



power tool institute, inc.

1300 SUMNER AVENUE, CLEVELAND, OHIO 44115-2851 216-241-7333 FAX 216-241-0105

E-Mail: pti@taol.com URL: www.taol.com/pti

May 27, 2008

Ms. Melinda Merritt
Mr. Harinder Singh
California Energy Commission
1516 9th St. MS 25
Sacramento, CA 95814

DOCKET 07-AAER-3	
DATE	MAY 27 2008
RECD.	MAY 27 2008

Re: Docket No. 07-AAER-03

Dear Ms. Merritt and Mr. Singh:

Enclosed are the comments of the Association of Home Appliance Manufacturers (AHAM) and the Power Tools Institute (PTI) regarding the proposed Staff Proposal for Title 20 and the PGE/Ecos Version 1.2 Test Procedure.

We recognize that the latest proposed Title 20 regulation has brought the California Energy Commission regulations into closer alignment with the Energy Independence and Security Act of 2007. We especially appreciate the changes in the term to "Class A External Power Supply," exclusion of battery chargers from the EPS requirements, and a new definition for detachable battery charger configurations. These are good changes.

We also would like to acknowledge a few changes that PG&E/Ecos have made in the Version 1.2 test procedure. Most notably these include: addition of an uncertainty measurement level, corrections to the Category 1 measurement of no-battery mode, and some change to the procedure for access of batteries. On this last point, while we believe Version 1.2 has included a method to add protective circuitry, we do not believe it still goes far enough to fully protect test technicians. Nevertheless in order to move the process along if the CEC wishes to take responsibility for this method, AHAM and PTI will not insist on further changes.

Unfortunately, there are still some serious issues between AHAM, the Power Tools Institute (with whom AHAM has been working closely) and the Ecos and PG&E Version 1.2. I will detail the outstanding issues and why we believe these are important.

While the current rulemaking under consideration is one for adoption of a test procedure (Docket No. 07-AAER-3) it is very difficult to separate the items in the test procedure from the elements of a future planned rulemaking to establish actual energy efficiency levels for battery chargers. This is especially true since PG&E has already submitted a proposal for where they desire to see the

regulatory levels and how they see the regulatory rulemaking format. [“Proposal Information Template for Battery Charger Systems,” Submitted April 7, 2008 by Ecos Consulting for Pacific Gas & Electric.] Under PG&E’s proposed standards levels, (the third regulatory action on battery chargers in 4 years), nearly 95% of today’s products would be ineligible for sale in California. As a forerunner to their proposed standards levels, the PG&E/Ecos proposed Version 1.2 *test procedure* is very restrictive and would essentially lead to one and only one method of regulating the product energy. We do not believe it is appropriate to use a restrictive test procedure in order to force one particular method for a future rulemaking on the standards levels. AHAM and PTI believe that a few changes in the proposed test procedure will keep all options open so that we can discuss regulatory standards later this year and not be forced into one and only one regulatory standards scheme. We believe the test procedure should eliminate the formula approach on the last page of the test procedure.

In general, AHAM and PTI believe that only those tests that are required by regulation should be included. Testing requirements of the test procedure that are for purely research purposes should not be included, as this research should have already been completed prior to adoption of a test procedure referenced by regulation.

The remaining key differences between the most current PGE/Ecos and AHAM/PTI test procedures are:

1. Definitions: AHAM and PTI have consistently suggested that an appropriate regulation for our products would be to consider actual energy use that would be encountered by the user. This would involve a proportionate aggregation of the various modes of energy use experienced by the BCS. This approach insures that our efforts as manufacturers to reduce energy have a measurable consumer and societal benefit. To this end, we have proposed definitions to be included in the test method that would distinguish various types of systems. In addition to the definition of detachable battery chargers that CEC staff have already proposed to add, we ask that CEC include definitions of “cradle-type” chargers and “integral” chargers. In the AHAM/PTI track change submittal of April 22, 2008 we have proposed specific language. This would allow the incorporating regulation to use this information to establish different approaches to use that data produced by the test procedure in ways that were most meaningful. It would not interfere with the current PG&E/Ecos test procedure to include these new definitions and edit the existing ones to bring clarity. It would allow us to open up the process and have the ability to discuss some key differences in the regulatory standard setting process later this year.
2. Other input voltages: We do not understand the necessity of testing battery chargers that use a cigarette-lighter type plug, other DC input voltages or 230 V AC testing of 115VAC plugs for chargers regulated in California. We have provided clear and workable recommendations to address this issue. When we have challenged the approach in the test procedure we were told by PG&E/Ecos that, “...it would provide interesting information.” It is unnecessary to add hundreds of hours of testing in order to provide information. This should have been done long before are finalizing the test procedure. In addition, the inclusion of a reference to the NEMA WD6 plug configuration would make this clearer. This is done in many U.S. standards.

3. Power Factor and Crest Factor. PG&E and Ecos have suggested additional tests to capture data on power factor and crest factor of battery chargers. AHAM brought the issue of power factor to the attention of CEC in 2006. It is clear, based the PG&E regulatory proposals, the intent is to regulate the power factor of battery chargers. This represents new regulatory territory where CEC/Ecos/PG&E have failed to justify the need. The ostensible reason for this approach is to capture power loss in the house wiring of homes using appliance battery chargers, a situation which is much more dependant on the quality of the house wiring than the power factor of the product. While Ecos has failed to present analysis that makes the case for the impact of such a regulatory requirement, our determination is that the impact is insignificant for appliance battery charging systems. Interestingly past CEC rulemaking have found power factor to be inconsequential on product energy regulations. For example, as a consequence of the 2006 regulations that CEC passed for External Power Supplies, many manufacturers were required to adopt battery chargers and EPS units based on Switch Mode Power Supply technology. In 2006 AHAM raised the issue that for large battery chargers, this could cause some issues with power factor. At that time, we were told by PG&E that this did not matter. In 2008, this seems to now matter. We do not believe Power Factor and Crest Factor should be measured on any Battery Charger Systems as this is an issue of house or distribution wiring. In fact, the test procedure proposed by PG&E and Ecos will not produce an accurate accounting of Power Factor or Crest Factor. However, if the CEC insists on proceeding, AHAM and PTI urge CEC to state that this section of the test procedure not apply to small battery chargers (those less than 700 V-A or approximately less than 450 watts). Any measurement of Power Factor or Crest Factor would produce values so low as to be within the uncertainty measurement for these small battery charger systems. We recognize that PG&E/Ecos have stated that they want the measurement of Power Factor to be in the test procedure in order to measure whether it is an issue. However, the PG&E/Ecos standards level proposal already calls for a proposed maximum level of Power Factor. Their arguments are contradictory. If PG&E and Ecos truly wanted the measurements for information, they would not have included a limit in their proposed regulatory limits.
4. Formulas. PG&E and Ecos have included regulatory formulas in the test procedure. We believe this has been done so that this would guide the standards level setting process to consider one and only one method of calculating energy efficiency. AHAM and PTI have stated that a test procedure should be kept simple and only include methods of how to test. As we mentioned with definitions above, we can discuss how to aggregate the information and how to regulate the products under the standards level setting section of Title 20 when that rulemaking takes place later this year.

These are the remaining issues that we have between PG&E/Ecos and the appliance and power tools industries. Considering the large volume of issues in the test procedure there is agreement on well over 95% of the total test procedure.

We would like to also raise the issue of how to properly configure the test procedure in Title 20. We would urge the CEC not to reference a test procedure from another organization, but to implement

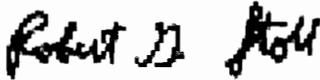
the test procedure as part of Title 20. This would avoid the issue of who “owns” the test procedure and allow CEC to make changes, should they be necessary.

We want to express our appreciation to the California Energy Commission for the ability to comment on the proposed test procedure.

Sincerely,

A handwritten signature in black ink that reads "Wayne Morris". The signature is written in a cursive style with a large initial 'W'.

Wayne Morris
Vice President, Division Services
Association of Home Appliance Manufacturers

A handwritten signature in black ink that reads "Robert G. Stoll". The signature is written in a cursive style with a large initial 'R'.

Robert G. Stoll
Technical Director
Power Tools Institute

Cc: Mr Tim Tutt, Advisor to Chairperson Jackalyne Pfannenstiel
Mr. John Wilson, Advisor to Commissioner Arthur Rosenfeld