

Appliance Standards Awareness Project
Natural Resources Defense Council
American Council for an Energy-Efficient Economy
Consumer Federation of America
National Consumer Law Center
Northwest Energy Efficiency Alliance
Northwest Power and Conservation Council

May 28, 2013

Ms. Brenda Edwards
U.S. Department of Energy
Building Technologies Program
1000 Independence Avenue, SW
Mailstop EE-2J
Washington, DC 20585

RE: Docket Number EERE–2008–BT–STD–0005/ RIN 1904–AB57: Request for Information on Evaluating New Products for the Battery Chargers and External Power Supply Rulemaking

Dear Ms. Edwards:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), Natural Resources Defense Council (NRDC), American Council for an Energy-Efficient Economy (ACEEE), Consumer Federation of America (CFA), National Consumer Law Center (NCLC), Northwest Energy Efficiency Alliance (NEEA), and Northwest Power and Conservation Council (NPCC) on the request for information (RFI) on evaluating new products for the battery chargers and external power supply rulemaking. 78 Fed. Reg. 18253 (March 26, 2013). We appreciate the opportunity to provide input to the Department.

We are pleased that DOE is considering revising the analysis for battery chargers in light of the availability of products that have been certified as meeting the California Energy Commission (CEC) standards. As DOE notes in the RFI, the CEC standards are more stringent than the standards in DOE's March 2012 proposed rule for those battery chargers falling within Product Classes 2-6,¹ which represent more than 75% of battery charger shipments. We expect that the CEC standards will become *de facto* national standards, at least for the majority of product types. Therefore, if DOE adopts standards for certain product classes that are weaker than the CEC standards, this could actually result in *increased* national energy consumption.

Below we provide our comments on the analysis for battery chargers and battery charger marking requirements.

¹ 78 Fed. Reg. 18254.

Battery Charger Analysis

We encourage DOE to conduct additional analysis on battery chargers in the CEC database. As we described in our comments and supplemental comments on the NOPR (dated May 29 and July 16, 2012), we would expect that nickel chemistry chargers will often be less-expensive than lithium chemistry chargers with similar efficiency levels. As of May 20, 2013, more than 800 nickel chemistry chargers were listed in the CEC database including chargers for cordless phones, digital cameras, and power tools. We encourage DOE to conduct additional analysis on battery chargers that have been certified to CEC since some of these units may represent lower-cost pathways to reach the CEC efficiency levels compared to the units analyzed by DOE for the NOPR.

We continue to urge DOE to evaluate efficiency levels that are closer to the CEC levels. As we explained in our comments on the NOPR, DOE failed to analyze the CEC levels for the key product classes. As shown in the table below, for Product Classes 2-6, the absolute percentage differences between the CEC levels and the closest CSLs range from 16% to 52%. (The CSLs that DOE considers to be closest to the CEC levels are highlighted in bold.)

Product Class	Annual Energy Consumption (kWh/yr)					% Difference Between CEC Standard and Closest CSL
	CSL 0	CSL 1	CSL 2	CSL 3	CEC Standard	
2	8.6	6.5	3.0	1.0	2.2	-35%
3	11.9	4.7	0.8	0.8	1.8	52%
4	37.8	10.7	4.3	3.2	5.2	16%
5	82.5	58.2	29.8	15.4	19.7	22%
6	120.6	81.7	38.3	16.8	33.1	49%

We encourage DOE to add a CSL for each product class that closely matches the CEC levels. In addition, some products that comply with the CEC standards may represent cost-effective designs for reaching efficiency levels that exceed the CEC levels. As DOE performs tear-downs for these new products, we encourage the Department to analyze the CEC levels as well as levels higher than the CEC standards.

We continue to urge DOE to conduct the analysis for battery chargers based on the lowest-cost chargers identified. In our supplemental comments on the NOPR, we illustrated examples for Product Classes 2, 3, and 4 where DOE averaged the costs of multiple battery chargers to represent the cost of a single CSL. In these cases, the cost of the highest-cost battery charger was 3-4 times the cost of the lowest-cost charger. As we explained in our comments, manufacturers have a strong incentive to adopt the lowest-cost method to achieve a required efficiency level. Therefore, averaging the costs of different battery chargers will overstate the cost to improve efficiency, especially when the costs vary wildly. Averaging costs of different units seems especially problematic in cases where costs are averaged for one or more CSLs above the baseline while the cost of only a single unit is used to represent the baseline cost, such as in the example we illustrate below.

While we welcome additional analysis on battery chargers in Product Class 4, DOE’s previous analysis conducted for the NOPR showed that the CEC standards are cost-effective for Product Class 4, even based on lithium units, if the cost of the lowest-cost unit is used for the analysis. Below we show a table presented in our supplemental comments on the NOPR summarizing the specific units used for DOE’s analysis of Product Class 4.

Product Class 4					
CSL	Unit ID	Product	Battery Chemistry	BOM	MSP
0	715.2.1	Power Tool	Nickel	\$2.60	\$3.79
1	716.2.1	Power Tool	Lithium	\$4.63	\$6.76
2	1045	Handheld Vacuum	Lithium	\$15.93	\$12.71
	630.2.1	Notebook Computer	Lithium	\$5.99	
	713.2.1	Power Tool	Lithium	\$4.19	
3	DOE Extrapolation				\$18.34

For both CSL 0 and CSL 1, DOE only analyzed a single product—in both cases a power tool. However, for CSL 2, which is roughly equivalent to the CEC standard, DOE averaged the costs of three different units to determine the cost of CSL 2—battery chargers for a power tool, a notebook computer, and a handheld vacuum. As can be seen in the table above, the cost of the battery charger for the power tool that meets CSL 2 is actually *less expensive* than the cost of the charger for the power tool that meets CSL 1. An analysis based on the lowest-cost unit that meets CSL 2 (the power tool) would clearly show that CSL 2 is cost-effective.

Battery Charger Marking Requirements

We strongly support a multi-level marking requirement for battery chargers. A multi-level marking requirement would help facilitate enforcement of the battery charger standards. It would also help facilitate broad international adoption of a marking scheme, which would ultimately benefit U.S. consumers and businesses by lowering the cost of high-efficiency battery chargers as a result of higher global manufacturing volumes. Multi-level marking would create a simple vocabulary for all stakeholders including manufacturers, retailers and enforcement agents. It would also facilitate enforcement within industry by driving accountability from retailers to their supply chains globally.

NRDC has proposed a multi-level marking scheme for battery chargers, which is different than CEC’s single-level marking requirement, but similar to the international marking protocol for external power supplies which has been instrumental in transforming the external power supply market. We note that NRDC’s multi-level marking proposal paves the way for future multi-level marking, but does not require multiple efficiency levels initially. Manufacturers could continue to use a single mark (different from CEC’s mark) until future levels are defined. We encourage DOE to adopt NRDC’s proposed multi-level marking scheme because it would be more effective than CEC’s single-level marking requirement at facilitating international adoption by enabling different agencies to establish different efficiency levels. It would also facilitate the ability of voluntary programs such as ENERGY STAR and utility incentive programs to establish higher efficiency levels.

Marking will add no cost for the vast majority of products. Manufacturers are already required to label all battery chargers sold in California covered by the current CEC standards. We expect that manufacturers are also marking the vast majority of battery chargers sold in the rest of the U.S. in order to simplify manufacturing processes and minimize costs. If DOE adopts the same marking requirement as that of CEC, this will represent no change for the products already being labeled. Adoption of the CEC marking requirement would require extending labeling to products not currently being labeled. However, we expect that the benefits of a consistent process for all products sold nationwide will quickly outweigh any cost associated with implementing the extension.

If DOE adopts NRDC's proposed multi-level marking scheme, this would require a small change in marking by manufacturers when the DOE standards take effect. We believe that the burden of switching from one mark to another is very small, as it does not require changing the marking process or the location of the mark on the product, but rather only requires changing the marking pattern, which in many cases is a digital file on the marking device.

The transition from CEC's marking requirement to a DOE marking requirement would be straightforward. Both CEC and DOE marking requirements apply to the date of manufacture of the product. This means that manufacturers can simply plan to replace one mark with another on their manufacturing equipment on the date the DOE standards take effect, without having to worry about managing dual inventories or dual marking their products.

We encourage DOE to offer the same flexibility as CEC currently offers regarding marking location. CEC provides manufacturers with the flexibility to place the mark either on the product nameplate or on the retail packaging and, if included, on the cover page of the instructions. We encourage DOE to offer the same flexibility in order to further minimize any marking costs.

In summary, we urge DOE to:

- Analyze additional battery chargers that have been certified to CEC;
- Analyze efficiency levels for battery chargers that are closer to the CEC levels;
- Rely on the lowest-cost battery chargers identified for the analysis; and
- Adopt a multi-level marking scheme for battery chargers.

Thank you for considering these comments.

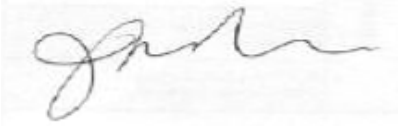
Sincerely,



Andrew deLaski
Executive Director
Appliance Standards Awareness Project



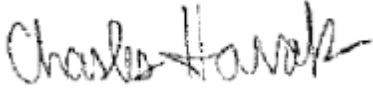
Pierre Delforge
Senior Engineer
Natural Resources Defense Council



Jennifer Amann
Director, Buildings Program
American Council for an Energy-Efficient Economy



Mel Hall-Crawford
Energy Projects Director
Consumer Federation of America



Charles Harak, Esq.
National Consumer Law Center
(On behalf of its low-income clients)



Charlie Stephens
Sr. Energy Codes & Standards Engineer
Northwest Energy Efficiency Alliance



Tom Eckman
Manager, Conservation Resources
Northwest Power and Conservation Council