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[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Parts 430 and 431

[EERE-2017-BT-STD-0062]

RIN 1904-AD38

Energy Conservation Program for Appliance Standards: Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment

AGENCY: Office of Energy Efficiency and Renewable Energy (EERE), Department of Energy.

ACTION: Final rule.

SUMMARY: The U.S. Department of Energy is updating and modernizing aspects of its current rulemaking method for considering new or revised energy conservation standards for consumer products and certain types of industrial equipment. The rule clarifies the process DOE will follow with respect to its application to these items, makes the specified rulemaking procedures binding on DOE, and revises certain provisions to bring consistency with existing statutory requirements. Other changes include expanding early opportunities for public input on the Appliance Program's priority setting and rulemaking activities, setting a significant energy savings threshold for updating standards, establishing a window between test procedure final rules and standards proposals, and delineating procedures for rulemaking under the separate

direct final rule and negotiated rulemaking authorities. In a separate but related action, DOE is re-proposing amendments to the walk-down approach including added clarity regarding what was intended by the concept of an economically rational consumer as discussed in the proposed rule.

DATES: The effective date of this rule is **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**

ADDRESSES: The docket for this rulemaking, which includes *Federal Register* notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials, is available for review at <https://www.regulations.gov>. All documents in the docket are listed in the <https://www.regulations.gov> index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

The docket webpage can be found at:

<https://www.regulations.gov/docket?D=EERE-2017-BT-STD-0062>. The docket webpage contains instructions on how to access all documents, including public comments, in the docket.

FOR FURTHER INFORMATION CONTACT: Ms. Francine Pinto, U.S. Department of Energy, Office of the General Counsel, GC-33, 1000 Independence Avenue, SW, Washington, DC 20585. Telephone: (202) 586-7432. E-mail: Francine.Pinto@hq.doe.gov.

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I. Summary of the Final Rule

The United States Department of Energy (“DOE” or, in context, “the Department”) generally uses the procedures set forth in its “Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards for Consumer Products” (“Process Rule”), *see* 10 CFR part 430, subpart C, appendix A, when prescribing energy conservation standards for both consumer products and commercial equipment pursuant to the Energy Policy and Conservation Act of 1975 (Pub. L. 94-163, codified at 42 U.S.C. 6291, *et seq.*), as amended (“EPCA”). In this document, DOE is updating and modernizing its Process Rule in the following major topics: (1) requiring that the procedures outlined in the Process Rule are binding on the agency; (2) formalizing DOE’s past practice of applying the Process Rule to both consumer products and commercial equipment; (3) clarifying the Process Rule’s application with regard to equipment covered by ASHRAE Standard 90.1; (4) expanding the Process Rule to include test procedure rulemakings, as well as energy conservation standards rulemakings; (5)

committing to both an “early look” process and other robust methods for early stakeholder input; (6) defining a significant energy savings threshold that must be met before DOE will update an energy conservation standard; (7) clarifying DOE’s commitment to publish a test procedure six months before a related standards NOPR; (8) articulating DOE’s authority under the Negotiated Rulemaking Act and EPCA’s direct final rule (“DFR”) provision, while clarifying that negotiated rulemakings and DFRs are two separate processes with their own sets of requirements; and (9) addressing other miscellaneous issues.

At this time DOE is not finalizing its prior proposal concerning the process by which DOE selects among alternative energy efficiency standards under EPCA (also known as the “walk-down” approach).. However, in a separate but related action, DOE is proposing amendments to this process, such that those standards achieve the “maximum improvement in energy efficiency, or in the case of showerheads, faucets, water closets, or urinals, water efficiency, which the Secretary determines is technologically feasible and economically justified.” (42 U.S.C. 6295(o)(2)(A)). In response to the concerns and requests for further explanation related to the economically rational consumer mentioned in DOE’s prior proposal, DOE is: (1) clarifying how impacts are considered in determining economic justification through the seven factors specified in EPCA; and (2) explaining that the requirement to determine economic justification based on comparisons across the full range of trial standard levels (TSLs) is consistent with EPCA. This proposal will respond to public comments requesting further clarity on DOE’s initial proposal that in making the determination of economic justification, DOE would choose one TSL over other feasible TSLs after considering all relevant factors, including, but not limited to, energy savings, efficacy, product features, and life-cycle costs.

DOE continues to contemplate additional topics regarding its process for undertaking appliance standards rulemakings that may lead to additional rulemaking proceedings to update the Process Rule. In particular, DOE continues to think about potential changes to its analytical methodologies and models for assessing the costs and benefits of appliance standards rulemakings.

II. Introduction

A. Authority

In overview, the Department of Energy's Process Rule was developed to guide implementation of the Appliance Standards Program, which is conducted pursuant to Title III, Part B¹ of the Energy Policy and Conservation Act ("EPCA" or "the Act"), Pub. L. 94-163 (42 U.S.C. 6291-6309, as codified), for consumer products, and Part C² for certain industrial equipment (42 U.S.C. 6311-6317, as codified), added by Pub. L. 95-619, Title IV, §441(a).³

Under EPCA, DOE's energy conservation program for covered products consists essentially of four parts: (1) testing; (2) labeling; (3) the establishment of Federal energy conservation standards; and (4) certification and enforcement procedures. The Federal Trade Commission ("FTC") is primarily responsible for labeling, and DOE implements the remainder of the program. Subject to certain criteria and conditions, DOE is required to develop test procedures to measure the energy efficiency, energy use, or estimated annual operating cost of each covered product and covered equipment. (42 U.S.C. 6293 and 42 U.S.C. 6314)

¹ For editorial reasons, upon codification in the U.S. Code, Part B was redesignated Part A.

² For editorial reasons, upon codification in the U.S. Code, Part C was redesignated Part A-1.

³ All references to EPCA in this document refer to the statute as amended through America's Water Infrastructure Act of 2018, Public Law 115-270 (Oct. 23, 2018).

Manufacturers of covered products and covered equipment must use the prescribed DOE test procedure as the basis for certifying to DOE that their products and equipment comply with the applicable energy conservation standards adopted under EPCA and when making any other representations to the public regarding the energy use or efficiency of those products. (42 U.S.C. 6293(c), 42 U.S.C. 6295(s), 42 U.S.C. 6314(a), and 42 U.S.C. 6316(a)) Similarly, DOE must use these test procedures to determine whether the products comply with standards adopted pursuant to EPCA. *Id.*

In addition, pursuant to EPCA, any new or amended energy conservation standard for covered products (and at least certain types of equipment) must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A) and 42 U.S.C. 6316(a)) Furthermore, the new or amended standard must result in a significant conservation of energy (42 U.S.C. 6295(o)(3)(B), 42 U.S.C. 6313(a)(6), and 42 U.S.C. 6316(a)), and comply with any other applicable statutory provisions.

B. Background on the Process Rule

DOE conducted a formal effort between 1995 and 1996 to improve the process it follows to develop energy conservation standards for covered appliance products. This effort involved many different stakeholders, including manufacturers, energy-efficiency advocates, trade associations, state agencies, utilities, and other interested parties. The result was the publication of a final rule on July 15, 1996, titled, "Procedures, Interpretations and Policies for Consideration of New or Revised Energy Conservation Standards for Consumer Products." (61 FR 36974)

This document was codified at 10 CFR part 430, subpart C, appendix A,⁴ and became known colloquially as the “Process Rule.”

The Process Rule was designed to provide guidance to stakeholders as to how DOE would implement its rulemaking responsibilities under EPCA for the Appliance Program. As part of this enhanced process, supplementing the traditional notice-and-comment rulemaking process under the Administrative Procedure Act⁵ (APA), DOE has invited and promoted extensive stakeholder involvement in its energy conservation standards and test procedure rulemakings. An important legacy of the Process Rule has been both to educate and learn from the many stakeholders who participate in DOE’s appliance rulemaking efforts. Some of the successes that have resulted from the Process Rule include: (1) greater involvement from a wider variety of stakeholders in DOE’s appliance rulemaking process; (2) improved technical analyses in support of the appliance rules due to enhanced input from stakeholders at an early stage of the rulemaking process; (3) improved solutions to issues and problems because of increased stakeholder involvement; and (4) more open dialogue and improved relationships between stakeholders and also between stakeholders and DOE.

While there have been many positive results from the Process Rule, DOE came to understand through the intervening years that the Appliance Program might benefit from additional improvements to the Process Rule, as reflected in this document. These amendments address: (1) processes that may no longer track the current legal requirements of EPCA; (2)

⁴ This final rule that amends the Process Rule is a legislative rule and therefore subject to the notice and comment requirements in the APA. (5 U.S.C. 553) Accordingly, DOE has conducted a “notice and comment” proceeding as evidenced by two public meetings and webinars and a robust period for written comments.

⁵ 5 U.S.C. 551 *et seq.*

processes that do not take into account the maturation of DOE's appliance program to the point that modernization is necessary; (3) that in many instances DOE has not rigorously followed the Process Rule; (4) the need for regulatory reform to reduce the costs and burdens of rulemaking; and (5) the need to clarify that the Process Rule applies to commercial/industrial equipment. In evaluating and seeking to expand the positive impacts of the Process Rule, as well as remedying the above-described negative developments, this final rule addresses the changed landscape of the rulemaking process under EPCA, and endeavors to modernize the Process Rule.⁶

On December 18, 2017, DOE issued an RFI (December 2017 RFI) to address potential improvements to the Process Rule so as to achieve meaningful burden reduction while continuing to achieve the Department's statutory obligations in the development of appliance energy conservation standards and test procedures. (82 FR 59992) Originally, the comment period for this RFI was scheduled to end on February 16, 2018. However, several stakeholders requested a 30-day extension to file comments.⁷ Consequently, DOE extended the comment period until March 2, 2018. (83 FR 5374 (Feb. 7, 2018)) Subsequently, DOE posted a notice on its website on March 2, 2018, which stated that the comment period was further extended until March 5, 2018, due to a brief closure of the Federal government in the Washington D.C. area.

⁶ In November 2010, DOE also issued a statement intended to expedite its rulemaking process. The statement is currently available at http://www1.eere.energy.gov/buildings/appliance_standards/pdfs/changes_standards_process.pdf. As reflected in this final rule, DOE has undertaken a thorough review of its Process Rule to determine the procedures it will follow in considering new or amended energy conservation standard and test procedures. As a result, this final rule supersedes those portions of the November 2010 statement pertaining to the elimination of these early rulemaking steps. DOE will revise its statement so as to conform to the amendments contained in this final rule.

⁷ See letter dated January 29, 2018 from Air-Conditioning, Heating, and Refrigeration Institute ("AHRI"), the Association of Home Appliance Manufacturers ("AHAM"), and the National Electrical Manufacturers Association ("NEMA"), to John Cymbalsky, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Buildings Technologies Program. [EERE-2017_BT-STD-0096, No. 17, p. 1]

To explore the issues in the December 2017 RFI, DOE convened a public meeting on January 9, 2018, which was attended by a wide range of stakeholders. The Department also simultaneously hosted a webinar, which was attended by approximately 150 additional persons.

After carefully reviewing the numerous public comments submitted on the December 2017 RFI and the issues raised at the January 2018 public meeting, DOE published a notice of proposed rulemaking (“NOPR”) regarding the Process Rule in the *Federal Register* on February 13, 2019. (84 FR 3910) This document responded to the RFI comments and proposed amendments to the Process Rule in a variety of areas, as discussed subsequently. Comments on the Process Rule NOPR were due by April 15, 2019.

To facilitate discussion of the issues in the February 2019 NOPR, DOE held a public meeting on March 21, 2019 in Washington, DC. The meeting was widely attended, both in person and via webinar. At the public meeting, numerous topics were discussed, including, but not limited to: (1) making the Process Rule binding on DOE; (2) making the Process Rule applicable to both consumer products and commercial/industrial equipment; (3) explaining application of the Process Rule to ASHRAE equipment; (4) priority-setting; (5) the process for coverage determinations; (6) early assessment review for energy conservation standard and test procedure rulemakings; (7) consideration of a significant savings of energy threshold; (8) finalizing test procedures 180 days before issuance of a standards NOPR; (9) adoption of consensus standards as DOE test procedures; (10) direct final rules; (11) negotiated rulemakings; (12) analytical methodologies and peer review; (13) potential changes to the “walk-down approach” for assessing standard levels; (14) cumulative regulatory burden; (15) retrospective

reviews of energy savings and costs for past standards; (16) certification, compliance, and enforcement issues, and (17) any other issues or topics raised by stakeholders. However, due to the large number of matters to be addressed and the significant public interest, DOE determined it necessary to carry over the public meeting to a second day and to extend the public comment period, actions which were announced in a *Federal Register* notice published on April 2, 2019. (84 FR 12527) Accordingly, a continuation of the NOPR public meeting was held on April 11, 2019, and the comment period on the NOPR was extended to May 6, 2019.

Overall, DOE experienced a high level of engagement from stakeholders and the interested public regarding potential changes to the Process Rule. Such comments provided important input to DOE’s final rule to modernize and refine the Process Rule. The issues raised in the NOPR public comments are addressed subsequently in this document. Through the amendments adopted in this final rule, DOE expects that its revised Process Rule will increase transparency, foster public engagement, and achieve meaningful burden reduction, while at the same time continuing to meet the Department’s statutory obligations under EPCA.

Commenters who provided written comments in response to DOE’s NOPR consisted of the following parties:

Table of Commenters

Commenter(s)	Affiliation	Acronym, Identifier
A.O. Smith	Manufacturer	A.O. Smith
Acuity Brands	Manufacturer	Acuity
Air-Conditioning, Heating, and Refrigeration Institute	Manufacturer Trade Group	AHRI
Alliance to Save Energy	Advocacy Group	ASE
American Council for an Energy Efficient Economy	Advocacy Group	ACEEE
American Efficient	Energy Efficiency Consultancy	AE
American Gas Association	Utility Trade Group	AGA
American Lighting Association	Manufacturer Trade Group	ALA

Commenter(s)	Affiliation	Acronym, Identifier
American Public Gas Association	Utility Trade Group	APGA
American Public Power Association	Utility Trade Group	APPA
American Society of Heating, Refrigeration, and Air Conditioning Engineers	Technical Society	ASHRAE
Appliance Standards Awareness Project (Joint Comments filed with ACEEE, Consumer Federation of America, Consumer Reports, National Consumer Law Center, NRDC, and NEEA)	Advocacy Group	ASAP, et al.
Appliance Standards Awareness Project 2 (Joint Comments filed with ACEEE, the California Energy Commission, Consumer Federation of America, Consumer Reports, National Consumer Law Center (on behalf of its low-income clients), and NEEA)	Advocacy Groups	ASAP, et al. 2
Attorneys General of California, Colorado, Connecticut, Illinois, Maine, Maryland, Michigan, Minnesota, New York, North Carolina, Oregon, Vermont, Washington, the Commonwealth of Massachusetts, the District of Columbia, and the City of New York	State, Local Governments	AG Joint Commenters
Bradford White Corporation	Manufacturer	BWC
Burnham Holdings, Inc. (dba U.S. Boiler Company)	Manufacturer	BHI
California Energy Commission	State	CEC
California Investor-Owned Utilities	Utilities	Cal-IOUs
Connecticut Department of Energy & Environmental Protection	State	CT-DEEP
Consumer Technology Association	Manufacturer Trade Group	CTA
Earthjustice	Advocacy Group	Earthjustice
GE Appliances	Manufacturer	GEA
George Mason University – Antonin Scalia Law School, Administrative Law Clinic	Academic Institution	GMU Law
George Washington University – Regulatory Studies Center	Academic Institution	GWU
Hearth Products and Barbecue Association	Manufacturer Trade Group	HPBA
Ingersoll Rand	Manufacturer	Ingersoll Rand
Joint Industry Commenters	Manufacturer Trade Groups	Joint Commenters
Lennox International	Manufacturer	Lennox
Lutron	Manufacturer	Lutron
Manufactured Housing Association for Regulatory Reform	Manufacturer Trade Group	MHARR
Manufactured Housing Institute	Manufacturer Trade Group	MHI
New Buildings Institute	Advocacy Group	NBI
New York University School of Law -- Institute for Policy Integrity	Academic Institution	NYU Law
North American Association of Food Equipment Manufacturers	Manufacturer Trade Group	NAFEM
National Electrical Manufacturers Association	Manufacturer Trade Group	NEMA
National Propane Gas Association	Utility Trade Group	NPGA
Natural Resources Defense Council	Advocacy Group	NRDC
Northwest Power and Conservation Council	Advocacy Group	NPCC
Northwest Energy Efficiency Alliance	Advocacy Group	NEEA

Commenter(s)	Affiliation	Acronym, Identifier
Rheem	Manufacturer	Rheem
Robert Bosch, LLC	Manufacturer	Bosch
Samsung	Manufacturer	Samsung
Sierra Club	Advocacy Group	Sierra Club
Signify	Manufacturer	Signify
Southern Co.	Utility	Southern
Spire, Inc.	Utility	Spire
Steinberg, Linda	None	Steinberg
United Cool Air	Manufacturer	UCA
Zero Zone	Manufacturer	Zero Zone

C. General Comments on DOE's Process Rule Proposal

As explained in further detail in section II.B of this final rule, DOE's Process Rule was originally designed to provide guidance to stakeholders as to how DOE would implement its rulemaking responsibilities under EPCA for the Appliance Standards Program, including extensive opportunities for stakeholder involvement in energy conservation standards and test procedure proceedings. While many benefits arose from the 1996 Process Rule, DOE determined that further improvements are possible since circumstances have changed since it was developed 25 years ago, as reflected in the agency's proposal. DOE's intent in proposing an updated Process Rule was to increase transparency and public engagement and achieve meaningful burden reduction, while at the same time continuing to meet DOE's statutory obligations under EPCA. (84 FR 3910, 3911-3912 (Feb. 13, 2019)) Not surprisingly, DOE's proposal was met with a wide variety of viewpoints. The paragraphs that follow summarize these stakeholder comments,⁸ followed by DOE's response.

⁸ When submitting their own individual comments, a number of organizations also explicitly signaled their endorsement of the comments prepared by others. Specifically, the ALA stated that it supports the detailed comments provided by the Joint Commenters. (ALA, No. 104 at p. 1) GEA expressed support for the comments of the Joint Commenters and incorporated them by reference into its own comments. (GEA, No. 125 at p. 1) NEMA stated that it supports the detailed Joint Comments of AHAM, AHRI, NEMA, and others. (NEMA, No. 107 at p. 2) Rheem supported the detailed comments provided by AHRI and the Joint Commenters. (Rheem, No. 101 at p. 1) NRDC stated that it signs onto and supports the comments submitted by the Appliance Standards Awareness Project and Earthjustice. (NRDC, No. 131 at p. 3)

A number of commenters expressed general support for DOE's Process Rule proposal. (Zero Zone, No. 102 at p. 1; Rheem, No. 101 at pp. 1-2; APGA, No. 106 at p. 2; BWC, No. 103 at p. 1) More specifically, AHRI praised DOE's responsiveness to stakeholder comments and adherence to the statutory principles of EPCA that it believes the agency had previously set aside. (AHRI, April 11, 2019 Public Meeting Transcript at pp. 234) APGA stated that DOE's comprehensive and transparent proposal would improve the way the Department fulfills its responsibilities under EPCA. (APGA, No. 106 at p. 2) BWC suggested that DOE's proposed Process Rule changes have the potential to make the rulemaking process more objective and improve its execution. (BWC, No. 103 at p. 1)

According to GEA, the proposed Process Rule should help alleviate many unnecessary regulatory burdens on both the regulated community and the DOE. GEA suggested that the following portions of the proposed Process Rule are of particular importance: (1) that all processes in the rule are binding on DOE; (2) the proposed early assessment process; and (3) the requirement to demonstrate significant energy savings before a revised standard is set. (GEA, No. 125 at p. 2)

In their overall assessment, the Administrative Law Clinic at George Mason University's Antonin Scalia Law School (GM Law) found the proposed changes to DOE's Process Rule to be consistent with good regulatory principles and all governing law. GM Law supported the proposal as sound regulatory policy by promoting stakeholder input, predictability, and

transparency. Furthermore, GM Law found DOE's proposal to comport with the D.C. Circuit's decision in *NRDC v. Herrington*, 768 F.2d 1355, 1372-73 (D.C. Cir. 1985), and it characterized other commenters' suggestions to the contrary as unfounded. (GM Law, No. 105 at pp. 1-2)

The Joint Commenters expressed support for DOE's proposal as representing the Department's renewed commitment to sound procedural practices that will increase regulatory efficiency, provide all interested stakeholders with a common understanding regarding DOE regulatory process, and ensure appropriate and reasonable investment of resources into DOE's important energy efficiency initiatives. Overall, the Joint Commenters offered support for the goal of EPCA's appliance efficiency program (*i.e.*, maximizing improvements in energy savings that are technologically feasible and economically justified). However, to succeed, these commenters stated that DOE should act on a consistent and predictable procedural basis and have an analytical structure that accounts for practical and technological realities, while ensuring regulatory transparency, consistency, and rationality. The Joint Commenters stated their belief that the proposed rule will provide greater certainty, transparency, and predictability in DOE's promulgation of test procedures and amended rules, a point echoed by Rheem. (Joint Commenters, No. 112 at p. 1; Rheem, No. 101 at pp. 1-2)

NEMA stated its understanding that the Process Rule NOPR did not add any steps to the rulemaking process, and added that concerns raised by certain other stakeholders about meeting deadlines can be addressed by appropriate project management solutions. (NEMA, No. 107 at p. 2)

Finally, while supporting the Process Rule proposal generally, Lennox expressed concern that the proposed Process Rule revisions may have weakened certain protections against regulations that are not economically justified. The commenter stated that in the prior version of the Process Rule, presumptions had existed against regulations such as those that: (1) result in a negative return on investment for the industry or would significantly reduce the value of the industry; (2) would be the direct cause of plant closures, significant losses in domestic manufacturer employment, or significant losses of capital investment by domestic manufacturers; or (3) would have a significant adverse impact on the environment or energy security. Lennox argued that these presumptions against regulation have been eliminated in the revised Process Rule, which now only identifies these as “considerations.” (Compare “Considerations in assessing economic justification” in current Process Rule section 5(e)(3)(i)(A)-(C) versus proposed Process Rule section 7(e)(2)(i)(A)-(C)). Lennox recommended that these presumptions against regulation should be re-instituted and protections strengthened for avoiding these obviously deleterious impacts, because doing so provides valuable transparency and regulatory predictability regarding DOE decision-making. (Lennox, No. 133 at p. 8)

Other commenters opposed DOE’s proposed Process Rule changes for a variety of reasons. For example, while ASE acknowledged that there are some improvements associated with the Process Rule NOPR, it stated that most of the proposed changes would likely complicate the program, add redundancy, remove flexibility, and make it more difficult to comply with statutory deadlines. More specifically, ASE expressed concerns that many of the proposed provisions of the Process Rule NOPR could have the effect of making it more difficult

for DOE to follow the law, because they would likely slow the program down, remove flexibility to respond to stakeholders and make course corrections during rulemakings, and remove the prospect of negotiations leading to direct final rules. Instead, ASE stressed the need for a program that is transparent, predictable, robust, steady, and meets its statutory deadlines. (ASE, No. 108 at pp. 1-2)

The AGs Joint Comment opposed DOE's Process Rule proposal, arguing that it would unlawfully impede DOE's energy conservation standards rulemakings and frustrate the purpose of EPCA. Furthermore, the AGs Joint Comment stated that DOE's proposed revisions to the Process Rule are unnecessary, counterproductive, and likely to slow or halt energy efficiency rulemakings, while exposing DOE to frequent litigation. The AGs then argued that in its proposal, DOE has misinterpreted factors which EPCA requires DOE to consider and has favored elements of industry which oppose energy efficiency standards. These commenters also stated that DOE's allocation of resources to an unnecessary Process Rule NOPR, which introduces obstacles and new procedural hurdles to meeting EPCA's core statutory requirements in a timely manner, is contrary to the statute because it puts the agency further behind on its statutorily-mandated deadlines for energy conservation standards. The AGs Joint Comment also argued that the Process Rule NOPR proposes to add unnecessary procedural steps for the establishment of standards and adding administrative barriers which make it more difficult to complete the rulemaking process. These commenters found this to be particularly troubling when DOE is already behind on so many rulemakings. Consequently, the AGs recommended that DOE withdraw its proposal. (AGs Joint Comment, No. 111 at pp. 1-2, 4-5)

Overall, NRDC's comments opposed DOE's proposed revisions to the Process Rule as jeopardizing issuance of cost-effective energy conservation standards. NRDC stated that although all stakeholders agree that the standards process should be transparent, predictable, and flexible, DOE's proposal does not advance those goals. (NRDC, No. 131 at p. 2) Instead, NRDC stated that the proposed changes to the Process Rule, when considered together, would make it substantially more difficult for DOE to set standards. The commenter argued that DOE has not shown why additional steps are necessary, how they would improve the program, or how the extended process could be completed in the timeframe required by law, particularly in light of the number of statutorily-mandated rulemaking deadlines that the Department has already missed. (NRDC, No. 131 at pp. 3-4) Along the same lines, the Cal-IOUs posed two key questions for DOE to address: (1) How will adopting these [proposed] Process Rule provisions help DOE meet EPCA requirements, specifically with respect to rulemaking timelines? (2) How do the provisions in the NOPR regarding industry test procedures help DOE independently assess the representativeness and enforceability of DOE test procedures? (Cal-IOUs, No. 124 at p. 2)

NRDC argued that it is premature and inappropriate for DOE to move forward with the Process Rule because its proposal was unclear on a number of key issues (*e.g.*, ordering and timeframe for various rulemaking steps, how DOE would comply with statutory deadlines, how test procedures would be established, details around the significant energy savings threshold, and changes to the "walk-down" methodology), thereby depriving NRDC and others an adequate opportunity to comment. (NRDC, No. 131 at p. 3) Similarly, PG&E argued that it is premature for DOE to move to a final rule, because the Process Rule NOPR poses too many unknowns and

has sparked too much confusion, a situation which could lead to litigation. Instead, PG&E urged DOE to provide further clarification and an additional opportunity for stakeholders comment on the clarified proposal in order to allow for meaningful input. (PG&E, April 11, 2019 Public Meeting Transcript at p. 227)

Southern California Edison encouraged DOE to use its discretion to see what to improve, but it also stated that it does not want DOE to lose its flexibility. (Southern California Edison, April 11, 2019 Public Meeting Transcript at pp. 222-223) ACEEE stated that it was surprised that the revised Process Rule does not incorporate regulatory review requirements from Congress, and it also suggested that any general rulemaking timeline envisioned by DOE should include test procedures as well as standards. (ACEEE, March 21, 2019 Public Meeting Transcript at p. 143, 206)

In response, DOE appreciates the many comments expressing a deep interest in its Process Rule proposal, through which the Department strives to simultaneously increase transparency and predictability, foster public participation, reduce unnecessary burdens, and conserve scarce public and private resources, all while ensuring compliance with applicable statutory requirements. DOE acknowledges the many comments suggesting that the Department's Process Rule proposal makes substantial progress in advancing these objectives, gains which the agency seeks to fully realize through promulgation of this final rule. DOE proposed these changes to address identified shortfalls in its implementation of the Process Rule in recent years. Consequently, as NEMA pointed out, DOE did not add a host of cumbersome new steps to its rulemaking process, but it is instead adopting a narrowly tailored update to the

Process Rule. In its only new procedural step, DOE has added an early assessment provision to gauge whether there are sufficiently changed circumstances to justify moving forward with an energy conservation standards or test procedure rulemaking. The early assessment process would add, at most, one brief additional comment period, but in cases where technologies and costs have not significantly changed since the last rulemaking, there is the potential to obviate the need for additional rulemaking, thereby allowing resources to be rapidly channeled to other rulemakings where economically justified and significant energy savings are possible.

Otherwise, this final rule largely reflects a faithful implementation of provisions already in place, albeit with certain modifications intended to facilitate operation of the Appliance Standards Program and to address changes in the statute since the original Process Rule was promulgated.

For the reasons that follow, DOE finds the concerns raised by opponents of the Process Rule NOPR to be theoretical, and unpersuasive. DOE needs a clear and effective process to facilitate execution of its statutory mandate for energy conservation standards and test procedures under EPCA. Many commenters have expressed the need for updates to DOE's Process Rule, a position the agency has acknowledged and with which it agrees. For example, in recent years, DOE frequently failed to meet the Process Rule's guidance that "[f]inal, modified test procedures will be issued prior to the NOPR on proposed standards." (*See* section 7(c) of 10 CFR part 430, subpart C, appendix A) There is general agreement that the preferred regulatory approach in this context is to have a final test procedure in place to inform the accompanying standard-setting rulemaking, but DOE has frequently deviated from the Process Rule and conducted test procedure and standards rulemakings concurrently. Likewise, while the Process Rule applied only to rulemakings for consumer products, there has been little opposition to

DOE's past application of the Process Rule to covered commercial and industrial equipment. Moreover, DOE has gained significant rulemaking experience under the Appliance Standards Program over the past 25 years since the Process Rule was first adopted. Accordingly, amendments to the Process Rule present a natural and logical evolution of DOE's rulemaking process.

DOE likewise does not agree with comments that the Department's Process Rule proposal would complicate or add redundancy to the regulatory process. With the exception of the early assessment and associated comment period, the amended Process Rule reflected in this final rule contains the same basic elements found in the 1996 Process Rule. Take again, the example of ensuring that a test procedure change is finalized prior to issuance of an energy conservation standards NOPR, which was also a provision in the previous Process Rule. While some commenters might consider that a complication, others could rightly call that an important procedural safeguard. As explained in detail elsewhere in this document, the procedural changes to the Process Rule adopted in this final rule are intended to address identified problems, not to complicate or unnecessarily delay DOE's rulemaking process.

Although several commenters asserted that the proposed changes to DOE's Process Rule would negatively impact the agency's ability to complete rulemakings and meet statutory deadlines, DOE disagrees. DOE is cognizant of its legal obligations under EPCA, and the Department anticipates being able to fulfill the requirements of both the statute and the Process Rule. The amended Process Rule has the potential to streamline DOE's rulemaking through the use of the early assessment, which can better enable the Department to satisfy its statutory time

constraints. By meeting its obligations within the allotted timeframes, DOE would not need commenters' recommended flexibility to waive the procedural safeguards of the Process Rule. Thus, commenters' arguments that DOE's Process Rule proposal would cause the Department to miss statutory deadlines and improperly delay rulemakings are speculative, at best.

In response to the AGs Joint Comment that DOE has misinterpreted the statute, the Department disagrees and has addressed specific claims to that effect at appropriate places elsewhere in this document. Regarding the AGs Joint Comment's assertion that the Process Rule proposal has incorporated provisions favoring industry, DOE once again disagrees. In many ways, DOE has merely updated the Process Rule to better reflect its current practice, and in other areas, it has made modifications to faithfully meet the requirements of the statute, to increase public participation, and to institute procedural safeguards to the benefit of all stakeholders.

Regarding assertions of that commenters' confusion necessitates further proceedings, DOE notes that most commenters on the Process Rule NOPR did not make such claims in response to the agency's proposal. Instead, such confusion was limited to a small number of commenters who generally opposed DOE's proposal. DOE published a Process Rule RFI, convened an interactive public meeting on the RFI, published a Process Rule NOPR, convened two interactive public meetings on the NOPR, published a Notice of Data Availability ("NODA") on the topic of its significant energy savings calculations, and accepted public comments through all of those mechanisms. In total, the Department has hosted three public meetings and solicited public comments for 197 days (i.e. longer than 6 months) on potential changes to the Process Rule. DOE believes it articulated clearly the changes to the Process Rule

that it was proposing and finds that there has been thorough discussion and opportunity for comment on virtually all the subjects mentioned by NRDC and PG&E.⁹ In fact, the lengthy and detailed comments on all of the topics raised in the proposed Process Rule submitted by the very parties claiming confusion belie that assertion. DOE recognizes that it may never be possible to explain its proposals to the complete satisfaction of every stakeholder, but given its numerous publications and opportunities for public engagement on the Process Rule, as well as the detailed nature of the comments received, the agency has concluded that stakeholders were afforded an adequate opportunity to comment on the topics contained in this final rule.

Regarding comments that DOE's amended Process Rule would invite increased litigation, the Department believes the opposite to be true. By having a transparent process with increased opportunity for public input that operates on a predictable schedule (*e.g.*, completion of test procedure prior to proposing standards), DOE anticipates a decreased incidence of litigation. And rather than frustrating the purpose of EPCA, DOE believes that this Process Rule final rule advances the purpose of EPCA by having better and more efficient procedures in place that allow the Department to better target its resources to those rulemakings which are technologically feasible, economically justified, and save a significant amount of energy.

Regarding the particular point made by Lennox about the Process Rule's considerations in assessing economic justification, DOE notes that in reorganizing the regulatory text, it did not intend to make substantive changes in this area regarding the analysis of economic justification criteria, nor did it discuss such action in the NOPR. DOE maintained the substance of those

⁹ The one exception involved the proposed changes to the "walk-down" methodology. DOE agrees that that topic will require further study before making a decision to move forward.

criteria, but it deleted a clear statement of the consequences that would flow from situations implicating those criteria (*i.e.*, deleting language stating “that standard level will be presumed not to be economically justified unless the Department determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects”). Although DOE’s streamlined version of the regulatory text was not proposing to change how those criteria are applied, the Department understands that the absence of the deleted language could be misinterpreted as indicating a substantive change in approach. Accordingly, DOE is reinserting the regulatory text language raised by Lennox in its comments.

In response to ACEEE’s suggestion that DOE incorporate regulatory review requirements from Congress in its proposal, the agency believes that a detailed and comprehensive recitation of applicable statutory requirements in the Process Rule is unnecessary. Those statutory requirements are a given, so instead, DOE endeavored to focus on the procedures it will follow to meet those requirements. Regarding ACEEE’s suggestion that any general rulemaking timeline envisioned by DOE should include test procedures as well as standards, DOE believes that the regulatory text of the Process Rule adequately addresses the topic of test procedures, and DOE has already made clear the key timing provision that any test procedure rulemaking is to be completed prior to publication of a standards NOPR. Consequently, DOE has determined that no further clarifications are required on these topics.

In sum, DOE has determined that the changes to the Process Rule adopted in this final rule will provide for a program that is transparent, predictable, robust, steady, and which meets its statutory deadlines, just as ASE suggested.

III. Discussion of Specific Revisions to the Process Rule

A. The Process Rule Will Be Binding on the Department of Energy

In the December 2017 RFI, DOE asked stakeholders whether DOE should make compliance with the Process Rule mandatory. (82 FR 59992, 59997) At the January 9, 2018, Process Rule public meeting, most stakeholders agreed that the Process Rule should be binding on the Department, that is, the Department should be held accountable for complying with its own procedures so that the public will have confidence in the transparency and fairness of DOE's regulatory process. Others recommended that any amended Process Rule retain flexibility for DOE so that the agency is not restricted in its ability to respond to the circumstances of each rulemaking and to avoid increased litigation risk.

Similarly, in response to the NOPR, most commenters support DOE's inclusion of a provision providing for the mandatory nature of the Process Rule to the Department to hold DOE accountable to its own procedures, thereby increasing public confidence in the fairness of the regulatory process. Those commenters are as follows: AHAM March 21, 2019 Public Meeting Transcript, No. 87, at pp. 68-69; AHRI, March 21, 2019 Public Meeting Transcript, No. 87 at p.10; AGA, March 21, 2019 Public Meeting Transcript, No. 87, at pp. 18-19; AGA, No. 114, at pp. 7-8; ALA, No. 104 at p. 2; APGA, March 21, 2019 Public Meeting Transcript, No. 87, at p. 14; APGA, No. 106 at p. 3; ASHRAE, No. 109 at p. 3; BWC, No. 103 at p. 1; CTA, No. 136 at p. 2; Danfoss, March 21, 2019 Public Meeting Transcript, No. 87, at p. 40; GEA, No. 125 at p. 2; GM Law, No. 105 at pp. 2, 4; GWU, No. 132 at p. 3; Joint Commenters, No. 112 at p. 2; Lennox, No. 133, at p. 2; Lutron, No. 137 at p. 2; NPCC, No. 94, at p. 4; NPGA, No. 110 at pp.

1-2; Rheem, No. 101 at p. 1; Southern Company, March 21, 2019 Public Meeting Transcript, No. 87, at p. 70; Southern Company, April 11, 2019 Public Meeting Transcript, No. 92, at p.233; Spire, March 21, 2019 Public Meeting Transcript, No. 87, at p. 37; Spire, No. 139, at p. 2; BHI, No. 135, at p. 1; and Westinghouse, March 21, 2019 Public Meeting Transcript, No. 87, at pp. 72-75; CTA, No. 136 at p. 2) Specifically, APGA added that if DOE merely makes changes to the “voluntary” guidelines, there is no change to the status quo in which there are no consequences for not following the Process Rule. (APGA, No. 106 at p. 3)

Conversely, also in response to the NOPR, other stakeholders oppose requiring that the Process Rule be mandatory to the Department for three reasons. First, commenters state that such a provision would deprive the Department of needed flexibility during the rulemaking process; second, commenters state that such a provision could lead to additional litigation, thereby causing delay in the rulemaking process, and third, commenters state that there may be cases where adherence to the Process Rule creates a conflict with the statute.

For those commenters concerned that the Department would lose flexibility during the rulemaking process, some recommended a “limited or good cause exception” that the Department could use in certain circumstances. For instance, A.O. Smith stated the a “limited exception” clause would grant the Department limited authority to deviate from its Process Rule under certain criteria such as: consensus agreements; negotiated rulemakings; test procedure rulemakings addressing clarifications necessary to provide clarity to the market, reduce uncertainty, and provide a level playing field; and rulemakings completed to fix errors. A.O. Smith recommended that such criteria be proposed in a supplemental notice of proposed

rulemaking. Furthermore, A.O. Smith explained that this limited exception would not be meant to circumvent the integrity of the rulemaking process but recognize circumstances where process deviations are necessary and expediting the process is reasonable. (A. O. Smith, No. 127, at p. 2)

Another commenter, ASE opposed making the Process Rule binding, because it would take away DOE's flexibility to respond to unforeseen developments during the rulemaking process and leave the Department vulnerable to lawsuits filed by stakeholders opposed to standards based upon real or perceived departures from procedure. ASE seemed to favor adoption of a "good cause" exception to the Process Rule to provide the agency with some flexibility. ASE also suggested that DOE consider documenting any deviations from the Process Rule for public comment throughout the rulemaking process, particularly but not limited to when a statutory deadline was set to be missed. (ASE, No. 108 at pp. 2-3)

Furthermore, ASAP, *et al.* states that making the Process Rule binding would take away important flexibility that benefits all stakeholders and increases the potential for litigation. ASAP stated that at a minimum, it should include a "good cause" exception as was included in DOE's draft NOPR provided to OIRA. However, any "good cause exception" should not be restricted but should provide DOE with the necessary flexibility to address specific situations that arise. (ASAP, *et al.*, No. 126 at pp. 1-3) Other commenters, including ACEEE (ACEEE, No. 123, at p. 3) and CT-DEEP (CT-DEEP, No. 93, at p. 2) agreed that a "good cause exception" should be included in the Process Rule if it is a mandatory requirement. Earthjustice suggested that if the Process Rule is going to be binding, there should be a procedure to deviate from the Process Rule. (Earthjustice, March 21, 2019 Public Meeting Transcript, No. 87, at p. 76)

Westinghouse took the position that the Process Rule should be mandatory but also that flexibility should be provided. (Westinghouse, March 21, 2019 Public Meeting Transcript, No. 87, at pp. 72-75)

Several additional stakeholders voiced their concern that mandatory application of the Process Rule to the Department will generate additional litigation, which could create uncertainty in the market. (A. O. Smith, No. 127, at p. 2; ACEEE, No. 123, at p. 3; ASE, No. 108 at pp. 2;; ASAP, et al., No. 126 at pp. 1-2; AGs Joint Comment, No. 111 at pp. 5-6; CEC, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 232-233; CEC, No. 121, at pp. 2-3; Cal-IOUs, No. 124, at pp. 3-4; Earthjustice, No. 134, at p. 2) Earthjustice believes that a mandatory Process Rule gives new leverage for parties seeking judicial review. (Earthjustice, No. 134, at p. 2) Further, Energy Solutions added that DOE would lose its discretion with mandatory binding requirements and wouldn't be able to address "one-off" issues. (Energy Solutions, March 21, 2019 Public Meeting Transcript, No. 87, at p. 72)

More specifically, the AGs Joint Comment argued that such litigation would not only delay completion of the rulemaking process, but simultaneously. It would frustrate DOE's stated objectives of increasing predictability and consistency, and likely deprive consumers and businesses the full and timely benefits of energy and cost savings associated with standards. (AGs Joint Comment, No. 111 at pp. 5-6)

Another commenter, the CEC states that if DOE continues to move forward with a binding process rule, it should include provisions that allow for substantial compliance with the

Process Rule. (CEC, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 232-233) In CEC's opinion, making the Process Rule binding will prevent DOE from responding quickly and effectively when it is in the interest of all stakeholders to do so and may make DOE more vulnerable to litigation challenges. (CEC, No. 121, at p. 2) Pointing to other instances where DOE needed to make modifications to its processes, the CEC noted that these changes brought about more effective means for gathering stakeholder input — e.g. shifting from using an ANOPR to other vehicles such as RFIs, Framework Documents, and NODAs. (CEC, No. 121, at p. 2) The CEC emphasized that DOE needs this flexibility to fit the appropriate process to the appliance standard or test procedure at issue. (CEC, No. 121, at p. 2) By making the Process Rule binding, the CEC asserted that DOE would be inviting stakeholders who are opposed to regulations to sue DOE for procedural violations that would not have changed the outcome of DOE's determination related to a given efficiency standard —which will in turn lead to delays in implementing the standard, lost energy savings to consumers, and regulatory uncertainty for manufacturers, distributors, and retailers. (CEC, No. 121, at pp. 2-3) To the contrary, the Joint Commenters disagree that binding DOE to the Process Rule will result in excessive litigation disrupting the goals of certainty and expediency. Most litigation stems from substantive defects caused by shortcutting the process and a binding process will reduce procedural litigation and result in better rules. (Joint Commenters, No. 112 at p. 2) AHRI also disagrees that a mandatory Process Rule would result in more litigation. (AHRI, March 21, 2019 Public Meeting Transcript, No. 87 at p. 10)

Next, ASAP, *et al.*, the AG's Joint Comment, and Cal-IOUs raised the issue as to how to reconcile a mandatory Process Rule and DOE's adherence to the statutory requirements in

EPCA. ASAP, et al. states that DOE compliance with the statute must take precedence over the Department's self-imposed restrictions in the Process Rule. (ASAP, et al., No. 126 at pp. 1-3) ASAP does not believe DOE is clear on how it would resolve a conflict between the Process Rule and the statute. (ASAP, March 21, 2019 Public Meeting Transcript, No. 87, at pp. 53, 62-63) Moreover, the AGs Joint Comment stated strong opposition to making the Process Rule binding, as opposed to guidance, because that would preclude DOE from having the procedural flexibility to take a different course of action when necessary to meet statutory requirements, and a rigid application of the Process Rule would jeopardize DOE's ability to meet its legal obligations under EPCA. The AGs Joint Comment opposed what it categorized as unnecessary and time-consuming procedural steps (e.g., coverage determination or test procedure restart requirements) that could further jeopardize DOE meeting its EPCA mandates. The AGs Joint Comment argued that because DOE's proposal failed to address how the Process Rule could be made mandatory while meeting its statutory duties, it has failed to provide sufficient detail to allow for meaningful and informed comment, as required under the APA. (AGs Joint Comment, No. 111 at p. 6) The AGs Joint Comment stated that if DOE does proceed to make the Process Rule binding, it should include a good cause waiver, particularly for use in cases where the Process Rule requirements would conflict with the text or purposes of EPCA. (AGs Joint Comment, No. 111 at p. 7)

The Cal-IOUs argued that the 1996 Process Rule had intended to be used as guidance and urged that DOE be mindful of this approach with respect to any new provisions or the "modernization" of the Process Rule, particularly with respect to any conflict between it and EPCA. (Cal-IOUs, No. 124, at p. 3) Another commenter, PG&E stated that making the Process Rule mandatory will impose added burdens on DOE and stakeholders which could prevent DOE

from meeting its statutory obligations. PG&E urged DOE to use its resources to first catch-up on rulemakings that are past due and finalize pre-publication or consensus term sheets before introducing new procedures that will limit agency discretion and create more regulatory burden. (PG&E, March 21, 2019 Public Meeting Transcript, No. 87, at pp. 21-22; PG&E, April 11, 2019 Public Meeting Transcript, No. 92, at p. 228)

DOE has carefully considered all the comments on this matter and has determined that requiring mandatory compliance on the part of DOE with its own Process Rule would clearly promote a rulemaking environment that is both predictable and consistent (*i.e.*, one where all stakeholders know what to expect during the rulemaking process). In the past, DOE has been criticized by stakeholders for not following its Process Rule, and instead exercising its discretion on a case-by-case basis on procedural matters during the rulemaking process. Today, DOE is affirming language in the amended Process Rule to make clear that its provisions are binding on the agency. DOE believes that this approach will promote confidence, consistency, clarity, and transparency in the rulemaking process that some feel has been lacking in the past. Moreover, it has been the rare instance, if at all, where all parties in a rulemaking proceeding agreed that deviating from the Process Rule was advisable. Rather, it is DOE's experience that deviations from normal process has resulted in one or more parties raising issues that have slowed the regulatory process. Even on rulemaking matters DOE thought to be relatively simple and straight-forward, the same parties suggesting in comment that the Process Rule should provide for flexibility have sought more procedural steps and raised issues of DOE proceeding too quickly and without appropriate stakeholder interaction. Making the Process Rule binding on DOE should result in no party arguing that the process used by DOE was unfair or lacking.

Furthermore, DOE believes that the argument that a binding Process Rule will generate increased litigation is highly speculative and, accordingly, is not an appropriate basis to reject the mandatory application of the amended Process Rule. Clearly, it is in the best interests of all stakeholders to work together during the rulemaking process so that DOE efforts to establish economically justified and technologically feasible energy conservation standards and promote meaningful burden reduction in the context of standards setting, compliance, and testing requirements can be achieved. And lastly, the amended Process Rule has been drafted to closely follow and implement EPCA. As such, following the Process Rule will mean that DOE will conduct its rulemaking activities to comply with all EPCA requirements.

After years of debate as to the nature of DOE's compliance with the current Process Rule, DOE believes it appropriate to increase public confidence in the fairness and predictability of the rulemaking process. Accordingly, DOE is adopting language in this final rule making the application of the Process Rule mandatory to the Department.

B. The Process Rule Will Apply to Both Consumer Products and Commercial Equipment

By its terms (and specifically by its title), the 1996 Process Rule applies only to consumer products. However, in practice, DOE has routinely followed the procedures set forth in the Process Rule when establishing standards for commercial equipment. In its December 2017 RFI, DOE requested comment as to whether the agency should amend the Process Rule to clarify that it is equally applicable to the consideration of standards for commercial equipment. (82 FR 59992, 59996) At the January 9, 2018, Process Rule public meeting, DOE also asked stakeholders how the agency should treat equipment covered by the American National

Standards Institute (“ANSI”)/American Society of Heating, Refrigerating, and Air-Conditioning Engineers (“ASHRAE”)/Illuminating Engineering Society of North America (“IESNA”) Standard 90.1 (“ASHRAE Standard 90.1”), if DOE were to amend the Process Rule to include commercial equipment. DOE pointed out that EPCA provides a separate set of procedural requirements and timelines for ASHRAE equipment that are different than those in the Process Rule. (DOE, January 9, 2018 Public Meeting Transcript at pp. 183-184)

Commenters agree with the principle that the Process Rule procedures should explicitly apply to both new and amended energy conservation standards for both covered consumer products and industrial and commercial covered equipment, but with modified provisions specific to ASHRAE equipment. (Acuity, No. 95, at p. 2; AHRI, March 21, 2019 Public Meeting Transcript, No. 87, at p. 87; ASE, No. 108 at p. 3; ACEEE, No. 123, at p. 1; AGA, No. 114, at pp. 8-9; ASAP, March 21, 2019 Public Meeting Transcript, No. 87, at p. 88; ASAP, et al., No. 126 at pp 1, 3; BWC, No. 103 at p. 1-2; CEC, No. 121, at p. 3; Edison Electric Institute, March 21, 2019 Public Meeting Transcript, No. 87, at p. 87; GM Law, No. 105 at p. 3; GWU, No. 132 at p. 3; Joint Commenters, No. 112 at p. 2; Lennox, No. 133, at p. 2; NAFEM, No. 122, at p. 2; NPCC, No. 94 at p. 4; NPGA, No. 110 at p.1; Cal-IOUs, No. 124, at p. 4; Rheem, No. 101 at p. 1; Spire, No. 139, at p. 24; BHI, No. 135, at p. 2) Only one commenter, the Cal-IOUs, supported expanding the scope of the Process Rule to include covered commercial and industrial equipment as long as the Process Rule is not binding. (Cal-IOUs, No. 124, at p. 4) This commenter did not explain the rationale for its position.

DOE agrees with commenters that a modernized Process Rule should apply to both consumer products and industrial and commercial equipment, and that the Process Rule must contain language that clarifies this coverage. Historically, DOE has applied the Process Rule to both consumer and industrial and commercial rulemakings. The final rule makes clear that this practice will continue. To promote a consistent process that reduces the regulatory burden of the rulemaking process, DOE will apply the same procedures in the Process Rule to both consumer products and industrial and commercial equipment rulemakings, except as discussed in section III.C for ASHRAE equipment. The Joint Commenters clearly articulated the rationale for such a decision as follows, there are no cogent reasons for treating the rulemaking process for commercial equipment differently than for consumer products. The benefits of a well-defined, consistent process apply regardless of product or equipment type. ASHRAE equipment holds unique status in EPCA and therefore must be considered separately. (Joint Commenters, No. 112 at p. 2)

Accordingly, DOE has concluded that formally applying the Process Rule to commercial and industrial equipment will enhance the consideration of such equipment by ensuring that there is proper time and information before the agency prior to promulgation of new or amended regulations.

C. The Application of the Process Rule to ASHRAE Equipment

In the February 13, 2019 Process Rule NOPR, DOE explained its proposed approach as to how the agency should treat ASHRAE equipment subject to ASHRAE Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, in the event DOE were to amend

the Process Rule so as to formally apply to commercial equipment. (84 FR 3910, 3914-3916)

As statutory background, EPCA provides, in relevant part, that ASHRAE equipment is subject to unique statutory requirements and its own set of timelines. More specifically, pursuant to EPCA's statutory scheme for covered ASHRAE equipment, DOE is required to consider amending the existing Federal energy conservation standards for certain enumerated types of commercial and industrial equipment (generally, commercial water heaters, commercial packaged boilers, commercial air-conditioning and heating equipment, and packaged terminal air conditioners and heat pumps) when ASHRAE Standard 90.1 is amended with respect to such equipment. (42 U.S.C. 6313(a)(6)(A)) For each type of equipment, EPCA directs that if ASHRAE Standard 90.1 is amended, DOE must adopt amended energy conservation standards at the new efficiency level in ASHRAE Standard 90.1 as the uniform national standard for such equipment, unless DOE determines by rule, and supported by clear and convincing evidence, that a more-stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)(I)-(II)); 84 FR 3910, 3914 (Feb. 13, 2019)

The Process Rule NOPR examined numerous topics, including the need to address ASHRAE equipment explicitly in the Process Rule, the level of deference to be accorded to ASHRAE (and the openness of that process), the "clear and convincing evidence" standard for establishing standard levels more stringent than those adopted in ASHRAE Standard 90.1, and DOE's interpretation of EPCA's ASHRAE trigger provisions (and related implementation). In response to the NOPR, several stakeholders expressed their views as to how DOE should handle ASHRAE equipment, including concerns regarding each of the topics raised in the NOPR. Each

of these matters will be addressed in the paragraphs that follow, including public comments received and DOE's responses.

The Need for ASHRAE Equipment to be Addressed Separately

In the Process Rule NOPR, DOE stated that it tentatively determined that the amended Process Rule will contain a new section that clearly delineates the procedure DOE will follow for evaluating amendments to ASHRAE Standard 90.1 and conducting related rulemakings. DOE noted that it would first reiterate its statutory obligations for ASHRAE equipment in this new section of the Process Rule. In the event that DOE determines that it is appropriate to conduct a rulemaking seeking to adopt standards for ASHRAE equipment more stringent than those in ASHRAE Standard 90.1, all of the Process Rule requirements would apply. However, for the typical situation wherein DOE is adopting the ASHRAE Standard 90.1 level(s), DOE would follow the EPCA statutory requirements rather than the Process Rule requirements. (84 FR 3910, 3915 (Feb. 13, 2019))

Many commenters supported (or did not object to) DOE's proposal to have the Process Rule separately and specifically address ASHRAE equipment. (AHRI, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 10, 95; Spire, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 100-101; Rheem, No. 101 at p. 1; NRDC, No. 131 at pp. 14-15; Spire, No. 139 at p. 5; BHI, No. 135 at p. 2) For example, ASHRAE expressed support for the clarification in DOE's proposal regarding the extent to which it would rely on ASHRAE Standard 90.1, an outcome which the commenter suggested would achieve the clear statutory intent of EPCA and would result in a less costly and burdensome rulemaking process. (ASHRAE, April 11, 2019 Public

Meeting Transcript, No. 92 at pp. 224, 226) The CEC also supported the inclusion of a means to facilitate the adoption of ASHRAE 90.1 levels for commercial equipment. (CEC, No. 121 at p. 3) Similarly, the AGA expressed support for the Process Rule NOPR's proposal that in the event that DOE conducts a rulemaking to establish more-stringent standards for covered ASHRAE equipment, DOE would follow the procedures established in the Process Rule, while still complying with EPCA's ASHRAE-specific deadlines. AGA also agreed with the Department's proposal in the NOPR to add a section into the Process Rule to clearly define the process used to adopt ASHRAE 90.1 equipment standards and also define a mechanism when a more-stringent equipment efficiency standard over the ASHRAE level can be pursued. (AGA, No. 114 at p. 10) The Joint Commenters also supported the Department's proposed approach to rulemakings for ASHRAE equipment, agreeing that the Process Rule should apply to commercial equipment covered by ASHRAE 90.1 standards only in the case where standards rulemakings for ASHRAE equipment are prompted by a six-year review or where DOE proposes standard levels more stringent than those in ASHRAE Standard 90.1. (Joint Commenters, No. 112 at p. 2)

ASHRAE expressed support for DOE's inclusion of a new section in its proposed Process Rule that clearly delineates the procedure DOE will follow for evaluating amendments to ASHRAE Standard 90.1 and conducting related rulemakings with respect to equipment covered by ASHRAE Standard 90.1. ASHRAE lauded DOE's decision to follow EPCA's mandate and adopt the revised ASHRAE levels, except in very limited circumstances. It also agreed with DOE's assessment that adopting the amended ASHRAE Standard 90.1 levels as its regular practice will result in reduced regulatory burden on stakeholders and will promote consistency and simplicity when DOE is addressing ASHRAE equipment. (ASHRAE, No. 109 at pp. 2-3)

However, several parties sought clarification as to how DOE's proposal would alter the agency's historical treatment of ASHRAE equipment and expressed concern that the Department would deviate from the relevant statutory requirements. For example, Danfoss argued that the Process Rule should not apply to ASHRAE equipment when DOE is adopting the standard levels in Standard 90.1 because the ASHRAE process already has requirements for fairness and transparency, but if DOE should decide that a more-stringent standard is warranted, then the Process Rule should apply. (Danfoss, March 21, 2019 Public Meeting Transcript, No. 87 at p. 40)

Lennox stated that the Process Rule should apply to commercial equipment except when it would conflict with special statutory provisions specific to commercial equipment rulemaking, such as provisions for adopting ASHRAE 90.1 industry standards. Although it found section 2 of the proposed Process Rule to be generally consistent with this principle, Lennox nonetheless urged DOE to clarify this point. For commercial equipment covered by ASHRAE Standard 90.1, Lennox noted that DOE must adopt the industry standard unless "clear and convincing evidence" dictates otherwise (*i.e.*, by supporting more-stringent standards). If DOE simply adopts ASHRAE 90.1 standards, Lennox stated that the additional provisions in the Process Rule are not necessary. However, Lennox suggested that additional Process Rule processes and transparency enhancements may apply to commercial equipment covered by ASHRAE 90.1 standards where: (1) energy conservation standard rulemakings for such ASHRAE products are prompted by a six-year review or (2) DOE proposes standard levels over-and-above those in ASHRAE 90.1, albeit in either case subject to the "clear and convincing evidence" standard.

Again, Lennox stated that although this structure is consistent with section 9 of the proposed Process Rule and DOE should clarify this in the final rule preamble. For instance, Lennox stated that in the “very limited circumstances” when DOE seeks to go beyond standards established by ASHRAE 90.1 for equipment covered by those standards, relevant Process Rule provisions may include many of those in Process Rule section 1 (Objectives) and sections 6 and 7 (which provide details on selecting standards, albeit these would apply only in those “very limited circumstances” when DOE considers going beyond ASHRAE standards and would be subject to the “clear and convincing evidence” standard). Lennox also argued for the potential continued applicability of section 8 (*e.g.*, finalizing a test procedure in advance of considering any amended energy conservation standard), sections 10 and 11 (on DFRs and negotiated rulemakings), and sections 13 to 17 (on engineering analyses, assessment of impacts on manufacturers and consumers, considering non-regulatory approaches, and cross-cutting analytical assumptions, all again subject to the “clear and convincing evidence” standard). Because of the potentially broader applicability of other Process Rule provisions beyond the ASHRAE-specific section 9, the Process Rule should include a clause whereby, or otherwise clarify, the Process Rule applies to ASHRAE equipment: (1) except when doing so would conflict with the ASHRAE-specific provisions and (2) in the two limited circumstances mentioned above when DOE might go beyond ASHRAE-specified levels for ASHRAE products (albeit subject to the “clear and convincing evidence” standard). (Lennox, No. 133 at p. 3)

Bosch stated that the DOE proposal to adopt the revised ASHRAE levels for standards as its regular practice, except in limited circumstances, represents a significant change to the current rulemaking process, as DOE would be deferring a considerable portion of its rulemaking work to

a non-governmental organization. Instead, Bosch countered that DOE has a clear and statutory obligation to conduct a full and sufficient evaluation of proposed ASHRAE amendments and not to simply defer to a separate industry standards organization. The commenter argued that instead of reducing regulatory burden, DOE's proposal to defer to ASHRAE would create new burdens for manufacturers by requiring companies to devote significant time and resources to engaging in the ASHRAE process. Also, Bosch stated that the proposal does not adequately address whether the levels set through the ASHRAE standards-setting process are sufficient or are updated within an appropriate period of time, unlike the six-year EPCA look-back review, thereby hindering regulatory certainty. Based upon the foregoing reasoning, Bosch requested that DOE reconsider this portion of its proposal. (Bosch, No. 113 at pp. 3-4) Along these same lines, the CA IOUs indicated that DOE's proposal with respect to deferring to industry standards — such as those promulgated by ASHRAE — would have the effect of the agency ignoring its statutory mandate to critically assess whether a given test procedure requires amending. (CA IOUs, No. 124 at p. 5) The AGs Joint Comment similarly argued that DOE's proposed modifications to its approach to regulating ASHRAE equipment amounts to an abdication of its duties to assess Standard 90.1 and engage in related rulemaking. (AGs Joint Comment, No. 111 at p. 12)

In contrast, the Joint Commenters expressed strong support for the expectation that DOE would adopt revised ASHRAE levels except in “very limited circumstances,” because they argued that historically, when DOE has exceeded the ASHRAE proposed levels, it has imposed disproportionate harm on industry segments in pursuit of inconsequential energy efficiency benefits. (Joint Commenters, No. 112 at p. 2)

Ingersoll Rand stated that it supports alignment of overlapping product energy efficiency requirements between ASHRAE Standard 90.1 and DOE appliance standards, in terms of both stringency and effective dates. However, Ingersoll Rand acknowledged that EPCA grants DOE some limited discretion when considering amending appliance standards under 42 U.S.C. 6313(a)(6)(A). Consequently, the commenter agreed with the Department's proposal that if standards established under ASHRAE Standard 90.1 are adopted by DOE, the rulemaking does not need to follow the Process Rule, but if the Department analyzes whether there is clear and convincing evidence to justify more-stringent standards, such rulemaking would need to abide by the Process Rule. However, Ingersoll Rand disagreed with the Department's interpretation that ASHRAE not acting to amend the energy efficiency requirements for DOE-covered products is tantamount to a decision that the existing standards remain in place. Ingersoll Rand stated that in this scenario, DOE has proposed to hold revisions to appliance standards under 42 U.S.C. 6313(a)(6)(C) to the same "very high bar" as if ASHRAE had revised the energy efficiency standards for these products in Standard 90.1. The commenter stated the while it expects ASHRAE to update these standards when it is economically justified and technologically feasible to do so, it is also conceivable that this process could be delayed for procedural reasons, given the nature of the ASHRAE consensus-based standards process. If the review of these standards is triggered by the 6-year-lookback provision at 42 U.S.C. 6313(a)(6)(C)(i), Ingersoll Rand encouraged DOE to consider standards for the appropriate equipment as it would any other standard under the Process Rule. Ingersoll Rand reasoned that such approach would ensure that any new appliance standards remain technologically feasible and economically justified per DOE's analysis (and including any ASHRAE analysis), without further delaying the appropriate updates to these standards. (Ingersoll Rand, No. 118 at p. 2)

Other commenters were more skeptical of DOE's proposed approach to ASHRAE equipment in the Process Rule NOPR and raised a number of concerns. ACEEE commented that applying the full Process Rule to ASHRAE products is not workable. According to ACEEE, DOE's proposal states that all of the Process Rule requirements would apply to a decision to go beyond ASHRAE levels, but it does not explain how an analysis and public comment period on the ASHRAE levels followed by early assessment, framework, full analysis, draft rule, and final rule, including three additional public comment periods, would all be accomplished within the statutory limit of 30 months (*i.e.*, the statutory time limit for adopting more-stringent standards). ACEEE argued that "the law (*i.e.*, EPCA) recognizes that substantial analysis and public input occur in the ASHRAE process, and the procedure for setting modified requirements should reflect that." (ACEEE, No. 123 at p. 2) The CA IOUs contended that EPCA prescribed a specific set of conditions for DOE to follow with regard to setting standards for ASHRAE equipment and commented that DOE is required to follow EPCA. (CA IOUs, No. 124 at p. 4-5)

Finally, ASAP sought clarification as to whether ASHRAE equipment would be subject to the early assessment process under the proposed Process Rule. (ASAP, April 11, 2019 Public Meeting Transcript, No. 92 at p. 196)

In response, DOE recognizes its specific obligations under EPCA vis-à-vis ASHRAE equipment and makes clear that it is continually striving to meet those obligations. And, the Department must have a process for doing so. As with other commercial equipment, DOE has applied the Process Rule to ASHRAE equipment to the extent permitted by statute, even though

10 CFR part 430, subpart C, Appendix A technically applies to “consumer products.” DOE has found the principles embodied in the Process Rule to be beneficial to both stakeholders and the agency, without distinction as to whether a consumer product or commercial/industrial equipment is at issue. After considering public comments, in this final rule, DOE has decided to make its existing practice more clear and transparent by explicitly addressing the applicability of the Process Rule to ASHRAE equipment and incorporating the key statutory timelines, as well as to clarify how DOE will conduct rulemakings for ASHRAE equipment. To the extent DOE can articulate a clear and rational process for implementing related statutory requirements, the agency anticipates that it would improve consistency across its ASHRAE rulemakings, thereby reducing burdens on manufacturers of such equipment and increasing benefits to consumers.

DOE also seeks to make clear that different procedures and timelines apply under EPCA, depending upon whether the Department is adopting the levels contained in ASHRAE Standard 90.1 or more-stringent standards. When ASHRAE 90.1 is amended with respect to the standard level or design requirements applicable under that standard to specific products enumerated in EPCA, DOE is “triggered” to adopt those measures as the uniform national standard (unless DOE finds clear and convincing evidence that adoption of more stringent levels for the product would result in significant additional energy savings and is technologically feasible and economically justified). When DOE determines to adopt the levels in ASHRAE Standard 90.1 as uniform national standards, it will generally follow the specific procedures and timelines set forth in the statute (*i.e.*, a truncated process under EPCA which directs DOE to adopt ASHRAE’s consensus standards within 18 months). The other Process Rule procedures are generally not applicable to that specific case and will not be required. However, where DOE finds clear and

convincing evidence to support more-stringent standards (as required either under EPCA's ASHRAE "trigger" or 6-year-lookback provisions), the statute's analytical requirements and longer 30-month timeline are more akin to DOE's typical rulemaking process, so DOE believes it appropriate to apply the Process Rule in such cases. DOE has made a clarification to this effect in the Process Rule's regulatory text (see sections 2 and 9).

Specifically in response to ASAP, DOE would not apply the early assessment process to ASHRAE trigger rulemakings because DOE must undertake such rulemaking pursuant to 42 U.S.C. 6313(a)(6)(A), so the early assessment's inquiry as to whether a rulemaking is necessary would not be relevant. Under the statutory process for ASHRAE, DOE is obligated to publish a NODA presenting potential energy savings from the ASHRAE action. DOE plans to use that vehicle to perform the early assessment for ASHRAE regarding whether there is potentially clear and convincing evidence to adopt a more stringent standard. In addition, DOE will conduct an early assessment for rulemakings for ASHRAE equipment that are initiated pursuant to the 6-year-lookback under 42 U.S.C. 6313(a)(6)(C), because in such cases, DOE is not statutorily obligated to adopt a level set by ASHRAE and may ultimately determine that no new standard is warranted.

DOE disputes ACEEE's assertion that applying the Process Rule to rulemakings that go beyond ASHRAE Standard 90.1 levels is unworkable, because DOE has been successfully applying most of those provisions to its ASHRAE rulemakings already. The only new step DOE has added to the rulemaking process through its revised Process Rule is the "early assessment" (applicable only to ASHRAE 6-year-lookback rulemakings, not ASHRAE "trigger")

rulemakings). DOE sees no reason why through sound management principles and proper scheduling that it cannot satisfy the applicable provisions of the Process Rule while meeting relevant statutory deadlines. In contrast to ACEEE's view, DOE envisions this final rule's process improvements as increasing the opportunity for public input and strengthening rulemaking analyses.

DOE is not deferring its statutory duties for standard setting to an outside organization (*i.e.*, ASHRAE) through these Process Rule amendments. The Department is committed to undertaking the necessary review, consistent with the EPCA timelines, to determine whether more-stringent standards are appropriate, both under its ASHRAE trigger and 6-year-lookback authority, as it always has. DOE is making clear that in doing so, it must meet the statutory requirement that the more-stringent standard level be supported by clear and convincing evidence. EPCA's statutory structure demonstrates a strong Congressional preference for adoption of ASHRAE levels, except in extraordinary cases where a high evidentiary hurdle has been surmounted. In this way, Congress sought to ensure that more-stringent standards have objectively recognized benefits that unquestionably justify their costs. DOE simply intends for the Process Rule to reflect these statutory requirements, not deviate from them or inappropriately shift responsibility to ASHRAE. Consequently, DOE will continue to perform all necessary review and analyses consistent with its statutory obligations, and stakeholders should not incur any additional responsibilities in terms of either the DOE rulemaking or participation in the ASHRAE Standard 90.1 process.

Openness of/Deference to the ASHRAE Standards Development Process

In the Process Rule NOPR, the Department explained its tentative decision that going forward, DOE would anticipate adopting the revised ASHRAE levels as contemplated by EPCA, except in very limited circumstances. (42 U.S.C. 6313(a)(6)(A)(ii)(II)) DOE reasoned that its commitment to adopting the amended ASHRAE Standard 90.1 levels as its regular practice would result in reducing the regulatory burden on stakeholders and would promote consistency and simplicity when addressing ASHRAE equipment. 84 FR 3910, 3915 (Feb. 13, 2019).

There was considerable difference of opinion as to the openness of the ASHRAE standards development process expressed by stakeholders both at the March 21, 2019 public meeting and in written comments on the Process Rule NOPR. At the March 21, 2019 public meeting, various stakeholders debated the level of access to participation in the ASHRAE process. (March 21, 2019 Public Meeting Transcript, No. 87 at pp. 99-108) Some commenters suggested that despite the technical expertise of ASHRAE Standard 90.1 committees, there are barriers to participation in that process in terms of time and money, which stand in contrast to the DOE regulatory process. For example, NEEA argued that although it does like certain aspects of the ASHRAE process, on balance, it has not found the ASHRAE process to be a viable pathway for bringing forth innovative proposals, as they are frequently blocked in committees. In contrast, NEEA believes that DOE has an open process which allows all interested stakeholders to make a meaningful contribution. Consequently, NEEA encouraged DOE to consider alternative processes when seeking to regulate ASHRAE equipment. (Northwest Energy Efficiency Alliance, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 105-106)

Such commenters suggested that while the ASHRAE process may appear to be open, the commenter expressed its view that the deck is often stacked against their meaningful participation. Along these lines, PG&E disagreed with DOE's proposed approach, asserting that ASHRAE is dominated by the manufacturers that will benefit by test procedures made by that organization. (PG&E, March 21, 2019 Public Meeting Transcript, No. 87 at p. 93) The CA IOUs indicated that ASHRAE decisions are based on a simple majority vote and that industry representative members are typically the most vocal and have the most influence over whatever test procedures (or standards) are ultimately adopted by ASHRAE. (CA IOUs, No. 124 at p. 5) PG&E added that ASHRAE "enforcement" requirements are less rigorous than DOE enforcement requirements in terms of the tolerances put around the requirements in an ASHRAE test procedure versus a DOE test procedure. (PG&E, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 93-94)

Energy Solutions stated that when there is an open ASHRAE Standard 90.1 process or when there is an opportunity for public review of related documents, DOE should notify stakeholders of the Appliance Standards Program so that interested parties will be better aware of such activities. (Energy Solutions, March 21, 2019 Public Meeting Transcript, No. 87 at p. 105)

Other stakeholders offered a vigorous defense of the openness, fairness, and transparency of the ASHRAE process. ASHRAE itself stated that it stands behind its standards development process and believes that the results generated by this process are robust. According to ASHRAE, all proposed changes to ASHRAE Standard 90.1 are open for public review, which allows interested parties to provide input into development of the standard and reach consensus,

thereby ensuring publication of a document that has been rigorously examined, questioned, and defended. The organization defended its consensus process as ensuring buy-in and reflecting input from energy advocates, building owners, design professionals, utilities, manufacturers, and representatives from DOE, and other materially-affected and interested parties. ASHRAE refuted the criticism that DOE's use of privately-developed consensus standards such as ASHRAE's relies too heavily on industry, which may create potential conflicts of interest. With respect to this criticism, ASHRAE emphasized that one does not need to be an ASHRAE member to participate in the ASHRAE standards development process. In addition, the organization argued that the 47 voting members on the Standing Standards Project Committee (SSPC) 90.1 have broad representation, and of the 19 industry voting members, only nine come from industries that have a material interest in equipment covered by potential DOE regulations. (ASHRAE, No. 109 at pp. 2-3)

ASHRAE further pointed out that the National Technology Transfer and Advancement Act of 1995 (Public Law 104-113) has directed Federal agencies to adopt voluntary industry consensus standards unless inconsistent with the law or impracticable. According to ASHRAE, since 1998, the Executive Office of the President has supported this statute through issuing and re-issuing Office of Management and Budget (OMB) Circular A-119, which mandates that administrative agencies rely on consensus standards. ASHRAE concluded that EPCA and DOE's proposal are consistent with these directives. (ASHRAE, No. 109 at p. 3)

BWC expressed support for DOE's adoption of revised standard levels set by ASHRAE, as that organization is a consensus body that permits a variety of stakeholders to participate.

(BWC, No. 103 at p. 2) Similarly, BHI expressed support for the Department's approach to rulemakings for ASHRAE Standard 90.1 equipment, as consistent with the statutory requirements of 42 U.S.C. 6313. BHI also recommended adding a clear statement to the Process Rule indicating that a DOE representative will attend all ASHRAE 90.1 committee meetings to: (1) avoid unnecessary delays in publishing the analysis of the potential energy savings of the amended energy conservation standard, or (2) advocate for a more-stringent standard when the Department has clear and convincing evidence of significant additional conservation of energy that is technically feasible and technologically justified, or (3) avoid delays in publishing a no-new-standard notification if ASHRAE 90.1 is not amended. (BHI, No. 135 at p. 2)

AGA stated that national codes and standards activities conducted by organizations such as ASHRAE and the International Code Council, among others, are very important to the natural gas industry. In recent history, the commenter pointed out that DOE has become more involved in these non-governmental organizations, such as by participating in standards and code body proceedings as advocates of requirements and generally becoming more active in these types of organizations. Although AGA acknowledged that DOE's governing statute permits the Department to be involved in such organizations, it argued that such participation should be limited to the presentation of peer-reviewed research/analysis and the review of codes. For example, it is appropriate for DOE to evaluate and analyze codes, such as when the International Energy Conservation Code issues codes to improve energy efficiency in buildings, but such evaluations and related determinations may appear less than arm's length if the Department has had a role in creating the codes. In other words, AGA argued that to maintain the independent nature of DOE's reviews of non-governmental codes and standards, it would be prudent for the

Department to step back and not be intimately involved in the creation of codes and standards that it may be called on to evaluate. (AGA, No. 114 at p. 31)

As these comments reflect, commenters on DOE's Process Rule NOPR offered a variety of opinions about the ASHRAE Standard 90.1 review committee process. Although the technical expertise of the committee members was generally not questioned, there was considerable debate as to the openness, fairness, and transparency of the ASHRAE process. However, it is not DOE's place to judge that process, because in EPCA (*see* 42 U.S.C. 6313(a)(6)(A)), Congress clearly and explicitly assigned ASHRAE a role in that regulatory regime, as discussed previously. Consequently, DOE does not have authority to alter ASHRAE's statutory role, but instead must follow the relevant statutory requirements, as reflected in the Process Rule.

Specifically, under the statute, DOE must adopt the standard levels in ASHRAE Standard 90.1, unless DOE finds clear and convincing evidence that adoption of more stringent levels for the equipment would result in significant additional energy savings and is technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A) and (C)(i)) Similarly, DOE must adopt the test procedures for ASHRAE equipment specified in ASHRAE Standard 90.1, and DOE must update those test procedures each time the ASHRAE test procedures are amended, unless DOE has clear and convincing evidence to show that such test procedure amendments are not reasonably designed to produce test results which reflect energy efficiency, energy use, and estimated operating costs of a type of industrial equipment (or class thereof) during a representative average use cycle (as determined by the Secretary) or are unduly burdensome to conduct. (42 U.S.C. 6314(a)(2)-(4)) DOE notes that the statutory scheme, which directs DOE to adopt ASHRAE technical standards and test procedures unless further EPCA provisions

command otherwise, comports with the requirements of the National Technology Transfer and Advancement Act of 1995 and OMB Circular A-119.

DOE understands Energy Solutions' desire for stakeholders of the Appliance Standards Program to be made aware of open ASHRAE Standard 90.1 matters or when there is an opportunity for public review of related documents, in order to more effectively participate in standard-setting for the ASHRAE equipment subject to DOE regulation. Although DOE participates in the ASHRAE committee process, it does not control that process and may not always be aware of the complete or up to date relevant information, so DOE does not find it feasible to assume responsibility for the messaging role suggested by Energy Solutions. However, DOE notes that ASHRAE's website offers interested parties the opportunity to subscribe to listservers to be automatically notified via email when activities and information related to various project committees are available. (Available at: <https://www.ashrae.org/technical-resources/standards-and-guidelines/options-to-stay-current>.) DOE believes that the availability of such listservers provides the notice of ongoing ASHRAE activities sought by Energy Solutions in its comment.

DOE agrees with AGA's cautionary statement that the Department must be careful to remain impartial in terms of its role in the ASHRAE committee process, particularly since DOE is statutorily obligated to adopt ASHRAE standards and test procedures, unless they fail to meet other applicable statutory requirements. DOE may serve a neutral role in ASHRAE proceedings (e.g., analyzing or evaluating - but not creating - drafts of ASHRAE standards and test

procedures, advising committee members as to the requirements and limitations imposed by EPCA), and will not inappropriately direct or coerce an outcome.

Finally, in response to BHI and as noted in the preceding paragraphs, DOE participates in the standards review process of the ASHRAE Standard 90.1 Committee. Although not required by the statute, such participation helps inform DOE's ASHRAE-related rulemakings for both standards and test procedures. As a result of its participation, the Department does not see a need to formally include such provisions in the Process Rule or to prescribe the appropriate participation of the DOE representative.

The "Clear and Convincing Evidence" Standard for ASHRAE Equipment

The Process Rule NOPR also tentatively took the position that for DOE to utilize its statutory authority to establish more-stringent standards than the amendments to ASHRAE Standard 90.1 pursuant to 42 U.S.C. 6313(a)(6)(A)(ii)(II), DOE will be required to meet a very high bar to demonstrate the "clear and convincing evidence" threshold that is articulated in that subsection. The NOPR stated that when evaluating whether it can proceed with a rulemaking to potentially establish more-stringent standards from those adopted by ASHRAE, DOE will seek, from interested parties and the public, data and information to assist in making that determination, prior to publishing a proposed rule to adopt more-stringent standards. DOE's proposal further stated that "clear and convincing evidence" would exist only if: *Given the circumstances, facts, and data that exist for a particular ASHRAE amendment, DOE determines there is no substantial doubt that the more-stringent standard would result in a significant additional conservation of energy and is technologically feasible and economically justified.* In

the Process Rule NOPR, DOE stated that this high bar would mean that only in extraordinary circumstances would DOE conduct a rulemaking to establish more-stringent standards for covered ASHRAE equipment. 84 FR 3910, 3915 (Feb. 13, 2019).

Although the “clear and convincing evidence” requirement is explicitly set forth in the statute, DOE’s proposal in the Process Rule NOPR to clarify that evidentiary standard drew considerable discussion and debate. A number of commenters welcomed the clarification regarding what some had viewed as an opaque process with no indication that a higher evidentiary standard had been met. Other commenters were concerned about DOE’s proposed clarifications regarding “clear and convincing evidence” and seemed to prefer the Department’s prior approach of simply assessing the evidentiary basis for amended standards more stringent than the levels in ASHRAE Standard 90.1 on a case-by-case basis. Still other commenters posed follow-up questions to try to better understand how a “clear and convincing evidence” standard would be applied in this context. These comments are summarized and addressed in the following paragraphs.

As noted, a number of commenters supported the Process Rule NOPR’s proposed clarification of the “clear and convincing evidence” standard in the context of DOE’s rulemaking process for ASHRAE equipment. (AHRI, March 21, 2019 Public Meeting Transcript, No. 87 at p. 12; Joint Commenters, No. 112 at pp. 2-3; NAFEM, No. 122 at p. 2; AGA, No. 114 at p. 10; ASHRAE, No. 109 at pp. 2-3) On this topic, AHRI stated that it agrees that a formal declaration of what “clear and convincing evidence” means and how it will be implemented increases certainty by increasing transparency and reflects the congressional intent expressed through EPCA. (AHRI, March 21, 2019 Public Meeting Transcript, No. 87 at p. 12) Similarly, ASHRAE

expressed appreciation for DOE's position that it would only consider standards more stringent than the ASHRAE levels if such standards can meet a very high bar to demonstrate the "clear and convincing" evidence threshold mandated by EPCA. (ASHRAE, No. 109 at pp. 2-3) The AGA commented that the proposal makes it clear that DOE will adopt the action taken by ASHRAE except in those circumstances where the Department, pursuant to a defined process and parameters, determines a more-stringent standard is appropriate. (AGA, No. 114 at p. 10)

The Joint Commenters and NAFEM concurred with the definition of "clear and convincing evidence" proposed by DOE with one minor edit, suggesting to add the word "specific" before "circumstances, facts, and data." NAFEM sought this addition to clarify that DOE cannot make a determination on its general understanding, but instead must base its determination upon specific information related to the equipment class standards subject to ASHRAE revision. In seeking to justify more stringent standards than the ASHRAE level, the Joint Commenters expressed a similar rationale in support of an evidentiary standard that requires demonstration of specific facts and evidence to support a higher standard or that an industry consensus test procedure is demonstrably unreasonable. (Joint Commenters, No. 112 at pp. 2-3; NAFEM, No. 122 at p. 2)

Although Spire agreed with the direction of DOE's approach, it suggested taking matters a step further. Rather than envisioning the possibility that ASHRAE Standard 90.1 levels and more-stringent DOE levels could each save a significant additional amount of energy and be technologically feasible and economically justified, Spire argued that the statute's use of a "clear and convincing" standard should be interpreted as a presumption that the industry consensus

standards are going to be adequate, unless there is clear evidence that they are not, at which point such presumption is rebutted. (Spire, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 114-115) In its written comments, Spire reiterated its point by suggesting that DOE's approach to application of the "clear and convincing" standard should be modified to clarify that DOE would only go beyond the ASHRAE Standard 90.1 levels when DOE determines (supported by clear and convincing evidence) that "only" a more-stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified. (Spire, No. 139, at p. 19)

In contrast to these viewpoints, another group of commenters disfavored DOE's proposed approach to applying the "clear and convincing evidence" standard in the ASHRAE context. A number of commenters challenged DOE's attempted clarification as a legal matter, characterizing it as an improper reinterpretation of the relevant statutory provision. For example, Earthjustice faulted DOE's Process Rule NOPR for assert[ing] – without substantiation – that the 'clear and convincing evidence' threshold is only met when 'there is no substantial doubt that the more stringent standard would result in a significant additional conservation of energy, is technologically feasible and economically justified.' 84 FR 3915. According to Earthjustice, the cited DOE language is a legal interpretation for the statutory requirement for "clear and convincing evidence," but the NOPR is devoid of any statutory or case law authority supporting the proposition that evidence is only "clear and convincing" when it leaves "no substantial doubt." The commenter argued that the NOPR's failure to provide a clear foundation (*e.g.*, discussing how the term "clear and convincing" has been interpreted in other contexts) deprives stakeholders a meaningful opportunity to comment on the claimed equivalency. For example,

Earthjustice referenced a U.S. Court of Appeal for the District of Columbia Circuit case finding “[t]he clear and convincing standard ‘generally requires the trier of fact, in viewing each party’s pile of evidence, to reach a firm conviction of the truth on the evidence about which he or she is certain.’” Parsi v. Daiouleslam, 778 F.3d 116, 131 (D.C. Cir. 2015) (quoting United States v. Montague, 40 F.3d 1251, 1255 (D.C. Cir. 1994)). The commenter questioned whether one could arrive at a “firm conviction” while recognizing the existence of “substantial doubt.” Earthjustice argued that the Process Rule NOPR does not answer that question and leaves stakeholders uncertain as to the extent to which the proposed amendments to the Process Rule comply with EPCA. (Earthjustice, No. 134 at p. 2; Earthjustice, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 125-126)

The AGs Joint Comment also questioned DOE’s effort in the NOPR to clarify what would constitute “clear and convincing evidence,” as would justify the adoption of more-stringent standards than those set forth in ASHRAE Standard 90.1. Specifically, in the NOPR DOE tried to clarify the matter by suggesting that there would be “no substantial doubt” on the part of the decision-maker that such standards are warranted. However, the AGs Joint Comment argued that such description is either the same as the statutory “clear and convincing evidence” standard (in which case it is purposeless and arbitrary) or more restrictive (in which case it would be contrary to EPCA and improperly cede authority to ASHRAE). (AGs Joint Comment, No. 111 at p. 13) On this same point, NRDC stated that in its assessment, DOE’s statements about “no substantial doubt” and going beyond ASHRAE “only in extraordinary circumstances” appear to be more narrow and restrictive than Congress’s intent. The commenter stated that it does not find DOE’s attempts to define “clean and convincing” to be either necessary or helpful. NRDC

also argued that DOE has failed to disclose where it got this definition and on which legal authorities it is relying, thereby frustrating the public's ability to meaningfully comment on the proposal. (NRDC, No. 131 at pp. 14-15) NRDC reminded DOE that it does not have the power to redefine "clear and convincing" so as to make it something closer to a "beyond a reasonable doubt" standard. (NRDC, March 21, 2019 Public Meeting Transcript, No. 87 at p. 121)

The CEC also opposed DOE's attempt to clarify the "clear and convincing" standard when pursuing standards more stringent than those contained in ASHRAE Standard 90.1. In the CEC's view, the "clear and convincing" standard has already been defined by case law, so further regulatory clarification is irrelevant. The CEC also argued that raising the evidentiary level to meet this standard -- as it alleged that DOE has attempted to do -- would leave significant, cost-effective, and technologically feasible energy savings on the table at a time when manufacturers are already redesigning equipment to meet ASHRAE 90.1. (CEC, No. 121 at p. 3)

The CA IOUs claimed that DOE's proposal to interpret the phrase "clear and convincing" to mean "no substantial doubt" ignores historical context for standard and test procedure improvements to the detriment of consumers. (CA IOUs, No. 124 at p. 4) The CA IOUs cited the 2016 commercial unitary air conditioners (CUAC) direct final rule¹⁰ (DFR) as an example of how DOE properly applied the clear and convincing threshold previously. (CA IOUs, No. 124 at pp. 4-5)

¹⁰ 81 FR 2420 (Jan. 15, 2016).

Other commenters focused on the potential practical effects of DOE's proposed clarification of the statute's clear and convincing evidence requirement in the context of ASHRAE equipment. For example, ACEEE criticized DOE's attempt to clarify the term "clear and convincing," arguing that a new "no substantial doubt" criterion for ASHRAE products would add uncertainty. As the commenter correctly pointed out, Congress required "clear and convincing evidence" for the Department to go beyond ASHRAE levels for such equipment. ACEEE characterized DOE's change in terminology from a legal term of art to a financial term as more of a substitution for, than an interpretation of, congressional intent, which would introduce a new term that would need to be interpreted, and would likely be subject to litigation. If interpreted to be more stringent than the congressional requirement, ACEEE argued that it would prevent the Department from adopting standards or test procedures that best meet the legal requirements. Finally, ACEEE asserted that the Department has failed to demonstrate a problem with the legislative language as would justify the need to change it. (ACEEE, No. 123 at p. 4)

ASAP also questioned what it views as the leap from an evidentiary requirement of "clear and convincing" to "no substantial doubt," and the commenter expressed concern that DOE would adopt ASHRAE Standard 90.1 levels without consideration of other alternatives, thereby eliminating the potential for negotiations and cooperation among stakeholders, a point with which NEEA agreed. According to ASAP, DOE's proposed language could make the process a "one way street," which presumably means that ASHRAE would drive or monopolize DOE's standard-setting process. (ASAP, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 111-112, 115, 119; NEEA, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 116-7)

Instead, ASAP argued that there is no need to interpret the “clear and convincing evidence” threshold as part of the Process Rule, because DOE to date has appropriately interpreted that threshold. According to ASAP, DOE’s proposal to consider levels beyond the ASHRAE levels only in “extraordinary circumstances” could sacrifice very large energy and economic savings, outcomes which the commenter does not believe reflects the intent of Congress. Even though DOE has adopted the ASHRAE levels in most cases over the past decade, ASAP, et al. offered concern that DOE’s proposed changes are attempting to severely restrict the Department’s ability to consider standards higher than the ASHRAE levels, as the agency has appropriately and effectively done in the past. (ASAP, *et al.*, No. 126 at pp. 2, 3-5)

CT-DEEP cautioned DOE from using the “clear and convincing” standard prescribed by EPCA with respect to setting standards higher than those contained in ASHRAE Standard 90.1 as a means “to avoid the responsibility of evaluating the potential for more stringent standards by setting the bar at ‘no substantial doubt that the more stringent standard would result in a significant additional conservation of energy.’” (CT-DEEP, No. 93 at p. 3)

NPCC disagreed with DOE’s application of the “clear and convincing evidence” standard with respect to establishing energy conservation standards more stringent than the ones adopted by ASHRAE, arguing that such approach would mean that DOE could only set more-stringent standards in extraordinary circumstances. Instead, NPCC urged DOE to use the seven existing EPCA criteria at 42 U.S.C. 6295(o) when determining whether to establish more-stringent standards for ASHRAE equipment, consistent with the approach to other products. (NPCC, No. 94 at p. 4; NPCC, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 122-123)

Finally and in contrast to the several commenters who sought to validate DOE's current process vis-à-vis "clear and convincing evidence," the AGs Joint Comment asserted that DOE's proposed revision improperly applied the clear and convincing evidence standard and ASHRAE deference when it is conducting its six-year-lookback review under 42 U.S.C. 6313(a)(6)(C). Instead, these commenters suggested that a six-year-lookback analysis should be conducted using a preponderance of the evidence standard, arguing that DOE has misinterpreted the relevant provisions of EPCA and risks failing to promulgate standards when they are warranted under the statute. (AGs Joint Comment, No. 111 at pp. 13-14)

Similarly, Earthjustice argued that DOE has improperly applied the "clear and convincing" evidence requirement to instances where the statute only requires a showing of substantial evidence. Earthjustice asserted that ASHRAE's failure to amend the standards applicable to a type of covered equipment under ASHRAE/IES Standard 90.1 does not justify applying the "clear and convincing" standard to DOE's 6-year review obligation under 42 U.S.C. 6313(a)(6)(C), a result which it argues is foreclosed by the plain text of the statute. According to the commenter, EPCA explicitly requires that clear and convincing evidence support any determination to adopt a standard more stringent than an amended Standard 90.1 requirement (pursuant to 42 U.S.C. 6313(a)(6)(A)(ii)(II)), but the statute does not apply this unique standard outside of that context (*see* 42 U.S.C. 6306 (applying "substantial evidence" standard to other DOE rules)). Instead, Earthjustice argued that when DOE considers amending standards for equipment in the absence of ASHRAE action, EPCA requires that DOE apply the "criteria" imposed under 42 U.S.C. 6313(a)(6)(A) if determining that standards do not need to be amended

and the “criteria and procedures” applicable under 42 U.S.C. 6313(a)(6)(B) if proposing amended standards. (42 U.S.C. 6313(a)(6)(C)(i)) Accordingly, the commenter reasoned that the “criteria” governing any determination not to amend the current standards for covered equipment are that adoption of a more-stringent standard for the equipment would not “result in significant additional conservation of energy and [be] technologically feasible and economically justified” (see 42 U.S.C. 6313(a)(6)(A)(ii)(II)). Under Earthjustice’s theory, Congress’s decision to withhold the procedures applicable under 42 U.S.C. 6313(a)(6)(A) from any determinations not to amend in the context of a 6-year review means the evidentiary burden applicable under 42 U.S.C. 6313(a)(6)(A) does not apply to 6-year reviews. (Earthjustice, No. 134, at pp. 2-3)

In response to these comments on the Process Rule NOPR, DOE emphasizes that in discussing the need for “clear and convincing evidence” in the context of more-stringent standard levels for ASHRAE equipment, the Department was simply explaining the existing requirements of the statute, rather than seeking to change or reinterpret those requirements. Specifically, EPCA provides that in order to adopt a more-stringent standard, DOE must determine, by rule published in the *Federal Register*, and supported by clear and convincing evidence, that adoption of a uniform national standard more stringent than the amended ASHRAE/IES Standard 90.1 for the product would result in significant additional conservation of energy and is technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)(II)) The language of the statute makes clear that Congress intended to establish a high bar for DOE to go beyond the levels in ASHRAE Standard 90.1, an intention clearly reflected by its decision to require a heightened evidentiary standard. Thus, the statute itself demonstrates that Congress intended for DOE to adopt the ASHRAE levels, except for in

extraordinary circumstances where the “clear and convincing evidence” standard has been met. In the Process Rule NOPR, DOE summarized the relevant ASHRAE-related statutory requirements and sought to explain how it implements its legislative mandate. A number of commenters supported DOE’s clarification efforts as promoting transparency, but others mistakenly believed that DOE was proposing substantive and inappropriate changes. However, given that DOE proposed no change to the existing statutory requirement, nor could it do so, commenters were not deprived of any opportunity to comment, contrary to what Earthjustice and NRDC suggest. Furthermore, by simply following the requirements of the statute regarding the need for clear and convincing evidence, DOE does not anticipate that there would be the basis for enhanced litigation risk or successful legal challenges.

In the Process Rule NOPR, DOE offered language to explain its understanding of Congress’s clear and convincing evidence requirement and how the Department has implemented that requirement. Specifically, DOE stated that “clear and convincing evidence” would exist only if: *Given the circumstances, facts, and data that exist for a particular ASHRAE amendment, DOE determines there is no substantial doubt that the more-stringent standard would result in a significant additional conservation of energy and is technologically feasible and economically justified.* Rather than changing the definition in question, DOE has found this language consistent with how that term has historically been interpreted and defined in the civil context in Federal Circuit and District Courts throughout the United States. The Ninth Circuit Court of Appeals has defined the “clear and convincing” standard as requiring the evidence “to be so clear as to leave no substantial doubt [and] sufficiently strong to command the unhesitating assent of every reasonable mind.” *Ittella Foods, Inc. v. Zurich Ins. Co.*, 98 Fed. Appx. 689, 691

(9th Cir. 2004) (internal citations omitted). Similarly, the Eighth Circuit Court of Appeals has defined, “clear and convincing evidence” as “leav[ing] no substantial doubt,” *Hunt v. Pan American Energy*, 540 F.2d 894, 901 (8th Cir. 1976), and the Second Circuit Court of Appeals stated, “[c]lear and convincing proof is highly probable and leaves no substantial doubt,” *Dongguk University v. Yale University*, 734 F.3d 113, 123 (2d Cir. 2013) (internal citations omitted).¹¹ Further, the *Handbook of Federal Evidence*, which consists of materials designed to aid in understanding Federal evidentiary rules, also defines “clear and convincing evidence” in civil cases as requiring that “evidence be so clear as to leave no substantial doubt” and describes this standard of proof to only be sustained if the evidence induces a reasonable belief that the facts asserted are highly probably true. (*Handbook of Federal Evidence*, § 301:5 Burden of Persuasion, Incidence and Measure in Civil Cases (8th ed., 2018))

Regarding NRDC’s argument that the “clear and convincing evidence” standard is a term of legal art, of which Congress was aware when they adopted the language, and that DOE does not have the power to redefine “clear and convincing evidence” to make it closer to “beyond a reasonable doubt,” as exhibited in the above paragraph, DOE is not redefining the standard, and

¹¹ Federal District Courts in circuits around the country have provided similar definitions of “clear and convincing evidence” in the civil context. See *Mandel v. Boston Phoenix, Inc.*, 492 F. Supp. 2d 26, 29 (D. Mass. 2007) (“The meaning of the term ‘clear and convincing evidence’—evidence so clear as to leave no substantial doubt.”), *Jersey Const., Inc. v. Pennoni Assoc., Inc.*, 1993 WL 2999 (E.D. Pa. 1993) (citing *Joseph's v. Pizza Hut of America, Inc.*, 733 F. Supp. 222, 223–24 (W.D.Pa.1989), *aff'd*, 899 F.2d 1217 (3d Cir. 1990) (“Clear and convincing evidence is evidence that leaves no substantial doubt . . . establishes not only that the proposition at issue is probable, but also that it is highly probable.”), *Hanna Coal Co., Inc. v. I.R.S.*, 218 B.R. 825, 829 fn 2 (W.D. Va. 1997) (“Clear and convincing evidence leaves no substantial doubt in your mind. It is proof that establishes in your mind, not only [that] the proposition at issue is probable, but also that it is highly probable.”), *Gentry v. Hershey Co.*, 687 F. Supp. 2d 711, 724 (M.D. Tenn. 2010) (“Evidence is clear and convincing when it leaves no serious or substantial doubt about the correctness of the conclusions drawn.”), *Sala v. U.S.*, 552 F. Supp. 2d 1157, 1162 (D. Colo. 2007) (“Clear and convincing evidence leaves no substantial doubt in your mind. It is proof that establishes in your mind, not only [that] the proposition at issue is probable, but also that it is highly probable.”), *Tobinick v. Novella*, 108 F. Supp. 3d 1299, 1309 (S.D. Fla. 2015) (“The burden of proof by clear and convincing evidence requires a finding of high probability. The evidence must be so clear as to leave no substantial doubt. It must be sufficiently strong to command the unhesitating assent of every reasonable mind.”).

DOE's provision for "clear and convincing evidence" is consistent with how it has been regularly defined in Federal Courts for many years. Accordingly, DOE agrees with NRDC that Congress was cognizant of the common law and accepted definition of "clear and convincing evidence" when implementing 42 U.S.C. 6313(a)(6)(A)(ii)(II); the definition of "clear and convincing evidence" as evidence that is so clear as to leave "no substantial doubt" can be traced to a 1899 California Supreme Court decision, decided far before 42 U.S.C. 6313(a)(6)(A)(ii)(II) was enacted. *Sheehan v. Sullivan*, 126 Cal. 189, 193 (1899) (defining clear and convincing evidence as clear, explicit, and unequivocal; so clear as to leave no substantial doubt). Again, this language has been reiterated by Federal Courts in the many years since.

Given DOE's commitment to meet its statutory duty to determine whether more-stringent standards are appropriate for ASHRAE equipment under either the ASHRAE trigger or the 6-year-lookback authority, the concerns expressed by CT-DEEP and ASAP that DOE will use the requirement for clear and convincing evidence to avoid its responsibility to consider whether the criteria for more-stringent standards have been met is unfounded. DOE will continue to evaluate the potential for more-stringent standards as a routine part of its ASHRAE rulemaking process. As part of that process, DOE will ensure that all three statutory criteria are met (*i.e.*, that there is clear and convincing evidence that a more stringent standard can achieve significant additional energy savings, technological feasibility, and economic justification); DOE cannot focus on only one factor (economic justification criteria), as NPCC suggested, because the statute is clear in terms of the criteria that must be considered. By following the requirements of the statute, there is no risk of forgone energy and economic savings as ASAP suggests, nor harm to consumers as the CEC asserts. Moreover, there should not be any impediments in the context of negotiated

rulemakings, because DOE will always consider alternate standard levels, provided they comport with all applicable statutory requirements. In light of the tenets of the ASHRAE-related provisions Congress wrote into the statute, there is little incentive for gamesmanship on the part of ASHRAE, because if that organization fails to consider amended standards or only adopts weak standards, DOE's obligation to consider more-stringent standards will resolve that problem.

In terms of the technical modification suggested by the Joint Commenters and NAFEM – suggesting to add the word “specific” to the definition of “clear and convincing evidence” right before “circumstances, facts, and data,” DOE agrees with these commenters that the agency cannot make a determination on its general understanding, but instead must base its determination upon specific information related to the equipment class standards subject to ASHRAE revision. Such specific circumstances, facts, and data are necessary to support a finding that a standard higher than that contained in ASHRAE Standard 90.1 is permitted or that an industry consensus test procedure is demonstrably unreasonable. Consequently, DOE is adding the word “specific,” as recommended by these commenters.

DOE does not agree with Spire's recommended interpretation of “clear and convincing evidence” so as to provide a presumption that the industry consensus standards are going to be adequate, unless there is clear evidence that they are not, at which point such presumption is rebutted. Again, Spire suggested that DOE's approach to application of the “clear and convincing” standard should be modified to clarify that DOE would only go beyond the ASHRAE Standard 90.1 levels when DOE determines (supported by clear and convincing

evidence) that "only" a more-stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified. Although the statute presumes that ASHRAE Standard 90.1 levels are going to be adequate (given the requirement for DOE to adopt them when triggered), it also contemplates that a more-stringent standard, supported by clear and convincing evidence, could exist which would result in significant additional energy savings and be technologically feasible and economically justified. Spire would not only ask DOE to prove a negative, but also to reject a more-stringent standard that meets the statutory criteria on that basis. DOE finds no basis in the statute to support such a reading, and consequently, the Department declines to adopt Spire's suggested interpretation.

Finally, DOE would address the comments from the AGs Joint Comment and Earthjustice suggesting that the Department should not apply the "clear and convincing evidence" standard and ASHRAE deference when the agency is conducting a 6-year-lookback review rulemaking under 42 U.S.C. 6313(a)(6)(C), but instead use a preponderance of the evidence standard. Notwithstanding any past DOE statements to the contrary, the plain language of the statute does not support such a reading.

Under the 6-year-lookback, the statute provides that every six years, DOE shall conduct an evaluation of each class of covered equipment and shall publish either: (1) a notice of determination that standards for the product do not need to be amended, based on the criteria established under subparagraph (A) (42 U.S.C. 6313(a)(6)(A)) or (2) a notice of proposed rulemaking including new proposed standards based upon the criteria and procedures established under subparagraph (B) (42 U.S.C. 6313(a)(6)(B)). These commenters focus on the distinction

that Congress directed DOE to subsection (A) when DOE makes a finding that no new standard is warranted (*i.e.*, the provision containing the “clear and convincing evidence” requirement), but directed the agency to subsection (B) when proposing to adopt more stringent standards, thereby presuming that an ordinary preponderance of evidence standard should apply. The commenters’ interpretation is difficult to square with the statute on more than one level. First, it seems illogical that Congress would hold DOE to two different evidentiary standard levels that involve essentially the same standard-setting decision. Under the commenter’s interpretation, DOE would issue a notice of determination that a product does not need to be amended when there is no clear and convincing evidence to support a more-stringent standard (applying the criteria of subparagraph (A)), but would be able to issue a proposed rule for those same more-stringent standards using the preponderance of the evidence standard. Such reading seems unworkable in practice. However, Congress arguably foreclosed that anomalous result when it directed that the proposed rule to amend the standard be based on the *criteria and procedures* established under subparagraph (B). (42 U.S.C 6313 (a)(6)(C)(i)(II)) In parsing the economic justification provisions of that subsection, the statute prominently states, “In determining whether a standard is economically justified *for the purposes of subparagraph (A)(ii)(II)*, the Secretary shall ... determine whether the benefits of the standard exceed the burden of the proposed standard by to the maximum extent practicable, considering....” (42 U.S.C. 6313(a)(6)(B)(ii) (Emphasis added)) Thus, in determining whether it is appropriate to set a more-stringent standard, 42 U.S.C. 6313(a)(6)(B) clearly references 42 U.S.C. 6313(a)(6)(A)(ii)(II), which contained the “clear and convincing evidence” requirement. In other words, 42 U.S.C. 6313(a)(6)(C) references 42 U.S.C. 6313(a)(6)(B), which references 42 U.S.C. 6313(a)(6)(A). The explicit language of the statute furthers congressional intent that DOE should defer to ASHRAE in most

cases when setting uniform national standards for covered equipment within that organization's purview. Consequently, DOE affirms its understanding that the statute's clear and convincing evidence requirement applies in the context of both ASHRAE trigger and 6-year-lookback rulemakings.

A handful of commenters raised other viewpoints regarding the "clear and convincing evidence" standard or questions regarding how DOE would implement its proposed clarifications. Among this group, Southern Company asked DOE to provide more specificity regarding what "high standard for overriding ASHRAE" means. (Southern Company, March 21, 2019 Public Meeting Transcript, No. 87 at p. 113) In response to this question, DOE refers back to the statutory scheme because the Department is not changing the standard for review regarding when it is appropriate to adopt levels more stringent than those set forth in ASHRAE Standard 90.1 as uniform national standards. Under 42 U.S.C. 6313(a)(6)(A)(ii)(II), EPCA makes clear that DOE may adopt more-stringent levels only where the Department determines, supported by clear and convincing evidence, that adoption of a more-stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified. As discussed previously, the case law makes clear that "clear and convincing evidence" is a level higher than a preponderance of the evidence, and as explained in the paragraphs immediately above, the statute applies this evidentiary requirement to both ASHRAE "trigger" and 6-year-lookback rulemakings. Thus, under the statutory scheme, DOE believes it reasonable to expect that in most cases, Federal standards will be set at a level corresponding to those in ASHRAE Standard 90.1.

Regarding “clear and convincing” evidence, Ingersoll Rand stated that it had in the past assumed that DOE would only consider alternative energy efficiency requirements if there were clear and convincing evidence that such standards would save a significant amount of energy, be technologically feasible, and be economically justified when compared to both the existing appliance standards and those contained in the updated version of ASHRAE Standard 90.1. As part of DOE’s process under 42 U.S.C. 6313(a)(6), Ingersoll Rand reasoned that DOE should review the same analysis developed by the ASHRAE Standard 90.1 development committee to justify revisions to the energy efficiency requirements for these products. The commenter stated that it does not interpret the proposed definition for “clear and convincing evidence” as a departure from this process. (Ingersoll Rand, No. 118 at p. 2)

In response, DOE generally agrees with Ingersoll Rand, in that the Department thoroughly considers the existing uniform national standard (for both ASHRAE trigger and 6-year-lookback rulemakings) and the ASHRAE standard (for trigger rulemakings¹²). In conducting the comprehensive review and analysis in support of its rulemaking under the ASHRAE trigger, DOE would anticipate examining the work of the ASHRAE Standard 90.1 Committee, to the extent it is publicly available.

Spire commented that any evidence on which DOE relies in support of the adoption of an energy conservation standard – including ASHRAE equipment -- must be made available for review and public comment during the rulemaking process and with adequate time to do so.

¹² DOE does not anticipate the need to examine the ASHRAE levels in the context of a 6-year-lookback rulemaking, because the existing Federal standard already would reflect either the level in ASHRAE Standard 90.1 or a more-stringent level supported by clear and convincing evidence.

(Spire, No. 97 at p. 9; Spire, No. 139 (Attachment C)) In response, DOE strives to make as much of the data underlying its appliance standards rulemakings publicly available to the greatest extent possible through posting of such information to the docket for that rulemaking. However, because it is frequently the case that some portion of the relevant data on which the agency makes its decision is proprietary in nature, DOE makes such data available in aggregated and anonymized form. DOE has determined that this approach is sufficient to allow interested stakeholders to understand the rationale for DOE's decision while appropriately protecting confidential information.

EEI argued that if DOE is going to revise ASHRAE equipment standards, it will publish a proposed rule for public comment, so even if the evidentiary bar is raised, there is still an open process with the opportunity for parties to suggest changes. (EEI, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 124-125) In response, DOE agrees with EEI's understanding that it is the Department's standard practice to issue a proposed rulemaking with an opportunity for public comment prior to adopting any new or revised Federal standards for covered ASHRAE equipment. However, DOE would once again clarify that it may not and is not changing the statute's "clear and convincing evidence" requirement for adopting levels more stringent than those contained in ASHRAE Standard 90.1 as uniform national standards.

Interpretations of the ASHRAE "Trigger" Provisions and Other ASHRAE Issues

The Process Rule NOPR also sought to address certain issues of statutory interpretation regarding EPCA's ASHRAE trigger provisions. Making clear that DOE will adopt the action taken by ASHRAE except in rare circumstances raises the question as to when DOE is triggered

by ASHRAE action in amending Standard 90.1. In the February 13, 2019 Process Rule NOPR, DOE proposed to clarify its interpretation of the ASHRAE trigger provision in this context. For example, if ASHRAE acts to amend its standard at the equipment class level for air-cooled variable refrigerant flow (VRF) multi-split air conditioners greater than or equal to 135,000 Btu/h, is DOE triggered to consider amended standards: (1) only for the specific equipment class(es) actually amended in ASHRAE Standard 90.1; (2) for the entire equipment category of VRF equipment, or (3) for the entire covered equipment type of small commercial package air conditioning and heating equipment? EPCA does not specifically define the term “amended” in the context of ASHRAE Standard 90.1. (84 FR 3910, 3915) Although the statute is not entirely clear on this matter, DOE has maintained a consistent position for over a decade, at least since it interpreted what would constitute an “amended standard” in a final rule published in the *Federal Register* on March 7, 2007. 72 FR 10038. In that rule, DOE stated that the statutory triggering event requiring DOE to adopt uniform national standards based on ASHRAE action is for ASHRAE to change a standard for any of the equipment listed in EPCA section 342(a)(6)(A)(i) (42 U.S.C. 6313(a)(6)(A)(i)) by increasing the efficiency level for that equipment. *Id.* at 72 FR 10042. In other words, if the revised ASHRAE Standard 90.1 leaves the standard level unchanged or lowers the standard, as compared to the level specified by the uniform national standard adopted pursuant to EPCA, DOE does not have authority to conduct a rulemaking to consider a higher standard for that equipment pursuant to 42 U.S.C. 6313(a)(6)(A). DOE subsequently reiterated this position in final rules published in the *Federal Register* on July 22, 2009 (74 FR 36312, 36313), May 16, 2012 (77 FR 28928, 28937), and July 17, 2015 (80 FR 42614, 42617).

However, in the American Energy Manufacturing Technical Corrections Act (AEMTCA), Public Law 112-210 (Dec. 18, 2012), Congress modified several provisions related to ASHRAE Standard 90.1 equipment. In relevant part, DOE must act whenever ASHRAE Standard 90.1's "standard level or design requirements under that standard" are amended. (42 U.S.C. 6313(a)(6)(A)(i)) Furthermore, that statutory amendment required that DOE must conduct an evaluation of each class of covered equipment in ASHRAE Standard 90.1 "every 6 years." (42 U.S.C. 6313(a)(6)(C)(i))

In practice, DOE's review in making this assessment of ASHRAE's actions has been strictly limited to the specific standards for the specific equipment for which ASHRAE has made a change (*i.e.*, determined down to the equipment class level). In the Process Rule NOPR, DOE stated that it believes that this is the best reading of the statutory provisions discussed previously, because if ASHRAE were to change the standard for a single equipment class, but DOE then considered itself triggered at the equipment category level or equipment type level, the process would arguably no longer comport with the statutory scheme. More specifically, in such cases, DOE would be addressing certain classes of ASHRAE equipment for which standards had not changed, so it would be impossible for DOE to adopt the ASHRAE level as the statute envisions (as, in most cases, it would already be the same as the existing Federal standard). Instead, DOE could only consider adoption of more-stringent standard levels. Such interpretation would arguably run counter to the "follow ASHRAE" statutory structure set in place by Congress. Furthermore, Congress specifically and recently added a 6-year-lookback provision for covered ASHRAE equipment at 42 U.S.C. 6313(a)(6)(C)(i), a provision which instructs DOE in terms of how and when to address covered equipment upon which ASHRAE has not acted in a timely

manner. Furthermore, DOE believes that ASHRAE not acting to amend Standard 90.1 is tantamount to a decision that the existing standard should remain in place. DOE believes it is reasonable to assume that, in revising ASHRAE Standard 90.1, ASHRAE would consider an entire equipment category before deciding to adopt a revised standard for only one or more classes of equipment in that category. Thus, for equipment classes for which it was not triggered, DOE would act under its 6-year-lookback authority at 42 U.S.C. 6313(a)(6)(C) to issue a standard more stringent than the existing standard for the product, provided that there exists clear and convincing evidence, as defined above, to support such decision.

Commenters raised a number of other issues of statutory interpretation which would be expected to impact how the revised Process Rule would treat ASHRAE equipment, each of which is addressed below. Again, consistent with its long-standing interpretation, the Department proposed to define the ASHRAE “trigger” to be applicable only to those equipment classes where ASHRAE Standard 90.1 has adopted an increase to the efficiency level as compared to the current Federal standard for that specific equipment class. Most commenters supported DOE’s interpretation regarding EPCA’s ASHRAE trigger provision. BWC agreed with DOE’s proposal to limit its changes to those specific equipment classes where ASHRAE has made a change, even though other similar equipment types were left untouched. (BWC, No. 103 at p. 2) The Joint Commenters also supported DOE’s clarification that ASHRAE’s revision of one equipment class’s performance standards or test method does not trigger DOE’s statutory obligation to initiate a rulemaking on all related equipment classes, explaining that DOE is correct to decline to initiate additional rulemaking on related products that were never considered by the consensus body. (Joint Commenters, No. 112 at p. 3) Similarly, Lennox agreed with

DOE's clarification that ASHRAE's revision of one equipment class's performance standard or test method does not trigger DOE's statutory obligation to initiate a rulemaking on all related equipment classes. Lennox stated that this clarification will avoid the artificial imperative to initiate a rulemaking on a product class that was not addressed by ASHRAE. (Lennox, No. 133 at p. 3)

However, one commenter appeared to favor a different interpretation of the ASHRAE trigger, under which triggering would result in a significantly broader rulemaking action. A.O. Smith raised a number of questions seeking additional clarification regarding DOE's interpretation in the Process Rule NOPR of the statutory provisions related to ASHRAE equipment (particularly the "ASHRAE trigger" and 6-year-lookback which would lead to rulemaking action). The commenter's inquiries were focused on packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks, although DOE notes that the issues raised would apply more broadly to the full suite of covered ASHRAE equipment. (A.O. Smith, No. 127 at pp. 7-8)

First, A.O. Smith asked, if the ASHRAE trigger only applies to those specific equipment classes where ASHRAE Standard 90.1 has increased the efficiency level, how will the Department handle the other equipment classes within the same product category or within the same covered product that ASHRAE 90.1 did not address? In other words, how does the statutory requirement by which, every six years, the Secretary shall conduct an evaluation of each class of covered equipment and shall publish either: (a) a notice of the determination of the Secretary that standards for the product do not need to be amended, based on the criteria

established in the statute; or (b) a notice of proposed rulemaking including new proposed standards based on the criteria and procedures established under subparagraph (B), apply to those equipment classes where ASHRAE 90.1 took no action? Would the Department conduct a separate “six-year look back” rulemaking to address those equipment classes where ASHRAE 90.1 took no action, or does the Department interpret ASHRAE 90.1 action on a single equipment class sufficient to satisfy the statutory requirement for the entire category or covered product? (A.O. Smith, No. 127 at p. 7)

As explained previously, EPCA contains two separate provisions pertaining to updating the standards for ASHRAE equipment, one for the ASHRAE trigger (*see* 42 U.S.C. 6313(a)(6)(A)) and another for the 6-year-lookback (*see* 42 U.S.C. 6313(a)(6)(C)). Under DOE’s interpretation, these two statutory provisions act in harmony to ensure that the standards for all types of covered ASHRAE equipment are reviewed on a periodic basis and updated as appropriate. Although not compelled to do so by the statute, DOE may decide in appropriate cases to simultaneously conduct an ASHRAE trigger rulemaking (*i.e.*, for those equipment classes for which ASHRAE set a higher standard) and a 6-year-lookback rulemaking (*i.e.*, for those equipment classes where ASHRAE left levels unchanged or set a lower standard) so as to address all classes of an equipment category at the same time. In other cases, DOE may choose to bifurcate the rulemakings and to handle the non-triggered equipment classes on a schedule to comply with the requirement to review standards every six years. As a general principle, DOE believes it appropriate to weigh the benefits of expediency (*e.g.*, consolidated rulemaking, potentially earlier energy savings) against the burdens (*e.g.*, accelerated compliance and certification costs for non-triggered equipment) for any given ASHRAE rulemaking. DOE anticipates stakeholder

feedback on this preliminary issue in response to publication of the ASHRAE NODA following an ASHRAE triggering event.

Second, A.O. Smith asked, if a metric is changed by ASHRAE Standard 90.1 for a given equipment class, does this trigger Department action? The new metric may or may not result in an increase in the efficiency level as compared to the Federal efficiency level. (A.O. Smith, No. 127 at p. 7)

In response, if ASHRAE maintained the existing regulating metric that serves as the basis for current Federal energy conservation standard (without changing those levels), DOE would not consider the addition of another metric to be a triggering event. However, if ASHRAE were to substitute a new metric and eliminate the existing metric entirely, DOE would need to, at a minimum, conduct a crosswalk to the existing metric to see if the changed ASHRAE Standard 90.1 levels would be more stringent than the current Federal standards, in which case DOE would be triggered for those equipment classes where ASHRAE established a higher standard. (DOE expects this latter scenario to likely be theoretical, as substantial market turmoil would conceivably accompany a wholesale exchange of metrics without the maintenance of a transitional metric.) Nonetheless, DOE would need to consider as a policy matter the appropriateness of transitioning to the new metric which ASHRAE has incorporated into Standard 90.1. If DOE determines that there is a sound scientific, technical, and policy basis for changing the metric underlying the Federal standard, it would pursue such change through notice-and-comment rulemaking.

Next, A.O. Smith stated that if the Department were to interpret the provisions as separate requirements under the statute, it could foresee a future where the Department is conducting two separate rulemakings (*i.e.*, one under EPCA's ASHRAE authority and another under EPCA's 6-year-lookback authority), which carry different processes under the proposed Process Rule, different analyses, and different compliance dates. According to A.O. Smith, this would be a very burdensome and costly interpretation because it would require double the resources spanning many years to comply with the uncoordinated requirements for the different equipment classes within a given covered product. For example, the commenter stated that there are currently 10 equipment classes of commercial packaged boilers, each with a different energy conservation standard for which compliance is required. A.O. Smith asked, if ASHRAE Standard 90.1 adopts a more-stringent standard for only one of those ten equipment classes and the Department subsequently adopts that standard, would the Department continue to be triggered by the six-year lookback to conduct a regular review of the other 9 equipment classes within the covered equipment? If this is the case, A.O. Smith strongly urged the Department to revisit its narrowly-defined interpretation of the ASHRAE trigger due to the potential burdens associated with misaligned review cycles arising from the separate grants of authority under EPCA. (A.O. Smith, No. 127 at pp. 7-8)

On its face, A.O. Smith's comment makes what appears to be a reasonable argument. However, the Department emphasizes that all other commenters on this issue opposed the idea of shifting the ASHRAE trigger from the equipment class level to an equipment category or equipment type level. In addition to individual companies (BWC and Lennox), a Joint Comment by 10 major trade associations (ACCA, AHRI, AMCA International, ALA, AHAM, HARDI,

HPBA, NAFEM, NEMA, and PMI) – representing hundreds of corporate members — all supported DOE’s proposal and in opposition to the change suggested by A.O. Smith to remedy “misaligned review cycles.” DOE has concluded that there are regulatory burdens separate from participation in the rulemaking process that these commenters deem to outweigh the ones identified by A.O. Smith. Perhaps the Joint Commenters see some benefit in spacing out rulemakings and associated compliance expenditures. Regardless, DOE reasons that there are other avenues in appropriate cases to alleviate the concerns expressed by A.O. Smith.

As noted previously, DOE believes that its approach provides the best reading of the statutory provisions at issue, because if ASHRAE were to change the standard for a single equipment class, but DOE then considered itself triggered at the equipment category level or equipment type level, the process would arguably no longer comport with the statutory scheme. In such cases, DOE would be addressing certain classes of ASHRAE equipment for which standards had not changed, so it would be impossible for DOE to adopt the ASHRAE level as the statute envisions (as, in most cases, it would already be the same as the existing Federal standard). Instead, DOE could only consider adoption of more-stringent standard levels. Such interpretation would arguably run counter to the “follow ASHRAE” statutory structure set in place by Congress. Equipment classes which ASHRAE has decided to leave unchanged would remain subject to review under the statute’s 6-year-lookback provision. Whether to consolidate ASHRAE trigger and 6-year-lookback rulemakings will likely hinge on the facts of a given situation. For example, if ASHRAE amends 9 out of 10 commercial packaged boiler equipment classes, it may make sense to immediately commence a 6-year-lookback rulemaking and to consolidate the rulemakings. However, the answer may conceivably be very different if

ASHRAE acts to amend only one equipment class. Fortunately, DOE's amended Process Rule provides ample opportunity for stakeholders to weigh in on such issues through the prioritization process, an early assessment, or through comments on the ASHRAE NODA analyzing potential energy savings in response to an ASHRAE trigger. Through such mechanisms, DOE believes that it is possible to minimize, if not eliminate, the types of regulatory burdens about which A.O. Smith expressed concern.

Earthjustice challenged as unsupported DOE's statement in the NOPR that "ASHRAE not acting to amend Standard 90.1 is tantamount to a decision that the existing standard remain in place." (84 FR 3910, 3916 (Feb. 13, 2019)). The commenter argued that DOE has not explained why that is a reasonable interpretation of ASHRAE's failure to amend a standard, or why that interpretation of ASHRAE inaction is consistent with the intent of Congress, which it argues has repeatedly amended 42 U.S.C. 6313(a)(6) to make clear that ASHRAE cannot shield covered equipment from strengthened DOE standards (*compare* 42 U.S.C. 6313(a)(6)(C) (2010) (requiring DOE's review "[n]ot later than 6 years after issuance of any final rule establishing or amending a standard, as required for a product under this part"), with 42 U.S.C. 6313(a)(6)(C) (2019) (requiring DOE's review "Every 6 years" and establishing a deadline for action on equipment "as to which more than 6 years has elapsed since the most recent final rule establishing or amending a standard")). (Earthjustice, No. 134 at p. 3)

In response to Earthjustice, DOE reasons that if ASHRAE acts to amend standards for certain equipment classes for an equipment category in Standard 90.1, that organization would have at a minimum reviewed the entirety of that equipment category. It would be illogical, confusing, and misleading to cherry-pick only select equipment classes within a category without

reviewing the complete category, particularly since that could impose unnecessary burdens on industry and State code enforcement officials. Consequently, presuming this assumption is correct, in most cases, ASHRAE would be making an active decision to the extent it did not modify certain equipment classes within an equipment category. However, the matter is largely a philosophical debate, because such characterization of ASHRAE's action (or, in this case, non-action) does not have any impact on the subsequent steps DOE is required to take under EPCA. Where ASHRAE has not acted, DOE remains obligated to review the need for amended standards under DOE's 6-year-lookback authority. (42 U.S.C. 6313(a)(6)(C)) Pursuant to that statutory provision, DOE must adopt amended standards more stringent than the current standards, if there is clear and convincing evidence showing that such amended standards would result in significant additional conservation of energy and are technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)(II); 42 U.S.C. 6313(a)(6)(B)(ii); 42 U.S.C. 6313(a)(6)(C)(i)(II)) Because DOE must follow its legal obligations under EPCA, ASHRAE cannot shield covered equipment from potential amended energy conservation standards in the manner Earthjustice suggests.

Southern Company argued that DOE should (but has not always) examine the totality of ASHRAE actions in setting equipment standards, because there may be associated usage standards which are also part of the equation (*e.g.*, requiring occupancy sensors to limit the time lamps are on, which may justify a higher energy use per watt but save more energy overall). According to Southern Company, DOE needs to look at the totality of how equipment would be used under ASHRAE Standard 90.1, not just looking at a particular piece of equipment in isolation and judging that by DOE's rules, ASHRAE should have chosen a higher standard. (Southern Company, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 102-103)

In response, DOE acknowledges that ASHRAE action in Standard 90.1 may sometimes employ a suite of complementary provisions intended to provide operational and energy savings benefits. In doing so, ASHRAE is not bound by the legal constraints of EPCA, so the organization is free to approach issues from a more purely technical perspective, rather than a regulatory one. In contrast, DOE must meet its legal obligations under the statute —particularly 42 U.S.C. 6313(a)(6)(A)-(C) and applicable definitions under 42 U.S.C. 6311 — in considering new or amended standards for ASHRAE equipment, whether acting under the ASHRAE trigger or 6-year-lookback. In general, DOE must adopt the levels set forth in ASHRAE Standard 90.1, unless DOE finds, supported by clear and convincing evidence, that more-stringent standards would result in significant additional energy savings and are technologically feasible and economically justified. Consequently, in conducting rulemakings for ASHRAE equipment, DOE must live within the parameters set forth in the statute.

PG&E argued there needs to be some form of verification of ASHRAE test procedures to ensure that they produce representative results. The company cited an example where through its own research, it was able to determine that an ASHRAE test procedure was producing results that were as much as 50 percent off, so the commenter recommended that a process be put in place to ensure that similar problems do not arise going forward. (PG&E, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 123-124)

DOE agrees that there should be a robust assessment of industry consensus test procedures prior to adoption as Federal test procedures, as contemplated by the statute. EPCA clearly

contemplates that the test procedures for ASHRAE equipment “shall be those generally accepted industry test procedures or rating procedures developed or recognized by [AHRI or ASHRAE] as referenced in ASHRAE/IES Standard 90.1.” The statute also directs that, when those industry test procedures are amended, DOE should amend the Federal test procedures to be consistent. The statute does require that such amended test procedures remain reasonably designed to produce test results that reflect the energy efficiency, energy use, and estimated operating costs of a type of industrial equipment (or class thereof) during a representative average use cycle and shall not be unduly burdensome to conduct. If the test procedure is a procedure for determining estimated annual operating costs, such amended procedure must continue to provide that such costs shall be calculated from measurements of energy use in a representative average-use cycle, and from representative average unit costs of the energy needed to operate such equipment during such cycle. (42 U.S.C. 6314(a)(2), (3), (4)(A)-(B)) If the amended industry consensus test procedures fail to meet these requirements, DOE may establish its own test procedure that meets the requirements of the statute. (42 U.S.C. 6314(a)(4)(C))

It is DOE’s standard practice to undertake a review of amended industry consensus test procedures referenced in ASHRAE Standard 90.1 before proposing conforming amendments to the corresponding Federal test procedures. As part of the process, DOE seeks public comment on its proposed test procedures, and all substantive comments must be addressed prior to adoption of a test procedure final rule. DOE believes that thorough vetting by both the Department and the interested public offers a sound practice that satisfies these express statutory requirements, as demonstrated by the case in PG&E’s example.

Southern Company argued that the proposed 0.5 quad threshold for significant energy savings should not apply to individual equipment lines in ASHRAE's standards (given that many involve equipment with smaller overall energy usage). The point was that for those equipment types, the threshold level may never be reached, so DOE would be left once again to await ASHRAE action, despite that fact that Congress had adopted a 6-year-lookback provision for ASHRAE. (Southern Company, March 21, 2019 Public Meeting Transcript, No. 87 at p. 122)

In response, DOE notes that while Southern Company made the argument at the March 21, 2019 public meeting that certain categories of ASHRAE equipment may have small shipments, energy consumption, or both, such that the energy savings potential would be limited and potentially never meet the proposed 0.5 quad threshold for significant energy savings, the commenter did not provide any further detail, data, or other evidence to support its claim. Southern Company then asserts that DOE's proposed threshold would prevent such equipment from ever being subject to the 6-year-look back at 42 U.S.C. 6313(a)(6)(C), thereby ceding too much control to ASHRAE.

If, for the sake of argument, DOE were to assume Southern Company's assessment of the market for ASHRAE equipment to be correct, the Department believes that the commenter has failed to consider all of the relevant provisions of EPCA, as well as the impact that the percentage savings prong of the energy savings threshold would have in such situations. First, in the ASHRAE context, Congress did include a requirement that more-stringent standards be supported by clear and convincing evidence showing that such standards would result in "significant additional conservation of energy" and be technologically feasible and economically justified (42 U.S.C. 6313(a)(6)(A)(ii)(II)), a provision which comes into play under both the

ASHRAE trigger and the 6-year-lookback. By including such requirement for significant additional energy savings, Congress not only acted consistently with its overall approach of deferring to ASHRAE but also to explicitly point out that some equipment may have energy savings that are too small to justify the imposition of standards. The implication of Southern Company's argument would be to have DOE read the "significant additional energy savings" requirement out of the statute for at least some subset of ASHRAE equipment. DOE is not at liberty to follow that suggestion, but instead must give effect to all applicable statutory provisions.

Nonetheless, DOE is sensitive to the concern that such equipment not be put beyond the reach of energy conservation standards without proper consideration of the potential for significant additional energy savings. That is why DOE has also proposed to include a percentage energy savings prong as part of its significant energy savings threshold test. Under that prong, if covered ASRAE equipment could achieve a substantial energy savings improvement (i.e., 10% reduction in energy use), such equipment would pass the test even though the quad threshold may never be reached. In summary, DOE has concluded that its approach properly addresses all of the relevant statutory provisions for adopting standard levels for ASHRAE equipment, including the requirement for significant additional energy savings. DOE's approach permits an assessment of each category of ASHRAE equipment, accords ASHRAE the deference it is due under the statute, and permits the adoption of more-stringent standards, supported by clear and convincing evidence, in appropriate cases.

D. Priority Setting

Previously, the Process Rule at 10 CFR part 430, subpart C, Appendix A, section 3(d) outlines DOE's priority-setting analysis, which considers ten factors: (1) potential energy savings; (2) potential economic benefits; (3) potential environmental or energy security benefits; (4) applicable deadlines for rulemakings; (5) incremental DOE resources required to complete the rulemaking process; (6) other relevant regulatory actions affecting products; (7) stakeholder recommendations; (8) evidence of energy efficiency gains in the market absent new or revised standards; (9) status of required changes to test procedures; and (10) other relevant factors. The Process Rule also previously required that the results of this analysis be used to develop rulemaking priorities and proposed schedules for the development and issuance of all rulemakings which would then be documented and distributed for review and comment. 10 CFR part 430, subpart C, Appendix A, section 3(a). The 1996 Process Rule also stated that each Fall, DOE would issue, simultaneously with the Administration's Regulatory Agenda, a final set of rulemaking priorities, the accompanying analysis, and the schedules for all priority rulemakings that it anticipated within the next two years. (*Id.* at section 3(c).)

In the February 13, 2019 NOPR, DOE proposed revising this process. DOE proposed that stakeholders would have the opportunity to provide input on prioritization of rulemakings through a request for comment as DOE begins preparation of its Regulatory Agenda each spring. In particular, DOE would point interested parties to the Regulatory Agenda posted to www.reginfo.gov the previous Fall and would request input concerning which rulemaking proceedings should be in particular action categories in the spring Regulatory Agenda and request comment on the timing of such rulemakings. If stakeholders believe that the Department

is pursuing a rule that should not be prioritized, they would have the opportunity to use this mechanism to so inform DOE. If stakeholders believe DOE should act more quickly on another rulemaking they could make that point as well. DOE has concluded that increased stakeholder input early in the rulemaking process, combined with the public availability of the Regulatory Agenda, would meet the same objectives as DOE's previous priority-setting analysis. (84 FR 3910, 3916) (February 13, 2019)

In response to DOE's NOPR, stakeholders provided mixed reviews of the proposal. Several stakeholders supported DOE's proposed prioritization process to invite early stage comments. (Acuity, No. 95, at p. 2; AHAM, March 21, 2019 Public Meeting Transcript, No. 87, at p. 136; AHRI, March 21, 2019 Public Meeting Transcript, No. 87, at p. 135; AGA, No. 114, at p. 11; BWC, No. 103 at p. 2; CTA, No. 136 at p. 2; Edison Electric Institute, March 21, 2019 Public Meeting Transcript, No. 87, at pp. 133-34; GM Law, No. 105 at p. 2; Joint Commenters, No. 112 at p. 3; NEMA, March 21, 2019 Public Meeting Transcript, No. 87, at p. 134; NPCC, No. 94, at p. 5; NPGA, No. 110 at p. 1; BHI, No. 135, at p. 4)

Others commenters stated that EPCA deadlines take precedence over the Department's policy preferences in determining DOE's agenda. For instance, ASE questioned whether DOE's prioritization proposal is needed. ASE argued that DOE's proposal is potentially duplicative of existing procedures based on statutory and regulatory requirements. ASE argued that Congress has already set deadlines for DOE, either by a date specific or through the 6-year-lookback provision (for energy conservation standards) or 7-year-look-back provision (for test procedures). Furthermore, ASE stated that DOE already reports its priorities through contributions to the Regulatory Agenda. However, ASE suggested that using requests for

information (RFIs) to gather stakeholder input could help prioritize new product coverage and publicize statutory deadlines. ASE recommended that DOE issue a revised proposal to better reconcile its statutory and regulatory duties with its plan for priority setting. (ASE, No. 108 at p. 3) ASAP stated that a provision for priority-setting should not be in the Process Rule. (ASAP, March 21, 2019 Public Meeting Transcript, No. 87, at p. 137, 139) ASAP, et al. stated that existing statutory deadlines will largely determine the sequencing of DOE's work on standards and test procedures. Further, requesting input on prioritization would seem to be duplicative of the "early assessment" for each product since stakeholders will have the opportunity to provide input at the beginning of each rulemaking regarding whether DOE should proceed. (ASAP, et al., No. 126 at pp. 2, 5)

CT-DEEP, CEC, and Cal-IOUs, and Earthjustice agreed with other commenters that DOE should not prioritize rulemakings based on anything other than the sequencing already required by statute. (CT-DEEP, No. 93, at p. 2; CEC, No. 121, at p.3; Cal-IOUs, No. 124, at p.6; Earthjustice, No. 134, at p. 3) As Earthjustice summarized, the Process Rule cannot authorize a delay or suspension of work that would lead to or exacerbate the violation of a statutory deadline. (Earthjustice, No. 134, at p. 3)

The Cal-IOUs also indicated that it did not understand the specific details of this aspect of DOE's proposal or how it would ensure that DOE would adhere to its schedules. The Cal-IOUs acknowledged that providing stakeholder input on DOE's priorities seems positive, but it warned that this added input would create additional burden through the imposition of new steps to the current process. (Cal-IOUs, No. 124, at p. 6). Also, Energy Solutions questions how

priority setting would supersede EPCA requirements. (Energy Solutions, March 21, 2019 Public Meeting Transcript, No. 87, at p. 132)

As for the 10 existing priority-setting factors, the CEC supports the continued application of the 10 existing priority-setting factors to DOE's priority-setting process and supports streamlining how the DOE notifies the public of its priorities by eliminating duplicative processes and using the Regulatory Agenda as the means for distributing the Agency's plans for upcoming efficiency regulations. (CEC, No. 121, at p. 3) Another commenter, AGA, stated that the Department should focus on two of the 10 existing priority-setting factors, the potential energy savings and the potential economic benefits as an initial screen for prioritization. The focus on these two factors is important because if the Department determines the proposed regulatory activity does not provide sufficient energy savings or is not cost effective, there is no need to review the other factors. (AGA, No. 114, at p. 11)

Although stakeholders have given DOE's prioritization proposal mixed reviews, DOE is implementing this revised priority-setting process because increased stakeholder input early in the rulemaking process, combined with the public availability of the Regulatory Agenda, is additional input that could better inform the Department in its decision-making process concerning priority-setting and would meet the same objectives as DOE's previous priority-setting analysis in the current Process Rule.

E. Coverage Determinations

In its proposal, DOE explained that EPCA provides DOE with the discretionary authority to classify additional types of consumer products and industrial/commercial equipment as “covered” within the meaning of EPCA. *See* 42 U.S.C. 6292(b) (providing authority for establishing coverage over consumer products) *and* 42 U.S.C. 6295(l) (setting criteria for setting standards for consumer products); *see also* 42 U.S.C. 6312(c) (providing authority for establishing coverage over specified commercial and industrial equipment). This authority allows DOE to consider regulating additional products/equipment that would further the goals of EPCA to conserve energy for the Nation —as long as the statutory threshold requirements are met.

DOE proposed to initiate the process through which it would add coverage of a particular product or equipment by publishing a notice of proposed determination to address solely the merits of covering that product or equipment. The notice would explain how the coverage of the item would meet the relevant statutory requirements and why coverage is “necessary or appropriate” to carry out the purposes of EPCA. (84 FR 3910, 3916 (Feb. 13, 2019)). *See also* 42 U.S.C. 6292(b)(1) (detailing criteria for classifying a consumer product as a covered product). In cases involving commercial/industrial equipment, DOE follows the same process, except that the Department need only show the coverage determination is “necessary” to carry out the purposes of EPCA. *See* 42 U.S.C. 6312(b) (providing that the Secretary of Energy “may, by rule, include a type of industrial equipment as covered equipment if he determines that to do so is necessary to carry out the purposes of [Part A-1 of EPCA]”). DOE’s authority to add coverage over commercial equipment is more limited than its coverage authority for consumer products

because Congress specified the particular types of equipment that could be added. (42 U.S.C. 6311(2)(B)) Stakeholders would then be given 60 days to submit written comments to DOE on the proposed determination notice. Subsequently (and in a change from DOE's past practice), DOE would assess the written comments and then publish its final decision on coverage as a separate notice, an action which would be completed prior to the initiation of any rulemaking for related test procedures or energy conservation standards. If the final decision determines that coverage is warranted, DOE would proceed with its typical rulemaking process for both test procedures and standards, applying the requirements of the Process Rule, as amended. *See generally*, 84 FR 3910, 3916 (Feb. 13, 2019).

Comment Summary

DOE received a variety of comments responding to its proposal, which would, at its core, emphasize the need for clearly establishing coverage over the relevant product/equipment prior to taking any additional steps, such as engaging with the public on matters involving potential test procedures or possible energy conservation standards. Commenters responded both in support of the proposal and against it.

Supporters of DOE's proposal included manufacturers, trade associations, and utility companies.

Acuity agreed with the proposal, stating that it makes sense to solicit public input and determine coverage prior to considering potential standards for products/equipment. (Acuity, No. 95, at pp. 2-3.) It added that a bifurcated approach like the one proposed by DOE would

save both DOE and stakeholders significant resources if there should be a "no coverage" determination. (Acuity, No. 95, at p. 3.) Acuity also agreed with DOE's proposal to identify newly covered products in a limited fashion and to narrowly and clearly define any new designations involving products. (Acuity, No. 95, at p. 3.)

BWC agreed with DOE's proposal to finalize a coverage determination at least six months prior to publication of a test procedure proposal, but it cautioned that the scope of coverage should be narrowly defined so as to prevent any unintended consequences. (BWC, No. 103 at p. 2)

Westinghouse Lighting stressed that as a small manufacturer, it does not have the bandwidth to quickly examine the impacts of a sudden "last minute" expansion in product coverage. It also emphasized that the coverage determination process "cannot go back to square one" but needs to have clear "exit ramp options" along the way to enable the agency to drop or add a product that no one had considered earlier in the process. (Westinghouse Lighting, March 21, 2019 Public Meeting Transcript at pp. 161-162.)

AGA supported DOE's proposal to limit any expansion of coverage to those narrow circumstances that satisfy the statutory requirements and purpose of EPCA. (AGA, No. 114, at 13)

NEMA stressed that it preferred to have determinations of rulemaking scopes of coverage, along with the completion of accompanying test procedures, completed early during DOE's rulemaking efforts. (NEMA, March 21, 2019 Public Meeting Transcript at p. 157)

The Joint Commenters also supported DOE's coverage determination proposal. In their view, finalizing coverage determinations before the initiation of any labeling, standards, or test procedure rulemakings (by six months prior to the start of a test procedure rulemaking) is necessary because it is impossible to address substantive issues until the products at issue have been clearly and specifically defined. (Joint Commenters, No. 112 at p. 3) They also asserted that any proposed covered products/equipment should be narrowly defined with sufficient clarity so that the proposed coverage corresponds to what is intended to be covered. In their view, following the proposed approach would avoid unnecessary confusion, the wasting of resources, and failures to address relevant and critical issues. They also asserted that finalizing coverage determinations first would ensure that both stakeholders and DOE know what products/equipment are at issue in the substantive rulemakings. The Joint Commenters also supported DOE's proposal to initiate a new coverage determination process (and to complete that process prior to moving forward either with a standards or test procedure rulemaking) if DOE finds it necessary to expand or reduce the scope of coverage during the substantive rulemaking process. (Joint Commenters, No. 112 at pp. 3-4)

HPBA stressed that unless a given product is "covered" by DOE, the Agency may not prescribe standards for that product (and only under certain circumstances) – and before DOE considers proposing a standard, there must be the possibility of a "substantial improvement" in

that product's energy efficiency and DOE must first consider whether labeling requirements would be effective. (HPBA, No. 128, at pp. 1-2.) HPBA elaborated that, with respect to labeling, the question is not whether a labeling rule would achieve the same energy savings that a mandatory standard would achieve but whether such a rule would be insufficient "to induce manufacturers to produce and consumers and other persons to purchase" products capable of achieving the highest level of efficiency that would be technologically feasible and economically justified. (HPBA, No. 128, at p. 2 (quoting from 42 U.S.C. 6295(l)(D)).) HPBA stressed that DOE's consideration of potential new standards should occur only after the potential products for coverage have been clearly identified but before any standards development has begun and only after the criteria for issuing standards for newly covered products under 42 U.S.C. 6295(l) (i.e. newly covered products) have been satisfied. (HPBA, No. 128, at p. 2.)

EEI viewed the proposal as "a good first step." (Edison Electric Institute, March 21, 2019 Public Meeting Transcript at pp. 147)

HPBA suggested that DOE codify the predicate conditions for substantive regulations in the Process Rule and stressed that DOE must (1) be clear as to what products are at issue, while determining that it is necessary to regulate them and (2) settle the issue of finality for judicial review to avoid having disputes over coverage before a decision is made on whether to impose standards. To address the latter of these, HPBA suggested characterizing the determination of coverage as a "preliminary determination of coverage." (HPBA, March 21, 2019 Public Meeting Transcript at pp. 148-49) Following this suggested approach would lead to a final determination once standards are adopted. (HPBA, March 21, 2019 Public Meeting Transcript at p. 149)

Responding to concerns during the March 2019 Public Meeting about having to restart the whole process every time there is an error in the coverage determination, Spire argued that it is necessary for the process to restart to help ensure that manufacturers have an opportunity to be involved in the process. (HPBA, March 21, 2019 Public Meeting Transcript at pp. 153, 158)

Finally, GM Law supported what it regarded as DOE's proposal to limit its ability to recognize new covered products. In its view, the proposed approach would allow all interested parties to focus on the most effective conservation measures. (GM Law, No. 105 at p. 3)

Commenters who expressed concerns about DOE's proposal, like those who supported it, represented a variety of different interests. These interested parties included energy efficiency advocacy groups, States, and utilities.

Earthjustice expressed concern that DOE would not gather standards-related information prior to finalization of the coverage determination. (Earthjustice, March 21, 2019 Public Meeting Transcript at p. 156)

NPCC disagreed with the proposed use of a separate coverage determination process. In its view, having notice and comment on coverage adds unnecessary burden and time to the standards process. (NPCC, No. 94, at p. 5.)

ACEEE argued that requiring a final coverage determination prior to initiating a test procedure or standard rulemaking, and a final test procedure 180 days before a standards NOPR,

will weaken coordination of DOE's rulemaking process. In its view, these restrictions will prolong the rulemaking process and prevent subsequent proceedings from informing earlier ones, resulting in worse coverage and test procedure decisions or years-long delays as the earlier rulemakings are repeated. (ACEEE, No. 123, at p. 2) ACEEE also indicated that it generally supported an approach that would result in completion of test procedures well before the end of the comment period on the accompanying energy conservation standard rulemaking for the affected product, while leaving an ability to fix problems that may become apparent later. (ACEEE, No. 123, at p. 2)

ASAP, like HPBA, supported the idea of settling the issue of finality regarding a given coverage determination for judicial review purposes and suggested that having a "preliminary determination" would help avoid the prospect of restarting the analytical process by moving back to a coverage determination analysis for the entire product or equipment type at issue. It envisioned a process where DOE could continue to move forward on those products/equipment that were already addressed by the earlier "preliminary" determination. (ASAP, March 21, 2019 Public Meeting Transcript at pp. 151-152) As proposed, ASAP expressed concern that the coverage determination process would be restarted whenever a problem with coverage is detected, which would result in DOE being unable to produce a rule within a reasonable timeframe, particularly if test procedures and coverage determinations are not being addressed in parallel with each other. To avoid this potential outcome, ASAP suggested that DOE adopt an approach that would address coverage determination and test procedures simultaneously. (ASAP, March 21, 2019 Public Meeting Transcript at pp. 167-168)

In jointly-filed comments, ASAP, *et al.* argued that the Process Rule should not require that a coverage determination be completed prior to initiating a rulemaking. These groups criticized DOE's proposal as not reflecting the fact that information learned during the rulemaking process for both test procedures and standards can, and should, inform the coverage determination. (ASAP, *et al.*, No. 126 at p. 2) They cautioned that the proposal would result in potentially adding steps to the process and unnecessarily delaying rulemakings and pointed to the miscellaneous refrigeration products rule to illustrate how information that is learned during the rulemaking process can ultimately inform the determination of coverage. (ASAP, *et al.*, No. 126 at pp. 5-6)

The State AGs contended that DOE's proposal to issue final coverage determinations six months prior to initiating a test procedure or standards rulemaking would improperly delay the promulgation of beneficial and necessary standards that are in the public interest. They worried that a standards-setting rulemaking would be significantly delayed if DOE determined that a coverage determination should be modified after finalizing coverage. They also worried that the need to restart the coverage determination process could act as a disincentive to modifying coverage determinations, even when warranted by new information obtained during the rulemaking process. In their view, the current approach followed by DOE readily permits changes to the scope of coverage as the process unfolds, while DOE's proposed approach would require re-noticing of the coverage determination, re-finalization, and restarting the 6-month clock for a standards rulemaking, all of which could impact DOE's ability to meet statutory deadlines. (AGs Joint Comment, No. 111 at pp. 8-9) The State AGs also contended that DOE's proposed "limited" approach to identifying new covered products is contrary to what they view

as Congress's intent for DOE to continue expanding covered products. (AGs Joint Comment, No. 111 at p. 4) Finally, the State AGs noted that since coverage determinations allow DOE to regulate previously unregulated products, a delay at this stage would delay the potentially significant benefits that could accrue from regulating these new products, contrary to EPCA's objective of propelling the market for new efficient consumer and industrial technologies. (AGs Joint Comment, No. 111 at pp. 8-9)

The CEC also made a variety of broad points in its public meeting statements and comments. It stated its belief that it did not view the issuance of a coverage determination to have a preemptive effect until standards are set for the product at issue. (CEC, March 21, 2019 Public Meeting Transcript at p. 165) It also argued that DOE must retain flexibility to modify the applicable scope of coverage in response to new information developed as part of the rulemaking process. (CEC, No. 121, at p. 4 (pointing to DOE's actions during its battery charger rulemaking that resulted in moving backup battery chargers into a separate rulemaking proceeding)) In its view, DOE's proposal to restart its entire standard-setting process if it needs to revise the scope of coverage would effectively prevent any appliances from becoming newly covered products, regardless of the potential for energy savings, the maturity of the test procedure, or the readiness for standards. (CEC, No. 121, at p. 4.) The CEC added that, at best, DOE's proposal would result in delayed standards without increasing stakeholder participation or providing consumer benefits. (CEC, No. 121, at p. 4.)

CT-DEEP argued that the proposal's coverage determination provision would generate an unnecessary and increased number of steps to the rulemaking process in cases where DOE finds

it necessary to modify the scope of coverage during a rulemaking. (CT-DEEP, No. 93, at p. 2.) In its view, to prevent unnecessary delays, DOEs should not require a completed coverage determination prior to initiating a rulemaking. (CT-DEEP, No. 93, at p. 2.)

The Cal-IOUs noted during the March 2019 public meeting that it agreed with HPBA's suggestions – i.e. that DOE must codify the predicate conditions for substantive regulations in the process rule, which would involve (1) not only being clear as to what products are at issue but also to determine that it is necessary to regulate them and (2) making this decision final for judicial review purposes to avoid having a dispute over coverage. (Cal-IOUs and HPBA, March 21, 2019 Public Meeting Transcript at pp. 148-150) (To the latter of these points, Spire suggested the use of a “preliminary determination of coverage.” (HPBA, March 21, 2019 Public Meeting Transcript at p. 149)) The Cal-IOUs were also concerned with whether the proposed process would preempt State regulatory efforts. In their view, preemption should not apply until the relevant test procedure and standards are established. (Cal-IOUs, March 21, 2019 Public Meeting Transcript at pp. 155-156.) In their written comments, the Cal-IOUs again asserted that final coverage determinations should be established only after standards have been finalized for the product that is subject to that determination. (Cal-IOUs, No. 124, at p. 6.) In their view, publishing a final determination before establishing standards could be problematic if modifications to the product scope are necessary during the rulemaking process. (Cal-IOUs, No. 124, at p. 6.) They argued that without the flexibility to readily modify the scope of coverage without pausing a rulemaking to solicit public comment on the coverage determination before moving forward, the rulemaking burden would increase both on DOE and stakeholders. (Cal-IOUs, No. 124, at pp. 6-7 (alluding to various comments from the March 2019 Public Meeting

regarding potential problems with the proposed finalization of coverage determination before establishing standards))

Finally, individual commenter Linda Steinberg provided a general wholesale rejection of the proposal. (Steinberg, No. 90, at 1)

Response to Comments

DOE has carefully considered the comments it received from all interested parties. While DOE has decided to largely continue with its proposed approach, it is making certain clarifications to address the concerns expressed in response to the proposal.

As a preliminary matter, DOE notes that without settling the fundamental question of what product or equipment to regulate, all other aspects of its regulatory framework – i.e. test procedures and energy conservation standards – stand on infirm ground. By ensuring that the scoping of a particular product or equipment type is appropriately set, the necessary details regarding how to evaluate the efficiency of that product/equipment can be discussed and evaluated. Once there is an agreed-upon means on how to evaluate the energy efficiency of a product/equipment, only then can there be a meaningful analytical discussion regarding what the appropriate energy conservation standards should be. And without completing the test procedure prior to issuing a proposal on potential standards (and providing industry with time to familiarize itself with the test procedure itself), the analytical process in evaluating those potential standards would be more prone to confusion and error in ensuring that an appropriate standard is set. The approach that DOE is adopting in this final rule is consistent with what DOE has done in the

past, and the agency seeks to adhere to this analytical sequence to help ensure that the framework that it applies to newly covered products and equipment will stand on firm technical and legal grounds.

Further, while DOE will seek to ensure that its coverage determination is as complete as possible, the agency emphasizes that coverage of a product/equipment type is necessarily broad in nature. DOE does not anticipate many changes to the scope of coverage of a product or equipment type once it finalizes a coverage determination but it recognizes that there may be issues involving which classes of products or equipment to regulate and how to regulate them. In DOE's view, these timing and policy questions are separate from the issue of determining coverage and can be addressed within the context of an ongoing test procedure or standards rulemaking, as appropriate. By way of a hypothetical example, if, after finalizing a coverage determination for "handheld or worn mobile communication-capable computing devices" that specifically includes smartphones, tablets, and smartwatches, DOE discovers that another group of devices should also have been covered – *e.g.*, smartglasses – DOE would be able to address that issue separately from the question of what testing method or standard would apply to the remaining classes of products within this product type. The question of coverage in this instance would be handled separately, as would questions concerning the appropriate test procedure and standards to apply. Once coverage is established, DOE may opt to regulate certain classes of a particular product type and defer regulating other classes for another time as appropriate.

DOE appreciates the concern expressed by Earthjustice regarding the importance of obtaining sufficient data prior to making a final decision regarding product or equipment

coverage. This sentiment for ensuring that DOE has sufficient information before making any final coverage decision, as indicated in the earlier summary, was shared by others as well. DOE notes that in performing its analysis to determine whether to extend coverage over a particular product or equipment, it would, as it routinely has in the past, collect as much information as possible through its own analysis and research – including through careful reviews of responses to DOE’s requests for information to the public. DOE is also hopeful that, given this apparently universally-held belief in the importance of ensuring that the agency has sufficient information on which to base its coverage determinations, interested parties will endeavor to provide DOE with as much relevant information as possible to help inform the decision-making process.

DOE also appreciates the concerns expressed by ACEEE to ensure that coverage determinations are properly set. DOE agrees that this factor is a critical consideration in the context of its test procedure and standards rulemakings. A coverage determination is the foundational step that serves as the stepping stone upon which an entire rulemaking will stand – and without a strong foundation on which to build, the framework of the rulemaking will be prone to difficulties in implementation and potentially vulnerable to a legal challenge. DOE wishes to avoid these and similar issues going forward to ensure that its regulations are appropriately scoped and implemented.

Regarding the notion of continuing with an ongoing test procedure or standards rulemaking if a problem with a finalized coverage determination is found, DOE notes that the addition (or removal) of a given product/equipment class as part of the overall coverage of a product/equipment would be treated and analyzed separately from the other classes already being

examined and agreed upon as appropriate for inclusion as part of an ongoing test procedure or standards rulemaking. To the extent that a given coverage determination is so defective that the determination itself needs reevaluating – such as from the reliance on inaccurate energy use data – DOE would pause its pending rulemakings to examine what aspects of its rulemakings need modifying in light of the new information. That process may very well involve seeking public comment and input to assist DOE in addressing any deficiencies in its analysis and related determination. DOE believes that the prospect of having to re-initiate the coverage determination process – and the attendant regulatory uncertainty and overall unpredictability that will follow – will serve as sufficient incentive for all interested parties to participate fully in the coverage determination process and provide DOE with comprehensive and relevant data to consider as part of the Agency’s analysis when it first initiates a coverage determination for a product or equipment type. When applied in this manner, DOE does not believe that a “preliminary determination,” as suggested by HPBA and others, is necessary to ensure the validity of coverage determinations or that the rulemaking process is able to proceed in a timely fashion. Accordingly, DOE is declining to adopt the suggested preliminary determination approach. DOE may revisit this issue if circumstances suggest that such a change is needed.

DOE notes that examples of coverage determination changes cited by ASAP, et al. (miscellaneous refrigeration products) and the CEC (battery chargers), reflect approaches that could still be followed with respect to the addressing of any fundamental problems with coverage. In the example of miscellaneous refrigeration products (MREFs), DOE settled questions regarding coverage by eliminating icemakers from the potential rulemaking’s scope after initiating a negotiated rulemaking. DOE does not anticipate that this process of addressing

coverage questions prior to setting out the framework for related test procedures and standards would be altered by the provisions adopted in this final rule. DOE also notes that because it initiated a negotiated rulemaking to address test procedure- and standards-related issues, the agency was able to address its various regulatory framework issues through a mutually agreed-on negotiated rulemaking process allowing the handling of these issues. *See* 80 FR 17355 (April 1, 2015). DOE agrees that the concurrent publication of DOE's test procedure final rule and coverage determination for these products, when following the normal course set out in this final rule, would unfold differently than in the negotiated rulemaking process as used in the MREF proceeding. *See* 81 FR 46768 (July 18, 2016).

Regarding the CEC's concerns, DOE first notes that it disagrees with the CEC's suggestion that the proposed coverage determination provision would prevent DOE from issuing any standards in the future. Since EPCA separates the determination of coverage from the setting of standards and test procedures, unless the problems with an earlier coverage determination were defectively fatal, DOE does not anticipate that the coverage determination provision being adopted in this final rule will necessarily prevent the agency from issuing future standards. Instead, it will help ensure that the scope of coverage that DOE sets is appropriate and sets out a firm foundation for future rulemakings.

With respect to the backup battery charger situation cited by the CEC, DOE notes that the removal of that class of products from the battery charger rulemaking to a different product type's rulemaking would still be possible, as no overall change to the product type itself – i.e. battery chargers – was made. *See* 81 FR 38266, 38275 (June 13, 2016). Applying this final

rule's approach would allow a finalized coverage determination to continue to remain intact provided that the removal of a given class of products would not affect DOE's ability to demonstrate that the coverage criteria under 42 U.S.C. 6295(l) would still be met. If, however, DOE can no longer demonstrate that these criteria are satisfied, the prior coverage determination would need to be re-evaluated and analyzed as appropriate.

As for the CEC's statements regarding preemption, DOE notes that the scope of preemption is already covered by 42 U.S.C. 6297 and, as applicable, 42 U.S.C. 6295(ii). In DOE's view, test procedure rules would preempt any similar requirements imposed at the local level – irrespective of whether standards for the products/equipment at issue have been set. With respect to standards, any newly covered product for which DOE sets coverage and standards would be addressed under 42 U.S.C. 6295(ii). DOE agrees with the CEC that under this scenario, where DOE is setting standards for a newly covered consumer product type for the first time, preemption of any pre-existing standards would not occur until the compliance date for the relevant DOE standards is reached. *See* 42 U.S.C. 6295(ii)(1). With respect to industrial equipment for which DOE adds coverage, DOE believes that the provisions of 42 U.S.C. 6297(b) do not require that a Federal standard must first be effective in order for preemption to apply. This provision, which preempts State and local regulations until such time that a Federal standard becomes effective, provides an exception for those products that were already addressed by regulations prescribed or enacted before January 8, 1987 and applies to products before January 2, 1988. (Special provisions applicable to certain types of lighting products also apply.) Exceptions are also provided for a variety of other regulations but have no bearing on the

industrial equipment over which DOE has authority to add coverage. See 42 U.S.C. 6297(b)(2)-(7).

With respect to the concerns expressed by the State AGs, DOE's responsibility is to ensure that it establishes legally defensible standards for newly covered products – in effect, to perform a balancing test regarding the benefits of energy savings, the costs of producing those savings, and the policy considerations inherent in making the final decision on standards. This means that the standards that DOE promulgates must produce significant energy savings that are economically justified and technically feasible. DOE acknowledges EPCA's goal of improving energy efficiency, and also emphasizes that DOE must ensure that those standards are produced with the benefit of full participation from interested parties to help it ascertain whether the requisite criteria for setting standards in a given scenario are met. DOE believes that the measured approach being adopted in this rule will enable it to continue to do so in a manner that addresses the concerns noted earlier by interested parties regarding the predictability and transparency of DOE's process while ensuring that a proper scope is used to set economically justified levels of energy efficiency that will benefit the Nation as a whole.

If DOE determines to initiate the coverage determination process, it will first publish a notice of proposed determination, limited to the issue of coverage, in which DOE will explain how such products/equipment that it seeks to designate as "covered" meet the statutory criteria for coverage and why such coverage is "necessary or appropriate" to carry out the purposes of EPCA. (42 U.S.C. 6292(b)(1)) In the case of commercial/industrial equipment, DOE follows the same process, except that the Department need only show the coverage determination is

“necessary” to carry out the purposes of EPCA. (42 U.S.C. 6312) DOE’s authority to add commercial equipment is more limited than its authority to add consumer products because Congress specified the particular types of equipment that could be added. (42 U.S.C. 6311(2)(B)) Stakeholders would then be given 60 days to submit written comments to DOE on the proposed determination notice. Subsequently (and in a change from DOE’s past practice), DOE would assess the written comments and then publish its final decision on coverage as a separate notice, an action which would be completed prior to the initiation of any rulemaking for related test procedures or energy conservation standards. If the final decision determines that coverage is warranted, DOE will proceed with its typical rulemaking process for both test procedures and standards, applying the requirements of the Process Rule, as amended. Specifically, DOE would not issue any RFIs, notices of data availability (“NODAs”), or any other mechanism to gather information for the purpose of initiating a rulemaking to establish a test procedure or energy conservation standard for the proposed covered product prior to finalization of the coverage determination. DOE will also finalize coverage for a product at least six months prior to publication of a proposed rule to establish a test procedure. And, DOE will complete the test procedure rulemaking at least six months prior to publication of a proposed energy conservation standard. This timing does not present any legal issue because adding coverage for a product and establishing test procedures and standards is a purely discretionary act without legal deadline.

The Joint Commenters, citing to 42 U.S.C. 6292(b)(1)(A), argued that DOE should exercise its authority to identify new “covered products” in a limited fashion, extending only to those products for which EPCA regulation is “necessary or appropriate” to the achievement of

EPCA's purposes. They further argued that DOE's authority to identify new "covered products" is limited to products that consume at least enough energy to satisfy a stated minimum energy consumption criterion. The Joint Commenters urged that coverage determinations be made on a product-specific basis with each new covered product being defined separately with sufficient clarity to ensure that products serving different purposes are not treated as a single covered product. They added that each product should individually satisfy the minimum energy consumption requirement and qualify as a "necessary or appropriate" target for regulation. The Joint Commenters advocated that the Process Rule should be amended to require that proposed and final coverage determinations under 42 U.S.C. 6292(b) specifically identify each of the products at issue and provide a separate justification for the coverage of each. They further added that DOE has failed to satisfy these requirements in the past. Moreover, the Joint Commenters recommended that a final coverage determination be in place before substantive rulemaking on test procedures or energy conservation standards commences so that the public clearly understands which products are covered, thus avoiding unnecessary confusion, wasted resources, and the failure to address critical issues. Lastly, the Joint Commenters suggested that the 1996 Process Rule requires a reopening of comment on the justification for a coverage determination during the first rulemaking in which substantive regulation is imposed and if broader coverage is required, a new coverage determination must be proposed and finalized before initiating a rulemaking to regulate the broader range of products. (Joint Comment, No. 51 at pp. 9-10) Whirlpool and Lutron expressed support for these views. (See Whirlpool, No. 76 at p. 1; Lutron, No. 50 at p. 2)

DOE agrees with the points raised by the Joint Commenters, discussed previously, that DOE should exercise its authority to identify new “covered products” in a limited fashion. To this end, DOE proposes to extend coverage only to: (1) those consumer products for which EPCA regulation is “necessary or appropriate” to the achievement of EPCA’s purposes and which meet statutory consumption criterion, and (2) to that commercial/industrial equipment for which EPCA regulation is “necessary” to the achievement of EPCA’s purposes. DOE agrees that any proposed new covered products/equipment should be narrowly defined with sufficient clarity so that the proposed coverage corresponds to that which is intended.

DOE does not agree with the Joint Commenters’ suggestion that all coverage determinations must be reopened as a matter of course in the first substantive rulemaking on the newly covered product/equipment. After completing notice and comment on a proposed coverage determination and issuing a final determination, DOE believes it is appropriate to accord such process finality. However, if during the substantive rulemaking proceeding DOE finds it necessary and appropriate to expand or reduce the scope of coverage, the Department agrees with the Joint Commenters’ that a new coverage determination process at that point should be initiated and finalized prior to moving forward with the test procedure or standards rulemaking.

F. Early Stakeholder Input to Determine the Need for Rulemaking

In the February 2019 NOPR, DOE proposed to adopt provisions in the revised Process Rule detailing the steps DOE would take prior to issuing a notice of proposed rulemaking, including a proposed determination not to amend an energy conservation standard or test

procedure. The proposed revisions focused on two main areas: (1) establishing an early assessment review of potential test procedure and energy conservation standard rulemakings; and (2) clarifying what steps DOE will take, and the corresponding opportunities stakeholders will have to comment, after the early assessment review and before issuance of any notice of proposed rulemaking. (84 FR 3910, 3917)

a. Early Assessment Review

In order to ensure that DOE maximizes the benefits of its rulemaking efforts, DOE proposed to revise the Process Rule to include an early assessment review of the suitability of further rulemaking. *Id.* at 84 FR 3917. This purpose of this review is to limit the resources, from both DOE and stakeholders, committed to rulemakings that will not satisfy the requirements in EPCA that a new or amended energy conservation standard save a significant amount of energy, and be economically justified and technologically feasible; and that an amended test procedure more accurately measure energy (or water) use during a representative average use cycle, or reduce testing burden. (42 U.S.C. 6295(o)(3)(B); 42 U.S.C. 6293(b)) Therefore, as the first step in any proceeding to consider establishing or amending an energy conservation standard or amending a test procedure, DOE would publish a notice in the *Federal Register* announcing that DOE is considering initiation of a proceeding, and as part of that notice, DOE would request submission of related comments, including data and information showing whether any new or amended standard would satisfy the relevant requirements in EPCA for a new or amended energy conservation standard or an amended test procedure. Based on the information received in response to the notice and its own analysis, DOE would determine whether to proceed with a rulemaking for a new or amended energy conservation standard or an amended test procedure. If

DOE determines that a new or amended standard or amended test procedure would not meet the applicable statutory criteria, DOE would engage in notice and comment rulemaking to make that determination. If DOE receives sufficient information suggesting it could justify a new or amended standard or the information received is inconclusive with regard to the statutory criteria, DOE would undertake the preliminary stages of a rulemaking to issue or amend an energy conservation standard. Beginning such a rulemaking, however, would not preclude DOE from later making a determination that a new or amended energy conservation standard or amended test procedure cannot satisfy the requirements in EPCA. (84 FR 3910, 3917, 3921)

In response, several commenters supported the addition of an early assessment review. For example, Acuity stated that early determinations at these stages will save regulated parties and the Department countless hours and valuable resources by cutting off what have become virtually automatic rulemakings to update standards and test procedures—updates that no longer produce meaningful energy savings and divert attention and resources from pro-consumer innovation, R&D, etc. (Acuity, No. 95, at p. 3) Similarly, Joint Commenters stated that early assessment improves and streamlines the Department’s approach to rulemaking by identifying early in the process how DOE should use its resources. (Joint Commenters, No. 112, at p. 4)

DOE also received comments expressing various concerns with the proposed early assessment review process. Several commenters were concerned that the addition of the early assessment review would increase the length of the rulemaking process and make it more difficult for DOE to meet applicable statutory deadlines. For instance, CEC stated that the early assessment review should be completed in sufficient time for DOE to meet its statutory

deadlines under EPCA, as delays caused by adding new procedures are not sufficient to change those Congressional mandates. (CEC, No. 121, at p. 5)

In response, DOE notes that the purpose of the early assessment review is to reduce the length of the rulemaking process when issuing a determination that a new or amended energy conservation standard or amended test procedure is not warranted under the applicable statutory criteria. And, while DOE acknowledges that the early assessment review adds an additional step to rulemaking processes, this step will allow DOE to focus more resources on rulemaking activities that result in a new or amended energy conservation standard or amended test procedure. As a result, DOE believes the increase in available resources will offset, in part or whole, the extra time spent conducting an early assessment review.

Commenters, such as ASAP, et al. and ASE, also expressed concern that the early assessment review process is unnecessarily duplicative of DOE's current process regarding preliminary rulemaking activities. (ASAP, et al., No. 126, at p. 7; ASE, No. 108, at p. 5) In response, DOE notes that the early assessment review is not just an earlier version of DOE's normal rulemaking analysis. The goal of the early assessment review is to conduct a more focused, limited analysis of a specific set of facts or circumstances that would allow DOE to determine that, based on one or more statutory criteria, a new or amended energy conservation standard or amended test procedure is not warranted.

Some commenters expressed concern that the early assessment review would shift the burden of determining whether to proceed with a rulemaking to stakeholders. For instance,

NPGA disagreed with placing the onus on stakeholders to demonstrate that new regulatory action is not necessary, and CEC stated that DOE will simply defer to commenters about whether a test procedure amendment is necessary, without conducting its own analysis, and then make a determination not to amend a test procedure without an opportunity for the public to comment on the reasoning behind that determination. (NPGA, No. 110, at p. 2; CEC, No. 121, at p. 6)

Additionally, Cal-IOUs stated that an early assessment review creates a heavy stakeholder burden to review, research, test, and validate all aspects of a test procedure in the typical 30-day comment period because after the early assessment, DOE could decide a more thorough review of the test procedure is not required based on stakeholder comments in this limited window, ending the rulemaking process. (Cal-IOUs, No. 124, at pp. 11-12) In response, DOE clarifies that the revisions to the Process Rule do not affect DOE's responsibility to determine whether a rulemaking satisfies applicable statutory criteria under EPCA. DOE has always solicited input from stakeholders during the rulemaking process, but that has never changed the fact that it is DOE's responsibility to determine whether an energy conservation standard or test procedure is promulgated in accordance with the criteria and procedures laid out in EPCA.

b. Other Avenues for Early Stakeholder Input in the Rulemaking Process

In a November 6, 2010, policy statement, DOE stated that while the framework document and preliminary analysis provide useful information, there are more efficient ways of gathering data. Accordingly, in appropriate cases, the Department will gather the needed preliminary data informally and begin the public rulemaking process with the issuance of a proposed rule for

public comment.¹³ In the February 2019 NOPR, DOE proposed to revise this process to ensure stakeholders have the opportunity to comment prior to issuance of a proposed energy conservation standard or test procedure rule. Assuming the early assessment review process does not result in DOE issuing a determination that a new or amended energy conservation standard or amended test procedure is not warranted, DOE would issue a framework document and preliminary analysis or an ANOPR. These documents, as opposed to “informal” data gathering, would provide the necessary robust analysis to determine whether to move forward with a proposed standard. RFIs and NODAs could be issued, as appropriate, in addition to these analytical documents. (84 FR 3910, 3918, 3921)

In general, commenters were in favor of ensuring stakeholders have to opportunity to comment prior to issuance of a proposed rule. For instance, ASAP, et al. supports providing an opportunity for early stakeholder input prior to the publication of a NOPR, and CTA stated that greater opportunities for early stakeholder input is a step that would make more efficient use of government and private sector resources. (ASAP, et al., No. 126, at p. 2; CTA, No. 136, at p. 3) GWU stated that the proposed revisions to the Process Rule would improve opportunities for public participation by committing the agency to procedures for early stakeholder input, thereby strengthening DOE’s decision-making process and aligning with good regulatory practices. (GWU, No. 132 at pp. 3, 6) With regard to specific vehicles for early stakeholder input, CEC supported the elimination of ANOPRs “in favor of flexibility in determining the appropriate document for early stakeholder input,” while AGA supported the continued use of the ANOPR process. (CEC, No. 121, at p. 6; AGA, No. 114, at p. 16) AGA also stated that DOE should

¹³ The November 6, 2010 Policy Statement is available at https://www1.eere.energy.gov/buildings/appliance_standards/pdfs/changes_standards_process.pdf.

explain its rationale for choosing a particular vehicle for early stakeholder input. (AGA, No. 114, at p. 16)

In response to these comments, DOE agrees that there are a variety of approaches that can achieve the goal of early information gathering in the rulemaking process. The ANOPR might be preferable in a given proceeding. Alternatively, an RFI or Notice of Data Availability would also allow for early stakeholder input through a request for comments in circumstances where DOE may not have sufficient information to develop an ANOPR. DOE might issue a Framework Document and Preliminary Analysis where DOE received information in response to the early look that might have been inconclusive with regard to the need for a new or amended standard, and DOE seeks additional input to help make that determination. These alternate tools equally promote transparency in DOE's process and allow for early information exchange. As such, DOE does not believe it is necessary to establish guidelines or scenarios for utilizing a specific form of early stakeholder input. In all cases, DOE will provide for some form of preliminary data gathering and public comment process, including either an ANOPR or Framework Document and Preliminary Analysis, prior to issuing a proposed rule.

G. Decision-making Process for Issuing a Determination Not to Issue a New or Amended Energy Conservation Standard or an Amended Test Procedure

In the February 2019 NOPR, DOE proposed to adopt provisions in the revised Process Rule detailing DOE's decision-making process when determining whether a new or amended energy conservation standard or an amended test procedure is warranted under the relevant provisions in EPCA. In determining whether to move forward with a given energy conservation

standards rulemaking, DOE stated it would address a series of issues that, while more expeditious than a complete rulemaking analysis, would nonetheless be supported by a thorough analysis to ensure that DOE proceeds with only those rulemakings that may yield a significant conservation of energy and be technologically feasible and economically justified. (84 FR 3910, 3920) For instance, if DOE is able to determine that a new or amended standard would not meet the threshold for significant energy savings, DOE would issue a proposed determination not to issue a new or amended standard without conducting additional analyses to determine whether a standard would also be technologically feasible and economically justified. DOE stated that it would apply a similar process for test procedure rules in order to determine whether an amended test procedure would more accurately measure the energy or water use of a covered product during a representative average use cycle or reduce testing burden. (84 FR 3910, 3921)

Joint Commenters, along with several others, noted that EPCA grants DOE authority to issue determinations of no new amended standards after considering three factors: significant energy savings, technological feasibility, and cost effectiveness. (Joint Commenters, No. 112, at p. 6) CEC stated that DOE should replace the term “economically justified” with “cost effective” throughout the early assessment process, instead of adding new considerations that are not permitted under the statute. (CEC, No. 121, at p. 6)

In response, DOE notes that there are two situations in which DOE will issue determinations of no new amended standards. First, as commenters have pointed out, DOE has authority to issue determinations of no new amended standards based on three factors: significant energy savings, technological feasibility, and cost effectiveness. (42 U.S.C. 6295(m)(1)(A) and 42 U.S.C. 6295(n)(2)) However, DOE is also only authorized to issue an amended standard if

the standard would result in significant conservation of energy and would be technologically feasible and economically justified. (42 U.S.C. 6295(m)(1)(B) and 42 U.S.C. 42 6295(o)) If an amended standard does not satisfy these three criteria, DOE will also issue a determination that an amended standard is not warranted. As a result, DOE has revised the Process Rule to reflect DOE's statutory obligation to consider both cost effectiveness and economic justification when issuing a determination not to amend a standard.

H. Significant Savings of Energy Threshold

1. Comments on the Proposed Threshold Approach

The December 2017 RFI raised a number of issues for which DOE sought comment with respect to how the Process Rule might be improved. Among these issues was whether (and if so, how) to give a more definitive meaning to the statutory phrase used in EPCA: —“significant conservation of energy” (or stated more generically, “significant energy savings”). In response to numerous comments to the RFI urging DOE to address this larger issue of what level of potential energy savings would be appropriate for purposes of satisfying EPCA, DOE proposed using a two-step threshold for determining whether setting energy conservation standards for a given product or equipment type would be likely to lead to a significant conservation of energy. *See* 84 FR 3910, 3921 (Feb. 13, 2019). *See also* 42 U.S.C. 6295(o)(3)(B) (prohibiting DOE from prescribing an amended or new standard for a type or class of covered product if the Secretary determines that the standard “will not result in significant conservation of energy” or that the standard is not “technologically feasible or economically justified.”)

Under the first step of this proposed approach, the projected energy savings from a potential maximum technologically feasible (“max-tech”) standard would be evaluated against a set numerical threshold. This initial step would be performed to ascertain whether a potential standard level would enable DOE to avoid setting a standard that “will not result in significant conservation of energy,” as provided under 42 U.S.C. 6295(o)(3)(B). (84 FR 3910, 3923) DOE proposed a quad-based threshold of 0.5 quad for this first step. (*Id.* at 84 FR 3924) Under the second step of the proposed approach, if the projected max-tech energy savings failed to meet or exceed this initial numerical threshold (with any lower level expected to achieve even less energy savings), those max-tech savings would then be compared to the total energy usage of the product/equipment to calculate a potential percentage improvement in energy efficiency/reduction in energy usage. (*Id.* at 84 FR 3923) DOE had proposed a percentage threshold of 10 percent, meaning that if the difference between the projected max-tech savings and the total energy usage of the product/equipment was under the 10 percent threshold, the analysis would end, and DOE would determine that no significant energy savings would likely result from setting new or amended standards. (*See Id.* at 84 FR 3923-3924). This step would ensure that DOE will promulgate those standards that are most likely to confer substantial benefits to consumers and the Nation and eliminate from further consideration those potential standards that are projected to result in substantially lower energy savings below those generated under the relevant threshold. (*Id.* at 84 FR 3923)

Satisfying either of these thresholds would trigger DOE to analyze whether a standard can be prescribed that produces the maximum improvement in energy efficiency that is both technologically feasible and economically justified (and still constitutes significant energy

savings at the level determined to be economically justified). *See* 42 U.S.C. 6295(o)(2)(A). Because technological feasibility is already determined through the max-tech analysis, DOE would then focus on performing an economic justification analysis under the seven criteria in 42 U.S.C. 6295(o)(2)(B)(i). DOE is issuing a proposal elsewhere in this issue of the *Federal Register* to amend the previous process for determining whether and what standard can satisfy the criteria under EPCA. *Id.*

As DOE explained in the preamble to its proposal, in performing this analysis, the Agency would consider the total amount of energy savings at issue at each trial standard level (“TSL”). Assuming that DOE uses a minimum numerical threshold and a separate percentage threshold, the projected savings for any given TSL would be measured against these two thresholds. DOE would perform its economic analysis to determine whether an economically justified level (producing the maximum amount of energy savings possible) can be reached that meets or exceeds either of these thresholds. The analysis would proceed to compare that projected savings against the amount that the examined product/equipment consumes at each TSL. (84 FR 3910, 3923)

Unsurprisingly, DOE’s proposed significant energy savings threshold approach generated substantial interest from commenters. These comments came during both of DOE’s two separate public meetings to discuss its proposal as well as in written submissions. Commenters generally fell into one of two groups – those who supported the use of a threshold (including those who suggested modifications to the proposed approach) and those who opposed the use of a threshold.

A. Comments Supporting the Proposed Threshold Approach

Commenters who supported the idea of applying a threshold for significant energy savings included AHAM, AHRI, AGA, BWC, CTA, GEA, GMU Law, GWU, the Joint Commenters, Lutron, NAFEM, NEMA, Regal-Beloit, Rheem, Samsung, Signify, Southern Co., Spire, and BHI. Among these commenters, AHAM, BWC, the Joint Commenters, and Samsung, preferred that a threshold level different from the proposed levels be used. Regal-Beloit suggested that, in addition to the proposed thresholds, DOE supplement its approach to include the use of a ratio of quads over cost impacts (in dollars). The company asserted that using this method would enable DOE to help ensure that it could still avail itself of energy savings opportunities in those cases where a free or low cost opportunity to achieve additional energy savings is possible – but would not meet the proposed 0.5 quad threshold. (Regal Beloit Corp., March 21, 2019 Public Meeting Transcript at p. 291) EEI also suggested that an exception or different threshold for ASHRAE equipment as well as those products and equipment with smaller markets be used. (Edison Electric Institute, March 21, 2019 Public Meeting Transcript, No. 87 at p. 268)

Regarding specific issues raised by commenters favoring the use of thresholds, AHRI supported the use of a definition for significant energy savings and did not agree with criticisms that DOE's proposal was arbitrary, arguing instead that DOE's approach was based on a reasoned analysis. (AHRI, March 21, 2019 Public Meeting Transcript, No. 87 at p. 242)

AGA supported DOE's premise that the setting of a significant conservation of energy threshold should be non-trivial and that each candidate standard considered should result in significant energy savings. In its view, the thresholds set should illustrate a problem large enough to justify a regulation or rule. It asserted that DOE's proposal establishes a mechanism to evaluate whether a new standard is appropriate based on the significance of the energy savings, the technological feasibility of a given standards proposal and the economic effect of a proposed standards rule. It suggested that whatever methodology adopted by DOE should consider a combination of the anticipated percentage reduction of energy consumption for the covered product compared to the existing standard, along with the impact of overall energy consumption in the market sector. (AGA, No. 114 at pp. 19-20) In its view, reviewing a proposed standards rulemaking under the proposal's approach would indicate if a standard merits amending -- for example, AGA asserted that a new standard for a consumer product "may not be needed if it could achieve a 20% increase in efficiency, but only negligibly contribute to a reduction in overall residential energy consumption." (AGA, EERE-2017-BT-STD-0062, No. 114 at p. 20)

CTA agreed that DOE should apply a threshold with respect to whether the projected energy savings for a given standard would be significant for purposes of satisfying the statutory requirements under EPCA. Without a specific numerical threshold, it argued, interpretations of what is "significant" will vary by stakeholder and administration. In its view, such a threshold would also support priority-setting to help DOE in managing its periodic rulemaking obligations and related accumulated backlog of rulemaking activities. It asserted that establishing a threshold for significant energy savings, as well as having a formal consideration of diminishing

returns and non-regulatory alternatives, are necessary for prioritization and the effective use of public resources. (CTA, No. 136 at p. 3)

Coupled with its belief that the proposal will help alleviate unnecessary regulatory burdens on the regulated entities as well as DOE, GEA asserted that it was particularly important for DOE to establish a requirement to demonstrate significant energy savings will occur before a revised standard is set. (GEA, No. 125 at p. 2)

GMU Law also favored the adoption of a minimum threshold for “significant” energy savings as a way to increase predictability and reduce regulatory uncertainty. (GMU Law, No. 105 at p. 3) In its view, DOE’s proposal not only did not contradict the *Herrington* opinion, it reflected the type of cost-benefit analysis that the *Herrington* court expected DOE to perform, but which DOE had not done in the case before it. (GMU Law, No. 105 at pp. 7-8) GMU Law added that DOE’s previous reading of the term “significant” as meaning “non-trivial” was based on a misreading of the *Herrington* decision and that DOE is permitted to conclude that the small energy savings benefits from a potential standard may be outweighed by the costs involved. (GMU Law, No. 105 at p. 7)

GWU supported a threshold-based analysis to avoid marginally effective revisions to standards whose benefits are outweighed by their costs. (GWU, No. 132 at p. 8) However, GWU argued that because expected energy savings are based on projections, DOE should also conduct ex-post evaluations to determine the accuracy of the savings estimates of standards that are implemented. Furthermore, GWU stated that a threshold-based analysis should not be used

as the sole determinant of whether a standards rulemaking should proceed with notice and comment, but instead be used to filter out standards where decreasing marginal returns to energy savings likely exist. To this point, GWU argued that in some cases, standards with benefits that do not outweigh their costs may still reach the threshold, which is why economic justification analysis is needed. GWU stated that DOE should ensure that standards undergo economic justification analysis before issuing a NOPR. (GWU, No. 132 at p. 8)

Lutron indicated that setting a threshold for significant energy savings is critical to adding clarity to, and planning for, future rulemakings, which would result in reducing burden by reducing regulatory uncertainty. (Lutron, No. 137 at p. 2)

NAFEM supported the development of objective thresholds for determining what constitutes “significant energy savings.” It suggested that rather than use the proposed 0.5 quad threshold, that DOE instead analyze the 57 standards examined under the proposal using the Pareto philosophy, where 80 percent of the deliverables would come from 20 percent of the activities. NAFEM asserted that since the Pareto analysis is consistently used in quality control and pertinent business research, DOE should consider using it in determining significant energy savings to provide a more grounded and defensible threshold. (NAFEM, No. 122 at p. 4)

NEMA supported the proposed threshold, noting that it provided DOE with a means to determine whether the potential energy savings in a given scenario are worth pursuing. It asserted that without a clearly defined path, the answer to the question of whether to set a more

stringent standard would always be yes. (NEMA, March 21, 2019 Public Meeting Transcript, No. 87 at p. 244)

During the March 2019 public meeting, Rheem initially indicated that while it was unsure whether the proposed 0.5 quad threshold was “the right number,” it suggested that DOE consider the impact to the consumer. In other words, if going forward with a particular standard for a given item would result in the consumer paying significantly more to purchase that item, that standard would not be a good option for DOE to select. Rheem supported the idea of having guidelines for DOE to follow and expressed reluctance over a “one-size fits all” approach. (Rheem, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 263-264) Rheem’s written comments supported DOE’s proposed changes to its significant energy savings analysis and the definition of significant energy savings without elaborating further. (Rheem, No. 101 at p. 1)

Signify supported the setting of minimum threshold energy savings requirements and it asserted that such an approach would help DOE with prioritization and in focusing on the right energy savings opportunities. (Signify, No. 116 at p. 1)

Southern Co., like some other commenters, was unsure whether the proposed 0.5 quad threshold was the appropriate value to apply. It asserted that there is value in setting a formalized threshold value, since what DOE has considered “significant” has varied in the past. (Southern Company, March 21, 2019 Public Meeting Transcript, No. 87 at p. 246) Southern Co. also suggested that the threshold be a presumption and not mandatory. In its view, DOE should

develop a procedure that offers an avenue for exceptions instead of having only a hard rule. (Id. at 266.) Southern Co. also echoed EEI's suggestion with respect to ASHRAE equipment and stated that the significant energy thresholds under consideration by DOE should not apply when DOE is conducting rulemakings under the ASHRAE-related provisions. It argued that not all of the different equipment types that are addressed by ASHRAE have the potential of yielding energy savings at the proposed threshold levels. Consequently, in its view, applying the proposed thresholds within the context of DOE's ASHRAE rulemakings under 42 U.S.C. 6313(a)(6) is not needed. (Southern Co., March 21, 2019 Public Meeting Transcript, No. 87 at p. 122)

Spire indicated during the March 2019 public meeting that DOE should clarify certain aspects of its proposal. In particular, it suggested that DOE include definitions for "quad," "site," "source," "discount rates," and other related terms used in the proposal. (Spire, March 21, 2019 Public Meeting Transcript, No. 87 at p. 284) Spire offered further observations as part of its written comments. First, it asserted that DOE needs to specify the metric being used, and — it suggested the use of "source" or "primary" energy and that the value used should include energy losses upstream of power plants. (Spire, No. 139 at p. 10.) Second, it suggested, consistent with DOE's proposal, that the Process Rule be made enforceable to mitigate the risk of litigation. (Spire, No. 139 at p. 11.) Spire indicated its support for DOE's proposed threshold-based approach provided that these two conditions are met. (Id.)

BHI supported the concept of a significant energy savings threshold as a means for DOE to deploy its rulemaking resources on products with the greatest energy saving potential. With

respect to the proposed 0.5 quad threshold, BHI offered no specific comments other than to state that it expected DOE to set an initial level compatible with its objective to assign adequate resources for effective rulemaking processes. It added that it expected future rulemakings could amend the initial level as specific energy conservation standards reach points of diminishing returns (or [are] no longer eligible for an amended standard) and/or as the availability of the Department's resources fluctuates. (BHI, No. 135 at p. 3)

Some supporters of DOE's proposed approach also suggested applying different threshold levels. AHAM suggested that the quad threshold should be higher than the proposed 0.5 quad but offered no particular alternative or explanation as to why. (AHAM, March 21, 2019 Public Meeting Transcript, No. 87 at p. 223) BWC suggested that DOE consider a threshold of 1 quad, which it argued would justify a standard on a per-household basis but remain consistent with the threshold discussed in the *Herrington* case. Regarding the proposed percentage threshold, BWC questioned whether this level was appropriate, particularly in the context of products that have previously been regulated or may be nearing the maximum available technology – but it did not offer a specific alternative for DOE to consider. BWC added that it had no objections to the general concept of a threshold test using a hybrid approach for an overall level of energy savings and a certain percentage of efficiency improvement. (BWC, No. 103 at p. 3) The Joint Commenters supported DOE's approach as well as the proposed threshold levels. They added, however, that their own analysis for 21 past rulemakings demonstrated that a 1.0 quad threshold over 30 years could be more appropriate.¹⁴ With respect to the proposed

¹⁴ For support, the Joint Commenters cited to a June 30, 2014, submission from the National Electrical Manufacturers Association regarding a proposed rulemaking addressing general fluorescent lamps and incandescent reflector lamps. That submission showed, among other things, the projected savings over 30 years (in quads) over the estimated industry net present value impacts for these two lighting equipment types when compared to the

percentage increase in efficiency, the Joint Commenters supported the proposed 10-percent level as appropriate. They also supported having a bright-line rule for significant energy savings as it would provide certainty and predictability. (Joint Commenters, No. 112 at p. 7) Samsung, however, criticized the proposed 0.5 quad threshold as unnecessarily high and could hinder the advancement of energy efficiency standards for newly covered products. It asserted that energy efficiency standards have incentivized innovation in various product categories and have resulted in significant cost savings for consumers and environmental benefits. In spite of its concerns regarding the proposed quad-based threshold, Samsung nonetheless supported the proposed threshold for a 10-percent increase in energy efficiency/energy use reduction. (Samsung, No. 129 at p. 2)

B. Comments Opposing the Proposed Threshold Approach

Commenters who opposed DOE's proposal to use a significant energy savings threshold included A.O. Smith, ACEEE, the AG Joint Commenters, American Efficient, ASAP, ASE, Bosch, CEC, CT-DEEP, Earthjustice, Energy Solutions (on behalf of the Cal-IOUs during both public meetings), Ingersoll Rand, NYU Law, NEEA, NPCC, NRDC, Ms. Linda Steinberg, and PG&E (in conjunction with all Other Cal-IOUs in written comments). These commenters contended that applying a threshold was not only unnecessary but conflicted with EPCA.

DOE notes that one comment written on a single postcard expressed general dissatisfaction with the entirety of DOE's proposal. (Linda Steinberg, No. 90 at p. 1)

overall average projected energy savings for DOE's appliance efficiency rulemakings completed between 2008 and the date of the submission -- 2.156 quads. *See* NEMA, EERE-2011-BT-STD-0006, No. 54 at p. 4.

A.O. Smith was concerned about having what it viewed as defining "significant energy savings" by an arbitrary number. It argued that DOE should only consider the cost effectiveness of a given standard and that it did not understand why DOE needed to set a threshold. (A.O. Smith, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 28, 237.) A.O. Smith also posed the question of how DOE would treat a consensus agreement that presented potential energy savings that fell shy of the proposed quad threshold – i.e. whether the agreement would also be bound to the minimum threshold in order for DOE to move forward with a DFR on that agreement. (Id. at 239-241.)

ASE argued that there is an inherent arbitrariness and inflexibility to setting any threshold, including when stakeholders may reach a consensus on an alternate path towards potential standards. ASE suggested that DOE instead examine whether energy savings from standards are cost-effective both in terms of the amount of energy saved and other benefits. ASE also criticized DOE for considering a significant energy savings threshold when it should be focused on meeting statutory deadlines. (ASE, No. 108 at p. 5)

ACEEE pointed out during the public meeting that DOE needed to clarify whether the proposed threshold was based on source or site energy. It also argued that having a hard threshold would prevent DOE from setting a national standard that benefits both manufacturers and consumers. (ACEEE, March 21, 2019 Public Meeting Transcript, No. 87 at p. 277) ACEEE also asserted its belief that while a standard threshold is not needed, if DOE were to set one, the threshold should not only be at a much lower level but also be a rebuttable presumption rather than an inflexible requirement. It asserted that without having some flexibility in the treatment

of the threshold, DOE may be prevented from considering consensus agreements, thus leaving manufacturers subject to a patchwork of State standards on a product. ACEEE also argued that requiring a threshold could also prevent DOE from considering a standard that would have a large impact on peak electric load or on a specific fuel. In its view, DOE should have the flexibility to consider these types of impacts. (ACEEE, No. 123 at p. 3)

During the March 2019 public meeting, ASAP argued that “significance” cannot be determined as a proportion of a figure but is an absolute value. (ASAP, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 256-57) It also sought clarity regarding when DOE’s proposed “significance analysis would be conducted in relation to other steps in the proposed revisions to the rulemaking process. (Id. at 260.) Additionally, ASAP, et al. argued that DOE should maintain its current interpretation of significant energy savings, which, it asserted, has been to view significant energy savings under the statute as savings that are not “genuinely trivial.” ASAP, et al. stated in written comments that DOE’s proposal would establish arbitrary thresholds for defining significant savings that could result in large lost savings for consumers and businesses and prohibit the adoption of consensus agreements. It asserted, without providing supporting evidence, that energy savings of 0.5 quad are equivalent to electricity bill savings of about \$7 billion and that DOE’s proposal would sacrifice billions of dollars in potential savings for consumers and businesses. ASAP, et al. also asserted that the proposal is not consistent with *Herrington* or Congress’ intent. (ASAP, et al., EERE-2017-BT-STD-0062, No. 126 at pp. 2, 9)

Further, ASAP, et al. did not agree with DOE’s justification for the 0.5 quad threshold. In their view, the fact that a subset of rules comprises a relatively small portion of total savings

does not mean that the savings from those rules are not significant. These commenters highlighted language cited in *Herrington* in which the Chairman of the House Sub-Committee on Energy and Power, Representative John Dingell, explained that “conservation must be approached on a nickel and dime basis” and that “the cumulative impact of a series of conservation initiatives, which in themselves might appear insignificant, could be enormous.” (ASAP, et al., No. 126 at p. 9) ASAP, et al. did not believe that the proposed thresholds reflected the intent of Congress, pointing in particular to *Herrington*’s discussion regarding the annual energy use threshold of 4.2 billion kWh established by Congress for prescribing standards for a newly-covered product. (ASAP, et al., No. 126 at p. 9 (citation omitted)). Using figures cited in the proposal, the commenters argued that for a product consuming 1.45 quads over 30 years, achieving 0.5 quad of savings would require a reduction in energy use of about 33%. ASAP stated that DOE appears to recognize that in proposing a 10% savings threshold, it is not reasonable to assume that Congress intended that a 33% reduction in energy use for a product consuming 4.2 billion kWh would be necessary in order for the savings in quads to be considered “significant.” Citing *Herrington*, the commenters stated that “Congress knew that standards for some covered products would produce quite modest incremental gains in efficiency and consequently in energy conserved.” (*Id.* at 10 (citation omitted)) ASAP added that DOE’s proposal would foreclose the possibility of pursuing a standard that did not meet the thresholds even if there would be no first-cost impact and gave some examples of potential scenarios where such rules would have been prohibited by the proposed threshold. (*See id.*) ASAP added that the determination that a new or amended standard would constitute “significant” energy savings is not a determination that such a standard is economically justified. In its view, DOE’s proposed thresholds for determining significant savings would eliminate DOE’s ability to even

consider whether a standard that would not meet the thresholds would be economically justified. (*Id.* at. 2, 9-11)

The AG Joint Commenters also criticized DOE's proposed significant energy savings threshold (which the commenters believed would short-circuit the standard-setting process) as a contravention of congressional intent, as expressed through EPCA, to save energy whenever technologically feasible and economically justified. (AGs Joint Comment, No. 111 at p. 4) They argued that setting a bright-line requirement for an energy savings threshold is an unlawful interpretation of EPCA that is both arbitrary and contrary to the APA. In their view, the proposal provided no substantive justification for the thresholds chosen or how these thresholds are appropriate in light of congressional intent, particularly how they strike an appropriate balance between lost energy savings and reduced regulatory burden, consistent with EPCA. They further asserted that DOE failed to explain whether the reduction in regulatory burden would outweigh the reduction in benefits that would be lost from the foregone standards, and warned that the proposal risks misinterpreting EPCA's significant energy savings provision in the same manner the agency had done in the run-up to the *Herrington* case. (AGs Joint Comment, No. 111 at pp. 9-11) The commenters argued that DOE must evaluate standards for a given product or equipment type unless the energy savings are "genuinely trivial," so as to avoid foregoing cost-free benefits, and stressed that failing to conduct an economic justification analysis would mean that DOE cannot answer this fundamental question from *Herrington*. They added that the proposed use of a threshold could preclude regulations that, while producing small benefits individually, would result in substantial benefits cumulatively. The commenters suggested that only by combining the significant energy savings threshold with the seven factors for economic

justification can DOE ensure that it is promulgating standards that substantially benefit the public. They reasoned that it would be more appropriate to assess significant energy savings later in the process when more information has been gathered on the record related to the seven factors for economic justification, of which energy savings is one. (AGs Joint Comment, No. 111 at pp. 10-11)

In addition, the AG Joint Commenters argued that DOE has not explained how its proposal would encourage gradual efficiency improvements without mandatory regulatory requirements. The commenters argued that DOE appears to be benefitting an entrenched industry at the expense of the public good and innovation. (AGs Joint Comment, No. 111 at p. 12) They also stated that significance thresholds can be subject to gaming, such as might occur if DOE were to divide rulemakings to only cover certain product classes (rather than all classes for a given product type) so as to keep the total anticipated energy savings below the significance threshold. The commenters argued that the proposal did not address this possibility or establish any safeguards to prevent such scenarios. They added that, were this to occur, it would frustrate the intent of Congress and EPCA. (AGs Joint Comment, No. 111 at p. 12) For all of the above reasons, the AG Joint Commenters concluded that DOE's proposed significance thresholds are arbitrary, capricious, and inconsistent with EPCA. (AGs Joint Comment, No. 111 at p. 12)

Bosch opposed the proposed thresholds, believing their application would produce results with far fewer energy efficiency gains, which would ultimately put U.S. manufacturers at a competitive disadvantage with its global competitors. It asserted, without citing or providing supporting evidence or data, that such a threshold would inadvertently pose a barrier to achieving

small and incremental gains in efficiency, which Bosch claimed is the general way technology advances. Bosch sought additional clarity regarding DOE's methodology in selecting the proposed threshold levels, as well as a better understanding if and when DOE would allow for an exception to this threshold. (Bosch, No. 113 at pp. 4-5)

During the April 2019 public meeting, the CEC noted its opposition to the proposed thresholds. In its view, the statutory criteria were already adequate to allow for DOE to determine that no amended standards were needed in a given scenario and that setting an arbitrary minimum savings threshold would not relieve DOE from its statutory obligations to regularly review standards and, when required, to prescribe standards. It further asserted that any non-zero amount of technically feasible energy savings must be evaluated to determine its cost effectiveness and economic justification. (CEC, April 11, 2019 Public Meeting Transcript, No. 92 at pp. 230-231) The CEC elaborated on its views in written comments, asserting that the determination of significant energy savings must be made on a case-by-case basis. (CEC, No. 121 at p. 7) It further argued that applying a broadly defined threshold of 0.5 quad over 30 years or a 10 percent improvement in energy efficiency may not be appropriate for every appliance -- such as in instances where potential energy (or water) savings have no incremental cost, where the potential savings accrue primarily in a few states where sales or use of the appliance at issue are more significant, or where the appliance currently has a small market share that makes a savings estimate small, but has the potential to balloon into a larger market share as a result of non-standards. (CEC, No. 121 at pp. 7-8) The CEC added that, in its view, DOE's failure to pursue standards for products that do not meet the applicable threshold "misses an opportunity to make incremental improvements to an appliance rather than dramatic overhauls" and argued that

incremental improvements can yield significant energy savings improvements while minimizing manufacturer burdens. By setting a high threshold for a rulemaking to start, the CEC argued that DOE would be eliminating the opportunity for creating incremental improvements that Congress viewed as appropriate through its inclusion of regular review provisions in EPCA. CEC also asserted that the proposed thresholds would result in "no-standard" standards at the national level while preempting States from acting to set their own standards. (CEC, No. 121, at p. 8)

While CT-DEEP commended DOE for considering modifications to the current Process Rule to help moderate the burdens on industry and manufacturers, it too argued that the proposed significant energy savings threshold would eliminate enormous energy savings potential. It asserted that the energy savings from rules that would have fallen under DOE's proposed 0.5 quad threshold have collectively saved the equivalent of over 10% of commercial and residential building energy use annually – which CT-DEEP stated was equal to “41.5 million MMBTU” of annual energy savings. DEEP-CT argued that the proposed quad-based threshold would have significant impacts on energy savings nationwide and urged DOE to continue to interpret “significant energy savings” as defined by *NRDC v. Herrington*. (CT-DEEP, No. 93 at p. 3)

Like the AG Joint Commenters, Earthjustice noted its concern about how the proposed thresholds would apply in the context of the ASHRAE rulemakings that DOE conducts for certain categories of commercial/industrial equipment. In its view, DOE has discretion in sorting products for rulemaking, including ASHRAE equipment, but the proposal would be leaving to ASHRAE the determination of whether a product is going to meet the significance threshold.

(Earthjustice, March 21, 2019 Public Meeting Transcript, at pp. 250-251) (See also *id.* at 252-253)

Energy Solutions (on behalf of the Cal-IOUs) argued that cost effective energy savings to a consumer is cost effective and in its view, 0.5 quad of energy use comprises a substantial amount of savings on the overall grid. It asked that DOE clarify the basis for its proposal by publishing the analysis for the 57 standards cited in the NOPR preamble and it added that it was unclear how DOE's max-tech analysis would differ from what would happen during the proposed pre-rulemaking stage. (Energy Solutions, March 21, 2019 Public Meeting Transcript, at pp. 228-29) Energy Solutions questioned the use of the lower end of the range over the higher or middle ranges in the analysis, (*id.* at 253) as well as the origins of the proposed 10% threshold. (*Id.* at 269)

Ingersoll Rand opposed the proposed thresholds and suggested that DOE continue to use its own discretion, after carefully weighing stakeholder input, as to whether potential cumulative energy savings are significant enough to proceed with a standards rulemaking. The company noted that 0.5 quad of energy could be significant, cost-effective, and technically justified for some product classes or sub-classes, which would, in its view, be appropriate to capture through appliance standards. It argued further that the proposed 10-percent improvement backstop was not appropriate, as this level of improvement could represent a significant leap for many covered products that is simply impossible to achieve, and may not be technically feasible. As a result, Ingersoll Rand argued that the proposed thresholds could prevent DOE from revising appliance

standards when mature market conditions demonstrate that they would be appropriate, and leave cost-effective energy savings on the table. (Ingersoll Rand, No. 118, at p. 3)

Of additional concern to Ingersoll Rand is the potential unintended consequence of DOE having the inability to limit the stringency and/or scope of a standard in response to manufacturer feedback – or negotiations between affected stakeholders – in order to focus a potential appliance standard on the most optimal requirements in cases where projected savings would not meet the proposed thresholds. Ingersoll Rand cited a recent example of this issue, wherein DOE proposed one TSL for commercial and industrial air compressors but indicated it was “strongly considering” both a more stringent one and an expanded scope to include additional classes and size ranges of air compressors. The air compressor industry urged DOE to set standards using the more limited scope and stringency, which would have yielded correspondingly lower energy savings, as this was the more cost-justified level and aligned closely with familiar product testing methods. Under DOE’s proposal for setting a threshold for significant energy savings, this discretion would not have been possible, but could have resulted in DOE pursuing standards more burdensome to manufacturers if they are also found to be technologically feasible and economically justified. (Ingersoll Rand, No. 118, at p. 3)

NYU Law asserted that DOE’s proposed thresholds for defining whether energy savings are “not . . . significant” are arbitrary and that “significance” should instead be weighed by considering all important costs and benefits.” (NYU Law, No. 119, at p. 1) In its view, whether the amount of energy savings is “significant” is relative and no single numerical threshold can determine significance in every situation. Instead, it argued, determining significance implicitly

calls for the balancing of factors. It stressed that comparative terms that “admit[] of degree” like “significant,” “minimize,” or “reasonable” typically should be employed to compare the costs and benefits, because “whether it is ‘reasonable’ to bear a particular cost may well depend on the resulting benefits.” (NYU Law, No. 119, at p. 2)

Similarly, NEEA objected to the proposed quad threshold as arbitrary and argued that it should be lower. (NEEA, March 21, 2019 Public Meeting Transcript, No. 87 at p. 245) It also suggested that DOE determine whether a given level of energy efficiency is “cost-effective to the consumer” rather than using the proposed 0.5 quad as the relevant metric. (NEEA, March 21, 2019 Public Meeting Transcript, No. 87 at p. 276)

NPCC and NRDC also disagreed with DOE’s proposal to set a threshold and argued that EPCA required the consideration of seven factors (not just one) when determining whether to adopt a standard. NPCC indicated that if Congress intended to establish a savings threshold it would have done so in EPCA. (NPCC, March 21, 2019 Public Meeting Transcript No. 87 at pp. 23-24, 249) In NPCC’s view, the proposal is inconsistent with EPCA and that applying a threshold before a standard can be proposed and evaluated against the criteria under EPCA risks losing substantial savings from standards that simply do not pass the threshold but that EPCA would otherwise allow. Citing estimates from ASAP, NPCC asserted that a third of the standards adopted by DOE between 2009 and 2017 would not have met the proposed threshold, which means that these proposed standards (and their combined savings) would not have been realized under DOE’s current proposal. It added that setting a threshold that prejudices a

proposal based on only its proposed savings -- and not a "balanced consideration of the overall benefits and costs" -- conflicted with DOE's statutory obligations. (NPCC, No. 94, at p. 6.)

NRDC argued that the issue of applying a threshold number for significant energy savings had been settled in *Herrington* and that, if implemented as proposed, would forego substantial energy savings. (See NRDC, March 21, 2019 Public Meeting Transcript, No. 87 at p. 248) In its view, the proposal to set a threshold for significant energy savings is arbitrary and contrary to both EPCA and the *Herrington* decision and should be withdrawn. NRDC asserted that it would be difficult or impossible to develop a threshold that is sufficiently responsive to the unique characteristics of each covered product and that does not unnecessarily reject savings. It added that the proposal would not account for the importance of saving energy at different times of day, such as at times of peak grid demand. NRDC also argued that DOE failed to explain whether its thresholds for significant energy savings were based on site energy consumption, source energy consumption, or some other method of calculation, which left stakeholders unable to effectively comment. NRDC also asserted that DOE has not explained how it will apply the threshold when aggregating savings from product/equipment classes and expressed concern (like Earthjustice and State AGs) that DOE could game the system by examining a subset of classes which fail to meet the threshold, even though a combined rule examining multiple product classes would meet it. (NRDC, No. 131 at pp. 5-7) Pointing to the comments of ASAP, at al., NRDC argued that some of DOE's energy conservation standards could be considered "cost-free," such as those for pre-rinse spray valves, and as a result, the proposed threshold would effectively prevent DOE from adopting such standards in violation of *Herrington*. (NRDC, No. 131 at p. 8)

NRDC stated that DOE's proposed significant energy savings threshold repeats the same mistake DOE made in *Herrington*, namely by arguing that 23 rulemakings adding up to 4.24 quads of savings were not worth the effort. NRDC argued that standards with smaller amounts of energy savings can add up to larger savings. Although it acknowledged that the *Herrington* court left open the possibility that an energy savings threshold could be set, NRDC asserted that DOE failed to show any awareness of the range of energy savings that Congress considered worth pursuing. In its view, this failure provides another reason for why DOE should withdraw its proposal. (NRDC, No. 131 at p. 9)

To highlight this point and to help illustrate the potential conflict between Congressional intent and the proposed thresholds regarding new energy conservation standards for various regulated products and equipment, NRDC identified three sets of statutory standards set by Congress for residential boilers, dehumidifiers, and electric motors, which over 30 years were projected to save 0.16 quads, 0.17 quads, and 0.14 quads, respectively. Under DOE's proposed significant energy savings threshold, NRDC argued that none of these energy conservation standards would have been set, although Congress clearly thought them worth adopting. (NRDC, No. 131 at p. 10)

NRDC also criticized DOE's proposal for failing to mention how the agency would determine a significant savings of water (which is required under 42 U.S.C. 6295(o)(3)(B) for showerheads, faucets, water closets, and urinals). It urged DOE to address how water-consuming products would be addressed under the Process Rule. (NRDC, No. 131 at p. 10)

Finally, PG&E stated that grid reliability must be considered when discussing significant energy savings and worried that it would not be if a contemplated rulemaking action ends because DOE's early assessment "off-ramp" is taken (i.e. the proposed thresholds are not met and no proposed rulemaking follows). PG&E noted that it would be unrealistic for it to submit comments to DOE during the proposed early assessment period since it would be difficult to assess grid impacts within the short amount of time allotted under the proposed time frame. (PG&E, March 21, 2019 Public Meeting Transcript, No. 87 at pp. 214-15) With respect to the proposed thresholds themselves, PG&E (in conjunction with the other Cal-IOUs) ultimately opposed them, indicating that any "non-zero" amount of technically feasible energy savings should be considered significant by DOE. To this end, it argued that DOE should interpret "significant energy savings" as meaning "not genuinely trivial." (Cal-IOUs, No. 124, at pp. 7-8)

The Cal-IOUs criticized DOE's proposal, characterizing the justification for the proposed threshold values as vague, including what the commenters described as a lack of clarity as to whether the proposal relied on site versus source energy. (Cal-IOUs, No. 124, at p. 8.) Referring to text from the *Herrington* case and comparing it to the proposal, the Cal-IOUs posed three questions/issues to DOE to address: (1) Can DOE provide a current site-to-power plant energy use factor, so that stakeholders can better interpret *Herrington* in the current landscape? (2) Given that the proposed 0.5 quad threshold represents a 35 percent source energy savings based on the 1982 site-to-power plant energy use factor, and the *Herrington* court noted that "Congress plainly thought that saving some part of the energy consumed by an appliance operating at those levels would be significant," DOE should elaborate on its interpretation of this

adjudicated decision to interpret “some part” to mean 35 percent. (3) In light of the absence of a reference to a ten-percent energy savings threshold in the *Herrington* decision, DOE should elaborate on the logic and legal justification for the proposed threshold. (Cal-IOUs, No. 124, at pp. 8-9.) The Cal-IOUs also stressed that the proposal, by eliminating 23 rulemaking standards (as indicated in the NOPR’s preamble discussion), would also have eliminated 4.24 quads of energy savings over 30 years, which the commenters viewed as a significant amount of savings. In their view, this approach would conflict with *Herrington* and with DOE's stated concern about limiting the first-cost impacts to consumers since the proposed threshold would not allow DOE to consider truly cost-free opportunities. (Cal-IOUs, No. 124, at p. 9.) The Cal-IOUs further noted that, as proposed, DOE would have removed multiple products/equipment from being considered for more efficient standards. The commenters cited DOE's rulemakings for circulator pumps and dedicated-purpose pool pumps as examples of the types of rulemaking activities that would have ceased prior to the initiation of an ASRAC working group. Since both rulemakings originated with the commercial and industrial pumps rule (which had a projected savings of 0.29 quads), the Cal-IOUs argued that neither of these rules would have survived DOE's proposed threshold – commercial and industrial pumps would have been dropped because it would not have satisfied the 0.5 quad threshold, which would also have ended the examination of potential standards for dedicated-purpose pool pumps. In the view of the Cal-IOUs, the savings projected for these two rulemakings (which the group stressed would be 4.51 quads) would have been lost under DOE's proposal. (Cal-IOUs, No. 124 at p. 9)

The Cal-IOUs were also critical of the information released by DOE regarding how the thresholds would be implemented as part of the Process Rule. They asserted that there were

inconsistencies between flow diagrams released as part of the proposal and during the April 2019 meeting, with the latter document noting that the thresholds would apply at three different points -- (1) during the early assessment review, (2) during the preliminary stage review, and (3) during the NOPR review, while being compared against technological feasibility and economic justification at each step. (Cal-IOUs, No. 124 at p. 10) The Cal-IOUs viewed this approach as "particularly troublesome" during the early stages of the review process because DOE did not indicate whether it would conduct a thorough analysis to provide a reasonable savings comparison against a quantitative savings threshold. In their view, DOE should specify that a DOE-led thorough analysis will be conducted at each stage and that a suggested (rather than mandatory) threshold be applied at earlier stages of the review process. (Cal-IOUs, No. 124 at p. 10)

The Cal-IOUs further noted that the published flow chart contained in the NOPR (unlike the revised one handed out during the April 2019 meeting) indicated that the savings threshold would first be considered during the preliminary stage of review while acknowledging that the early assessment will consider whether significant energy savings can be achieved in accordance with EPCA's economically justified and technologically feasible tests. In their view, these statements are in conflict and that DOE should elaborate in detail how and when the proposed quantitative threshold will be applied. They added that DOE should also explain what information will inform the analysis throughout the rulemaking process and how the thresholds would be applied in those cases where a product type has multiple product classes. (Cal-IOUs, No. 124 at p. 10) The Cal-IOUs also criticized the proposal by asserting that the use of a threshold would ignore real-world implications and the additional value provided by more

efficient products, citing as examples reduced energy generation and reducing and managing energy demand during peak hours. (Cal-IOUs, No. 124 at pp. 10-11)

C. Comments Regarding DOE's Notice of Data Availability

DOE received fourteen (14) comments responding to its July 2019 NODA. In addition to reiterating or expanding on earlier points made in response to the NOPR, these comments also highlighted the potential challenges and disadvantages that DOE may face if it were to adopt an energy savings threshold based on site energy use compared to primary source or full fuel cycle ("FFC") energy use. Commenters also raised issues regarding the sufficiency of DOE's data as support for the proposal and alleged that the particulars regarding the thresholds remained unclear.

A.O. Smith asserted that the NODA and its associated analysis fell short in providing enough analytical, technical, and factual justification to support DOE's proposed energy savings threshold. It argued that the materials provided no actual methodology or explanation on how DOE arrived at a 0.5 quad energy savings threshold. In its view, the NODA and accompanying data did not support the proposed energy savings threshold conclusion or provide a sound methodology to recreate the actual value proposed in the NOPR to enable the public to understand how the threshold conclusion was reached and cannot be relied on to justify this aspect of DOE's proposal. (A.O. Smith, No. 153, at pp. 1-2) It added that basing a threshold using site energy savings would not present a "full picture of the total energy use used by the building (or the appliances in it) because the process of generating electricity incurs substantial losses associated with delivering fuel (e.g. gas, electricity, oil) to the site. In its view, source

energy is the most equitable metric for evaluating national energy savings comparisons among buildings and appliances since it considers different fuels and provides a more neutral foundation to assess total energy savings. It further argued that relying on site energy “severely undervalues” electricity savings compared to gas or oil savings and noted that there is a three-fold difference between site and primary/FFC electricity savings when accounting for all transmission and distribution losses. A.O. Smith contended that such a threshold would place electric and gas/oil appliances on an unequal footing with each other, distort DOE’s national energy savings analyses, and negatively impact consumers and U.S. manufacturers by permitting the importation of less efficient products. (A.O. Smith, No. 153, at p. 2).

A.O. Smith also criticized the information disclosed in the NODA because DOE did not acknowledge or consider that each rulemaking included an analytical methodology that was appropriate for the particular covered product in question. For example, not all of the examined rulemakings use the same analysis period (i.e. length of time), leading to a mismatched comparison. (A.O. Smith, No. 153, at p. 2) Further, it noted that the U.S. Energy Information Administration continuously updates the Annual Energy Outlook with changes in the economy and energy supply/generation, which may deviate from earlier estimates published by the Department. It asserted that to account for the changes in methodology across this time period, DOE would need to convert each energy savings estimate from published final rules to allow for an accurate comparison. (A.O. Smith, No. 153, at pp. 2-3) It also suggested that DOE should evaluate the impacts of a significant energy savings threshold using the most recent version of DOE’s analysis of energy and economic impacts from energy and water conservation standards,

which would allow for cross comparisons of savings across rulemakings. (A.O. Smith, No. 153, at p. 3)

Finally, A.O. Smith asserted that the NODA included the energy savings from four remanded rulemakings in error – 2001 central air conditioners and central heat pumps (replaced by a 2002 rule with lower national energy savings), 2010 direct heating equipment (unrealized energy savings from remanded portion of the rule for hearth products), 2011 central air conditioners, central heat pumps, and furnaces (unrealized energy savings from remanded portion of rule regarding furnaces); and 2014 walk-in coolers and freezers (double-counting of energy savings of some products vacated from the 2014 rule and subsequently covered by the replacement 2017 rule). (A.O. Smith, No. 153, at p. 3)

A.O. Smith also noted that DOE failed to consider the historical context of the appliance standards program and the implementation of energy conservation standard regulations over time. In its view, the initial standards rulemakings conducted by DOE amounted to “lower-hanging fruit” with regard to improvements in energy efficiency and, as a result, yielded much higher energy savings than subsequent “more incremental” standards rulemakings. Consequently, A.O. Smith argued that DOE’s inclusion of the projected energy savings from these earlier initial rulemakings was erroneous and that DOE should have excluded these initial savings when developing an energy savings threshold. (A.O. Smith, No. 153, at p. 3)

A.O. Smith further asserted that EPCA already prescribes a method for determining whether a given standard would be too costly (or technologically infeasible) for DOE to adopt.

As a result, A.O. Smith viewed the need for a significant energy savings threshold value as unnecessary. (A.O. Smith, No. 153, at p. 4)

AGA urged DOE to rely on FFC energy use rather than site energy use for developing energy savings thresholds and in calculating energy savings projections for new or amended energy conservation standards. (AGA, No. 157, at p. 2) It stressed that under 42 U.S.C. 6295(o), DOE may use full FFC energy use when determining whether a given level of energy savings constitutes “significant” energy savings. (AGA, No. 157, at pp. 5-6) AGA also pointed to DOE’s prior policy statement regarding the use of full fuel cycle energy use metrics. (AGA, No. 157, at pp. 6-7) AGA also argued that site energy use does not account for upstream energy savings impacts from standards or permit comparisons across fuel types. (AGA, No. 157, at pp. 7-8) By adopting an approach that eliminates all upstream energy consumption and associated emissions required to deliver fuel to its point of use, AGA argued that DOE’s significant energy thresholds would provide an incomplete picture regarding the potential impacts of a standard. (AGA, No. 157, at pp. 8-9). AGA also noted that the National Academy of Sciences recommended that DOE use a FFC metric and that other agencies, such as the EPA, supported that approach. (AGA, No. 157, at pp. 9-11). AGA added that source energy – used by the GREET model¹⁵ -- excludes extraction and production losses but could be readily converted to a FFC measure of energy consumption. (AGA, No. 157, at p. 11). AGA was also concerned that DOE’s potential reliance on a site energy-based approach would ignore the benefit that FFC

¹⁵ Sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE), Argonne National Lab developed a full life-cycle model called GREET (Greenhouse gases, Regulated Emissions, and Energy use in Transportation) to allow researchers and analysts to evaluate various vehicle and fuel combinations on a full fuel-cycle/vehicle-cycle basis. This model is used by DOE to help ascertain potential impacts related to DOE’s standards rulemakings.

energy use would provide by accounting for a broader range of energy impacts and would depart from the Agency's past practice. (AGA, No. 157, at p. 12) It added that the public would benefit from the use of a FFC energy metric and asserted that such a metric would provide "the most efficient and equitable characterizations" of energy usage across competing fuels. Further, it noted EPA's reliance on full fuel cycle energy data as part of their ENERGY STAR program for commercial buildings. (AGA, No. 157, at p. 13)

In addition, AGA reiterated its support for the use of significant energy savings thresholds and reiterated its earlier recommendation that the thresholds consider a combination of the anticipated overall energy consumption savings along with the percentage reduction of energy consumption for the covered products compared to the applicable existing standard. (AGA, No. 157, at p. 14) AGA suggested that DOE should take into account a combination of the possible quad reductions and the anticipated percentage reduction of energy consumption so that it is not "one or the other." (AGA, No. 157, at p. 15)

AGA offered an example to illustrate one way to use its suggested threshold approach:

If DOE established a threshold of 0.5 quads of energy savings and a 10 percent reduction in the energy consumption of the covered product, as referenced in the NODA, and if a new standard was projected to save 0.25 quads of energy (a level below the energy savings threshold) but result in a 20 percent reduction in energy consumption for the covered product (two times the percent threshold), the rulemaking process could proceed since the two thresholds were proportionately achieved. However, if in the above example, the new standard would have only achieved a 10 percent reduction in energy consumption for the covered product, it would not

proportionately meet the combined thresholds and the rulemaking process would not proceed. (AGA, No. 157, at pp. 14-15)

AGA also suggested that all DOE benefit and cost calculations be fully documented, subject to public review prior to their use in any rulemaking analyses, and peer reviewed prior to final publication. (AGA, No. 157, at pp. 15-16) It suggested that DOE establish consistent national average energy conversion factors that reflect consensus views of transitions to renewable electricity generation operating contribution, captured energy from renewables, and more realistic electricity grid considerations. It pointed to the use of source energy conversions published by the Pacific Northwest National Laboratory (“PNNL”) in May 2019.¹⁶ (AGA, No. 157, at pp. 16-17)

In addition, AGA suggested that analyses of products should include an analysis of competing product markets and penetrations flowing from efficiency standards proposals, particularly with respect to competing fuel types – which would collectively include estimated responses among manufacturers and their competing product lines, including fuel choice considerations, more realistic fuel switching considerations, and public review of fuel choice and switching methodologies. (AGA, No. 157, at p. 17) Consumer baseline decisions should also presume rational decision making. Under this approach, AGA contended that DOE should model consumers as preferring the product model providing the greatest consumer surplus relative to all covered product models available in the absence of new minimum standards. (AGA, No. 157, at pp. 17-18). It also suggested that once a covered product analysis begins,

¹⁶ See also PNNL, Preliminary Energy Savings Analysis: 2018 IECC Residential Requirements.

DOE should better characterize end-user markets. Specifically, AGA suggested that DOE define these markets in public workshops directed at identifying key customer classes and building types, and achieve consensus on how the standards analysis would apply to these differentiated markets. (AGA, No. 157, at p. 18)

APGA continued to support DOE's goal of establishing a metric that best estimates climate impacts and supports the interests of the public. (APGA, No. 151, at p. 2) It expressed concern, however, with the prospect of DOE's adoption of a site-based energy use metric. Citing to earlier work from the National Academy of Sciences and DOE's subsequent adoption of a policy statement agreeing to use FFC metrics, APGA urged DOE to continue to follow this FFC-based approach when measuring energy consumption. (APGA, No. 151, at pp. 2-3) Pointing to data comparing energy costs and CO₂ emissions across different electric-powered and natural gas appliances, APGA highlighted the lower annual operating costs, lower energy usage and lower CO₂ emissions of natural gas appliances relative to electric-powered ones. (APGA, No. 151, at p. 3)

APPA supported the use of site energy when determining whether the proposed energy use thresholds were met. (APPA, No. 154, at p. 2) In its view, site energy is credible, reliable, replicable, transparent, and an actual metric that can be verified while source energy is an estimate that can be calculated in a variety of ways, have a variety of values, and does not account for significant regional differences in the U.S. (APPA, No. 154, at pp. 2-3). APPA also suggested that DOE clarify which thresholds it would use. It sought clarification on how DOE would treat a scenario where a 10% reduction in energy use occurs over 30 years. If the

reduction were based on site energy use, in APPA's view, the threshold requirement should be based on a minimum percentage reduction in appliance/equipment site energy consumption per year over a 30-year analysis period (or require an X% reduction in annual site energy consumption over a 30-year analysis period). (APPA, No. 154, at p. 3 (emphasis in original)). Regarding those instances where DOE presents a potential range of savings over a 30-year analysis period, APPA suggested that DOE use the mid-point value of the range to improve the understandability and technical accuracy of the analysis being used. (APPA, No. 154, at p. 4)

In joint comments responding to the NODA, ASAP and its fellow joint commenters restated concerns with the proposed energy savings threshold and asserted that DOE has not made a clear proposal regarding those potential thresholds. The commenters were also concerned that DOE would consider using site energy use when evaluating potential energy savings from energy conservation standards and they asserted that DOE has still not provided an "apples-to-apples" comparison of energy savings from historical rulemakings. (ASAP, et al. 2, No. 158 at p. 1) The commenters urged DOE not to adopt a significant energy savings threshold and highlighted examples where DOE analyses have identified efficiency improvements with no first-cost impacts. They argued that setting a threshold would potentially deny the benefits of these energy savings to consumers and businesses. (ASAP, et al. 2, No. 158 at p. 2)

The commenters also asserted that DOE's proposal and subsequent NODA have not yet offered a clear proposal regarding the potential thresholds for determining whether significant energy savings were present in a given situation. They noted that it was unclear whether DOE would be applying an approach based on site, source, or full fuel cycle energy use – in spite of

the NODA's presentation of past energy savings in terms of site energy use. The commenters added that DOE has not clearly defined the 30-year period that would apply and that the proposal continued to remain unclear with respect to the 10 percent threshold – specifically, whether it would amount to a reduction in energy usage or an improvement in energy efficiency. (With respect to the last of these, it highlighted an example of the practical difference between a reduction in energy use and an increase in efficiency.) (ASAP, et al. 2, No. 158 at pp. 2-3)

Additionally, with the NODA's presentation of past rulemaking energy savings in site energy use, the commenters were concerned about relying on site energy, which would, in their view, deviate from prior DOE practice of using source or full fuel cycle energy use. It noted two problems in particular. First, site energy savings do not accurately reflect the total impact of standards on national energy consumption since associated losses in electricity generation, transmission and distribution are not included – in addition to the absence of considering energy used to extract, process, and transport the fuels that are consumed to produce that electricity. Second, relying solely on site energy use would not provide a fair comparison between electricity savings and natural gas savings for the reasons noted. They asserted that FFC energy savings from a standard that saves electricity produces (i.e. accounts for) roughly three times as much in energy savings than from site energy use measurements alone – a standard saving natural gas, by comparison, would yield only 10% more in savings over site energy savings. (ASAP, et al. 2, No. 158 at p. 3).

Finally, the commenters contended that even with the publication of the NODA and the release of its accompanying data, DOE has not provided an “apples-to-apples” comparison.

They noted that the projected energy savings from certain rules presented in DOE's data provided different analytical periods. Second, the commenters stated that the projected savings of two standards were calculated differently: the small electric motors rule was based on a reduction in energy losses, while the electric motors rule was based on a reduction in energy usage. These different approaches can yield different results. Finally, the commenters noted that relying on site energy usage does not provide an "apples-to-apples" comparison when evaluating rules that affect both electric and natural gas products. (ASAP, et al. 2, No. 148, at pp.3-4)

ASAP, et al. 2 provided an example of how this discrepancy could impact the calculated energy savings. For example, the site energy savings listed in the document referenced in the NODA would suggest that the 2016 rule for residential boilers will save more energy (0.137 quads) than the 2016 rule for dehumidifiers (0.100 quads). But in fact, the total energy savings (reported as full-fuel-cycle energy savings in each rule) for dehumidifiers (0.30 quads) are about twice as great as those for residential boilers (0.16 quads). (ASAP, et al. 2, No. 158, at pp. 3-4 (footnotes omitted))

The Cal-IOUs suggested that DOE issue a supplemental notice of proposed rulemaking to provide additional details and respond to various comments. They asserted that the NODA raised a number of issues and that the NODA was unclear whether DOE was proposing to use site or source energy as the basis for the proposed thresholds. They also asserted that the NODA did not provide a uniform set of data to enable a comparison of historical rulemakings since the data unfairly compared the energy savings from gas and electric equipment standards and provided a misleading picture of the savings from gas and electric standards. The Cal-IOUs also

expressed confusion over the “statutorily required measure” referenced by DOE in the NODA’s preamble. (Cal-IOUs, No. 155, at p. 2) Further, the Cal-IOUs reiterated certain questions it raised in response to the proposal itself: (1) How and when will the quantitative energy savings threshold be applied, and what information will inform that analysis? (2) How would the threshold apply to products with multiple product classes? (3) How did DOE arrive at the conclusion that to apply a 0.5 quad threshold in light of the *Herrington* decision’s discussion regarding aggregate source energy? (4) What is the basis for DOE’s 10% threshold? (Cal-IOUs, No. 155, at pp. 2-3)

The Joint Commenters indicated that DOE could adopt a higher quad-based threshold of up to 0.75 quad or a percentage-based reduction of ten percent – which would achieve the same energy savings as the proposed 0.5 quad threshold. (Joint Commenters, No. 159 at pp. 1-2) They noted that the NODA’s data showed that 34 of the 57 rules analyzed would have met the proposed significant energy savings thresholds when applying a quad threshold range of 0.40 to 0.75 quad or ten percent reduction in energy use and emphasized that among the remaining rules that did not meet the proposed threshold, which comprised nearly half of the analyzed rules, the energy savings achieved by these rules amounted to a little over 6% of the total projected energy savings of DOE’s standards rulemakings. (Joint Commenters, No. 159, at 2)

They also stressed that with the passage of time between since *Herrington*, DOE has developed a robust dataset and a voluminous record of energy conservation standards. The Joint Commenters also asserted that DOE’s interpretation of the term “significant” conservation of energy in the aftermath of *Herrington* did not track that decision, which counseled that it was

unlikely that Congress intended for DOE to ignore a cost-free chance to save energy unless the amount of energy saved was genuinely trivial. (Joint Commenters, No. 159, at pp. 3-4) They further emphasized that the *Herrington* court noted that if it were truly obvious, without the extended investigation appropriately undertaken as part of the inquiry into economic justification, that the value of saving small amounts of energy was outweighed by the cost and trouble of undertaking any appliance program at all, DOE might be justified in determining that those small savings were not significant. (Joint Commenters, No. 159, at p. 4 (quoting *Herrington*, 768 F.2d at 1373, n. 19)) The Joint Commenters also noted that recent case law suggests that the meaning of the word “significant” means something “important, notable” as opposed to being “more than trivial or of no importance.” (Joint Commenters, No. 159, at pp. 4-5 (quoting *Kaufman v. Allstate N.J. Ins. Co.* 561 F.3d 144, 157 (3rd Cir. 2009)) They further noted that in determining whether a given level of energy savings is significant, DOE necessarily must compare the aggregate site energy savings achieved by rulemakings that were able to achieve a potential energy savings threshold against those savings that do not. In their view, recognizing every incremental increase in energy savings without limit would effectively read the word “significant” out from EPCA. Consequently, the Joint Commenters argued that the statute should be read as providing DOE with the discretion to establish a significance threshold based on a balancing approach such as the one that DOE has conducted in comparing the projected energy savings from rulemakings that meet a given threshold against the savings from rulemakings that do not. (Joint Commenters, No. 159 at pp. 5-6) To this end, using historical energy savings to determine a potential threshold level is, in the view of the commenters, reasonable. (Joint Commenters, No. 159 at pp. 6-9)

MHARR repeated its earlier assertions regarding the various alleged procedural defects affecting the unrelated rulemaking in which DOE is currently considering potential energy conservation standards for manufactured housing and again urged DOE to adopt the same type of procedural protections and safeguards set forth in the NOPR for manufactured homes. (MHARR, No. 149, at p. 2.) MHARR argued that DOE's approach with respect to setting energy use thresholds for determining whether a given standard would produce significant energy savings should apply equally to DOE's manufactured housing rulemaking – and that DOE should issue an entirely new rulemaking in light of the alleged defects. (MHARR, No. 149, at pp. 3-4)

NBI cautioned that the use of site energy would result in distorted information becoming the foundation of standards setting at DOE. (NBI, No. 150, at p. 1). It noted that jurisdictions both within and outside of the U.S. have relied on source-based, primary energy use rather than site energy, and if DOE were to adopt a site energy-based approach, the Agency would become increasingly divergent from the policies and rules being set at local, State, and international levels. (NBI, No. 150 at p. 1)

NRDC repeated its opposition to the adoption of an energy savings threshold and argued that when applying the projected energy savings presented with the NODA to the proposed thresholds, DOE's approach would make the proposed quad threshold more stringent than if it were based on source or FFC energy use. (NRDC, No. 156 at pp. 1-2) It further argued that the proposed threshold is invalid and contrary both to EPCA and *Herrington*, asserting that DOE's proposal (and subsequent NODA) fails to address the question of rejecting "no-cost standards"

that would result in additional energy savings and urged DOE to evaluate the issue of significant energy savings on a standard-by-standard basis and to consider the aggregate savings of energy involved. (NRDC, No. 156 at pp. 2-3) In addition, NRDC stressed that, in light of the *Herrington* court's discussion of potential source energy-based savings, DOE should consider thresholds at or above the level of 1.45 quads of source energy as "clearly legally impermissible."¹⁷ (NRDC, No. 156 at p. 4) When applied to a site energy-based approach, NRDC asserted that DOE's proposed 0.5 quad threshold is equivalent to a 1.5 quad source energy threshold, which, in its view, would run afoul of the upper bound discussed in *Herrington*. (NRDC, No. 156 at 4) NRDC added that it would not consider a threshold below the 1.45 quad source energy level discussed in *Herrington* as necessarily reasonable or permissible and it urged DOE to withdraw its proposal in its entirety. (NRDC, No. 156, at 4-5)

NYU Law contended that DOE's proposal would set arbitrary thresholds in violation of EPCA and noted that at least one recent court decision indicated that a "very small portion" of a 'gargantuan' total effect" may still create a "gargantuan" effect of its own – suggesting that DOE's proposed thresholds would exclude a large amount of future energy savings as being insignificant. (NYU Law, No. 148, at p. 1) In the commenter's view, DOE's percentage approach can create a misleading impression and is subject to manipulation. Consequently, the energy savings from the various standards that would not have satisfied DOE's proposed

¹⁷ The figure of 1.45 quads is based on the D.C. Circuit's discussion of the energy consumption that must be present to permit DOE to issue a discretionary energy conservation standard for a consumer product – i.e. an annual energy consumption of 0.014335 quad, which is equivalent to 0.0483 quad of annual site energy usage. Projected over a 30-year period would yield 1.449 quads (i.e. 1.45 quads when rounded up). *See generally Herrington*, 768 F.2d at 1374.

thresholds – in addition to avoided carbon emissions – would be sacrificed in the future if the proposed thresholds were adopted. (NYU Law, No. 148, at pp. 1-2)

Samsung reiterated its earlier view (without providing additional support) that the proposed 0.5 quad threshold is too large and may hinder advancement of energy efficiency standards for newly covered products. (Samsung, No. 161, at p. 2) It also repeated its support for DOE's proposed percentage threshold of 10 percent increase in energy efficiency/reduction in energy usage for covered products as a trigger for new standard levels. (Samsung, No. 161, at p. 2)

In joint comments responding to the NODA, Sierra Club and Earthjustice expressed concern over what it perceived as a “dramatic shift” by DOE to move away from relying on source energy or FFC energy consumption to site energy use when projecting potential energy savings of a given standard. (Sierra Club & Earthjustice, No. 160, at p. 1) In their view, adopting a site energy-based approach would ignore DOE's own past findings that site energy measurements do not account for the inefficiencies present in electric generation. (Sierra Club & Earthjustice, No. 160, at pp. 1-2) If adopted without acknowledging and addressing DOE's own record with respect to the deficiencies of site energy and providing a reasoned explanation for the change, the commenters contended that such a move would be unlawful. (Sierra Club & Earthjustice, No. 160, at p. 2) They also asserted that EPCA does not compel that site energy be the basis for the Agency's analyses performed with respect to determining the impacts of a given energy conservation standard and it emphasized that DOE's past and longstanding use of source and FFC energy as part of prior standards rulemakings reflected the Agency's own conclusion

regarding the partial picture presented by site energy usage. That conclusion, the commenters continued, was further buttressed by the work performed by the National Academy of Sciences, which recommended that DOE use FFC energy consumption when assessing the national and environmental impacts from energy conservation standards. (Sierra Club & Earthjustice, No. 160, at pp. 2-3)

They further asserted that even if DOE were permitted to establish a threshold for significant energy savings – which they stressed it could not – shifting DOE’s energy savings calculations to site energy would result in setting a threshold that far exceeds the level of energy savings Congress viewed as significant when it amended EPCA to require DOE’s adoption of standards. (Sierra Club & Earthjustice, No. 160, at p. 3) Citing to *Herrington*, the commenters again emphasized that Congress could not have intended for DOE to not adopt a standard that imposed “absolutely no burdens at all” and that it was unlikely that Congress had intended for DOE to throw away a cost-free chance to save energy unless the amount of energy saved was genuinely trivial. (Sierra Club & Earthjustice, No. 160, at p. 3 (citing *Herrington*, 768 F.2d at 1373)) Sierra Club and Earthjustice also stressed that when the *Herrington* court examined the specific figures inserted into EPCA by Congress, including the prerequisites found in 42 U.S.C. 6295(l) for prescribing standards for newly covered products, it concluded that Congress had viewed 0.014335 quad of site energy use as significant – while DOE’s proposed threshold would not. (Sierra Club & Earthjustice, No. 160, at p. 3)

With respect to the application of a percentage threshold, the commenters noted that the standards at issue in *Herrington* provided for efficiency increases of 5 percent or less, which, in

their view, supported the notion that Congress sought to provide for incremental improvements in energy efficiency – and thereby constraining DOE’s ability to treat equivalent efficiency improvements as insignificant. (Sierra Club & Earthjustice, No. 160, at pp. 3-4) The commenters argued further that prior amendments to EPCA – particularly, the National Appliance Energy Conservation Act of 1987, Pub. L. 100-12 (March 17, 1987), demonstrated (through its adoption of water heater standards that would yield efficiency increases of less than 10 percent and potential energy savings for some standards as being under 0.03 quad per year) that Congress had viewed marginal improvements in efficiency as “worth seizing” through efficiency standards. Accordingly, Sierra Club and Earthjustice argued that history counsels against adopting a significance threshold that would foreclose the adoption of standards yielding comparable energy savings. (Sierra Club & Earthjustice, No. 160, at pp. 3-4)

Spire supported the concept of adopting an energy savings threshold but claimed that a threshold based on site energy use would not appropriately measure the efficiency of fuel utilization from the point of extraction – thereby leading to misleading information regarding the efficiency of gas-fueled vs. electric-powered appliances. It asserted that reliance on site energy would distort the market for appliances and ultimately reduce competition, which would lead to higher costs for consumers. While Spire stated that source energy is a better metric for measuring energy savings than site energy, it also viewed that metric as flawed since the amount of energy lost from the point of fuel extraction to the input of an electric power plant is not considered for purposes of measuring the ‘source’ efficiency of an electric appliance. (Spire, No. 152, at p. 2) Instead, Spire suggested that DOE adopt an approach based on the FFC, which would, in its view, readily show that gas appliances “significantly” out-perform electric-based

options with respect to CO₂ emissions and when examining consumer marginal energy use rates. (Spire, No. 152, at pp. 2-3)

2. Response to Comments on the Proposed Thresholds

After evaluating comments received from both those who supported the use of a threshold – including those who suggested that a different quad threshold be applied – and those who objected to one, DOE revisited its approach. In response to comments seeking clarification regarding the type of energy use on which the quad and percentage thresholds were based, DOE re-examined its data and published a Notice of Data Availability (“NODA”) to present its energy savings data in terms of site energy usage. *See* 84 FR 36037 (July 26, 2019). After taking a second careful look at its data and applying a uniform approach with respect to the energy usage examined, DOE has adjusted its thresholds to account for the concerns raised by commenters.

DOE has divided its responses to the comments on this issue into two parts – one to address comments that generally supported the use of the proposed thresholds and one to address comments that opposed them.

A. Response to Comments Supporting the Proposed Threshold Approach

As a preliminary matter, DOE emphasizes that its application of its thresholds will apply when it first examines whether to initiate a standards rulemaking, during the early assessment phase and throughout the rulemaking process. If DOE engages in a standards rulemaking, these thresholds will also be applied at the different steps of that rulemaking – i.e. Early Assessment, Preliminary Stage, NOPR, supplemental NOPR (if applicable), and final rule. In effect, these thresholds will apply throughout the rulemaking process to ensure that the statutory requirement

of achieving significant energy savings is achieved with any standards final rule that DOE promulgates. (For a visual illustration of how this would apply, see Figure III.1, presented later in this discussion.)

In response to commenters who suggested that the proposed 0.5 quad threshold be raised higher (AHAM, AHRI, BWC, and the Joint Commenters) to 1.0 quad, DOE notes that it recognizes that there is the potential for additional burden reduction and related manufacturer cost savings from increasing the magnitude of the quad-based threshold. The data examined by DOE, however, suggest that doing so in the context of the 57 standards final rules that were examined in the NOPR would significantly decrease the amount of potential energy savings that could be obtained. (*See* 84 FR 36037, 36038 (July 26, 2019)) When comparing that value to the suggested 1.0 quad offered by commenters and applying the same percentage threshold that DOE had proposed, the level of energy savings would decrease by approximately 3% from 94% v. 91%. Following this approach would also eliminate a little over half of these standards rulemakings. (*See id.* at 84 FR 36038-36039.) In DOE's view, raising the quad threshold in the manner suggested would have a severe impact on the potential energy savings that could be obtained from future rulemakings. DOE is not adopting this suggestion due to this fact, along with the absence of any supporting data or analysis from the proponents of this approach to increase the quad-based threshold. As for Samsung's separate suggestion that the 0.5-quad threshold may be too high, DOE has addressed this concern – along with similar ones raised by other commenters – by modifying the quad-based threshold, which is discussed elsewhere in this document.

Regarding suggestions from both EEI and Southern Co. to apply an exception or different threshold for ASHRAE equipment, as explained elsewhere in this document, DOE is treating ASHRAE equipment in a manner consistent with the specific provisions laid out in 42 U.S.C. 6313(a)(6). As explained elsewhere in this discussion, the threshold framework will apply in those instances where DOE intends to adopt standards that exceed the stringency of those set by ASHRAE. DOE notes that the “significant conservation of energy” requirement for standards, that is woven into 42 U.S.C. 6295(o)(3)(B) for consumer products and non-ASHRAE equipment, does not apply to ASHRAE equipment when DOE is following the statutory command to establish the national minimum efficiency standard at the level set by ASHRAE. In setting a more stringent standard for this equipment, DOE must have “clear and convincing evidence” that doing so “would result in significant additional conservation of energy” in addition to being technologically feasible and economically justified. 42 U.S.C. 6313(a)(6)(A)(ii)(II). This language indicates that Congress had intended for DOE to ensure that, in addition to the savings from the ASHRAE standards, DOE’s standards would yield additional energy savings that are significant. In DOE’s view, these two statutory provisions share the requirement that “significant conservation of energy” must be present – and supported with “clear and convincing evidence” – to permit DOE to set a more stringent requirement than ASHRAE. Accordingly, in examining these potential impacts, DOE believes that Congress intended for standards more stringent than ASHRAE to achieve significant conservation of energy in addition to the savings already projected under the ASHRAE standards. The variety of equipment that are encompassed by the ASHRAE equipment classes, the intense amount of scrutiny already applied by technical experts in adjusting any potential standards for ASHRAE equipment through the ASHRAE standards review process, and the nearly identical statutory language imposing that “significant

additional conservation of energy” used by Congress with respect to DOE-initiated standards for this equipment, all favor treating ASHRAE equipment in a manner that recognizes the particular nature of this equipment relative to all other products and equipment that are not similarly subject to the same level of technical scrutiny and review. In other words, the statutory language and factual circumstances surrounding ASHRAE equipment indicate that DOE must determine that adopting a more stringent standard than ASHRAE will produce a significant amount of energy savings above what would be achieved by simply adopting the level set by ASHRAE. As a result, to be consistent with this established framework, DOE is applying the thresholds in this final rule to the standards rulemaking process of 42 U.S.C. 6313(a)(6) governing ASHRAE equipment.

As for EEI’s suggestion that an exception or different threshold be applied to those other products and equipment with smaller markets – DOE does not believe that such changes, absent more concrete and definitive information, are necessary, particularly in light of the other changes that are being incorporated into this final rule in response to commenter concerns. In DOE’s view, the fact that the footprint of a given product or equipment is small suggests that Federal intervention in the form of mandatory standards may not be the appropriate means at that time to improve the efficiency of that product. See, e.g. Battery Chargers Standards Final Rule, 81 FR 38266, 38281-38282 (June 13, 2016) (refraining from including wireless chargers within the scope of the battery charger standards rulemaking to avoid the “loss of utility and performance likely to result from the promulgation of a standard for a nascent technology such as wireless charging.”). In addition, the 10 percent energy savings threshold enables the application of more

stringent standards to products with a “small footprint” that would otherwise be unable to meet the criteria for saving a significant amount of energy.

With respect to AGA’s suggested imposition of an overall reduction in residential energy use test, DOE notes that such an approach would be similar to the one explicitly rejected in *Herrington*, which would not only present a legal problem under existing case law but also link improvements to energy efficiency from a standard for a given individual product/equipment type solely to the amount of savings from that standard relative to the entirety of residential energy usage. (*See Herrington*, 768 F.2d at 1375-1378 (rejecting DOE’s significance tests that, among other things, relied on the overall reduction in energy use when evaluating the energy savings potential that a particular standard could achieve)) Aside from the conflict with current case law, this approach would effectively eviscerate the Agency’s ability to amend its standards. In DOE’s view, AGA’s suggestion presents an overbroad approach that fails to consider the requisite balancing that Congress had instructed DOE to undertake – that of determining whether a given standard that produces significant energy savings for a given product or equipment type is both technologically feasible and economically justified – in order to produce a more precisely calibrated result to improve the energy efficiency of consumer products and (specifically identified) industrial equipment. *See* 42 U.S.C. 6201(5) and 42 U.S.C. 6312(a).

Similarly, NAFEM’s suggestion that DOE apply a Pareto analysis approach to the thresholds presents another alternative that DOE is also declining to adopt. This approach may result in cases where DOE would forego energy savings in cases where one of the two thresholds is met since it would involve applying a more stringent threshold (*i.e.*, determine which 20

percent of rulemakings produce 80% of the energy savings) that would likely remove additional standards that would produce significant energy savings from further consideration. While DOE seeks to improve the efficiency of its own process in developing and finalizing energy conservation standards for its regulated products and equipment, it must also ensure that the statutory criteria can be achieved under the balancing performed under EPCA. *See* 42 U.S.C. 6295(o)(2)(A) (standards must be designed to achieve “the maximum improvement in energy efficiency”) and 42 U.S.C. (o)(2)(B)(i) (detailing factors for determining whether a given standard is economically justified). Applying NAFEM’s suggested approach, would make it unlikely for DOE to meet this requirement since it would raise the probability of prematurely eliminating standards rulemakings for those products and equipment that may still produce significant conservation of energy.

Regarding Regal-Beloit’s suggestion that DOE supplement its thresholds with the use of a ratio of quads over cost impacts, DOE, after careful consideration of this suggested change, is declining to add this step to its threshold approach at this time. To the extent that any “cost-free” energy savings are possible, DOE believes that the modified levels being adopted in this final rule will be sufficient to ensure that it is able to capture the maximum amount of energy savings while limiting the potential financial burdens manufacturers or consumers may face provided the energy savings result in significant conservation of energy. As a result, DOE has decided to retain the general framework of its proposed thresholds without adding this suggested change.

As to GWU’s concerns about the analytical process that DOE would follow once a significant energy savings determination is made, DOE notes that it would continue to perform

the routine economic justification analysis for any potential rulemaking standard that satisfies the applicable threshold. Analyzing whether a potential standard is economically justified is a prerequisite to determining whether the economic justification prong under 42 U.S.C. 6295(o)(2)(B)(i) is met and DOE must complete this step prior to finalizing its rulemaking determination. Consequently, DOE does not anticipate making any changes to this aspect of its rulemaking process.

DOE also took into account Rheem's concerns regarding whether 0.5 quad was "the right number" for a quad-based threshold. Under the revised approach detailed in this final rule, DOE believes that these revisions establish an appropriate quad threshold—namely, 0.3 quads of site energy over 30 years—that satisfies DOE's legal obligations in implementing EPCA. As DOE explains elsewhere in this document, the approach adopted in the rule will apply appropriate quad and percentage thresholds to ensure that those energy savings meriting further analysis are not ignored and receive due consideration for adoption as a standard. And regarding Rheem's urging that DOE consider consumer impacts, DOE notes that consumer impacts remain an integral part of DOE's routine energy conservation standards analysis and the Department does not anticipate any changes to this approach. (*See, e.g.* 42 U.S.C. 6295(o)(2)(B)(i)(I) (instructing DOE when determining whether a standard is economically justified to consider "the economic impact of the standard on the manufacturers and on the consumers of the products subject to such standard."))

Regarding BHI's comments regarding the potential amendment of the threshold levels in the future, DOE notes that while it does not anticipate making changes to these levels, any

amendments would be made as part of a notice and comment rulemaking regarding the Process Rule similar to the one that DOE initiated for this final rule. DOE does not anticipate amending the threshold levels as part of individual energy conservation standards rulemaking efforts.

Finally, as suggested by Spire and numerous other commenters, including those opposed to the use of thresholds, DOE is clarifying the basis for its proposed thresholds and making adjustments to the values being adopted as part of this final rule. While DOE's proposal was based on a calculated value that used both site- and source-based energy savings, this final rule bases the adopted threshold levels on site energy-based savings. DOE's July 2019 NODA on this very topic laid out a variety of threshold scenarios based on site energy usage to illustrate their potential impacts using a combination of different threshold values. *See* 84 FR 36037, 36038-36039 (July 26, 2019) (detailing the impacts of a variety of quad-based and percentage-based threshold combinations based on site energy use). This approach will serve as the basis for DOE's significant energy use thresholds and is consistent with EPCA's definition for "energy use" (i.e. "the quantity of energy directly consumed by a consumer product at point of use") and the process followed by DOE when determining whether to apply energy conservation standards to other covered products (i.e. applying "average per household energy use" when determining whether to prescribe standards). *See* 42 U.S.C. 6291(4) (defining "energy use") and 42 U.S.C. 6295(l)(1) (detailing qualifying criteria DOE must consider prior to prescribing standards for newly covered products).

B. Response to Commenters Opposing DOE's Proposed Use of Thresholds

In reviewing and considering the arguments forwarded by commenters who opposed the use of thresholds for determining whether a potential standard would produce significant conservation of energy, DOE gave careful thought to the concerns and potential problems that they identified. After considering these specific concerns, DOE has taken a number of steps to address them and has made some adjustments to the proposed approach as part of this final rule. These adjustments include providing further explanation of the supporting data (as presented in the July 2019 NODA) and modifying the quad-based threshold level that DOE initially considered adopting. As indicated in DOE's NODA regarding the various threshold combinations it examined, DOE sought additional feedback from the public regarding what might be appropriate levels to use by providing the projected energy savings for the examined standards final rules in a uniform manner using site energy.

As a preliminary matter, in response to the commenters who opposed the proposed thresholds because of the lack of clarity concerning the basis for the proposed levels or out of concern for the level of the proposed thresholds themselves (ACEEE, Bosch, CT-DEEP, Ingersoll-Rand, and NEEA), DOE has since clarified the basis of these threshold levels. *See* 84 FR 36037 (July 26, 2019) (presenting and explaining data regarding projected impacts on number of rulemakings and percentage of energy savings retained relative to applying no threshold under various quad/percentage improvement scenarios using primary source energy use). That NODA explained that DOE re-examined its data and discovered that its proposed 0.5 quad threshold was based on the use of source- and site-based energy. As a result, DOE released a set of tables to illustrate the potential energy savings related to the 57 different standards rulemakings that were examined and the impacts that various quad/percentage efficiency

threshold combinations would have had on those rulemakings. These revised tables present the energy savings involved uniformly in terms of site energy usage and DOE's use of these data is consistent with the manner discussed elsewhere in this document. And while DOE acknowledges Energy Solutions' (i.e. the Cal-IOU's) objections to the proposed thresholds, Energy Solutions offered no data or substantive analysis in support of its views.

Consistent with these clarifications, DOE notes that it will determine whether the threshold levels are met by relying on site energy use values, which, as indicated earlier, is consistent with EPCA's treatment of energy use and procedures for prescribing standards for those covered products not already explicitly addressed under the statute. DOE will also continue to follow its policy of using FFC analyses as part of the Department's energy conservation standards program when analyzing overall impacts, including emissions, from a given rulemaking standard. *See* 76 FR 51281 (Aug. 18, 2011) (announcing DOE's statement of policy to use FFC analysis in its standards rulemakings). *See also* 77 FR 49701 (Aug. 17, 2012) (amending DOE's FFC policy by specifying that DOE's National Energy Modeling System rather than the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation model). In DOE's view, this approach maintains consistency with both its statutory obligations and its policy of ensuring that its analyses address the full range of potential savings and costs that flow from examining the FFC energy use of a given product or equipment.

Regarding the CEC's concern that the application of any thresholds would preempt States from enacting their own standards for a Federally-covered product or equipment type, DOE agrees that EPCA contains explicit preemption provisions that apply both in general for covered

products and as specified in particular circumstances. *See* 42 U.S.C. 6295(ii) and 42 U.S.C. 6297 (detailing specific circumstances in which limitations on Federal preemption of State standards applies).

With respect to Ingersoll-Rand's and NEEA's concerns over the use of thresholds – specifically, that they may be arbitrary and too high, with the proposed 10 percent threshold posing too steep a level of improvement for many covered products and equipment to achieve – DOE notes that it has modified its quad threshold after reviewing its data and relevant comments. The modified thresholds adopted in this final rule, which are based on analyses of projected energy savings from final rules previously adopted by DOE, ensure that those rulemakings that produce energy conservation standards also produce, as urged by NEEA, cost-effective savings to consumers while reducing the burdens that accompany repeated cycles of rulemakings to eke out more limited potential energy savings. While the final selected level of energy efficiency may be influenced by a variety of factors specific to a given case, DOE must rely on its available data and analyses in determining what level – if any – to set for energy savings. Using data from its past analyses and rulemakings, and weighing its obligations under the statute to account for a variety of factors, DOE has determined that applying the thresholds detailed in this final rule set out an approach consistent with its legal obligations and policy to continuously improve energy efficiency that is economically justified.

In DOE's view, the adjustments made to the final threshold levels should be sufficient to address both NEEA's and Ingersoll-Rand's initial concerns about their magnitudes. DOE notes that, given the increasing number of products and equipment that it is either directly regulating or

over which it currently has coverage but is not yet regulating, the Agency's oversight responsibilities are extensive – and, based on prior Congressional actions, are expected to continue to grow. *See, e.g.* Energy Policy Act of 2005, Pub. L. 109-58 (Aug. 8, 2005) (adding battery chargers and external power supplies as products for DOE to regulate), Energy Independence and Security Act of 2007, Pub. L. 110-140 (Dec. 19, 2007) (adding walk-in cooler and freezer equipment for DOE to regulate and revising the scope of electric motor coverage), American Energy Manufacturing Technical Corrections Act, Pub. L. 112-210 (Dec. 18, 2012) (making a series of amendments affecting a variety of procedural and scoping-related provisions regarding regulated consumer products and industrial equipment), and EPS Improvement Act of 2017, Pub. L. 115-115 (Jan. 12, 2018) (setting out procedures for DOE to follow in the event that solid state lighting power supply circuits, drivers, or devices are treated by DOE as covered equipment). Without a more efficient way of managing and prioritizing its limited resources to address these increasing regulatory activities, DOE runs an increased risk of falling further behind in fulfilling its statutory obligations, reducing the quality and comprehensiveness of its analyses, or, adopting statutory interpretations that, while potentially providing an expedient solution for a given issue, may inadvertently undermine the careful consideration that Congress required DOE to perform when evaluating potential efficiency standards for the numerous consumer and industrial appliances that DOE oversees.

As to those commenters (A.O. Smith, AG Joint Commenters, ASAP, et al., Cal-IOWs, CEC, NPCC, NRDC, and NYU Law) who opposed the use of any thresholds, most took that position out of the belief that EPCA only permits the use of an individual case-by-case analysis in every instance where DOE is considering whether to amend or establish a standard for a

particular product or equipment. We note the fact that EPCA specifically states the Secretary may not prescribe an amended or new standard under this section for a type (or class) of covered product if the Secretary determines, by rule, that the establishment of such standard will not result in significant conservation of energy, or that the establishment of such standard is not technologically feasible or economically justified. *See* 42 U.S.C. 6295(o)(3)(B).

DOE has carefully considered these arguments and re-examined the *Herrington* opinion. The statutory test for establishing or revising an energy conservation standard contains three separate and distinct determinations. EPCA makes clear that DOE cannot establish or amend a standard unless all three are met. To comply with EPCA requirements DOE is unable to simply decide that any savings of energy that is technologically feasible and economically justified per se saves a significant savings of energy or that the savings from a number of energy conservation standards will add up to a significant amount of energy. Separate from a determination regarding economic justification or technological feasibility, the Secretary is explicitly prohibited from prescribing an amended or new standard that will not result in significant conservation of energy. Any other position would write out of the statute the discrete determination the language requires about the significance of the energy savings. In explaining its proposal, DOE noted its concern with the direct economic impacts that are likely to flow from imposing standards that are projected to yield relatively lower energy savings—standards that may produce little in overall benefits in energy and cost savings for consumers when compared to the costs related to the manufacture and purchase of products and equipment meeting these kinds of standards. (84 FR 3910, 3922 (Feb. 13, 2019)) DOE elaborated on the basis for its proposal, noting that this [proposed] approach gives effect to the *Herrington* court’s reference to not forego energy

savings that are “cost-free.” However, it would also limit the first-cost impacts to consumers to those instances where a given rulemaking is expected to generate significant energy savings and other substantial benefits. (84 FR 3910, 3922 (Feb. 13, 2019))

And as DOE previously pointed out in its preamble to the proposal, *see* 84 FR 3910, 3922 (Feb. 13, 2019), EPCA, despite using it in multiple statutory sections, does not define the term “significant conservation of energy” nor does it specify any particular criteria or specific guidance as to the term’s meaning. *See* 42 U.S.C. 6295(n) (specifying that DOE shall grant a petition for an amended standard if the petition contains evidence that, if no other evidence were considered, provides an adequate basis that amended standards will result in significant conservation of energy) and (o) (providing that DOE may not prescribe an amended standard if the establishment of that standard will not result in significant conservation of energy). *See also* 42 U.S.C. 6313(a)(6)(A)(ii)(II) (requiring DOE to demonstrate with clear and convincing evidence that adoption of a standard more stringent than those set by ASHRAE would result in “significant additional conservation of energy”). The fact that this term, despite its prominent place in key provisions related to DOE’s standards-making authority remains undefined, indicates that Congress had intended for DOE to make this determination of what level(s) of energy use savings (if any) would satisfy this term. Under such circumstances, case law is clear that an agency, where gaps are present in the statute, must necessarily fill those gaps as appropriate. *See Chevron v. Natural Resources Defense Council*, 467 U.S. 837, 843-44 (1984) (“If Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation.”) (Stevens, J.) *See also Herrington*, 768 F.2d at 1372-1373 (noting that DOE has “substantial discretion to

set specific levels of significance” so long as the levels selected are “consistent with the express terms and underlying congressional intentions of [EPCA].”). Significantly, the *Herrington* court did not attempt to dictate the meaning of “significant conservation of energy,” deferring instead to those specific provisions Congress prescribed in the enacted legislation to discern a reasonable meaning for “significance.” *See Herrington*, 768 F.2d at 1373-1374.

Further, the use of thresholds for determining significance was clearly contemplated under the *Herrington* decision. The *Herrington* court did not shy from applying a threshold – it sought only to determine what would be a reasonable one in light of the various provisions laid out in EPCA. Using the threshold that Congress already set for prescribing an energy conservation standard for which DOE has added coverage, the *Herrington* court determined that Congress must have viewed the prescribed level of energy savings (0.014335 quad per year of household energy consumption for a given product, which translates into a source energy use of 0.0483 quad per year) as being significant. *See id.* (When calculated over 30 years, this source energy use value reaches 1.449 quads and the site value reaches 0.43 quads. These values clearly exceed the max-tech quad threshold of 0.5 quad that DOE had earlier proposed and the 0.3 site energy quad that DOE is finalizing here, respectively.)¹⁸ The *Herrington* court even went as far to emphasize that in those instances where the threshold for significance was not reached, DOE must not issue a standard even in the face of the prospect of forfeiting savings that would impose

¹⁸ DOE notes that in the case of industrial equipment, which DOE began regulating after the *Herrington* decision, the population of potential commercial/industrial equipment over which DOE could add coverage is limited solely to those equipment types listed under 42 U.S.C. 6311(2)(B). DOE may include such equipment types as covered equipment if the Secretary “determines that to do so is necessary to carry out the purposes of this part.” 42 U.S.C. 6312(b). While this provision, unlike its counterpart for consumer products (found in 42 U.S.C. 6295(l)), does not specify a minimum energy use threshold to establish coverage or to set standards, an appropriate threshold based on similar energy consumption use could also apply. Accordingly, DOE may use its discretion in setting initial threshold requirements for adding regulatory coverage of commercial/industrial equipment.

no burdens. *See* 768 F.2d at 1373 (stressing that “DOE may not issue a standard it has disqualified under the significance provision *even if that standard imposes absolutely no burdens at all.*”) (emphasis in original). Determining significance is a decision that rests with DOE. In making this judgment, the Department balanced competing considerations and its limited resources. DOE notes that while the commenters object to the use of thresholds, their past actions in other rulemaking contexts have demonstrated a willingness to accept no changes in a standard for specific product classes where the projected energy savings would be small. *See, e.g.* ASAP, December 16, 2015 Central Air Conditioner and Heat Pumps Working Group Meeting, EERE-2014-BT-STD-0048 at pp. 90-91 (ASAP stating its willingness to leave the standards for single-packaged air conditioners and heat pumps unchanged when the projected energy savings over 30 years were calculated to be 0.2 quad)

Further, DOE notes that EPCA itself does not use the phrase “genuinely trivial” when describing the amount of energy savings that a given standard must achieve. The *Herrington* court used that phrase in an attempt to give substance to the concept of significance but, like “significant energy savings,” never defined that phrase. While DOE may have treated “genuinely trivial” as the test to apply when determining whether to adopt a standard, DOE is now applying the test from the statute itself – i.e. whether the standard produces significant energy savings.

Finally, DOE points out that the *Herrington* court expressed concern not with the use of thresholds but the manner in which those thresholds were developed and justified. In that case, the court viewed DOE’s effort at defining “significant energy savings” as problematic in light of

the agency's inability to sufficiently explain why its three tests for significant conservation of energy were valid in light of other provisions contained in EPCA. The tests that DOE attempted to use to define the contours of significant energy savings effectively prevented DOE from issuing the discretionary energy conservation standards that Congress had intended for DOE to promulgate. *See Herrington*, 768 F.2d at 1375-76. The *Herrington* court sought evidence demonstrating that DOE's definition of significance showed "some awareness of the range of energy savings Congress thought worth pursuing." *Herrington*, 768 F.2d at 1377.

In this rule, DOE has taken a much more tailored approach to account for the concerns noted in *Herrington* and the issues raised by commenters regarding the potential impacts from using thresholds. It has not erected a series of tests that would pose an insurmountable barrier that would effectively bar it from promulgating efficiency standards going forward. To the contrary, DOE's approach, which relies on the past experiences, data, and information from dozens of standards rulemakings completed over three decades, has been designed to not only ensure that economically justified energy conservation standards are developed but to also provide a reasonable level of predictability to DOE's rulemaking process as numerous commenters have repeatedly asked DOE to follow. These thresholds will also enable DOE to focus its rulemaking efforts and enable DOE to efficiently manage the finite resources it currently has with respect to overseeing the standards and test procedures for the products and equipment it regulates.

Further, DOE notes that technological innovation occurs on a constant basis, which means that the product and equipment efficiency levels and cumulative energy savings potential

from new or revised standards for a given product are not static. This potential for continuous improvement is driven by technological innovation and product development which are a function of time. Designs that DOE previously analyzed as max-tech prototypes, and which failed the screening criteria 20 years ago, are today's baseline models. As a result, DOE does not anticipate that the thresholds being adopted in this rule will present an insurmountable barrier to achieve further energy savings in the future.

In light of the balancing of interests that DOE continues to perform with respect to evaluating potential energy conservation standards, DOE is also mindful of its past rulemakings when setting new or amended standards for regulated products and equipment, and believes its extensive regulatory past is the best guide to its future actions. As DOE previously explained, it selected a level that accounted for the concerns noted in the *Herrington* decision by considering the level of savings to apply against the thresholds discussed in that decision and prescribed in EPCA. *See* 84 FR 3910, 3922-3924 (Feb. 13, 2019). In so doing, DOE initially determined that a 0.5 quad threshold applied to the projected max-tech savings, when compared against the sizable number of completed rulemakings that produced new or amended standards for regulated products and equipment, would help DOE to continue to ensure that the vast majority of future energy savings from its rulemakings would be preserved.

Additionally, DOE's proposed approach included a second step to ensure that it would be able to capture energy savings even in those cases where less than 0.5 quad of savings were projected under the max-tech analysis. That second step – applying a percentage-based increase in efficiency, also projected under the max-tech analysis – was intended to provide DOE with a

backstop that would help better account for the energy efficiency potential of the individual product or equipment at issue. DOE notes that by applying these thresholds to the max-tech analysis, DOE will be able to assess the technological feasibility of whether significant energy savings is possible at an early stage of its analysis. Once it makes this determination, DOE will also be positioned to evaluate whether a standard for this level of energy savings is economically justified. Accordingly, under DOE's approach, decisions regarding whether and how to proceed with a given standard can be made in a more transparent and predictable manner consistent with the statute.

While commenters have expressed concerns regarding the potential of inadvertently missing cost-free opportunities for higher energy efficiency-related savings from a standard, those savings must in the first instance be significant, since Congress did not intend for DOE to continually set standards irrespective of the magnitude of those potential savings. *See Herrington*, 768 F.2d at 1378 (noting that "DOE is right to think that under [42 U.S.C. 6295(o)], standards for each product type must result in significant conservation."). *See also id.* at 1373 (stressing that "DOE may not issue a standard it has disqualified under the significance provision *even if that standard imposes absolutely no burdens at all.*") (emphasis in original). DOE believes that its revised process as outlined in this final rule will encourage interested parties to provide substantive input that will assist DOE in readily addressing those potential areas where rulemaking will be most beneficial and yield the greatest amount of energy savings without imposing the economic burdens from multiple additional rulemakings yielding only marginal benefits. By conducting an early assessment of the max-tech energy savings from potential new or amended standards for a given product or equipment type as described in this final rule, DOE

expects that interested parties will provide as much information as early as possible to help supplement any information already being evaluated by DOE to ascertain whether either of the thresholds is met. And in those cases where DOE must make decisions regarding the scope of a particular set of standards, the Agency will apply a cleaner – and broader – approach by evaluating each product/equipment type as a whole rather than dividing a particular product/equipment type into multiple classes or subclasses. DOE does not expect such a circumstance to arise, but should the Department proceed with a standards rulemaking applicable to only a segment of a covered product, it will evaluate the potential energy savings across all product classes. While DOE may ultimately decide not to set standards for every conceivable class within a product or equipment type, DOE anticipates that the potential max-tech standards it will use to evaluate each product and equipment type as a whole at the early assessment stage will enable DOE to reasonably determine whether a new or amended standard for a given product or equipment type merits further evaluation. And should DOE initially view new or amended standards as not being warranted for having not met either threshold, interested parties would have the opportunity to weigh in with additional information and data as part of the notice of proposed determination process required under 42 U.S.C. 6295(m)(1)-(3). See Figure III.1 at the end of this discussion section.

In the case of those rulemakings where standards have been characterized by commenters as having been cost-free (i.e. those involving commercial clothes washers, pre-rinse spray valves, dehumidifiers, and hugger fans), DOE refers back to *Herrington*, which stressed that a standard must not be set unless there are significant energy savings to be had. And as to the specific rulemakings highlighted by commenters, DOE notes that the preamble discussions from the cited

rules noted that certain efficiency levels that DOE considered for certain classes of the products or equipment at issue were not projected to yield net costs, not that these standards would have been cost-free (an amended standard would necessarily involve costs for manufacturers to implement through new compliance-related costs).¹⁹ Regarding water savings, DOE notes that the significant energy (water) savings requirement does not apply to pre-rinse spray valves, which would mean that even if DOE had developed specific water savings thresholds, as it has the authority to do, such thresholds would not apply to this particular equipment type. *See* 42 U.S.C. 6295(o)(3)(B) (specifying significant conservation of water for only “showerheads, faucets, water closets, or urinals”). In any event, even if DOE could consider adopting standards that it believed did not produce significant energy savings, those standards cannot be accurately characterized as “cost-free.”

As to concerns of potential conflicts between the quad savings levels achieved by Congressionally-enacted standards and the quad threshold being set by DOE in this rule, DOE notes that Congressionally-enacted standards are independent of DOE’s analysis of what qualifies as “significant” and can be determined on a case-by-case basis. As a result, Congressionally-enacted standards are always open to any level that Congress deems appropriate. It does not follow, however, that DOE would, without explicit statutory language to the contrary, set a standard without first determining whether significant energy conservation of energy could be achieved. By leaving the meaning of this term undefined, Congress has permitted DOE to define the meaning of this term -- and DOE’s reliance on a reasonable

¹⁹ *See* 79 FR 74492 (Dec. 15, 2014) (final rule amending standards for commercial clothes washers); 81 FR 4748 (Jan. 27, 2016) (final rule amending standards for commercial pre-rinse spray valves); 81 FR 38338 (June 13, 2016) (final rule amending standards for dehumidifiers); *and* 82 FR 6826 (Jan. 19, 2017) (final rule amending standards for ceiling fans).

threshold that accounts for the savings of prior rulemakings in no way conflicts with the ability of Congress to unilaterally set a standard that may differ from the thresholds that DOE applies through this Process Rule. As indicated elsewhere, DOE's approach can permit standards that fall below the quad threshold through its second prong if the facts supported a rulemaking based on the projected reduction in energy use from a standard.

Regarding Earthjustice's concerns of potential gaming by DOE if a threshold is set, DOE notes generally that when examining all products and equipment within a particular type (or in the case of ASHRAE equipment, equipment category) for purposes of determining whether the projected energy savings would satisfy the significance thresholds, DOE will examine product and equipment types in a manner that makes the most sense and not selectively examine classes or sub-classes of products and equipment simply for the purposes of projecting whether potential energy savings would satisfy the applicable thresholds. Similarly, in the case of ASHRAE equipment, which are addressed by a separate statutory provision, if DOE is triggered to examine the standards for certain classes within a particular equipment type, DOE will also examine all of the remaining classes within that same equipment category consistent with its current obligations under the six-year review cycle under 42 U.S.C. 6313(a)(6)(C). Accordingly, in light of the concerns expressed by Earthjustice, DOE has adjusted its regulatory text under Section 6(b) to explicitly spell out this approach.

Regarding water efficiency, DOE acknowledges that its proposed thresholds do not encompass a particular level for the specific water-consuming products identified in 42 U.S.C. 6295(o)(2)(B). In DOE's view, with sufficient data and analysis, a water savings threshold may

be possible in the future. However, the absence of a proposed threshold was due at least in part to the fewer number of data points with respect to water savings. With this data situation remaining the same since the publication of DOE's proposal, DOE is opting not to set any threshold levels related to water savings at this time.

DOE also acknowledges the concerns raised by the Cal-IOUs. While grid reliability issues are a critical concern in the overall context of energy usage, these issues are best addressed within a separate effort focusing on these issues. DOE also notes that the Cal-IOUs did not indicate whether the magnitude of the proposed max-tech threshold levels – let alone those thresholds that DOE is adopting today – would have any appreciable impact to grid reliability and if so, by how much. Nevertheless, DOE notes that, to the extent that these issues become a major factor in a given rulemaking, DOE will address them within the context of that particular rulemaking action.

Regarding the Cal-IOUs assertion that the proposed thresholds would eliminate 4.24 quads of energy savings, DOE believes that the adopted approach presents a careful and reasonably balanced method of ensuring that significant energy savings are produced while limiting the overall burdens associated with implementing and following the necessary regulations for complying with new or amended standards. Moreover, under the proposed thresholds, DOE would still have achieved over 100 quads of energy savings (with 54.64 quads of site energy savings). (*See* 84 FR 3910, 3923 (Feb. 13, 2019) (noting that applying a 0.5 quad threshold would yield 109 quads of energy savings based on an examination of prior DOE standards rulemakings) and 84 FR 36037, 36038 (July 26, 2019) (noting site energy savings of

54.64 quads) (*See also* 84 FR 36037, 36038-36039 (July 26, 2019) (noting that 34 of the examined 57 standards rules produced nearly 94% of the total energy savings -- and would be roughly equivalent to 51.3 quads of site energy savings)) In addition, the 4.24 quads of savings that the commenters cite translate to 3.29 quads of site energy.

As for the concern raised by the Cal-IOUs of the possibility that DOE's thresholds may inadvertently close off potential rulemakings that may unlock substantially more energy savings than had been initially anticipated as part of DOE's early look process, DOE is unsure what the Cal-IOUs are suggesting. However, DOE notes that a properly scoped rulemaking effort from the beginning will minimize the risk of foregoing energy savings. The example cited by the Cal-IOUs — pumps — involved a broad array of products and equipment that fell within that particular category, within which were classes with different potentials for energy savings. When examining the particular pumps at issue in that rulemaking, DOE projected that the max-tech energy savings involved 1.28 quads primary source energy use (and 1.34 full-fuel cycle energy use) — easily well in excess of the 0.3 site energy quad threshold established in this revision to the Process Rule.

With respect to the timing of DOE's application of the thresholds, DOE notes that these thresholds would be applied continuously throughout its various rulemaking steps. DOE would apply these thresholds as part of the early assessment in addition to when weighing the merits of a particular proposal. DOE anticipates that all interested parties will assist the Agency's decision-making process to ensure that any potential energy savings are not unnecessarily foregone and that no rulemaking will be initiated until the appropriate conditions are met — i.e.

when sufficient energy savings under the thresholds are satisfied through DOE's examination and analyses of potential max-tech energy savings. Accordingly, while DOE appreciates the concerns raised by the Cal-IOUs, the framework detailed under this rule should provide adequate incentives to ensure that DOE receives and analyzes sufficient information to enable the Agency to determine whether a given rulemaking merits further action at that particular point in time. Given that DOE is obligated to review its determinations to not amend a standard within a relatively short (three-year) window, additional opportunities to review the max-tech energy savings potential for a particular product or equipment will continuously present themselves. (*See* 42 U.S.C. 6295(m)(1)-(3) (detailing the process by which a notice of determination to not amend a standard will occur and specifying that such notice will provide an opportunity for written comment and for public review of DOE's analysis.))

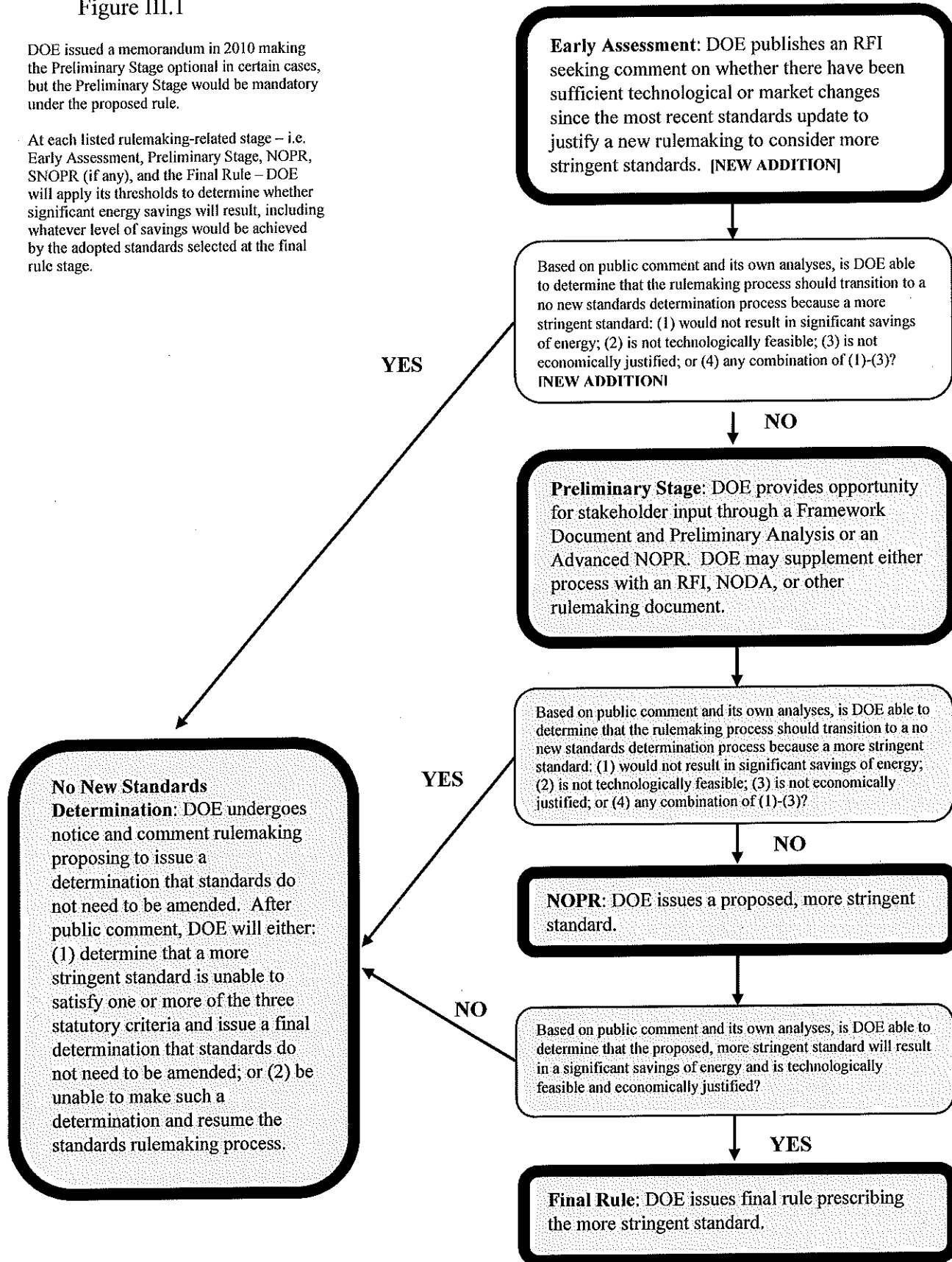
As for A.O. Smith's concern regarding the treatment of DFRs within the context of DOE's significant energy threshold, DOE notes that any DFR agreement submitted to DOE must conform to the statute. As explained elsewhere in this final rule, the DFR provision is procedural, and in no way provides an authority to take an action not in compliance with the rest of EPCA. Thus, a DFR submitted to DOE would need to satisfy the provisions detailed in EPCA in order for DOE to move forward with that submission. In addition, consistent with the approach detailed elsewhere in this discussion of the final rule, any projected energy savings from the standards contained in a consensus agreement presented to DOE pursuant to the DFR provision would need to satisfy the thresholds in this final rule.

Finally, both ASE and Ms. Steinberg appeared to wholly oppose the thresholds out of principle. As to these commenters, DOE refers back to the arguments and explanations presented earlier. Regarding ASE's view that the setting of any threshold is arbitrary and inflexible, and that DOE should instead focus on meeting its statutory deadlines, DOE believes that the thresholds being established in this final rule are based on a careful consideration of available data regarding energy savings that were projected to accrue from these standards. In turn, DOE believes that the adoption of these thresholds will enable DOE to more readily satisfy its continuing obligation to review its standards as well as its separate ongoing obligations to review all of its test procedures on a cyclical basis by helping DOE to quickly identify those areas that will yield the most benefit from DOE's efforts to amend or establish standards producing significant energy conservation for a given regulated product or equipment. By helping DOE to prioritize its efforts, the thresholds will allow DOE to better focus on standards that "provide for improved energy efficiency of . . . major appliances and certain other consumer products." 42 U.S.C. 6201(5).

Figure III.1

DOE issued a memorandum in 2010 making the Preliminary Stage optional in certain cases, but the Preliminary Stage would be mandatory under the proposed rule.

At each listed rulemaking-related stage – i.e. Early Assessment, Preliminary Stage, NOPR, SNOPR (if any), and the Final Rule – DOE will apply its thresholds to determine whether significant energy savings will result, including whatever level of savings would be achieved by the adopted standards selected at the final rule stage.



C. Response to Comments on the Notice of Data Availability

Site Energy

The term “energy use” is defined under EPCA as “the quantity of energy directly consumed by a consumer product at point of use” and as determined under the test procedure promulgated pursuant to DOE’s authority under 42 U.S.C. 6293. (42 U.S.C. 6291(4)) *See also* 42 U.S.C. 6311(4) (defining “energy use” for industrial/commercial equipment as “point of use” energy). An energy conservation standard is defined as either (1) a performance standard that prescribes a minimum level of energy efficiency or a maximum quantity of energy use (or in the case of certain water products, water use) or (2) a design requirement with respect to certain specified products. (*See* 42 U.S.C. 6291(6). *See also* 42 U.S.C. 6311(18) (applying similar criteria for industrial/commercial equipment energy conservation standards)) Further, when establishing coverage for a product under DOE’s limited discretionary authority under EPCA, DOE must first evaluate the average “annual per-household energy use” for the product at issue against a prescribed statutory threshold. (*See* 42 U.S.C. 6292(a)(20) (specifying that a covered product includes “[a]ny other type of consumer product which the Secretary classifies as a covered product under [42 U.S.C. 6292(b)]”) *and* 42 U.S.C. 6292(b) (permitting the Secretary to classify a product as a covered product if it is “necessary or appropriate to carry out the purposes of this chapter” and where products of such type are likely to exceed an average annual per-household energy use of 100 kilowatt-hours or its Btu equivalent)) EPCA also clarifies that in determining whether the 100 kilowatt-hour threshold for coverage is met, DOE must take the estimated aggregate annual energy use of the product type at issue that is used by households in

the United States, divided by the number of such households which use products of such type.
(42 U.S.C. 6292(b)(2))

Similarly, when determining whether it can set an energy conservation standard for a product added for coverage under 42 U.S.C. 6292(b), DOE must determine whether additional criteria, including thresholds based on household energy use, are satisfied. (See 42 U.S.C. 6295(l)) In particular, DOE may prescribe an energy conservation standard for a product covered under 42 U.S.C. 6292(b) provided that the Secretary determines that: (1) the “household energy use of products of that type (or class) exceeded 150 kilowatt-hours (or its Btu equivalent) for any 12-month period ending before such determination; (2) the aggregate “household energy use within the United States by products of such type (or class) exceeded 4,200,000,000 kilowatt-hours (or its Btu equivalent) for any such 12-month period; (3) substantial improvement in the energy efficiency of the product is technologically feasible; and (4) applying a labeling rule is unlikely to be sufficient to induce manufacturers to produce, and consumers and others to purchase, covered products of such type (or class) that would achieve the maximum level of energy efficiency that is technologically feasible and economically justified. (See 42 U.S.C. 6295(l)(1)(A)-(D))

Accordingly, since “household energy use” refers to the point of use energy consumption, these statutory provisions, when read together, indicate that the standards promulgated by DOE must be based on the site energy use of the products at issue. Consistent with this framework, DOE presented its supporting data for the NODA with this structure in mind.

Further, in contrast to the assertions made by some of the commenters, adhering to a site-based approach is also consistent with the framework developed under DOE's FFC Policy Statement when the Agency considered the question of using the FFC within the context of its energy conservation standards analyses. (See 76 FR 51281 (August 18, 2011) (DOE Statement of Policy for Adopting Full-Fuel-Cycle Analyses Into Energy Conservation Standards Program)) While the Policy Statement noted that using FFC measures would help provide more complete information about the total energy use and greenhouse gas emissions associated with a specific energy efficiency level, the Agency also stressed that EPCA requires that its measures used to determine the energy efficiency of its covered products be based solely on the energy consumed at the point of use. (76 FR 51281, 51282) DOE pointed out that although EPCA does not mandate the use of "point-of-use" measures in each of its analyses in support of a given standard – and DOE ultimately decided to include FFC energy measures were included as part of DOE's national impact analyses and environmental assessments for standards rulemakings – DOE made clear its view that the final energy conservation standard chosen "must be expressed as a point-of-use measure." (76 FR 51281, 51284 (citing to 42 U.S.C. 6291(4)-(6), 6311(3)-(4), (18)) DOE also considered the question of whether it should establish a policy to calculate and use full fuel cycle measure in future rulemakings in instances where a fuel choice is present – but ultimately concluded that these additional measures would only provide a rough indicator of the impacts of possible fuel switching on total energy savings and emissions and, therefore, would not enhance current DOE estimates of the direct impacts of alternative standard levels on fuel choice, energy savings, emissions and other factors. (76 FR 51281, 51285)

The adoption of a full fuel cycle approach by other entities and jurisdictions (as indicated by a number of commenters) does not change the fact that DOE has its own, Congressionally-mandated requirements to follow – which require that DOE base its standards on site-based energy use. DOE also notes that the determination of a threshold for significant energy savings is a separate question from whether a given standard is economically justified. Accordingly, consistent with its statutory obligations and with its past practice and policy statements, when determining whether a given standard is economically justified, DOE will apply FFC measures to evaluate the given standard level but continue to base its energy conservation standards on site energy use.

Calculation Methodology

DOE appreciates the various suggestions offered by commenters on possible ways to modify DOE's supporting analysis, such as by modifying the analysis to account for changes in EIA-related numbers, accounting for different methods for setting standards (e.g., reduction in losses v. increased energy efficiency), excluding first-round rulemakings, and others. However, the purpose of DOE's analysis was not to go back and verify or improve the energy savings analyses from these rules. Instead, DOE conducted this analysis in response to *Herrington*, which stated that the "cumulative savings possible from the appliance program as a whole is certainly relevant to whether the conservation that standards for a particular product type might achieve should be deemed significant." 768 F.2d 1355, 1378 (1985). DOE's goal was to determine how much the proposed threshold would have reduced the projected, cumulative energy savings from its prior rules. As the proposed threshold would have preserved 94 percent

of the projected, cumulative energy savings, DOE believes it is a reasonable threshold for significant energy savings.

In future rules, DOE will quantify the quads of site energy saved using the same methodology it has used for previous rulemakings to ensure that standards meet the 0.3 quad threshold over 30 years outlined in this rule. As noted elsewhere in this document, DOE will continue to use FFC energy savings to calculate emissions reductions. As an alternate threshold, DOE will assess the energy savings percentage by assessing the quads of energy saved relative to the baseline. DOE notes that, using this method, the percentage of energy savings would be identical whether quads are assessed at the site energy or primary energy level. In this way, use of a percentage energy threshold in addition to the site energy threshold addresses some commenters' concerns regarding whether a site energy threshold would skew how the Department will treat standards for gas-using versus electric appliances.

Quad and Percentage Thresholds

Regarding the various comments in favor and against the proposed thresholds in light of the supplemental data furnished by the NODA and related docketed materials, DOE continues to believe that it has the authority to establish threshold levels for determining significant energy savings. Nevertheless, DOE has revisited its proposed threshold levels in light of the comments it received in response to the NODA. After reviewing the quad site energy savings from past energy conservation standards rulemakings, DOE has determined to revise its proposed 0.5 quad threshold. The 0.5 quad threshold was not based on a consistent evaluation of energy use across rules. When the energy savings of all rules are evaluated on a site energy basis, the primary goals

of the proposed threshold are best achieved at 0.3 quads of site energy. Namely, this threshold clearly distinguishes between the standards that accomplish the vast majority of total energy savings and those that accomplish purely incremental savings at the same level of administrative burden. When considered in this light, DOE has decided to adopt a threshold for significant energy savings at 0.3 quads of site energy or, if that level is not met, a 10 percent reduction in site energy use.

As a preliminary matter, DOE notes that the NODA data were intended to present the projected energy savings from past rulemakings in a uniform manner consistent with the framework established by Congress to illustrate the relative savings achieved by DOE's prior rulemakings when setting energy conservation standards. As A.O. Smith noted, the rulemakings listed in the NODA do not all have the same analytical period. However, DOE clearly specifies in this rule that for future rulemakings energy savings will be assessed over a 30-year analytical period, which clearly provides a uniform approach across rulemakings.

With respect to the energy usage threshold that Congress imposed as a mandatory prerequisite before permitting DOE to set standards for a given product using its discretionary authority under 42 U.S.C. 6295(l), that threshold is equivalent to 0.014335 quad of site energy use on an annual basis. When extrapolated over 30 years, that total amount of quad savings – 0.43005 quad – would exceed the site energy-based equivalent level adopted in this final rule. With the site energy-based approach adopted in this rule, DOE has decided to lower its quad-based threshold to 0.3 quad.

DOE notes that in those instances where even this amount of savings may prove too high a hurdle to surmount, DOE would apply its percentage threshold, which was intended to be a measure that would be better tailored to accommodate the particular energy savings potential of the product/equipment under consideration. With respect to applying the percentage threshold, DOE notes that it has further examined its proposed 10 percent level. Under DOE's proposed thresholds, approximately 95% of the total savings from the 57 final rule would have been retained. Given the concerns raised by the commenters, DOE adjusted its quad-based threshold but has chosen to retain the proposed 10 percent threshold for this final rule. In DOE's view, these thresholds together create a fair trade-off to ensure that energy savings achieved by DOE's rulemaking efforts produce results that are consistent with the balancing required under EPCA – i.e. to produce significant energy savings that are technologically feasible and economically justified. This result is consistent with EPCA's goal of improving energy efficiency while also ensuring that those energy savings achieved are significant in the first instance. *See generally* 42 U.S.C. 6201(5) *and* 42 U.S.C. 6295(o)(3)(B). *See also Herrington*, 768 F.2d at 1376 (noting that DOE may set levels of significance as a percentage of energy consumed by a product “provided that the levels selected reasonably accommodate the policies of the Act.”) In DOE's view, the adjustments it is making in this final rule to establish thresholds for significant energy savings attempts to reduce the overall potential regulatory burdens in the form of reduced rulemakings while retaining the vast majority of energy savings (over 95%) when viewed against past rulemakings. (*See* 84 FR 36037, 36038 (July 26, 2019)).

Further, use of a percentage threshold addresses commenters' concerns regarding the ways in which a site energy threshold could cause appliances with different fuel sources to be

treated differently, because the percentage change remains constant regardless of which energy metric is selected. *See generally* 42 U.S.C. 6201(5) *and* 42 U.S.C. 6295(o)(3)(B). *See also Herrington*, 768 F.2d at 1376 (noting that DOE may set levels of significance as a percentage of energy consumed by a product “provided that the levels selected reasonably accommodate the policies of the Act.” The 10 percent level being adopted in this rule accounts for potentially lower reductions in energy savings that may occur as DOE continues to incrementally amend the standards for regulated products and equipment.

As DOE previously explained, its purpose in setting thresholds for significant energy savings was to take a middle ground when determining significant savings of energy to improve the predictability and transparency of its standards rulemakings. (*See* 84 FR 3910, 3923 (Feb. 13, 2019)) Further, DOE must also consider “the overall conservation possible” under its program in determining what would meet the “significant conservation of energy” requirement prescribed under EPCA. *Herrington*, 768 F.2d at 1378. In following this framework, and in contrast to its past approach of emphasizing whether projected energy savings were “genuinely trivial,” DOE gave careful consideration to the results of its past rulemaking actions and is now seeking to better balance the potential savings and potential burdens involved to help ensure that DOE produces rulemakings that achieve significant energy conservation as required under EPCA while reducing the overall burdens in achieving those savings.

Regarding requests that DOE clarify whether it is adopting a max-tech percentage threshold based on a reduction in energy use or an improvement in energy efficiency, DOE has decided, as indicated earlier, to adopt the former. In addition to the differences noted by

commenters, DOE believes that adopting a percentage threshold based on the reduction in energy use is preferable given that it more closely tracks the statutory framework to directly address energy use and to reduce that usage to the extent possible within the limits prescribed by EPCA. *See generally* 42 U.S.C. 6291.

Other Comments

With respect to MHARR's suggestion to apply the Process Rule's provisions to the separate rulemaking on manufactured housing that is currently underway, while DOE appreciates this suggestion, we note that the statutory authorities for manufactured housing and the appliance standards that are addressed by this final rule are in separate chapters within Title 42 of the U.S. Code and have no relationship with each other — aside from applying generally to DOE. Consequently, DOE is declining to adopt this suggestion.

As for suggestions that DOE issue a supplemental notice of proposed rulemaking, DOE is also declining this suggestion. In DOE's view, the proposal, related public meetings, and subsequent NODA (and accompanying data), provided a sufficient opportunity for interested parties to meaningfully comment on the proposed rulemaking. Given the detailed feedback provided by commenters, and the nearly 200 days in total that stakeholder have had to submit comments on these topics, DOE does not believe that a supplemental notice is necessary. Should DOE decide, however, to amend the process rule at a later point in time, a new notice of proposed rulemaking would be issued and published.

Regarding how and when the quantitative thresholds would be applied, as noted elsewhere, these thresholds would be applied at the initiation of a review of potential standards for a given product or equipment. Assuming that the max-tech-based threshold for significant energy savings is met, DOE would evaluate potential standards under consideration against that threshold and whether those standards would be economically justified – with technological feasibility already being addressed under the initial max-tech analysis. This review would be conducted in a manner consistent with the approach outlined in Figure III-1. Relevant information collected by and submitted to DOE at each respective step will be used to assess any potential standards under consideration. In applying these thresholds to multiple product classes belonging to a particular product type, as stated elsewhere in this document, the significant energy thresholds would apply to the product type as a whole, not simply to a particular class of that product type. DOE has added language to the regulatory text to mitigate the risk of potential manipulation of classes (or subclasses) for the purposes of attempting to solely satisfy (or not satisfy) the thresholds.

I. Finalization of Test Procedures Prior to Issuance of a Standards NOPR

Currently, the Process Rule states that DOE will propose any modifications to a test procedure prior to issuing an ANOPR for energy conservation standards and finalize those modifications prior to issuing a NOPR for energy conservation standards. However, DOE has deviated from this schedule in the past and conducted test procedure and standards rulemakings concurrently.

DOE recognizes that a finalized test procedure allows interested parties to provide more effective comments on proposed standards. Further, if the test procedure is finalized sufficiently in advance of the issuance of proposed standards, interested parties will have experience using the new test procedure, which may provide additional insights into the proposed standards. As a result, in its February 13th NOPR, DOE proposed to require that test procedures used to evaluate new or amended standards will be finalized at least 180 days before publication of a NOPR proposing new or amended standards. (84 FR 3910, 3926) In this final rule, DOE has adopted this proposal.

Most commenters are in general agreement that test procedures should be finalized before DOE proposes new or amended standards. Commenters agreeing include: CTA, No. 136 at p. 3; A.O. Smith, March 21, 2019 Public Meeting Transcript, No. 87, at p. 27; Acuity, No. 95, at p.5; AHAM, April 11, 2019 Public Meeting Transcript, No. 92, at p. 36; AHRI, March 21, 2019 Public Meeting Transcript, No. 87, at p. 12; AHRI, April 11, 2019 Public Meeting Transcript, No. 87, at p. 49; ASE, No. 108 at p. 5; AGA, March 21, 2019 Public Meeting Transcript, No. 87, at p. 20; Joint Commenters, No. 112, at p.8; AGA, No. 114, at pp. 20-21; ALA, No. 104 at p. 2; APGA, March 21, 2019 Public Meeting Transcript, No. 87, at pp. 14-15; APGA, No. 106 at p. 4; ASAP, April 11, 2019 Public Meeting Transcript, No. 92, at p. 43; BWC, No. 103 at p. 3; CTA, No. 136 at p. 3; Joint Commenters, No. 112 at p. 8; Lutron, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 52-53; Lutron, No. 137 at p. 2; NEMA, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 47-48; NPGA, No. 110 at p. 2; PG&E, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 41-42; Rheem, No. 101 at p. 1; Signify, No. 116 at p. 2; BHI, No. 135,

at p. 3; Westinghouse, April 11, 2019 Public Meeting Transcript, No. 92, at p. 38; Zero Zone, No. 102 at p. 2.

Most of the commenters agree that the proposed 180-day time period is appropriate. Only three would prefer a longer time period: NAFEM suggesting a 270-day time period (NAFEM, No. 122, at p. 4), Westinghouse suggesting a longer time period without a specific proposal (Westinghouse, April 11, 2019 Public Meeting Transcript, No. 92, at p. 38), and ALA offering support for the 180-day, although suggesting that more time would be beneficial (ALA, No. 104 at p. 2).

Zero Zone argued that test procedures must be finalized before a standard is developed. Zero Zone emphasized that, due to EPCA's anti-backsliding provision, energy conservation standards improperly set due to an incomplete understanding of test procedure amendments cannot be adjusted downwards. According to Zero Zone, completion of a test procedure prior to standards initiation would help avoid such problems and ensure that standards are set at an appropriate level. (Zero Zone, No. 102 at p. 2) DOE agrees with Zero Zone's comment as another reason in support of DOE's proposal.

Several commenters believe that the requirement to finalize test procedures 180-days prior to proposing a related standards rule is too restrictive. ACEEE stated that such a requirement would not only prolong the process, but also prevent the later proceedings from informing the earlier one, thus resulting in worse test procedure decisions or years-long delays as the earlier rulemakings are repeated. ACEEE stated that it generally supports completion of test

procedures well before the end of the comment period on the standard NOPR, while leaving an ability to fix problems that may become apparent later. (ACEEE, NO. 123, at p. 2) Similarly, the AGs Joint Comment opposed the requirement for test procedures to be finalized 180 days prior to issuance of a standards NOPR because it would unnecessarily delay the rulemaking process by imposing a 180-day waiting period, thereby threatening DOE's ability to meet EPCA statutory deadlines. It agreed that DOE should strive to finalize test procedures before a standards rulemaking commences, but saw no reason to impose an inefficient waiting period which would be to the detriment of the interests of the public and other non-manufacturer stakeholders. Furthermore, the AGs Joint Comment argued that manufacturers already have a very significant role in test procedure rulemakings, because they supply information (e.g., product expertise and test data), so making the standards rulemaking await completion of the test procedure rulemaking would give manufacturers inordinate influence over when such standards rulemaking may begin. According to the AGs Joint Comment, DOE's proposed approach is contrary to the spirit of EPCA, which affords diverse stakeholders an equal opportunity to participate in the process, and any delay on the part of the manufacturers could render DOE unable to meet its statutory deadlines. (AGs Joint Comment, No. 111 at p. 7)

DOE disagrees with the proposition from the AG's Joint Comment that the 180-day waiting period will give manufacturers excessive influence over the timing of the standards rulemaking process. First, DOE approaches the rulemaking process expecting that all stakeholders will act in good faith even while advocating for their particular position. DOE notes that existing Process Rule, which has been in place for more than 20 years, has contemplated that the test procedure would be finalized prior to the publication of the proposed

rule in the standards proceeding and the scenario posited by the AG's Joint Comment has never materialized. Second, the 180-day period has its own clear purpose, that is, it is designed to ensure that during the standards process all parties can rely on the accuracy of the related final test procedure. Most stakeholders agree with the underlying intent of the provision even if they disagree with the specific time period.

The CEC asserted that DOE's proposal to insert an interval between the test procedure and standards rulemakings would introduce "unnecessary barriers" to the standards process and would "do nothing to advance energy efficiency under the statutory intent of EPCA" and harm consumers by delaying the effectiveness of standards that would otherwise save energy and money. (CEC, No. 121, at pp. 4-5) CT-DEEP asserted generally that it opposed any changes that would lengthen the rulemaking process. (CT-DEEP, No. 93, at pp. 1-2) As noted above, the accuracy of test procedures advances EPCA's goal of energy efficiency. The standards rulemaking process cannot proceed without accurate test procedures. Thus, the 180-day period is not an "unnecessary barrier."

NPCC supported the goal of developing a test procedure prior to the issuance of a standards NOPR but it objected to the fixed 180-day time interval between the test procedure final rule and the publication of the standards proposal. In its view, this time period is both too long and removes DOE's flexibility to issue a proposal in a shorter period of time in order to satisfy a related statutory deadline for a standards rulemaking. NPCC also objected to the proposed condition that the test procedure final rule be "completely 'finalized' prior to the [standards] rulemaking [being initiated NPCC argued that DOE should continue to allow for

flexibility if the rulemaking process reveals a need to modify the applicable test procedure.
(NPCC, No. 94, at p. 6)

Energy Solutions stated that DOE should aim to finalize a test procedure before issuing a proposal for standards, but it should be non-binding guidance, not mandatory. If it is mandatory, it could cause DOE to miss statutory deadlines. (Energy Solutions, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 37-38, 56) Similarly, the Cal-IOUs support the current guidance approach, which is for DOE to aim to issue a final test procedure rule prior to a standards NOPR whenever feasible or practical so that the standards rulemaking can account for any test procedure updates. (Cal-IOUs, No. 124, at p. 11) By linking a standards rulemaking directly to a test procedure rulemaking, the Cal-IOUs worried that this approach would significantly hamper DOE's ability to meet statutory deadlines. Cal-IOUs, No. 124, at p. 11. ASE expressed concern that a binding Process Rule would make it impossible for DOE to resolve test procedure issues which come to light without losing time and potentially missing statutory deadlines. (ASE, No. 108 at p. 5)

The above comments reflect the concern among several commenters that DOE needs to retain flexibility during the rulemaking process. To a large extent, the process of amending the Process Rule arose from complaints that DOE was exercising too much flexibility during the rulemaking process and was not following the current Process Rule. A number of those complaints were situations in which DOE had not completed a test procedure rulemaking prior to proposing a new or revised standard. In DOE's experience, not following that step-wise approach resulted in disputes over data and technical issues that lead to delays. In response,

DOE has examined the issue and has decided to make the previously existing concept of completing the test procedure rulemaking prior to proposing a new or revised standard mandatory and specify a period of time that is of sufficient duration that accurate data can be produced using that test procedure to inform decisionmaking in the standards rulemaking process.

One specific issue addressing flexibility on which commenters have generally expressed concern is how the Department will handle technical corrections to a finalized test procedure, either discovered during the standards rulemaking or perhaps, at a time after it becomes final. Lennox suggested that if such a situation arises, DOE should assess the best course of action on a case-by-case basis guided by principles that: (1) stakeholders have adequate notice and opportunity to comment on rulemakings; and (2) burdens on regulated-equipment manufacturers, including the burdens of the rulemaking process itself, are minimized. Lennox believes that DOE should not automatically be required to re-propose the standards NOPR if the need for a technical correction is discovered. (Lennox, No. 133, at pp. 6-7) On this same topic, the AGs Joint Comment questioned whether the test procedure problem would need to be resolved first and then have the standards rulemaking start all over again. According to the AGs Joint Comment, not only would this approach jeopardize DOE's ability to meet statutory deadlines, but given the ambiguity of this part of the agency's proposal, stakeholders have not been afforded adequate notice to allow a meaningful opportunity to comment. (AGs Joint Comment, No. 111 at pp. 7-8)

Similarly, ASAP raised the concern as to how DOE will make changes to the test procedure when the problems arise during the standards process after the test procedure has been finalized. Referring to the test procedure, ASAP said "have it done but don't have it so done" that the Department cannot make changes if needed and still meet statutory obligations for test procedures. (ASAP, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 44-46) ASAP urges the Department to retain flexibility to address test procedure issues because it seems inevitable that situations will arise that will require deviating from the general practice. ASAP, et al. believes that the language in the current Process Rule that "final, modified test procedures will be issued prior to the NOPR on proposed standards," is sufficient. ASAP, et al. states that an alternative could be to specify 180 days between the finalization of a test procedure and the end of the comment periods on the standards NOPR, which would give manufacturers enough time to evaluate the impact of any test procedure changes on the performance of the products. (ASAP, et al., No. 126, at pp. 2, 11-12) In response, DOE takes the position that ASAP's alternative proposed language is too open-ended and vague to create certainty for stakeholders.

Southern California Edison also expressed its concern as to how test procedure changes will be handled and is concerned about DOE giving up its flexibility. (Southern California Edison, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 49-51). One commenter specifically suggested that if changes to the test procedure are made after the 180-days, manufacturers will need to re-test to the new standard and the 180-day period should be reset. (Lutron, April 11, 2019 Public Meeting Transcript, No. 92, at pp. 52-53) The Joint Commenters recommended that DOE include an opportunity for DOE to adjust and address test procedure amendments on an expedited basis, such as a petition from stakeholders. This commenter stated

that such a process would not be intended to address sweeping changes to the method of test, but could fix errors or address burdensome practical challenges that had not been anticipated during the rulemaking stage. (Joint Commenters, No. 112, at p. 8; GEA, No. 125 at pp. 2-3, also supporting a quick fix process)

Generally speaking, DOE would not expect that as soon as a test procedure is finalized, DOE and stakeholders would immediately find significant changes that need to be made to the just-finalized test procedure. In fact, requiring the test procedure be completed prior to proposing a new or revised energy conservation standard should ensure that these issues don't occur and, in the unlikely event that they do, DOE can make an amendment before getting too far along in the standards rulemaking or before the statute would require use of the test procedure to make representations. If it was discovered that small, technical changes are needed, DOE would hope that all stakeholders would join together with DOE to allow such minor changes to be made without revisiting the entire test procedure from the beginning. We would expect that all stakeholders would join in a common sense, expeditious solution.

The remote possibility of a worst-case scenario happening, that is, significant errors being discovered during a standards rulemaking for a related, recently finalized test procedure, should not diminish the positive impact of providing for a specific 180-day period, which coincides with the statutory 180-day period prior to use of the test procedure for making representations using the test procedure. Providing a 180-day period between a final test procedure rule and a proposed standards rule gives stakeholders the opportunity to evaluate the new or amended test procedure and assess the effects of the test procedure on upcoming proposed standards within a

specified reasonable time period. As AHAM stated at the April 11, 2019 public meeting, industry needs to have some opportunity to work with the new or amended test procedure before standards proposals can be effectively analyzed. (AHAM, April 11, 2019 Public Meeting Transcript, No. 92, at p. 36) APGA offered a similar comment stating that finalizing the test procedure first gives stakeholders the opportunity to work with the test procedure to help ensure that it is technically correct and produces repeatable results, and that interested parties can ascertain the impacts of the test procedure on the current energy efficiency rating of covered products. APGA argued that unless stakeholders know the exact and settled procedure for testing, they cannot meaningfully analyze and comment on the impacts of proposed standards. (APGA, No. 106 at p. 4) And, the Joint Commenters commented that the appropriate sequencing allows predictability, transparency, and the opportunity for stakeholders to understand the ramifications of the DOE's rulemaking proposals. Only after real-world testing can manufacturers, and indirectly DOE and the public, be comfortable that the implications for the test procedure's application to a revised standard are fully understood. (Joint Commenters, No. 112, at p. 8)

Accordingly, in light of the reasons discussed above, DOE is adopting its proposal to require that test procedures used to evaluate new or amended standards will be finalized 180-days before publication of a NOPR proposing new or amended standards.

J. Adoption of Industry Standards

As part of its February 13th NOPR, DOE proposed to amend the Process Rule to require adoption, without modification, of industry standards as test procedures for covered products and

equipment unless such standards do not meet the EPCA statutory criteria for test procedures. (84 FR 3910, 3927) This Process Rule requirement would apply to covered products and equipment where use of an industry standard is not mandated by EPCA. In effect, this requirement is merely a codification of DOE established practice.²⁰

DOE's established practice has been to routinely adopt industry standards as DOE test procedures and in cases where the industry standard does not meet EPCA statutory criteria for test procedures make modifications to these standards as the DOE test procedure. These modifications have always been handled during the individual notice and comment rulemaking proceeding for the test procedure at issue. As noted in the NOPR, DOE recognizes that modifications to these standards impose a burden on industry (*i.e.*, manufacturers face increased costs if the DOE modifications require different testing equipment or facilities).

Several commenters, CTA, the Joint Commenters, and NEMA point to the fact that U.S. law and policy, that is, the National Technology Transfer and Advancement Act (NTTAA) and

²⁰ Throughout this discussion, DOE will use the terminology "consensus standards" as opposed to "industry standards" due to the fact that the National Technology Transfer and Advancement Act (NTTAA) and OMB Circular A-119 address the use of private sector standards, developed by private, consensus organizations to meet Federal agency needs in standards development activities.

There was some debate during the course of this rulemaking as to the meaning of "consensus." NRDC specifically states that these standards should not be rebranded as something they are not. (NRDC, April 11, 2019 Public Meeting Transcript at pp 79-80) Consensus means different things in different context. (NRDC, April 11, 2019 Public Meeting Transcript at p. 87) EEI stated that the term consensus is more than a simple majority but less than unanimity. (EEI, April 11, 2019 Public Meeting Transcript at p. 82) Westinghouse requested that DOE change terminology from industry standards to consensus standards. (Westinghouse, April 11, 2019 Public Meeting Transcript at pp. 39-40)

OMB Circular A-119, “Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities,” together direct Federal agencies to adopt voluntary, private sector, consensus standards to meet agency needs during standards development activities, thereby supporting the use of technical standards that are developed or adopted by voluntary, private sector, consensus standards bodies (rather than government-unique standards), unless such standards are inconsistent with applicable law or otherwise impractical. (National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113, Section 12 (March 7, 1996) and revised Circular A-119, 81 FR 4673 (January 27, 2016)) The NTTAA codified the policies in OMB Circular A-119. The 2016 revised version of OMB Circular A-119 is available and can be accessed via PDF download at <https://www.whitehouse.gov/omb/information-for-agencies/circulars/>.

Together, the commenters explain that several public policy objectives underlie the NTTAA and OMB Circular A-119. These objectives include the intention to enhance technological innovation for commercial public purposes, to promote the adoption of technological innovations, to encourage long-term growth for U.S. enterprises, to promote efficiency and economic competition through harmonization of standards, and to eliminate the cost to the Federal government of developing its own standards and decrease the burden of complying with agency regulation. CTA also points out that it believes governmental use of consultants to develop test procedures is not only costly, but is less transparent and open than the consensus standards development process. It states that such standards development organizations are accredited by national bodies and are open to all interested parties. (CTA, No. 136, at pp. 2-3) NEMA added that by adopting such industry test procedures as Federal test procedure, it is likely to facilitate expedited compliance with DOE legally mandated test

procedures. Also, NEMA states that these consensus test procedure standards are likely to meet the EPCA requirement that a test procedure not be “unduly burdensome to conduct” as they are likely already in use. (NEMA, No. 107, at p. 6) And finally, the Joint Commenters point out that DOE’s proposal aligns with decades-old executive and Congressional policy goals and agrees with NEMA that this policy enables more rapid compliance. The Joint Commenters add that it also promotes confidence in the adoption of energy conservation standards by regulated parties. (; NEMA, No. 107, at pp. 5-6, and the Joint Commenters, No. 112, at pp. 9-10) Accordingly, putting DOE’s proposal in context, on its face, this proposal explicitly implements and is consistent with the NTTAA and OMB Circular A-119.

Lastly, with respect to the NTTAA, Atlas Copco suggested that language be added to DOE’s proposal requiring procedural compliance with section 12(d)(3) of the NTTAA. (Miles & Stockbridge on behalf on Atlas Copco, No. 100, at p. 2-3) In order for DOE to consider adding new language to its proposal at this time, DOE would need to issue a supplemental notice of proposed rulemaking (SNOPR) and re-open the comment period. Rather than delay finalizing this rule, DOE will take this recommendation under advisement and decide at a later date if further amendment to the Process Rule is required.²¹

DOE also strongly agrees with stakeholders that the Department has a fundamental obligation to apply all EPCA statutory requirements when it promulgates any and all test

²¹ Atlas Copco also proposed additional changes to the amended Process Rule that relate to its rulemaking petition concerning the Rotary Air Compressor Test Procedure. This petition was submitted in response to DOE’s request that stakeholders identify existing test procedures that should be modified to conform to existing industry test procedures. (Miles & Stockbridge, on behalf of Atlas Copco, No. 100, at pp. 1-6) These matters will be addressed during the DOE rulemaking that considers Atlas Copco’s petition.

procedures for covered consumer products and commercial and industrial equipment. For certain covered products and equipment, EPCA specifically mandates that DOE adopt certain consensus standards, subject to certain conditions as specified in EPCA. This latter category is not the subject of this discussion. Instead, the following discussion applies only to covered products and equipment where use of consensus standards is not mandated by EPCA.

In order to adopt any such test procedure, the Department must apply certain EPCA statutory criteria. These criteria are contained in two sections of EPCA, that is, 42 U.S.C. 6293(b)(3), and (4), or 42 U.S.C. 6314(a)(2) and (3), depending upon the specific covered product or covered commercial equipment to which the test procedure would apply. Both of these sections contain similar language describing two statutory criteria for the promulgation of a test procedure: (1) that the test procedure shall be reasonably designed to produce test results which measure energy efficiency, energy use, water use, or estimated annual operating cost of a covered product during a representative average use cycle or period of use, as determined by the Secretary, and (2) that the test procedure shall not be unduly burdensome to conduct.²²

Accordingly, when DOE considers promulgating either a new or amended test procedure, DOE will evaluate the applicable consensus standard to determine whether such consensus standard meets the applicable above-referenced EPCA requirements. If the consensus standard

²² The language in 42 U.S.C. 6314 (a)(2) and (3) differs slightly from its parallel sections in 42 U.S.C. 6293(b)(3) and (4). 42 U.S.C. 6314(a)(2) reads as follows: "(2) Test procedures prescribed in accordance with this section shall be reasonably designed to produce test results which reflect energy efficiency, energy use, and estimated operating costs of a type of industrial equipment (or class thereof) during a representative average use cycle (as determined by the Secretary), and shall not be unduly burdensome to conduct.

Subparagraphs (3) for each of these two statutory provisions referenced above address test procedures for determining estimated annual operating costs have similar language but are not identical in order to reflect differences in criteria for covered products and covered commercial equipment.

does not meet both of the two criteria in the applicable section of EPCA, DOE will not adopt the consensus standard “as is.” Stated another way, the consensus standard under consideration must meet the EPCA statutory criteria for it to be used verbatim. If it does not meet the statutory criteria, it will then be necessary for DOE and stakeholders, during the notice and comment rulemaking process, to determine what specific modifications will bring the consensus standard into compliance with the statutory criteria in order for it to be the basis for a final DOE test procedure. Logically speaking then, if the applicable consensus standard under consideration fully meets both statutory criteria, then DOE will adopt it pursuant to this provision in the amended Process Rule. If, on the other hand, the consensus standard cannot be modified to meet the statutory criteria, DOE will not use it and will need to craft its own test procedure from the beginning. As with all test procedure rules and as we stated above, all of these issues, including whether the consensus standard meets the EPCA statutory criteria, will be discussed and decided in the regular notice and comment rulemaking process.

DOE hopes that the above discussion clarifies the application of DOE’s proposal to the adoption of consensus standards. In reviewing the many comments concerning this proposal, DOE observes that many commenters misunderstood DOE’s proposal. Many commenters objected to the proposal, stating in various ways, that DOE should not have a mandatory rule to rely on, or give deference to, consensus test procedures. These commenters state that they do not want DOE to abdicate its responsibility for reviewing and revising consensus test procedures since modifications may be necessary. Generally, commenters want DOE to retain its independence and flexibility when setting test procedures. It would appear that these commenters generally believe that the DOE proposal does not require application of the EPCA

statutory criteria to the consensus standard under consideration. (A.O. Smith, March 21, 2019 Public Meeting Transcript at p. 28; A. O. Smith, No. 127, at pp. 3-4; ASE, No. 108 at p. 5; AGA, No. 114, at pp. 21-22; ASAP, April 11, 2019 Public Meeting Transcript at pp. 70-71; ASAP, et al., No. 126 at pp. 2, 12-13; ACEEE, No. 123, at p. 3; NPCC, March 21, 2019 Public Meeting Transcript at p. 24; NPCC, No. 94, at pp. 6-7; NRDC, No. 131 at pp. 11-12; PG&E, April 11, 2019 Public Meeting Transcript at pp. 228-229; Cal-IOUs, No. 124, at pp. 6, 12-13; Southern California Edison, April 11, 2019 Public Meeting Transcript at p. 65) One commenter, Energy Solutions, stated that outsourcing the test procedure development process to industry is problematic. (Energy Solutions, April 11, 2019 Public Meeting Transcript at p. 74) Whereas another commenter, CEC characterizes DOE's proposal as a "blanket approach" to adopting industry test procedures without providing reasoning that such test procedures meet EPCA's requirements. (CEC, April 11, 2019 Public Meeting Transcript at pp. 231-232; CEC, No. 121, at p. 9-10) Another commenter, the Cal-IOUs, questioned how the provisions in the NOPR regarding industry test procedures help DOE independently assess the representativeness and enforceability of DOE test procedures. (Cal-IOUs, No. 124, at p. 2). As we have explained previously, DOE has determined that it will use industry test procedures as the initial basis for a DOE test procedure, but that is only the first step in the process. Most importantly, DOE must assess whether the industry standard under consideration specifically meets the EPCA statutory criteria for the establishment of a test procedure. So, in response to the Cal-IOUs above-stated question, DOE is applying two separate principles; one does not support or help the other.

According to NRDC, DOE's proposed approach would conflict with EPCA, because unlike commercial equipment, Congress did not explicitly point DOE toward industry consensus

standards for consumer products. But NRDC agrees that industry test procedures can serve as a useful starting point for discussions, even though they often require modification, for instance, to account for power consumption of new features or to address loopholes. NRDC states a preference for DOE's current approach to test procedures, whereby DOE acts as a neutral convener for discussion of test procedure issues. (NRDC, No. 131 at pp. 11-12) While it is true that EPCA does not require the use of consensus standards for certain test procedures for certain equipment, it does not prohibit such use and the NTTAA and OMB Circular A-119 favors the use of consensus standards by agencies, unless there is a conflict with applicable law or it is otherwise impractical. Clearly, nothing in EPCA prevents DOE from using consensus standards in test procedure rulemakings as long as DOE can demonstrate that these consensus standards meet the EPCA statutory criteria. Moreover, DOE believes that whether it uses consensus standards or not in any given situation, it can act as a neutral convener for the discussion and promulgation of test procedures during the rulemaking process.

Moreover, Earthjustice argues that the NOPR fails to consider the implication of Congress's decision to explicitly require DOE to adopt industry test methods for specific products (*i.e.*, many types of commercial equipment, thus limiting its discretion to a narrow review of industry standards for specific products). (Earthjustice, No. 134, at p. 4) As we stated above in response to NRDC, nothing in EPCA prevents DOE from using consensus standards in its test procedure rulemakings, as long as DOE can demonstrate that these consensus standards meet the EPCA statutory criteria. All commenters agree that DOE must meet the EPCA statutory criteria for the establishment of test procedures and most, if not all agree that consensus standards are a logical foundation to begin the test procedure process. Furthermore, the NTTAA and OMB Circular A-119 provide a context for the use of consensus standards to meet agency

needs. Accordingly, DOE finds that this proposal implements both the underlying purpose of EPCA with respect to test procedures, and the NTTAA and OMB Circular A-119 with respect to consensus standards and ultimately, is a reasonable exercise of the agency's discretion in its test procedure rulemaking activity.

ACEEE also argued that consensus test procedures are not generally developed for regulatory purposes. ACEEE added that in developing and implementing mandatory standards, a lack of clarity or different interpretations of the test procedures may surface. It believes that a failure to address these issues results in an uneven playing field for manufacturers as well as inconsistent efficiency levels for consumers. New metrics or requirements may require additional test procedures. This commenter, and others, states that the Department should have the ability to ensure its test procedures serve the purposes of the program, and not be required to adopt industry procedures without modification. (ACEEE, No. 123, at p. 3) DOE agrees with ACEEE that the agency should be able to modify the consensus standards. As we have already discussed, and will reiterate throughout this discussion, if the EPCA statutory criteria are not met, DOE will not adopt the consensus standard under consideration verbatim and modifications will be made to the consensus standard, if possible, so that it will meet the statutory criteria. If this latter result cannot be achieved, DOE must develop a whole new test procedure.

Another commenter, ASAP, believes that DOE's proposal favors manufacturers. ASAP believes that DOE is turning away from consumer needs for a representative test procedure and the Department's need to set standards that are representative of actual energy use in the real world. (ASAP, April 11, 2019 Public Meeting Transcript at pp. 67-68) As with other

commenters, it agrees that it is reasonable for DOE to start with existing test procedures (regardless of whether they are “industry” test procedures). (ASAP, April 11, 2019 Public Meeting Transcript at p. 68) ASAP further states their concern that the NOPR document emphasizes a test procedure without modification and it does not want DOE to tie its hands. (ASAP, April 11, 2019 Public Meeting Transcript at p. 71) ASAP, et al. further states that any reference in the Process Rule to the criteria that DOE will use in adopting test procedures should simply refer to the statutory criteria. (ASAP, et al., No. 126 at pp. 12-13) In response to ASAP, DOE points out that this proposal requires DOE to unequivocally apply the statutory criteria, with representativeness being part of that evaluation. Moreover, the regulatory text for section 8(c), *Adoption of Industry Test Methods*, contains the statutory criteria that DOE must satisfy.

Next, the AGs Joint Comment faulted DOE’s proposed approach for using industry consensus test procedures, because it finds the approach to be overly deferential to industry and without sufficient weight given to DOE’s own analysis and determination. This commenter states that by making a presumption in favor of consensus test procedures, DOE’s flexibility would be unnecessarily limited and it would hinder DOE’s ability to satisfy EPCA’s test procedure requirements, as well as expose the Department to considerable litigation risk. It states that DOE cannot presume that industry test procedures satisfy EPCA’s requirements. (AGs Joint Comment, No. 111 at pp. 4, 14) In response to the AGs Joint Comment, DOE can only reassure this commenter, and others who are similarly concerned, that DOE takes its regulatory responsibility seriously and will analyze the appropriate consensus standards in light of the EPCA statutory criteria to ensure that EPCA is not undermined. DOE agrees with the

AGs Joint Comment, and others like it, that DOE should not presume that the consensus test procedures meet the EPCA requirements; it will not do so.

According to the Attorneys General, the biggest problem with DOE's proposed approach is that it would impose a duty on DOE to adopt the industry test procedure unless the Department makes a contrary determination. The AGs Joint Comment argued that DOE would need to make an affirmative finding that the industry test procedures would need to be modified prior to adoption, and that finding would be subject to litigation in which the Department would bear the burden of proof that the industry test procedure did not meet EPCA's requirements. (AGs Joint Comment, No. 111 at p. 14) With respect to this point, DOE believes that the AGs Joint Comment has superimposed requirements that do not exist, and has inserted steps into the process that are unnecessary. DOE will proceed with its established practice to analyze the appropriate consensus standards, and with the input of stakeholders either determine that the EPCA statutory criteria are met and use it as the DOE test procedure, modify it so that it complies with the statutory criteria, or reject it and develop an entirely new test procedure. Stakeholders will have ample opportunity to comment on DOE's ultimate approach for any given test procedure under consideration.

The AGs Joint Comment also argued that industry test procedures are generally not created to measure energy efficiency and are likely not appropriate under EPCA. It alleges that industry interests hostile to stronger efficiency standards may try to manipulate the industry test procedures to their own advantage. (AGs Joint Comment, No. 111, at p. 14) While DOE appreciates the AGs perspective, we believe that this point of view is speculative at best.

The AGs Joint Comment also points out that some products may have multiple industry test procedures which could apply, but that the Process Rule NOPR does not explain how DOE would determine which procedure to adopt in those cases. (AGs Joint Comment, No. 111 at p. 14) Similarly, the CEC contends that the blind adoption of industry test procedures would create confusion where multiple procedures exist for a given product since it would be unclear as to which procedure to use. (CEC, No. 121, at p. 11) With respect to its criticism of DOE's approach, the CEC also argued that, in many cases, industry test procedures contain optional test requirements, multiple test set-ups, instances where testing requirements are not specified and left to the testing lab's discretion, or unclear or overlapping definitions. As a result, the CEC states that test results would vary between test labs (affecting reproducibility) and tested products (affecting comparability, and leave open the potential for gaming by manufacturers. As a result the CEC argues that consumers would not receive the expected level of efficiency from their products, manufacturers would not be held to the same efficiency standard for the same products, and DOE would be unable to enforce its standards effectively. (CEC, No. 121, at p. 10) Because, as one might expect, consensus test procedures vary widely, DOE takes the position that these hypothetical scenarios, if and when they materialize, must be addressed on a case-by-case basis during the specific rulemaking proceeding.

CEC further asserted that where EPCA requires DOE to affirmatively determine that amended test procedures are reasonably designed to produce test results that measure the energy use or operating costs of appliances and is not unduly burdensome to conduct, DOE cannot require, by regulation, the public instead to prove to DOE that an industry test procedure does

not meet these goals. (CEC, No. 121, at p. 10) DOE's proposal does not shift the burden of proof to stakeholders to demonstrate that the applicable consensus standard should not apply. During the rulemaking process, DOE will analyze the consensus standard and make a determination as to whether the statutory criteria are met. Stakeholders will have the opportunity to give their comments.

As DOE explained at the beginning of this discussion, this proposal is merely codifying DOE established practice concerning the use of consensus standards as DOE test procedures. Commenters are incorrect that DOE is proposing mandatory use of consensus standards without providing for an evaluation as to whether the EPCA statutory criteria are met. This proposal does not require the absolute adoption of consensus standards verbatim in all circumstances. If the EPCA statutory criteria are not met, in order to use the appropriate consensus standard, modifications will need to be made so that the consensus standard meets the EPCA statutory criteria. Such modifications will be vetted during the notice and comment rulemaking process so that all interested stakeholders can give DOE feedback. DOE follows this same analytical process now and will continue to do so. Commenters need not worry that consensus standards will be automatically adopted as DOE test procedures. As a matter of fact, commenters generally agree that using consensus standards as a basis to begin considering the substance of new or amended DOE test procedures is appropriate. At least one commenter, AHAM, recognized and agreed that DOE's proposal on this matter is not a departure from DOE's current, established process, and gave its support. (AHAM, April 11, 2019 Public Meeting Transcript at pp. 63-64)

Other commenters generally support DOE's proposal, without specifically acknowledging that it is not a change from its current practice. (Acuity, No. 95, at p. 4; BWC, No. 103 at pp. 3-4; CTA, No. 136 at pp. 2-3; GM Law, No. 105 at p. 3; Joint Commenters, No. 112 at p. 9; Lutron, No. 137 at pp. 2-3; NAFEM, No. 122, at p. 5; NEMA, No. 107 at pp. 5-6; Rheem, No. 101 at p. 1; Signify, No. 116 at p.1; Westinghouse, April 11, 2019 Public Meeting Transcript at pp. 72,74) In support of the proposal, AHRI stated that this proposal reflects renewed adherence to the statutory requirements and makes sense from the perspective of a cost-benefit analysis. (AHRI, March 21, 2019 Public Meeting Transcript at p.12; AHRI, April 11, 2019 Public Meeting Transcript at pp 65-66)

In addition, many commenters support DOE working with consensus standards development organizations to address issues that would ensure that relevant consensus standards can be used as Federal test procedures. (AHRI, April 11, 2019 Public Meeting Transcript at p. 76; EEL, April 11, 2019 Public Meeting Transcript, at p. 82; BWC, No. 103 at pp. 3-4; Signify, No. 116 at p. 2; Southern Company, April 11, 2019 Public Meeting Transcript at p. 78) Acuity specifically urged DOE to work with the appropriate industry standards development organization to update the relevant standard to minimize any gaps, duplication or conflicts between testing standards and statutory requirements. (Acuity, No. 95, at p. 4) AGA stated that the use of industry standards can minimize regulatory burdens and improve transparency. (AGA, March 21, 2019 Public Meeting Transcript at p. 20; AGA, No. 114, at pp. 21-22) Similarly, GM Law stated that adoption of existing industry standards would decrease unpredictability and the burdens of regulation. (GM Law, No. 105 at p. 3) ASHRAE emphasized that the standards development process is open to everybody, and its fairness, due

process and transparency are ensured by its ANSI accreditation. (ASHRAE, April 11, 2019 Public Meeting Transcript at pp. 61-63

BHI supports the adoption of industry test standards, but would prefer a collaborative process and specifically suggested adding language to DOE's proposal. BHI states that it disagrees with the expected comments that the industry technical experts who design and test the product are the best informed to draft test procedures. It states that industry technical experts normally design and test products to specific ANSI, UL or other construction and performance standards primarily focused on safety and reliability. It specifically suggested additional language to the DOE proposal to require the active DOE participation in the consensus standards process and require DOE to make available, as necessary, the resources of the National Institute of Standards and Technology (NIST). (BHI, No. 135, at pp. 5-6) While DOE appreciates BHI's suggestions, DOE does not believe that the suggested language itself will enhance DOE's participation. DOE currently participates in the consensus standards-setting process and already has the statutory authority to utilize NIST resources pursuant to 42 U.S.C. 6314(e). Accordingly, DOE will not add this language which it considers duplicative.²³

Several commenters expressed concern with non-DOE consensus groups. PG&E voiced its concern that it is difficult to get changes to consensus standards in these groups, and that the standards do not work as they should. Mostly, consumers are hurt, according to PG&E. (PG&E, April 11, 2019 Public Meeting Transcript at pp. 59-61) Another commenter, the Cal-IOUs

²³ OMB Circular A-119 encourages agencies to participate fully in the private standards development process as equal parties. OMB, however, defers to individual agencies on their policies for determining to what extent and under what circumstances agency representatives are authorized to engage in particular activities, based on agency requirements and priorities. (OMB Circular A-119, at pp. 7-8)

believe that DOE would increase stakeholder burden and reduce transparency by requiring stakeholders to participate in non-DOE activities -- or, in the extreme case, have stakeholder voices ignored entirely if these non-DOE activities are not administered in a way to incorporate stakeholder participation or are otherwise headed by a biased committee. (Cal-IOUs, No. 124, at p. 6) The Cal-IOUs take the position that EPCA provides a balanced approach to create a repeatable, reproducible, representative, and enforceable test procedures, while any given consensus test procedure is produced within organizations that do not share these same goals. The commenters fear that following the DOE's proposed approach would reduce transparency and increase stakeholder burden by requiring stakeholder participation in at least two test procedure rulemaking processes per product -- one led by standards setting consensus organizations and the other by DOE. (Cal-IOUs, No. 124, at p. 12)

Moreover, A.O. Smith specifically requested that the Department issue a supplemental proposal that would consider guidelines to help it better understand the facts underlying the development of any new or revised consensus test procedure including: (1) the representation on the committee; (2) how innovative technologies are addressed; (3) de-identified test data showing the new or amended industry method is capable of being run in a laboratory; and (4) the rationale for associated changes. (A. O. Smith, No. 127, at p. 4) After carefully considering the request, DOE has determined that the request for a supplemental NOPR to develop guidelines for use in the consensus development process is a subject that will not change the outcome of this specific proposal and would significantly delay implementation of the amended Process Rule. Accordingly, DOE rejects A.O. Smith's request at the current time. We also note that enhanced participation by DOE in the standards development processes, with or without this type of

guidance, would not change DOE's obligation during the rulemaking process to review each consensus standard for adherence to the EPCA statutory criteria on a case-by-case basis.

After careful consideration of the many comments related to DOE's proposal concerning the adoption of consensus standards during the DOE test procedure rulemaking process, and for the reasons articulated above, DOE is adopting its proposal in the final rule.

K. Direct Final Rules

The Energy Independence Security Act of 2007 ("EISA 2007") (Pub. L. 110-140) amended EPCA, in relevant part, to grant DOE authority to issue a "direct final rule" (i.e. DFR) to establish energy conservation standards. As amended, EPCA establishes requirements for when DOE uses this type of rulemaking proceeding for the issuance of certain actions. Specifically, DOE may issue a DFR adopting energy conservation standards for a covered product or equipment upon receipt of a joint proposal from a group of "interested persons that are fairly representative of relevant points of view," provided DOE determines the energy conservation standards recommended in the joint proposal conform with the requirements of 42 U.S.C. 6295(o) or section 342(a)(6)(B) as applicable. (42 U.S.C. 6295(p)(4)(A)) In the February 2019 NOPR, DOE proposed to (1) clarify its authority under the DFR provision found at 42 U.S.C. 6295(p)(4); (2) provide guidance as to DOE's interpretation of "fairly representative," and (3) explain DOE's obligations upon receipt of an adverse comment. (84 FR 3910, 3928)

1. DOE's Authority Under the DFR Provision

The DFR provision is found in EPCA at 42 U.S.C. 6295(p), the heading and introduction of which state: "Procedure for prescribing new or amended standards. Any new or amended energy conservation standard shall be prescribed in accordance with the following procedure." Given the placement of the DFR provision within EPCA, DOE sought to clarify in the February 2019 NOPR that 42 U.S.C. 6295(p)(4) is a procedural process for issuing a DFR and not an independent grant of rulemaking authority. As such, any standard issued as a DFR must comply with the provisions of the EPCA subsection under which the rule was authorized.

In response, AGA stated that the proposed revisions in the revised Process Rule will help to ensure that the DFR process is used only when all of the statutory requirements are met. (AGA, No. 114, at p. 24) Other commenters expressed concerns with DOE's clarification and its effect on achieving consensus agreements for new standards. For example, ACEEE stated that flexibility is needed in Direct Final Rules. DOE has interpreted the Direct Final Rule authority to allow more flexibility in metrics, requirements, and compliance dates than it usually takes in setting standards. This flexibility has been crucial to achieving consensus, allowing more room for negotiation, for example to trade stringency for lead time in ways that increase savings and decrease burden on manufacturers. (ACEEE, No. 123, at p. 4) AHRI also agreed that the ability to make important adjustments, particularly to compliance timelines, has been a vital aspect of being able to work together. (AHRI, April 11, 2019 Public Meeting Transcript, at 99) In addition to concerns about reduced flexibility in reaching consensus standards, commenters also disagreed with DOE's proposed clarification that the DFR provision is not an independent grant

of rulemaking authority. For instance, A.O. Smith stated that DOE did not provide an additional basis for its legal reinterpretation in the proposed process rule and A.O. Smith does not believe the reinterpretation is legally sound. (A.O. Smith, No. 127, at p. 6) Similarly, the Cal-IOUs stated that DOE's proposed clarification is "incorrect and inconsistent." (Cal-IOU, No. 124, at p. 13)

DOE recognizes that the clarifications made in the Process Rule mean there is not flexibility in DFRs regarding certain aspects of energy conservation standards, e.g., compliance periods, energy efficiency metrics, etc. That being said, EPCA generally has very specific requirements for compliance periods and other aspects of energy conservation standards. For example, EPCA mandates either 3 or 5-year compliance periods for standards issued under 42 U.S.C. 6295(m). EPCA also requires either 3 or 5-year compliance for standards issued in response to a petition for rulemaking under 42 U.S.C. 6295(n). The DFR provision in EPCA, on the other hand, is silent regarding compliance periods and every other aspect of the substantive requirements applicable to energy conservation standards. In the past, DOE has interpreted this silence as providing some flexibility regarding compliance periods and certain other aspects of energy conservation standards. However, that interpretation assumes that the DFR provision is an independent grant of rulemaking authority that outlines its own set of substantive requirements on the establishment or amendment of an energy conservation standard as opposed to a procedural option for issuing a standard authorized under another provision of EPCA, such as 42 U.S.C. 6295(m) or 42 U.S.C. 6295(n). However, there is no language in EPCA providing statutory support for that position. As stated previously, the DFR provision is found in EPCA at 42 U.S.C. 6295(p), the heading and introduction of which state: "Procedure for prescribing new

or amended standards. Any new or amended energy conservation standard shall be prescribed in accordance with the following procedure.” The first three subparagraphs of 42 U.S.C. 6295(p) outline the process the Secretary must follow to propose and finalize a standard using the “normal” rulemaking approach. These are procedural requirements that apply when DOE is exercising its rulemaking authority under a separate provision of EPCA. These subparagraphs could not be interpreted as granting DOE a separate and independent statutory authority for issuing standards.

Similarly, 42 U.S.C. 6295(p)(4) outlines the procedural requirements for issuing a standard as a DFR and should also not be read as independent grant of rulemaking authority. Nor has DOE claimed that 42 U.S.C. 6295(p)(4) is a separate grant of rulemaking authority in its prior issuances of DFRs that differed from the requirements in a substantive provision of EPCA. This is a curious omission in that it means DOE relied on a substantive provision of EPCA, such as 42 U.S.C. 6295(m), to authorize issuance of an energy conservation standard but based variance from the requirements in such section on a procedural provision that says nothing about such variance. Thus, the “silence” in 42 U.S.C. 6295(p)(4) regarding compliance periods and other requirements associated with standards cannot be interpreted as providing flexibility, but rather as simply the result of these requirements already being addressed by the statutory provision that authorizes issuance of the standard, e.g., 42 U.S.C. 6295(m). Moreover, there is no limitation on a variance authorized by silence. That is, the logic of the argument expressed by commenters in favor of “flexibility” could be used to, for example, exempt all domestic manufacturers from compliance with a standard or permit backsliding on an existing standard. Such positions would surely make reaching consensus on a measure more enticing to some parties, but would be antithetical to the purposes of the statute. DOE cannot take a legal position

that statutory silence has authorized it to pick and choose with interested parties the parts of the statute to negotiate away. The revised Process Rule clarifies that the DFR provision in 42 U.S.C. 6295(p) is not an independent grant of rulemaking authority and DOE will not accept or issue as a DFR a submitted joint proposal that does not comply with all pertinent parts of EPCA, including those product specific requirements included in the provision that authorizes issuance of the standard.

2. Interested Persons Fairly Representative of Relevant Points of View

As part of the DFR process, DOE must determine if a proposed standard has been “submitted jointly by interested persons that are fairly representative of relevant points of view (including representatives of manufacturers of covered products, States, and efficiency advocates). (42 U.S.C. 6295(p)(4)(A)) In the February 2019 NOPR, DOE proposed that at a minimum, “fairly representative of relevant points of view” must include businesses, including small businesses in the regulated industry/manufacturer community, energy advocates, energy utilities, as appropriate, consumers, and States. DOE also stated that it would be necessary to determine whether a proposal was submitted by interested persons that are “fairly representative of relevant points of view” on a case-by-case basis, subject to the circumstances of a particular rulemaking. In order to assist DOE in making this case-by-case determination, upon receipt of a joint statement recommending energy conservation standards, DOE proposed to publish in the *Federal Register* the statement, as submitted to DOE, in order to obtain feedback as to whether the joint statement was submitted by a group that is fairly representative of relevant points of view. (84 FR 3910, 3929)

DOE received several comments on these proposals. First, with regards to DOE's explanation of what it means for a DFR to be "submitted jointly by interested persons that are fairly representative of relevant points of view," Acuity stated that any DFR proposal should reflect a reasonable balance of representation and support from key stakeholders. (Acuity, No. 95, at p. 5) Spire stated that representation of manufacturers of the covered products at issue, suppliers of the energy used by such products, and efficiency advocates should always, at a minimum, be required. (Spire, No. 97, at p. 2) AGA and APGA stated that DOE should specify particular entity types or interest groups that are relevant to certain categories of proposed standards, such as gas distribution utilities and their customers for appliances that use gas. (AGA, No. 114, at pp. 24-25; APGA, No. 106, at p. 8) AGA and APGA also stated that the DFR process was intended to be used only in circumstances in which representatives of all relevant interests jointly submit a proposed energy conservation standard for a product, i.e., when there is a clear consensus. (AGA, No. 114, at p. 24; APGA, No. 106, at p. 6) The Joint Commenters and Lennox, on the other hand, encouraged DOE to avoid an interpretation where every possible point of view must be represented for a DFR to proceed. (Joint Commenters, No. 112, at p. 11; Lennox, No. 133, at p. 5) Lennox also commented that "DOE should not mandate the need for separate 'consumer' representation for a joint proposal." (Lennox, No. 133, at p. 5)

As for DOE's proposal to determine, after seeking public comment through a *Federal Register* notice, whether a DFR was submitted by parties "that are fairly representative of relevant points of view" on a case-by-case basis, CEC and Signify agreed that the determination should be made on a case-by-case basis. (CEC, No. 121, at p. 12; Signify, No. 116, at p. 2)

CEC, however, opposed the addition of a public comment period as it would add process and delay without adding any meaningful opportunity for input. (CEC, No. 121, at p. 12) NPCC commented that there may not always be a need for a public comment period and encouraged DOE to assess the need for that step on a case-by-case basis. (NPCC, No. 94, at p. 7)

In response, DOE notes that any concerns about whether a DFR was submitted by parties “that are fairly representative of relevant points of view” can be raised during the public comment period on the DFR. DOE will raise this issue as a specific topic on which it seeks input in the Federal Register notice publishing for public comment on any DFR. After receiving public comment DOE will determine if the submitting parties include, at a minimum, businesses, including small businesses, in the regulated industry/manufacturer community, energy advocates, energy utilities, as appropriate, consumers, and States. As for specific comments on which parties must be represented in a DFR, DOE agrees with AGA, APGA, and Spire that suppliers of the energy used by a covered product/equipment must be included, in relevant instances. This is reflected in DOE’s list of mandatory parties to a DFR, which includes “energy utilities, as appropriate.” DOE does not agree with Lennox’s comment that separate consumer representation is not necessary in a DFR. Consumer concerns do not necessarily overlap with those of manufacturers, efficiency advocates, or any of the other parties discussed previously. Finally, as the comment period for determining representativeness would occur during the time DOE analyzes the submission for other legal and analytical issues and considers preparation of a rulemaking document, it would not delay the decision to publish a DFR.

3. Adverse Comments

Simultaneous with the issuance of a DFR, DOE must also issue a NOPR containing the same energy conservation standards as in the DFR. Following publication of the DFR, DOE must solicit public comment for a period of at least 110 days; then, not later than 120 days after issuance of the DFR, the Secretary must determine whether any adverse comments “may provide a reasonable basis for withdrawing the direct final rule,” based on the rulemaking record. (42 U.S.C. 6295(p)(4)(B), (C)(i)) In the past, to determine whether a comment was sufficiently “adverse” so as to provide a reasonable basis for withdrawal of the direct final rule, DOE weighed the substance of any adverse comment received against the anticipated benefits of the consensus agreement and the likelihood that further consideration of the comment would change the result of the rulemaking (referred to as the “balancing test”). This approach was outlined in recent DOE rulemakings, such as DOE’s final rule for energy conservation standards for dishwashers. 77 FR 59712, 59714 (Oct. 1, 2012).

In the February 2019 NOPR, DOE proposed to consider the substance of adverse comments and not the quantity when determining if there is a reasonable basis for withdrawing the DFR. For instance, one comment may present an argument that could lead DOE to conclude that it is an adverse comment providing a basis for withdrawal of the DFR. Moreover, in contrast to previous policy, DOE also proposed to consider adverse comments even if the issue was brought up previously during DOE-initiated discussions (e.g. publication of a framework or RFI document) that preceded submission of a joint statement. In short, if DOE determines that one or more substantive comments objecting to the final rule provides a sufficient reason to withdraw the DFR, DOE will do so, and instead proceed with the published NOPR (which could include withdrawal of that NOPR, as appropriate). (84 FR 3910, 3930)

DOE received numerous comments on the revised approach to determining whether an adverse comment provides a reasonable basis for withdrawing a DFR. Acuity and AGA supported the revised approach's focus on the substance of the adverse comments, as opposed to the quantity of the adverse comments. (Acuity, No. 95, at p. 5; AGA, No. 114, at p. 25)) AGA also stated that speculative and unsupported assertions may not warrant the withdrawal of a DFR, but positions supported by the material submitted in the proceeding and precedent should be provided sufficient weight when balancing differing interests. (AGA, No. 114, at p. 25) APGA stated that the bar for withdrawal is "very low" and any serious and substantive objections to a DFR that are reasonably backed by argument – even if the Secretary disagrees with them – should be deemed to provide a reasonable basis for withdrawing the DFR. (APGA, No. 106, at p. 9) Spire commented that DOE should withdraw a DFR if any interested party submits comment that opposes the adoption of a DFR as written and provides relevant information or argument as a basis for such opposition. This approach would define "adversity" in simple, easily-applied terms, and — consistent with both the statutory language and the principle that exceptions to notice and comment requirements should be narrowly construed — it requires that any doubt be resolved in favor of withdrawal of a DFR when comment reflects substantive opposition." (Spire, No. 97, at pp. 2-3) GWU commented that moving away from the balancing test is a positive development, since DFRs constrain public input in the rulemaking process. (GWU, No. 132, at p. 9)

The CA IOUs, on the other hand, commented that the balancing test "for evaluating adverse comments to DFRs was an effective approach and DOE's language reversal could allow

a single commenter to derail the DFR process, even if that commenter had previous opportunities to submit adverse comments. The CA IOUs also requested that DOE provide more clarity on what constitutes a “substantive” comment in this setting, especially in light of DOE reserving the right to consider a previously-issued adverse comment as “substantive” enough to prevent finalization of a DFR. (CA IOUs, No. 124, at p. 13) The Joint Commenters and Lennox encouraged DOE to maintain flexibility in determining the quantity and quality of comments considered “adverse.” (Joint Commenters, No. 112, at p. 11; Lennox, No. 133, at p. 5) CEC opposed DOE’s proposal to withdraw the DFR upon receiving any substantive adverse comment that provides a “sufficient reason” to withdraw the DFR, even if that comment raises issues previously considered by DOE and resolved. CEC further commented that this approach does not offer any clarity on what DOE considers to be ‘substantive’ or ‘adverse,’ and could result too easily in ideologically opposed stakeholders commenting on DFRs, using the exact arguments considered and rejected in earlier comment periods, to ensure that the DFRs are withdrawn. (CEC, No. 121, at p. 12)

In response, DOE notes that the focus on the substance, as opposed to quantity, of adverse comments, is designed to ensure that DOE considers adverse comments that may provide a reasonable basis for withdrawing a DFR. Thus, numerous speculative and unsupported assertions will not constitute a reasonable basis for withdrawing a DFR, while one, well-supported comment may provide a reasonable basis for withdrawing a DFR. With regards to issues previously raised during the rulemaking process (e.g., in response to a framework document or RFI), DOE recognizes that facts and circumstances may change or new information

may come to light, and, as a result, DOE will not foreclose consideration of adverse comments that address issues previously raised during the rulemaking process.

L. Negotiated Rulemaking

Negotiated rulemaking is a process by which an agency attempts to develop a consensus proposal for regulation in consultation with interested parties, thereby addressing salient comments from stakeholders before issuing a proposed rule.²⁴ Consequently, when done properly, negotiated rulemaking can yield better decisions, while conserving time and resources of both the agency and interested parties. To facilitate potential negotiated rulemakings, DOE established the Appliance Standards and Rulemaking Federal Advisory Committee (i.e. ASRAC) to comply with the Federal Advisory Committee Act (“FACA”), Pub. L. No. 92-463 (1972) (codified at 5 U.S.C. App. 2). As part of the DOE process, working groups have been established as subcommittees of ASRAC, from time to time, for specific products, and one member from the ASRAC committee attends and participates in the meetings of a specific working group. Ultimately, the working group reports to ASRAC, and ASRAC itself votes on whether to make a recommendation to DOE to adopt a consensus agreement. The negotiated rulemaking process allows real-time adjustments to the analyses as the working group is considering them. Furthermore, it allows parties with differing viewpoints and objectives to negotiate face-to-face regarding the terms of a potential standard. Additionally, it encourages manufacturers to provide data for the analyses in a more direct manner, thereby helping to better account for manufacturer concerns. While negotiated rulemaking is not a topic directly

²⁴ This process is conducted in accordance with the requirements of the Negotiated Rulemaking Act (“NRA”), Pub. L. 104-320 (5 U.S.C. 561-570).

addressed by the current Process Rule, the Process Rule does recognize the value and encourage submission of joint stakeholder recommendations.

In the February 2019 NOPR, DOE proposed to include a section on negotiated rulemaking in the updated Process Rule. In the proposed section on negotiated rulemaking, DOE stated that negotiated rulemakings would go through the ASRAC process outlined above, and that the appropriateness of a negotiated rulemaking for any given rulemaking would be determined on a case-by-case basis. In making this determination, DOE proposed to use a convener to ascertain, in consultation with relevant stakeholders, whether review for a given product or equipment type would be conducive to negotiated rulemaking, with the agency evaluating the convener's recommendation before reaching a decision on such matter. DOE also proposed that the following five factors would weigh in favor of a negotiated rulemaking: (1) stakeholders commented in favor of negotiated rulemaking in response to the initial rulemaking notice; (2) the rulemaking analysis or underlying technologies in question are complex, and DOE can benefit from external expertise and/or real-time changes to the analysis based on stakeholder feedback, information, and data; (3) the current standards have already been amended one or more times; (4) stakeholders from differing points of view are willing to participate; and (5) DOE determines that the parties may be able to reach an agreement. If a negotiated rulemaking is initiated, DOE proposed to have a neutral and independent facilitator, who is not a DOE employee or consultant, present at all ASRAC working group meetings. Additionally, DOE proposed to set aside a portion of each ASRAC working group meeting to receive input and data from non-members of the ASRAC working group. Finally, DOE stated that a negotiated rulemaking in which DOE participates under the ASRAC process will not result in the issuance

of a DFR. Further, any potential term sheet upon which an ASRAC working group reaches consensus must comply with all of the provisions of EPCA under which the rule is authorized. (84 FR 3910, 3950)

In response, several commenters expressed their support for the negotiated rulemaking process and its inclusion in the Process Rule. (*See, e.g.*, A.O. Smith, No. 127, at p. 5; AGA, No. 114, at p. 26; CEC, No. 121, at p. 13) In supporting the inclusion of negotiated rulemaking in the Process Rule, CEC stated that negotiated rulemakings open up the discussion between interested parties on challenging but resolvable issues in potential standards or test procedures, reduce the risk of litigation on the rule, allow for public input, and reduce DOE's burden in having to prepare multiple regulatory documents through the ordinary rulemaking process. (CEC, No. 121, at p. 13) GWU, on the other hand, commented that notice-and-comment procedures are more likely to produce meaningful public participation at a more effective time in the process than a negotiated rulemaking process. (GWU, No. 132, at 10).

DOE recognizes that, as GWU alluded, a negotiated rulemaking puts the onus on the public to participate in the rulemaking process in a different manner than through traditional notice-and-comment rulemaking. However, DOE believes that this concern is greatly mitigated by the benefits to the data gathering and analytical process that are accomplished through face-to-face discussion of complex technical issues that occur through negotiated rulemaking. The agency is committed to setting aside a portion of each ASRAC working group meeting to receive input and data from non-members (i.e., the public). Further, DOE agrees with the benefits cited by CEC and the Process Rule is amended to include a section on negotiated rulemaking.

With regards to appointing a convener, AGA commented that the Process Rule should make clear that, prior to initiating a negotiated rulemaking, DOE will, pursuant to the APA, appoint a convener to: (i) identify persons who will be significantly affected by a proposed rule; and (ii) conduct discussions with such persons to identify their issues of concern and to ascertain whether the establishment of a negotiated rulemaking committee is feasible and appropriate in the particular rulemaking. (AGA, No. 114, at pp. 26-27) CEC was neutral on whether to engage a convener, but cautioned DOE against using a process that would result in unnecessary delays. (CEC, No. 121, at p. 14) NPCC commented that a convener is not needed in all cases. (NPCC, No. 94, at p. 8) Lennox sought revision of section 11(a)(3) that, independent of the convener's report, DOE can still proceed with a negotiated rulemaking based on the five proposed criteria. (Lennox, No. 133, at pp. 3-4)

As for the five factors DOE listed previously that would weigh in favor of a negotiated rulemaking, the Joint Commenters reiterated their support for the factors, while CEC recommended that the five factors be used as a balancing test rather than as a strict set of requirements for whether a negotiation would work. (Joint Commenters, No. 112, at p. 11; CEC, No. 121, at p. 14) CEC and the CA IOUs also recommended excluding the criterion limiting negotiated rulemakings to products/equipment that have already undergone one or more rounds of rulemaking. (CEC, No. 121, at p. 14; CA IOUs, No. 124, at p. 14)

DOE notes that these five factors are not a required check-list for convening a negotiated rulemaking. Rather, they are simply additional factors (to the convener's report) that will help

DOE determine if a negotiated rulemaking is appropriate. With regards to comments that DOE should eliminate the factor limiting negotiated rulemakings to products/equipment that have already undergone one or more rounds of rulemaking, DOE notes that this factor is not a requirement and it does not exclude newly covered products from being the subject of a negotiated rulemaking. Further, DOE believes that there is an advantage to focusing negotiated rulemakings on products/equipment that already have standards as DOE will already have a good grasp on which parties should be included in the working group and manufacturers will already be familiar with DOE's regulatory scheme. On the other hand, if DOE engages in negotiated rulemaking for newly covered products, DOE may be able to gather data and information about the product and vet issues applicable to such product more effectively than through traditional notice and comment rulemaking. This is why these factors are listed as considerations rather than requirements.

In regards to DOE's proposal that an independent, neutral facilitator (who cannot be a DOE employee) be present at all ASRAC working group meetings, several commenters expressed their support. For example, Acuity stated that a neutral, qualified facilitator is essential for a successful negotiated rulemaking process. A facilitator helps ensure that processes are followed and that all participants have an equal opportunity to contribute to the discussion. (Acuity, No. 95, at p. 6) Similarly, BWC commented that use of an experienced facilitator will enable the working group to ... work towards an amenable consensus. (BWC, No. 103, at p. 4) DOE agrees with these comments as it has found independent, neutral facilitators to be essential in moving working group discussions along and reaching consensus.

With respect to DOE's proposal that a dedicated portion of each ASRAC working group meeting will be set aside to receive input and data from non-members of the ASRAC working group, AGA commented that allowing for public comment before the working group will help ensure the participation of all relevant interests in the process. (AGA, No. 114, at p. 27). DOE agrees with this comment.

Finally, DOE received numerous comments on its proposal that any negotiated rulemaking in which DOE participates under the ASRAC process will not result in the issuance of a DFR, but instead a proposed rule that complies with the provisions of EPCA, under which the rule is authorized. The majority of commenters opposed this proposal. For example, ACEEE stated that a negotiated rulemaking should be able to result in a Direct Final Rule. If the outcome of a formal negotiated rulemaking meets the statutory requirements for a Direct Final Rule, the Department should be able to use that process to issue the standard. Banning it makes a consensus agreement less likely. (ACEEE, No. 123, at p. 2) The Joint Commenters generally agreed with DOE's negotiated rulemaking proposals with the exception of DOE's proposed discontinuance of DFRs. (Joint Commenters, No. 112, at p. 11) NPCC commented that abandoning the use of direct final rules in all cases – rather than retaining the flexibility to use DFRs when appropriate following a negotiated rulemaking – will simply result in prolonging the agency process, increasing the agency's own costs often to no useful end, and increasing the regulatory process burden on manufacturers and other stakeholders rather than reducing it. (NPCC, No. 94, at p. 8) Some commenters did express support for DOE's proposed plan to separate DFRs and negotiated rulemakings. GWU commented that the decision to separate DFRs and negotiated rulemaking and establish that the outcome of negotiated rulemaking would

be a proposed rule are positive developments. (GWU, No. 132, at p. 10) AGA also supports DOE separating DFRs from negotiated rulemakings and requiring that the outcome of a negotiated rulemaking be a proposed rule, subject to a comment period. (AGA, No. 114, at p. 27)

As stated in the February 2019 NOPR, DOE is modifying its negotiated rulemaking process to be more consistent with the NRA which contemplates that the committee will transmit to the agency a report containing a proposed rule (or more applicable in DOE's use of the process, a term sheet specifying the potential standard levels to be incorporated into a proposed rule). If the Department determined to act on the term sheet, it would be in the form of a proposed rule open for notice and comment rather than a direct final rule.

M. Other Revisions and Issues

1. DOE's Analytical Methodologies, Generally

After considering the many comments on its analytical methodology in the Process Rule RFI, DOE explained in the Process Rule NOPR its plan to convene an expert independent peer review (consistent with OMB's Information Quality Bulletin for Peer Review²⁵) of its assumptions, models, and methodologies to ensure that its approach is designed to provide projections that are sufficiently rigorous for their intended use. 84 FR 3910, 3936-3938 (Feb. 13, 2019). The goals of the peer review are to assess whether any changes are needed to the agency's analytical methodologies and potentially to the Process Rule. In order to ensure that

²⁵ 70 FR 2664 (Jan. 14, 2005) (Available at: <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2005/m05-03.pdf>).

the analytical models and approaches that DOE regulatory uses are as up-to-date and accurate as possible, DOE committed to undertaking a recurring peer review of the Department's analytical methods at least once every 10 years. DOE tentatively concluded that the investment of resources in both immediate and long-term peer review by the Department and interested parties would help improve the overall rulemaking process and ensure the credibility and validity of the results of that process. DOE also committed to making its peer review available to the public, and during its initial peer review meeting on November 19-20, 2019, provided the public with an opportunity to observe and raise issues for peer reviewers' consideration. The Process Rule NOPR went on to identify and discuss 12 potential focus areas for the peer review, including:

- Analytical time horizon(s)
- Baseline efficiency estimates
- Consumer choice model
- Emissions analysis
- Fuel switching analysis
- Indirect employment effects
- Marginal manufacturer mark-up
- Product price forecasts
- Product performance
- Subgroup analysis
- Use of proprietary data
- Welfare analysis and deadweight loss

DOE requested comments and other relevant information on these topics, as well as other related issues which stakeholders wish to raise. The Department explained that any potential changes to

the Process Rule that might be appropriate based on the results of the peer review and any methodological updates would be addressed in a subsequent proceeding. (For a more detailed discussion of DOE's past and planned peer reviews, please consult the relevant discussion in the February 13, 2019 Process Rule NOPR at 84 FR 3910, 3936-3938.)

In response to the Process Rule NOPR, DOE received a variety of comments from approximately 22 discrete commenters regarding its analytical methodologies, with recommendations that, in many cases, that are both detailed and specific. These submissions generally fell into one of several discrete areas – peer review, DOE's analytical methodologies generally (*e.g.*, transparency of models and assumptions, public access to data, discount rates, marginal energy prices, life-cycle cost and payback period issues, the screening analysis, use of proprietary data, the Social Cost of Carbon), and the walk-down approach to standard-setting.

For the reasons discussed subsequently, DOE has decided as part of this final rule to move forward with a peer review of its analytical methodologies, models, and assumptions, so DOE will summarize and respond to the peer review comments it received on the Process Rule NOPR in the paragraphs below. Likewise, DOE will summarize and respond to the comments on its proposed walk-down approach to standard setting, because any upcoming energy conservations standards rulemaking would confront that part of the rulemaking process and require a path forward. However, the Department is not addressing the other substantive comments on and critiques of its analytical methodologies and models in this final rule, because those are the types of issues that will be addressed during the course of the peer review and stakeholders will have a separate opportunity to weigh in on that proceeding. Relevant

comments on those topics submitted to the docket for this rulemaking will be referred to the independent expert peer reviewers to be addressed as part of their charge in that separate proceeding.

a. Peer Review

As noted previously, peer review was a topic of discussion in the Process Rule NOPR, because DOE identified that approach as a suitable and effective way to evaluate the concerns raised by various stakeholders about the agency's analytical methodologies. 84 FR 3910, 3936-3938 (Feb. 13, 2019). The Department foresees both an immediate peer review of its analytical methodologies, as well as recurring peer review over a longer term (*e.g.*, every 10 years). Overall, commenters on the Process Rule NOPR expressed support for DOE's plans to conduct a peer review of its analytical methodologies, although one commenter (Spire) expressed some misgivings as to the Department's ability to conduct such review in a fair and effective fashion. The following comments focused on the peer review itself (rather than the subject matter to be addressed by the peer review).

A number of commenters expressed general support for DOE's planned peer review of its analytical methodologies, including Acuity and NAFEM. (Acuity, No. 95, at p. 6; NAFEM, No. 122 at p. 7) APGA also expressed support for a peer review, which it believes will allow stakeholders to have assurance that the standards development process is based on sound scientific and economic data and methods. (APGA, March 21, 2019 Public Meeting Transcript at p. 15) Likewise, Energy Solutions stated that it supports DOE's plans for peer review,

suggesting that product price forecasts should be one of the focus areas for that review. (Energy Solutions, April 11, 2019 Public Meeting Transcript at p. 156)

Other commenters stated support for DOE's planned peer review and followed up with additional thoughts and recommendations regarding that process. Some of those commenters focused on the peer review to be conducted in the near term, while others concentrated on the long-term, recurring peer review, and some addressed both.

Focusing on the need for an immediate peer review, AGA recommended that DOE conduct a peer review of its assumptions, models, and methodologies as soon as possible to ensure that its processes are current. By not conducting peer reviews in a timely manner, AGA argued that the Department deprives the public of certain regulatory protections – such as standards based on current scientific information that has been tested impartially and deemed appropriate and reliable by a group of relevant experts. For example, the commenter stated that the regulatory guidelines established by the Office of Management and Budget (OMB) require a peer review of any changes to scientific data and/or methodologies used in the development of rules or regulations. Specifically, AGA noted that OMB's Final Information Quality Bulletin for Peer Review requires each Federal agency to conduct a peer review of all influential scientific information that the agency intends to disseminate. Because the Technical Support Documents (TSDs) that the Department relies on when issuing a proposed and final standard contain influential scientific information that DOE has disseminated, AGA concluded that such information should be peer reviewed and up-to-date. AGA also considered the long term and expressed support for the Department conducting a peer review, at least once every ten years, of

its assumptions, models, and methodologies to ensure that its approach is designed to provide reasonable, accurate projections. (AGA, No. 114 at pp. 28-29)

Likewise focusing on the immediate peer review, the Joint Commenters and AHRI strongly urged DOE not to delay in commencing its peer review of its analytical methodologies. (Joint Commenters, No. 112 at p. 12; AHRI, April 11, 2019 Public Meeting Transcript at p. 157) The Joint Commenters asserted that the current DOE methodologies are seriously flawed. Furthermore, the Joint Commenters stated that a sound peer review process should be conducted by a third-party panel, not by DOE. (Joint Commenters, No. 112 at p. 12) In furtherance of this point, the Joint Commenters suggested several principles to guide the peer review process including: (1) The composition of the peer review panels must include people who are technically competent to review economic, cost, energy, and other matters. The composition of the panels should be determined in a public process with advice and comment from the public on the panels' composition; (2) The members of the peer review panels should conform to the standards for "Highly Influential Scientific Assessments;" (3) The peer review panels should not be constrained by the twelve topics identified by DOE, but these should instead be viewed as a minimum scope. The peer review panels should look at DOE's analytical processes with a clean slate. Additional topics for consideration may include consumer discount rates, the use of learning and experience curves in projecting future product prices, mark-ups across the total chain from factory to consumer, and the definition of maximum technically feasible product configuration; (4) The peer review panels should hold hearings to help guide them in determining which topics they should pursue and what alternatives they should consider; and (5)

The peer review panels should present their tentative findings for public review and comment prior to finalizing their reports. (Joint Commenters, No. 112 at p. 13-14)

Lennox and AHRI echoed some of the points raised by the Joint Commenters. Lennox commented that DOE's peer review should be transparent, with stakeholders such as industry allowed to provide input, and peer review panels should present their tentative findings for public review and comment prior to finalizing their reports. (Lennox, No. 133 at pp. 8-9) Although commending DOE on beginning a peer review process, AHRI made a similar point urging the Department to open up the process of selecting a peer review panel by getting interested parties to comment on the charter and the candidates for the peer review panel. AHRI added that it does not agree that one of the 12 focus areas should be incremental margins at the manufacturer level, a concept which it believes is flawed and should be removed. (AHRI, April 11, 2019 Public Meeting Transcript at pp. 146-148) Instead, AHRI recommended that peer review should look at the whole modeling effort. (AHRI, April 11, 2019 Public Meeting Transcript at p. 158)

Regarding long-term peer review, APGA stated that it is in favor of a recurring peer review of DOE's analytical assumptions, models, and methodologies, at least once every 10 years, so as to ensure that such analyses are based on sound scientific and economic data. The commenter stated that such approach is consistent with OMB's regulatory guidelines and its Final Information Quality Bulletin for Peer Review. However, APGA reiterated its belief that DOE's models are too complex and burdensome and urged replacing the current complicated

life-cycle cost analysis with a simple payback analysis based on real numbers". (APGA, No. 106 at pp. 10-12)

Finally, Spire's comments reflected some skepticism of DOE's efforts to conduct a peer review of its analytical methodologies and urged caution to ensure a fair and balanced outcome. More specifically, one representative of Spire criticized peer review as a useless appendage of the past. (Spire, April 11, 2019 Public Meeting Transcript at p. 145) However, another Spire representative expressed mixed feelings about peer review, suggesting that it can be helpful with some types of issues but stating that there are a lot of issues where it is not suitable. (Spire, April 11, 2019 Public Meeting Transcript at pp. 149-150) Spire indicated that a peer review within the context of setting standards for regulated appliances continues to be problematic when DOE selects "experts" whose interests are already aligned with EERE's "clean energy" mission. As a result, the commenter suggested that DOE should eliminate peer reviews until fundamental changes are made, such as reconvening its general purpose advisory board as laid out in the 1996 Process Rule. (Spire, No. 139 at p. 7) (DOE notes that it is unclear what Spire is referring to here.) Spire argued that the peer review process under DOE's current approach would not have identified in a timely manner the means by which DOE uses to justify a given standard through its LCC analyses. (Spire, No. 139 at p. 8) Spire added that the multiple adverse effects it identified in its comments would have cumulative impacts on consumers as the time period between peer reviews lengthens. Rather than conduct periodic peer reviews, Spire recommended that DOE should adopt a "Continual Improvement Process" to change the frequency of reviews and reconsider the make-up of its advisory committee, given what the commenter characterizes as ASRAC's current lack of "requisite diversity." (Spire, No. 139 at pp. 9-10) As part of its

suggestion that DOE apply a continuous improvement approach, Spire stressed that there should be independent review of the agency's "misuse" of Monte Carlo simulations, as well as other DOE methodologies that Spire alleged distort the Department's determinations and drive unwarranted increases in energy efficiency. (Spire, No. 139 at p. 10)

In response, DOE appreciates the many thoughtful comments it received on peer review of its analytical methodologies, models, and assumptions. The Department agrees with the commenters as to the importance of using the best available scientific, technical, and economic data that contribute to its decision-making when setting energy conservation standards. Because such standards typically generate significant public benefits and costs to the regulated community, it is incumbent upon DOE to utilize the best available data and practices in developing such standards. Given the passage of time since the last peer review of the Appliance Standards Program, DOE has commenced a new peer review, but it also plans to conduct an ongoing, periodic peer review on a 10-year cycle. Because the technical support documents for energy conservation standards rulemakings contain influential scientific/technical/economic information that underpins DOE's standards, it is crucial that such information be current, validated, and of high quality. Although it is DOE's position that its data, methods, and models already meet the requirements of OMB Circular A-4²⁶ and the Information Quality Act,²⁷ the Department is committed to ensuring that its analytical models and methodologies continue to meet a high standard of integrity and to be based on sound scientific methods and principles. DOE believes that peer review advances this objective and is consistent with the principles of

²⁶ Available at: <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A4/a-4.pdf>.

²⁷ Section 515 of Public Law 106-554. OMB issued final guidelines to implement the Information Quality Act on February 22, 2002 (67 FR 8452) (available at: <https://www.govinfo.gov/content/pkg/FR-2002-02-22/pdf/R2-59.pdf>).

good government, and consequently, the agency is moving expeditiously to commence its next review. Such action should also satisfy DOE's obligations under OMB's Final Information Quality Bulletin for Peer Review.

DOE further agrees with commenters that this peer review should be part of an open and transparent process, with opportunities for public input and public availability of the recommendations made by the reviewers. The Department also agrees that the peer review should be conducted by independent, third-party experts drawn from the relevant disciplines. DOE would make clear that the peer reviewers are not limited to consideration of the 12 topic areas mentioned in the Process Rule NOPR, but they instead have license to conduct a comprehensive review of the models, methodologies, and assumptions used in DOE's rulemakings. Those peer reviewers would be free to consider relevant subjects presented by DOE, public comments, and other stakeholder input, as well as those identified by their own initiative. DOE will also ensure that there is an opportunity for public engagement with the peer reviewers as part of this process. The Department believes that such approach will ensure that it is receiving an objective and unbiased assessment of its analytical methodologies and models, while inspiring public confidence along those same lines. To this end, DOE has contracted with the National Academy of Sciences (NAS) to independently conduct its peer review. All information and announcements regarding this peer review, including the group's charter, topics to be addressed, announcements of public meetings, and availability of the final peer review report, are available via the NAS website. Any necessary changes to the Process Rule arising from the peer review and methodological updates will be addressed in a separate proceeding.

DOE disagrees with Spire as to the value of a peer review of DOE's analytical methodologies, and the agency expects that an independently conducted peer review, as DOE envisions and presents here, will alleviate many of Spire's concerns. In addition, DOE notes that it is not officially adopting Spire's recommendation for a "continual improvement process," although the Department is always open to constructive feedback about its processes. Interested parties are free to raise methodological issues as part of their public comments on various rulemakings or to bring the matter to DOE's attention through other correspondence. DOE will carefully consider such comments, and in appropriate cases where the agency finds merit, it may take action outside the normal 10-year peer review cycle. In such cases, options might include immediate corrective action, initiation of rulemaking, or early commencement of the next peer review cycle.

b. Walk-down

In the Process Rule NOPR, DOE specifically sought comment on its "walk-down" approach to assessing different potential standards. DOE explained that using this approach, DOE starts from the most stringent choice to determine both economic justification and technological feasibility by "walking-down" through the available choices by stringency until arriving at the first choice that meets all of the statutory criteria. In the proposal, DOE noted that economic theory suggests that the most logical way to determine if a particular option is "economically justified" is to compare it to the full range of available choices, rather than just one baseline. Applying economic theory, DOE proposed at 10 CFR part 430, subpart C, appendix A, sec. (7)(e)(2)(G) to require the Secretary to determine whether a candidate/trial standard level would be economically justified when compared to the full range of other feasible

TSLs. The proposal stated that in making this determination, the Secretary is to consider whether an economically rational consumer would choose a product meeting the candidate/trial standard level over products meeting the other feasible TSLs levels after considering all relevant factors, including but not limited to, energy savings, efficacy, product features, and life-cycle costs. If an economically rational consumer would not choose the candidate TSL after considering these factors, it would be rejected as economically unjustified. This approach would recognize that the “economic justification” of any particular option depends on a broader comparison of economic attributes relative to other available options, rather than relative to just one baseline, particularly one that is likely to be of little relevance to a consumer when choosing which product(s) are economically justified for their purchase. Rather that person is likely to be focused on the set of actually available products at the time of purchase, rather than some hypothetical baseline representing the set of products that would have been available in the absence of the standard (including perhaps the model currently being replaced). DOE sought public comment on its proposal to refine the “walk-down” approach to require determinations of economic justification to consider comparisons of economically relevant factors across TSLs, consistent with both economic theory and the actual purchasing behavior of rational consumers. (84 FR 3910, 3938)

DOE received a substantial amount of comment on its proposal related to the walk-down and as a consequence is issuing a notice of proposed rulemaking published elsewhere in this issue of the *Federal Register* to further clarify amendments to the walk-down approach. Although one commenter supported DOE’s proposal as presented (APGA), the rest of the comments on this topic generally ranged from neutral (citing a lack of information necessary to

comment and move forward) to strongly negative (arguing that the proposed approach would be illegal under EPCA). These comments are summarized below, followed by DOE's response.

Alone among the commenters, APGA expressed unqualified support for DOE's proposal to modify its walk-down approach to standard setting. The commenter explained how it has long complained that DOE uses a materially-flawed analysis which the commenter argued overstates potential benefits of standards and underestimates their costs, thereby failing to meet EPCA's requirements for economic justification. APGA stated that in order to determine whether a potential standard is economically justified, it should be compared to the full range of available consumer choices reflected by the entire suite of TSLs. (APGA, No. 106 at pp. 12-13)

A number of other commenters expressed varying degrees of theoretical support for potential modifications to DOE's walk-down but concluded that the Process Rule NOPR did not present enough detail or explanation to support a change at this time. Among this group, AHAM stated that because DOE's walk-down proposal was not sufficiently clear and fully articulated, it was not in a position to comment at this time, but it added that the concept should not be discarded. However, AHAM concluded that just because the walk-down proposal is not fully developed, that should not slow down consideration and finalization of the rest of the Process Rule proposal. (AHAM, April 11, 2019 Public Meeting Transcript at p. 169) Similarly, a representative for AHAM, AHRI, and the Joint Commenters stated that it is impossible to evaluate DOE's walk-down proposal and that commenters would need more information before they could do so, such as by the agency publishing an example as to how the revised process would work. (Everett Shorey, April 11, 2019 Public Meeting Transcript at p. 174)

NYU Law stated that DOE's proposed replacement of its walk-down approach with an "economically rational consumer" test is insufficiently defined and inadequately justified. NYU Law noted the following reasons to support its opinion: the Department vaguely alludes to "economic theory" but provides no citations; it does not detail how it is defining a "rational consumer" or how the test will be conducted; it does not explain whether or how the new test will weigh important social externalities; and it does not provide any illustrations or guidance on how the new test will compare to the old one. Accordingly, the commenter concluded that DOE has failed to sufficiently justify its proposal and has not provided the public with enough information to offer meaningful comments. (NYU Law, No. 119, at p. 1)

Likewise, NAFEM stated that it is not expressing any view as to the proposed "walk-down" approach specifically. However, NAFEM commented generally that it does support approaches that evaluate customer choice based on models that are economically viable with commercially available technologies contemporaneously with the review, rather than purely theoretical models based on technologies that may or may not be available in the future. (NAFEM, No. 122 at p. 7)

NEMA stated that while it is not opposed to considering the behavior of consumers as part of the walk-down to determine the economic justification of potential standards, it would need to know more about how such approach would work in regulatory practice. NEMA expressed concern that different perspectives about the "rational consumer" are capable of being variably applied, and consequently, it recommended that DOE approach this issue on a case-by-case basis in rulemakings where there is an opportunity for notice and comment. Thus, NEMA

suggested that these principles would need to evolve before being incorporated into the Process Rule. (NEMA, No. 107 at pp. 7-8)

Southern Company characterized the Process Rule NOPR's walk-down proposal as a major improvement, particularly since it deemed consumer discount rates to have been significantly underestimated in the past. (Southern Company, April 11 Public Meeting Transcript at p. 162) However, Southern Company ventured that the topic of the walk-down proposal is likely to be very intertwined with methodological issues that are being handled in a separate proceeding, and the commenter added that it would like to see a separate proceeding conducted every three or four years on the economic assumptions that are being used in different rulemakings. (Southern Company, April 11 Public Meeting Transcript at pp. 170) Spire expressed support for these comments of Southern Company, echoing the need for further details and perhaps a definition of "economically rational consumer."²⁸ (Spire, April 11, 2019 Public Meeting Transcript at p. 163) Nonetheless, Spire viewed DOE's proposal as an attempt to improve the *status quo* which has prevailed for many years. (Spire, April 11, 2019 Public Meeting Transcript at p. 168)

Similarly, AHRI stated that it would be interested to see what DOE comes up with and what it thinks is advisable to consider in terms of the walk-down proposal. The trade association concluded that the walk-down proposal does not currently provide enough information to allow it to offer meaningful comment, although the organization noted that it looks forward to subsequently seeing the agency's analysis and a more formal proposal. (AHRI, April 11, 2019

²⁸ Although the transcript shows the commenter referring to an "environmentally-rational consumer," DOE assumes that Spire meant to say "economically-rational consumer" in this context.

Public Meeting Transcript at pp. 165-166) AHRI commented that it does not think the walk-down approach is statutorily mandated, and it also pointed out that the language “maximum improvement in energy efficiency that is technologically feasible and economically justified” only applies to consumer products, not to commercial equipment. Thus, AHRI suggested that DOE has more flexibility with commercial equipment and that it has the authority to reconsider its economic justification analysis. (AHRI, April 11, 2019 Public Meeting Transcript at pp. 172-173)

The Joint Commenters expressed their support for a full consideration of the consumer choice frameworks used by the DOE, including both the current “walk-down” and alternatives, as well as the random assignment of base-case efficiencies currently used in the life-cycle costing analysis. These commenters made clear that they are not taking a position on the proposed “walk-down” approach and alternatives until all possible approaches have been reviewed in the context of how they would affect particular analyses. According to the Joint Commenters, the complexity and subtlety of translating theoretical approaches to practical situations are high and fraught with unintended consequences. Thus, the Joint Commenters suggested that this subject should be addressed during the peer review process. (Joint Commenters, No. 112 at p. 14)

The balance of the comments opposed DOE’s walk-down proposal to move from its current analytical methodology and walk-down standards selection process to an “economically rational consumer” test, as presented in the Process Rule NOPR, for a variety of reasons. (ASE, No. 108 at pp. 6-7; ACEEE, April 11, 2019 Public Meeting Transcript at pp. 171-172; ASAP, et

al., No. 126 at pp. 15-16; AGs Joint Comment, No. 111 at pp. 15-16; Earthjustice, No. 134 at p. 5; NRDC, No. 131 at pp. 15-17; NPCC, No. 94 at p. 8; Cal-IOWs, No. 124 at p. 14; PG&E, April 11, 2019 Public Meeting Transcript at pp. 164-165; Southern California Edison, April 11, 2019 Public Meeting Transcript at p. 222; CEC, No. 121 at p. 14; CT-DEEP, No. 93 at p. 4)

More specifically, many commenters were concerned that DOE did not define the term “economically rational consumer” in the NOPR. (ASE, No. 108 at pp. 6-7; ACEEE, April 11, 2019 Public Meeting Transcript at pp. 171-172) ASAP (and others) argued that particularly because DOE did not define that key term, it is unclear precisely what DOE is proposing for a revised walk-down methodology, so the organization does not know how to comment. (ASAP, April 11, 2019 Public Meeting Transcript at pp. 166-167; AGs Joint Comment, No. 111 at pp. 15-16; NRDC, No. 131 at pp. 15-17) ACEEE added that if DOE were to choose to move forward with this concept, a supplemental NOPR would be required. (ACEEE, April 11, 2019 Public Meeting Transcript at pp. 171-172)

Even if the term “economically rational consumer” were to be defined, some of the commenters expressed concerns with any such attempt. For example, ASAP, et al. argued that seeking to define who a “rational consumer” is and to assess what choices such a person would make would be fraught with problems, and the commenter reminded DOE that the NOPR provided no information about how DOE would make such determinations. (ASAP, et al., No. 126 at pp. 15-16) The AGs Joint Comment likewise stated that there is widespread skepticism surrounding the concept of the “economically rational consumer” because economists and social scientists recognize that many times consumers act irrationally, so this theory may not reflect

real-world conditions. (AGs Joint Comment, No. 111 at pp. 15-16) NRDC argued that there are varying academic opinions regarding the decisions consumers make, whether an economically rational consumer exists, and the value of such a construct, so much energy and money could be lost if a standard is rejected simply because a consumer were to make an irrational choice under such test. (NRDC, No. 131 at pp. 17) Furthermore, NRDC asserted that the Process Rule NOPR's efforts to advance the concept of an economically rational consumer overlook the fact that not all consumers purchase their appliances or equipment (*i.e.*, renters), so the commenter questioned how, under this type of approach, DOE would account for the benefits of standards to low-income people or renters who would not necessarily be making purchasing decisions. (NRDC, April 11, 2019 Public Meeting Transcript at p. 164) Similarly, CT-DEEP opposed DOE's proposal walk-down approach based on what it characterized as a hypothetical and arbitrary 'economically rational consumer,' arguing that modern economic theory suggests that such consumer does not truly exist. (CT-DEEP, No. 93 at p. 4)

PG&E stated that the concept of a rational consumer is a difficult one to quantify and that it could potentially contribute error to DOE's analyses. More specifically, PG&E argued that the proposed change to the walk-down would add complexity to the analysis, and with more complexity would come the possibility of more mistakes. Furthermore, the commenter ventured that the relevant information may be unknown and would then require estimation. (PG&E, April 11, 2019 Public Meeting Transcript at pp. 164) Southern California Edison made a similar point that the proposal surrounding the rational consumer looks very difficult to quantify, which runs counter to the goal of making DOE's process more transparent. (Southern California Edison, April 11, 2019 Public Meeting Transcript at p. 222)

Several commenters in this group questioned how DOE could meet its statutory obligations under EPCA while following this new approach. ASE and ACEEE argued that Congress has mandated that the Department set standards at the maximum level that is technologically feasible and economically justified, and has specified seven considerations to be balanced in determining what is economically justified; the statute does not direct DOE to choose the most economically justified level. (ASE, No. 108 at pp. 6-7; ACEEE, April 11, 2019 Public Meeting Transcript at pp. 171-172; ACEEE, No. 123 at p. 4) ASAP, et al. explained its understanding of how DOE has implemented the current process by first looking at the "max-tech" level and evaluating whether that level is economically justified; if DOE concludes that that level is not economically justified, it proceeds to the next-highest level and makes the same evaluation until reaching a level (if any) that the Department determines is economically justified. The commenter expressed its opinion that the process used to date implements what the statute requires. Specifically, by starting at the "max-tech" level and working its way down, ASAP, et al. argued that the Department ensures that it does in fact adopt the maximum level that is technologically feasible and economically justified. (ASAP, et al., No. 126 at pp. 15-16) In contrast, ASAP and ASAP, et al. questioned that fact that the NOPR leaves unclear how DOE's proposed approach would fit with the statutory requirement to consider the seven factors in determining whether a standard is "economically justified," except maybe factor 7 (*i.e.*, other factors the Secretary considers relevant). (ASAP, April 11, 2019 Public Meeting Transcript at pp. 166-167; ASAP, et al., No. 126 at pp. 15-16) ASAP stated that it cannot find a legal justification for the agency's proposed change to the walk-down or how one would conduct such revised walk-down from a process point of view, expressing unease with what appears to be

DOE's suddenly reworking of how the entire standards process has been conducted for over 30 years. (ASAP, April 11, 2019 Public Meeting Transcript at pp. 166167) NPCC recommended that because the current walk-down approach (as described in the Process Rule NOPR) is consistent with the statutory directive that standards must be set at the maximum level of efficiency that is technically feasible and economically justified, no further refinement of this aspect of DOE's existing rulemaking process is needed. (NPCC, No. 94 at p. 8)

ACEEE argued that the current walk-down approach has a clear process of choosing the maximum improvement level required under the statute, but once the current process is abandoned in favor of a rational consumer approach, the commenter asserted that the Department would be ignoring the law, because the "preferred" level is not what is in the statute. (ACEEE, April 11, 2019 Public Meeting Transcript at pp. 171-172) On this point, ASAP, et al. similarly stated that DOE's proposed approach, as presented, would appear to instead hinge on whether an ill-defined "economically rational consumer" would choose a product meeting a certain efficiency level. (ASAP, et al., No. 126 at pp. 16) ACEEE expressed its view that the Department has not made clear how selection of a consumer's preferred level, among all the options, would yield the maximum level that meets the statutory criteria. Moreover, ACEEE argued that it is even less clear how consideration of a single consumer would incorporate, or would be incorporated with, the seven required considerations. As the Department has provided no information on how the rational consumer would make their choice, ACEEE opined that DOE's walk-down proposal also would introduce significant uncertainty and potentially arbitrary decisions for manufacturers and consumers (*e.g.*, What rational consumer will be considered, based on what financial situation, with what economic utilities? How will this be determined?).

These considerations shaped ACEEE's view that the "economically rational consumer," while well-studied in the economics literature, does not appear to be a concept in current Federal law, and, thus, it is a likely subject for litigation, if adopted. Consequently, ACEEE concluded that a theoretical, economically rational consumer cannot be used to choose an energy conservation standard level. (ACEEE, No. 123 at p. 4)

Still others characterized DOE's proposed walk-down approach more strongly; arguing either that the proposed approach is impermissible and illegal under EPCA or arguing that the current approach is legally mandated by EPCA. (AGs Joint Comment, No. 111 at pp. 15-16; Earthjustice, No. 134 at p. 5; NRDC, No. 131 at pp. 15-16; CEC, No. 121 at p. 14) Among this group, the AGs Joint Comment strongly disfavored DOE's use of an "economically rational consumer," as arbitrary and capricious and inconsistent with EPCA. According to the AGs Joint Comment, DOE has failed to describe how it would conceive this purported rational consumer or detail how this approach would be put into practice. According to the AGs, DOE may only consider an "economically rational consumer" consistent with EPCA's payback presumption in 42 U.S.C. 6295(o)(2)(B)(iii), and diverging from that presumption in favor of a hypothetically economically rational consumer would violate EPCA. Furthermore, the AGs Joint Comment argued that EPCA already explains how consumer interests are to be addressed as one of the seven factors for economic justification, a consideration to be weighed but not to be valued predominantly or exclusively. (AGs Joint Comment, No. 111 at pp. 15-16)

Although Earthjustice suggested that the Process Rule NOPR's proposed changes shifting the focus of DOE's economic justification inquiry to a hypothetical "economically rational

consumer” are not clearly explained in the NOPR, the commenter stated that any such change abandoning the walk-down approach the Department has long used to assess the economic justification for each TSL under consideration would be impermissible. Earthjustice stated that as the D.C. Circuit has explained, EPCA “establishes a clear decision-making procedure” that applies when DOE selects energy conservation standard levels (*citing NRDC v. Herrington*, 768 F.2d 1355, 1391 (D.C. Cir. 1985)). Specifically, the commenter stated that DOE must first identify, for all product types or classes, the maximum improvement in energy efficiency that is technologically feasible, and if a standard at that level would be economically justified, DOE must set the standard there. Earthjustice added that if a standard requiring the maximum technologically feasible level would not be economically justified, DOE must set the standard at the next highest level that is both technologically feasible and economically justified. In that event, Earthjustice stated that EPCA requires DOE to explain specifically why a standard achieving the maximum technologically feasible improvement in efficiency was rejected (*citing Id.* at 1391-1392 (citations omitted)). To the extent the NOPR would substitute a different approach, the commenter argued that that proposal is unlawful. Earthjustice stated that if that is not what DOE intended, the Department must provide stakeholders with a clear understanding of how the reliance on an “economically rational consumer” would change DOE’s evaluation of whether a TSL is economically justified. (Earthjustice, No. 134 at p. 5) NRDC’s comments used much the same logic as Earthjustice in opposing DOE’s proposed “walk-down” approach, because in its view, such approach is prohibited by EPCA. According to NRDC, basing such decisions on an “economically rational consumer” is problematic for a number of reasons, particularly since EPCA does not permit DOE to prioritize an “economically rational consumer”

test higher than other factors the agency is required to consider for economic justification.

(NRDC, No. 131 at pp. 15-17)

In objecting to DOE's proposed change to the current walk-down analytical approach, the CEC argued that the factors for economic justification are described in, and limited to, those in EPCA, which makes no mention of an "economically rational consumer" for purposes of DOE's required analysis. Moreover, the CEC added that practical experience and results over decades of implementing the appliance efficiency program show that there is a need for efficiency standards to overcome information barriers, cost barriers, and corporate inertia that stymie the otherwise rational economic consumer. (CEC, No. 121 at p. 14)

Finally, BWC and the Cal-IOWs offered some suggestions as to other alternatives DOE might consider when revising its walk-down approach. BWC stated that it does not support DOE's proposed revised "walk-down" approach, but instead favors a "walk-up" approach that looks at the TSL just above the current standard (*i.e.*, the baseline). From there, BWC suggested that each level would be compared independently to the baseline. According to BWC, such approach would better reflect its experience that most consumers want the least expensive option that provides them the same utility as their current appliance. (BWC, No. 103 at p. 4) As an alternative to DOE's potential use of an "economically rational consumer" as part of the agency's analytical process (to which they objected), the Cal-IOWs instead suggested that DOE should align its approach with the one already in use in California -- where energy efficiency measures are evaluated using the current standard as the baseline and to factor in natural market adoption in the measured case to prevent double-counting. (Cal-IOWs, No. 124 at p. 14)

In response, DOE recognizes that its walk-down proposal, as presented in the Process Rule NOPR, could be viewed as a fundamental shift in the way the Department has historically selected energy conservation standards for adoption. Some commenters favored further examination of the subject matter of the proposal (perhaps as part of a peer review) but stated that the lack of clarity and sufficient detail rendered them unable to express an opinion or comment further. Those commenters were clear that, while they believed DOE should look into the issues presented by the walk-down proposal, they were opposed to delaying the remainder of the Process Rule's improvements while that work was done. Others not only questioned the workability and academic underpinnings of DOE's proposal but flatly challenged the legal basis for the agency's proposed approach (citing both the statute and case precedent), suggesting that it would invite litigation.

Upon further reflection and after reviewing the public comments received on the matter, DOE has come to understand that its walk-down proposal would benefit from further elaboration and opportunity for public comment. Accordingly, DOE has decided not to finalize its proposed revised walk-down approach in this rule. Instead, elsewhere in this issue of the *Federal Register*, DOE has proposed revisions to its existing walk-down methodology together with added explanation to address some of the concerns raised by stakeholders. This supplemental proposal will revise 10 CFR part 430, subpart C, appendix A, sec. (7)(e) of the Process Rule. Specifically, the proposal clarifies that the process by which DOE selects among alternative energy efficiency standards under EPCA, satisfies the requirement that standards achieve the "maximum improvement in energy efficiency, or in the case of showerheads, faucets, water closets, or

urinals, water efficiency, which the Secretary determines is technologically feasible and economically justified.” 42 U.S.C. 6295(o)(2)(A). In response to the concerns and requests for further explanation related to the economically rational consumer mentioned in DOE’s prior proposal, DOE is: (1) clarifying how impacts are considered in determining economic justification through the seven factors specified in EPCA; and (2) explaining that the requirement to determine economic justification is based on comparisons across the full range of trail standard levels (TSLs) is consistent with EPCA. This proposal will respond to public comment requesting further clarity on DOE’s initial proposal that in making the determination of economic justification, DOE would choose a TSL over other feasible TSLs after considering all relevant factors, including, but not limited to, energy savings, efficacy, product features, and life-cycle costs.

DOE encourages interested parties to review DOE’s proposal and provide comment for consideration.

c. Other

In commenting on DOE’s analytical methodologies, Lutron suggested that as part of the Department’s analysis, DOE should assess the impacts on customers related to the potential elimination of desirable product features. According to the commenter, DOE should not promulgate rules that would eliminate features that are highly valued by customer subgroups. (Lutron, No. 137 at p. 3) In response, DOE notes that EPCA specifically addresses this issue, stating at 42 U.S.C. 6295(o)(4) that DOE may not prescribe an amended or new standard if it finds (and publishes such finding) that interested persons have established by a preponderance of

the evidence that the standard is likely to result in the unavailability in the United States in any covered product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States at the time of DOE's finding. Thus, in keeping with its statutory mandate, DOE routinely evaluates the effects its potential energy conservation standards would have on identified product features and takes action consistent with 42 U.S.C. 6295(o)(4). (These same principles apply to covered commercial and industrial equipment through operation of 42 U.S.C. 6313(a)(6)(B)(iii)(II)(aa), 42 U.S.C. 6313(a)(6)(C)(i), and 42 U.S.C. 6316(b).)

2. Cumulative Regulatory Burden

In the Process Rule NOPR, DOE acknowledged that its past treatment of cumulative regulatory burdens faced by regulated entities may have lacked the comprehensiveness sought by some industry stakeholders. However, DOE attempted to address these burdens in a consistent manner to ensure that it accounts for them in each of DOE's energy conservation standards rulemakings. DOE committed to improving its assessments of the potential burdens (*i.e.*, costs) faced by industry in implementing potential standards by improving its analysis. As part of this effort, DOE stated that it will attempt to account for these potential costs through its modeling approaches, but the Department welcomed constructive feedback on particular steps it should take (consistent with its legal obligations) that would help improve its evaluation of the cumulative regulatory burdens faced by regulated entities within the energy conservation standards context. 84 FR 3910, 3939 (Feb. 13, 2019).

In response to the Process Rule NOPR, DOE received several comments on the topic of cumulative regulatory burden, primarily from individual companies and industry trade associations. Most of these commenters supported DOE's proposal to strengthen its analysis of cumulative regulatory burden, often reiterating their view of the perceived problem, stressing the importance of addressing it, and sometimes offering suggestions for how the Department can improve its process. For example, Rheem expressed strong support for DOE's efforts to improve the Department's consideration of cumulative regulatory burden and to reduce complexity as part of the standards rulemaking process. (Rheem, No. 101 at pp. 1-2) MHI expressed a similar sentiment, stating that it is critical that the process by which DOE sets rules for energy standards must carefully consider the cost impacts and work together with other Federal agencies so that cumulative regulatory costs are accounted for in the rulemaking process. (MHI, No. 130 at p. 3) These comments are discussed in the paragraphs immediately below, along with DOE's response.

As noted, DOE's past practices (and in some cases its NOPR proposal) regarding cumulative regulatory burden were criticized by a number of the commenters on the Process Rule NOPR. For example, Lennox faulted DOE's actions in recent energy efficiency rulemakings for what it characterized as the agency's consistent failure to undertake a meaningful analysis of the cumulative impacts of multiple regulations, beyond merely listing factors such as the industry conversion costs of separate rulemakings in isolation (citing DOE's supplemental notice of proposed rulemaking for residential furnaces at 81 FR 65720, 65824-65825 (Sept. 23, 2016) as an example). According to Lennox, DOE's cumulative regulatory burden analysis has often been a perfunctory exercise, identifying harms to industry and lost

jobs, but failing to meaningfully weigh these harms and instead emphasizing energy saved without properly assessing whether a standard is economically justified. Lennox argued that while DOE actions impose a significant burden on manufacturers, several other Federal and State regulations may also significantly burden manufacturers of the same products. Under section 10 of the existing Process Rule (now proposed section 14(g)), DOE is to “recognize and seek to mitigate the overlapping effects on manufacturers of new or revised DOE standards and other regulatory actions affecting the same products.” However, according to the commenter, DOE insufficiently considers the impacts of these other regulations, so the Process Rule should clarify that the cumulative impacts analysis should include all regulations that impact manufacturers of DOE-regulated products, including other Federal and State regulations (particularly regarding those States where significant volumes of equipment are distributed and regulations are rapidly evolving, such as California). (Lennox, No. 133 at p. 7)

Further, Southern California Edison stated that in DOE’s rulemakings, the Department has overestimated the burden on manufacturers and taken a conservative approach. The commenter argued that manufacturers need to provide cost data to DOE in a methodical and historical manner, and the Department should consider such data. (Southern California Edison, April 11, 2019 Public Meeting Transcript at pp. 178-179) However, in contrast, Westinghouse strongly disagreed with any suggestion that DOE overestimates the costs of its rulemakings on industry. The commenter suggested that although manufacturers routinely provide data through industry associations and confidential manufacturer interviews, DOE typically underestimates costs and is not transparent as to where they get their alternate numbers that do not match those provided by manufacturers. Westinghouse went on record to state its opinion that DOE has

never properly accounted for the costs of regulations in any of the rulemakings. (Westinghouse, April 11, 2019 Public Meeting Transcript at pp. 179-180)

Other commenters, such as AHAM and AHRI, expressed concerns about DOE's past cumulative regulatory burden practices but were optimistic that the Department's proposal could lead to improvements in this area. AHAM commended DOE's Process Rule proposal for its efforts to make its analysis of cumulative regulatory burden clear and explicit. DOE should always consider cumulative regulatory burden (as early in the process as possible) even if it does not ultimately change the course of regulatory action, suggesting that this concept offers a way to prioritize rulemakings in terms of allocating agency and industry resources. AHAM, April 11, 2019 Public Meeting Transcript at pp. 175-176) AHRI commenter argued that in the past, DOE has run the numbers for cumulative regulatory burden, but the Department has failed to make clear what it is doing with them. (AHRI, April 11, 2019 Public Meeting Transcript at p. 180) AHRI also stated that it also supports DOE's proposal regarding cumulative regulatory burden, and it echoed the comments of AHAM. AHRI advocated that (AHRI, April 11, 2019 Public Meeting Transcript at pp. 177-178)

Still other commenters either requested further clarification of DOE's proposal regarding cumulative regulatory burden or offered specific recommendations as to potential improvements to that process. Along this line, NAFEM requested that DOE clarify the scope of regulations it will consider in the cumulative regulatory burden analysis. The commenter stated that DOE's proposed language provides a temporal scope (*i.e.*, within three years of the compliance date of another DOE standard), but argued that there is ambiguity as to whether DOE will consider non-

DOE regulations. As an example of the problems arising from an inadequate cumulative regulatory burden analysis, NAFEM challenged the last commercial refrigeration equipment (CRE) rulemaking, because DOE's analysis included equipment that used refrigerants that EPA no longer permitted. The commenter stressed that DOE should set forth procedures for ensuring robust analyses of the overall burdens and costs on all regulated entities associated with its various rulemakings. (NAFEM, No. 122 at pp. 7-8)

In response to the Process Rule NOPR, DOE received a number of recommendations as to the types of information that should be included in any cumulative regulatory burden analysis conducted by the Department. For example, Lennox recommended that improvements to the Process Rule should include an assessment of the generally known regulatory burdens and systematic analysis of the cumulative impacts of any new or amended regulation, including economic modelling to show how multiple regulatory actions impact manufacturers and employment related to DOE-regulated products. (Lennox, No. 133 at p. 7) More specifically, BWC urged DOE to consider cumulative regulatory burden from a domestic standpoint at the Federal, State, and regional/local level. According to the commenter, some of those requirements – such as certain emission limits (*e.g.*, Ultra-Low NO_x for the California Air Quality Management or Air Pollution Control Districts) – can significantly affect allocation of manufacturer resources. BWC also stated that DOE should account for situations where manufacturers might have multiple rulemakings, possibly of different product types, going on at the same time. The commenter added that when manufacturers are forced to spend most of their limited resources on regulatory changes, it inhibits work on new, higher-efficiency products. (BWC, No. 103 at p. 4)

NAFEM stated that DOE should include within its burden review the scope all of the regulations, even from other Federal agencies, that affect the viability of the equipment DOE is targeting at the TSLs. Specifically, NAFEM argued that the Regulatory Flexibility Act (RFA) requires that regulations from other Federal agencies must be reviewed, noting that the Small Business Administration (SBA) publishes the RFA Guide as a tool for Federal agencies to use to help ensure compliance with the RFA and related laws and Executive Orders (providing in relevant part that “[r]ules are conflicting when they impose two conflicting regulatory requirements on the same classes of industry”). (NAFEM, No. 122 at pp. 7-8)

Commenters also discussed the mechanism for considering the information obtained through the cumulative regulatory burden analysis. Relatedly, the Joint Commenters urged DOE to modify its current rulemaking process so as to incorporate the financial results of the current cumulative regulatory burden analysis directly into the Manufacturer Impact Analysis. They suggested that this can be done by adding the combined costs of complying with multiple regulations into the product conversion costs in the Government Regulatory Impact Analysis (GRIM) model. The Joint Commenters argued that this would be an appropriate approach to include the costs to manufacturers of responding to and monitoring regulations, noting that in the past, AHRI has submitted such information to DOE. (Joint Commenters, No. 112 at p. 14)

Energy Solutions stated that although it does not object to DOE’s cumulative regulatory burden analysis, it recommends that such review should not be included in the life-cycle cost analysis. (Energy Solutions, April 11, 2019 Public Meeting Transcript at p. 180)

NAFEM also stated that DOE should incorporate a comprehensive process into its Process Rule that fairly and adequately implements the RFA, that fosters engagement with the SBA Office of Advocacy, and that contemplates either different standards or more reasonable compliance deadlines for small business manufacturers subject to EPCA standards. (NAFEM, No. 122 at pp. 7-8) AHRI also commented that cumulative regulatory burden might be included in the Regulatory Flexibility Act (RFA) analysis, and it urged DOE to consider relevant governmental actions beyond its own regulations. (AHRI, April 11, 2019 Public Meeting Transcript at pp. 177-178)

Finally, certain commenters focused on the types of impacted entities that should be examined under DOE's cumulative regulatory burden analysis, which has typically focused on manufacturers of the products/equipment subject to new or amended energy conservation standards. Spire made the point that regulatory burden is not limited to manufacturers, and other entities, such as utilities, also face significant regulatory burdens. Accordingly, Spire cautioned DOE not to limit its consideration of cumulative regulatory burdens to manufacturers. (Spire, April 11, 2019 Public Meeting Transcript at p. 177) NAFEM added that as part of its cumulative regulatory burden analysis, DOE should ensure that there are no disproportional impacts on small businesses. (NAFEM, No. 122 at pp. 7-8)

In response, DOE is both cognizant of and sensitive to the cumulative regulatory burden faced by regulated parties subject to the Department's energy conservation standards. As DOE fulfills its statutory mandate under EPCA, it is obligated to consider the economic impacts of

potential standards on manufacturers; however, the Department's understanding of those impacts is arguably incomplete unless one assesses the overall regulatory environment facing the relevant industry. In addition to the energy conservation standard at issue in a given rulemaking, a manufacturer or industry may be simultaneously subject to other DOE appliance standards rulemakings, regulations of other Federal agencies, as well as State and regional/local regulatory requirements. Assembling and analyzing data relevant to examining cumulative regulatory burden is a complex task. DOE has generally sought to examine other appliance standards rulemakings coming into effect within three years of the anticipated compliance date of the standard under development, as well as other Federal, State, and local regulations of which it is aware and which are expected to have a significant impact. Nonetheless, DOE acknowledges that its cumulative regulatory burden analysis has not been as comprehensive nor its impacts as transparent as some might have liked. The Department also recognizes the negative effects that excessive regulatory burdens can have on corporate resource allocations. While DOE avers that cumulative regulatory burden was one of the factors the agency weighed carefully when considering potential energy conservation standards, it is committed to working towards the development of a more robust and transparent approach going forward.

DOE agrees with AHRI that the inquiry into cumulative regulatory burden should begin as early in the rulemaking process as possible, and the Department continues to welcome data and information regarding such burdens during comment opportunities at the various stages of a standards rulemaking. To NAFEM's point, DOE does strive to carefully and fully consider the impacts of its rulemakings on small entities through its analysis under the Regulatory Flexibility Act (RFA) and related Executive Orders. Although cumulative regulatory burden is certainly a

consideration in that context, it is a matter of more global concern to all manufacturers subject to the energy conservation standards at issue. Consequently, DOE does not believe that the RFA analysis would be the appropriate locus for a broad consideration of cumulative regulatory burden. In response to NAFEM's other comments regarding small businesses, DOE notes that it cannot set differentiated standards under EPCA (*e.g.*, one set of requirements applicable to small businesses and another set of requirements applicable to large manufacturers). Any test procedure or energy conservation standard DOE promulgates must be equitable to all industry participants, meaning that all participants, regardless of size, must be held to the same testing and energy conservation standards criteria. However, additional compliance flexibilities may be available to small businesses through other means. For example, individual manufacturers may petition DOE for a waiver of the applicable test procedures. (*See* 10 CFR 430.27) Furthermore, EPCA provides that a manufacturer whose annual gross revenue from all of its operations does not exceed \$8,000,000 may apply for an exemption from all or part of an energy conservation standard for a period not longer than 24 months after the effective date of a final rule establishing the standard. (*See* 42 U.S.C. 6295(t); 10 CFR part 430, subpart E) Additionally, section 504 of the Department of Energy Organization Act, 42 U.S.C. 7194, provides authority for the Secretary to adjust a rule issued under EPCA in order to prevent "special hardship, inequity, or unfair distribution of burdens" that may be imposed on that manufacturer as a result of such rule. Manufacturers should refer to 10 CFR part 430, subpart E, and 10 CFR part 1003 for additional details. Regarding NAFEM's comment about engagement with the SBA Office of Advocacy, DOE notes that that office closely follows and regularly participates in DOE's appliance standards rulemakings, and the Department always appreciates SBA's involvement and insights.

As a general path forward, DOE expects that the scope and timeframe for the cumulative regulatory burden analysis, as well as related economic models, will be among the topics examined in depth by peer reviewers. Based upon the results and conclusions of that peer review, DOE may take further action, as necessary, to modify its processes accordingly.

The issue of the specific mechanism for considering cumulative regulatory burden in DOE's standard-setting process is an interesting question which will likely require further consideration and study. To date and as noted previously, DOE has considered cumulative regulatory burden as a factor contributing to the economic impacts on manufacturers, which is one of the criteria for assessing the economic justification of a potential energy conservation standard. The Joint Commenters' suggestion to somehow incorporate a quantitative assessment of cumulative regulatory burden into the MIA through DOE's GRIM model will have to be evaluated further. Regarding the cautionary statement of Energy Solutions not to include assessment of cumulative regulatory burden as part of the life-cycle cost (LCC) analysis, the Department agrees that the two are not linked. The LCC analysis estimates of consumer benefits, whereas cumulative regulatory burden involves manufacturer costs. Regarding the best mechanism for incorporating cumulative regulatory burden into DOE's standard-setting process (including the specific suggestions raised by these commenters), the Department has once again concluded that this matter would benefit from examination by the peer reviewers who will be examining the analytical methodologies underpinning the Appliance Standards Program.

Finally, in response to Spire's comment regarding the cumulative regulatory impacts on utilities, DOE notes that the Appliance Standards Program regulates covered products and

equipment constructed and/or imported and certified by manufacturers. DOE's program does not directly regulate entities such as utilities, although they may experience some ancillary effects. However, DOE is open to exploring potential impacts of its Appliance Standards Program on non-manufacturer third parties as part of the peer review of DOE's analytical processes and addressing such impacts as necessary and appropriate.

3. Should DOE Conduct Retrospective Reviews of the Energy Savings and Costs of Energy Conservation Standards?

At the January 9, 2018 Process Rule RFI public meeting and also in the Process Rule NOPR, DOE solicited feedback as to whether it should conduct a retrospective review of the energy savings and costs for its current standards as well as associated costs and benefits as part of any pre-rulemaking process that it ultimately adopts. 84 FR 3910, 3939 (Feb. 13, 2019). In responding to the numerous comments on this topic, DOE acknowledged that a broad and comprehensive retrospective review of DOE's current and past energy conservation standards could provide significant data for DOE to consider as part of future standards rulemakings. The Department stated that while it recognizes the potential benefits of conducting this type of retrospective review on a periodic basis, it also recognizes that it faces limits on its own resources to conduct the broad and comprehensive analyses that would be needed to collect and analyze this information. Accordingly, DOE stated that it is continuing to evaluate the prospect of conducting these types of reviews, including on a longer-term (*e.g.*, 10-year) basis but has not, as of yet, reached a final decision as to how to proceed. DOE did note that its proposed early assessment processes do incorporate an element of retrospective review. That is, by beginning a potential proceeding to amend existing energy conservation standards or test procedures for a

product by asking if anything has changed since issuance of the last standard or test procedure, DOE will be seeking input in what effectively amounts to a retrospective review of the impact and effectiveness of its most recent regulatory action for the product at issue. (*Id.* at 84 FR 3940.)

Commenters on the Process Rule NOPR expressed divergent viewpoints on the need to conduct a retrospective review in the context of DOE's appliance standards rulemaking process. The following commenters supported DOE's use of a retrospective review as a mechanism to improve the quality and effectiveness of the agency's rulemakings. BWC recommended that DOE conduct a retrospective review to determine whether products and markets have materialized as the Department anticipated in its rulemaking, and if not, that DOE investigate to understand why its previous analysis was incorrect. (BWC, No. 103 at p. 5) Similarly, Signify expressed support for the concept of retrospective reviews to see what past rulemakings actually accomplished and to save time and money by avoiding iterative rulemakings that are not realizing significant energy savings. (Signify, No. 116 at p. 2) APGA also supported DOE's use of routine retrospective reviews generally. (APGA, No. 106 at p. 13)

GWU emphasized retrospective review as essential to making DOE's standards rulemaking process more effective and transparent. GWU argued that because DOE relies heavily on assumptions about future prices of energy and other goods, opportunity costs, and producer and consumer preferences, it is reasonable for DOE to assess the outcomes and effects of its past rulemaking so as to better inform its next rulemaking. According to GWU, such review would allow DOE to measure the efficacy of its assumptions and to use a real (rather than

hypothesized) baseline in its next set of rulemaking analyses. In addition to reviewing existing standards and analytical assumptions, GWU also sees the potential for reviewing how new standards are established by building in metrics, indicators, and timelines at the rule's outset. (GWU, No. 132 at pp. 11-12)

AGA expressed its belief that DOE should not commence a new minimum energy efficiency standards process until the existing standards have been reviewed. According to AGA, an effective retrospective review would include objective, verifiable quantification, and if done right, this sort of retrospective review should enhance DOE's modeling and analyses and should avoid any material flaws in DOE's current modeling. If a retrospective review demonstrates that a substantial percentage of high-efficiency appliances exceeding the current standard within the type (or class) already exists, the commenter reasoned that no new minimum standard would be needed. AGA further stated that it understands that DOE has limited resources to conduct a retrospective review and is still evaluating how to effectively proceed. In the meantime, AGA commented that the retrospective review can occur during the comment period of the applicable early stakeholder process. AGA argued that interested parties can and should provide data demonstrating changes since the issuance of the last standard or test procedure, and the impact and effectiveness of its most recent regulatory action for the product at issue. According to AGA, the Department, as part of the Process Rule, should commit to such retrospective reviews when data is submitted as part of the stakeholder process. (AGA, No. 114 at p. 30)

Citing Executive Order 13563 (particularly section 6 of that Order which contains retrospective review requirements), Spire expressed support for the idea of DOE performing a retrospective analysis of its rules. (Spire, April 11, 2019 Public Meeting Transcript at p. 186; Spire, No. 139 at p. 24) Spire argued that retrospective review should be conducted almost every time you are considering new efficiency standards to see how well estimates of claimed consumer savings have done. (Spire, April 11, 2019 Public Meeting Transcript at p. 182) The commenter suggested that retrospective reviews should be conducted on a continuous basis, rather than sporadically. (Spire, No. 139 at p. 10) Spire also criticized DOE's use of Energy Information Agency (EIA) data by asserting that these data routinely over-estimate consumer gas price increases and under-estimates electricity price increases, and it argued that DOE's reliance on these data should be subject to retrospective review. Spire also suggested that the appropriate length of time for analysis should be the useful lifetime of the product under consideration. (Spire, No. 139 at p. 22)

Other commenters cautioned against the initiation of a comprehensive retrospective review, which they characterized as a complex and costly endeavor. However, even these commenters generally supported the type of more limited retrospective review proposed as part of the early assessment provisions in DOE's Process Rule NOPR. Among this group of commenters, the Joint Commenters stated that they do not support a separate retrospective review process, arguing that trying to determine what actually happened following the implementation of standards is an incredibly complicated process and that there is no public data to support such an analysis. In addition, the Joint Commenters explained that the cost to manufacturers to develop this data is very substantial, as the information is not readily available

and is highly proprietary and confidential. (Joint Commenters, No. 112 at p. 15) Along these lines, a consultant to AHAM/AHRI and the Joint Commenters, alerted any potential peer reviewers that looking at manufacturer costs is an expensive and difficult process. The commenter took issue with the notion that DOE's price forecasts are incorrect and that DOE has underestimated manufacturing costs, arguing that there is no data to support that conclusion. (Everett Shorey, April 11, 2019 Public Meeting Transcript at pp. 185-186)

However, the Joint Commenters did support a review of what has changed in the cost or energy savings projections for the design options considered in previous standards. If nothing or very little has changed, then the Joint Commenters suggested that the presumption should be that the existing standards are appropriate, and DOE should not make a change. These commenters concluded that it should be determinative that DOE concluded in the previous rulemaking that no more-stringent standard met its own criteria. (Joint Commenters, No. 112 at p. 15)

Lennox agreed that the Process Rule NOPR's proposed early assessment for rulemakings already contains an element of retrospective review and that requiring a formal retrospective review for all rulemakings would unnecessarily burden DOE and manufacturers alike. Moreover, Lennox stated that EPCA already requires an extensive economic justification test (*e.g.*, 42 U.S.C. 6295(o)). As a result, Lennox reasoned that a full and burdensome retrospective review of market impacts some six years or more before a rulemaking is not necessarily relevant to determining whether a standard under consideration is economically justified, but instead, DOE should make common sense inquiries such as what, if anything, has changed since a previous DOE appliance efficiency standards final rule for that product was adopted. The

commenter stated that this seems in line with the Process Rule NOPR approach on this issue, and to that extent Lennox concurs. (Lennox, No. 133 at p. 6)

A few other commenters expressed support for a more limited or targeted form of retrospective review. On this topic, NEMA stated that it would like to see the models and other forecasting tools put to the test in order to assess how they performed and how accurate such forecasting was in actual application. (NEMA, April 11, 2019 Public Meeting Transcript at p. 184) Southern Company remarked that retrospective review looks good in theory, but it wondered how it would work out in practice. Due to statutory cycles (6 and 7 years), Southern Company reasoned that it is difficult to judge the impact of the last standard, and it reiterated the need for good documentation of assumptions made in rulemakings. (Southern Company, April 11, 2019 Public Meeting Transcript at p. 183) Although BHI pointed out that most project management systems conclude with a lessons learned session to identify administrative issues that hindered the completion of the project, the company did not recommend a retrospective review. However, BHI does recommend reviewing and documenting principles and procedures that have resulted in effective rulemaking processes. (BHI, No. 135 at p. 7)

Finally, United Cool Air raised an example of why it presumably thinks retrospective review would be necessary in the context of DOE energy conservation standards rulemakings. More specifically, United Cool Air set forth a number of allegations regarding DOE's past approaches with respect to the Process Rule. In particular, it highlighted what it characterized as illegal efforts by DOE to avoid the current requirements of 10 CFR part 430, subpart C, appendix A. In its view, that approach resulted in the fabrication of data to enable DOE to "rush through"

dozens of new regulations. (UCA-1, No. 96 at p. 1) The commenter cited to what it believed was evidence that DOE did not have any record of collecting data that the agency purportedly had collected. (See UCA-1, No. 96, at p. 1 and related attachments comprising of: (1) a FOIA request to DOE seeking the identities of the five small businesses that DOE had noted in a published *Federal Register* document related to certification requirements for commercial HVAC, water heater, and refrigeration equipment manufacturers, and (2) the agency's response stating that no responsive documents were found (EERE-2017-BT-STD-0062-0096 ("FOIA Request for 5 Small Business Names" and "Final Letter"))) United Cool Air also alleged that small businesses are not being informed of the new regulations being developed or having any input into them, which have led to small businesses being harmed. (UCA-1, No. 96 at p. 1) Furthermore, the company added that the standards being developed only apply to large manufacturers who have greater resources compared to small businesses (*i.e.*, 1-250 employees). (UCA-1, No. 96 at p. 1)

In response, DOE notes that the comments on retrospective review – as diverse as they were – all seemed to agree that an understanding of the impacts of the Department's past regulations (and the predictive power of the analytical tools employed in support of the adoption of those regulations) could contribute to more targeted and less burdensome regulations in the future. The disagreement among commenters seemed to center on whether it would be feasible to generate the requisite data for such an analysis (which may be proprietary, if it exists at all) and to do so in a cost-effective fashion. If those hurdles are surmounted, further questions arise as to the proper scope of the retrospective review (*e.g.*, whether to assess the effectiveness of the Appliance Standards Program as a whole, of an individual product/equipment type over time, or

of a specific, most recent rulemaking) and the appropriate frequency of such review (*e.g.*, every ten years, prior to the next round of rulemaking for a given product, on a continuous basis). However, most commenters appeared to favor an early assessment analysis of the technological and market developments since the last standards rulemaking, which would be a limited but practical form of retrospective review.

DOE is in full accord with such sentiments regarding the potential benefits of retrospective review. It would be valuable to understand the impacts of the Department's past regulatory actions and the predictive power of its analytical tools, thereby enhancing the quality and effectiveness of DOE's rulemakings and conserving resources by avoiding iterative rulemakings resulting in standards that do not realize significant energy savings. The Department also agrees with GWU that given DOE's reliance on assumptions about future prices of energy and other goods, opportunity costs, and producer and consumer preferences, it would be reasonable to assess the outcomes and effects of its past rulemakings so as to better inform its next rulemaking. As GWU suggests, such review may allow DOE to measure the efficacy of its assumptions and to use a real (rather than hypothesized) baseline in its next set of rulemaking analyses.

After carefully considering these comments, DOE has decided, at least initially, to bifurcate its approach to retrospective review of its past appliance standards rulemakings. One aspect of this approach can be commenced immediately. Namely, through its early assessment process, the agency believes it is possible to conduct a timely and useful assessment of developments since the last rulemaking for the product/equipment in question. To this end, DOE

welcomes comments, data, and other information on costs, prices, shipments, and other relevant factors, such that the Department might refine its analyses and models to better prospectively capture the real world impacts of its standards. Along with this useful feedback, stakeholders may provide other information to suggest that the technologies, costs, or energy use profiles for the product/equipment at issue have not changed, such that amended standards are unlikely to be cost-justified, or information suggesting just the opposite. (DOE does not agree with the Joint Commenters that a presumption to this effect is appropriate, given the variety of relevant data to be considered, but instead, the Department would undertake such assessment in each individual case based upon the information before it.) DOE believes that this is a practical mechanism for the near term, because DOE faces a number of statutory deadlines for rulemaking actions, so it cannot simply hold rulemaking in abeyance until a comprehensive retrospective review is completed, as AGA suggested.

The other, more long-term aspect of DOE's approach to retrospective analysis will involve consideration of retrospective review as a topic under the peer review of DOE's analytical methodologies used in the Appliance Standards Program. The peer reviewers will examine the feasibility of and options for conducting a comprehensive retrospective review of the Department's past appliance standards rulemakings, either at a programmatic or individual product level. Peer reviewers will consider the scope, costs, and anticipated benefits of such retrospective review(s) and seek to ensure that results generated are objective and verifiable to the maximum extent practicable. As GWU suggested, in addition to reviewing existing standards and analytical assumptions, peer reviewers might also consider how new standards are established by building in metrics, indicators, and timelines at a rule's outset. An examination of

the efficacy of DOE's models, assumptions, forecasting, timeframe for analysis, and the documentation of principles and procedures all might fall within the ambit of the peer reviewers' work vis-à-vis retrospective review. After carefully considering the results and recommendations coming out of such peer review, DOE will consider what further actions, if any, should be undertaken in this area.

Regarding other matters raised by commenters on retrospective review, DOE does not agree with AGA's suggestion that if a retrospective review demonstrates that a substantial percentage of high-efficiency appliances exceeding the current standard within the type (or class) already exists, then no new minimum standard would be needed. The criteria for promulgating energy conservation standards are established under EPCA (*i.e.*, significant energy savings, technological feasibility, and economic justification) and do not hinge on the percentage of high-efficiency products in the marketplace. DOE must follow its statutory mandate for standard setting and may not substitute other criteria or tests along the lines the commenter suggests.

DOE likewise does not agree with Spire's criticism of DOE's use of EIA data in its analyses. Although Spire asserts that these data overestimate consumer gas price increases and underestimate electricity price increases, the Department has entertained these arguments in past rulemakings and found them to be unproven and without merit. EIA data are based on sound scientific and economic principles, and they are used on a government-wide basis for a variety of regulatory analyses, which are not limited to DOE. Thus, DOE does not agree that the totality of EIA data should be subjected to retrospective review or that the Department should otherwise be limited in its use of such data.

Finally, in response to United Cool Air, DOE appreciates the commenter's interest in the Department's shared goal of increasing the transparency of its decision-making and public participation through this revised Process Rule. DOE cannot readily address the particulars of the commenter's concerns about the prior rulemaking it mentioned, although the Department suspects that it may have involved proprietary data obtained under nondisclosure agreement(s), the type of information which would not be subject to release under FOIA. DOE respectfully disagrees with United Cool Air's contention that DOE has not considered small businesses in its rulemakings (as its RFA analysis demonstrates), and contrary to the commenter's assertions, DOE's energy conservation standards are applicable to all manufacturers of the covered product or covered equipment that is the subject of a rulemaking, regardless of the size of that manufacturer. DOE's proposals are published in the *Federal Register*, and thus, they are publicly available to all interested stakeholders, including small businesses. DOE encourages public participation and maintains a transparent process with open public meetings and the opportunity for public comment on its proposals and other rulemakings documents which are published in the *Federal Register*. DOE fully addresses public comments on its proposal in the final rule.

4. Certification, Compliance, and Enforcement (CCE)-Related Issues

While certification, compliance, and enforcement (CCE) are important standards-related matters for DOE, regulated entities, and other interested stakeholders, DOE's Process Rule NOPR explained in response to CCE-related comments on its Process Rule RFI that such matters

are largely beyond the scope of the current proceeding. However, DOE stated that it is willing to evaluate this topic in further detail through separate rulemaking. (84 FR 3910, 3940) The Department acknowledged that in 2010-2011 when DOE changed its CCE requirements for all products in a single rulemaking, that process was unwieldy, particularly given the level of interest from various parties and volume of comments received (*see* 76 FR 38287 (June 30, 2011)²⁹). In the Process Rule NOPR, DOE explained that its plan is to address changes to its CCE regulations, and related provisions in 10 CFR parts 430 and 431, in separate rulemakings with separate public meetings to help manage comments and to allow DOE to consider industry-specific issues in a more focused format. DOE stated that it may ultimately adopt different provisions for different products based on comments and would make appropriate changes to regulatory text to be more general or product-specific in a final rule. (84 FR 3910, 3940 (Feb. 13, 2019))

Despite DOE's pronouncement that the Department would be addressing CCE-related issues in separate rulemakings, DOE did receive a few further comments on this issue. More specifically, Acuity argued that DOE should streamline and modernize its CCE processes, as improvements in these areas will help bolster any improvements to the Process Rule in terms of reducing unnecessary regulatory burdens and serving the Program's purposes. (Acuity, No. 95 at p. 7) NEMA similarly encouraged DOE to continue working on ways to refine the CCE process, including doing more to ensure that products coming through ports of entry are compliant. (NEMA, April 11, 2019 Public Meeting Transcript at pp. 189-190) Finally, at the April 11, 2019 public meeting, AHRI sought clarification as to whether DOE would do one global rulemaking

²⁹ Docket Number EERE-2010-BT-CE-0014, <https://www.regulations.gov/docket?D=EERE-2010-BT-CE-0014>.

when updating its CCE regulations or making changes as individual energy conservation standards and test procedures are done. In this context, AHRI expressed support for an industry-by-industry approach to addressing CCE. (AHAM, April 11, 2019 Public Meeting Transcript at pp. 190-191) At that public meeting, DOE responded that the agency expects to now examine CCE-related issues on an industry-by-industry basis. (DOE, April 11, 2019 Public Meeting Transcript at p. 191)

In response, DOE affirms its commitment to continue examining its CCE regulations and consider amending those regulations, as necessary, through future rulemaking, and it will reconsider the substance of these comments in such venues, including the port-of-entry issue raised by NEMA. In short, however, DOE agrees with Acuity that improvements to DOE's CCE regulations have the potential to complement the improvement made to the Process Rule through this final rule. The Department notes that it expects to address CCE-related issues on an industry-by-industry basis in the context of individual product/equipment rulemakings, for the reasons previously stated.

5. Other Issues

DOE also received a number of comments on its Process Rule NOPR that did not fit neatly into any of the categories discussed previously, so those issues are set forth and addressed here.

Preemption

Acuity sought a clear statement from DOE on the preemptive effects of a "no amended standard" or "no new standard" determination. In the commenter's view, these situations should trigger Federal preemption, and States should be prohibited from imposing their own regulations regarding a given covered product. (Acuity, No. 95 at p. 7) In response, EPCA explicitly addresses the preemptive effects of regulatory actions taken by DOE under the Appliance Standards Program, and DOE acts in accordance with those provisions. Specifically, with certain limited exceptions, the general rule of preemption for energy conservation standards, before Federal standards have become effective, is that no State regulation, or revision thereof, concerning the energy efficiency, energy use, or water use of the covered product, shall be effective with respect to such covered product. (42 U.S.C. 6297(b)) In addition, under 42 U.S.C. 6295(ii), there is a specific preemption provision that applies to new coverage determinations, certain lamps (*i.e.*, rough service lamps, vibration service lamps, 3-way incandescent lamps, 2,601-3,300 lumen general service incandescent lamps, and shatter-resistant lamps), battery chargers, external power supplies, and refrigerated beverage vending machines, which provides that the preemption provisions of 42 U.S.C. 6297 apply to products for which energy conservation standards are to be established under subsections (l), (u), and (v) of 42 U.S.C. 6295 beginning on the date on which a final rule is issued by DOE, but any State or local standard prescribed or enacted for the product before the date on which the final rule is issued shall not be preempted until the energy conservation standard established under subsection (l), (u), or (v) of 42 U.S.C. 6295 for the product takes effect.

Similarly, with certain limited exceptions, the general rule of preemption when Federal standards become effective for the product, no State regulation concerning the energy efficiency,

energy use, or water use of such covered product shall be effective with respect to such covered product. (42 U.S.C. 6297(c)) DOE may waive Federal preemption in appropriate cases consistent with the provisions of 42 U.S.C. 6297(d). In addition, the statute also provides that a State (and its political subdivisions) requiring testing or labeling regarding the energy consumption or water use of any covered product may do so only if such requirements are identical to those established pursuant to 42 U.S.C. 6293 and 42 U.S.C. 6294, respectively. These same provisions generally apply to covered commercial and industrial equipment through operation of 42 U.S.C. 6316, except for the provisions at 42 U.S.C. 6295(ii) which only apply to consumer products.

Specific Products Recommended for Regulatory Review

AHRI requested that DOE address four regulatory concerns (as set forth in five exhibits submitted as part of AHRI's written comments) in future rulemakings or, preferable, by interpretive rule. These topics included: (1) Furnace fan test procedure clarifications; (2) Central air-conditioning and heat pump test procedure calculation corrections; (3) Water heater recovery energy efficiency calculations; and (4) Instantaneous water heater test procedure tolerances. (AHRI, No. 117 at p. 1) In response, DOE appreciates stakeholder efforts to make the Department aware of identified problems with its energy conservation standards or test procedure regulations. The Appliance Standards Program will examine the exhibits submitted by AHRI to determine what actions, if any, are necessary.

Effective Date vs. Compliance Date Clarifications

The CEC supported DOE's attempt to distinguish between "effective dates" and "compliance dates" but noted that the terms are not clearly distinguished in the statute. As a

result, it asserted that DOE's efforts could lead to further confusion rather than clarity. The CEC added that DOE's definition of a compliance date for a test procedure is inconsistent with EPCA's requirement that newly prescribed or established test procedures take effect for representation of energy efficiency or energy use 180 days after that procedure has been prescribed or established. Consequently, the CEC asserted that DOE's proposed approach would be invalid under EPCA. (*See* 42 U.S.C. 6293(c)(2)) (CEC, No. 121 at pp. 14-15) In response, DOE appreciates that the CEC recognizes the difficulty that the agency, regulated entities, and other interested stakeholders have had in distinguishing between “effective dates” and “compliance dates” under relevant provisions of EPCA. However, contrary to what the CEC suggests, DOE does not believe that allowing such confusion to persist should be the preferred option. Instead, DOE has sought to clarify this matter in the Process Rule through a dedicated section 12. DOE has received many questions along these lines over the years, and the Department has sought to foster a general understanding that the “effective date” is the point at which a rule becomes legally operative after publication in the *Federal Register* (typically 60 days after publication) and that the “compliance date” is the point at which regulated entities must meet the requirements of the rule. DOE’s inclusion of such provision in the Process Rule has not altered the approach the agency has historically taken when dealing when giving meaning to the somewhat unclear statutory language. DOE does not agree with the CEC’s assessment that its clarifications run afoul of section 323(c)(2) of EPCA (42 U.S.C. 6293(c)(2)); instead, section 12 of the Process Rule is integrally linked to that statutory provision. To be clear, DOE is not expanding the 180-day timeframe that regulated entities have to begin making representations consistent with a new or amended test procedure after publication in the *Federal*

Register. Consequently, DOE is adopting the proposed Process Rule provisions for distinguishing between effective dates and compliance dates in this final rule.

Judicial Review

GWU urged DOE to consider strengthening its commitments toward process improvement by making the agency accountable in court. Although GWU noted that DOE's proposal removed the prior provision precluding judicial review, it suggested that the agency should consider an affirmative statement subjecting itself to judicial review, a step which studies have shown improves the quality of agency analyses. (GWU, No. 132 at pp. 3-4) In response, DOE does not believe it necessary to include a specific judicial review provision in the Process Rule, because a comprehensive judicial review provision for covered consumer products already exists at 42 U.S.C. 6306 (which is extended to covered commercial and industrial equipment through 42 U.S.C. 6316(a) and (b)). This provision applies to final rules for energy test procedures, labelling, and conservation standards, and it had been used by litigants on a number of occasions. Consequently, a separate judicial review provision in the Process Rule would be largely redundant of the existing statutory provision. Agencies cannot create judicial review when Congress has not provided it.

Manufactured Housing

MHAAR requested that in any final Process Rule, DOE expressly apply all pertinent procedural protections and safeguards set out in its Process Rule NOPR to any manufactured housing energy conservation standards or revisions to those standards, or any applicable test procedures developed pursuant to section 413 (42 U.S.C. 17071) of the Energy Independence

and Security Act of 2007 (EISA 2007). MHAAR pointed out that DOE's proposal does not specifically reference standards development and/or testing procedures under section 413 of EISA 2007, concerning energy conservation standards for Federally-regulated manufactured homes. The commenter stated that because the proposed Process Rule applies to DOE's Appliance Standards program and both the previously proposed June 17, 2016 DOE standards for such homes (81 FR 39756) and the currently pending proposed energy standards for manufactured homes set forth in the August 3, 2018 NODA (83 FR 38073) derive directly from a negotiated rulemaking process conducted by and within the DOE Appliance Standards Program, the pertinent provisions of the Process Rule should apply. (MHAAR, No. 115 at pp. 2-3)

In response, DOE's authority for manufactured housing is derived from free-standing authority in EISA 2007, which is separate and apart from the EPCA provisions governing the Appliance Standards Program. DOE's Process Rule is strictly focused on the Appliance Standards Program and related provisions of EPCA. Consequently, DOE does not find it appropriate to conflate these two programs or the procedures that apply to them. Furthermore, DOE notes that its manufactured housing rule is currently the subject of litigation in the U.S. District Court for the District of Columbia, so the Department does not wish to undertake any action that would impact its position in that case.

Market-based Approach to Energy Conservation Standards

Samsung responded to DOE's indication in the Process Rule NOPR that it would continue to contemplate additional topics to update the Process Rule. Along those lines, the

commenter encouraged DOE to consider a pilot market-based approach to energy conservation standards rulemaking when considering other potential revisions to the Process Rule. Samsung pointed out that in 2018, DOE considered such innovative approach in the Appliance and Equipment Standards Program Design (82 FR 56181(Nov. 28, 2017), and it urged DOE to further pursue that concept that allows the market to drive energy efficiency, which helps consumers save money. (Samsung, No. 129 at p. 2) In response, DOE appreciates the commenter's suggestion to further consider market-based approaches to energy conservation standards rulemaking. The Department is currently reviewing the comments it received on the November 2017 RFI and evaluating potential next steps.

IV. Procedural Issues and Regulatory Review

A. Review Under Executive Orders 12866 and 13563

This regulatory action is a significant regulatory action under section 3(f) of Executive Order 12866, "Regulatory Planning and Review," 58 FR 51735 (Oct. 4, 1993). Accordingly, this proposed regulatory action was subject to review under the Executive Order by the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget (OMB).

B. Review Under Executive Orders 13771 and 13777

On January 30, 2017, the President issued Executive Order (E.O.) 13771, "Reducing Regulation and Controlling Regulatory Costs." 82 FR 9339 (Jan. 30, 2017). That Order states that the policy of the Executive Branch is to be prudent and financially responsible in the expenditure of funds, from both public and private sources. More specifically, the Order provides that it is essential to manage the costs associated with the governmental imposition of

requirements necessitating private expenditures of funds required to comply with Federal regulations. This final rule is considered an EO 13771 deregulatory action. Details on the estimated cost savings of this proposed rule can be found in the rule's economic analysis.

In addition, on February 24, 2017, the President issued Executive Order 13777, "Enforcing the Regulatory Reform Agenda." 82 FR 12285 (March 1, 2017). The Order requires the head of each agency to designate an agency official as its Regulatory Reform Officer (RRO). Each RRO is tasked with overseeing the implementation of regulatory reform initiatives and policies to ensure that individual agencies effectively carry out regulatory reforms, consistent with applicable law. Further, E.O. 13777 requires the establishment of a regulatory task force at each agency. The regulatory task force is required to make recommendations to the agency head regarding the repeal, replacement, or modification of existing regulations, consistent with applicable law.

To implement these Executive Orders, the Department, among other actions, issued a request for information (RFI) seeking public comment on how best to achieve meaningful burden reduction while continuing to achieve the Department's regulatory objectives. 82 FR 24582 (May, 30, 2017). In response to this RFI, the Department received numerous and extensive comments pertaining to DOE's Process Rule.

C. Economic Analysis

DOE estimated cost savings for the final Process Rule by quantifying the reduction in administrative burden that results from new streamlined rulemaking procedures, namely, the energy savings threshold. DOE quantified these savings by identifying each of its previous rulemakings that would not have met the final threshold and tallying the total administrative

burden associated with each. DOE quantified the average administrative burden per rulemaking and forecast how many rulemakings per year are likely to be affected in the future.

In July 2019, DOE published in the Federal Register a notice of data availability (NODA) outlining the energy savings of each of its energy conservation standards issued since 1989. DOE used these data, which were available for public comment, to identify rules that would be affected by a potential threshold at the max tech and the adopted standard level. Based on this review, DOE expects that approximately half of the rulemakings that fail to meet the significant energy threshold will do so at the outset of rulemaking (i.e. the RFI/NODA stage) and half will do so at the proposed rule (i.e., the NOPR/NOPD) stage.

DOE assessed administrative burden by aggregating the key regulatory documents in each regulatory docket and estimating the average word count using several samples from each docket. For regulations that include several different product types, DOE broke out the portion of the docket attributable to the product in question.

DOE used methodology established by the U.S. Food and Drug Administration (FDA) to estimate the administrative burden of reading DOE regulatory documents. DOE additionally estimates the administrative burden of attending public meetings and submitting comments. The Department of Health and Human Services provides guidelines regarding the reading speed of regulation reviewers, which assumes a normal distribution with a mean of 225 words per minute.³⁰ DOE estimated administrative burden at the mean reading speed and at one standard deviation to provide a range.

In implementing this guideline, FDA recognizes that due to the complexity of some rules multiple individuals may read a rule for a single stakeholder (for example, 2 lawyers for a small

³⁰ https://aspe.hhs.gov/system/files/pdf/242926/HHS_RIAGuidance.pdf Table 4.1

firm or 4 lawyers for a large firm).³¹ The National Small Business Association's (NSBA) 2017 Small Business Regulations Survey further states that although 72 percent of small firms report having read through proposed regulations, the majority of those who do so (63 percent) report that they have to comply with the rules they read only half of the time, or less frequently.³² This indicates that the number of comments submitted on a given rule, or even the number of affected stakeholders, may not adequately capture the number of people who bear administrative burden from DOE's rulemakings. In light of the FDA estimate above and NSBA survey data, DOE conservatively estimates that 1.75 people read a proposed rule for every comment submitted to the docket.

The NSBA survey also provides data on the number of hours it takes small business to submit comments.³³ DOE uses the weighted average of these survey data to estimate the average time it takes a small business to submit a comment on a DOE regulation. DOE assumes that other stakeholders, such as trade associations, spend approximately 10 hours on writing and submitting comments (to include time spend collecting data from members and potential test follow-up).

DOE monetizes the cost savings using the cost of labor to represent the opportunity cost of participating in a rulemaking. For industry wages, we use 2016 mean wage estimates from the Bureau of Labor Statistics' National Industry-Specific Occupational Employment and Wage Estimates for the household appliance manufacturing industry. The table below shows the mean

³¹ U.S. Food & Drug Administration. Premarket Tobacco Product Applications and Recordkeeping Requirements: Preliminary Regulatory Impact Analysis; Initial Regulatory Flexibility Analysis; Unfunded Mandates Reform Act Analysis. Docket No. FDA-2019-N-2854. Page 35. <https://www.fda.gov/about-fda/economic-impact-analyses-fda-regulations/premarket-tobacco-product-applications-and-recordkeeping-requirements-proposed-rule-preliminary>

³² 2017 NSBA SMALL BUSINESS REGULATIONS SURVEY. Page 10. <https://www.nsba.biz/wp-content/uploads/2017/01/Regulatory-Survey-2017.pdf>

³³ 2017 NSBA SMALL BUSINESS REGULATIONS SURVEY. Page 11. <https://www.nsba.biz/wp-content/uploads/2017/01/Regulatory-Survey-2017.pdf>

hourly wages, the fully loaded wages, and the public meeting and public comment-weighted wages that are used in this analysis. (For example, DOE assumes that compliance officers are less involved in attending public meetings than they are in reading and commenting on regulations.)

NAICS Occupation 335200 (Household Appliance Manufacturing)	Mean Hourly Wage	Fully-Loaded Wage
Management Occupations	\$63.97	\$127.94
Compliance Officers	\$23.90	\$47.80
Engineers	\$41.14	\$82.28
Lawyers*	\$83.73	\$167.46

DOE anticipates that the changes finalized in this rule will reduce total administrative burdens by between \$53.5 million and \$59.7 million (undiscounted) for annualized cost savings of between \$0.5 million to \$0.6 million, discounted at 7%.

Table Number—Total and Annualized Cost Savings

	Low-end	Primary Estimate	High-end
Total Savings (2016\$):	\$ 53,505,672	\$ 56,189,431	\$59,698,963
NPV, 3%	\$16,907,207	\$ 17,755,245	\$18,864,219
NPV, 7%	\$7,634,859	\$8,017,811	\$8,518,595
Annualized Savings (7%)	\$534,440	\$561,247	\$596,302

D. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996) requires preparation of an initial regulatory flexibility analysis (IRFA) for any rule that by law must be proposed for public comment and a final regulatory flexibility analysis (FRFA) for any such rule that an agency adopts as a final rule, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. A regulatory flexibility analysis examines the impact of the rule on small entities and considers alternative ways of reducing

negative effects. Also, as required by Executive Order 13272, "Proper Consideration of Small Entities in Agency Rulemaking," 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the DOE rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel's website at: <http://energy.gov/gc/office-general-counsel>.

Because this final rule does not directly regulate small entities but instead only imposes procedural requirements on DOE itself, DOE certifies that this final rule will not have a significant economic impact on a substantial number of small entities, and, therefore, no regulatory flexibility analysis is required. Mid-Tex Elec. Co-Op, Inc. v. F.E.R.C., 773 F.2d 327 (1985).

E. Review Under the Paperwork Reduction Act of 1995

Manufacturers of covered products/equipment must certify to DOE that their products comply with any applicable energy conservation standards. In certifying compliance, manufacturers must test their products according to the DOE test procedures for such products/equipment, including any amendments adopted for those test procedures, on the date that compliance is required. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment. 76 FR 12422 (March 7, 2011); 80 FR 5099 (Jan. 30, 2015). The collection-of-information requirement for certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910-1400. Public reporting burden for the certification is estimated to average

30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

Specifically, this final rule, addressing clarifications to the Process Rule itself, does not contain any collection of information requirement that would trigger the PRA.

F. Review Under the National Environmental Policy Act of 1969

In this document, DOE revises its Process Rule, which outlines the procedures DOE will follow in conducting rulemakings for new or amended energy conservation standards and test procedures for covered consumer products and commercial/industrial equipment. DOE has determined that this rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this final rule is strictly procedural and is covered by the Categorical Exclusion in 10 CFR part 1021, subpart D, paragraph A6. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

G. Review Under Executive Order 13132

Executive Order 13132, "Federalism," 64 FR 43255 (August 10, 1999), imposes certain requirements on Federal agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this final rule and has determined that it will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. It will primarily affect the procedure by which DOE develops proposed rules to revise energy conservation standards and test procedures. EPCA governs and prescribes Federal preemption of State regulations that are the subject of DOE's regulations adopted pursuant to the statute. In such cases, States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297(d)) Therefore, Executive Order 13132 requires no further action.

H. Review Under Executive Order 12988

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform," 61 FR 4729 (Feb. 7, 1996),

imposes on Federal agencies the general duty to adhere to the following requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. Regarding the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and has determined that, to the extent permitted by law, the final rule meets the relevant standards of Executive Order 12988.

I. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. (Pub. L. 104-4, sec. 201 (codified at 2 U.S.C. 1531)) For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of \$100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish

a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed "significant intergovernmental mandate," and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect them. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. (62 FR 12820) (This policy is also available at <http://www.energy.gov/gc/office-general-counsel> under "Guidance & Opinions" (Rulemaking)) DOE examined the final rule according to UMRA and its statement of policy and has determined that the rule contains neither an intergovernmental mandate, nor a mandate that may result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any year. Accordingly, no further assessment or analysis is required under UMRA.

J. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Public Law 105-277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This final rule will not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

K. Review Under Executive Order 12630

Pursuant to Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights,” 53 FR 8859 (March 18, 1988), DOE has determined that this final rule will not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

L. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for Federal agencies to review most disseminations of information to the public under information quality guidelines established by each agency pursuant to general guidelines issued by OMB. OMB’s guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE’s guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this final rule under the OMB and DOE guidelines and has concluded that it is consistent with the applicable policies in those guidelines.

M. Review Under Executive Order 13211

Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,” 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OIRA at OMB, a Statement of Energy Effects for any proposed significant energy action. A “significant energy action” is defined as any action by an agency that promulgates or is expected to lead to promulgation of a final rule, and that: (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by

the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

DOE has tentatively concluded that the regulatory action in this document, which makes clarifications to the Process Rule that guides the Department in proposing energy conservation standards is not a significant energy action because it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects for this final rule.

N. Review Consistent with OMB's Information Quality Bulletin for Peer Review

On December 16, 2004, OMB, in consultation with the Office of Science and Technology Policy (OSTP), issued its Final Information Quality Bulletin for Peer Review (the Bulletin). 70 FR 2664 (Jan. 14, 2005). The Bulletin establishes that certain scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal Government, including influential scientific information related to agency regulatory actions. The purpose of the bulletin is to enhance the quality and credibility of the Government's scientific information. Under the Bulletin, the energy conservation standards rulemaking analyses are "influential scientific information," which the Bulletin defines as "scientific information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions." *Id.* at 70 FR 2667.

In response to OMB's Bulletin, DOE conducted formal in-progress peer reviews of the energy conservation standards development process and analyses and has prepared a Peer Review Report pertaining to the energy conservation standards rulemaking analyses. Generation of this report involved a rigorous, formal, and documented evaluation using objective criteria and qualified and independent reviewers to make a judgment as to the technical/scientific/business merit, the actual or anticipated results, and the productivity and management effectiveness of programs and/or projects. The "Energy Conservation Standards Rulemaking Peer Review Report," dated February 2007, has been disseminated and is available at the following website: http://www1.eere.energy.gov/buildings/appliance_standards/peer_review.html. Because available data, models, and technological understanding have changed since 2007, DOE is committing in this proceeding to engage in a new peer review of its analytical methodologies.

O. Congressional Notification

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule prior to its effective date. The report will state that it has been determined that the rule is not a "major rule" as defined by 5 U.S.C. 804(2).

V. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this final rule.

List of Subjects

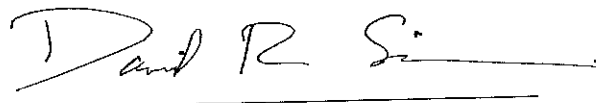
10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Intergovernmental relations, Small businesses, Test procedures.

10 CFR Part 431

Administrative practice and procedure, Confidential business information, Incorporation by reference, Reporting and recordkeeping requirements, Test procedures.

Signed in Washington, DC, on **DEC 31 2019**

A handwritten signature in black ink, appearing to read "Daniel R. Simmons", written over a horizontal line.

Daniel R Simmons
Assistant Secretary
Energy Efficiency and Renewable Energy

For the reasons stated in the preamble, DOE amends parts 430 and 431 of title 10 of the Code of Federal Regulations as set forth below:

PART 430—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS

1. The authority citation for part 430 continues to read as follows:

Authority: 42 U.S.C. 6291-6309; 28 U.S.C. 2461 note.

2. Appendix A to subpart C of part 430 is revised to read as follows:

Appendix A to Subpart C of Part 430—Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Certain Commercial/Industrial Equipment

1. Objectives
2. Scope
3. Mandatory Application of the Process Rule
4. Setting Priorities for Rulemaking Activity
5. Coverage Determination Rulemakings
6. Process for Developing Energy Conservation Standards
7. Policies on Selection of Standards
8. Test Procedures
9. ASHRAE Equipment
10. Direct Final Rules
11. Negotiated Rulemaking Process
12. Principles for Distinguishing Between Effective and Compliance Dates
13. Principles for the Conduct of the Engineering Analysis

14. Principles for the Analysis of Impacts on Manufacturers

15. Principles for the Analysis of Impacts on Consumers

16. Consideration of Non-Regulatory Approaches

17. Cross-cutting Analytical Assumptions

1. Objectives

This appendix establishes procedures, interpretations, and policies that DOE will follow in the consideration and promulgation of new or revised appliance energy conservation standards and test procedures under the Energy Policy and Conservation Act (EPCA). This appendix applies to both covered consumer products and covered commercial/industrial equipment. The Department's objectives in establishing these procedures include:

(a) *Provide for early input from stakeholders.* The Department seeks to provide opportunities for public input early in the rulemaking process so that the initiation and direction of rulemakings is informed by comment from interested parties. Under the procedures established by this appendix, DOE will seek early input from interested parties in determining whether establishing new or amending existing energy conservation standards will result in significant savings of energy and is economically justified and technologically feasible. In the context of test procedure rulemakings, DOE will seek early input from interested parties in determining whether—

(1) Establishing a new or amending an existing test procedure will better measure the energy efficiency, energy use, water use (as specified in EPCA), or estimated annual operating cost of a

covered product/equipment during a representative average use cycle or period of use (for consumer products); and

(2) Will not be unduly burdensome to conduct.

(b) *Increase predictability of the rulemaking timetable.* The Department seeks to make informed, strategic decisions about how to deploy its resources on the range of possible standards and test procedure development activities, and to announce these prioritization decisions so that all interested parties have a common expectation about the timing of different rulemaking activities. Further, DOE will offer the opportunity to provide input on the prioritization of rulemakings through a request for comment as DOE begins preparation of its Regulatory Agenda each spring.

(c) *Eliminate problematic design options early in the process.* The Department seeks to eliminate from consideration, early in the process, any design options that present unacceptable problems with respect to manufacturability, consumer utility, or safety, so that the detailed analysis can focus only on viable design options. Under the procedures in this appendix, DOE will eliminate from consideration design options if it concludes that manufacture, installation or service of the design will be impractical, or that the design option will have a material adverse impact on the utility of the product, or if the design option will have a material adverse impact on safety or health. DOE will also eliminate from consideration proprietary design options that represent a unique pathway to achieving a given efficiency level. This screening will be done at the outset of a rulemaking.

(d) *Fully consider non-regulatory approaches.* The Department seeks to understand the effects of market forces and voluntary programs on encouraging the purchase of energy efficient products so that the incremental impacts of a new or revised standard can be accurately assessed and the Department can make informed decisions about where standards and voluntary programs can be used most effectively. DOE will continue to support voluntary efforts by manufacturers, retailers, utilities, and others to increase product/equipment efficiency.

(e) *Conduct thorough analysis of impacts.* In addition to understanding the aggregate social and private costs and benefits of standards, the Department seeks to understand the distribution of those costs and benefits among consumers, manufacturers, and others, as well as the uncertainty associated with these analyses of costs and benefits, so that any adverse impacts on subgroups and uncertainty concerning any adverse impacts can be fully considered in selecting a standard. Pursuant to this appendix, the analyses will consider the variability of impacts on significant groups of manufacturers and consumers in addition to aggregate social and private costs and benefits, report the range of uncertainty associated with these impacts, and take into account cumulative impacts of regulation on manufacturers. The Department will also conduct appropriate analyses to assess the impact that new or amended test procedures will have on manufacturers and consumers.

(f) *Use transparent and robust analytical methods.* The Department seeks to use qualitative and quantitative analytical methods that are fully documented for the public and that produce results that can be explained and reproduced, so that the analytical underpinnings for policy decisions on standards are as sound and well-accepted as possible.

(g) *Support efforts to build consensus on standards.* The Department seeks to encourage development of consensus proposals for new or revised standards because standards with such broad-based support are likely to balance effectively the various interests affected by such standards.

2. Scope

The procedures, interpretations, and policies described in this appendix apply to rulemakings concerning new or revised Federal energy conservation standards and test procedures, and related rule documents (i.e., coverage determinations) for consumer products in Part A and commercial and industrial equipment under Part A-1 of the Energy Policy and Conservation Act (EPCA), as amended, except covered ASHRAE equipment in Part A-1 are governed separately under section 9 in this appendix.

3. Mandatory Application of the Process Rule

The rulemaking procedures established in this appendix are binding on DOE.

4. Setting Priorities for Rulemaking Activity

(a) In establishing its priorities for undertaking energy conservation standards and test procedure rulemakings, DOE will consider the following factors, consistent with applicable legal obligations:

- (1) Potential energy savings;
- (2) Potential social and private, including environmental or energy security, benefits;
- (3) Applicable deadlines for rulemakings;

- (4) Incremental DOE resources required to complete the rulemaking process;
- (5) Other relevant regulatory actions affecting the products/equipment;
- (6) Stakeholder recommendations;
- (7) Evidence of energy efficiency gains in the market absent new or revised standards;
- (8) Status of required changes to test procedures; and
- (9) Other relevant factors.

(b) DOE will offer the opportunity to provide input on prioritization of rulemakings through a request for comment as DOE begins preparation of its Regulatory Agenda each spring.

5. Coverage Determination Rulemakings

(a) DOE has discretion to conduct proceedings to determine whether additional consumer products and commercial/industrial equipment should be covered under EPCA if certain statutory criteria are met. (42 U.S.C. 6292 and 42 U.S.C. 6295(l) for consumer products; 42 U.S.C. 6312 for commercial/industrial equipment)

(b) If DOE determines to initiate the coverage determination process, it will first publish a notice of proposed determination, providing an opportunity for public comment of not less than 60 days, in which DOE will explain how such products/equipment that it seeks to designate as “covered” meet the statutory criteria for coverage and why such coverage is “necessary or appropriate” to carry out the purposes of EPCA. In the case of commercial equipment, DOE will follow the same process, except that the Department must demonstrate that coverage of the equipment type is “necessary” to carry out the purposes of EPCA.

(c) DOE will publish its final decision on coverage as a separate notice, an action that will be completed prior to the initiation of any test procedure or energy conservation standards rulemaking (i.e., DOE will not issue any Requests for Information (RFIs), Notices of Data Availability (NODAs), or any other mechanism to gather information for the purpose of initiating a rulemaking to establish a test procedure or energy conservation standard for the proposed covered product/equipment prior to finalization of the coverage determination). If DOE determines that coverage is warranted, DOE will proceed with its typical rulemaking process for both test procedures and standards. Specifically, DOE will finalize coverage for a product/equipment at least 180 days prior to publication of a proposed rule to establish a test procedure. And, DOE will complete the test procedure rulemaking at least 180 days prior to publication of a proposed energy conservation standard.

(d) If, during the substantive rulemaking proceedings to establish test procedures or energy conservation standards after completing a coverage determination, DOE finds it necessary and appropriate to expand or reduce the scope of coverage, a new coverage determination process will be initiated and finalized prior to moving forward with the test procedure or standards rulemaking.

6. Process for Developing Energy Conservation Standards

This section describes the process to be used in developing energy conservation standards for covered products and equipment other than those covered equipment subject to ASHRAE/IES Standard 90.1.

(a) *Early Assessment.* (1) As the first step in any proceeding to consider establishing or amending any energy conservation standard, DOE will publish a notice in the *Federal Register*

announcing that DOE is considering initiating a rulemaking proceeding. As part of that notice, DOE will solicit submission of related comments, including data and information on whether DOE should proceed with the rulemaking, including whether any new or amended rule would be cost effective, economically justified, technologically feasible, or would result in a significant savings of energy. Based on the information received in response to the notice and its own analysis, DOE will determine whether to proceed with a rulemaking for a new or amended energy conservation standard or an amended test procedure. If DOE determines that a new or amended standard would not satisfy all of the applicable statutory criteria, DOE would engage in notice and comment rulemaking to issue a determination that a new or amended standard is not warranted. If DOE receives sufficient information suggesting it could justify a new or amended standard or the information received is inconclusive with regard to the statutory criteria, DOE would undertake the preliminary stages of a rulemaking to issue or amend an energy conservation standard, as discussed further in paragraph (a)(2) of this section.

(2) If the Department determines it is appropriate to proceed with a rulemaking, the preliminary stages of a rulemaking to issue or amend an energy conservation standard that DOE will undertake will be a Framework Document and Preliminary Analysis, or an Advance Notice of Proposed Rulemaking (ANOPR). Requests for Information (RFI) and Notices of Data Availability (NODA) could be issued, as appropriate, in addition to these preliminary-stage documents.

(3) In those instances where the early assessment either suggested that a new or amended energy conservation standard might be justified or in which the information was inconclusive on this

point, and DOE undertakes the preliminary stages of a rulemaking to establish or amend an energy conservation standard, DOE may still ultimately determine that such a standard is not economically justified, technologically feasible or would not result in a significant savings of energy. Therefore, DOE will examine the potential costs and benefits and energy savings potential of a new or amended energy conservation standard at the preliminary stage of the rulemaking. DOE notes that it will, consistent with its statutory obligations, consider both cost effectiveness and economic justification when issuing a determination not to amend a standard.

(b) Significant Savings of Energy. (1) In evaluating the prospects of proposing a new or amended standard—or in determining that no new or amended standard is needed—DOE will first look to the projected energy savings that are likely to result. DOE will determine as a preliminary matter whether the rulemaking has the potential to result in “significant energy savings.” If the rulemaking passes the significant energy savings threshold, DOE will then compare these projected savings against the technological feasibility of and likely costs necessary to meet the new or amended standards needed to achieve these energy savings.

(2) Under its significant energy savings analysis, DOE will examine both the total amount of projected energy savings and the relative percentage decrease in energy usage that could be obtained from establishing or amending energy conservation standards for a given covered product or equipment. This examination will be based on the applicable product or equipment type as appropriate and will not be used to selectively examine classes or sub-classes of products and equipment solely for the purposes of projecting whether potential energy savings would satisfy (or not satisfy) the applicable thresholds detailed in this rule. Under the first step of this

approach, the projected energy savings from a potential maximum technologically feasible (“max-tech”) standard will be evaluated against a threshold of 0.3 quads of site energy saved over a 30-year period.

(3) If the projected max-tech energy savings does not meet or exceed this threshold, those max-tech savings would then be compared to the total energy usage of the covered product or equipment to calculate a potential percentage reduction in energy usage.

(4) If this comparison does not yield a reduction in site energy use of at least 10 percent over a 30-year period, the analysis will end, and DOE will propose to determine that no significant energy savings would likely result from setting new or amended standards.

(5) If either one of the thresholds described in paragraphs (b)(3) or (b)(4) of this section is reached, DOE will conduct analyses to ascertain whether a standard can be prescribed that produces the maximum improvement in energy efficiency that is both technologically feasible and economically justified and still constitutes significant energy savings (using the same criteria of either 0.3 quad of aggregate site energy savings or a 10-percent decrease in energy use, as measured in quads – both over a 30-year period) at the level determined to be economically justified.

(6) In the case of ASHRAE equipment, DOE will examine the potential energy savings involved across the equipment type at issue.

(c) *Design options--(1) General.* Once the Department has initiated a rulemaking for a specific product/equipment but before publishing a proposed rule to establish or amend standards, DOE will identify the product/equipment categories and design options to be analyzed in detail, as well as those design options to be eliminated from further consideration. During the pre-proposal stages of the rulemaking, interested parties may be consulted to provide information on key issues through a variety of rulemaking documents. The preliminary stages of a rulemaking to issue or amend an energy conservation standard that DOE will undertake will be a framework document and preliminary analysis, or an advance notice of proposed rulemaking (ANOPR). Requests for Information (RFI) and Notice of Data Availability (NODA) could also be issued, as appropriate.

(2) *Identification and screening of design options.* During the pre-NOPR phase of the rulemaking process, the Department will develop a list of design options for consideration. Initially, the candidate design options will encompass all those technologies considered to be technologically feasible. Following the development of this initial list of design options, DOE will review each design option based on the factors described in paragraph (c)(3) of this section and the policies stated in section 7 of this Appendix (i.e. *Policies on Selection of Standards*). The reasons for eliminating or retaining any design option at this stage of the process will be fully documented and published as part of the NOPR and as appropriate for a given rule, in the pre-NOPR documents. The technologically feasible design options that are not eliminated in this screening will be considered further in the Engineering Analysis described in paragraph (d) of this section.

(3) *Factors for screening of design options.* The factors for screening design options include:

(i) Technological feasibility. Technologies incorporated in commercial products or in working prototypes will be considered technologically feasible.

(ii) Practicability to manufacture, install and service. If mass production of a technology under consideration for use in commercially-available products (or equipment) and reliable installation and servicing of the technology could be achieved on the scale necessary to serve the relevant market at the time of the effective date of the standard, then that technology will be considered practicable to manufacture, install and service.

(iii) Adverse Impacts on Product Utility or Product Availability.

(iv) Adverse Impacts on Health or Safety.

(v) Unique-Pathway Proprietary Technologies. If a design option utilizes proprietary technology that represents a unique pathway to achieving a given efficiency level, that technology will not be considered further.

(d) *Engineering analysis of design options and selection of candidate standard levels.* After design options are identified and screened, DOE will perform the engineering analysis and the benefit/cost analysis and select the candidate standard levels based on these analyses. The results of the analyses will be published in a Technical Support Document (TSD) to accompany the appropriate rulemaking documents.

(1) *Identification of engineering analytical methods and tools.* DOE will select the specific engineering analysis tools (or multiple tools, if necessary to address uncertainty) to be used in the analysis of the design options identified as a result of the screening analysis.

(2) *Engineering and life-cycle cost analysis of design options.* DOE and its contractor will perform engineering and life-cycle cost analyses of the design options.

(3) *Review by stakeholders.* Interested parties will have the opportunity to review the results of the engineering and life-cycle cost analyses. If appropriate, a public workshop will be conducted to review these results. The analyses will be revised as appropriate on the basis of this input.

(4) *New information relating to the factors used for screening design options.* If further information or analysis leads to a determination that a design option, or a combination of design options, has unacceptable impacts, that design option or combination of design options will not be included in a candidate standard level.

(5) *Selection of candidate standard levels.* Based on the results of the engineering and life-cycle cost analysis of design options and the policies stated in paragraph (c) of this section, DOE will select the candidate standard levels for further analysis.

(e) *Pre-NOPR Stage--(1) Documentation of decisions on candidate standard selection.*

(i) If the early assessment and screening analysis indicates that continued development of a standard is appropriate, the Department will publish either:

(A) A notice accompanying a framework document and, subsequently, a preliminary analysis or;

(B) An ANOPR. The notice document will be published in the *Federal Register*, with accompanying documents referenced and posted in the appropriate docket.

(ii) If DOE determines at any point in the pre-NOPR stage that no candidate standard level is likely to produce the maximum improvement in energy efficiency that is both technologically feasible and economically justified or constitute significant energy savings, that conclusion will be announced in the *Federal Register* with an opportunity for public comment provided to stakeholders. In such cases, the Department will proceed with a rulemaking that proposes not to adopt new or amended standards.

(2) *Public comment and hearing.* The length of the public comment period for pre-NOPR rulemaking documents will vary depending upon the circumstances of the particular rulemaking, but will not be less than 75 calendar days. For such documents, DOE will determine whether a public hearing is appropriate.

(3) *Revisions based on comments.* Based on consideration of the comments received, any necessary changes to the engineering analysis or the candidate standard levels will be made.

(f) *Analysis of impacts and selection of proposed standard level.* After the pre-NOPR stage, if DOE has determined preliminarily that a candidate standard level is likely to produce the maximum improvement in energy efficiency that is both technologically feasible and economically justified or constitute significant energy savings, economic analyses of the impacts of the candidate standard levels will be conducted. The Department will propose new or amended standards based on the results of the impact analysis.

(1) *Identification of issues for analysis.* The Department, in consideration of comments received, will identify issues that will be examined in the impacts analysis.

(2) *Identification of analytical methods and tools.* DOE will select the specific economic analysis tools (or multiple tools if necessary to address uncertainty) to be used in the analysis of the candidate standard levels.

(3) *Analysis of impacts.* DOE will conduct the analysis of the impacts of candidate standard levels.

(4) *Factors to be considered in selecting a proposed standard.* The factors to be considered in selection of a proposed standard include:

(i) Impacts on manufacturers. The analysis of private manufacturer impacts will include: Estimated impacts on cash flow; assessment of impacts on manufacturers of specific categories

of products/equipment and small manufacturers; assessment of impacts on manufacturers of multiple product-specific Federal regulatory requirements, including efficiency standards for other products and regulations of other agencies; and impacts on manufacturing capacity, plant closures, and loss of capital investment.

(ii) Private Impacts on consumers. The analysis of consumer impacts will include:

Estimated private energy savings impacts on consumers based on national average energy prices and energy usage; assessments of impacts on subgroups of consumers based on major regional differences in usage or energy prices and significant variations in installation costs or performance; sensitivity analyses using high and low discount rates reflecting both private transactions and social discount rates and high and low energy price forecasts; consideration of changes to product utility, changes to purchase rate of products, and other impacts of likely concern to all or some consumers, based to the extent practicable on direct input from consumers; estimated life-cycle cost with sensitivity analysis; consideration of the increased first cost to consumers and the time required for energy cost savings to pay back these first costs; and loss of utility.

Other analyses of social and distributional effects include:

(iii) Impacts on competition, including industry concentration analysis.

(iv) Impacts on utilities. The analysis of utility impacts will include estimated marginal impacts on electric and gas utility costs and revenues.

(v) National energy, economic, and employment impacts. The analysis of national energy, economic, and employment impacts will include: Estimated energy savings by fuel type; estimated net present value of benefits to all consumers; and estimates of the direct and indirect

impacts on employment by appliance manufacturers, relevant service industries, energy suppliers, suppliers of complementary and substitution products, and the economy in general.

(vi) Impacts on the environment. The analysis of environmental impacts will include estimated impacts on emissions of carbon and relevant criteria pollutants, and impacts on pollution control costs.

(vii) Impacts of non-regulatory approaches. The analysis of energy savings and consumer impacts will incorporate an assessment of the impacts of market forces and existing voluntary programs in promoting product/equipment efficiency, usage, and related characteristics in the absence of updated efficiency standards.

(viii) New information relating to the factors used for screening design options.

(g) *Notice of Proposed Rulemaking--(1) Documentation of decisions on proposed standard selection.* The Department will publish a NOPR in the *Federal Register* that proposes standard levels and explains the basis for the selection of those proposed levels, and will post on its website a draft TSD documenting the analysis of impacts. The draft TSD will also be posted in the appropriate docket on <http://www.regulations.gov>. As required by 42 U.S.C. 6295(p)(1) of EPCA, the NOPR also will describe the maximum improvement in energy efficiency or maximum reduction in energy use that is technologically feasible and, if the proposed standards would not achieve these levels, the reasons for proposing different standards.

(2) *Public comment and hearing.* There will be not less than 75 days for public comment on the NOPR, with at least one public hearing or workshop. (42 U.S.C. 6295(p)(2) and 42 U.S.C. 6306).

(3) *Revisions to impact analyses and selection of final standard.* Based on the public comments received, DOE will review the proposed standard and impact analyses, and make modifications

as necessary. If major changes to the analyses are required at this stage, DOE will publish a Supplemental Notice of Proposed Rulemaking (SNOPR), when required. DOE may also publish a NODA or RFI, where appropriate.

(h) *Final Rule.* The Department will publish a Final Rule in the *Federal Register* that promulgates standard levels, responds to public comments received on the NOPR, and explains how the selection of those standards meets the statutory requirement that any new or amended energy conservation standard produces the maximum improvement in energy efficiency that is both technologically feasible and economically justified and constitutes significant energy savings, accompanied by a final TSD.

7. Policies on Selection of Standards.

(a) *Purpose.* (1) Section 5 describes the process that will be used to consider new or revised energy efficiency standards and lists a number of factors and analyses that will be considered at specified points in the process. Department policies concerning the selection of new or revised standards, and decisions preliminary thereto, are described in this section. These policies are intended to elaborate on the statutory criteria provided in 42 U.S.C. 6295 of EPCA.

(2) The procedures described in this section are intended to assist the Department in making the determinations required by EPCA and do not preclude DOE's consideration of any other information consistent with the relevant statutory criteria. The Department will consider pertinent information in determining whether a new or revised standard is consistent with the statutory criteria.

(b) *Screening design options.* These factors will be considered as follows in determining whether a design option will receive any further consideration:

(1) *Technological feasibility.* Technologies that are not incorporated in commercial products or in commercially-viable, existing prototypes will not be considered further.

(2) *Practicability to manufacture, install and service.* If it is determined that mass production of a technology in commercial products and reliable installation and servicing of the technology could not be achieved on the scale necessary to serve the relevant market at the time of the compliance date of the standard, then that technology will not be considered further.

(3) *Impacts on product utility.* If a technology is determined to have significant adverse impact on the utility of the product/equipment to subgroups of consumers, or result in the unavailability of any covered product type with performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as products generally available in the U.S. at the time, it will not be considered further.

(4) *Safety of technologies.* If it is determined that a technology will have significant adverse impacts on health or safety, it will not be considered further.

(5) *Unique-pathway proprietary technologies.* If a technology has proprietary protection and represents a unique pathway to achieving a given efficiency level, it will not be considered further, due to the potential for monopolistic concerns.

(c) *Identification of candidate standard levels.* Based on the results of the engineering and cost/benefit analyses of design options, DOE will identify the candidate standard levels for further analysis. Candidate standard levels will be selected as follows:

(1) *Costs and savings of design options.* Design options that have payback periods that exceed the median life of the product or which result in life-cycle cost increases relative to the base case, using typical fuel costs, usage, and private discount rates, will not be used as the basis for candidate standard levels.

(2) *Further information on factors used for screening design options.* If further information or analysis leads to a determination that a design option, or a combination of design options, has unacceptable impacts under the policies stated in this Appendix, that design option or combination of design options will not be included in a candidate standard level.

(3) *Selection of candidate standard levels.* Candidate standard levels, which will be identified in the pre-NOPR documents and on which impact analyses will be conducted, will be based on the remaining design options.

(i) The range of candidate standard levels will typically include:

(A) The most energy-efficient combination of design options;

(B) The combination of design options with the lowest life-cycle cost; and

(C) A combination of design options with a payback period of not more than three years.

(ii) Candidate standard levels that incorporate noteworthy technologies or fill in large gaps between efficiency levels of other candidate standard levels also may be selected.

(d) *Pre-NOPR Stage.* New information provided in public comments on any pre-NOPR documents will be considered to determine whether any changes to the candidate standard levels are needed before proceeding to the analysis of impacts.

(e) [N.B., On [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*], DOE published a proposed rule to replace paragraph 7(e) of this Appendix. The proposal would require the agency to conduct a comparative analysis of the relative costs and benefits of all of the proposed TSLs to make a reliable determination that the chosen TSL is economically

justified. This comparative analysis would include assessing the incremental changes in costs and benefits as part of an holistic analysis among all TSLs.]

Selection of proposed standard. Based on the results of the analysis of impacts, DOE will select a standard level to be proposed for public comment in the NOPR. As required under 42 U.S.C. 6295(o)(2)(A), any new or revised standard must be designed to achieve the maximum improvement in energy efficiency that is determined to be technologically feasible and economically justified.

(1) *Statutory policies.* The fundamental policies concerning the selection of standards include:

(i) A candidate/trial standard level will not be proposed or promulgated if the Department determines that it is not technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A) and 42 U.S.C. (o)(3)(B)) For a standard level to be economically justified, the Secretary must determine that the benefits of the standard exceed its burdens. (42 U.S.C. 6295(o)(2)(B)(i)) A standard level is subject to a rebuttable presumption that it is economically justified if the payback period is three years or less. (42 U.S.C. 6295(o)(2)(B)(iii))

(ii) If the Department determines that a standard level is likely to result in the unavailability of any covered product/equipment type with performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as products generally available in the U.S. at the time, that standard level will not be proposed. (42 U.S.C. 6295(o)(4))

(iii) If the Department determines that a standard level would not result in significant conservation of energy, that standard level will not be proposed. (42 U.S.C. 6295(o)(3)(B))

(2) *Considerations in assessing economic justification.*

(i) The following considerations will guide the application of the economic justification criterion in selecting a proposed standard:

(A) If the Department determines that a candidate/trial standard level would result in a negative return on investment for the industry, would significantly reduce the value of the industry, or would cause significant adverse impacts to a significant subgroup of manufacturers (including small manufacturing businesses), that standard level will be presumed not to be economically justified unless the Department determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects.

(B) If the Department determines that a candidate/trial standard level would be the direct cause of plant closures, significant losses in domestic manufacturer employment, or significant losses of capital investment by domestic manufacturers, that standard level will be presumed not to be economically justified unless the Department determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects.

(C) If the Department determines that a candidate/trial standard level would have a significant adverse impact on the environment or energy security, that standard level will be presumed not to be economically justified unless the Department determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects.

(D) If the Department determines that a candidate/trial standard level would not result in significant energy conservation, that standard level will be presumed not to be economically justified.

(E) If the Department determines that a candidate/trial standard level is not practicable to manufacture or has a negative impact on consumer utility or safety, that standard level will be presumed not to be economically justified unless the Department determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects.

(F) If the Department determines that a candidate/trial standard level is not consistent with the policies relating to consumer costs in paragraph (c)(1) of this section, that standard level will be presumed not to be economically justified unless the Department determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects.

(G) If the Department determines that a candidate/trial standard level will have significant adverse impacts on a significant subgroup of consumers (including low-income consumers), that standard level will be presumed not to be economically justified unless the Department determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects.

(H) If the Department of Energy and the Department of Justice determine that a candidate/trial standard level would have significant anticompetitive effects, that standard level will be presumed not to be economically justified unless the

Department of Energy determines that specifically identified expected benefits of the standard would outweigh this and any other expected adverse effects.

(ii) DOE will, consistent with paragraph (f) of this section, account for the views expressed by the Department of Justice regarding a given proposal's effects on competition.

(iii) The basis for a determination that triggers any presumption in paragraph (e)(2)(i) of this section and the basis for a determination that an applicable presumption has been rebutted will be supported by substantial evidence in the record and the evidence and rationale for making these determinations will be explained in the NOPR.

(iv) If none of the policies in paragraph (e)(2)(i) of this section is found to be dispositive, the Department will determine whether the benefits of a candidate standard level exceed the burdens considering all the pertinent information in the record.

(f) *Selection of a final standard.* New information provided in the public comments on the NOPR and any analysis by the Department of Justice concerning impacts on competition of the proposed standard will be considered to determine whether issuance of a new or amended energy conservation standard produces the maximum improvement in energy efficiency that is both technologically feasible and economically justified and still constitutes significant energy savings or whether any change to the proposed standard level is needed before proceeding to the final rule. The same policies used to select the proposed standard level, as described in this section, will be used to guide the selection of the final standard level or a determination that no new or amended standard is justified.

8. Test Procedures

(a) *General.* As with the early assessment process for energy conservation standards, DOE believes that early stakeholder input is also very important during test procedure rulemakings. DOE will follow an early assessment process similar to that described in the preceding sections discussing DOE's consideration of amended energy conservation standards. Consequently, DOE will publish a notice in the *Federal Register* whenever DOE is considering initiation of a rulemaking to amend a test procedure. In that notice, DOE will request submission of comments, including data and information on whether an amended test procedure rule would:

- (1) More accurately measure energy efficiency, energy use, water use (as specified in EPCA), or estimated annual operating cost of a covered product during a representative average use cycle or period of use without being unduly burdensome to conduct; or
- (2) Reduce testing burden. DOE will review comments submitted and, subject to statutory obligations, determine whether it agrees with the submitted information. If DOE determines that an amended test procedure is not justified at that time, it will not pursue the rulemaking and will publish a notice in the *Federal Register* to that effect. If DOE receives sufficient information suggesting an amended test procedure could more accurately measure energy efficiency, energy use, water use (as specified in EPCA), or estimated annual operating cost of a covered product during a representative average use cycle or period of use and not be unduly burdensome to conduct, reduce testing burden, or the information received is inconclusive with regard to these points, DOE would undertake the preliminary stages of a rulemaking to amend the test procedure, as discussed further in the paragraphs that follow in this section.

(b) *Identifying the need to modify test procedures.* DOE will identify any necessary modifications to established test procedures prior to initiating the standards development process. It will consider all stakeholder comments with respect to needed test procedure modifications. If

DOE determines that it is appropriate to continue the test procedure rulemaking after the early assessment process, it would provide further opportunities for early public input through *Federal Register* documents, including NODAs and/or RFIs.

(c) *Adoption of Industry Test Methods.* DOE will adopt industry test standards as DOE test procedures for covered products and equipment, unless such methodology would be unduly burdensome to conduct or would not produce test results that reflect the energy efficiency, energy use, water use (as specified in EPCA) or estimated operating costs of that equipment during a representative average use cycle.

(d) *Issuing final test procedure modification.* Test procedure rulemakings establishing methodologies used to evaluate proposed energy conservation standards will be finalized at least 180 days prior to publication of a NOPR proposing new or amended energy conservation standards.

(e) *Effective Date of Test Procedures.* If required only for the evaluation and issuance of updated efficiency standards, use of the modified test procedures typically will not be required until the implementation date of updated standards.

9. *ASHRAE Equipment*

(a) EPCA provides that ASHRAE equipment are subject to unique statutory requirements and their own set of timelines. More specifically, pursuant to EPCA's statutory scheme for covered ASHRAE equipment, DOE is required to consider amending the existing Federal energy conservation standards and test procedures for certain enumerated types of commercial and industrial equipment (generally, commercial water heaters, commercial packaged boilers, commercial air-conditioning and heating equipment, and packaged terminal air conditioners and

heat pumps) when ASHRAE Standard 90.1 is amended with respect to standards and test procedures applicable to such equipment. Not later than 180 days after the amendment of the standard, the Secretary will publish in the *Federal Register* for public comment an analysis of the energy savings potential of amended energy efficiency standards. For each type of equipment, EPCA directs that if ASHRAE Standard 90.1 is amended, not later than 18 months after the date of publication of the amendment to ASHRAE Standard 90.1, DOE must adopt amended energy conservation standards at the new efficiency level in ASHRAE Standard 90.1 as the uniform national standard for such equipment, or amend the test procedure referenced in ASHRAE Standard 90.1 for the equipment at issue to be consistent with the applicable industry test procedure, respectively, unless—

- (1) DOE determines by rule, and supported by clear and convincing evidence, that a more-stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified; or
 - (2) The test procedure would not meet the requirements for such test procedures specified in EPCA. In such case, DOE must adopt the more stringent standard not later than 30 months after the date of publication of the amendment to ASHRAE/IES Standard 90.1 for the affected equipment.
- (b) For ASHRAE equipment, DOE will adopt the revised ASHRAE levels or the industry test procedure, as contemplated by EPCA, except in very limited circumstances.

With respect to DOE's consideration of standards more-stringent than the ASHRAE levels or changes to the industry test procedure, DOE will do so only if it can meet a very high bar to demonstrate the "clear and convincing evidence" threshold. Clear and convincing evidence would exist only where the specific facts and data made available to DOE regarding a particular

ASHRAE amendment demonstrates that there is no substantial doubt that a standard more stringent than that contained in the ASHRAE Standard 90.1 amendment is permitted because it would result in a significant additional amount of energy savings, is technologically feasible and economically justified, or, in the case of test procedures, that the industry test procedure does not meet the EPCA requirements. DOE will make this determination only after seeking data and information from interested parties and the public to help inform the Agency's views. DOE will seek from interested stakeholders and the public data and information to assist in making this determination, prior to publishing a proposed rule to adopt more-stringent standards or a different test procedure.

(c) DOE's review in adopting amendments based on an action by ASHRAE to amend Standard 90.1 is strictly limited to the specific standards or test procedure amendment for the specific equipment for which ASHRAE has made a change (*i.e.*, determined down to the equipment class level). DOE believes that ASHRAE not acting to amend Standard 90.1 is tantamount to a decision that the existing standard remain in place. Thus, when undertaking a review as required by 42 U.S.C. 6313(a)(6)(C), DOE would need to find clear and convincing evidence, as defined in this section, to issue a standard more stringent than the existing standard for the equipment at issue.

10. Direct Final Rules

(a) A direct final rule (DFR), as contemplated in 42 U.S.C. 6295(p)(4), is a procedural mechanism separate from the negotiated rulemaking process outlined under the Negotiated Rulemaking Act (5 U.S.C. 563). DOE may issue a DFR adopting energy conservation standards for a covered product provided that:

(1) DOE receives a joint proposal from a group of “interested persons that are fairly representative of relevant points of view,” which does not include DOE as a member of the group. At a minimum, to be “fairly representative of relevant points of view” the group submitting a joint statement must include larger concerns and small businesses in the regulated industry/manufacturer community, energy advocates, energy utilities, as appropriate, consumers, and States. However, it will be necessary to evaluate the meaning of “fairly representative” on a case-by-case basis, subject to the circumstances of a particular rulemaking, to determine whether additional parties must be part of a joint statement in order to be “fairly representative of relevant points of view.”

(2) This paragraph (a)(2) describes the steps DOE will follow with respect to a DFR.

(i) DOE must determine whether the energy conservation standard recommended in the joint proposal is in accordance with the requirements of 42 U.S.C. 6295(o) or section 342(a)(6)(B) as applicable. Because the DFR provision is procedural, and not a separate grant of rulemaking authority, any standard issued under the DFR process must comply fully with the provisions of the EPCA subsection under which the rule is authorized. DOE will not accept or issue as a DFR a submitted joint proposal that does not comply with all applicable EPCA requirements.

(ii) Upon receipt of a joint statement recommending energy conservation standards, DOE will publish in the *Federal Register* that statement, as submitted to DOE, in order to obtain feedback as to whether the joint statement was submitted by a group that is fairly representative of relevant points of view. If DOE determines that the DFR was not submitted by a group that is fairly representative of relevant points of view, DOE will not move forward with a DFR and will consider whether any further rulemaking

activity is appropriate. If the Secretary determines that a DFR cannot be issued based on the statement, the Secretary shall publish a notice of the determination, together with an explanation of the reasons for the determination.

(iii) Simultaneous with the issuance of a DFR, DOE must also publish a NOPR containing the same energy conservation standards as in the DFR. Following publication of the DFR, DOE must solicit public comment for a period of at least 110 days; then, not later than 120 days after issuance of the DFR, the Secretary must determine whether any adverse comments “may provide a reasonable basis for withdrawing the direct final rule,” based on the rulemaking record. If DOE determines that one or more substantive comments objecting to the DFR provides a sufficient reason to withdraw the DFR, DOE will do so, and will instead proceed with the published NOPR (unless the information provided suggests that withdrawal of that NOPR would likewise be appropriate). In making this determination, DOE may consider comments as adverse, even if the issue was brought up previously during DOE-initiated discussions (e.g. publication of a framework or RFI document), if the Department concludes that the comments merit further consideration.

11. Negotiated Rulemaking Process

(a)(1) In those instances where negotiated rulemaking is determined to be appropriate, DOE will comply with the requirements of the Negotiated Rulemaking Act (NRA) (5 U.S.C. 561-570) and the requirements of the Federal Advisory Committee Act (FACA) (5 U.S.C. App. 2). To facilitate potential negotiated rulemakings, and to comply with the requirements of the NRA and the FACA, DOE established the Appliance Standards and Rulemaking Federal Advisory

Committee (ASRAC). Working groups can be established as subcommittees of ASRAC, from time to time, and for specific products/equipment, with one member representative from the ASRAC committee attending and participating in the meetings of a specific working group. (Consistent with 5 U.S.C. 565(b), committee membership is limited to 25 members, unless the agency determines that more members are necessary for the functioning of the committee or to achieve balanced membership.) Ultimately, the working group reports to ASRAC, and ASRAC itself votes on whether to make a recommendation to DOE to adopt a consensus agreement developed through the negotiated rulemaking.

(2) DOE will use the negotiated rulemaking process on a case-by-case basis and, in appropriate circumstances, in an attempt to develop a consensus proposal before issuing a proposed rule.

When approached by one or more stakeholders or on its own initiative, DOE will use a convener to ascertain, in consultation with relevant stakeholders, whether the development of the subject matter of a potential rulemaking proceeding would be conducive to negotiated rulemaking, with the agency evaluating the convener's recommendation before reaching a decision on such matter.

A neutral, independent convener will identify issues that any negotiation would need to address, assess the full breadth of interested parties who should be included in any negotiated rulemaking to address those issues, and make a judgment as to whether there is the potential for a group of individuals negotiating in good faith to reach a consensus agreement given the issues presented. DOE will have a neutral and independent facilitator, who is not a DOE employee or consultant, present at all ASRAC working group meetings.

(3) DOE will base its decision to proceed with a potential negotiated rulemaking on the report of the convener. The following additional factors militate in favor of a negotiated rulemaking:

- (i) Stakeholders commented in favor of negotiated rulemaking in response to the initial rulemaking notice;
 - (ii) The rulemaking analysis or underlying technologies in question are complex, and DOE can benefit from external expertise and/or real-time changes to the analysis based on stakeholder feedback, information, and data;
 - (iii) The current standards have already been amended one or more times;
 - (iv) Stakeholders from differing points of view are willing to participate; and
 - (v) DOE determines that the parties may be able to reach an agreement.
- (4) DOE will provide notice in the *Federal Register* of its intent to form an ASRAC working group (including a request for nominations to serve on the committee), announcement of the selection of working group members (including their affiliation), and announcement of public meetings and the subject matter to be addressed.
- (b) DOE's role in the negotiated rulemaking process is to participate as a member of a group attempting to develop a consensus proposal for energy conservation standards for a particular product/equipment and to provide technical/analytical advice to the negotiating parties and legal input where needed to support the development of a potential consensus recommendation in the form of a term sheet.
- (c) A negotiated rulemaking may be used to develop energy conservation standards, test procedures, product coverage, and other categories of rulemaking activities.
- (d) A dedicated portion of each ASRAC working group meeting will be set aside to receive input and data from non-members of the ASRAC working group. This additional opportunity for input does nothing to diminish stakeholders' ability to provide comments and ask relevant questions during the course of the working group's ongoing deliberations at the public meeting.

(e) If DOE determines to proceed with a rulemaking at the conclusion of negotiations, DOE will publish a proposed rule. DOE will consider the approved term sheet in developing such proposed rule. A negotiated rulemaking in which DOE participates under the ASRAC process will not result in the issuance of a DFR. Further, any potential term sheet upon which an ASRAC working group reaches consensus must comply with all of the provisions of EPCA under which the rule is authorized. DOE cannot accept recommendations or issue a NOPR based upon a negotiated rulemaking that does not comply with all applicable EPCA requirements, including those product- or equipment-specific requirements included in the provision that authorizes issuance of the standard.

12. Principles for Distinguishing Between Effective and Compliance Dates

(a) *Dates, generally.* The effective and compliance dates for either DOE test procedures or DOE energy conservation standards are typically not identical and these terms should not be used interchangeably.

(b) *Effective date.* The effective date is the date a rule is legally operative after being published in the *Federal Register*.

(c) *Compliance date.* (1) For test procedures, the compliance date is the specific date when manufacturers are required to use the new or amended test procedure requirements to make representations concerning the energy efficiency or use of a product, including certification that the covered product/equipment meets an applicable energy conservation standard.

(2) For energy conservation standards, the compliance date is the specific date upon which manufacturers are required to meet the new or amended standards for applicable covered products/equipment that are distributed in interstate commerce.

13. Principles for the Conduct of the Engineering Analysis

(a) The purpose of the engineering analysis is to develop the relationship between efficiency and cost of the subject product/equipment. The Department will use the most appropriate means available to determine the efficiency/cost relationship, including an overall system approach or engineering modeling to predict the reduction in energy use or improvement in energy efficiency that can be expected from individual design options as discussed in paragraphs (b) and (c) of this section. From this efficiency/cost relationship, measures such as payback, life-cycle cost, and energy savings can be developed. The Department will identify issues that will be examined in the engineering analysis and the types of specialized expertise that may be required. DOE will select appropriate contractors, subcontractors, and expert consultants, as necessary, to perform the engineering analysis and the impact analysis. Also, the Department will consider data, information, and analyses received from interested parties for use in the analysis wherever feasible.

(b) The engineering analysis begins with the list of design options developed in consultation with the interested parties as a result of the screening process. The Department will establish the likely cost and performance improvement of each design option. Ranges and uncertainties of cost and performance will be established, although efforts will be made to minimize uncertainties by using measures such as test data or component or material supplier information where available. Estimated uncertainties will be carried forward in subsequent analyses. The use of quantitative models will be supplemented by qualitative assessments as appropriate.

(c) The next step includes identifying, modifying, or developing any engineering models necessary to predict the efficiency impact of any one or combination of design options on the

product/equipment. A base case configuration or starting point will be established, as well as the order and combination/blending of the design options to be evaluated. DOE will then perform the engineering analysis and develop the cost-efficiency curve for the product/equipment. The cost efficiency curve and any necessary models will be available to stakeholders during the pre-NOPR stage of the rulemaking.

14. Principles for the Analysis of Impacts on Manufacturers

(a) *Purpose.* The purpose of the manufacturer analysis is to identify the likely private impacts of efficiency standards on manufacturers. The Department will analyze the impact of standards on manufacturers with substantial input from manufacturers and other interested parties. This section describes the principles that will be used in conducting future manufacturing impact analyses.

(b) *Issue identification.* In the impact analysis stage (section 5(d)), the Department will identify issues that will require greater consideration in the detailed manufacturer impact analysis. Possible issues may include identification of specific types or groups of manufacturers and concerns over access to technology. Specialized contractor expertise, empirical data requirements, and analytical tools required to perform the manufacturer impact analysis also would be identified at this stage.

(c) *Industry characterization.* Prior to initiating detailed impact studies, the Department will seek input on the present and past industry structure and market characteristics. Input on the following issues will be sought:

- (1) Manufacturers and their current and historical relative market shares;

- (2) Manufacturer characteristics, such as whether manufacturers make a full line of models or serve a niche market;
- (3) Trends in the number of manufacturers;
- (4) Financial situation of manufacturers;
- (5) Trends in product/equipment characteristics and retail markets including manufacturer market shares and market concentration; and
- (6) Identification of other relevant regulatory actions and a description of the nature and timing of any likely impacts.

(d) *Cost impacts on manufacturers.* The costs of labor, material, engineering, tooling, and capital are difficult to estimate, manufacturer-specific, and usually proprietary. The Department will seek input from interested parties on the treatment of cost issues. Manufacturers will be encouraged to offer suggestions as to possible sources of data and appropriate data collection methodologies. Costing issues to be addressed include:

- (1) Estimates of total private cost impacts, including product/equipment-specific costs (based on cost impacts estimated for the engineering analysis) and front-end investment/conversion costs for the full range of product/equipment models.
- (2) Range of uncertainties in estimates of average cost, considering alternative designs and technologies which may vary cost impacts and changes in costs of material, labor, and other inputs which may vary costs.
- (3) Variable cost impacts on particular types of manufacturers, considering factors such as atypical sunk costs or characteristics of specific models which may increase or decrease costs.

(e) *Impacts on product/equipment sales, features, prices, and cost recovery.* In order to make manufacturer cash-flow calculations, it is necessary to predict the number of products/equipment

sold and their sale price. This requires an assessment of the likely impacts of price changes on the number of products/equipment sold and on typical features of models sold. Past analyses have relied on price and shipment data generated by economic models. The Department will develop additional estimates of prices and shipments by drawing on multiple sources of data and experience including: actual shipment and pricing experience; data from manufacturers, retailers, and other market experts; financial models, and sensitivity analyses. The possible impacts of candidate/trial standard levels on consumer choices among competing fuels will be explicitly considered where relevant.

(f) *Measures of impact.* The manufacturer impact analysis will estimate the impacts of candidate/trial standard levels on the net cash flow of manufacturers. Computations will be performed for the industry as a whole and for typical and atypical manufacturers. The exact nature and the process by which the analysis will be conducted will be determined by DOE, with input from interested parties, as appropriate. Impacts to be analyzed include:

- (1) Industry net present value, with sensitivity analyses based on uncertainty of costs, sales prices, and sales volumes;
- (2) Cash flows, by year; and
- (3) Other measures of impact, such as revenue, net income, and return on equity, as appropriate.

DOE also notes that the characteristics of a typical manufacturers worthy of special consideration will be determined in consultation with manufacturers and other interested parties and may include: manufacturers incurring higher or lower than average costs; and manufacturers experiencing greater or fewer adverse impacts on sales. Alternative scenarios based on other methods of estimating cost or sales impacts also will be performed, as needed.

(g) *Cumulative Impacts of Other Federal Regulatory Actions.* (1) The Department will recognize and seek to mitigate the overlapping effects on manufacturers of new or revised DOE standards and other regulatory actions affecting the same products or equipment. DOE will analyze and consider the impact on manufacturers of multiple product/equipment-specific regulatory actions. These factors will be considered in setting rulemaking priorities, conducting the early assessment as to whether DOE should proceed with a standards rulemaking, assessing manufacturer impacts of a particular standard, and establishing compliance dates for a new or revised standard that, consistent with any statutory requirements, are appropriately coordinated with other regulatory actions to mitigate any cumulative burden.

(2) If the Department determines that a proposed standard would impose a significant impact on product or equipment manufacturers within approximately three years of the compliance date of another DOE standard that imposes significant impacts on the same manufacturers (or divisions thereof, as appropriate), the Department will, in addition to evaluating the impact on manufacturers of the proposed standard, assess the joint impacts of both standards on manufacturers.

(3) If the Department is directed to establish or revise standards for products/equipment that are components of other products/equipment subject to standards, the Department will consider the interaction between such standards in setting rulemaking priorities and assessing manufacturer impacts of a particular standard. The Department will assess, as part of the engineering and impact analyses, the cost of components subject to efficiency standards.

(h) *Summary of quantitative and qualitative assessments.* The summary of quantitative and qualitative assessments will contain a description and discussion of uncertainties. Alternative

estimates of impacts, resulting from the different potential scenarios developed throughout the analysis, will be explicitly presented in the final analysis results.

(1) *Key modeling and analytical tools.* In its assessment of the likely impacts of standards on manufacturers, the Department will use models that are clear and understandable, feature accessible calculations, and have clearly explained assumptions. As a starting point, the Department will use the Government Regulatory Impact Model (GRIM). The Department will also support the development of economic models for price and volume forecasting. Research required to update key economic data will be considered.

(2) *Reserved.*

15. Principles for the Analysis of Impacts on Consumers

(a) *Early consideration of impacts on consumer utility.* The Department will consider at the earliest stages of the development of a standard whether particular design options will lessen the utility of the covered products/equipment to the consumer. See paragraph (c) of section 6.

(b) *Impacts on product/equipment availability.* The Department will determine, based on consideration of information submitted during the standard development process, whether a proposed standard is likely to result in the unavailability of any covered product/equipment type with performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as products/equipment generally available in the U.S. at the time. DOE will not promulgate a standard if it concludes that it would result in such unavailability.

(c) *Department of Justice review.* As required by law, the Department will solicit the views of the Department of Justice on any lessening of competition likely to result from the imposition of a proposed standard and will give the views provided full consideration in assessing economic

justification of a proposed standard. In addition, DOE may consult with the Department of Justice at earlier stages in the standards development process to seek its preliminary views on competitive impacts.

(d) *Variation in consumer impacts.* The Department will use regional analysis and sensitivity analysis tools, as appropriate, to evaluate the potential distribution of impacts of candidate/trial standard levels among different subgroups of consumers. The Department will consider impacts on significant segments of consumers in determining standards levels. Where there are significant negative impacts on identifiable subgroups, DOE will consider the efficacy of voluntary approaches as a means to achieve potential energy savings.

(e) *Payback period and first cost.* (1) In the assessment of consumer impacts of standards, the Department will consider Life-Cycle Cost, Payback Period, and Cost of Conserved Energy to evaluate the savings in operating expenses relative to increases in purchase price. The Department also performs sensitivity and scenario analyses when appropriate. The results of these analyses will be carried throughout the analysis and the ensuing uncertainty described. (2) If, in the analysis of consumer impacts, the Department determines that a candidate/trial standard level would result in a substantial increase in product/equipment first costs to consumers or would not pay back such additional first costs through energy cost savings in less than three years, Department will assess the likely impacts of such a standard on low-income households, product/equipment sales and fuel switching, as appropriate.

16. Consideration of Non-Regulatory Approaches

The Department recognizes that non-regulatory efforts by manufacturers, utilities, and other interested parties can result in substantial efficiency improvements. The Department intends to

consider the likely effects of non-regulatory initiatives on product/equipment energy use, consumer utility and life-cycle costs, manufacturers, competition, utilities, and the environment, as well as the distribution of these impacts among different regions, consumers, manufacturers, and utilities. DOE will attempt to base its assessment on the actual impacts of such initiatives to date, but also will consider information presented regarding the impacts that any existing initiative might have in the future. Such information is likely to include a demonstration of the strong commitment of manufacturers, distribution channels, utilities, or others to such non-regulatory efficiency improvements. This information will be used in assessing the likely incremental impacts of establishing or revising standards, in assessing -- where possible -- appropriate compliance dates for new or revised standards, and in considering DOE support of non-regulatory initiatives.

17. Cross-cutting Analytical Assumptions

In selecting values for certain cross-cutting analytical assumptions, DOE expects to continue relying upon the following sources and general principles:

- (a) *Underlying economic assumptions.* The appliance standards analyses will generally use the same economic growth and development assumptions that underlie the most current Annual Energy Outlook (AEO) published by the Energy Information Administration (EIA).
- (b) *Analytic time length.* The appliance standards analyses will use two time lengths—30 years and another time length that is specific to the standard being considered such as the useful lifetime of the product under consideration. As a sensitivity case, the analyses will also use a 9-year regulatory time line in analyzing the effects of the standard.

(c) *Energy price and demand trends.* Analyses of the likely impact of appliance standards on typical users will generally adopt the mid-range energy price and demand scenario of the EIA's most current AEO. The sensitivity of such estimated impacts to possible variations in future energy prices are likely to be examined using the EIA's high and low energy price scenarios.

(d) *Product/equipment-specific energy-efficiency trends, without updated standards.*

Product/equipment-specific energy-efficiency trends will be based on a combination of the efficiency trends forecast by the EIA's residential and commercial demand model of the National Energy Modeling System (NEMS) and product-specific assessments by DOE and its contractors with input from interested parties.

(e) *Price forecasting.* DOE will endeavor to use robust price forecasting techniques in projecting future prices of products.

(f) *Private Discount rates.* For residential and commercial consumers, ranges of three different real discount rates will be used. For residential consumers, the mid-range discount rate will represent DOE's approximation of the average financing cost (or opportunity costs of reduced savings) experienced by typical consumers. Sensitivity analyses will be performed using discount rates reflecting the costs more likely to be experienced by residential consumers with little or no savings and credit card financing and consumers with substantial savings. For commercial users, a mid-range discount rate reflecting DOE's approximation of the average real rate of return on commercial investment will be used, with sensitivity analyses being performed using values indicative of the range of real rates of return likely to be experienced by typical commercial businesses. For national net present value calculations, DOE would use the Administration's approximation of the average real rate of return on private investment in the U.S. economy. For manufacturer impacts, DOE typically uses a range of real discount rates

which are representative of the real rates of return experienced by typical U.S. manufacturers affected by the program.

(g) *Social Discount Rates.* Social discount rates as specified in OMB Circular A-4 will be used in assessing social effects such as costs and benefits.

(h) *Environmental impacts.* (1) DOE calculates emission reductions of carbon dioxide, sulfur dioxide, nitrogen oxides, methane, nitrous oxides, and mercury likely to be avoided by candidate/trial standard levels based on an emissions analysis that includes the two components described in paragraphs (h)(2) and (3) of this section.

(2) The first component estimates the effect of potential candidate/trial standard levels on power sector and site combustion emissions of carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, methane, and nitrous oxide. DOE develops the power sector emissions analysis using a methodology based on DOE's latest Annual Energy Outlook. For site combustion of natural gas or petroleum fuels, the combustion emissions of carbon dioxide and nitrogen oxides are estimated using emission intensity factors from the Environmental Protection Agency.

(3) The second component of DOE's emissions analysis estimates the effect of potential candidate/trial standard levels on emissions of carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, methane, and nitrous oxide due to "upstream activities" in the fuel production chain. These upstream activities include the emissions related to extracting, processing, and transporting fuels to the site of combustion as detailed in DOE's Fuel-Fuel-Cycle Statement of Policy (76 FR 51281 (August 18, 2011)). DOE will consider the effects of the candidate/trial standard levels on these emissions after assessing the seven factors required to demonstrate

economic justification under EPCA. Consistent with Executive Order 13783, dated March 28, 2017, when monetizing the value of changes in reductions in CO₂ and nitrous oxides emissions resulting from its energy conservation standards regulations, including with respect to the consideration of domestic versus international impacts and the consideration of appropriate discount rates, DOE ensures, to the extent permitted by law, that any such estimates are consistent with the guidance contained in OMB Circular A-4 of September 17, 2003 (Regulatory Analysis).

PART 431 – ENERGY EFFICIENCY PROGRAM FOR CERTAIN COMMERCIAL AND INDUSTRIAL EQUIPMENT

3. The authority citation for part 431 continues to read as follows:

Authority: 42 U.S.C. 6291-6317; 28 U.S.C. 2461 note.

4. Section 431.4 is added to subpart A to read as follows:

§431.4 Procedures, interpretations, and policies for consideration of new or revised energy conservation standards and test procedures for commercial/industrial equipment.

The procedures, interpretations, and policies for consideration of new or revised energy conservation standards and test procedures set forth in appendix A to subpart C of part 430 of this chapter shall apply to the consideration of new or revised energy conservation standards and test procedures considered for adoption under this part.