

**Comments on ENERGY STAR® Program Requirements
Product Specification for Displays - Eligibility Criteria - Draft 1 Version 6.0**

Fujitsu Technology Solutions - July 15th 2011

Page	Line	Requirement / Definition	Comment
4	151-155	<p>3.3.2 <u>Networking Capabilities:</u></p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Currently, there are displays sold in the market that have networking capability (e.g. Ethernet, Wi-Fi) and may serve as the main connector to common peripherals and mobile devices. Due to these additional functionalities, the power consumption associated with these Displays may increase in the On, Off and Sleep mode. EPA welcomes stakeholder feedback regarding the prevalence of these products in the market and their associated power consumption.</p> </div>	<p>Fujitsu Technology Solutions (FTS) offers such products with networking capabilities:</p> <ul style="list-style-type: none"> • Zero Client DZ19-2 • Zero Client DZ22-2 • FUTURO DC20-1 <p>These are display clients for a virtual desktop infrastructure and comprise besides the display functionality an Ethernet network interface, audio interfaces, some USB interfaces (mainly for HID) and HW to transform network data to video, audio and USB streams and vice versa.</p> <p>The additional functions cause an additional power consumption, which needs to be added to the display function.</p> <p><u>Proposed text for this section 3.2.2:</u> “Some displays may have networking capabilities implemented (e.g. display clients for virtual desktop infrastructure) and may serve as the main connector to common peripherals and mobile devices. These devices have in addition to the display functionality a network interface (e.g. Ethernet, WiFi), USB interfaces, audio interfaces and HW to transform network data to video, audio and USB information and vice versa. These additional functionalities will add some power consumption compared to display only function.”</p> <p>Following comment is related to the request, to include these display clients into ENERGY STAR® Program Requirements.</p>

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6	205-208	<p>For products that do not offer ABC, or for which ABC is not enabled by default, On Mode power (P_{ON}), as calculated per the ENERGY STAR test method, shall be less than or equal to the Maximum On Mode Power Requirement (P_{ON_MAX}), as calculated per Table 1.</p> <p>Table 1: Calculation of Maximum On Mode Power Requirements (P_{ON_MAX})</p> <table border="1"> <thead> <tr> <th>Product Type Diagonal Screen Size, d (inches)</th> <th>P_{ON_MAX} (watts)</th> </tr> </thead> <tbody> <tr> <td></td> <td>Where: <ul style="list-style-type: none"> r = Screen resolution in megapixels A = Viewable screen area, rounded to the nearest 0.1 square inches. </td> </tr> <tr> <td>All sizes</td> <td>TBD</td> </tr> </tbody> </table>	Product Type Diagonal Screen Size, d (inches)	P_{ON_MAX} (watts)		Where: <ul style="list-style-type: none"> r = Screen resolution in megapixels A = Viewable screen area, rounded to the nearest 0.1 square inches. 	All sizes	TBD	<p>We propose to include into the table a row as shown below:</p> <table border="1"> <thead> <tr> <th>Product Type Diagonal Screen Size, d (inches)</th> <th>P_{ON_MAX} (watts)</th> </tr> </thead> <tbody> <tr> <td></td> <td>Where: <ul style="list-style-type: none"> r = Screen resolution in megapixels A = Viewable screen area, rounded to the nearest 0.1 square inches. </td> </tr> <tr> <td>All sizes</td> <td>TBD</td> </tr> <tr> <th>Capability</th> <th>Additional Power Allowance</th> </tr> <tr> <td>Additional hardware for networking capability (e.g. Ethernet, WiFi) and serving as main connector to common peripherals and mobile devices (e.g. via USB connectors, audio jacks)</td> <td>+ xx</td> </tr> </tbody> </table> <p>“+ xx” indicates, that xx watts can be added to the limit.</p> <p>FTS proposes xx = 12 (equal to Thin Client Category A).</p>	Product Type Diagonal Screen Size, d (inches)	P_{ON_MAX} (watts)		Where: <ul style="list-style-type: none"> r = Screen resolution in megapixels A = Viewable screen area, rounded to the nearest 0.1 square inches. 	All sizes	TBD	Capability	Additional Power Allowance	Additional hardware for networking capability (e.g. Ethernet, WiFi) and serving as main connector to common peripherals and mobile devices (e.g. via USB connectors, audio jacks)	+ xx
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