HP Comments on the Draft 3 Computer Specification
7/28/06

To compliment the feedback provided through ITI, HP has the following feedback about the draft 3 computer spec.

1. TEC coefficients:
   - HP is anxious to know what coefficients will be established for the TEC calculation. HP's hopes there will be a period of industry review and feedback prior to finalization.

2. Labeling and education:
   - Include a desktop link to EPA ENERGY STAR website. This would serve as an enhancement to electronic labeling as well as a link to date educational material that the EPA can control.
   - Display of logo at boot up for 5 seconds seems excessive.

3. Mobile Workstation differentiation: Please see the attached note Steve Ortmann sent on June 20.

> From: Ortmann, Steve
> Sent: Tuesday, June 20, 2006 2:10 PM
> To: Osdoba.Katharine@epamail.epa.gov
> Subject: RE: 3 Tier Approach for Notebooks?
>
> Katharine,
>
> Specifically, we are looking for relief which will allow us to qualify Mobile Workstations. The problem is similar to the PC vs. WS.
>
> Mobile WS are a smaller portion of sales but energy savings and E* compliance remains a concern of our customers.
>
> A potential starting point would be to define a Mobile WS as;
>
> > **Category A (Mobile Workstation) Definition:**
> > Must have the following to qualify:
> >
> > Marketed as a Mobile Workstation
> >
> > and
> >
> > must have at least 2 of the following to qualify:
> >   Minimum 15 in. Display
> >   Two or more processor cores
> >   2GB or more of installed DRAM

Greater than 128 MB of dedicated graphics memory separate from system DRAM

Category B Definition: Anything not qualifying as a category A.

In Table 1: Tier 1 Energy Efficiency Requirements under notebook product type:

      Standby (Off Mode): <= 2W
      Sleep Mode: <= 3W
      Idle State:
          Category A: 30W
          Category B: 20W

I have attached some data for you review.

Model		EPA specs. Version 4 draft 1	EPA specs. Version 4 draft 2	Discrete Graphics			
				17" mainstream	17" Workstation	15.4" mainstream	15.4" Workstation
Note:							
S0, Idel, LCD off, Wireless on, (W)	N/A	≤ 21	≤ 20	25.50	31.77	28.73	28.73
S3 Power (W)	No WOL		≤ 3	1.75	1.75	1.83	1.83
	Yes WOL	≤ 5	≤ 3.75	2.28	2.28	2.38	2.38
S4 Power (W)	No WOL		≤ 1.75	1.70	1.70	1.79	1.79
	Yes WOL	≤ 1	≤ 2.45	2.23	2.23	2.30	2.30
S5 Power (W)	No WOL		≤ 1.75	1.70	1.70	1.79	1.79
	Yes WOL	≤ 1	≤ 2.45	2.23	2.23	2.30	2.30
Adapter only Power (W)			≤ 0.75	0.13	0.29	0.13	0.13

Note:

S3 power depend on the memory configuration
S0 depend on system configuration such CPU, Memory, Panel, and others
Power varies with model and configuration
Notebook connected to the network