



July 15, 2019

Mr. Ryan Fogle
United States Environmental Protection Agency
ENERGY STAR Program
1200 Pennsylvania Ave NW
Washington, DC 20460

Subject: NRDC comments on ENERGY STAR Computers Version 8 Internal Power Supply Efficiency

Dear Mr. Fogle,

On behalf of the Natural Resources Defense Council (NRDC) and our more than 1.3 million members and online activists, we respectfully submit the following comments in regard to the ENERGY STAR Computer Version 8.0 stakeholder meeting held June 18, 2019.

Our comments focus on internal power supply efficiency, which remains one of the key energy efficiency opportunities for desktop computers, because inefficient power supplies can be responsible for 25 percent or more of the energy used by the computer, which makes them one of the top energy-using components in the computer.

As indicated in our May 3, 2019 comments, we support a 10-percent load efficiency requirement as a compromise between our initial proposal of a 5-percent efficiency requirement and other stakeholders' positions. 10-percent load is reasonably representative of low-intensity operating conditions on most computers, and the efficiency at that load has been measured and reported by the 80-Plus team for many years. It therefore adds no testing burden for manufacturers.

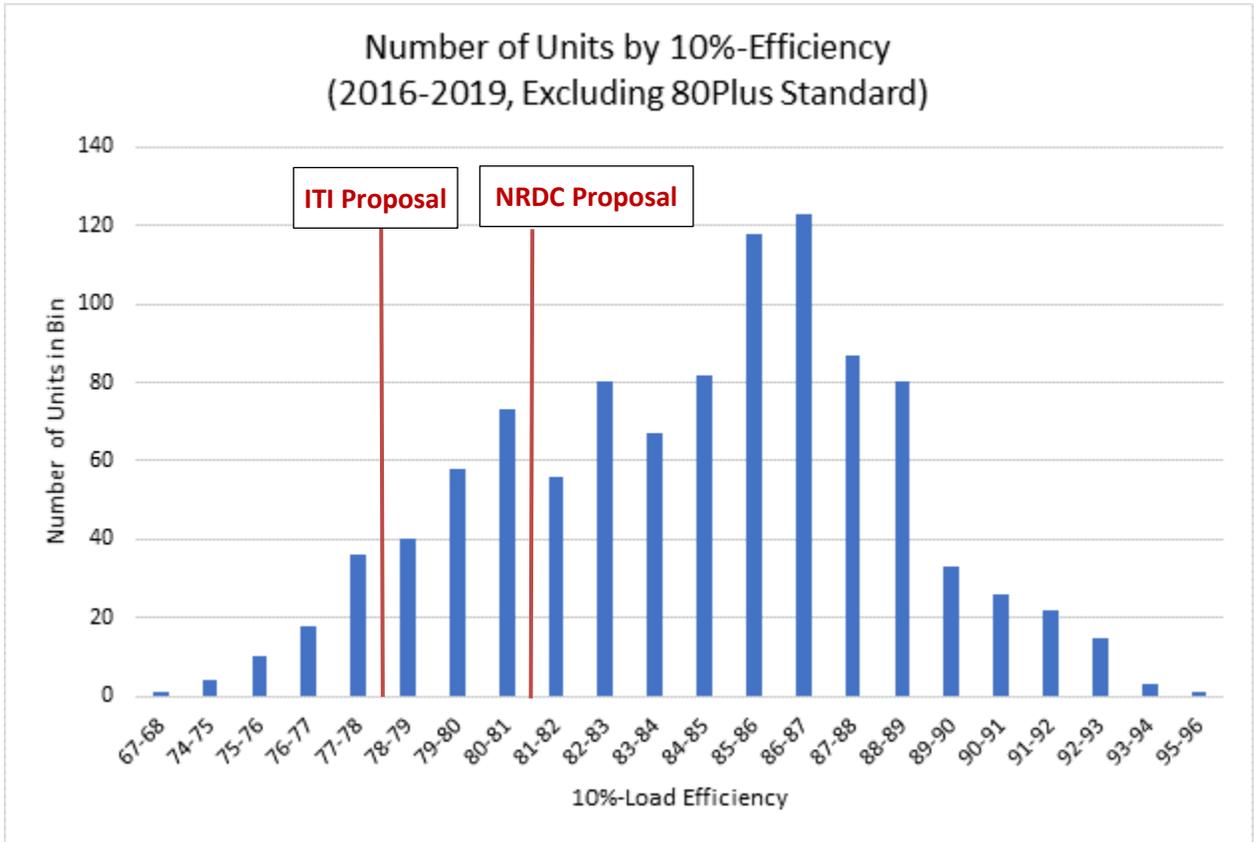
NRDC recommends an 81-percent threshold for all power supplies, above and below 500-watt

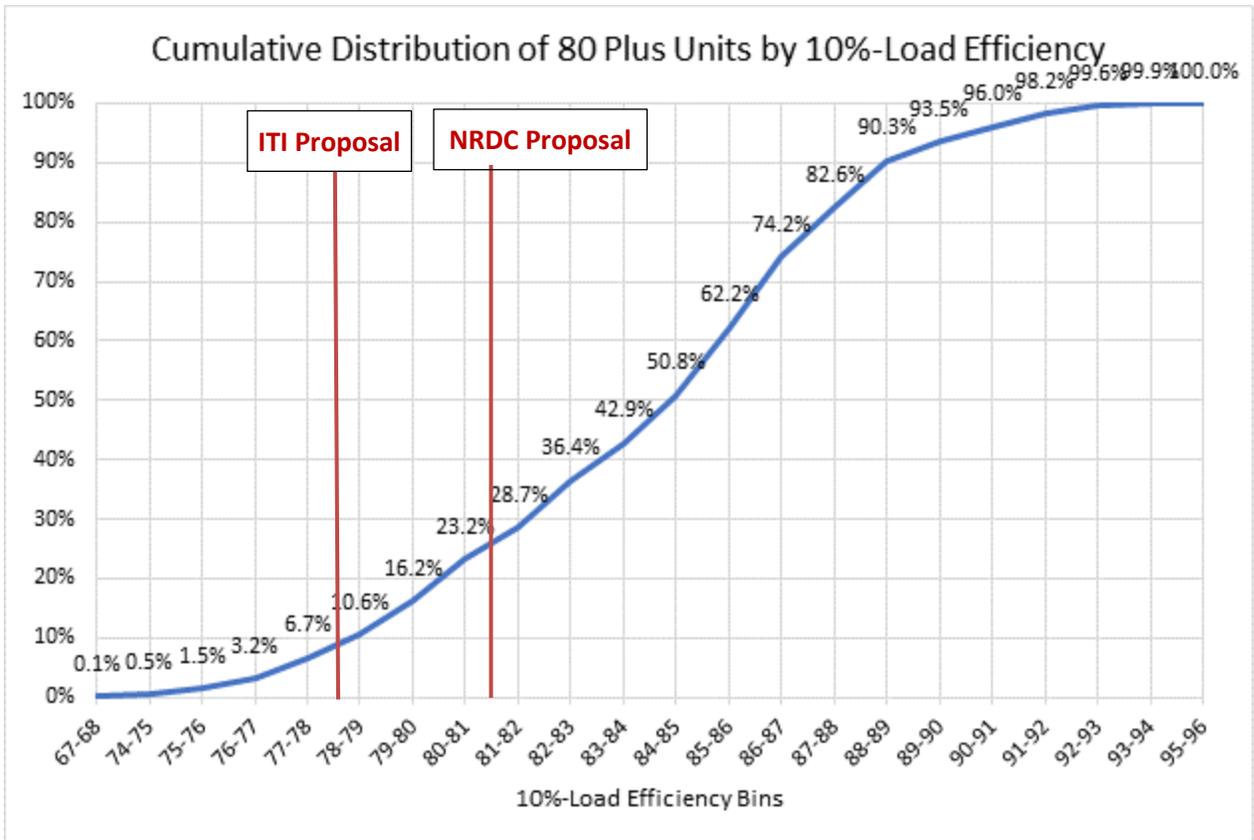
NRDC is encouraged by ITI's proposal of a 10-percent load efficiency requirement and we generally support this approach. However, to be effective, the following adjustments should be made:

1. The minimum efficiency requirement should be set at the bottom quartile of the 80-Plus dataset, which is roughly 81 percent
2. This 81-percent requirement should apply to all internal power supplies, not just those rated 500 watts or less.

NRDC’s analysis of the 80-Plus dataset on 10-percent load efficiencies finds that only **6.7%** of more than 1000 power supplies analyzed (all 115-volt certified models released from 2016 to 2019, excluding Standard rating) would be eliminated by a 78-percent threshold.

The median of the dataset is 84.9% efficiency, and the bottom quartile 81.3%. An 81-percent requirement is slightly less stringent than the bottom quartile and leaves a 4-percent efficiency margin with the median of the current market.





The 81-percent efficiency requirements should be applied to all internal power supplies, not just those rated 500 watts or less. Draft 1 already requires power supplies rated higher than 500 watts to achieve 80 Plus Gold equivalent efficiency levels. NRDC supports this requirement, but is concerned that it could be achieved at the expense of 10-percent load efficiency. A consistent 10-percent load efficiency requirement across all ratings would be simpler, and would prevent the risk of unnecessary trade-off between 80 Plus Gold and 10-percent load efficiency requirements. It should also be very easy to achieve as 98% of the 435 Gold-rated power supplies NRDC analyzed already meet it.

Thank you for the opportunity to participate in this specification development process and for your consideration of our comments.

Sincerely,

Pierre Delforge
 Senior Scientist
 Natural Resources Defense Council