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Project Title:	Commercial Food Service Equipment (i.e. Commercial Steam Cookers, Commercial Ovens, Commercial Dishwashers, and Commercial Fryer)
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Document Title:	Request for Information for Commercial Fryers
Description:	The California Energy Commission (CEC) seeks information from stakeholders and members of the public as it considers establishing efficiency standards, and other efficiency measures for commercial fryers.
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CEC-057 (Revised 1/21)

Request for Information (RFI):
Appliance Efficiency Regulations for Commercial Fryers
Docket 23-AAER-01
Written Comments Due: June 23, 2025

The California Energy Commission (CEC) seeks information from stakeholders and interested members of the public as it considers establishing efficiency standards, test procedures, marking requirements, and other efficiency measures for commercial fryers. The purpose of this Request for Information (RFI) is to ask specific questions about propane commercial fryers, the scope of the proposed standards, and the standard levels for commercial fryers.

Background

The CEC continues to work towards a clean and equitable energy future for California through implementation of innovative energy policies, including establishing energy and water efficiency standards for indoor and outdoor appliances.

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 commercial food service equipment, including commercial steam cookers, commercial dishwashers, commercial ovens, and commercial fryers. 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.

On November 14, 2023, the CEC issued an RFI for commercial food service equipment to seek information from the public and invite interested members of the public to submit proposals.

Request for Information

Since the issuance of the RFI in November 2023, the CEC has reviewed all comments received, conducted additional research, and communicated with various stakeholders. The CEC is issuing this RFI to solicit additional input from interested members of the public on specific topics related to commercial fryers which will inform the development of efficiency standards for commercial fryers.

CEC has included a series of questions below organized by topic. Responses may address any or all of the questions in this RFI but should clearly indicate which questions responses are intended to address. Commenters should include as much detail as possible to support CEC's understanding of the reasoning informing each response. Instructions for how to submit responses are included towards the end of this RFI.

Topic - Propane Commercial Fryers

The CEC did not specifically ask about propane commercial fryers in the RFI issued November 14, 2023. Most manufacturers offer their commercial fryer models in both natural gas and propane configurations at the same price. The Investor-Owned Utilities Codes and Standards Enhancements (IOU CASE) Team recommended that the CEC investigate propane commercial fryers further for potential inclusion in the proposed efficiency standards.[1] Given the relatively higher price for propane, the benefits of more efficient fryer operation are reasonably expected to be higher for propane commercial fryers.

Staff is therefore seeking information on commercial propane fryers to assess their prevalence and performance in the commercial food service industry. Understanding the market share, typical applications, and technical characteristics of these fryers is crucial for determining their potential inclusion in the proposed efficiency standards.

1) **Should propane commercial fryers be included in the scope of commercial fryer efficiency standards?**
2) **What is the current market share of gas commercial fryers in California that are propane commercial fryers?**
3) **Which industries or user groups primarily purchase and operate propane commercial fryers, and what factors drive their choice (e.g., lack of natural gas access, cost, portability, etc.)?**
4) **Can propane and natural gas commercial fryers be converted interchangeably, and what are the technical requirements and the associated conversion costs?**
5) **Is the performance measured under standardized testing protocols (ASTM F1361-21[2] and ASTM F2144-21[3]) different for the propane and natural gas configurations of the same commercial fryer?**
6) **Are there commercial fryers that are designed exclusively for propane usage, without the existence of a natural gas equivalent model or ability to configure for natural gas?**
7) **What is an appropriate average statewide price of propane to use for the CEC's cost-effectiveness analysis? Please provide supporting data sources.**

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[1] pp. 22, The CEC Docket 23-AAER-01, 2023. *California Investor Owned Utilities Comments - Title 20 Fryers CASE Report RFI Response Commercial Food Service* https://efiling.energy.ca.gov/GetDocument.aspx?tn=257835&DocumentContentId=93738

[2] ASTM F1361-21 - Standard Test Method for Performance of Open Vat Fryers: https://store.astm.org/f1361-21.html

[3] ASTM F2144-21 - Standard Test Method for Performance of Large Open Vat Fryers: https://store.astm.org/f2144-21.html

8) **Are there any other factors or data the CEC should consider regarding the use, performance, or market dynamics of propane commercial fryers?**

Topic - Scope of the Proposed Standards

The scope of ENERGY STAR Version 3.0[4] is commercial open, deep-fat fryers, meeting the size and capacity specifications of either standard fryers or large vat fryers:

- Standard Fryer: A fryer with a vat width ≥ 12 inches and < 18 inches, and a shortening capacity ≥ 25 pounds and ≤ 65 pounds.
- Large Vat Fryer: A fryers with a vat width ≥ 18 inches and ≤ 24 inches, and a shortening capacity > 50 pounds.
- Split Vat Fryer: A standard or large vat fryer with an internal wall that separates the vat into two equal sides.

Fryers with vat sizes less than 12 inches or greater than 24 inches wide fall outside the ENERGY STAR Version 3.0 scope.

Staff is considering aligning the scope of the proposed efficiency standards with the scope of ENERGY STAR Version 3.0, but staff will consider appropriate modifications of ENERGY STAR's voluntary scope when defining the mandatory scope of the Appliance Efficiency Regulations. The scope of ENERGY STAR Version 3.0 includes countertop, floor type, and drop-in designs.

9) **Should countertop commercial fryers be included in the scope of the proposed efficiency standards?**
   a) **What is the current market share of this fryer type in California?**
   b) **Which industries or user groups primarily purchase and operate this fryer type?**
   c) **If these types of fryers are to be excluded, what definitions do you recommend the CEC use for this purpose?**
10) **Should drop-in style commercial fryers be included in the scope of the proposed efficiency standards?**
   a) **What is the current market share of this fryer type in California?**
   b) **Which industries or user groups primarily purchase and operate this fryer type?**
   c) **If these types of fryers are to be excluded, what definitions do you recommend the CEC use for this purpose?**
11) **Are there any other commercial fryer types or characteristics that should be considered for inclusion or exclusion in the proposed efficiency standards? Please provide rationale and supporting data.**

[4] ENERGY STAR Program Requirements for Commercial Fryers, Version 3.0. https://www.energystar.gov/sites/default/files/asset/document/ENERGY%20STAR%20Commercial%20Fryers%20Version%203.0%20%28Rev.%20December%20-%202020%29%20Specification.pdf

Topic - Standard Levels for Commercial Fryers

The performance criteria for gas commercial fryers are identical for ENERGY STAR Version 2.0 and ENERGY STAR Version 3.0. Multiple stakeholders, including ITW Food Equipment Group[5] and the IOU CASE Team[6], recommended to align with these criteria of a cooking efficiency standard of 50% and idle energy rate limits of 9,000 Btu/hr for standard vat gas fryers, and 12,000 Btu/hr for large vat gas fryers. Alternatively, Earthjustice[7] submitted comments recommending adopting a more stringent 56% cooking efficiency standard, and idle energy rate limits of 8,000 Btu/hr and 10,000 Btu/hr, respectively.

12) Should the CEC propose efficiency standards for gas commercial fryers aligning with the ENERGY STAR specification, Earthjustice's proposal (see footnote 8), or pursue something else? What would be the implications of adopting standards more stringent than ENERGY STAR Version 3.0? Please elaborate.

For electric commercial fryers, both the IOU CASE Team and Earthjustice recommended to not establish efficiency standards and instead only establish test-and-list requirements for electric commercial fryers. ENERGY STAR established an energy efficiency requirement for both standard vat and large vat electric commercial fryers in ENERGY STAR Version 2.0[8] and made the standard for standard vat electric commercial fryers stricter in ENERGY STAR Version 3.0[9].

13) Should the CEC align efficiency standards for electric commercial fryers with ENERGY STAR Version 2.0, ENERGY STAR Version 3.0, only establish test-and-list requirements, or pursue something else? Please elaborate.

The IOU CASE Team estimated the incremental equipment cost of standard vat electric commercial fryers to comply with ENERGY STAR Version 2.0 and ENERGY STAR Version 3.0 to be $4,157 and $6,239, respectively.[10] ENERGY STAR, however, estimates in their Commercial Food Service (CFS) Equipment Calculator, updated in March 2024, that the incremental equipment cost of standard vat electric commercial fryers to comply with ENERGY STAR Version 3.0 is $1,500.[11] The higher increased incremental equipment cost is the primary reason why the IOU CASE Team concludes

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[5] The CEC Docket 23-AAER-01, 2023. *ITW Food Equipment Group Comments*
https://efiling.energy.ca.gov/GetDocument.aspx?tn=253672&DocumentContentId=88922
[6] The CEC Docket 23-AAER-01, 2023. *California Investor Owned Utilities Comments - Title 20 Fryers CASE Report RFI Response Commercial Food Service*
https://efiling.energy.ca.gov/GetDocument.aspx?tn=257835&DocumentContentId=93738
[7] The CEC Docket 23-AAER-01, 2023. *Earthjustice Comments on Commercial Fryer Efficiency Standards*
https://efiling.energy.ca.gov/GetDocument.aspx?tn=259963&DocumentContentId=961699
[8] ENERGY STAR Program Requirements for Commercial Fryers, Version 2.0.
https://www.energystar.gov/sites/default/files/specs//private/Commercial_Fryers_Program_Requirements.pdf
[9] ENERGY STAR Program Requirements for Commercial Fryers, Version 3.0.
https://www.energystar.gov/sites/default/files/asset/document/ENERGY%20STAR%20Commercial%20Fryers%20Version%203.0%20%28Rev.%20December%20-%202020%29%20Specification.pdf
[10] Table 18, pp 35. The CEC Docket 23-AAER-01, 2023. *California Investor Owned Utilities Comments - Title 20 Fryers CASE Report RFI Response Commercial Food Service*
https://efiling.energy.ca.gov/GetDocument.aspx?tn=257835&DocumentContentId=93738
[11] Commercial Food Service Equipment Calculator, available from:
https://www.energystar.gov/partner-resources/energy-star-training-center/commercial-food-service

that an energy efficiency standard for standard vat electric commercial fryer is not cost-effective.[12]

14) What is the most appropriate value for the CEC to assume for the incremental equipment cost for standard vat electric commercial fryers to comply with ENERGY STAR Version 3.0? Please provide supporting data.

Submitting Comments to the CEC Docket

Public input is important to the CEC's standards development process, and the CEC welcomes public participation.

Written comments must be submitted to the Docket Unit by **June 23, 2025**. Written comments, attachments, and associated contact information (such as address, telephone number, and email address) will become a part of the public record of this proceeding with access available to anyone via any internet search engine. Once considering any comments received in response to this RFI, CEC staff will develop a staff draft report and proposed regulatory text for commercial fryers. Additional public comment periods will follow publication of this initial staff proposal as a standard part of CEC's pre-rulemaking activities.

The public have the options to submit responses either electronically, by email, or by mail. The CEC encourages use of its electronic commenting system. Visit the e-commenting page at https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=23-AAER-01, which links to the comment page for this docket. Enter your contact information and a comment title describing the subject of your comment(s), and please state that comments are for 'Commercial Fryers'. 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.[13] The maximum file size is 10 MB.

Written comments may also be submitted by email. Include the docket number, 23-AAER-01, and the type of appliance ("Commercial Fryers") 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

[12] Table 20, pp 37. The CEC Docket 23-AAER-01, 2023. *California Investor Owned Utilities Comments - Title 20 Fryers CASE Report RFI Response Commercial Food Service* https://efiling.energy.ca.gov/GetDocument.aspx?tn=257835&DocumentContentId=93738

[13] Media, Format, Content, and other Required Characteristics of Filed Documents: https://govt.westlaw.com/calregs/Document/IC9B8C2B35CCE11EC9220000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default).

confidentiality, interested parties should 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 at https://www.energy.ca.gov/about/divisions-and-offices/chief-counsels-office/docket-unit, which links the application for confidentiality.

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.

Please direct questions on the subject matter of this RFI to Stefani Wilde at stefani.wilde@energy.ca.gov. The CEC's Appliance Efficiency Branch can also be contacted by phone at (916) 651-7100.

Media

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

Subscribing to CEC's News, Programs, and Events

Interested parties who would like to follow or participate in this proceeding should subscribe to receive updates and information on news, programs, and events from the CEC through its subscriptions webpage at https://public.govdelivery.com/accounts/CNRA/signup/31895. Be sure to include "Appliance Efficiency Standards" in your subscription topics. By subscribing to this service, interested parties are consenting to receive information, notices, and other communications, including information associated with the 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 Ovens, Commercial Dishwashers, and Commercial Fryers), 23-AAER-01. When new information is posted, an email will be sent to those on the Appliances subscription list. To receive these notices, subscribe to the list by following the steps in the above section, or subscribe at the Appliance Efficiency Proceedings webpage at https://www.energy.ca.gov/rules-and-regulations/appliance-efficiency-regulations-title-20/appliance-efficiency-proceedings.