



AMERICAN PUBLIC GAS ASSOCIATION

Via Regulations.gov

July 14, 2017

Mr. Daniel R. Simmons
Chair, Regulatory Reform Task Force
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

**Re: Comments of the American Public Gas Association on
Reducing Regulation and Controlling Regulatory Costs**

Dear Mr. Simmons:

The American Public Gas Association (APGA) appreciates this opportunity to submit comments in response to the request for information on reducing regulation and controlling regulatory costs of the Department of Energy.¹

I. Introduction

APGA is the national association for publicly owned natural gas distribution systems. There are approximately 1,000 public gas systems in 37 states, and over 730 of these systems are APGA members. Publicly owned gas systems are not-for-profit, retail distribution entities owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that own and operate natural gas distribution facilities in their communities.

Public gas systems' primary focus is to provide a safe, reliable, and affordable service to their customers. Our members serve homeowners and small businesses, which rely upon affordable natural gas to heat their homes, cook their meals, and power their restaurants, schools, hospitals and businesses.

APGA's members are affected directly by actions of the DOE. In particular, APGA's members are affected by the efficiency standards set by the Office of Energy Efficiency and Renewable Energy (EERE). That office states its mission as "to create and sustain American leadership in the transition to a global clean energy economy. Its vision is a strong and

¹Reducing Regulation and Controlling Regulatory Costs, 82 Fed. Reg. 24,582 (May 30, 2017) (RFI).

prosperous America powered by clean, affordable, and secure energy.”² APGA believes that the starting point for a careful review of DOE’s regulations is to ensure that its stated mission and vision appropriately reflects the statutory purposes for DOE and its various offices. In the case of EERE, the mission and vision statement goes well beyond the law by putting “clean energy” ahead of “energy reliability, security and cost”. APGA certainly recognizes the importance of balancing economic, energy and environmental policies; however, as EERE has put “clean energy” at the front of its mission, it has excluded natural gas as “clean”—wrongly concluding that the direct use of natural gas is not part of a clean, reliable, secure and low-cost energy system for Americans when the opposite is true.

II. Specific Suggestions Regarding Repeal, Replacement and Modification

Executive Order 13783 requires DOE to “review all existing regulations, orders, guidance documents, policies, and any other similar agency actions (collectively, agency actions) that potentially burden the development or use of domestically produced energy resources, with particular attention to oil, natural gas, coal, and nuclear energy resources.” In addition, DOE’s RFI requested “specific suggestions” on how the agency can achieve its regulatory objectives.

Our experience to date (in DOE proceedings conducted under the auspices of EERE) has demonstrated that there are a number of areas in which DOE is not following best practices – indeed, in many instances not even following its own regulations. Accordingly, APGA believes that the following reforms should be addressed by DOE.

A. Reorganize the Office of Energy Efficiency and Renewable Energy (EERE)

What is today EERE traces its origins to the Energy Research and Development Administration in 1975. In 2001 the office was renamed and reorganized as EERE. Along the way, its mission expanded.

In 2002, EERE leadership restructured the headquarters offices and reengineered business management processes to focus on program performance and results to better accomplish EERE’s mission.³ Very little focus appears to have been given to the process of establishing appliance efficiency standards. Further, the FY2016 budget for EERE does not reveal how new appliance standard making is funded.

EERE’s core function established in 1975 was to focus the federal government’s energy research and, under the Energy Policy and Conservation Act of 1975, establish appliance efficiency standards. Today its mission has expanded “to create and sustain American leadership in the transition to a global clean energy economy.”

This orientation creates bias in the setting of appliance efficiency standards against natural gas usage, as well as in other areas. Appliance efficiency rules would be effective if the

²<https://energy.gov/eere/about-office-energy-efficiency-and-renewable-energy>

³ See “Reorganizing for Results,” A Report by a Panel of the National Academy of Public Administration for the United States Congress and the Department of Energy (Sept. 2004)
http://www.napawash.org/images/reports/2004/04_10EnergyEfficiencyandRenewableEnergy.pdf

entity conducting the rulemaking was neutral. Separation of the appliance standards obligations of DOE into its own office would improve appliance standard outcomes.

B. Separation of Administrative Functions: To Ensure Integrity and Independence, Analytic Functions Should Be Separate from Regulatory Implementation

In APGA’s experience, EERE’s utilization of analytics lacks integrity. By allowing the policymaker to establish advanced analytics to support a proposal, the policymaker can control the outcome. Conversely, if different portions of an organization are responsible for creating evidence and then reviewing the evidence, the regulatory process is more transparent and fair.

An example of this issue is EERE’s advocacy of renewable energy and “Zero Net Energy” policies and programs. Regulatory functions include the establishment of appliance minimum efficiency standards. For example, having both “Zero Net Energy” and fossil-fueled appliance efficiency standards under the same office is a recipe for the regulatory picking of winners and losers.

It is widely accepted that DOE’s analyses of its energy efficiency standards rely heavily upon assumptions about analytical inputs like future energy prices and consumer behavior. As one observer has put it: “Problems with these initial assumptions and analyses can lead to suboptimal standards that saddle consumers with high costs for little benefit.”⁴ Separation of these administrative functions would add integrity to the process and improve appliance efficiency standard outcomes.

C. Test Procedures Must Be Completed by EERE Prior to Any Efficiency Standard is Proposed

DOE is required to develop test procedures to measure the energy efficiency, energy use, or estimated annual operating cost of each covered product prior to the adoption of a new or amended energy conservation standard. 42 U.S.C. 6295(o)(3)(A) and (r)). If modifications are needed to its test procedures for a covered product, DOE will issue a final, modified test procedure before issuing a proposed rule for energy conservation standards for that product.”⁵ But DOE does not always do so.

To preserve at least the appearance of neutrality, DOE must adhere to its own regulations. As DOE’s regulations call for test procedures to be finalized before appliance standards are issued, this is necessary in order for the appliance manufacturers to be able to test the appliances against the proposed standards. DOE has not consistently followed this requirement, instead moving ahead with standards NOPRs before test procedures are finalized. It did this, for

⁴ S. Miller, “Reforming the Energy Policy and Conservation Act” at 1, Working Paper, The George Washington University Regulatory Studies Center (June 27, 2017) <https://regulatorystudies.columbian.gwu.edu/reforming-energy-policy-and-conservation-act-learning-experience-energy-efficiency> .

⁵See 10 C.F.R., Part 430, Subpart C, Appendix A, § 7(c).

example, in the Furnace NOPR and most recently in the NOPRs for commercial boilers and water heaters.⁶

The “Energy and Natural Resources Act of 2017” (S.1460) would remedy this issue. Section 1207 of the Senate Bill would amend 42 USC §6295(p) by requiring DOE to wait 180 days after a new test procedure is adopted to commence a comment period on a new energy efficiency standard.

D. Establish “Sunset” Reviews Of All DOE Offices, Programs and Major Rules

So-called “mission creep” has been shown to be present in all federal bureaucracies.⁷ In the state of Texas, the Sunset Advisory Commission began in 1977 as a way to look closely at the effectiveness of Texas state agencies and determine their utility and worth. A Sunset review looks at the effectiveness of approximately 130 state agencies in Texas. An agency under review is automatically abolished, unless the Legislature decides to pass a Sunset bill of reforms that would continue the agency’s existence or merge them with others. The threshold review, however, is done by the agency itself. Agency staff compile an internal report, examining what is and is not working. That report is submitted to the Sunset Advisory Commission and their staff looks at the self-evaluation and makes a game plan on how it will continue reviewing the agency. During a series of meetings the agency then teaches the Sunset staff about operations. Afterwards, the Sunset staff meets with groups related to or affected by the state agency. From a roundup of the Sunset staff findings, recommendations are developed and then published.

DOE can commence such a review internally and forward a report to the Secretary for action in the absence of any other body to oversee it. Alternatively, a sunset review process can be coordinated with the Office of Management and Budget.

In the context of energy conservation standards, DOE needs a process whereby it can review the impacts of its new standards before adding on another standard. To date, DOE has not interpreted its statutory mandate to conduct this common-sense review. Instead, it jumps to the question of whether a new standard is technically feasible. An appropriate review would be akin to a sunset review that is designed to determine whether the program/standard is working and worthwhile—creating more benefit than cost. In this process, consumer behavior must be

⁶On March 11, 2015, DOE posted a NOPR in which it proposed “to revise its test procedure for residential furnaces and boilers established under the Energy Policy and Conservation Act.” 80 Fed. Reg. 12875, 12876. DOE announced it would receive comments on the proposed rule until May 26, 2015, following which it would issue a final rule. By notice issued May 22, 2015, DOE extended the date for filing comments in this proceeding to July 10, 2015. Nevertheless, DOE commenced another NOPR for actual furnace efficiency standards on March 12, 2015 (80 Fed. Reg. 13120). DOE tried to rationalize this prematurity away as follows: “DOE has tentatively determined that this amendment to the test procedure would not be substantial enough to merit a revision of the proposed AFUE efficiency levels for residential furnaces.” 80 Fed. Reg. at 13142. APGA submits that such facile excuses for not following the required sequencing scheme of implementing test procedures before proposing revised efficiency standards does not pass statutory or regulatory muster. *See also* Comments of Association of Home Appliance Manufacturers re DOE NOPR in Energy Conservation Standards for Residential Dishwashers, Docket No. EERE-2014-BT-STD-0021, at 12-14 (Mar. 25, 2015).

⁷According to a December 2016 report by EconoStats, when some government agencies and departments expand past their original missions it leads to significant and costly overlap and duplication. <http://econostats.org/wp/wp-content/uploads/2016/12/EconoSTATS-CDC-Mission-Creep-Analysis-v.1.pdf>

analyzed accurately to determine the true impact of a standard.⁸ Further, inaccurate assumptions about energy cost variables and the impact of unintended consequences should be measured.

Obviously, to the extent that this common-sense approach does not fit within the statutory six-year review process for energy conservation standards, Congress will need to act.

E. Limit DOE Participation in National Codes And Standards Activities

National codes and standards activities conducted by the likes of ASHRAE, ICC, etc. are important to industry. DOE's participation, however, should be limited to presentation of peer reviewed research and analysis. In recent years, DOE has participated in standards and code body proceedings as advocates of requirements, chairs of committees and task groups, voting members of these organizations, and funding sources for advocacy organizations and interests participating in these proceedings. In fact, through direct funding and "packing the bleachers," committee assignments, DOE has effectively hijacked these institutions (which do little to resist DOE largesse). Such activity is verifiable mission creep that is not consistent with the agency's statutory mandate (42 U.S.C. § 6836(b)). DOE's role should be re-evaluated and its participation limited.

III. Responses to Specific DOE Questions

A. Question 3: How can DOE best obtain and consider accurate, objective information and data about the costs, burdens, and benefits of existing regulations?

1. *Proper Accounting of Source Energy Values Is Key to Determining Regulatory Costs and Benefits*

The RFI requests comment on how DOE can best obtain and consider accurate, objective information about the costs, benefits and burdens of existing regulations.⁹ A crucial component of the cost-benefit analysis is a proper accounting of the relative efficiencies of various energy sources. APGA has long supported viewing energy efficiency through the lens of full-fuel-cycle analyses so that regulators and consumers are accurately informed about the real consequences of the direct use of natural gas versus other sources of energy. It is of critical importance that regulatory agencies such as DOE avoid sending inaccurate signals to the marketplace.

In measuring the impact of energy efficiency measures on total energy savings, DOE commonly converts site energy into source energy (primary energy), using a site-to-source ratio, which accounts for the useful energy lost in converting, transmitting and distributing.¹⁰ As DOE

⁸ See Section III. A. 2. below.

⁹RFI at p. 24,583.

¹⁰*Accounting Conventions for Non-Combustible Renewable Energy Use*, 81 Fed. Reg. 7,778, 7,778 (Feb. 16, 2016) (2016 RFI).

has explained, this results in a more equitable “apples-to-apples” comparison of energy use than viewing site energy alone.¹¹

APGA commends DOE for recognizing the benefits of utilizing source energy as it contemplates critical energy policy decisions. As DOE is aware, there are various methods that can be used to determine energy values (*e.g.*, thermodynamic, fossil fuel equivalency, marginal, captured energy, and “free” renewable energy), and they can produce very different outcomes.¹² It is important to link the method used to the purpose for which the analysis is undertaken so that there is not a mismatch and therefore skewed and unreliable outcomes. Stated another way, there is no one-size-fits-all approach to measuring source energy.

For example, the marginal approach values energy efficiency based on the marginal impact of end-use energy on the electric generation mix.¹³ As the Gas Technology Institute has explained, marginal efficiency is likely to be the most useful approach for design and investment decisions, including determining the value of direct use of gas for new and existing buildings.¹⁴ By contrast, the captured-energy approach, which treats certain renewable resources as 100% efficient, is not useful for this purpose. This is because renewable generation is generally not considered marginal, which means end-use efficiency measures are more likely to displace fossil-fuel generation than renewables. On the other hand, captured energy and other average-energy approaches may make sense for determining carbon footprint or GHG inventory or for benchmarking purposes.

In February 2016, EERE issued a request for information on the use of the captured-energy approach for calculating source energy from non-combustible renewable resources.¹⁵ In response, APGA filed comments urging DOE to develop source-energy calculations that are tailored towards the specific applications under consideration.¹⁶ APGA cautioned that the captured-energy approach could be misused to promote ‘electrification,’ by distorting the relative efficiencies of the direct use of natural gas versus reliance on electric power.¹⁷

In October 2016, however, EERE published a report setting forth guidelines that appear to favor the use of the captured-energy approach for several purposes, including calculating marginal site-to-source ratios to calculate source-energy savings.¹⁸ While acknowledging

¹¹*Id.*

¹²*See* Comments of Gas Technology Institute, Docket No. EERE-2016-OT-0010 (filed March 14, 2016).

¹³*Id.* at 4.

¹⁴*Id.*

¹⁵2016 RFI.

¹⁶Comments of the American Public Gas Association, Docket No. EERE-2016-OT-0010 (filed March 14, 2016).

¹⁷*Id.* at 2.

¹⁸Accounting Methodology for Source Energy of Non-Combustible Renewable Electricity Generation, EERE, at 8 (Oct. 2016), available at <https://energy.gov/eere/analysis/downloads/accounting-methodology-source-energy-non-combustible-renewable-electricity>.

APGA's concerns, the report does not address them in substance other than to note the importance of matching methodological choice with the goals of a given policy or metric.¹⁹

APGA submits that further process is necessary. In order to analyze the costs and benefits of existing regulations – and promulgate new regulations and standards on a going-forward basis – DOE must utilize the correct source-energy calculations. Accordingly, APGA urges DOE to rescind the 2016 EERE report on this issue and initiate a formal rulemaking proceeding that appropriately addresses stakeholder concerns in developing the proper metrics for specific purposes.

2. *A Sophisticated Understanding of Consumer Behavior is Needed to Support Energy Conservation Standards*

Increasingly, DOE analyses of the costs and energy savings associated with a proposed conservation standard are dependent on assumptions about producer and consumer behavior and product lifespans. If these assumptions are incorrect, the standard does not succeed. To determine whether the large cost savings that DOE forecasts actually materialize for consumers, DOE should determine how to collect information on consumer behavior, such as via surveys or other instruments. A concerted effort to improve these data would lead to better energy conservation standards.

Better data would work to eliminate poor assumptions employed to close the data gap. DOE's "bad guesses" have been thoroughly documented. One category concerns assumptions made using survey data from the Residential Energy Consumption Survey (RECS), a recurring survey conducted by the Energy Information Administration. In the rulemaking most important to APGA—the residential furnace efficiency standard—one commentator summarized DOE's shortcomings as follows:

In setting its 2011 standards for residential furnaces, air conditioners, and heat pumps, DOE relied on an assumption that households will heat or cool their households relative to a threshold of 65 degrees Fahrenheit. For example, DOE derived annual energy use for these appliances based on the idea that they would be running on days below/above this temperature threshold for any region. In reality, many households likely use very different heating and cooling thresholds depending on insulation, energy prices, and time of day, among other considerations. For example, many households may turn off the heat or the air conditioning during the day while the occupants are at work, regardless of temperature. If households respond differently than DOE's equation suggests the result may be lower appliance usage—and a lower payoff from increased efficiency—than DOE's analysis assumes. In such cases, an ex post analysis can verify which assumptions were accurate, which helps in turn to improve future ex ante analysis of consumer behavior and energy use.²⁰

¹⁹*Id.* at 7. The report also notes that "the marginal generation displacement methodology is currently used by the appliance standard program when reporting impact assessments," (*id.* at 7) but this does not address issue of applying the captured-energy approach to such an analysis.

²⁰ Miller, *supra* note 4, at pp. 9-10.

The record shows that DOE's use of consumer data has often been unsophisticated and errant. Access to better data would improve results. Specific ad hoc surveys on particular appliances may be a proper path. Almost any improvement would be welcome.

B. 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?

1. *Increase Transparency in DOE Processes*

A key aspect of transparency, in addition to the peer review requirement discussed below, is that DOE provide parties ample time to respond to proposed rules so that the parties can engage experts, conduct discovery (including participation in technical conferences), perform complex analysis, and draft comments. The typical 60-day comment period set by DOE is woefully inadequate for parties to perform these tasks. DOE should, at a minimum, provide for open technical conferences within 30 days of the publication of a proposed appliance rule (at which DOE would both explain the proposed rule and answer questions about its contents), followed by a 90-day comment period (with extensions liberally granted for good cause shown). Presumably the purpose of the exercise is for the public to get thoroughly familiar with the proposed rule and its underpinnings and then to submit meaningful comments; this simply cannot happen under the collapsed procedural timetable frequently followed by DOE.

In addition, there must be complete neutrality and fairness as to all parties, regardless of whether those parties are supporting or opposing a particular proposed rule. DOE exhibited clear bias toward APGA in the way in which it issued filing time extensions in the pending natural gas furnace proceeding. Following the issuance of the Furnace NOPR in 2015, DOE issued a Notice of Data Availability (NODA) in which DOE proposed in effect to modify the NOPR in important respects. The NODA requested that comments be filed by October 14, 2015. Shortly after the NODA was issued, APGA and others filed a joint data request seeking more time in which to file comments.

As of the October 14 deadline for filing the NODA comments, DOE had not responded to the Joint Request, so APGA and other stakeholders were required to file comments without benefit of the data responses (much less any follow-up regarding same). On October 15, the day after the comment deadline, DOE notified the parties electronically of an extension of the time for filing comments and provided the data responses. Inexplicably, most of the pro-rule advocates seemed to be aware that the October 14 deadline was being moved despite the absence of public notice, as they did not file at the deadline. APGA raised concerns regarding DOE's actions in comments to the DOE Secretary and DOE Inspector General, pointing out how these actions impact DOE's credibility and the public's right to unbiased and transparent agency action and seeking assurance that similar events are not repeated. Incredibly, DOE made another zero hour extension in November 2016 in the Supplemental NOPR in the same proceeding.²¹ Again,

²¹APGA filed its SNO PR comments timely, before the close of business on November 22, 2016, as instructed by DOE. Several minutes after 5 pm on November 22, APGA received an email stating that EERE had issued a pre-publication notice that the comment period in the SNO PR proceeding would be extended to January 6, 2017. The hyperlink to that notice did not function. When the notice was posted on line for the public to read, it was several days later, and the notice was dated November 21, 2016. See "Supplemental Comments Of the American Public

critics of the rule filed on the original date while proponents had the advantage of reading those comments and filing some six weeks later on the extended date. DOE's unseemly actions in establishing foreshortened comment periods and then responding belatedly to timely requests for adequate time to conduct technical analyses are indicative of an agency bent on keeping those who question its proposals off-balance and disadvantaged. This practice must stop.

In addition, APGA believes that DOE should not be able to utilize proprietary data in a rulemaking unless that data is made available to the public at no cost and without limitations as to its use in the rulemaking. In the case of the furnace rulemaking, DOE relied on proprietary data from two privately authored American Home Comfort studies in its life cycle costs calculation. To view this data, APGA was required to purchase the studies at a cost of \$15,000 and retain expert consultants to analyze the data. What this data actually revealed was the opposite of what DOE was suggesting it showed, and APGA has pointed that out in comments to DOE.

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

1. *EERE Must Adhere Strictly to Peer Review Requirements*

In the Information Quality Act, Congress recognized that there is no element of rulemaking more important than the use of and reliance on credible and understandable data.²² The Office of Management and Budget (OMB) in 2004, in consultation with the Office of Science and Technology Policy, issued its "Final Information Quality Bulletin for Peer Review" (OMB Bulletin),²³ to the heads of departments and agencies. The guidance is designed to realize the benefits of meaningful peer review of the most important science disseminated by the Federal Government. DOE's adherence to this standard has been wanting.

An example of this can be seen in DOE's 2015 Notice of Proposed Rulemaking relating to efficiency standards for residential furnaces (Furnace NOPR).²⁴ DOE included its boiler-plate language on peer review and pointed to the "Energy Conservation Standards Rulemaking Peer Review Report" dated February 2007 as satisfying the peer-review requirements of the OMB

Gas Association On the Supplemental Notice Of Proposed Rulemaking," Docket Number EERE-2014-BT-STD-0031/ RIN NO. 1904-AD20 (filed Jan. 6, 2017).

²²In the Information Quality Act, Congress directed OMB to issue guidelines to "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility and integrity of information" disseminated by Federal agencies. Public Law No. 106-554, § 515(a). The Information Quality Act was developed as a supplement to the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, which requires OMB, among other things, to "develop and oversee the implementation of policies, principles, standards, and guidelines to * * * apply to Federal agency dissemination of public information." In addition, Executive Order 12866, 58 Fed. Reg. 51,735 (Oct. 4, 1993), established that OIRA is 'the repository of expertise concerning regulatory issues,' and it directs OMB to provide guidance to the agencies on regulatory planning. E.O. 12866, § 2(b). The Order also requires that '[e]ach agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, or other information.' E.O. 12866, § 1(b)(7).

²³70 Fed. Reg. 2664 (2004).

²⁴Docket No. EERE-2014-BT-STD-0031, 80 Fed. Reg. 13120.

Bulletin (2007 Peer Review Report).²⁵ But DOE relied on a stale peer review. First, the referenced peer review report, which was released some eight years prior in 2007, reflects the outcome of a peer review exercise conducted in 2005 of stale technical data used in 2004 to support DOE standards rulemakings.²⁶ Second, the 2004 influential scientific information that was reviewed in 2005 (and assessed in the 2007 Peer Review Report) has changed considerably since 2004 and those changes dramatically impact the end results reached by DOE when setting energy conservation standards.

The “influential scientific information” upon which the DOE appliance standards rulemakings rely is the Crystal-Ball driven spreadsheet (CB Spreadsheet) from which the bulk of the data in the underlying technical support documents is derived. It is on the basis of the CB Spreadsheet, for example, that the Life Cycle Cost and Payback Period data, which are the core of DOE’s economic feasibility analysis, are determined. It is clear from a review of the 2007 Peer Review Report and an ensuing Energy Conservation Standards Rulemaking Peer Review Report dated March 2007²⁷ (i) that the peer reviewers were aware of the complexity of the CB Spreadsheet and the need for more consumer input²⁸ and (ii) that the 2004 CB Spreadsheet reviewed in 2005 is materially different from the CB Spreadsheet underlying the Furnace NOPR (and presumably the proposed rule now before OMB).

Accompanying APGA’s comments in the Furnace NOPR proceeding was a Technical Analysis of the Furnace NOPR performed by the Gas Technology Institute, which uncovered a number of inputs to the CB Spreadsheet that have never been peer reviewed and that change dramatically the results, in a pro-rule manner, of the output of the CB Spreadsheet. Once these inputs are understood and corrected, the technical support for a changed furnace efficiency standard disappears.

It further appeared to be beyond any doubt that Oracle, the producer of the Crystal Ball software, has made many significant upgrades in the software since 2004 and that those upgrades are being used by DOE (and its outside consultant, Lawrence Berkeley National Laboratory) in ways not envisioned (and hence not peer-reviewed) in 2004.

It simply is not fair to the public to allow a governmental agency to characterize “influential scientific information” upon which it relies as peer-reviewed when the peer review that did occur was of a computer model that has been materially altered in its application. Since the 2007 Peer Review Report was authored by the same office of DOE, namely EERE, that is now proposing to rely on the un-reviewed and materially revised CB Spreadsheet as the basis for

²⁵*Id.* at 13195. This same language is found in all of DOE’s NOPRs and Final Rules on energy appliance standards issued in recent years.

²⁶2007 Peer Review Report at p. 10.

²⁷Available at: <http://energy.gov/eere/buildings/downloads/energy-conservation-standards-rulemaking-peer-review-report>.

²⁸2007 Peer Review Report at page 27 (“A common theme involved the trade-offs inherent in greater analytical complexity. Reviewers recommended that DOE more critically examine the benefits of complexity in the context of cost-effectiveness and desired transparency of the analysis. Peer reviewers also emphasized the need for increased stakeholder participation in the analysis process (particularly consumers).”).

its proposed rule, it is necessary for an impartial third party, OMB, to make the determination regarding the need for an updated peer review report.

The importance of the above discussion is to point out that DOE is not following pertinent and relevant regulations in pursuing its goal of setting appliance standards, and in so doing, depriving the public of the protections written into the regulations – in this instance, of reliance on scientific information that is tested via impartial peer review and hence deemed reliable by a group of experts. The record in the Furnace NOPR proceeding, for example, showed that the Crystal-Ball driven spreadsheet on which DOE relied was premised on faulty science, which would have been uncovered had DOE followed the OMB regulations on peer review.

2. *EERE's Energy Efficiency Modeling Is Too Complex and Burdensome*

The modeling created by DOE to justify efficiency standards has grown excessively complex, impenetrable, and therefore costly. Technical Support Documents (TSDs) have grown to over 1,000 pages. These cannot be created by DOE staff but require costly consulting contracts with the likes of the national labs and national consulting firms. Thus the process itself has grown into a government contracting feeding frenzy. It is time to re-evaluate.

Moreover, this complexity can yield anomalous and inaccurate results. There is too much room for error. Further, more and more complex models depend upon more and more data inputs—and often the data is not available. For example, the Residential Energy Consumption Survey (RECS) data that DOE used in the residential furnace SNOFR for assigning furnace sizes in the SNOFR LCC model was inadequate and results in a poor correlation between annual heating load and furnace size.²⁹

In addition, more extensive modeling invariably runs into the use of proprietary data. For example, DOE's life-cycle cost (LCC) analysis uses a complex analytical model that includes interactive impacts among a large number of input parameters. Some algorithms, such as manufacturer component costs and consumer decision making logic, use proprietary or confidential technical and cost information. DOE's methodology includes a combination of fixed (deterministic) values, partial or full distributions, and random assignments to conduct its forecasting analysis. After incorporating all these various deterministic values, distributions, and random assignments, the DOE LCC analysis model provides a single answer for key parameters rather than a probability distribution of possible results with error bars or other indicator of accuracy, precision, and confidence level.³⁰

For all these reasons, plus transparency, cost and due process, DOE should consider a more simplified approach to evaluating existing minimum efficiency standards and for setting new ones. A more simplified and straightforward approach could certainly lower the cost of DOE's regulations and the burden on industry and consumers.

²⁹ See Comments of American Gas Association on Supplemental Notice of Proposed Rulemaking on Energy Conservation Standards for Residential Furnaces Docket No. EERE-2014-BT-STD-0031; RIN 1904-AD20, at 6, 23-26 (Sept. 23, 2016).

³⁰ *Id.* at 16.

3. Use Market Prices in Modeling

EERE tends to use EIA-produced price forecasting when market prices would do a better job if they were to be updated. EIA forecasts routinely are revised. Moreover, those forecasts miss long-term trends, such as the recent profound drop in the price of natural gas. Increasingly, markets provide longer term prices. Linking models to such pricing would improve them.

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APGA trusts that its comments provide useful information for DOE to use in its planning processes. Any follow up or questions may be addresses to the undersigned.

Respectfully submitted,



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