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**BEFORE THE
OFFICE OF THE SECRETARY
UNITED STATES DEPARTMENT OF ENERGY
WASHINGTON, DC**

(In Regards To "Regulatory Burden Reduction RFI")
(ID: DOE_FRDOC_0001-3375)
(Federal Register Number 2017-10866, Pages 24582-24583)

July 14, 2017

Mr. Daniel Cohen
U.S. Department of Energy
Office of the General Counsel
1000 Independence Avenue, SW.
Washington, DC 20585

Dear Mr. Cohen:

This letter comprises the comments of SoCalGas in response to the Department of Energy's (DOE's) Request for Information (RFI) as part of its implementation of Executive Order 13771 (The Office of the White House 2017). These comments focus specifically on DOE's Appliance and Equipment Standards Program as well as on the Energy Efficiency Standard and Test Procedure Regulations developed and implemented by this program.

SoCalGas has been delivering clean, safe and reliable natural gas to its customers for more than 140 years. We are the nation's largest natural gas distribution utility, serving 20.9 million consumers through 5.8 million meters in more than 500 communities. The company's service territory encompasses approximately 20,000 square miles in diverse terrain throughout Central and Southern California, from Visalia to the Mexican border.

California leads the nation in energy policy. The state's Investor Owned Utilities are advancing energy efficiency not only to protect the environment but also to serve our residential, commercial and industrial customers. For decades, SoCalGas has been actively pursuing strategies to promote the efficient use of natural gas and energy efficiency. We have driven advancements in natural gas equipment and low emissions technologies and invested significantly in the advancement towards renewable natural gas and distributed generation.

We have observed and contributed to the Appliance and Equipment Standards Program since 2001, and have witnessed its effectiveness through significant energy savings from covered products. The program has been successful at increasing energy savings nationwide, at fostering innovation and consumer choice, and, where cost-effective, at freeing up economic resources for other uses. Our commitment to the success of the Appliance and Equipment Standards Program increased significantly in 2016, when SoCalGas' nominee to the Appliance Standard and Rulemaking Federal Advisory Committee (ASRAC) was invited to join by then Secretary Moniz.

We appreciate DOE's efforts to solicit input from stakeholders on how best to implement Executive Order 13771 (The Office of the White House 2017) to achieve meaningful burden reduction. As directed by Executive Order 13771, the regulatory reform task force will identify regulations that, among other things, are "ineffective". Overall, SoCalGas believes DOE's appliance and test procedure regulations are in fact effective policy tools that help reduce energy consumption and drive technology innovation, however some areas could benefit from improvement. We outline some of the positive aspects and impacts in the following sections. It is in this spirit that SoCalGas has in the past submitted constructive comments in the scope of numerous rulemakings, and it is also in this spirit that we provide further recommendations as responses to select DOE RFI questions below in this document.

Positive Impacts

States and Utilities

Many states have compelling needs for advanced appliance efficiency standards, either due to energy costs, state policy goals, regional differences, or other factors. Federal appliance standards can be a strong policy tool for reducing energy use in existing buildings. For example, in California, the California Public Utility Commission (CPUC) established an energy goal for zero net energy (ZNE) performance in new residential construction by 2020 and in new commercial construction by 2030 (California Public Utility Commission 2008). Advanced appliance efficiency standards play a significant part in making the achievement of these goals realistic

Utility rebate and other voluntary programs that incentivize efficient products, such as the Environmental Protection Agency (EPA) ENERGY STAR[®] program, are critical to achieving economies of scale that drive costs down for advanced efficiency technologies. DOE rulemakings inform the creation of ENERGY STAR programs, and the outcomes of these programs can inform future DOE rulemakings in a cycle of continuous improvement.

These programs, as well as DOE's energy conservation standards rely on metrics based on DOE test procedure regulations. By developing and regularly revising test procedure regulations to incorporate market developments, technological changes, and lessons learned, DOE provides a stable foundation for quantifying and comparing appliance performance. This is critical for meaningful standards and programs, and we support these efforts.

Innovation

DOE energy efficiency regulations advance technological innovation. Voluntary programs support commercialization of emerging technologies by incentivizing the adoption of promising technologies in the early phase of market introduction and accelerate future market adoption. Adoption into regulation stimulates manufacturers to develop new, differentiated products in response to their high-margin, high-efficiency products becoming the new baseline when new DOE standards take effect. This promulgates energy efficiency, societal progress in general, and domestic and international competitiveness – in fact, innovation is a cornerstone of the world’s most successful economies.

Responses & Recommendations regarding DOE Questions

Question 1: How can DOE best promote meaningful regulatory cost reduction while achieving its regulatory objectives, and how can it best identify those rules that might be modified, streamlined, or repealed?

Assuming that DOE selects committee members fairly and thoughtfully, SoCalGas believes that the Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC) can streamline the process of establishing and updating energy efficiency regulations. SoCalGas was recently appointed as a member of ASRAC. Some of SoCalGas’ goals are to ensure that energy efficiency regulations do not put excessive burdens on customers, and to ensure that regulations consider a balanced energy approach that does not exclude any one energy option.

ASRAC has the opportunity to recommend changes that would bring consensus to and significantly streamline the process. Multi-tiered standards have been discussed for some time and provide manufacturers with regulatory certainty over a longer period of time, enabling and encouraging them to invest and plan for multiple rounds of standards at once. Multi-tier (or multi-phase) standards consist of one analysis that leads to two standard updates at future dates.

Question 2: What factors should DOE consider in selecting and prioritizing rules and reporting requirements for reform?

SoCalGas and other utilities alike have an obligation to prioritize their territory’s consumer interests. In our experience, new DOE regulations are rarely welcome by consumers. This is in part due to a consumers’ general dislike to make technology investments with simple payback times exceeding 2-3 years. We understand that while perhaps desirable from an all-consumer-advocate standpoint, such short payback times cannot always be accomplished for all. However, we have also repeatedly found in DOE’s analyses, and pointed out in our docketed comments, that consumers can be negatively impacted by undesirable qualitative aspects of new rules. Those are often not sufficiently considered by DOE’s – primarily economic – assessments. Examples are loss or change of functionality in appliances (for

instance cooktops), or increased first hour ratings of heat pump water heaters when compared to natural gas water heaters. We urge the DOE to assign a higher priority to consumer preference and comfort concerns in future rulemakings, and to prioritize revisiting those rulemakings where it is presently known that consumers are dissatisfied with certain non-economic aspects of the standards.

DOE may consider deprioritizing efficiency regulations where above-code equipment has already proven to be successful in the marketplace for many applications and customers. In these situations, one can support the position that a standard is not needed, because the higher efficiencies are attractive enough to be adopted by consumers without government intervention. Where regional differences or other circumstances may result in lower than desired market penetration, state policymakers and programs could help close the gap. This approach is sensible towards customers that would otherwise be negatively impacted, because these customers now have a choice to opt out of higher efficiency equipment.

DOE should prioritize promulgating efficiency regulations that account for different regional impacts. For example, in 2011, DOE finalized regional regulations for residential central air conditioners and heat pumps. Based on levels agreed to by a coalition of stakeholders, the standards set efficiency levels for three regions based on the number of heating degree days and climate zone, a significant improvement compared to the previous version of this regulation. DOE should seek such legislative changes for all products where typical uses, performance, savings opportunity and cost/benefit, and consumer impact vary with location.

In promulgating new or updated efficiency regulations, DOE should leverage existing voluntary standards, such as the ENERGY STAR Program or ASHRAE standards, and leverage relevant information associated with the voluntary standards (e.g., shipment data, technology adoption, etc.) to help form the basis of new or updated mandatory standards. Leveraging existing data could potentially reduce the costs of undergoing certain efficiency regulations.

Question 3: How can DOE best obtain and consider accurate, objective information and data about the costs, burdens, and benefits of existing regulations? Are there existing sources of data DOE can use to evaluate the post-promulgation effects of regulations over time? We invite interested parties to provide data that may be in their possession that documents the costs, burdens, and benefits of existing requirements?

There are several retrospective studies by environmental advocates that have reviewed the impacts of DOE efficiency regulations (Gold, et al. 2011) (Wei, Patadia and Kammen 2010) (Taylor, Spurlock and Yang 2015). They found that energy efficiency regulations have provided significant economic benefits for consumers through saving energy and freeing up funds for other use, which culminates in broader macroeconomic benefits to both the local and national economy.

We have not identified research on the same topic by other important stakeholders such as low-income customer advocacy groups, energy company associations, or manufacturer associations. Their findings should be weighed against those above. In addition, readers should be careful not to over-generalize any findings given the uniqueness of any given rulemaking.

Question 4: Are there regulations that simply make no sense or have become unnecessary, ineffective, or ill-advised and if so what are they? Are there rules that can simply be repealed without impairing DOE's statutory obligations and, if so, what are they?

SoCalGas understands the DOE statutory obligations with respect to the anti-backsliding provision of EPCA but believe that there is opportunity within the non-finalized regulations, such as the furnace rulemaking. SoCalGas and other parties docketed comments in that rulemaking, strongly questioning whether economic benefit had been appropriately demonstrated. Critical comments included, but were not limited to:

- Many input data points were intransparent, not available for review, or outdated,
- Many assumptions were not properly justified,
- Fuel switching considerations were not aligned with market experience
- The no-new-standards-case consumer choice model was inaccurate
- The accuracy of the methodology using probability distributions was extremely difficult to confirm due to the complexity of the models and the software in use
- Incomplete consideration of regional differences, e.g. for California
- Too little review time granted to stakeholders considering complexity of techniques

SoCalGas believes it is imperative that these concerns are addressed in the furnace rulemaking before the final rule is released.

In addition, we would like to strongly urge the DOE to ensure that similar concerns are pre-empted in future rulemakings for other appliances that use similar data and methodology to establish cost effectiveness.

Question 5: Are there rules or reporting requirements that have become outdated and, if so, how can they be modernized to better accomplish their objective?

Several DOE rulemakings that SoCalGas has commented on, for example regarding furnaces, commercial boilers and commercial water heaters, use the concept of “marginal” electricity cost in their cost-benefit and fuel-switching analyses. We believe this concept includes insufficient detail and thereby may result in very questionable conclusions.

True marginal electricity cost in states like California varies greatly between approximately 15c/kWh and 45c/kWh (threefold!) depending on several factors such as customer type, income tier, total monthly usage, time of day, presence of a solar system or electric vehicle,

presence of peak charges, participation in certain tariff programs, or a combination of the above. The marginal electricity cost is further dependent upon which technology or appliance is in scope; for example, residential appliances would be operated under residential tariffs that are structured very differently than commercial, industrial and agricultural tariffs. Neither of these factors nor an appropriate marginal cost distribution have been considered in DOE's analyses as far as SoCalGas has researched. It does not appear possible to accurately state how customers whose marginal electricity cost is different than the marginal cost utilized by DOE would be economically impacted by a new rule. The affected customer group is likely very large, because the marginal electricity rates used by DOE are typically around 20c/kWh, which, at least for California's residential customers, is near the low end of the range of the true marginal cost. It is thereby likely that the DOE's analyses do injustice to a significant fraction of customers in California, and in other states with similar electricity tariffs. Consequently, any conclusion of a new rule being "economically justified" is at best questionable for those customers. Considering that it is unclear how large this customer group is for any given rulemaking, SoCalGas urgently requests that the DOE analyses methodologies be improved in this respect.

Possible improvements could include the introduction of time-dependent valuation of energy, as is used in California for statewide cost-benefit analyses. Another option is to introduce parameterized marginal electricity cost distributions that consider the various influencing factors. Another thought is to utilize source energy in calculations where that may be sensible, as we understand the DOE is considering for some upcoming analyses.

Whichever new methodologies DOE decides to introduce with respect to this subject matter, SoCalGas respectfully requests that the details be made available for public scrutiny and peer review before being introduced into new rulemakings.

Question 6: Are there rules that are still necessary, but have not operated as well as expected such that a modified, or slightly different approach at lower cost is justified?

No comment, but please refer to the responses to related questions 1 and 2.

Question 7: Are there rules of the Department that unnecessarily obstruct, delay, curtail, or otherwise impose significant costs on the siting, permitting, production, utilization, transmission, or delivery of energy resources?

No comment.

Question 8: Does DOE currently collect information that it does not need or use effectively?

SoCalGas recognizes the need for fair and accurate data to allow for appropriate analysis of proposed standards, and supports DOE's efforts to collect information from stakeholders, such as trade organizations, manufacturers, testing laboratories, consumers, and others. It does not appear from our experience that DOE collects data that is unneeded. Conversely,

SoCalGas finds that some data may be missing, may not be sufficiently fine-grained, or may not be utilized to the level necessary with respect to highlighting regional variations, consumer circumstances, and justification of assumptions. For instance, in the scope of the furnace rulemaking, California and several other states were grouped into one climate region. This decision was not well justified, and when scrutinized by SoCalGas, it was found that it had resulted in life cycle cost savings that were highly overstated for California in general and for Southern California in particular. Similarly, the consumer choice model used in the furnace rulemaking was not found to line up with California's market realities. SoCalGas believes that for rulemakings where results may vary with climate, consumer choice or other factors that presently are averaged or coarsely bucketed by DOE, it behooves the DOE to collect and/or utilize additional, more detailed data, for improved results.

We also find that it will be helpful to expand public knowledge of appliance shipment information due to the gaps in the data provided by manufacturers and their associations.

To facilitate the collection of accurate and complete data, DOE may consider providing more notice about its own planned data collection activities in support of future standards and test procedures rulemakings. If DOE's stakeholders, both manufacturers and non-manufacturers, had a better understanding and advance notice of DOE's plans for data collection for rulemakings, they would be better able to effectively contribute to the process, while simultaneously strengthening DOE's analyses and reducing DOE's regulatory costs. Examples of product data that DOE should seek out from stakeholders include: energy performance data; market shipment data; testing data on product prototypes; data on retail, installation, and maintenance costs; and energy consumption data of installed equipment.

Finally, SoCalGas believes that it is critical that DOE publishes any data that is used in the scope of rulemakings to allow for scrutiny by stakeholders, at no cost, and in a timely manner.

Question 9: Are there regulations, reporting requirements, or regulatory processes that are unnecessarily complicated or could be streamlined to achieve statutory obligations in more efficient ways?

DOE should consider staging test procedure and standard rulemaking updates for a given product category so that the test procedure regulations are completed before the standards rulemaking. Staging the rulemakings in this way would be sensible to ensure standards regulations are based on updated metrics and data from a new or modified test procedure.

DOE should improve the life cycle cost (LCC) methodology and its inputs and models to alleviate the shortcomings identified by SoCalGas and others per the response to Question 4 in this letter. This applies to all rulemakings that employ these techniques, not just the cited example of furnaces.

DOE should work closely with other agencies, such as the EPA, the California Energy Commission (CEC), and the European Commission, to share, or obtain, reported product data.

Agency collaboration could reduce duplicative reporting burden for manufacturers. Each of the agencies noted manages public-facing product databases displaying information on product efficiency, among other attributes. Given the overlap of reported data required by these agencies, a standardized test template and single product submission to one entity, such as the CEC's Modernized Appliance Efficiency Database System (MAEDBS), that would be shared with other applicable databases could reduce costs for manufacturers.

DOE should also consider updating its current compliance certification database to allow stakeholders to more easily search for information on complying products and access test reports. Since utility incentive programs, aimed at increasing adoption of higher efficiency products, establish program requirements based on certified product data, having better access to DOE's database could potentially reduce additional manufacturer reporting burden for products eligible for incentive programs.

Question 10: Are there rules or reporting requirements that have been overtaken by technological developments? Can new technologies be leveraged to modify, streamline, or do away with existing regulatory or reporting requirements?

As mentioned previously in comments to Question 9, DOE should work closely with other agencies that manage product databases to reduce duplicative reporting burden for manufacturers by sharing product data when applicable. This could reduce costs for manufacturers and could potentially reduce administration costs for DOE. In addition, the reported product data would be clearer and more consistent for consumers and other stakeholders, such as utilities, that use the product databases.

Question 11: Does the methodology and data used in analyses supporting DOE's regulations meet the requirements of the Information Quality Act?

No comment.

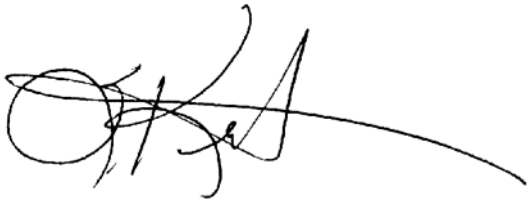
Conclusion

SoCalGas has dedicated decades to advancing efficiencies in energy use and our results in that area are substantial. We will continue to work to drive higher efficiency standards wherever it is proven to be cost effective for our customers. Our efforts have realized savings equivalent to almost 152 million therms over the past five years and over 560 million therms since 1990. Currently, we run 82 energy-efficiency programs, have an annual savings goal of over 25 million therms, an annual budget of \$89.5 million and employ 186 people to deliver these programs. In addition, our low-income energy efficiency programs have treated over 569,000 low-income households with energy efficiency upgrades at no cost to those households. In 2014 alone, we avoided 170,000 tons of CO₂ emissions. Our energy efficiency programs alone have also helped to create over 8,000 jobs in California.

We would like to reiterate our support for the DOE for their tremendous efforts regarding the Appliance and Equipment Standards Program.

SoCalGas thanks the DOE for the opportunity to be involved in this process and encourage the DOE to carefully consider the recommendations outlined in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'SK', with a long horizontal line extending to the right.

Sue Kristjansson
Manager, Codes & Standards

References

- California Public Utility Commission. 2008. "California Long Term Energy Efficiency Strategic Plan ."
- Energy Efficiency and Renewable Energy Office, Department of Energy. 2016. "Energy Conservation Program for Certain Industrial Equipment: Energy Conservation Standards for Small, Large, and Very Large Air-Cooled Commercial Package Air Conditioning and Heating Equipment and Commercial Warm Air Furnaces; Direct final rule." *EERE-2013-BT-STD-0007-0113*.
- Gold, Rachel, Steven Nadel, John A Laitner, and Andrew deLaski. 2011. *Appliance and Equipment Efficiency Standards: A Money Maker and Job Creator*. ACEEE & ASAP.
- Taylor, Margarit, C. Anna Spurlock, and Hung-Chia Yang. 2015. *Confronting Regulatory Cost and Quality Expectations: An Exploration of Technical Change in Minimum Efficiency Performance Standards*. Berkeley: Lawrence Berkeley National Laboratory.
- The Office of the White House. 2017. "Executive Order 13771." *Reducing Regulation and Controlling Regulatory Costs*. January 30.
- . 2017. "Presidential Executive Order 13777: Enforcing the Regulatory Reform Agenda." February 24.
- Wei, Max, Shana Patadia, and Daniel M Kammen. 2010. "Putting renewables and energy efficiency to work: How many jobs can the clean energy industry generate in the US?" *Energy Policy*.