

NEW EFFICIENCY RULES FOR COMPUTERS AND COMPUTER MONITORS MOVE FORWARD**JOHN A. HODGES**

While computers help make life more efficient, their increased use and power are stimulating governmental efforts to make these essential products more efficient. California is conducting a proceeding leading toward mandatory efficiency standards for computers and computer monitors. The U.S. Department of Energy (DOE) has a pending rulemaking for computer and battery backup systems (computer systems). And there are extensive voluntary programs for computers and computer monitors under Energy Star; new Energy Star criteria for computer monitors are about to go into effect. Such rules have significant implications for industry.

California. The California Energy Commission (CEC) has issued draft proposed regulations for mandatory energy efficiency standards for computers, computer monitors, and signage displays sold or offered for sale in California. CEC Docket No. 14-AAER-2. Industry and other interested parties have an opportunity to participate in the CEC proceedings. If adopted, the California standards could well become de facto national and even worldwide standards. California standards are backed by severe sanctions, including civil penalties up to \$2,500 per unit. This is all pursuant to CEC's Appliance Efficiency Regulations, 20 Cal. Code. Regs. §§ 1601-1609.

The draft proposed regulations and revised draft staff report were considered at a CEC workshop on April 26, 2016. Written comments can be submitted by May 16, 2016. The goal is to examine the draft standards and their cost effectiveness, technical feasibility, and electricity savings. Thereafter, CEC will issue a final proposal for public comment and adoption.

Desktops and thin-clients. Under the CEC draft, desktop computers and thin-clients manufactured on or after January 1, 2018, would be required to have a maximum total energy consumption of 50 kWh/yr, plus a maximum kWh/yr for applicable adders such as memory, Energy-Efficient Ethernet, and storage. These products generally would also need to be shipped with power management settings that (i) transition the computer into either the sleep mode or off mode within 30 minutes of user inactivity; and (ii) transition connected displays into sleep mode within 15 minute of user inactivity. The model is not required to comply with (i) and (ii) if it is shipped without an operating system per the purchaser's request.

Notebooks. The CEC draft for notebook computers generally tracks the foregoing requirements for desktops and thin-clients, except that the maximum total energy consumption for notebooks would be 30 kWh/yr, plus a maximum kWh/yr for applicable adders.

Small scale servers and workstation computers. The CEC draft would require that small scale servers and workstation computers manufactured on or after January 1, 2018, be powered by a power supply that meets the 80 PLUS Gold performance standards. These performance standards are issued pursuant to the 80 PLUS voluntary certification program for certification of

**HWG CLIENT ADVISORY
APRIL 2016**

efficient computer power supply units (PSUs). Small scale servers and workstations would also be required to incorporate Energy-Efficient Ethernet functionality; transition connected displays into sleep mode within 15 minutes of user inactivity; and transition themselves into a sleep mode within 30 minutes of user inactivity.

Exemption for small volume manufacturers. The CEC draft also contains a limited exemption for computers manufactured on or after January 1, 2018, by “small volume manufacturers.” These are manufacturers with gross revenues of \$750,000 or less in the preceding 12 months and that assemble and sell computers at the same location. They must comply with power management settings but are exempt from all other requirements for computers unless they manufacture more than 15 units of a similar system.

Computer monitors. The CEC draft standards provide that computer monitors manufactured on or after January 1, 2018, must meet maximum power requirements in watts for on mode, sleep mode, and off mode. The standards are based on diagonal screen size and resolution.

Enhanced performance displays manufactured on or after January 1, 2018, would need to comply with on mode power allowance adders.

Computer monitors with touchscreen capability would be allowed an additional 1 watt allowance.

In addition, computer monitors manufactured on or after the effective date must be shipped with a screen luminance less than or equal to 200 cd/m².

Signage displays. The CEC draft also includes requirements for signage displays. These are analog or digital devices designed primarily for the display of a computer generated signal and are not marketed for use as a television. Signage displays manufactured on or after January 1, 2018, would be required to meet certain CEC standards specified for televisions. These include maximum standby-passive mode power usage, maximum on mode power usage, and minimum power factor.

DOE. There currently are no mandatory DOE efficiency standards for computers or computer monitors. However, there is a pending proposal for computer and battery backup systems (known as computer systems). DOE indicates that these are consumer products whose primary function is to perform logical operations and process data, or equipment whose primary function is to maintain continuity of load power for such products in case of input power failure. DOE says that, based on this definition, it would consider consumer products such as computers, servers, and UPS systems to be within the scope of coverage.

DOE is currently considering whether computer systems are consumer products that are “covered products” for purposes of the DOE energy efficiency program. If DOE issues a determination that computer systems are covered products, it may prescribe test procedures and energy conservation standards for them. Standards would need to be technologically

**HWG CLIENT ADVISORY
APRIL 2016**

feasible and economically practicable, as required by the Energy Policy and Conservation Act, 42 U.S.C. § 6291 et seq.

Energy Star. There are robust programs for computers and computer monitors under the voluntary Energy Star program. Energy Star is managed primarily by the Environmental Protection Agency, with DOE involvement. Participating manufacturers can use the valuable Energy Star logo for products meeting specified criteria, thereby enhancing their marketability.

Computers. Current eligibility criteria under the Energy Star program for computers include desktop computers, integrated desktop computers, notebook computers, slates/tablets, portable all-in-one computers, workstations, small-scale servers, and thin clients. Products not eligible for qualification under the Energy Star specification for computers include docking stations, game consoles, e-readers, handheld gaming devices, personal digital assistant devices (PDAs), certain thin clients, certain point-of-sale products, and handheld computers that contain cellular voice capability.

The Energy Star eligibility criteria for computers include internal power supply efficiency; external power supply efficiency; specified Typical Energy Consumption; and power management requirements, including shipping with certain settings for system sleep mode, display sleep mode, wake on LAN, and wake management.

Monitors. Computer monitors are covered under the Energy Star program for Displays. New criteria are about to go into effect. On July 1, 2016, monitors will be covered by Eligibility Criteria Version 7.0; they are currently covered by Version 6.0.

Under Version 7.0, external power supplies (EPSs) provided with monitors will be required to meet Level VI or higher performance requirements under the International Efficiency Marking Protocol when tested according to the DOE test procedure for EPSs.

Power management requirements for monitors include that monitors must automatically enter sleep mode or off mode within five minutes of being disconnected from a host computer. Computer monitors must meet a specified Total Energy Consumption. Energy allowances are provided for monitors with enhanced performance display; Automatic Brightness Control (ABC); Full Network Connectivity; Occupancy Sensor; and Touch Technology.

* * * * *

For more information regarding new efficiency rules for computers and computer monitors, or Harris, Wiltshire & Grannis LLP's [energy efficiency practice](#), please contact [John Hodges](#) at +1 (202) 730-1326 or by e-mail at jhodges@hwglaw.com.

This client advisory is not intended to convey legal advice. It is circulated to our clients as a convenience and is not intended to reflect or create an attorney-client relationship as to its subject matter.