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November 18, 2011

Via Fed Ex and Email  
California Energy Commission  
Docket No.: 11-AAER-2  
Docket Unit  
1516 Ninth Street, Mail Station 4  
Sacramento, CA 95814-5504  
[Docket@energy.state.ca.us](mailto:Docket@energy.state.ca.us)

<b>DOCKET</b>	
<b>11-AAER-2</b>	
DATE	Nov. 18 2011
RECD.	Nov. 18 2011

Re: Rebuttal to California Energy Commission ("CEC") Public  
Hearing of October 24, 2011

Dear California Energy Commission:

On October 18, 2011, Schumacher Electric Corporation ("Schumacher")<sup>1</sup> submitted comments in response to the CEC's NOPA, along with detailed information about our company and a patent issue that would create a monopoly in the automotive battery charger marketplace if the NOPA is enacted as written. Schumacher attended the CEC's October 24, 2011 Public Hearing ("Hearing") to express these concerns directly to the CEC. Cory Watkins, Schumacher's Executive Vice President and General Counsel, presented remarks at the hearing to illuminate the crippling impact of these regulations on our industry. Likewise, we listened to the remarks made at the conclusion of the meeting by certain individuals representing the California utility customers.

Please allow this letter to serve as Schumacher's rebuttal to those erroneous comments made at the hearing, along with a reiteration of the very important patent issue at hand, which has yet to be addressed by the CEC.

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<sup>1</sup> As a reminder, Schumacher is an Illinois Corporation and is the leading manufacturer of automotive battery chargers distributed throughout the United States, including California. The battery chargers we manufacture and distribute are linear and high frequency battery chargers that convert AC power to DC power to charge and/or engine start automotive 6volt and/or 12volt batteries.

## **A. Rebuttal of Information Stated at the Hearing from the ECOS Report.**

During the hearing, ECOS representatives, along with various corporate speakers, cited to numerous tables found in the October 1, 2010 ECOS report titled: “Codes and Standards Enhancement (CASE) Initiative for PY2010: Title 20 Standards Development; Analysis of Standards Options for Battery Charger Systems.” (“ECOS Report”). A thorough review of the tables in the ECOS Report, specifically tables 6, 7 and 10, leads to the simple conclusion that 12 Volt Automotive Battery Chargers are categorized improperly with Marine/RV battery chargers. Further, the Proposed Small Battery Charger Standard as set forth on Page 7 of the CEC’s NOPR (which varies from Table 8 of the ECOS Report) must also be examined.

### **1. The Duty Cycles for Automotive Battery Chargers are Grossly Overstated.**

Table 6 of the ECOS Report: The information cited in Table 6 of the ECOS Report, Battery Charger Systems Duty Cycles for Automotive is completely inaccurate. The table states the following duty cycles for Automotive Battery Chargers: percent of charge time: 1%; percent of maintenance time: 42%; percent of time with no battery: 46%; and percent of time unplugged: 10%. There is absolutely no basis in fact for these assertions for automotive battery chargers. Schumacher cannot validate these percentages with respect to the marine/RV market; but as the leader in the 12 Volt Automotive Battery Charger market, we know these percentages are false.

Retail Consumers of Automotive Battery Chargers unplug the units when not in use. First and perhaps most importantly, the percent of charge time with no battery is essentially non-existent in the automotive market – the unit typically is plugged in only when hooked to the automotive battery and actively charging. This in turn means that the percent of time unplugged is much greater than 10%. Finally, the maintenance percentage is also astronomically high as the actual charging is why an automotive battery charger is used; it is not used to maintain like in a marine or RV application. The percentages utilized in this table are grossly inaccurate, and skews the entire NOPA formula used for energy efficiency and compliance. It is Schumacher’s position that Automotive Battery Chargers must be separated from Marine/RV and more accurate numbers put into place regarding duty cycles of Automotive Battery Chargers.

### **2. The Proposed Energy Use for Automotive Battery Chargers is Unattainable.**

Table 7 and 10 of the ECOS Report: Notably, Table 7 of the ECOS Report, Baseline Energy Use per Product for Automotive shows electricity consumption of 462 kWh/yr. Under the proposed standards, Table 10 of the ECOS Report, Proposed Energy Use per Product for Automotive shows electricity consumption of 66.4 kWh/yr. Simply put, in order to meet the

proposed standards Automotive Battery Chargers would be required to reduce consumption by more than Eighty Five Percent (85%). This is simply untenable when compared to other categories. A cursory review of Table 13 shows a current compliance rate in the Automotive/Marine/RV Battery Charger applications at 0% compliance. The other sectors have current compliance, making the ease of compliance with the CEC's standards easier and more cost effective. Again, Schumacher contends that Automotive Battery Chargers be carved out of the group category of Automotive/Marine/RV. Further, Automotive applications must have a longer time frame for compliance, once the numbers associated with compliance have been corrected for accuracy.

3. Inadequate Metrics are used for Small Battery Charger Systems with Large Wattage Systems.

Under the CEC's NOPR: Proposed Small Battery Charger Standard, the metric used for a 24 hour charge cycle including maintenance mode does not account for large wattage systems. Stated differently, all small wattage systems will be able to comply in a shorter time frame and with less impact on cost because the CEC has proposed one set standard. The CEC needs to amend the standard's metrics to allow for larger wattage systems to comply.

Stated differently, the CEC needs to review its data and the standard to ensure Automotive Battery Chargers that operate on a larger wattage system with virtually no "no-battery percentage" and low "maintenance percentage" are able to comply with the standards without harming the industry and California's consumers with large cost impacts.

**B. Patent Issues: Creating a Monopoly in the Automotive Battery Charger Marketplace**

As Schumacher presented in its letter of October 18, 2011, the State of California must recognize that the regulation of automotive battery chargers will create a monopoly in the marketplace due to an existing patent. If the CEC's standards require certain types of Automotive Battery Chargers, specifically those chargers that have Engine Start capabilities, to utilize high frequency/switch mode technology, only one company will be able to manufacture such products. To date, the CEC has not addressed this issue, other than to have a representative from ECOS contact Shantel Bill, author of the October letter, to gain an understanding of the "engine start" application subject to the patent issues.

Schumacher explained in detail the issues associated with the patent and the automotive battery charger engine start technology to the ECOS representative. Further, Schumacher directed the representative to Schumacher's website at [www.batterychargers.com](http://www.batterychargers.com) to further understand automotive battery charger products with the engine start technology. It is our belief CEC, through the ECOS contact, should have a full understanding of the competitive implications. However, as a reminder, forcing battery chargers with engine start to use a high frequency/switch mode technology will create a monopoly in the marketplace. This will increase costs to consumers and eliminate over \$58,000,000 in sales

from our company alone, thereby eliminating U.S. jobs and our company's ability to compete in the marketplace.

Thank you in advance for your consideration of all points Schumacher has raised herein. Please do not hesitate to contact the undersigned for further information or discussion of the points raised.

Sincerely,

Shantel D. Bill  
Schumacher Electric Corporation

Cc: John Waldron  
Cory Watkins  
John Whiting