NATURAL RESOURCES DEFENSE COUNCIL

Comments of the Natural Resources Defense Council
On Proposed ENERGY STAR Computer Power Levels

September 15, 2006

On behalf of the Natural Resources Defense Council and its 1.2 million members and e-activists, we respectfully submit these comments on the recent document by ENERGY STAR on power levels for the near final computer specification. Our comments are limited to desktop and notebook computers as we do not have sufficient expertise to comment on workstations.

Through the computer specification revision process, EPA and stakeholders have reached consensus that the new specification must in some way address active mode power use and that the expedient way to do this is by: a) setting minimum power supply efficiency requirements, and b) establishing maximum allowable idle mode power levels for each product category (desktops, notebooks, and workstations). Throughout the spec revision process we have supported with this approach.

Based on manufacturer feedback, EPA was requested to create subgroups within each product category. For example, break desktop computers into low and high performance units and provide additional idle power to the higher categories as appropriate. To that end, EPA created proposed category groupings (A, B, and C) for desktops and laptops, and then requested additional idle mode performance data for each group. An analysis of this data was provided by EPA in its August 26, 2006 memo.

NRDC has reviewed EPA's data analysis and power level recommendations and has the following comments:

**Sleep/Standby Levels** – We are comfortable with the sleep and standby levels proposed by EPA. We are hopeful that the adopted recommendations made by industry coupled with product modifications will result in higher rates of power management.

**Desktop Idle Mode Power Levels** – The approach used by the stakeholders to develop this spec was to not address the power used when the computer is working hard. This is because it would be difficult to come up with an agreed upon test method and since the computer spends little of its time in this mode. Instead the spec focused on idle mode and encourages computer designers to have the computer drop back to uniformly low idle mode power levels when the computer is just sitting there, which is the majority of the time.

We concur with EPA's methodology of analyzing the data whereby it adjusted the reported power levels to account for the future market shifts towards more efficient power supplies.

www.nrdc.org

111 Sutter Street, 20th Floor
San Francisco, CA 94104
TEL 415 875-6100 FAX 415 875-6161

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In reviewing the data set there did not appear to be a significant difference between data sets A and B. In other words, the greater functionality that Group B computers provide did not appear to require much if any additional power use in idle mode than those in Group A.

As much of the market will likely shift to dual core chipsets (a key characteristic of the current Group B) when this spec becomes effective, we recommend EPA consider adopting one of the following: (Both options would leave the higher tier descriptor and power levels in the current Group C unchanged. All models that don't meet the current definition of Group C would be classified as Group A.)

- Create a two tier system that eliminates the currently proposed group B – leave Tier A at 50W.

- Create a two Tier system that creates a new Group A with a power level of 55 W and eliminates the currently proposed Group B.

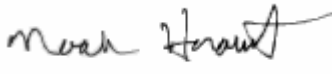
We base the above proposals on the fact that there are already several models on the market, including those with dual core offerings, which would meet the 50W idle mode level. Well-designed chips using dual core architecture maintain the idle power levels used by current single core chips while yielding better performance. *In other words, dual core chips do not necessarily require additional idle mode power compared to single core chips.* As the group B requirement of having 1 GB of system memory may require slightly higher idle mode power levels ( approximately 3 W or so), we offered the less stringent option of 55W idle mode to account for these systems.

We believe these proposals are more responsive to where the desktop market is likely heading and would eliminate a large portion of future sales of the current group B from *undeservingly qualifying* for ENERGY STAR. Stated in simple terms we believe the power levels in the current spec for Group B are unnecessarily too high.

Notebook Idle Mode Power Levels – We agree with the two notebook category descriptors and the idle mode power levels that EPA has proposed based on its analysis of the data.

In closing, we appreciate the additional data that the computer industry has submitted to EPA and the extensive analysis provided by ENERGY STAR staff. We hope you will seriously consider adopting our proposed modification to the desktop idle mode power levels as it will increase the amount of energy saved by the new specification, with little to no adverse manufacturer impact.

Respectfully submitted by,



Noah Horowitz
Sr. Scientist
nhorowitz@nrdc.org