

April 5, 2004

## Efficiency Challenge 2004 – Power Supply Design Competition To Launch April 19

Power Supply Manufacturers, ENERGY STAR® Partners, and Other Interested Parties:

The U.S. Environmental Protection Agency and the California Energy Commission formally announced Efficiency Challenge 2004, an international design competition for power supply efficiency, February 23. The announcement started the clock on the rules clarification phase of the competition.

We strongly encourage power supply and product designers, manufacturers and universities planning to compete in Efficiency Challenge to review and comment on the latest draft of the rules and guidelines. Interested parties have through **April 9, 2004**, to submit their comments for review via e-mail to [sfoster@ecosconsulting.com](mailto:sfoster@ecosconsulting.com). Please note that the April 9 deadline is firm; the final rules and guideline will be issued April 19, officially launching the contest. To review the current documents and to submit questions, please visit [www.efficientpowersupplies.org/competition.html](http://www.efficientpowersupplies.org/competition.html).

Research funded by the EPA ENERGY STAR® program and the Energy Commission's Public Interest Energy Research (PIER) program has identified ac-dc power supplies as a major opportunity for reducing global energy consumption and greenhouse gas emissions. More than 3.1 billion power supplies are currently in use in the U.S., consuming about 3 percent to 4 percent of the nation's electricity bill. More efficient designs could cut total U.S. electricity use by 1 percent to 2 percent, saving \$2.5 billion to \$5 billion per year.

The vision for Efficiency Challenge 2004 is to achieve dramatic improvements in the energy efficiency of the most widely purchased types of power supplies. Power supplies for most applications have become a commodity, competing primarily on price instead of performance, features or quality. This competition aims to make total cost of ownership, including energy use, a competitive advantage and unleash the best technology the private sector has to offer.

The design competition features two major classes. The first class covers internal and external "market-ready" designs that can save energy cost-effectively in particular types of consumer electronics products. The second is an "open" class, intended to showcase the most efficient power supply designs from industry and academia without cost constraints. Opportunities are available not just for the companies that manufacture power supplies, but also the much larger companies that buy them for use with computers, televisions, printers, monitors, etc.

Since late February, a number of other exciting developments have unfolded with Efficiency Challenge 2004:

- Intel has agreed to act as an Industry Champion and has released a design guide for more efficient internal power supplies for desktop computers (see [www.formfactors.org](http://www.formfactors.org)).
- ON Semiconductor has announced it will provide technical support and sample parts to university teams submitting entries, as well as competitive financial awards for winning submissions. Visit [www.onsemi.com/power](http://www.onsemi.com/power) to apply for the company's support.
- The official contest judges have been announced:
  - Chris Calwell, vice president and director of policy & research, Ecos Consulting
  - Arshad Mansoor, vice president of engineering, EPRI Power Electronics Applications Center
  - Doug McIlvoy, president, Power Electronics Strategies
- Numerous manufacturers and entrepreneurs have contacted the Efficiency Challenge implementers requesting information about other companies with whom they might partner to submit contest entries. In response, Ecos Consulting and EPRI-PEAC have

recently established a “corkboard” where companies can post and read information about potential partners for the competition ([www.efficientpowersupplies.org/forum\\_home.asp](http://www.efficientpowersupplies.org/forum_home.asp)).

Note also that a proposed test procedure for internal power supply efficiency has been posted for comment at:

[www.efficientpowersupplies.org/pages/GeneralInternalPowerSupplyTestProcedureRev1.pdf](http://www.efficientpowersupplies.org/pages/GeneralInternalPowerSupplyTestProcedureRev1.pdf)

This test procedure will be used in the design competition and may be employed by ENERGY STAR® in future labeling programs for products containing internal power supplies. Companies that manufacture or purchase internal power supplies for their products should submit comments by **April 16, 2004** to Brian Fortenbery at [bfortenbery@epri-peac.com](mailto:bfortenbery@epri-peac.com).

As always, your involvement in this power supply effort and other energy efficiency initiatives is appreciated and vital to a successful process. If you have any questions, please contact me via email at [fanara.andrew@epa.gov](mailto:fanara.andrew@epa.gov) or by telephone at (202) 343-9019. Thank you.

Best regards,

Andrew Fanara, US EPA  
ENERGY STAR Specification Development

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