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<th><strong>Docket Number:</strong></th>
<th>20-AAER-03</th>
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<td><strong>Project Title:</strong></td>
<td>Amend Title 20 Computer and Monitor Regulations</td>
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<td><strong>Document Title:</strong></td>
<td>Attachment A to standard 399</td>
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<tr>
<td><strong>Description:</strong></td>
<td>Attachment A to standard 399 economic and fiscal impact statement for appliance efficiency rulemaking</td>
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<td><strong>Organization:</strong></td>
<td>California Energy Commission</td>
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INTRODUCTION

The proposed regulations relate to Title 20 appliance efficiency standards for computers and computer monitors. Recently, the CEC has been presented with a list of new technologies for computers and computer monitors that were not available at the time of the previously completed computers rulemaking in 2017. The proposed changes are unlikely to have any quantifiable economic or fiscal impacts. The new technologies include the following:

- Computer monitors with high refresh rates;
- Intermediate transfer rate Local Area Network (LAN) ports;
- Multi-screen notebook computers; and
- Notebooks exhibiting cyclical behavior.

ECONOMIC AND FISCAL IMPACTS

The proposed changes are unlikely to have any quantifiable economic or fiscal impacts.

The CEC proposes amendments to the Title 20 Appliance Efficiency Regulations that would modify and clarify existing standards and test procedures for computers and computer monitors to incorporate new technologies and innovations that were not known at the time of the previously completed rulemakings.

The proposed regulations provide a new energy allowance, or “adder”, for a type of new, innovative computer gaming monitor. This new technology allows users to view image contents with a much faster refresh rate and is mostly marketed for computer game players. This type of consumer typically uses computer monitors in the higher-end price range and upgrading their monitors with this new technology is not expected to have an identifiable cost impact. The total amount of computer monitors sold is not expected to change as a result of this rulemaking, as the decision to purchase a computer monitor is tied to factors other than the presence or absence of this new technology. Therefore, there will not be any identifiable increase or decrease in manufacturer or retailer revenues or costs as a result of these proposed regulations.

The proposed regulations add a new energy adder for a new type of Ethernet that is integrated on the motherboard and provides data transfer rates of more than 1 gigabits per second and less than 10 gigabits per second. However, such Ethernet ports that are not integrated on the motherboard and are provided through an add-in card, receive the generic energy adder provided for all add-in cards. According to information from
manufacturers, this new technology is not expected to impact the overall energy use or
the cost of computers because they are expected to replace some Ethernet ports with
data transfer rates of less than 1 gigabit per second and some of the Ethernet ports with
data transfer rates of more than 10 gigabit per second both of which consume energy.

Under the current regulations, the new technology would be eligible for sale; however, it
would only receive an energy allowance for the Ethernet ports that are provided through
an add-in card. This means that for computer models that cannot accommodate an add-
in card Ethernet, manufacturers would need to reduce energy consumption in other
parts of the computer or forgo using the new technology altogether. Providing the new
energy allowance adds flexibility to computer manufacturers by providing an adequate
allowance that allows for proper design of the computer.

The proposed regulations clarify that multi-screen notebooks are in fact a type of
notebook computers and are subject to notebook computer standards. The CEC does
not expect this clarification to change the expected energy savings or cost to individuals
and businesses that purchase these products.

The proposed regulations modify the test procedure for notebook computers that exhibit
cyclical behavior. This modification is not expected to impact the energy use or cost of
the product. It just ensures the accuracy of the reported data.

The proposed regulations do not create the need for a new, non-existent good or
service. Instead, it allows for the improvement of products that will replace some of the
existing goods in the market. These are the new generations of the same products and
the total amount of computers sold and the overall net cost of those products is not
expected to change as a result of this rulemaking. Businesses engaged in the
manufacturing or sale of computers and computer monitors will benefit by being able to
market and sell more product diversity and include products that utilize new technologies.
For consumers, including businesses, small businesses and state and local agencies
that purchase and use computers and computer monitors, this broader product offerings
in the California market typically leads to greater competition and stable or slightly
decreasing prices. The proposed changes will ensure that California residents and
businesses will continue to have access to new and innovative technologies.