

Appliance Standards Awareness Project
American Council for an Energy-Efficient Economy
National Consumer Law Center, on behalf of its low-income clients
Natural Resources Defense Council

April 3, 2023

Mr. Jeremy Dommu
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Building Technologies Office, EE-5B
1000 Independence Avenue SW
Washington, DC 20585

RE: Docket Number EERE-2020-BT-STD-0006/RIN 1904-AD87: Notice of Proposed Rulemaking for Energy Conservation Standards for External Power Supplies

Dear Mr. Dommu:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), National Consumer Law Center, on behalf of its low-income clients (NCLC), and Natural Resources Defense Council (NRDC) on the notice of proposed rulemaking (NOPR) for energy conservation standards for external power supplies (EPSs). 88 Fed. Reg. 7284 (February 2, 2023). We appreciate the opportunity to provide input to the Department.

We support strengthening the energy conservation standards for EPSs and are pleased that DOE is moving forward with proposed amended standards for all EPS product classes. In the NOPR, DOE proposed to adopt Trial Standard Level (TSL) 4, which would result in meaningful, cost-effective energy savings and emissions reductions that will benefit consumers and the environment. However, higher efficiency levels would achieve significantly greater energy savings, emissions reductions, and cost savings. Therefore, we encourage DOE to consider adopting TSL 5. If DOE elects not to adopt TSL 5, we urge the Department to adopt a higher efficiency level for AC-DC basic-voltage EPSs. We discuss these recommendations and other issues in further detail below.

We encourage DOE to consider adopting TSL 5. DOE's analysis shows that relative to the proposed standards (TSL 4), TSL 5 would achieve significantly greater energy savings, emissions reductions, and cost savings for consumers.¹ Specifically, as shown in Table 1, TSL 5 would result in four to five times greater energy savings, net present value savings, and CO₂ emissions reductions compared to TSL 4.

¹ 88 Fed. Reg. 7335.

Table 1. Comparison of benefits from amended EPS standards at TSL 4 and TSL 5

TSL	Full-Fuel Cycle National Energy Savings (quads)	NPV @ 7% (\$M)	NPV @ 3% (\$M)	Cumulative CO ₂ Emissions Reductions (MMT)
4	0.115	174	451	3.9
5	0.510	752	1,958	17.3

At TSL 5, the range of incremental costs is only \$0.02 to \$1.96, depending on the product class.² DOE notes that incremental product costs for all EPSs are very small relative to the cost of the end-use application, which can be greater by several factors of 10.³ Additionally, at TSL 5, average lifecycle cost (LCC) savings are positive for all product classes, except for one, which has slightly negative savings (-\$0.27).

If DOE elects not to adopt TSL 5, we urge the Department to adopt Efficiency Level (EL) 2 for the AC-DC basic-voltage product class. In the NOPR, DOE proposed to adopt TSL 4, which represents EL 1 for AC-DC basic-voltage EPSs. As described above, we encourage DOE to consider adopting TSL 5, which represents EL 3 for the AC-DC basic-voltage class. However, if DOE elects not to adopt TSL 5, we urge the Department to adopt EL 2 for AC-DC basic-voltage EPSs—a level which was not reflected in any of the TSLs. At EL 2, less than half of consumers would see a net cost (49%), and LCC savings are essentially the same as at the proposed standard level (-\$0.10 at EL 2 compared to -\$0.03 at EL 1). Furthermore, as DOE notes in the NOPR, LCC savings will grow in the years beyond 2027 (the assumed compliance date) as the average incremental product costs decrease over time due to price trends, and fewer consumers would actually experience a net cost.⁴ For EL 2, it appears that LCC savings would become positive after about four years.⁵ Thus, we believe that a modified TSL 4 that includes EL 2 for AC-DC basic-voltage EPSs would address any net cost concerns while increasing energy savings and consumer net present value savings.

We support DOE’s decision to remove the distinction between indirect and direct operation Class A and non-Class A EPSs. The current EPS standards vary based on whether the product meets the definition of direct or indirect operation and whether an EPS is Class A or non-Class-A. In this NOPR, DOE has proposed more stringent standards that would be applicable to all EPSs, including direct and indirect operation Class A and non-Class A EPSs.⁶ Therefore, we agree with DOE that the continued use of these terms is unnecessary.

² TSL 5 would set the standard at Efficiency Level (EL) 1 for the AC-DC low-voltage, AC-AC low-voltage, and multiple-voltage product classes. The AC-DC basic-voltage and AC-AC basic-voltage product classes would be set at EL 3 and EL 4, respectively. <https://www.regulations.gov/document/EERE-2020-BT-STD-0006-0026>, pp. 8-26 – 8-27.

³ 88 Fed. Reg. 7338.

⁴ 88 Fed. Reg. 7338.

⁵ The average incremental cost at EL 2 for the AC-DC basic-voltage product class (\$0.53) would decline each year according to the price trend associated with semiconductors (6% applied to 95% of the incremental cost) and would be equivalent to the lifetime incremental operating cost savings (\$0.43) between year 4 and 5. <https://www.regulations.gov/document/EERE-2020-BT-STD-0006-0028>.

⁶ 88 Fed. Reg. 7293.

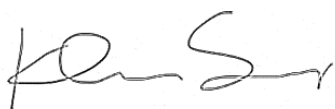
DOE's improved engineering analysis for the NOPR better reflects the incremental costs to achieve higher efficiency levels. In our comments on the 2022 preliminary technical support document (PTSD), we urged DOE to conduct additional product testing and teardowns and manufacturer interviews to better estimate incremental costs for EPSs.⁷ For the NOPR, DOE increased the number of teardowns across different product classes to validate the manufacturer cost of production for the representative units and the extrapolated values.⁸ Additionally, after the PTSD, DOE conducted manufacturer interviews to receive feedback on the costs and overall engineering analysis.⁹ We believe these efforts resulted in more accurate estimates of incremental costs for EPSs.

We support DOE's decision to include a price trend associated with semiconductors. In the NOPR analysis, DOE incorporated a price trend based on the Producer Price Index for semiconductors, with an estimated price decline of about 6% per year.¹⁰ DOE applied this price trend to 95% of the total incremental cost, which is the portion of EPSs attributable to semiconductors. With price learning incorporated into the analysis, we believe that DOE's analysis better approximates the future costs associated with higher efficiency levels over the analysis period.

We support the proposed compliance date of two years following the publication of a final rule. If finalized, the proposed standards would go into effect two years after publication of the final rule. EPSs manufactured on or after this date would be required to meet the proposed standards; however, as DOE noted at the March 2023 public meeting, any existing inventory manufactured or imported into the U.S. prior to the compliance date may continue to be sold until the inventory is depleted.¹¹ The current EPS standards, which were finalized in 2014, also had a two-year compliance date.¹² We believe that a two-year compliance date would give manufacturers ample time to bring EPSs into compliance with the new standards.

Thank you for considering these comments.

Sincerely,



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⁷ <https://www.regulations.gov/comment/EERE-2020-BT-STD-0006-0024>.

⁸ 88 Fed. Reg. 7304.

⁹ Ibid.

¹⁰ <https://www.regulations.gov/document/EERE-2020-BT-STD-0006-0026>, p. 8-7.

¹¹ Transcript from the DOE public meeting on March 1, 2023. <https://www.regulations.gov/document/EERE-2020-BT-STD-0006-0035>, p. 45.

¹² 88 Fed. Reg. 7291.



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