

DOCKETED

Docket Number:	23-AAER-01
Project Title:	Commercial Food Service Equipment (i.e. Commercial Steam Cookers, Commercial Convection Ovens, Commercial Dishwashers, and Commercial Fryer)
TN #:	253089
Document Title:	Request for Information for Commercial Food Service Equipment
Description:	Request for Information and Invitation to submit proposals for four appliances within the Commercial Food Service Equipment category
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Organization:	California Energy Commission
Submitter Role:	Energy Commission
Submission Date:	11/14/2023 9:21:41 AM
Docketed Date:	11/14/2023

CALIFORNIA ENERGY COMMISSION

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CEC-057 (Revised 1/21)



**Request for Information (RFI)
and
Invitation to Submit Proposals (ITSP)
Appliance Efficiency Regulations for Commercial Food
Service Equipment
Docket 23-AAER-01
Written Comments Due: February 13, 2024**

The California Energy Commission (CEC) seeks information from the public and invites interested parties to submit proposals as it considers establishing efficiency standards, test procedures, marking requirements, certification requirements, and any other appropriate regulations for commercial steam cookers (Steam Cookers), commercial dishwashers (Dishwashers), commercial convection ovens (Ovens), and commercial fryers (Fryers) within the commercial food service equipment category.

Background

The CEC continues to work toward a clean and equitable energy future for California through implementation of innovative energy policies, including establishing electricity, natural gas, and water efficiency standards for indoor and outdoor appliances. Steam Cookers, Dishwashers, Ovens, and Fryers are appliances used in the commercial food service equipment industry which include both commercial and institutional facilities that prepare food for human consumption.

On August 10, 2023, the CEC issued an order instituting rulemaking (OIR) to consider efficiency standards, test procedures, marking requirements, and other efficiency measures for Steam Cookers, Dishwashers, Ovens, and Fryers within the commercial food service equipment category. Any measures resulting from the OIR will be incorporated into the California Code of Regulations (CCR), Title 20, sections 1601-1609, the Appliance Efficiency Regulations.

Request for information

This request for information (RFI) provides interested members of the public an opportunity to provide written comment on the development of efficiency standards for the four appliances within the Commercial Food Service Equipment category, and to submit proposals to CEC staff on the topic of potential minimum energy and water standards for these appliances. Where feasible, comments should be as specific as possible and include examples and recommendations with supporting references.

CEC staff will review comments and proposals in depth and may use the information provided to develop regulatory proposals for Steam Cookers, Dishwashers, Ovens, and Fryers. Proposed regulatory standards will be based on the proceeding record, which may include data and technical information provided by CEC staff and stakeholders.

Staff has identified the following commercial food service equipment appliance types to be included in the scope of Steam Cookers, Dishwashers, Ovens, and Fryers:

Table 1: Commercial Food Service Equipment Scope

Commercial Food Service Equipment Appliance	Classifications
Commercial Steam Cookers	- Natural Gas - Electric
Commercial Dishwashers	- Electric
Commercial Convection Ovens	- Natural Gas - Electric
Commercial Fryers	- Natural Gas - Electric

Source: California Energy Commission

The CEC seeks information for the four appliances within the Commercial Food Service Equipment category on:

- Product definition and scope
- Existing test procedures and test procedures under development
- Test data
- Source of test data
- Existing standards and standards under development
- Product lifetime
- Operations, functions, and modes
- Energy-saving technologies, components, and features
- Per-unit electrical, natural gas, and water savings
- Incremental cost
- Market characteristics and market share
- Design and sales cycles

- Product development trends
- Market competitions for efficient products
- Health and safety, for example: indoor air quality and/or fire safety
- Impacts to small businesses if efficiency standards are adopted, such as jobs and cost increases
- Impacts to low-income consumers and [disadvantaged communities](#)¹, if efficiency standards are adopted.

The CEC will review and consider all information received through the docket. Interested parties are encouraged to provide input in the development of the proposed appliances efficiency standards for Steam Cookers, Dishwashers, Ovens, and Fryers.

Feedback and Public Input – Specific Questions

The following questions are examples of information for which staff is seeking feedback in relation to the topics listed above for Steam Cookers, Dishwashers, Ovens, and Fryers:

1. Based on Table 1, are there additional classifications that should be considered in scope or out-of-scope? Based on what factors?
2. What definitions are useful to describe Steam Cookers, Dishwashers, Ovens, and Fryers? Are there distinct characteristics within Steam Cookers, Dishwashers, Ovens, and Fryers that would allow multiple uses?
3. Steam Cookers, Dishwashers, Ovens, and Fryers are found in commercial and institutional settings such as hospitals, schools, etc., are there other unique settings that staff should investigate?
4. Are there other efficient technologies available on the market for Steam Cookers, Dishwashers, Ovens, and Fryers? Are there new or upcoming technological developments for Steam Cookers, Dishwashers, Ovens, and Fryers?
5. Are there alternatives for Steam Cookers, Dishwashers, Ovens, and Fryers used by the food service industry that would achieve the same functions of those appliances? For example, are air fryers a viable efficient alternative to Fryers that use oil?
6. The EnergyStar program provides a voluntary way to certify the efficiency of very efficient options on the listed appliances of Table 1, are there other approaches available that CEC should be aware of? Please include references to publicly available sources.
7. What inspections or test methods should CEC staff use to verify compliance with each efficiency requirement?
8. Is there current research or advancement by industry to improve the efficiency of the appliances listed in Table 1?
9. What is the market share of each identified classification of each appliance listed in Table 1?

¹ SB 535 Disadvantaged Communities, <https://oehha.ca.gov/calenviroscreen/sb535>

10. What percent of the listed appliances in Table 1 are leased or sold in California?
11. Please provide an estimate of the current installed stock in California for each of the appliances listed in Table 1. What sources of information are available to estimate current and projected stock in California?
12. What is the retail cost per unit or differential within each appliance category for Steam Cookers, Dishwashers, Ovens, and Fryers?
13. What is the installation cost per unit? What is the replacement cost per unit?
14. What is the average lifetime of each appliance listed in Table 1? What assumptions for product lifetime should staff consider for the listed appliances, and why? How do product lifetimes vary per product type within each appliance listed in Table 1? Please provide published sources of information.
15. What is the average run time for each of the appliances listed in Table 1? Do they vary by product type?
16. Do manufacturers provide a broad product offering for the listed appliances?
17. How many small businesses are involved in the manufacturing, sale, or installation of the listed appliances in California? How might small businesses be affected by any changes to the listed appliances?
18. What are the potential impacts and benefits the proposed standards may have for consumers (i.e., users of these appliances)?

Invitation to Submit Proposals

Interested parties are also invited to submit fully-developed proposals for potential standards along with technical information or comments. This invitation to submit proposals (ITSP) provides an opportunity to submit efficiency measures on Steam Cookers, Dishwashers, Ovens, and Fryers for staff to consider and evaluate. Staff will consider these proposals, along with the data and information received through the RFI, as they draft recommendations for consideration as part of the rulemaking process.

The CEC is seeking proposals for efficiency measures that meet the following criteria:

- Efficiency improvements are technologically feasible and attainable.
- Efficiency improvements will reduce energy or water consumption.
- Proposed measures do not result in any added total costs for consumers over the designed life of the appliances (i.e., the measures are cost-effective).
- Proposed measures are supported by information or data in the CEC's record for this proceeding or submitted as part of the proposal.

Proposal Format

The following is a guide stakeholders should use to prepare proposals for improving the energy and/or water efficiency of commercial food service equipment. The information outlined is critical for CEC staff to evaluate proposed changes to the CEC's Appliance

Efficiency Regulations (Title 20, CCR, sections 1601-1609). These proposals could include any type of action the CEC could take to reduce energy or water consumption in products, including mandatory minimum efficiency standards, voluntary efforts, consumer education, legislation, or labeling.

Reviewing CEC staff reports and analyses can be helpful to stakeholders trying to understand the types of information used to analyze energy or water efficiency standards.

The proposal(s) shall include the following sections, as described below:

- A. **Product Description and Scope:** Provide information and details of product classes intended to be covered by the proposals as well as those that should be excluded (be specific). Generally, products are classified based on features, functionality, or other unique market characteristics.
- B. **Summary of Proposal:** Describe the framework of the proposal, its goals, and the expected market transformation. Also, discuss alternate approaches to achieving energy/water savings and why the proposed approach is superior.
- C. **Proposed Test Procedure(s):** If the proposal includes the measurement of product performance or market transformation, describe how these would be measured. Describe why the methodology is the best available, necessary, and the least-cost approach that produces the necessary information.
- D. **Proposed Regulatory Language:** Please include drafted proposed language if the proposal would require a new regulation, memorandum of understanding, or legislation. To enhance the clarity of such a proposal, define both the scope of what products or entities would be covered and provide definitions for any terms that differ from the dictionary definition or are critical to the proposal. For proposed appliance efficiency standards, also include which types of data the CEC should require for certification.
- E. **Implementation Plan:** Describe how the proposal would be implemented.

For each section above, stakeholders are expected to cite or include information, data, or analyses to support their proposed action. The following sections provide guidance on the type of support each proposal should include. The CEC will accept information and data at any time during its rulemaking proceeding. But the more comprehensive a proposal is when originally proposed, the better the CEC can evaluate its merit and align with its recommendations.

The proposal(s) should include the following analysis:

- 1) **Technical Feasibility Analysis**
 - a. Describe the efficient options or features and their impact on the operation of the product. Provide information on whether any voluntary measures are in place to accelerate market transformation.

- b. Discuss the feasibility of improving products that are currently less efficient than those that would result from the proposed measures. Which technologies are available for manufacturers to improve existing products? Which technologies are proprietary, and which are not? How would the improvements impact other aspects of product quality and performance? How long would it take manufacturers to implement these improvements across their affected product line?
 - c. Provide information related to consumer acceptance of efficiency products in the market or products that would result from the proposal. Provide solutions to issues and problems identified.
- 2) Economic Analysis
- a. Market Saturation and Sales
 - i. Provide an estimate of the number of models, the number of units, or market share per model, with efficient features that are currently sold in the market.
 - ii. Provide a projected annual growth rate and any other pertinent information that will impact stock or sales.
 - b. Baseline Energy and Water Usage (Per unit and Statewide)
 - i. Provide per unit energy/water usage by product class, efficiency level, capacity, or any other characteristic that drives energy/water use.
 - ii. Provide an estimate of current statewide energy/water usage of products within the proposal's scope by multiplying unit energy/water consumption by market saturation and sales.
 - c. Energy and Water Savings (Per unit and Statewide)
 - i. Provide an estimate about unit energy/water lifecycle savings to the consumer.
 - ii. Estimate the California energy/water savings and peak demand reduction that would result from implementing the proposal. Please be clear on the time-period methodology (e.g., savings for first-year sales, after entire stock turnover, savings in 2024, etc.)
 - d. Provide the estimated incremental cost to improve the product's efficiency to meet the proposal. Explain in detail how that incremental cost figure was developed, and which specific products or product baselines were used to compare costs. Please disaggregate incremental costs associated with non-efficiency improvements. Incremental first costs should be focused on the price to the final purchaser (e.g., the change in retail price for the product)
 - e. Provide the estimated incremental operating costs or savings of products with improved efficiency. Incremental operating costs or savings should focus on the costs or savings to the consumer. These costs or savings may include costs or savings associated with maintenance (if maintenance will change due to the

proposed standard) or costs or savings from reduced or increased energy/water consumption. Include any costs or savings from reduced or improved product efficacy resulting from the proposal. Please disaggregate incremental costs associated with non-efficiency improvements.

- f. Provide the lifecycle cost and cost-to-benefit ratio of the proposed recommendation as it relates to the consumer. If possible, please also include wider societal lifecycle cost and benefit.

3) Environmental and Societal Impacts

- a. Provide information related to any potential beneficial or adverse environmental impacts from implementing the proposal. Does the proposal impact indoor-outdoor air quality or otherwise affect indoor-outdoor environmental quality? Does the proposal affect atmospheric emissions (including greenhouse gas emissions and ozone-depleting gases), and if so, by how much (million metric tons of CO₂ equivalents)?
- b. Are there environmental impacts associated with material extraction, manufacturing, packaging, shipping to the point-of-sale, or other activities associated with implementing the measure?
- c. What are the impacts on the health and welfare of California residents, worker safety, and the state's environment?
- d. Estimate how the proposal would: create or eliminate jobs in the state, create or eliminate businesses in the state, provide competitive advantages or cause competitive disadvantages for businesses currently doing business in the state, increase or decrease investments in the state, and/or provide incentives for innovation in products, materials, or processes.
- e. If possible, include wider societal lifecycle costs and benefits. Such as potential impacts and benefits that proposed standards may have on low-income customers and disadvantaged communities.

4) Methodology

- a. Describe the methodology and approach used in the development of the proposed measures. Typically, this section will contain the assumptions used for the analysis of the proposal, a description of the base case (current standards or current practice), and the proposed measure. The proposal should also exhibit the methodology used to calculate the savings and incremental cost of efficiency improvement.

5) References

- a. List and describe each of the research studies, reports, and personal communications that provide background for this research. Identify all resources that have been pursued to further this measure. Identify all “experts” that were involved in further developing the change, all research and analysis reports and documents that were reviewed, and all industry standards that were consulted (e.g., ASTM, UL, ASHRAE test procedures, etc.). Include research that is underway that addresses the measure/change. Provide a full citation of sources.

Where feasible, proposals should be as specific as possible and include examples and recommendations with supporting references. CEC staff will review the proposals in depth and may use the information provided to develop regulatory proposals for commercial steam cookers, commercial dishwashers, commercial convection ovens, and commercial fryers. Proposed regulatory standards will be based on the proceeding record, which may include data and technical information provided by CEC staff and stakeholders.

The CEC will accept and review all proposals received during its proceeding, regardless of its format or elements.

Submitting Comments to the CEC Docket

Public input is important to the rulemaking process. The CEC welcomes public participation.

Written comments must be submitted to the Docket Unit by **February 13, 2024**.

Written comments, attachments, and associated contact information (for example, address, telephone number, and email address) will become part of the public record of this proceeding with access available via any internet search engine. One or more public hearings and public input periods will follow on the proposed regulatory text.

The CEC encourages use of its electronic commenting system. Visit the [e-commenting page](#), which links to the comment page for this docket.² Enter your contact information and a comment title describing the subject of your comment(s), please include the type of appliance listed in Table 1. Comments may be included in the “Comment Text” box or attached in a format consistent with the California Code of Regulations, Title 20, Section 1208.1.³ The maximum file size is 10 MB.

2 Commercial Food Service Equipment (i.e. Commercial Steam Cookers, Commercial Convection Ovens, Commercial Dishwashers, and Commercial Fryers) e-commenting webpage,

<https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=23-AAER-01>

3 [§ 1208.1 Media, Format, Content, and Other Required Characteristics of Filed Documents; Electronic Signatures, Changes in the Requirements by the Executive Director](#),

[https://govt.westlaw.com/calregs/Document/IC9B8C2B35CCE11EC9220000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/IC9B8C2B35CCE11EC9220000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

Written Comments may also be submitted by email. Include the docket number 23-AAER-01 and the type of appliance listed in Table 1 in the subject line and send to docket@energy.ca.gov.

If preferred, a paper copy may be submitted to:

California Energy Commission
Docket Unit
RE: Docket No. 23-AAER-01
715 P Street
Sacramento, CA 95814

If interested parties wish to maintain the confidentiality of specific data or information, they should submit an application for confidentiality and the confidential documents directly to the Docket Unit through the e-filing system. For information on applying for confidentiality, interested parties shall contact the Docket Unit in the CEC's Chief Counsel's Office before submitting a response to this RFI. Otherwise, all responses received will become publicly available. Visit the [Docket Unit](#), which links the application for confidentiality.⁴

Questions regarding submitting comments to the docket, including inquiries regarding confidentiality, should be referred to the Docket Unit at docket@energy.ca.gov or (916) 654-5076.

Public Advisor and Other Commission Contacts

The CEC's Public Advisor assists the public with participating in CEC proceedings. To request interpreting services, reasonable modification or accommodations, and other modifications, contact the Public Advisor at publicadvisor@energy.ca.gov or by phone at (916) 957-7910. Requests should be made as soon as possible but at least five days in advance. The CEC will work diligently to meet all requests on availability.

Direct questions on the subject matter of this RFI contact Alejandro Galdamez P.E. at alejandrogaldamez@energy.ca.gov or call (916)237-2550.

Media

Direct media inquiries to the Media and Public Communications Office at mediaoffice@energy.ca.gov or call (916)654-4989

Subscribing to E-mail List Servers

Interested parties who would like to follow or participate in this proceeding should subscribe to the CEC's "appliances – Appliance Efficiency Standards"(Appliances) list server found at the [List Servers webpage](#).⁵ By subscribing to this list server, interested parties are consenting to receive information, notices, and other communications,

4 Dockets Unit Website, <https://www.energy.ca.gov/about/divisions-and-offices/chief-counsels-office/docket-unit>

5 California Energy Commission e-mail list-servers subscription webpage, <https://public.govdelivery.com/accounts/CNRA/signup/31895>

including information associated with CEC's efficiency-related rulemaking proceedings, by electronic mail.

Availability of Documents

All records for the process will be accessible in the Appliance Efficiency Regulations for [Commercial Food Service Equipment \(i.e. Commercial Steam Cookers, Commercial Convection Ovens, Commercial Dishwashers, and Commercial Fryers\)](#) 23-AAER-01.⁶

When new information is posted, an email will be sent to those on the Appliances list server. To receive these notices, subscribe to the list by following the steps in the above section, or subscribe at the [Appliance Efficiency Proceedings webpage](#).⁷

6 Commercial Food Service Equipment (i.e. Commercial Steam Cookers, Commercial Convection Ovens, Commercial Dishwashers, and Commercial Fryers) e-commenting webpage, <https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=23-AAER-01>

7 Appliance Efficiency Proceedings webpage, <https://www.energy.ca.gov/rules-and-regulations/appliance-efficiency-regulations-title-20/appliance-efficiency-proceedings>