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Docket Number:	18-AAER-10
Project Title:	Amendments to Title 20 Appliance Efficiency Regulations Rulemaking
TN #:	223096
Document Title:	Economic and Fiscal Impact Statement - Attachment A
Description:	Economic and Fiscal Impact Statement (Form 399) - Attachment A for the Amendments to Title 20 Appliance Efficiency Regulations Rulemaking
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Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	3/30/2018 10:45:46 AM
Docketed Date:	3/30/2018

ECONOMIC AND FISCAL IMPACT STATEMENT
Standard Form 399
Attachment A

The attachment documents the Energy Commission staff's information, assumptions and calculations used in the development of the economic and fiscal impact statement to satisfy SAM section 6614.

INTRODUCTION

The proposed regulations are amendments to the appliance efficiency regulations that do not increase or decrease expected energy savings for any appliance because no changes to the efficiency standards themselves are proposed. The proposed regulations make the following types of changes:

1. Changes to include federal appliance standards and test procedures or to align existing definitions with federal definitions. These federal standards and test procedures preempt inconsistent state standards and state test procedures as a matter of law and are therefore effective whether they are included in the regulations or not. These changes are identified in the Initial Statement of Reasons, Table 1. Because these changes merely incorporate existing federal law, they are not expected to have any economic impact in California.

2. Changes related to state-specific requirements for appliances, including:

    a. Repealing state standards and state test procedures that are preempted by federal law.
    b. Aligning state test procedures for battery chargers with federal test procedures, even though there is no preemption (section 1604(w)).
    c. Removing the requirement to report portable luminaire sales data (section 1606(j)).
    d. Changing the marking requirement for distribution transformers (section 1607(d)).

    These changes are identified in the Initial Statement of Reasons, Table 2.1. Changes 2(b-d) will have a small economic impact by eliminating certain reporting requirements, reducing manufacturer test burden by aligning otherwise inconsistent test procedures, and simplifying the marking requirements.

3. Changes related to the Commission's appliance efficiency database, including:

    a. Changing the names to refer to the nomenclature used in the Modernized Appliance Efficiency Database System (MAEDbS).
    b. Allowing the Commission to send electronic notifications of database changes instead of mail notifications by registered or certified mail.

c. Providing for automatic removal of models from the “Approved” database to the “Archived” database. Note: Models moved into the archived database may continue to be sold if they were manufactured before the effective date of a new efficiency standard.
d. Changes to the data submittal requirements identified in Title 20, section 1606, Table X, to align with the changes in federal and state test procedures.
e. Requiring certain newly federally regulated appliances, including pumps, walk-in coolers and freezers, and low-profile ceiling fans, to certify to the Energy Commission’s database upon the effective date of federal standards for these products.

These changes are identified in the Initial Statement of Reasons, Tables 2.2 and 2.3. The changes in data submittal requirements are not expected to have any economic impact as manufacturers are already required to collect test results under the federally required test procedures, which are not a result of these regulations, and simply need to continue to submit those test results to the Commission. The changes in certification requirements for pumps, walk-in coolers and freezers, and low-profile ceiling fans are expected to have a small economic impact. The remaining changes are not expected to have any economic impact, as they do not affect manufacturers, retailers, or individuals complying with the regulations. However, they will have a fiscal impact by reducing the Energy Commission’s costs in managing the database.

4. Changes to correct typographical errors, clarify ambiguous language, and use consistent terms and format. These changes are nonsubstantive because they do not impose, create, or modify any existing federal or state requirement, and have no impact on the Energy Commission’s interpretation or implementation of its regulations. These changes are identified in the Initial Statement of Reasons, Table 3. These changes are not expected to have any economic impact because they are nonsubstantive changes.

ECONOMIC IMPACT STATEMENT

Part A. Estimated Private Sector Cost Impacts

Section 2

1. Changes to include applicable federal appliance standards and test procedures.

The proposed regulations update the appliance efficiency regulations to include the current federal appliance standards and test procedures. Manufacturers are required to test their products and meet these standards as a matter of federal law. Therefore, the proposed regulations do not create any new obligations or costs by including these federal standards and test procedures. The only qualitative benefit is to identify, in one place, all applicable federal and state regulations for appliances. Therefore, there are no

economic impacts associated with the proposed regulations to include federal appliance standards and test procedures.

2. Changes related to state-specific requirements for appliances.

    a. Repealing state standards and state test procedures that are preempted by federal law.

These changes have no economic impact, as the state standards and test procedures that are being repealed have no legal effect because they are inconsistent with federal law.

    b. Aligning state test procedures for battery chargers with federal test procedures, even where there is no preemption (section 1604(w)).

These changes will benefit appliance manufacturers by reducing industry testing burdens, where industry otherwise has to use two different test procedures for the same products. Therefore, these will have a small economic benefit to appliance manufacturers. The Energy Commission estimates this one-time benefit to total $75,000.

    c. Removing the requirement to report portable luminaire sales data (section 1606(j)).

The Energy Commission proposes to remove a requirement that manufacturers report sales data of certain portable luminaires. The Energy Commission does not observe a need for this data, as the information submitted to the MAEDbS is a reasonable proxy for the specific sales numbers. By removing this reporting requirement, manufacturers of portable luminaires will receive a small economic benefit. The Energy Commission estimates this one-time benefit to total $148,500.

    d. Changing the labeling requirement for distribution transformers (section 1607(d)).

The Energy Commission proposes to change a labeling requirement for distribution transformers from NEMA Standard TP3-2000 to marking “DOE Compliant” or equivalent. Distribution transformers are now federally regulated products, making the NEMA standard an inappropriate way to identify efficient distribution transformers. The new marking requirement will reduce some manufacturer costs because marking “DOE compliant” is simpler than complying with the labeling requirements in NEMA Standard TP3-2000. Manufacturers will also have a one-time initial cost to change the printing to “DOE compliant,” with ongoing costs expected to be $0 compared to the existing labeling requirements. The Energy Commission estimates the total one-time cost to as $18,500. The Energy Commission was unable to quantify the benefits of the more simplified marking requirement in terms of reducing manufacturer costs.

3. Changes related to the Commission's appliance efficiency database.

    a. Changing the names to refer to the nomenclature used in the Modernized Appliance Efficiency Database System (MAEDbS).

These changes are ministerial only and do not have any economic impact.

    b. Substituting electronic notifications of database changes for mail notifications by registered or certified mail.

This change does not affect how manufacturers, retailers, or consumers comply with the standards. Instead, this change affects how the Energy Commission does business associated with the database. As a result, there is no economic impact associated with this change. However, there is a fiscal impact to the state. See FISCAL IMPACT STATEMENT.

    c. Providing for automatic removal of models from the "Approved" database to the "Archived" database.

This change does not affect how manufacturers, retailers, or consumers comply with the standards. Instead, this change affects how the Energy Commission does business associated with the database. As a result, there is no economic impact associated with this change.

    d. Changes to the data submittal requirements identified in Title 20, section 1606, Table X, to align with the changes in federal and state test procedures.

These changes do not have an economic impact on manufacturers, who are still required to certify that their products comply with the applicable efficiency standards, or on consumers, whose products will still comply with the standards. Rather, this change updates the reporting requirements to align with the results of federal test procedures, which are already effective as the law. As a result, this change does not have any economic impact, as it does not require any new reporting.

    e. Requiring certain newly federally regulated appliances, including pumps, walk-in coolers and freezers, and low-profile ceiling fans, to certify to the Energy Commission's database upon the effective date of federal standards for these products.

The Commission proposes to require manufacturers to certify to the Commission that they meet the federal efficiency standards for pumps, walk-in coolers and freezers, and low-profile ceiling fans, as applicable. Certification is required on the effective date of federal standards for these products. These are new reporting requirements, and therefore there will be a cost to manufacturers to collect the test results and submit it through a template or manual upload it to the MAEDbS. There is no cost to access

MAEDbS. Testing and standards costs are the result of the federal standards, and are not the result of these proposed regulations, so those costs are not considered in this analysis. The Energy Commission estimates the additional cost of reporting to total $81,000.

4. Changes to correct errors, clarify, or improve consistency.

The proposed regulations make changes to correct typographical errors, improve clarity in the regulatory text, correct cross references and consistency issues, remove obsolete text, and correct errors and omissions. These changes are nonsubstantive and have no regulatory effect other than to improve the readability of the regulations. Therefore, there is no economic impact associated with these types of changes.

The total estimated costs and benefits associated with these proposed regulations is $75,000 + $148,500 + $18,500 + $81,000 = $323,000. None of these costs or benefits will accrue in California because the manufacturers affected by these costs or benefits are not located in California.

Section 3

The Energy Commission estimates that the total number of businesses impacted by the proposed regulations (as described in 2(b), 2(c), 2(d), and 3(e) in Section 2 above is 1,511.

- 1,000 battery charger manufacturers.[1]
- 297 portable luminaire manufacturers.[2]
- 52 distribution transformer manufacturers.[3]
- 66 low-profile ceiling fan manufacturers.[4]
- 86 pump manufacturers.[5]
- 10 walk-in cooler and walk-in freezer manufacturers.[6]

[1] Based on Energy Commission staff research of unique manufacturers in MAEDbS who have certified battery chargers.

[2] Based on Energy Commission staff research of unique manufacturers in MAEDbS who have certified portable luminaires.

[3] Based on the number of manufacturers identified in 78 Fed. Reg. 23335, 23428 (Apr. 18, 2013).

[4] Based on the number of manufacturers who make ceiling fans, as most offer both low-profile and regular ceiling fans. This is based on the U.S. Department of Energy's technical support document published in support of its final rule establishing ceiling fan standards. U.S. Department of Energy, Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Ceiling Fans (Nov. 2016), at p. 12-24, available at https://www.regulations.gov/document?D=EERE-2012-BT-STD-0045-0149.

[5] This is from the U.S. Department of Energy's technical support document published in support of its final rule establishing pump standards. U.S. Department of Energy, Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Pumps (Dec. 2015), at p. 12-4, available at https://www.regulations.gov/document?D=EERE-2011-BT-STD-0031-0056.

[6] This is from the U.S. Department of Energy's technical support document published in support of its final rule establishing walk-in cooler and walk-in freezer standards. U.S. Department of Energy, Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Walk-in

The number of these businesses that are small businesses is 771, or about 50 percent.

- 500 battery charger manufacturers are small businesses.[7]
- 148 portable luminaire manufacturers are small businesses.[8]
- 41 distribution transformer manufacturers are small businesses.[9]
- 41 ceiling fan manufacturers are small businesses. [10]
- 38 pump manufacturers are small businesses. [11]
- 3 walk-in cooler and walk-in freezer manufacturers are small businesses.[12]

For distribution transformers, ceiling fans, pumps, and walk-in coolers and freezers, the estimate of small businesses is high, as it is based on the size standards set by the federal Small Business Administration for the industry's NAICS classification, which is generally between 750 and 1,250 employees, instead of 100 employees as described in Government Code section 11346.5(b)(4). All of these manufacturers are assumed to be located outside of California, and most are also located outside of the United States.

Section 4

No businesses are expected to be created or eliminated as a result of the proposed regulations.

Aligning test procedures for battery charger manufacturers may yield a small economic benefit to those manufacturers who make both federally regulated and state-regulated products. The differences between the test procedures are minor, such as allowing conditioning of certain batteries before testing. These changes would not change whether a product meets the standard. The Energy Commission estimates the total savings in aligning test procedures to be about $300 per manufacturer, in one-time savings. The total number of manufacturers who make both state- and federally regulated battery chargers is estimated to be about 25 percent, or 250. This yields a benefit of $75,000 to battery charger manufacturers. This is not enough to create any new businesses.

Coolers and Walk-in Freezers (Dec. 2016), at p. 12-24, available at https://www.regulations.gov/document?D=EERE-2015-BT-STD-0016-0099.

[7] Based on Energy Commission staff estimate.

[8] Based on Energy Commission staff estimate.

[9] Based on the small businesses identified in 78 Fed. Reg. 23335, 23428 (Apr. 18, 2013).

[10] Based on the small businesses identified in U.S. Department of Energy, Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Ceiling Fans (Nov. 2016), at p. 12-24, available at https://www.regulations.gov/document?D=EERE-2012-BT-STD-0045-0149.

[11] Based on the small businesses identified in U.S. Department of Energy, Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Pumps (Dec. 2015), at p. 12-4, available at https://www.regulations.gov/document?D=EERE-2011-BT-STD-0031-0056.

[12] Based on small businesses identified in U.S. Department of Energy, Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Walk-in Coolers and Walk-in Freezers (Dec. 2016), at p. 12-24, available at https://www.regulations.gov/document?D=EERE-2015-BT-STD-0016-0099.

The elimination of reporting requirements for portable luminaires would yield a small economic benefit to portable luminaire manufacturers, as they no longer have to report their shipments to the Commission on an annual basis. The cost of this reporting requirement was assumed to be about $500 per manufacturer to collect the sales data and submit it to the Commission. The option of electronic reporting would have further reduced this cost. Therefore, the benefit of no longer requiring this report is estimated to be about $500 per manufacturer, or $148,500 total. This is not enough to create any new businesses.

The change to the labeling requirements for distribution transformers will have a small cost per manufacturer. The initial setup costs would include the time to change the printing on the label from what is required under NEMA Standard TP3-2000 to “DOE compliant”. The Energy Commission assumes that this change will require 8 hours of engineer or programmer time, at a wage of $44.36 per hour, for a total cost per manufacturer of $354.88 (about $355). For the 52 distribution transformer manufacturers, the total, one-time cost is $18,453.76, or about $18,500. This cost is not expected to eliminate any businesses.

The addition of reporting requirements for pumps, walk-in coolers and freezers, and low-profile ceiling fans is estimated to be about $500 per manufacturer to collect the test results and provide it in a template or manually upload it to the Energy Commission’s MAEDbS. Note, the Energy Commission did not include the cost to run the test themselves, as these test procedures are the result of federal law and not the result of the proposed changes to the regulations. The cost of certification is reduced generally by having an online database and by staff efforts to align templates and data collection requirements with what is required to be reported to the U.S. Department of Energy. The total additional costs of certification are estimated to be $81,000 ($500 per the 162 manufacturers). Because this is a small cost across many appliances, the proposed reporting requirements are not expected to eliminate any businesses.

Section 5

The regulation is a statewide regulation.

Section 6

No jobs are expected to be created or eliminated as a result of the proposed regulations. The total costs and benefits of any of the changes are up to $500 per affected manufacturer. This low cost is not expected to support creating any new jobs or eliminating any existing jobs.

Part B. Estimated Costs

Section 1

The Energy Commission estimates that there are no in-state manufacturers of portable luminaires, battery chargers, distribution transformers, pumps, walk-in coolers and freezers, or low-profile ceiling fans. Therefore, the total statewide cost to small business, typical businesses, and individuals to comply is zero because there are no in-state entities to comply. Instead, out-of-state manufacturers as well as in-state retailers will need to comply. In-state retailers must ensure that the products they sell appear in the MAEDbS, and often integrate that into purchase agreements with distributors or manufacturers, leading to no additional cost to comply with these regulations.

The initial cost for a typical manufacturer to comply with the regulations is estimated to be about $500 for manufacturers of pumps, walk-in coolers and freezers, and low-profile ceiling fans, and about $355 for manufacturers of distribution transformers. These costs are associated with certifying products to the Energy Commission and labeling products. The product design cycle for these products, when new models would be produced and would need to be certified to the Commission, is about five years on average for pumps, walk-in coolers and freezers, and ceiling fans. Therefore, the ongoing costs of certification are estimated to be about $100 ($500 / 5 years). Manufacturers only need to certify each model once, and do not incur annual costs of certification. The ongoing cost of labeling is estimated to be $0 per manufacturer because labeling is required under the existing regulations, so continuing to require a mark would not add any cost above the existing law.

The initial cost for a typical small business is the same as for a manufacturer.

There is no initial cost for individuals, as individuals are not required to comply with the regulation. Given the low cost of certification and labeling, the Energy Commission does not expect the costs of these regulations to be passed on to consumers in any meaningful way.

No other economic costs are expected to occur.

Section 2

- Distribution transformer manufacturers: 18,500 initial cost, and $0 in ongoing costs.
- Low-profile ceiling fan manufacturers: $33,000 initial cost, and $6,600 in ongoing costs (incurred every five years)
- Pump manufacturers: $43,000 initial cost, and $8,600 in ongoing costs (incurred every five years)
- Walk-in cooler and freezer manufacturers: $5,000 initial cost and $1,00 in ongoing costs (incurred every five years)

Section 3

The addition of reporting requirements for pumps, walk-in coolers and freezers, and low-profile ceiling fans is estimated to be about $500 per manufacturer initially, and

$100 annually thereafter. The cost of certification is reduced generally by having an online database and by staff efforts to align templates and data collection requirements with what is required to be reported to the U.S. Department of Energy. This estimate includes any programming, record keeping, and completing of templates to submit to the Energy Commission. This estimate does not include record keeping associated with test reports, as that requirement is a result of federal law and not the result of these proposed regulations.

Section 5

There are existing federal regulations for pumps, walk-in coolers and freezers, and low-profile ceiling fans. See 10 C.F.R. §§ 431.456 (pumps), 431.306 (walk-in coolers and freezers), and 430.32(s) (ceiling fans). Incorporating the federal test procedures and standards as state test procedures and standards ensures that the standards remain in effect in California in the event of a federal repeal and provide California the ability to monitor compliance and report violations of the standards to the appropriate entities. The Energy Commission requires manufacturers to certify to the Commission's database to backstop against a federal failure to continue its own certification process. The Energy Commission's database also incorporates verifications and checks on the data submitted to ensure that it is accurate and true. This helps to improve the quality of data submitted and prevent against manufacturers submitting inaccurate data, typographical errors, or invalid information, to ensure that California receives the benefits of the efficiency regulations. Manufacturers are required by law to be certified to the Energy Commission's database to lawfully sell or offer for sale their products in California.

There are existing federal regulations for distribution transformers. See 10 C.F.R. § 431.196. Changing the labeling requirement for distribution transformers from the industry program to a simple "DOE compliant" mark harmonizes with the federal approach and will help the Energy Commission and California consumers to ensure that their distribution transformer meets the most current federal efficiency standards. This type of marking is important for products that are primarily installed in the field rather than procured in retail stores, and will improve compliance with the regulations.

Part C. Estimated Benefits

Section 2

Total benefits of regulation: $75,000 + $148,500 (for portable luminaire and battery charger manufacturers) = $223,500.

Total costs of regulation: $18,500 + $81,000 (for distribution transformer and pump, walk-in cooler/freezer, & ceiling fan manufacturers) = $99,500.

Total costs and benefits of the alternative are determined to be $0 because there are no benefits to maintaining the current regulations, and there are no additional costs imposed by the current regulations.

Section 3

The Energy Commission assumes that there are no portable luminaire or battery charger manufacturers in the state. Therefore the benefits of eliminating the reporting requirement for portable luminaires and of aligning the test procedures for battery chargers do not have any statewide effect, as they only affect out-of-state manufacturers.

Section 4

No expansion of businesses is expected as a result of the regulation. The total savings associated with removing the portable luminaire reporting requirement in 1606(j) of $500 per manufacturer, and of aligning with battery charger test procedures, saving $300 per affected manufacturer, would not result in any expansion of those businesses.

FISCAL IMPACT STATEMENT

Part A. Fiscal Effect on Local Government

The proposed regulations do not have any fiscal effect on local government. The proposed regulations do not impose any reporting or compliance obligations on, and do not provide any benefits to, local government because local governments are not appliance manufacturers.

Part B. Fiscal Effect on State Government

Section 1

The proposed changes will not result in any additional expenditure in the current fiscal year.

Section 2

Under the current regulations, a model number and associated energy information must appear in the appliance efficiency database to be eligible for sale in California. The appliance efficiency database is actually two databases – active (or “approved”) and historical (or “archived”). The approved database contains models that are currently being manufactured and that meet the currently effective efficiency standards. The archived database contains models (a) that are no longer manufactured (but leftover stock may still be sold), (b) that no longer meet the current efficiency standards but met standards applicable when the appliance was manufactured, (c) for which the

information submitted has changed, or (d) that disclosed data using a then-applicable test procedure and a new test procedure has since come into effect. Models that appear in the archived database may continue to be sold in California if manufactured before the effective date of the new standard or test procedure.

Under current regulations, the Energy Commission shall send a letter by certified mail (or by registered mail if the address is outside of the United States) to notify a manufacturer that their models will be archived due to one of the four issues (a-d) above. This archiving process typically occurs 3 times a year. For one appliance type, small battery chargers, this resulted in 1017 letters sent internationally by registered mail, and 450 letters sent domestically by certified mail. Registered mail costs $18.80 ($14.95 for registered mail and $3.85 for return receipt); certified mail costs $6.46 per letter. This results in a cost of approximately $19,100 for international letters and $2,900 for domestic letters, for a total postage cost for one round of archiving of $21,000. Envelopes, letter stock, printing, and labor are additional costs absorbed by the agency.

Manufacturers are responsible for keeping their address and other information current in the database. However, many manufacturers fail to do so, and the Energy Commission does not have an easy way to update this information, especially for out-of-country manufacturers. Because of outdated or inaccurate information, many of the letters do not reach the intended recipient. From the small battery charger archiving process above, the Energy Commission has received:

- For international letters: no mail receipts, 305 undeliverable letters, and 712 letters with no response.
- For domestic letters: 290 mail receipts, 69 undeliverable letters, and 91 letters with no response.

Because MAEDbS is electronic and manufacturers have to log in using an e-mail address, the Energy Commission has found that the e-mail addresses are typically more current than the physical mailing addresses. This means that providing electronic notice to a manufacturer that their products will be archived is typically more effective than providing notice by certified or registered mail.

In addition, for products for which a new standard has taken effect, the manufacturer is already on notice as a result of the rulemaking that their products will be archived once the standard takes effect. There is no need to provide additional notice that their products will be archived. Importantly, manufacturers may continue to sell products manufactured before the effective date even if they appear in the archived database. Manufacturers may not sell products manufactured after the effective date that do not comply with the current standard *even if the model appears in the approved database*. There is no substantive impact to the manufacturer of automatically archiving products that no longer meet the currently effective efficiency standard.

Therefore, the Commission’s proposed regulations would remove the requirement to provide notice of archiving by registered or certified mail and only provide such notice by electronic mail. The proposed regulations would also automatically archive, without

further notice to the manufacturer, any appliance model that no longer meets the currently effective efficiency standard.

The estimated fiscal savings to the Energy Commission from changing these noticing requirements is approximately $21,000 per round of archiving, or about $63,000 per fiscal year, in reduced annual costs from no longer sending notice by registered or certified mail. Energy Commission staff time would be approximately the same, as staff would still need to spend time reviewing the database to identify models that need to be archived and sending notifications by e-mail to manufacturers.

Part C. Fiscal Effect on Federal Funding of State Programs

The savings estimated above do not affect any federally funded state agency or program.