

March 11, 2010

Mr. Michael Leao
California Energy Commission
Dockets Office, MS-4
Re: Docket No. 09-AAER-2
1516 Ninth Street
Sacramento, CA 95814-5512

DOCKET

09-AAER-2

DATE MAR 11 2011

RECD. MAR 15 2011

Sent via E-Mail: docket@energy.state.ca.us

Re: Docket Number: 09-AAER-2 (Draft Appliance Efficiency Standards for Battery Chargers and Lighting Controls)

Dear Mr. Leao:

Bose Corporation is a U.S.-based engineering, manufacturing, and retail distributor of electronics and audio equipment with approximately 3,400 employees in operations in Framingham and Stow, Massachusetts; Columbia, South Carolina; and Yuma, Arizona. Bose Corporation is also a member of the Consumer Electronics Association ("CEA"), which may be submitting comments on this same matter.

Bose Corporation appreciates this opportunity to provide its comments on the Staff Workshop, which was held on March 3rd to discuss the CEC staff analyses of battery chargers and to seek comments from interested parties regarding draft appliance efficiency standards for battery chargers and lighting controls sold in California.

As a global seller of electronics and audio equipment, Bose Corporation opposes the development of State energy efficiency requirements that differ from federal or international energy efficiency requirements that are currently in place or that are being developed. Unique State-specific requirements typically impose significant compliance burdens and manufacturing and design costs on regulated entities. Unless there are compelling State-specific reasons why State-specific requirements are necessary, the imposition of such burdens and costs may be wasteful and often are disruptive to global trade.

In the case of proposed California-specific battery charger energy efficiency standards, State-specific requirements are particularly not necessary due to the fact that, **by July 2011, the U.S. Department of Energy will finalize a federal rule that will establish energy conservation standards for battery chargers that charge consumer products if sold in the United States.** The federal energy conservation standards for battery chargers are authorized by the Energy Independence and Security Act of 2007 (EISA 2007) and, **once effective, the federal rule preempt all State energy conservation limits that apply to battery chargers that charge consumer products.**

Bose Corporation opposes any effort by the California Energy Commission (“CEC”) to establish California-specific energy efficiency requirements for battery chargers that charge consumer products for three main reasons:

- (1) CEC energy efficiency requirements for battery chargers are likely to significantly differ from federal energy efficiency requirements for battery chargers and, therefore, will create significant compliance burdens, design costs, and marketing challenges for regulated entities;
- (2) The CEC energy efficiency requirements for battery chargers will be in place for approximately only one year before being preempted by the federal energy conservation standards for battery chargers, resulting in significant time and money investments that will be rendered meaningless once the federal rules come into effect; and
- (3) There is tremendous uncertainty regarding the validity of the PG&E/Ecos data on which the CEC has based its proposed rules, raising serious concerns about the stringency of the proposed limits and the cost data that the CEC is using to justify the rule.

For these reasons, Bose Corporation urges the CEC to cease its efforts to develop an energy efficiency standard for battery chargers and, instead, work in partnership with the U.S. Department of Energy (“DOE”) to inform the development of the federal rule.

Bose Corporation’s specific comments are set forth below:

The March 2011 CEC Draft Staff Report (Staff Analysis of Battery Charger Standards) acknowledges that there will be “potential” that the federal and state standards “will vary in stringency, causing manufacturers of consumer products to meet different standards within a relatively short timeframe.”¹ The Report adds that “those differences do not necessarily require manufacturers to go through two different redesign and production change processes... *the manufacturers can simply design their products to meet the more stringent standards* (emphasis added).”²

The CEC’s response to the potential reality that the CEC’s final battery charger rule will differ from the final (and eventually preemptive) DOE battery charger rule is alarming. It is no simple matter for Bose Corporation and other regulated entities to design, manufacture and market their products to meet a State-specific requirement – especially one that even the DOE acknowledges is unattainable by most products on the market. The CEC’s response is more alarming given the fact that the CEC rule will only be in effect for a short time – perhaps less than a year, resulting in a short-term investment of compliance costs that will not be required for compliance with the federal battery charger rule. Finally, the CEC response assumes that the proposed CEC rule is justified by technical and economic data that have been put forth by the California investor-owned utility, Pacific Gas and Electric (“PG&E”) and its consultant, Ecos Consulting (“Ecos”).

¹ California Energy Commission 2011 Appliance Efficiency Rulemaking: Proposed Efficiency Standards for Battery Chargers and Lighting Controls, Draft Staff Report, *CEC-400-2011-001-SD*, p. 9.

² *Ibid.*, pp. 9-10.

The DOE, in its own technical support documents for the federal battery charger rule, rejects many of the assumptions and methodologies used by PG&E and Ecos, calling into question the technical and economic justifications which the CEC proposes to use to set its energy efficiency limits for battery chargers.

The CEC's statement in its Draft Staff Report suggests that regulated entities should ignore a federal energy conservation standard for battery chargers that is being developed by a team of national scientists and research organizations, including Lawrence Berkeley National Laboratories, and instead capitulate to a State-specific energy efficiency requirement that is being driven by an investor-owned utility. If allowed to occur, this would be a dangerous precedent and possible breach of the public trust. With its ambitious rule-making schedule, it appears that the CEC is trying to outpace the DOE in order to establish the most stringent battery charger energy efficiency requirements in the world and, thereby, require regulated entities that sell covered battery chargers in California to adopt these stringent requirements, thereby necessitating design, manufacturing and marketing changes and costs that will not be required by the final federal rule.

This move by the CEC to finalize its rule as soon as possible is particularly troubling given the fact that the DOE considered and rejected several recommendations and comments made by CEC, PG&E, and Ecos during the DOE's public comment period on its Framework Document³ – raising serious concerns regarding the methodology and assumptions used by the CEC, PG&E and Ecos to develop the proposed CEC rule.

Some of the most relevant CEC, PG&E and Ecos comments that were rejected by the U.S. DOE include the following:

- PG&E recommended that the DOE should include Candidate Standard Levels (CSL) for potential analysis for the federal rulemaking that encompass design options *that are not currently available in the marketplace* (emphasis added). The DOE rejected this recommendation, stating that the “max-tech CSL mentioned above is based on technologies that are typically only available in prototype form and not commercially available.”⁴ Instead, DOE plans to analyze the best-in-market level for its preliminary analysis.
- CEC, PG&E and Ecos requested that the DOE analyze the efficiency standard for BCs that PG&E proposed to the State of California to adopt as part of its efficiency standards. PG&E, in turn, asked that DOE adopt that proposed standard. The DOE rejected these recommendations, stating: “[t]hat standard, if adopted, would specify a specific 24-hour energy efficiency that is only dependent upon a battery charger's rated battery energy... According to PG&E's

³ U.S. Department of Energy, Preliminary Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Battery Chargers and External Power Supplies (September 2010).

⁴ *Ibid.*, p, 2-58.

data...there are few BCs for batteries with energies above 10 watt-hours that can meet PG&E's proposed standard.⁵

- PG&E suggested the DOE mitigate boundary issues by using a continuous function when setting the energy efficiency standard. DOE rejected that recommendation, stating that "developing the correct scaling relationships presents a challenge because of the wide variety of BC designs, each of which responds differently to changes in battery voltage and energy."⁶
- PG&E commented that DOE should use marginal electricity prices rather than average prices when calculating the life cycle cost and payback period for adoption of the energy conservation standards. DOE rejected this comment, stating that "average electricity prices are typically used for rulemakings on products that do not contain a great degree of seasonability or time sensitivity, whereas marginal electricity prices are typically used for rulemakings on products that do...DOE has found no evidence that this is a case for BCs...which operate without much seasonality or time sensitivity."⁷
- PG&E commented that DOE should factor time-of-use into its electricity prices because California is moving toward critical-peak pricing. DOE rejected this comment stating that DOE has not found any data to suggest that time-of-use factors have a significant impact on BCs or EPSs. As a result, DOE did not consider time-of-use when calculating electricity prices.⁸

The DOE's rejection of the suggestions and comments of the CEC, PG&E and Ecos makes it clear that the CEC's proposed battery charger rule and the DOE's emerging battery charger rule are based on very different methodologies – not only in terms of setting actual energy efficiency limits for battery chargers, but also in terms of the economic models used for calculating life-cycle costs and payback periods. These differences will produce very different energy efficiency limits and very different economic impacts.

Should the CEC battery charger rule be finalized and come into effect prior to the DOE's final battery charger rule, regulated entities that sell covered battery chargers for consumer devices in California will be required to adopt the CEC limits – at least for the interim period between the CEC rule's finalization and the effective date of the DOE's preemptive battery charger rule. Because of the significant differences between the CEC and DOE methodologies, the CEC rule is expected to be much more stringent than the DOE final rule. In fact, the DOE recognized that only *some* product classes analyzed at the "best-in-market" candidate standard level (a level that is higher than ENERGY STAR®) would meet the PG&E standards, raising serious technical feasibility issues for the CEC's proposed limits.

⁵ *Ibid.*, p. 2-58.

⁶ *Ibid.*, p. 2-61.

⁷ *Ibid.*, p. 2-68.

⁸ *Ibid.*



The CEC should re-examine its methodologies in light of the DOE's Preliminary Technical Support Document. Before moving forward with a CEC battery charger rule, the CEC must address the reasons why the DOE rejected the methodologies that PG&E and Ecos used to support their claims that a proposed CEC battery charger rule is warranted. The CEC should critically assess the proposed data and methodologies that were submitted to the CEC by a for-profit entity (PG&E) in light of DOE's Preliminary Technical Support Document, which was developed by the DOE and Lawrence Berkeley National Laboratory.

In closing, we urge the CEC to cease its battery charger energy efficiency rulemaking and, instead, work in partnership with the DOE to develop a federal rule that will achieve the CEC's stated goal of saving energy in a cost effective and feasible manner. Unfortunately, the methodologies and proposed rules that have been proposed by PG&E and Ecos will establish energy efficiency limits that few (if any) existing products can meet. To require regulated entities to meet such requirements, for the short period of time before the federal rule becomes effective, will be extremely costly and disruptive to the battery-charger market.

Thank you for your consideration of these comments. Please let us know if you have any further questions.

Sincerely,
BOSE CORPORATION

A handwritten signature in black ink, appearing to read "Mark E. Sullivan", is positioned above the printed name. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Mark E. Sullivan
General Counsel & Secretary