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California Energy Commission  
Dockets Office, MS-4  
RE: Docket 09-AAER-2  
1516 Ninth Street  
Sacramento, CA 95814-5512

DOCKET	
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DATE	MAY 27 2011
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May 27, 2011

Dear Commissioner,

Please let us applaud the commission for having a public workshop. It is in the best interest of everyone involved to hear all sides. We have a few comments on the battery charger efficiency proposal.

Our first point was raised by many industry participants. The proposed regulation does not comprehend energy usage by other functions of the unit under test. It is well understood that the intent of the CEC is to regulate the energy efficiency of the battery charging system; however, most of Dell's products that have battery charging systems have other primary functions. In most cases it is impossible to turn off the other functions to measure the battery charging system efficiency. In many cases, these additional functions help to improve the device's overall energy efficiency – such as the Power Management portions of the chipset. We feel very strongly that the CEC should make allowances in the test procedure to modify the system to remove these additional functions, or additional allowances need to be made to the energy consumption to account for the power.

Our second point is around marking of the product. The proposed Circle-BC battery charger mark may make sense for use on products that the primary use is a battery charger. However, for products where the battery charger is only a small part of the overall system, it does not make sense to the consumer to label it as a compliant battery charger. Dell would like to see the scope of the Circle-BC mark limited to dedicated battery chargers, and/or external power supplies dedicated to battery charging systems.

Thirdly, we would like to see clarification of the combined Maintenance Mode and No Battery Mode requirement. In the test procedure there is not currently a method to measure maintenance power for a battery charging system rated for 2kW or less. The test procedure needs to be updated to clearly show how to measure the maintenance mode power consumption.

Our fourth point is that we would like to see the scope of the limits of battery backup reduced. Dell sells storage controllers that have internal batteries to back-up the write cache. The capacity of these batteries is generally less than 8Wh. However, the systems are rated at about 600W. The power supply is designed to efficiently operate during normal usage. Even with the system powered down, which is how we believe that

the maintenance power would be measured, the power supply is powering other items (as raised in our first point), as well as providing power to the battery charger. The efficiencies required to have a healthy level of power consumption at normal operation force inefficiency during off-mode. This inefficiency forces our systems to be non-compliant, even if the other power is accounted for. Therefore, we would propose that any system where the battery capacity is less than 10% of the systems rated input power should be exempted from the regulation.

Thank you for your consideration on these points.

Best Regards,

Jeffrey C. Hailey  
Principle Engineer – Energy Regulations  
Environmental Affairs