 9.0 released.

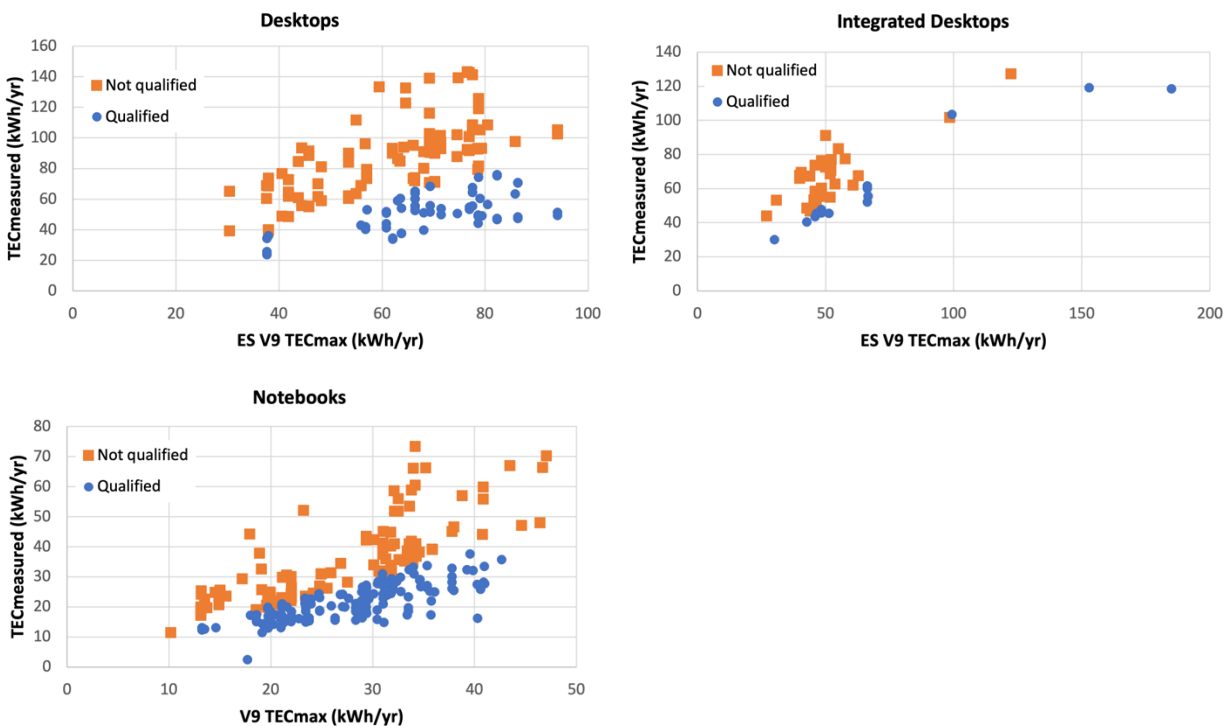


Figure 1: Comparison of proposed maximum total energy consumption (TECmax) and measured TEC (TECmeasured) for desktop, integrated desktop, and notebook product categories. Orange squares indicate models that would not qualify at the proposed levels for Version 9.0. Blue squares indicate eligible models.

Source: CA IOU analysis of [ENERGY STAR Computers Version 9.0 Data Package](#).

2. The CA IOUs support 80 PLUS Silver or better efficiency levels for internal power supplies 500 watts and less.

The CA IOUs have previously advocated for EPA to mandate more efficient internal power supplies (IPS) to facilitate energy savings. EPA proposes that IPS of 500-watt or less should meet or exceed the 80 PLUS[®] Silver efficiency levels. Our analysis of IPS tested within the past 10 years by 80 PLUS indicates that 54% of 500-watt or less IPS already meet or exceed the 80 PLUS Silver standard.¹ We concur with EPA’s assessment that a sufficient supply of IPS meets or surpasses the Silver standard, satisfying the proposed requirement. However, EPA proposes to increase the efficiency requirements only for IPS larger than 500 watts due to the limited availability of Platinum IPS. Yet, our analysis shows that 23% of IPS tested for 80 PLUS certification in the past ten years achieved the Platinum rating. Therefore, we urge EPA to adopt Platinum –level efficiency requirements for IPS greater than 500 watts once they reach an acceptable market penetration.

Given that computers typically sleep and idle at loads lower than those measured by the EPA test method, the CA IOUs have previously encouraged EPA to require a low-load IPS efficiency measurement and to set a low-load efficiency requirement if deemed appropriate. In April 2023, 80 PLUS began

¹ CA IOU analysis of test data downloaded from 80 PLUS: <https://www.clearesult.com/80plus/manufacturers/115V-Internal>

measuring IPS efficiency at 5% to collect low-load data.² Once the dataset has a suitable number of IPS, we will evaluate the potential for energy savings at low loads.

- 3. The CA IOUs support the requirement that all Ethernet ports with a speed of one Gigabit per second and faster should have Energy Efficient Ethernet enabled in the as-shipped condition.**

The CA IOUs have previously recommended requiring Energy Efficient Ethernet (EEE) to be shipped as enabled to reduce the energy use of unused and idling Ethernet ports. We commend EPA for adding this requirement to the Version 9 specification.

- 4. The CA IOUs support removing the IPS efficiency and alternative low-power mode full network proxy allowances.**

EPA intends to remove allowances not utilized under Version 8 or made irrelevant due to specification changes. The CA IOUs support these deletions.

- 5. The CA IOUs support EPA's exploration of methods for measuring active mode power consumption, with the possibility of including this data in future revisions of this ENERGY STAR specification.**

EPA has expressed interest in investigating testing methodologies for evaluating computer power consumption in active mode and assessing the potential inclusion of such measurements in the specification. The CA IOUs support EPA's ongoing efforts in this area and look forward to including computer energy efficiency requirements for active mode performance in future ENERGY STAR specifications.

The CA IOUs appreciate the opportunity to provide these comments on Version 9.0, Draft 1 specification for computers. We thank EPA for its consideration. We look forward to the next steps in the process.

² 80 PLUS data is available on its website: CLEAResult, "80 PLUS® Certified Power Supplies and Manufacturers," n.d., <https://www.clearesult.com/80plus/manufacturers/115V-Internal>.

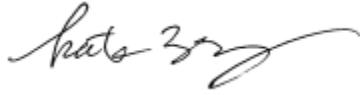
Sincerely,



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