UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

November 14, 2017,

Dear Computers Stakeholder:

On September 28th, 2017, the U.S. Environment Protection Agency (EPA) released the ENERGY STAR[®] Computers Version 7.0 Draft 2 specification. EPA held a webinar to discuss proposed updates and stakeholder feedback on October 12th, 2017. In response, compelling feedback was provided that adjustments to the notebook category 2 base allowance and notebook memory adder are warranted in order to allow sufficient selection of certifying models across different hardware platforms. These adjustments are also necessary to ensure the memory adder is not penalizing configurations with small amounts of memory and providing a disproportionate adder amount to configurations with large amounts of memory. EPA is seeking feedback on these potential modifications to the Draft 2 proposal prior to including them in the Final Draft specification, expected to be released in early December.

Revised Notebook Category 2 Base Allowance

EPA received stakeholder feedback suggesting that the notebook category 2 base allowance would limit the certification of different hardware options with 16GB or less of memory. As a result, EPA is proposing to increase this base allowance from 12 to 14 kWh/year, which better reflects the performance of higer-end configurations in a product family that contain notably less memory than the product family's tested representative model. The proposed change in Table 8 is shown below:

Table 8: Base TEC (TEC$_{BASE}$) Allowances for Notebooks

Category Name	Notebook	
	Performance Score, P^v	Base Allowance
0	$P \leq 2$	6.5
1	$2 < P \leq 8$	8.0
2	$P > 8$	~~12.0~~ 14.0

Revised Notebook Memory Adder

EPA received feedback from stakeholders raising two issues with the memory adder proposed in Draft 2. They are:
1. Lower-end configurations with 4GB of memory would not be recognized in great enough numbers based on Draft 2 criteria. Stakeholder comments revealed this issue, which was not apparent in the certified product data as these lower-end models are not typically reported due to product family structure, where the highest memory configurations serve as the representative model.
2. The pass rate for higher-end configurations with memory totals greater than 16GB would be disproportionately higher, indicating the need for an adder that scales less steeply than the previously proposed 0.4 kWh/year per GB adder.

EPA reviewed data that supports these findings and is proposing to adjust the memory adder, providing slightly more allowance for memory up to 4GB, and less allowance beyond 4GB. This equation scales

similarly to the memory adder adopted by the California Energy Commission in their latest regulatory effort on notebooks, but the adder values better serve ENERGY STAR's purpose of recognizing leadership. The revised memory adder is shown below:

Function	Notebook
TEC_{MEMORY} (kWh)^{vi}	~~0.4~~ 2.4 + (0.294 × GB)

vi: TEC_{MEMORY} Adder: *GB* applies per GB of memory installed in the system

The combination of the proposed changes to the notebook category 2 base allowance and notebook memory adder is intended to allow sufficient selection of certified models across different hardware platforms.

Stakeholders are encouraged to provide feedback on the proposed changes presented here, as well as any general comments, to computers@energystar.gov **no later than November 30, 2017**. Please direct specification related questions to Ryan Fogle, EPA, at Fogle.Ryan@epa.gov, or 202-343-9153; or John Clinger, ICF, at John.Clinger@icf.com, or 215-967-9407.

Sincerely,

Ryan Fogle
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