

Northeast Comment Letter to U.S. DOE on Battery Chargers/EPS NOPR

5/29/2012

Ms. Brenda Edwards U.S. Department of Energy **Building Technologies Program** Mailstop EE-2J 1000 Independence Avenue, SW. Washington, DC 20585-0121

Re: Notice of Proposed Rulemaking for Battery Chargers/External Power Supplies

Docket Number: EERE-2008-BT-STD-0005

RIN: 1904-AB57

Dear Ms. Edwards:

Thank you for the opportunity to comment on the recently released Notice of Proposed Rulemaking (NOPR) for Battery Chargers and External Power Supplies. Northeast Energy Efficiency Partnerships (NEEP) and the undersigned organizations would like to raise several important issues that we urge the Department to consider before publishing its Final Rule.

Battery charging systems and external power supplies are becoming ever more common as the use of consumer electronics products (especially portable, battery powered products) continues to grow rapidly. When considering the use of hundreds of millions of these consumer products in use throughout the country, every small improvement to their efficiency can add up to important energy savings. The effort to set strong energy efficiency standards for Battery Chargers and External Power Supplies is of paramount importance for Northeast states, as we face some of the most aggressive energy reduction use goals in the country. Strong federal energy efficiency standards for these product categories will help meet these goals by reducing consumption of electricity, as well as lowering peak electricity demand, significantly reducing pollution and creating new economic opportunities. Although we appreciate the hard work that the Department has put into the development of this proposed rule, we are not convinced the standard levels proposed secure all of the technically-feasible, economicallyjustified savings available through these product categories.

We see this standards setting process as a vital mechanism in transforming the market towards high efficiency consumer electronics products. Below, we offer a series of comments presenting our perspectives on a number of topics. The comments are organized in two sections; issues specifically related to Battery Chargers and issues related to External Power Supplies.

Battery Chargers

- 1. We would like to raise a couple of key issues around the Products Classes where we believe significantly greater savings are cost-effective, primarily Product Classes 2-6 (low and medium energy Battery Chargers), as they make up 75% of the battery charger market.
- 2. The costs that the Department has associated with improved efficiency within these Product Classes appear to be overstated. The high cost assumptions have skewed the results of the economic analysis, namely the Life Cycle Cost Analysis (LCC), which determines the costeffectiveness to consumers of improving product efficiency. We suggest that the Department consider re-examining the cost estimates used, as the Trial Standards Levels selected will largely hinge on the results of this Analysis.



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- a. California Energy Commission's recent Staff Report on Battery Charger Standards includes cost estimates for improving efficiency in various products. They determined lower incremental costs compared to the DOE analysis. As interested stakeholders, we feel it is important to understand how and why the assumed estimates diverge.
- b. Are there varying assumptions about battery chemistries that have affected assumed costs? It appears that for Product Class 3, the Department has used a representative product for CSL 2 that uses a lithium chemistry battery. There may be ways to reach CSL 2 efficiencies using cheaper nickel chemistry battery systems.
- 3. For those Battery Chargers that utilize Direct Operation External Power Supplies as part of their systems, DOE should assume the Direct Operation EPS efficiency levels proposed in this Notice as baseline when analyzing efficiency levels for Battery Chargers.
- 4. Going to the next level of efficiency described by Candidate Standard Level (CSL) 2 for Product Classes 2-4 and CSL 3 for Product Classes 5-6 for Battery Chargers offers nearly 1 Quad in additional national energy savings, as presented below. This could more than double the sayings from these Product Classes. Because of these significant additional sayings, we urge the Department to carefully re-examine the analysis inputs that drive the LCC results to be sure they accurately reflect market realities.

Difference in National Energy Savings (in Quads)

	Product	Product	Product	Product	Product	Product
	Class 2	Class 3	Class 4	Class 5	Class 6	Class2-6
	National	National	National	National	National	National
	Savings	Savings	Savings	Savings	Savings	Savings
						Total
CSL	.14	.05	.12	.52	.08	.91
Proposed by						
DOE						
1 CSL higher	.58	.17	.30	.67	.11	1.83
Difference	.44	.12	.18	.15	.03	.92
between						
savings						

External Power Supplies

- 1. Northeast Stakeholders support the strong proposed standard levels (Trial Standard Level 2, characterized as "best on market" by the Department) for each of the External Power Supply Product Classes. DOE's analysis shows that the proposed efficiency levels have positive Life Cycle Cost (LCC) savings for consumers, a Net Present Value of over \$1 Billion (3% discount rate), while simultaneously achieving 0.99 Quads of national energy savings.
- 2. While we are supportive of the proposed levels, we do have questions regarding some of the outputs of the Life Cycle Cost Analysis, specifically the results of the LCC for the 60 W subcategory in Product Class B. Product Classes B and C make up roughly 75% of the power supply market, so we are most interested in getting the analysis right so that benefits will be accurately reflected. The LCC results show unexplained irregularities when compared to the



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other representative units (2.5W, 18W, and 120W). The Department provided little explanation for this discrepancy, except to say that the cost data they relied upon to determine life cycle cost was entirely provided by manufacturers. DOE has given no suggestion as to why the results for this subclass are out of line with the others. We believe an analysis that reflects costs more in line with the other subcategories of Product Class B would result in a more accurate National Impact Analysis and Net Present Value calculation. It would be prudent for the Department to conduct some additional independent engineering/cost analysis to reexamine their assumptions. Northeast Stakeholders raised a similar issue with the Department in our public comments during the Preliminary Technical Support Document stage.

In order to develop a strong Final Rule for both Battery Chargers and External Power Supplies, we urge the Department to seriously consider the issues we have raised. This includes clarifying discrepancies and conducting additional research/analysis. It is our position that the appropriate efficiency levels for battery chargers are certainly higher than what DOE has proposed in this NOPR and should be determined by an improved analysis that has reevaluated key inputs. The Northeast is hopeful that the Department will seize this exciting opportunity to maximize cost-effective energy savings associated with these products. Feel free to contact us with clarifications or comments. Thank you again for your consideration.

Sincerely,

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