

SoCalGas, SDG&E and Southern California Edison Comments on SNOPR for Energy Conservation Standards for Residential Conventional Cooking Products

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November 2, 2016



Mr. John Cymbalsky
U.S. Department of Energy
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Mailstop EE-5B
1000 Independence Avenue, SW.
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Dear Mr. Cymbalsky:

This letter comprises the comments of Southern California Gas Company (SoCalGas), San Diego Gas and Electric (SDG&E), and Southern California Edison (SCE) (collectively referred to herein as the Southern California Investor Owned Utilities or SoCal IOUs) in response to the Department of Energy (DOE) Energy Conservation Standards Supplemental Notice of Proposed Rule (SNOPR) for residential conventional cooking products.

The SoCal IOUs represent some of the largest utility companies in the Western United States, serving over 20 million customers. As energy companies, we understand the potential of appliance efficiency standards to cut costs and reduce consumption while maintaining or increasing consumer utility of the products. We have a responsibility to our customers to advocate for standards that accurately reflect the climate and conditions of our respective service areas, so as to maximize these positive effects.

We appreciate this opportunity to provide the following comments about this SNOPR. We commend DOE for revisiting energy conservation standards for residential cooking products that were last updated in the April 2009 Final Rule and planning to establish standards for gas and electric residential cooking products.

1) The SoCal IOUs support DOE adopting prescriptive design requirements only for conventional ovens. We support DOE adopting performance requirements for electric and gas cooking tops since the August 2016 Test Procedure SNOPR proposed a test method to fully capture energy consumption.

The SoCal IOUs support adopting prescriptive design requirements for the control system of conventional ovens and continuing to prohibit constant burning pilot lights in conventional gas ovens. As noted by DOE, there are uncertainties in calculating performance-based standards using the conventional oven test procedure that DOE has proposed to repeal in the August 2016 Test Procedure SNOPR. More specifically, the test procedures for conventional ovens do not fully capture energy consumption in commercial-style ovens. As such, prescriptive requirements circumvent the issues associated with the test procedures while effectively prohibiting and encouraging specific designs. However, for cooking tops, the SoCal IOUs support DOE adopting performance requirements, which are based on the cooking tops test procedures proposed in DOE's August 2016 Test Procedure SNOPR.

- 2) The SoCal IOUs reviewed all product classes within the DOE proposed trial standard level (TSL) 2 and found all calculations and rationale for each to be reasonable, with the exception of Product Class 3 (gas cooking tops). To resolve this while maintaining the viability of commercial-style features, we support TSL 2 but with efficiency level (EL) 0 for Product Class 3.**

We commend DOE for their goal of maintaining all commercial-style features in TSL 2 and for the low payback periods for the majority of product classes. However, we are concerned about the 26.1 percent of gas cooking top consumers that will be adversely impacted by TSL 2 as shown in Table 8.2.58 below from the Technical Support Document (TSD)¹ and the summary tab of the life cycle cost (LCC) spreadsheet².

Table 8.2.58 No-New-Standards Case Efficiency Distribution for Gas Cooking Tops in 2019

Efficiency Level	Water TP IAEC (kBtu/year)	Market Share (%)
Baseline	1,105	26.1
1	924	24.0
2	838	36.7
3	730	13.2

This metric of average payback period is calculated against the no-new-standards case and non-affected consumers (i.e. those assigned to EL 1 and higher since they already comply) are ignored. To create the no-new-standards case, DOE assigns an efficiency level to each home using a “consumer-choice model” that takes into account consumers’ sensitivity to first cost, historical shipments, equipment price data, and housing type³. Per the table above, 26.1 percent of gas cooking top customers are assigned to EL 0 (i.e. “baseline”) and it is this group that has an average payback period of 19.7 years. This is a substantial quantity of gas cooking top consumers who will be adversely impacted with a poor payback period.

We agree with DOE that EL 2 for gas cooking tops is not desirable because consumers should retain their ability to purchase gas cooking tops with all available commercial-style features. Therefore, we recommend TSL 2, with EL 0 (baseline) for Product Class 3. This will yield only a fractional reduction in national energy savings of 0.06 quads⁴.

- 3) The SoCal IOUs support DOE’s decision to consider induction heating as a technology option for electric smooth cooking tops instead of creating a separate product class.**

In response to the February 2014 Request for Information on cooking product standards, the California IOUs comment letter expressed support for induction heating to be considered as a technology option for electric smooth cooking tops.⁵ We continue to support DOE’s decision to consider induction heating as a technology option for electric smooth cooking tops.

¹ TSD p.8-50, <https://www.regulations.gov/document?D=EERE-2014-BT-STD-0005-0052>

² <https://www.regulations.gov/document?D=EERE-2014-BT-STD-0005-0049>

³ TSD p. 8-46 & 8-47, <https://www.regulations.gov/document?D=EERE-2014-BT-STD-0005-0052>

⁴ TSD p. 10-13, <https://www.regulations.gov/document?D=EERE-2014-BT-STD-0005-0052>

⁵ <https://www.regulations.gov/document?D=EERE-2014-BT-STD-0005-0011>

As stated in this SNOPR, DOE found that induction heating has the same enhanced utility as electric cooking tops with smooth elements by being easier to clean than electric cooking tops with coil elements while providing the same basic function of cooking or heating foods. We support DOE's conclusion that while induction cooking tops are only compatible with ferromagnetic cooking vessels, there is no unique consumer utility associated with induction cooking tops which would warrant a separate product class. DOE's lifecycle cost analysis accounted for the replacement costs of ferromagnetic cooking vessels, which are required to cook with induction cooking tops. DOE also conducted standby power testing on full-surface induction cooking tops and found the standby power required was below the average standby power for other tested cooking tops.

The SoCal IOUs support the analysis, as presented in this SNOPR, of residential induction cooking tops that are available on the market, including DOE conducting testing and tearing down multiple sample units. The SoCal IOUs also support DOE's decision to consider induction heating as a technology option for electric smooth cooking tops instead of creating a separate product class since induction heating provides the same utility electric smooth cooking tops with electric resistance heating.

4) The SoCal IOUs recommend that DOE use the most updated publication of the Annual Energy Outlook (AEO 2016) to improve the accuracy of the LCC results.

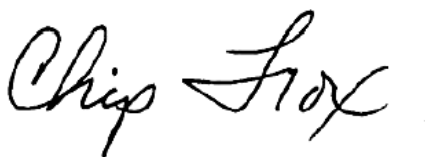
DOE uses AEO 2015 for their energy price forecasts, but AEO 2016 is available⁶ and more accurate. We recommend that DOE update their LCC spreadsheet, SNOPR, and all cost related calculations for each TSL. DOE should then confirm or update the recommended TSL as needed.

In conclusion, we would like to reiterate our support to DOE for establishing standards for conventional cooking products. We thank DOE for the opportunity to be involved in this process and encourage DOE to carefully consider the recommendations outlined in this letter.

Sincerely,



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⁶ <https://www.eia.gov/forecasts/aeo/index.cfm>