[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Part 430

[EERE-2025-BT-STD-0001]

RIN 1904-AF72

Energy Conservation Program: Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Certain Commercial/Industrial Equipment

AGENCY: Office of Critical Minerals and Energy Innovation, Department of Energy.

ACTION: Notice of proposed rulemaking and announcement of webinar.

SUMMARY: The U.S. Department of Energy ("DOE" or "the Department") proposes to update the Department's current rulemaking methodology titled, "Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Certain Commercial/Industrial Equipment" ("Process Rule"). Specifically, DOE proposes to: make Appendix A binding on DOE for certain actions; amend objectives and considerations consistent with recent Executive orders and Department policies; add a definition of "significant energy savings"; re-instate the comparative analysis requirement, described as a "walk up" approach; include certain economic thresholds; re-instate the description of clear and convincing evidence; and revert to language from the 2020 Process Rule text, with minor edits, in several sections. In addition to requesting written comments on its proposal, DOE will also hold a public meeting to discuss this proposal and obtain additional input.

DATES: *Comments*: DOE will accept comments, data, and information regarding all aspects of this notice of proposed rulemaking ("NOPR") no later than **INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER***.

Meeting: DOE will hold a public meeting via webinar on Wednesday, July 15, 2026, from 1 to 4 p.m. ET. See section VI of this document, "Public Participation," for webinar registration information, participant instructions, and information about the capabilities available to webinar participants.

ADDRESSES: Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at *www.regulations.gov* under docket number EERE-2025-BT-STD-0001. Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by docket number EERE-2025-BT-STD-0001 and/or regulatory information number ("RIN") 1904-AF72, by any of the following methods:

(1) *Email*: *ProcessRule2025STD0001@ee.doe.gov*. Include the docket number EERE-2025-BT-STD-0001 and/or RIN 1904-AF72 in the subject line of the message. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or ASCII file format, and avoid the use of special characters or any form of encryption.

(2) *Postal Mail*: Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, Mailstop CM-5B, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. If possible, please submit all items on a compact disc ("CD"), in which case it is not necessary to include printed copies.

(3) *Hand Delivery/Courier*: Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 287-1445. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

No telefacsimiles ("faxes") will be accepted. For detailed instructions on submitting comments and additional information on this process, *see* section VI (Public Participation) of this document.

Docket: The docket for this activity, which includes *Federal Register* notices, comments, and other supporting documents/materials, is available for review at *www.regulations.gov*. All documents in the docket are listed in the *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 *www.regulations.gov/docket/EERE-2025-BT-STD-0001*. The docket webpage contains instructions on how to access all documents, including public comments, in the docket. *See* section VI of this document for information on how to submit comments through *www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Appliance Standards Program, U.S. Department of Energy, Office of Critical Minerals and Energy Innovation, Building Technologies Office, CM-5B, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Email: *ApplianceStandardsQuestions@ee.doe.gov*.

Mr. Pete Cochran, U.S. Department of Energy, Office of the General Counsel, GC-33, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 586-4798. Email: *Peter.Cochran@hq.doe.gov*.

For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact the Appliance and Equipment Standards Program staff at (202) 287-1445 or by email: *ApplianceStandardsQuestions@ee.doe.gov*. A plain language summary of the rule is also available on the Federal e-Rulemaking Portal at *www.regulations.gov*.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Summary of the Proposal

In this NOPR, DOE is proposing revisions to the Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Certain Commercial/Industrial Equipment, codified in the Code of Federal Regulations ("CFR") at 10 CFR part 430, subpart C, appendix A,

("Appendix A" or the Process Rule), which DOE generally uses to prescribe energy conservation standards and test procedures for both consumer products and commercial equipment pursuant to the Energy Policy and Conservation Act of 1975 (EPCA), as amended (42 U.S.C. 6291, *et seq*.; 42 U.S.C. 6311, *et seq*.). These proposed changes are intended to provide increased certainty in DOE's rulemaking processes for impacted stakeholders, and to better inform the Secretary in making his or her determination under EPCA regarding both whether to regulate and, when choosing to regulate, what standard level to select. In addition, as discussed further below, the proposed process changes reflect the best reading of the statute, consistent with *Loper Bright Enters v. Raimondo,* 603 U.S. 369 (2024), and *Michigan v. EPA*, 576 U.S. 743 (2015).

In this document, DOE proposes to make appendix A binding on DOE for certain actions; amend objectives and considerations consistent with statute and recent Executive Orders and Department policies; add a definition of "significant energy savings"; re-instate the comparative analysis requirement, described as a "walk up" approach; include certain economic thresholds; re-instate the description of clear and convincing evidence; and revert to language from the 2020 Process Rule text, with minor edits, in several sections. These proposed revisions are summarized in Table I.1.

Table I.1 List of Proposed Revisions in this Document Organized by Process Rule Section

Section	Proposed Revisions
1. Objectives	• Proposes to clarify that consensus proposals can proceed to a direct final rule, and that direct final rules would follow the procedural requirements specified in EPCA • Proposes to add objectives consistent with recent Executive Orders
2. Scope	• None
3. Application	• Proposes that Appendix A be binding on DOE for certain actions
4. Setting Priorities	• Proposes to amend factors for consideration in prioritization and to change the request for comment requirement to be based on if circumstances weigh toward doing so
5. Coverage Determinations	• Proposes to re-instate language from 2020 Process Rule
6. Process for Developing Energy Conservation Standards	• Proposes to reinstate the 2020 Process Rule requirements regarding Early Assessment, Pre-NOPR stages, and comment periods. • Proposes to re-instate determination of significant savings of energy with revised thresholds compared to the 2020 Process Rule • Proposes to make minor amendments to factors for consideration in selecting proposed standards including removing impacts on the environment and adding consideration of consumer choice and certain consumer economic impacts
7. Policies on Selection of Standard	• Proposes to re-instate section on considerations in assessing economic justification • Proposes to re-instate a walk up comparative analysis • Proposes to define certain consumer economic thresholds
8. Test Procedure	• Proposes to re-instate language from the 2020 Process Rule including on rulemaking stages and timelines, comment periods, and adoption of industry standards, and corrects a formatting error
9. ASHRAE Equipment	• Proposes to re-instate 2020 Process Rule language including that DOE will adopt the standard levels or industry test procedure contained in ASHRAE Standard 90.1 except in very limited circumstances and to define the term “clear and convincing evidence”
10. Direct Final Rules	• Proposes to revert this section to the 2020 Process Rule language while including existing clarification regarding direct final rules in section 1
Negotiated Rulemaking	• Proposes to reinstate this section from the 2020 Process Rule with minor edits
11. Principles for Distinguishing Between Effective and Compliance Dates	• Proposes to distinguish between prescribed, effective, and compliance date
12.-16. Analytical Methodology Sections	• Proposes to amend some of these sections; detailed analytic updates will be addressed separately via the analytic framework update effort.

In addition, on January 20, 2025, the President issued Executive Order 14154, "Unleashing American Energy" (E.O. 14154). 90 FR 8353 (Jan. 29, 2025). That order stated the policy of the United States with regard to energy production and management. Among the stated elements of this policy, sections 1(f) through (h) of E.O. 14154 cite the intent to safeguard the American people's freedom to choose from a variety of goods and appliances, including but not limited to lightbulbs, dishwashers, washing machines, gas stoves, water heaters, toilets, and shower heads, and to promote market competition and innovation within the manufacturing and appliance industries; to ensure that the global effects of a rule, regulation, or action shall, whenever evaluated, be reported separately from its domestic costs and benefits, in order to promote sound regulatory decision making and prioritize the interests of the American people; and to guarantee that all Executive departments and agencies (agencies) provide opportunity for public comment and rigorous, peer-reviewed scientific analysis. Section 6 of the Executive order also specifies policies for prioritizing accuracy in environmental analyses, specifically instructing that for Federal regulatory processes, "all agencies shall adhere to only the relevant legislated requirements for environmental considerations and any considerations beyond those requirements are eliminated." Section 6 of the Executive order also provides instructions regarding consideration of greenhouse gas emissions and the "social cost of carbon."

Consistent with E.O. 14154, the Department, among other actions, is evaluating existing policy regarding its approach for consideration of new or amended energy conservation standards and test procedures for consumer products and certain commercial and industrial equipment. The Department has tentatively determined that the changes proposed herein will provide certainty in DOE's rulemaking processes for impacted

stakeholders and will allow the Secretary to make the best-informed determinations under EPCA regarding the regulation of covered products and equipment.

In addition to the specific issues discussed in this NOPR, DOE welcomes comment on all other aspects of the Process Rule that interested parties believe could be improved or should be maintained.

II. Authority and Background

A. Authority

The Energy Policy and Conservation Act, Pub. L. 94-163, as amended ("EPCA"),[1] authorizes DOE to regulate the energy efficiency of a number of consumer products and certain industrial equipment. (42 U.S.C. 6291-6317, as codified). Title III, Part B[2] of EPCA established the Energy Conservation Program for Consumer Products Other Than Automobiles. (42 U.S.C. 6291-6309, as codified). Title III, Part C[3] of EPCA, added by Pub. L. 95-619, Title IV, section 441(a), established the Energy Conservation Program for Certain Industrial Equipment, which sets forth a variety of provisions designed to improve energy efficiency. (42 U.S.C. 6311-6317, as codified). Under EPCA, DOE's energy conservation program consists essentially of four parts: (1) testing, (2) labeling, (3) the establishment of Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of EPCA specifically include definitions (42 U.S.C. 6291; 42 U.S.C. 6311), test procedures (42 U.S.C. 6293; 42 U.S.C. 6314), labeling provisions (42 U.S.C. 6294; 42 U.S.C. 6315), energy conservation standards (42 U.S.C. 6295; 42 U.S.C. 6313), and

[1] All references to EPCA in this document refer to the statute as amended through Energy Act of 2020, Public Law 116-260 (Dec. 27, 2020), which reflects the last statutory amendments that impact parts A and A-1 of EPCA.
[2] For editorial reasons, upon codification in the U.S. Code, Part B was redesignated as Part A.
[3] For editorial reasons, upon codification in the U.S. Code, Part C was redesignated as Part A-1.

the authority to require information and reports from manufacturers (42 U.S.C. 6296; 42 U.S.C. 6316).

Subject to certain criteria and conditions, DOE is required to develop test procedures to measure the energy efficiency, energy use, water use (as applicable), or estimated annual operating cost of each covered product and covered equipment during a representative average use cycle or period of use, and the statute further requires that the test procedure not be unduly burdensome to conduct. (42 U.S.C. 6293; 42 U.S.C. 6314). Manufacturers of covered products must use the prescribed DOE test procedure as the basis for certifying to DOE that their product complies with the applicable energy conservation standards and as the basis for any representations regarding the energy use or energy efficiency of the product. (42 U.S.C. 6293(c); 42 U.S.C. 6295(s); 42 U.S.C. 6314(d); and 42 U.S.C. 6316(a)). Similarly, DOE must use these test procedures to determine whether the products or equipment comply with the applicable energy conservation standards adopted pursuant to EPCA. (42 U.S.C. 6295(s); 42 U.S.C. 6316(a)).

DOE must follow specific statutory criteria for prescribing new or amended standards for covered products. EPCA requires that 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); 42 U.S.C. 6313(a)(6)(A)-(C); 42 U.S.C. 6316(a)). Furthermore, for covered consumer products and certain covered equipment, 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. 6316(a)). For other covered equipment subject to ASHRAE Standard 90.1, the statute states that if DOE determines that a standard higher than the

ASHRAE level is appropriate, the Department must determine that such standard would result in significant additional conservation of energy and be supported by clear and convincing evidence. (42 U.S.C. 6313(a)(6)(A)-(C)).

Moreover, DOE may not prescribe a standard: (1) for certain products, if no test procedure has been established for the product, or (2) if DOE determines by rule that the standard is not technologically feasible or economically justified. (42 U.S.C. 6295(o)(3)(A)–(B); 42 U.S.C. 6313(a)(6)(A)-(C); 42 U.S.C. 6316(a)). In determining whether a proposed standard is economically justified, DOE must determine whether the benefits of the standard exceed its burdens. (42 U.S.C. 6295(o)(2)(B)(i); 42 U.S.C. 6313(a)(6)(B)(ii); 42 U.S.C. 6316(a)). DOE must make this determination after receiving comments on the proposed standard, and by considering, to the greatest extent practicable, the following seven statutory factors:

(1) The economic impact of the standard on the manufacturers and consumers;

(2) The savings in operating costs, throughout the estimated average life of the products (*i.e.*, life-cycle costs), compared with any increase in the price of, or in the initial charges for, or operating and maintaining expenses of, the products which are likely to result from the imposition of the standard;

(3) The total projected amount of energy, or as applicable, water, savings likely to result directly from the standard;

(4) Any lessening of the utility or the performance of the products likely to result from the standard;

(5) The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard;

(6) The need for national energy and water conservation; and

(7) Other factors DOE considers relevant. (42 U.S.C. 6295(o)(2)(B)(i)(I)-(VII)) 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)(A)-(C); and 42 U.S.C. 6316(a)) and comply with any other applicable statutory provisions.

Further, EPCA establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the energy savings during the first year that the consumer will receive as a result of the standard, as calculated under the applicable test procedure. (42 U.S.C. 6295(o)(2)(B)(iii); 42 U.S.C. 6316(a)).

Additionally, EPCA provides that a rule prescribing an energy conservation standard for a type (or class) of covered products shall specify a level of energy use or efficiency higher or lower than that which applies (or would apply) for such type (or class) for any group of covered products which have the same function or intended use, if the Secretary determines that covered products within such group: (A) consume a different kind of energy from that consumed by other covered products within such type (or class); or (B) have a capacity or other performance-related feature which other products within such type (or class) do not have and such feature justifies a higher or lower standard from that which applies (or will apply) to other products within such type (or class). (42 U.S.C.6295(q)(1)) In making a determination under this paragraph concerning whether a performance-related feature justifies the establishment of a higher or lower standard, the Secretary shall consider

such factors as the utility to the consumer of such a feature, and such other factors as the Secretary deems appropriate. (*Id.*)

In 2020, DOE previously exercised permissible discretion in amending and making binding the Department's Process Rule. Since then, recent Supreme Court decisions -- notably *Loper Bright Enterprises v. Raimondo* (603 U.S. 369 (2024)) -- provide further guidance on how agencies should interpret and apply applicable statutes. The decision in *Loper* not only bolsters the discretion exercised by the 2020 final rule but also supports this proposal as consistent with the "best read" of EPCA. In addition, other decisions, such as *Michigan v. EPA*, 576 U.S. 743 (2015), further support DOE's proposed application of the balancing factors under at 42 U.S.C. 6295(o)(2)(B)(i). EPCA expressly requires that DOE "shall . . . determine whether the benefits of the standard exceed its burdens" and lists a broad array of seven balancing factors the Secretary must consider. *Id.* The procedures proposed here, and the proposal to make them binding on actions that may result in more stringent standards, will enhance the Department's ability to gather and weigh the relevant evidence needed to support a reasoned decision under EPCA's broad and inherently consumer-protective balancing factors. *See id.* (directing Secretary expressly to consider, *inter alia*, the economic impact on manufacturers and consumers, the comparative life-time operating cost savings versus increases in product purchase and maintenance costs, and any lessening in utility as a result of new standards); *see also id.* 42 U.S.C. 6295(o)(3)(B) (forbidding the establishment of new standard if it will not result in "significant conservation" of energy or water); *cf. Michigan*, 576 U.S. at 752 (noting irrationality of ignoring costs under even the vague "appropriate and necessary" standard).

B. Background

In July of 1996, DOE published a final rule in the *Federal Register* that codified DOE's "Procedures, Interpretations and Policies for Consideration of New or Revised Energy Conservation Standards for Consumer Products" at 10 CFR part 430, subpart C, appendix A. 61 FR 36974 (July 15, 1996) ("July 1996 Final Rule"). The goal of the Process Rule was to increase transparency by elaborating on the procedures, interpretations, and policies that would guide the Department in establishing new or revised energy conservation standards for consumer products.

On February 14, 2020, DOE published a final rule in the *Federal Register* ("February 2020 Final Rule") that significantly revised the Process Rule. 85 FR 8626. This rule made the specified rulemaking procedures binding on DOE and revised certain provisions to ensure consistency with existing statutory requirements. Other changes included 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 180-day window between test procedure final rules and standards proposals, specifying DOE's approach to adoption of industry test standards in its test procedures, and delineating procedures for rulemaking under the separate direct final rule and negotiated rulemaking authorities. DOE also published a companion final rule in the *Federal Register* on August 19, 2020 ("August 2020 Final Rule"), that clarified how DOE would conduct a comparative analysis across all trial standard levels when determining whether a particular trial standard level was economically justified. 85 FR 50937.

Subsequently, DOE published further amendments to the Process Rule, some of which reversed or modified amendments made in the February 2020 and August 2020 Final

Rules. DOE published the first of these final rules in the *Federal Register* on December 13, 2021 ("December 2021 Final Rule"). 86 FR 70892. DOE published a second final rule with additional amendments to certain sections of the Process Rule in the *Federal Register* on April 8, 2024 ("April 2024 Final Rule"). 89 FR 24340. These amendments, among other things, reverted the Process Rule back to the non-binding status of the July 1996 Final Rule to allow DOE to tailor its rulemaking process to best fit the unique circumstances of a particular rulemaking and provide DOE with flexibility to be able to better meet statutory review requirements, and removed the significant energy savings threshold. 86 FR 70896-70906.

The following paragraphs summarize the origins and historical amendments to the individual sections of the Process Rule.[4]

(1) *Objectives*—This section was established in the July 1996 Final Rule and lays out the overall purpose of the Process Rule and its specific provisions. The February 2020 Final Rule made various editorial changes to this section.

(2) *Scope*—This section was established in the July 1996 Final Rule and identifies the types of rulemakings to which the Process Rule applies. This section was amended in the February 2020 Final Rule to clarify that the Process Rule applies to energy conservation standards and test procedures for both covered consumer products and commercial and industrial equipment.

(3) *Application*—This section was added in the February 2020 Final Rule and specified that the Process Rule would be binding on DOE. This section was subsequently amended in the December 2021 Final Rule to state that DOE has discretion to depart from

[4] The full text of the current Process Rule is available at *www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430/subpart-C/appendix-Appendix%20A%20to%20Subpart%20C%20of%20Part%20430*.

the general guidance in Appendix A when it deems necessary or appropriate, with the stipulation that DOE will provide interested parties with notice of the deviation and an explanation.

(4) *Setting Priorities for Rulemaking Activity*—This section was established in the July 1996 Final Rule and identifies the factors that DOE applies when determining its regulatory plans and formulation of inputs for the Regulatory Agenda. This section was amended in the February 2020 Final Rule to specify that DOE would offer an 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*—This section was established in the February 2020 Final Rule and describes the process DOE would follow to establish coverage for consumer products and industrial equipment. Subsequent amendments in the December 2021 Final Rule and April 2024 Final Rule allow DOE to seek early stakeholder input through preliminary rulemaking documents prior to a proposed coverage determination, removed a previous requirement that final coverage determinations be published prior to the initiation of any test procedure or energy conservation standard rulemaking and at least 180 days prior to publication of a test procedure NOPR, and removed the previously required 180-day period between finalization of DOE test procedures and issuance of a NOPR proposing new or amended energy conservation standards.

(6) *Process for Developing Energy Conservation Standards*—This section was established in the July 1996 Final Rule and 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. The February 2020 Final Rule created an

"early assessment" process for seeking stakeholder input prior to commencing a rule and committed to an initial rulemaking stage prior to a proposed rule (*e.g.*, a framework document or preliminary analysis). This rule also established a threshold of "significant energy savings" of 0.3 quads or 10-percent site savings over 30 years. Subsequent amendments in the December 2021 and April 2024 Final Rules removed the energy savings threshold requirement and the requirement for a separate early assessment request for information ("RFI") but clarified that DOE will issue one or more documents during the pre-NOPR stage of a rulemaking.

(7) *Policies on Selection of Standards*—This section was established in the July 1996 Final Rule and describes Department policies concerning the selection of new or revised standards. The July 1996 Final Rule provided that DOE would implement the statutory mandate that any new or amended standard is designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. The February 2020 Final Rule made minor amendments to align with revisions elsewhere in in the Process Rule, while the August 2020 Final Rule added a clarification that DOE would conduct a comparative analysis across all trial standard levels when determining whether a level was economically justified. The December 2021 Final Rule amended this section to remove the requirement for a comparative analysis.

(8) *Test Procedures*—This section was established in the original July 1996 Final Rule and describes the process by which DOE would establish test procedures for covered products and equipment. The February 2020 Final Rule added an early assessment process for test procedures and generally committed that DOE would adopt consensus industry test procedures unless not consistent with EPCA. Consistent with other amendments in that rule,

this section was also amended to require that DOE finalize a test procedure 180 days in advance of a standards proposal. The December 2021 Final Rule clarified that DOE may revise consensus industry test procedure standards for compliance, certification, and enforcement purposes, and revised application of the 180-day period to apply to the period between finalization of a test procedure and close of the comment period of a standards proposal (rather than publication of the proposal).

(9) *ASHRAE Equipment*—This section was created by the February 2020 Final Rule and describes the process DOE will follow for conducting rulemakings for equipment subject to the "ASHRAE trigger" provisions in EPCA that apply when ASHRAE Standard 90.1 is amended with respect to standards, test procedures, or design requirements applicable to such equipment. The April 2024 Final Rule added provisions to clarify application of the 6- and 7-year-lookback provisions for periodic review of standards and test procedures for ASHRAE equipment.

(10) *Direct Final Rules*—This section was established in the February 2020 Final Rule and describes how DOE would comply with EPCA requirements specific to publication of direct final rules, including the Department's interpretation of the term "fairly representative of relevant points of view" as it applies to interested stakeholders. It also stated that a negotiated rulemaking may not result in a direct final rule. The December 2021 Final Rule amended this section to clarify that DOE will implement its direct final rule authority under EPCA on a case-by-case basis including its evaluation of the meaning of "fairly representative", subject to the circumstances of a particular rulemaking. It also removed the prohibition on a negotiated rulemaking culminating in a direct final rule.

(11) *Principles for Distinguishing Between Effective and Compliance Dates*—This section was established in the February 2020 Final Rule and provides clarification as to the distinction between the effective and compliance dates of a final rule. This section has not been amended since its original establishment.

(12) *Principles for the Conduct of the Engineering Analysis*—This section was established in the July 1996 Final Rule, and other than minor editorial changes, was not substantively amended in subsequent rulemakings.

(13) *Principles for the Analysis of Impacts on Manufacturers*—This section was established in the July 1996 Final Rule, and other than minor editorial changes, was not substantively amended in subsequent rulemakings.

(14) *Principles for the Analysis of Impacts on Consumers*—This section was established in the July 1996 Final Rule, and other than minor editorial changes, was not substantively amended in subsequent rulemakings.

(15) *Consideration of Non-Regulatory Approaches*—This section was established in the July 1996 Final Rule and identifies how DOE will consider the effects of non-regulatory efforts by manufacturers, utilities, and other interested parties to produce substantial efficiency improvements. Revisions in the February 2020 Final Rule removed a section discussing the Department's pursuit of voluntary programs where it appears that highly efficient products can obtain a significant market share but that less efficient products cannot be eliminated altogether because, for instance, of unacceptable adverse impacts on a significant subgroup of consumers.

(16) *Cross-Cutting Analytical Assumptions*—This section was established in the July 1996 Final Rule and sets outs the sources and general principles that DOE expects to

continue relying upon in selecting values for certain cross-cutting analytical assumptions. This section was amended in the February 2020 Final Rule to specify that DOE would 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 well as a 9-year regulatory timeline as a sensitivity case. That rule also specified that DOE will endeavor to use robust price forecasting techniques in projecting future prices of products.

On April 17, 2025, DOE published in the *Federal Register* an RFI seeking comments and information from interested parties to assist DOE in identifying potential modifications to its Process Rule ("April 2025 RFI"). 90 FR 16093. DOE received comments in response to the April 2025 RFI from the interested parties listed in Table II.1.

Table II.1 Commenters with Written Submissions in Response to the April 2025 RFI

Commenter(s)	Abbreviation	Comment No. in the Docket	Commenter Type
AHRI, AMCA, AHAM, CTA, HPBA, HARDI, NAM, NAMA, NAFEM, NEMA, PHCC, PMI, PTI[5]	Joint Commenters	24	Trade Associations
Air Conditioning Contractors of America	ACCA	38	Trade Association
Air-Conditioning, Heating, and Refrigeration Institute	AHRI	28	Trade Association
American Gas Association, American Public Gas Association, National Propane Gas Association	Joint Gas Associations	25	Utility Associations
American Public Power Association	APPA	20	Utility Association
Anonymous	Anonymous	4	Individual
Anonymous	Anonymous	5	Individual
Anonymous	Anonymous	6	Individual
Anonymous	Anonymous	10	Individual

[5] The Air-Conditioning, Heating, and Refrigeration Institute (AHRI); Air Movement and Control Association (AMCA) International; Association of Home Appliance Manufacturers (AHAM); Consumer Technology Association (CTA); Hearth, Patio & Barbecue Association (HPBA); Heating, Air-Conditioning, Refrigeration Distributors International (HARDI); National Association of Manufacturers (NAM); National Automatic Merchandising Association (NAMA); North American Association of Food Equipment Manufacturers (NAFEM); National Electrical Manufacturers Association (NEMA); Plumbing-Heating-Cooling Contractors Association (PHCC); Plumbing Manufacturers International (PMI); and Power Tool Institute (PTI)

Appliance Standards Awareness Project, American Council for an Energy-Efficient Economy, Consumer Federation of America, National Consumer Law Center	Joint Advocates	31	Advocates
ASHRAE	ASHRAE	12	Trade Association
AUX Air USA	AUX	7	Manufacturer
Bradford White Corporation	BWC	34	Manufacturer
Burnham Holdings, LLC	BHI	16	Manufacturer
Ceres, Inc.	Ceres	22	Advocates
Don Voight	Voight	3	Individual
Edison Electric Institute	EEI	35	Utility Association
Hawaii State Energy Office; Washington State Department of Commerce	State Agencies	33	State Agencies
Heidi King Consulting	Heidi King Consulting	30	Consultant
Lennox International Inc.	Lennox	26	Manufacturer
Manufactured Housing Institute	MHI	21	Trade Association
Mark Strauch	Strauch	18	Individual
National Association of Home Builders	NAHB	19	Trade Association
National Electrical Manufacturers Association	NEMA	23	Trade Association
National Multifamily Housing Council and National Apartment Association	NMHC and NAA	29	Trade Association
National Rural Electric Cooperative Association	NRECA	17	Utility Association
North American Association of Food Equipment Manufacturers	NAFEM	13	Trade Association
Northwest Energy Efficiency Alliance	NEEA	36	Advocates
ONE Gas, Inc.	ONE Gas	37	Utility
Pacific Gas and Electric Company; San Diego Gas and Electric; Southern California Edison	CA IOUs	32	Utilities
Pool & Hot Tub Alliance	PHTA	27	Trade Association
Rinnai America Corporation	Rinnai	11	Manufacturer
Solaray Corporation	Solaray	8	Manufacturer
Teresa Sabol Spezio, PhD, PE	Spezio	9	Individual
The Rehancement Group, Inc.	TRG	2	Consultant
WM Technologies LLC	WM Technologies	14	Manufacturer
Zero Zone, Inc.	Zero Zone	15	Manufacturer

A parenthetical reference at the end of a comment quotation or paraphrase provides the location of the item in the public record.[6]

DOE received one comment pertaining to issues outside of the scope of this rulemaking and which, therefore, are not addressed in this document.[7]

III. Discussion of General Comments

A. General Support for or Opposition to Standards

A number of commenters indicated general support for existing energy conservation standards. (Anonymous, No. 4 at p. 1; Anonymous, No. 6 at p.1; Ceres, No. 22 at p. 6; Lennox, No. 26 at p. 1; Rinnai, No. 11 at p. 2)

An individual commented that existing energy conservation standards still allow for a significant number of choices for consumers. (Anonymous, No. 6 at p. 1) Another individual commented that energy conservation standards drive engineering innovation, including for lighting and water-using products. (Anonymous, No. 3 at p. 1)

Several individuals commented on operating cost savings associated with energy conversation standards. An individual commented that energy efficient appliances reduce operating costs for consumers and asked DOE to continue enforcing standards. (Anonymous, No. 3 at p. 1) The individual also suggested DOE review studies documenting the value of energy conservation standards. (Anonymous, No. 3 at p. 1) Another individual commented that less-efficient appliances will cost consumers more to operate regardless of energy source or price and that DOE should continue to establish energy conservation standards to save consumers money. (Anonymous, No. 9 at p. 1) A third individual commented that E.O.

---

[6] The parenthetical reference provides a reference for information located in this rulemaking docket, Docket No. EERE-2025-BT-STD-0001, which is maintained at: *www.regulations.gov*. The references are arranged as follows: (commenter name, comment docket ID number at page of that document).

[7] (TRG, No. 2 at pp. 1-4).

14154 is focused on reducing energy costs and burdens on consumers and that increasing energy efficiency is one of the best ways to reduce energy costs for consumers. The individual also commented that regulations should be backed by strong data and analysis and that research demonstrates that the energy savings associated with standards can be worth it, even if there is a higher up-front cost. (Anonymous, No. 10 at pp. 1-2).

Lennox commented to support the goals of DOE's appliance efficiency program to maximize improvements in energy savings for consumers that are technologically feasible and economically justified for finished products at the system level. (Lennox, No. 26 at p. 1).

Rinnai commented to support national energy efficiency standards and the principle of Federal preemption, which prevents State-level mandates that would destabilize markets and erode consumer choice. (Rinnai, No. 11 at p. 2).

An individual expressed opposition to energy conservation standards, commenting that efficiency standards have had a negative impact on reliability and that it would be preferable to have greater choice for lighting and appliances. (Anonymous, No. 5 at p. 1).

In response, DOE is not making any proposals with respect to the Appliance Standards Program itself, but instead, the Department is proposing certain revisions to the process by which it carries out its obligations under EPCA to adopt new or revised energy conservation standards and test procedures, as discussed in section IV of this document.

B. General Support for or Opposition to Changes to the Process Rule

This section discusses the comments in general support for or opposition to revising the current Process Rule. Specific comments related to specific Process Rule revisions are discussed in section IV of this document.

Several commenters expressed general support for revising the current Process Rule, as discussed in the following paragraphs.

BHI commented that DOE's existing rulemaking process is opaque, overly complex, and subject to agenda-driven manipulation. The commenter added that the resulting rules are often delayed, based on flawed analysis, and poorly documented, and that they impose undue regulatory burden and uncertainty on the industry, while leaving DOE open to litigation. (BHI, No. 16 at p. 2) BHI attached comments submitted to previous rulemakings[8] to illustrate the need for revisions. (BHI, No. 16 at pp. 1-2) BHI acknowledged that implementing the Process Rule changes as changes recommended in their comments for periodic reviews of standards as required under EPCA would likely result in an increased frequency with which new standards cannot be justified for a particular product. According to the commenter, increasing standards for a particular product over time results in an appliance's efficiency approaching its theoretical limit, thereby suggesting that previous standards have done what EPCA intended; any process for standard setting should account for the reality that trivial energy gains will result in cost increases to consumers that yield little to no real-world payback by way of decreases in utility bills. (BHI, No. 16 at p. 6)

The Joint Commenters stated that the Process Rule should be clear, transparent, and reflect stakeholder consensus so that it will not be subject to policy swings by changing Administrations. (Joint Commenters, No. 24 at p. 3).

[8] BHI attached previously submitted comments that were summarized as part of the rulemakings corresponding to the following dockets: Docket EERE 2019-BT-STD-0036, EERE-2021-BT-STD-003, EERE-2018-BT-STD-0018 related to Boilers, the Process Rule, and Non-Condensing Technology, respectively.

The Joint Gas Associations commented that the Process Rule should be revised to ensure protection of consumer choice, promote market competition and innovation, maintain fuel neutrality, and reduce regulatory burdens. (Joint Gas Associations, No. 25 at p. 7).

NRECA commented in support of DOE's efforts to revise the Process Rule in ways that would lead to more common sense outcomes when updating energy conservation standards. NRECA added that the Process Rule should be revised to enhance consumer choice and affordability. (NRECA, No. 17 at p. 2).

Rinnai commented that the Process Rule should be revised to ensure discipline, transparency, and public accountability. (Rinnai, No. 11 at p. 3).

DOE also received comments generally supporting revisions to return, fully or partially, to the Process Rule as amended at the beginning of 2020 (*i.e.*, the "2020 Process Rule"), as further discussed in the following paragraphs.

BHI, MHI, WM Technologies and Zero Zone commented that DOE should return to the 2020 Process Rule. (BHI, No. 16 at p. 2; MHI, No. 21 at p. 2; WM Technologies, No. 14 at pp. 1, 3; Zero Zone, No. 15 at p. 1). MHI noted that standards for water heaters, gas furnaces, showerheads, electric spas, and freezers would have been avoided with the 2020 Process Rule. (MHI, No. 21 at p. 2).

AHRI, BWC, the Joint Commenters, and Lennox commented in support of revising the Process Rule and of any changes largely consistent with the 2020 Process Rule. (AHRI, No. 28 at p. 1; BWC, No. 34 at p. 1; Joint Commenters, No. 24 at p. 2; Lennox, No. 26 at p. 2) Specifically, Lennox stated that they support re-instituting the five key Process Rule measures from the 2020 Process Rule: (1) DOE's compliance with the Process Rule must be mandatory and binding on DOE; (2) test procedures should be finalized by DOE 180 days

before proposing new energy conservation standards; (3) reasonable and mandatory minimum public comment periods should be provided; (4) minimum threshold values for significant energy savings should be reinstated; and (5) comparative analysis across trial standard levels should be reinstated. (Lennox, No. 26 at p. 2). BWC added that the 2020 Process Rule was not a "one-size-fits-all" approach and provided DOE with extensive regulatory flexibility. (BWC, No. 34 at p. 3).

Several commenters opposed changes to the current Process Rule and generally stated that the current Process Rule is adequate. (Joint Advocates, No. 31 at p. 1; State Agencies, No. 33 at pp. 1-2; Ceres, No. 22 at p. 6; Anonymous, No. 4 at p. 1).

The Joint Advocates added that the current Process Rule already provides detailed rulemaking guidance that addresses the topics discussed in the April 2025 RFI. For example, the Joint Advocates argued that the current Process Rule already includes consumer choice and market competition and innovation protections; it also considers manufacturer impacts, including regulatory burden, and it provides detailed guidance on cost and benefit analysis and the public comment and review process. (Joint Advocates, No. 31 at p. 1).

The State Agencies added that the current Process Rule appropriately provides guidance and should not be modified. The State Agencies argued that repeated changes to the Process Rule have led to market uncertainty. In addition, the State Agencies further argued that any changes to the Process Rule would increase regulatory burden and recommended that DOE should not pursue any further rulemakings related to Process Rule, including a separate analytical methodology RFI. (State Agencies, No. 33 at pp. 1-2).

An individual commented that there was a lack of evidence to suggest that there are substantial flaws in existing rules or the current process to establish them. (Anonymous, No. 4 at p. 1).

AUX stated that the current Process Rule is essential to fostering innovation, ensuring affordable and environmentally-friendly products, and balancing regulatory certainty and flexibility for manufacturers without overburdening manufacturers. AUX added that the existing Process Rule has driven innovation in residential HVAC, leading to more-efficient products that often exceed standards and providing significant cost savings to consumers. (AUX, No. 7 at pp. 1-2).

The CA IOUs stated that they support the objectives of the Process Rule and recommended that any changes should enhance these goals while aligning with EPCA's purpose of achieving cost-effective energy savings. The CA IOUs emphasized the importance of maintaining flexibility to address appliance-specific issues, complying with EPCA and the Administrative Procedure Act, and ensuring equitable implementation. The commenters suggested that DOE should evaluate issues on a case-by-case basis within the context of each individual rulemaking rather than being pre-determined by a set of generalized assumptions. The CA IOUs further cautioned against frequent changes to the Process Rule, which create uncertainty, instead urging DOE to prioritize consistency and to focus on improvements grounded either in established practices or ones widely supported by stakeholders. (CA IOUs, No. 32 at pp. 1-2).

NEEA commented that DOE should maintain a consistent Process Rule to provide a predictable and accessible regulatory process and prevent additional regulatory burden. (NEEA, No. 36 at p. 1).

In response, DOE has reviewed the current Process Rule, the 2020 Process Rule, and the general comments received in response to the April 2025 RFI. Based on this review and an evaluation of comments received on specific Process Rule topics, DOE is proposing revisions to the current Process Rule to return largely to the 2020 Process Rule with some modifications, as discussed in further detail in section IV of this document.

IV. Discussion of Comments and Proposed Revisions to Individual Sections of the Process Rule

The following sections discuss comments received relating to individual sections of the Process Rule, DOE's responses, and the proposed revisions to the Process Rule. DOE requests comments, data, and information regarding these proposals and all aspects of this notice of proposed rulemaking.

A. Objectives (Section 1)

This section was established in the July 1996 Final Rule and lays out the overall purpose of the Process Rule and its specific provisions. The February 2020 Final Rule made various editorial changes to this section. The December 2021 Final Rule added support for proposals developed in accordance with the Negotiated Rulemaking Act (5 U.S.C. 561 *et seq.*).

DOE did not receive any comments specific to the Objectives section of the Process Rule, other than general comments related to negotiations, as discussed in section IV.K of this document.

As discussed in the April 2025 RFI, DOE requested information to ensure consistency with recently issued Executive orders while continuing to satisfy the Department's statutory obligations. 90 FR 16093 (April 17, 2025). Consistent with this

goal, DOE is proposing to include a new section in the Objectives section of the Process Rule to clearly specify the Department's goals of preserving availability of 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 the Secretary's finding as prescribed by EPCA. Such goals also safeguard the American people's freedom to choose from a variety of goods and appliances (including but not limited to lightbulbs, dishwashers, washing machines, gas stoves, water heaters, toilets, and shower heads); promote market competition and innovation within the manufacturing and appliance industries; ensure that the global effects of a rule, regulation, or action shall, whenever evaluated, be reported separately from its domestic costs and benefits (energy savings and efficiency), in order to promote sound regulatory decision making and prioritize the interests of the American people; and guarantee opportunities for public comment and rigorous, peer-reviewed scientific analysis. (42 U.S.C. 6295(o)-(p)). These objectives also support the policies specified in Executive Order 14154.

Consistent with the statutory requirements of EPCA, DOE additionally has the goal of eliminating counterproductive requirements that raise the costs of home appliances.[9] DOE is proposing to include this goal within the objectives section of the Process Rule.

B. Scope (Section 2)

This section was established in the July 1996 Final Rule and identifies the types of rulemakings to which the Process Rule applies. This section was amended in the February 2020 Final Rule to clarify that the Process Rule applies to both covered consumer products

[9] *See* "Delivering Emergency Price Relief for American Families and Defeating the Cost-of-Living Crisis" (Available at: *https://www.whitehouse.gov/presidential-actions/2025/01/delivering-emergency-price-relief-for-american-families-and-defeating-the-cost-of-living-crisis/*).

and commercial and industrial equipment, except covered ASHRAE equipment, which is governed separately under section 9 of the appendix.

The Joint Gas Associations stated that a revised process Rule should apply to both consumer products and industrial and commercial equipment, except for ASHRAE equipment. (Joint Gas Associations, No. 25 at p. 30).

In response, DOE notes that the current Process Rule has this same scope as recommended by Joint Gas Associations, with ASHRAE covered separately in its own section. DOE is not proposing any revisions to the Scope section of the Process Rule.

C. Application (Section 3)

This section was added to the Process Rule by the February 2020 Final Rule and specified that the Process Rule would be binding on DOE. This section was subsequently amended in the December 2021 Final Rule to provide DOE with discretion to depart from the general guidance in Appendix A when it deems it necessary or appropriate to do so, with the stipulation that DOE will provide interested parties with notice of the deviation and an explanation.

In the April 2025 RFI, DOE requested comments on whether reintroducing a provision making the Process Rule mandatory would better enable the Department to comply with its obligations under the statute and applicable Executive orders. 90 FR 16093, 16100 (April 17, 2025).

In response to the April 2025 RFI, many commenters supported mandatory application of the Process Rule, generally to provide certainty to stakeholders. (Joint commenters, No. 24 at p. 3; AHRI, No. 28 at p. 13; Joint Gas Associations, No. 25 at pp. 7, 10-11; ASHRAE, No. 12 at p. 2; BWC, No. 34 at p. 1; MHI, No. 21 at p. 3; NAHB, No. 19

at p. 5; NEMA, No. 23 at pp. 2-3; NAFEM, No. 13 at p. 7; ONE Gas, No. 37 at p. 2; Rinnai, No. 11 at pp. 3, 11-12; WM Technologies, No. 14 at p. 3; Zero Zone, No. 15 at p. 3; BHI, No. 16 at p. 2) AHRI and BHI noted that mandatory application should reduce litigation risk. (AHRI, No. 28 at p. 13; BHI, No. 16 at p. 2).

Several of the commenters supporting mandatory application also acknowledged that some changes or flexibility may need to be included. PHTA stated that some areas should have well thought out deviations. (PHTA, No. 27 at p. 1) The Joint Commenters stated that any flexibility needed should be built into the rule. (Joint Commenters, No. 24 at p. 3) NAFEM stated that its recommended revisions should be included if the rule becomes mandatory. (NAFEM, No. 13 at p. 7) Lennox stated that if made binding, the Process Rule should require DOE to actively explore negotiated rulemakings for all major new standards. (Lennox, No. 26 at pp. 11-12).

In addition, Zero Zone emphasized the value of public comment in making any changes to the Process Rule. (Zero Zone, No. 15 at p. 3) BHI suggested that Congress should cement this rule as law to avoid the pendulum swinging between Administrations. (BHI, No. 16 at p. 2).

Two commenters opposed mandatory application of the Process Rule. The Joint Advocates stated that an overly rigid approach could result in missed energy and water savings opportunities, delay rulemakings, and increase potential for procedural litigation. (Joint Advocates, No. 31 at p. 4) The State Agencies stated that flexibility is needed, and that making the Process Rule mandatory would increase regulatory burden. They noted that if the Process Rule is to be made mandatory, additional opportunities for public comment

should be provided to make sure all potential provisions are carefully considered. (State Agencies, No. 33 at p. 2).

Upon review, DOE has tentatively determined that there is a reasonable basis for making the Process Rule binding for certain actions, while retaining greater flexibility for other actions. Any ECS-related action undertaken by DOE must adhere to the requirements outlined by EPCA. *See* 42 U.S.C. 6295; 42 U.S.C. 6311-6313. When the Secretary must make a statutory determination (*e.g.*, regarding whether to regulate; or whether a proposed standard is technologically feasible and economically justified; or whether the benefits of a proposed standard exceed its burdens), DOE may offer the public additional transparency regarding circumstances when the Department will follow the requirements under EPCA more narrowly or will follow additional procedures. The Secretary has discretion under EPCA to implement additional procedures in support of careful consideration of statutory factors that weigh heavily in his determinations.

In the Process Rule, DOE is proposing that all procedures for regulatory actions (actions that may increase ECS stringency relative to existing requirements) will be binding requirements for the Department, which will provide much-needed certainty to stakeholders and will reflect the Secretary's careful consideration and weighing of the balancing factors for economic justification and other requirements under EPCA. (See 42 U.S.C. 6295(o)). This approach recognizes, per EPCA, that regulatory changes often increase manufacturer costs and usually result in the need for design modifications that necessitate substantial investments of engineering resources, production line conversions, and other related manufacturing alterations or revisions to testing regimes. (*See* 42 U.S.C. 6295(o)(2)(B)(i), (m)). EPCA acknowledges the time, detailed analysis, and notice required in prescribing new

or amended standards by establishing a minimum allowable period between further regulatory rulemakings; clearly articulated factors for a determination of economic justification; and required procedures for notice, comment, and transparency of record. (*See* 42 U.S.C. 6295(*l*), (m), (o), (p)). It behooves DOE to proceed with caution when enacting efficiency standards that may adversely affect consumers by pricing them out of the market for new or replacement appliances or eliminating useful characteristics of covered products. (*See* 42 U.S.C. 6295(o)(2)(B)(i)). New standards are also likely to present more challenges when evaluating economic effects, including lack of pertinent data on consumer response and reliance on assumptions. When reweighing evidence in other actions, such as for certain deregulatory actions, however, hindsight may provide a wealth of information. Moreover, DOE must meet strict evidentiary standards when issuing rules, including more stringent energy conservation standards, under 42 U.S.C. 6293, 6294, or 6295. Under 42 U.S.C. 6306(b)(2), when petitioned by an aggrieved party, a court may not affirm a ule unless DOE's rule is supported by "substantial evidence." Likewise, 42 U.S.C. 6313(b)(6)(A)(ii)(II) requires "clear and convincing evidence" to support a heightened standard for certain commercial equipment. This is true even when the Department has limited information to evaluate such complex factors as "the economic impact of the standard on the manufacturers and on the consumers of the products" and a comparison of the "operating costs throughout the estimated average life of the covered product" against "any increase in the price . . . or maintenance expenses of[] the covered products" with respect to products that may not be brought to market until some years after the regulatory action is finalized. (42 U.S.C. 6295(o)(2)(B)(i); *see, e.g.*, *id.* 42 U.S.C. 6295(*l*)(2), (m)(4), (n)(5)

(requiring delays of up to five years before new standards may be enforced on manufacturers))

As noted previously and as EPCA acknowledges, regulatory actions typically justify the need for early stakeholder involvement and ample opportunities for public input. That is why it is crucial that DOE regulatory actions provide sufficient opportunity for public input so that stakeholders have adequate time to analyze and provide thoughtful comments, data, and information to the agency before it finalizes a proposed regulatory action. Not only does a properly structured process provide regulatory certainty and prevent the imposition of unnecessary or unjustified costs on manufacturers, but it also ensures that consumers do not face excessive costs or the loss of important performance-related features. This holds true for both energy conservation standards and test procedure rulemakings, because if a test procedure does not properly measure a covered product's energy efficiency or energy use, energy conservation standards may be set at an inappropriate level. And it is important to remember that EPCA establishes the minimum requirements to issue new rules. For example, EPCA requires a comment period of not less than 60 days for proposed standards and test procedures. (42 U.S.C. 6295(p)(2), 6293(b)(2)). But there is no maximum comment period limit for a proposed standards rule and the limit for a proposed test procedure rule is 270 days. *Id.* Similarly, EPCA only requires that DOE publish a notice of proposed rulemaking before issuing a final rule or final determination not to amend standards. (42 U.S.C. 6295(p)(1)). But again, that is the minimum requirement. And while these procedural requirements may be sufficient for revisiting a determination not to amend standards that was made less than 3 years ago in a market where there has been no technological advances in efficiency, for all the reasons discussed previously, a more

comprehensive, structured process is warranted before implementing rules that impose new obligations and costs on regulated parties and consumers. Consequently, the proposed Process Rule sets forth procedural elements (including early assessment opportunities and preliminary documents), temporal spacing between key elements, and minimum comment periods to facilitate rulemakings that are robust and best meet all applicable statutory requirements. Making these procedures binding on DOE would further safeguard the achievement of these important objectives. While DOE acknowledges the concerns raised by some commenters about an overly rigid approach, the Department has tentatively determined that the Process Rule, as proposed to be amended in this NOPR, contains sufficient flexibility to address those stakeholder concerns.

Certain actions, in contrast, may present a very different set of situations that may warrant a different approach and may not necessitate the same level of advance outreach, lengthened comment periods, or lead time, as compared to regulatory actions. In some circumstances, where DOE determines that deregulation is appropriate, it may be that DOE has recognized, with the benefit of hindsight and additional real-world information gathered as a new standard or test procedure is implemented, or a test procedure later determined to be unduly burdensome to conduct (in violation of 42 U.S.C. 6293(b)(3) or 42 U.S.C. 6314(a)(2)). In such instances, consumers may experience a reduction in product choice, a loss of valuable features, and/or an unjustified increase in first costs. Alternatively, an unanticipated change in market conditions or error in analysis may result in hardships or barriers to compliance for manufactures. Deregulatory actions are intended to remedy these suboptimal outcomes, and in some cases, DOE does not believe that there is the same need for procedural protections for deregulatory actions as there is for regulatory actions, for the

reasons that follow. Over time, DOE has exercised discretion in expediting certain deregulatory actions. For example, DOE has conducted test procedure rulemakings on an expedited timeline to address limited-scope issues (*e.g.*, the rulemaking to amend test cloth specifications for clothes dryer and clothes washer testing was initiated with a NOPR[10] and did not have a pre-proposal document).

First, deregulatory actions are not likely to require costly changes to manufacturing lines or production facilities, as would be expected to accompany more stringent standards. In contrast to regulatory actions, deregulation may reduce costs, and potential savings may trickle down to consumer, especially in highly competitive markets. A newly deregulated area frees industry from associated compliance mandates and presents more business options, which will of course entail the independent weighing of potential costs and benefits by industry before taking action. Second, because deregulatory actions open up new, less burdensome options to manufacturers (and indirectly to consumers), those same procedural safeguards (*e.g.*, preliminary documents, required spacing of rulemaking steps, and extended comment periods) may not be necessary. With the increased flexibility that comes from deregulation, industry and consumers may choose to maintain course or adjust, but are not compelled to take any action, unlike with regulatory actions, which by their nature limit choice and force action. Furthermore, DOE believes that there is also a temporal element to deregulatory actions, in that there is value in providing substantive relief to consumers and manufacturers as soon as possible. Accordingly, following all of the procedural steps proposed in the Process Rule would in certain circumstances run counter to providing deregulatory relief as soon as possible. Finally, DOE may choose to add to the standards

[10] See 89 FR 87803 (Nov. 5, 2024), which led to a final rule publication at 90 FR 5519 (Jan. 17, 2025).

determination process thresholds rooted in EPCA's required considerations for economic justification. When those thresholds, which reflect the Secretary's discretion in weighing EPCA's balancing factors, indicate a determination not to further regulate, DOE may consider that analysis sufficient under the requirements of EPCA and may choose to forego more detailed analyses. (42 U.S.C. 6295(o)). Though such an action is not deregulatory, it offers the kind of certainty and timely notice contemplated by EPCA, and these considerations may outweigh the additional procedural steps merited for increases in stringency. Consequently, DOE proposes not to make all Process Rule provisions binding on the Department for actions that are not likely to increase stringency for affected entities (*e.g.*, certain deregulatory actions or determinations not to further regulate). In such instances, the Department may choose to apply those provisions as may be appropriate in any particular action so as to maintain flexibility and to provide relief without undue delay in appropriate cases.

Moreover, in contrast to a regulatory action imposing new standards that will result in estimated, but uncertain, impacts on the market, it will often be the case that DOE has a wealth of information to rely on in making a deregulatory decision with respect to a test procedure or standard under consideration. Both the Department and stakeholders will have data and experience gathered during the implementation of an existing standard that will provide greater certainty without the need for an extended period of evidence building and development of estimates and projections.

DOE has not identified any statutory or other legal impediments to a bifurcated approach to the binding nature of the Process Rule that distinguishes between regulatory and other actions. DOE has discretion to set its own procedures for conducting rulemaking

proceedings, as long as such procedures also incorporate any relevant statutory requirements set forth in EPCA (*e.g.,* a minimum 60-day comment period for NOPRs). In crafting those procedures, DOE is at liberty to tailor those procedures to address identified concerns (as discussed previously) or to provide a more flexible and expedited process where the same concerns are not found to exist.

It is DOE's view that this approach would allow DOE to best meet the statutory requirements of EPCA, including preventing the unavailability of performance-related features. (42 U.S.C. 6295(o)(4)). DOE also believe that this approach is consistent with numerous comments on the April 2025 RFI which generally supported mandatory application of the Process Rule but acknowledged the potential need for flexibility in certain situations. Furthermore, this approach is consistent with the objectives set forth in various Executive orders and Presidential memoranda. For example, section 2(f) of Executive Order (E.O.) 14154, "Unleashing American Energy," 90 FR 8353 (Jan. 29, 2025), states that it is the policy of the United States to safeguard the American people's freedom to choose from a variety of goods and appliances, including but not limited to lightbulbs, dishwashers, washing machines, gas stoves, water heaters, toilets, and shower heads, and to promote market competition and innovation within the manufacturing and appliance industries. In addition, the Presidential memorandum titled "Delivering Emergency Price Relief for American Families and Defeating the Cost-of-Living Crisis," 90 FR 8245 (Jan. 28, 2025), directs agencies to take appropriate actions to, among other things, "eliminate counterproductive requirements that raise the cost of home appliances."

In summary, DOE has tentatively concluded that a bifurcated approach to the binding nature of the Process Rule which distinguishes between regulatory and other actions would

be appropriate for several reasons. DOE believes that it best suits the Department's model outcome for deregulatory situations, in that it would allow DOE to provide expedited relief to stakeholders in terms of cost savings, reduced regulatory burdens, and protection of performance-related features. Along these lines, it would also be consistent with the views of many commenters and would allow DOE to implement what it believes is the best reading of the statutory provisions of EPCA, including applicable evidentiary standards, as well as practical differences between regulatory and deregulatory actions such as informational asymmetries. It would also support the Administration's priorities in terms of advancing appliance affordability and preserving consumer choice.

As such, DOE proposes to revise section 3 of the Process Rule to specify its mandatory application as described in this section. DOE requests comment on this proposal and on any alternate approaches to mandatory application that best achieve transparency and opportunities for public comment while allowing for flexibility for certain deregulatory actions.

D. Setting Priorities for Rulemaking Activity (Section 4)

This section was established in the July 1996 Final Rule and identifies the factors that DOE applies when determining its regulatory plans and formulation of inputs for the Regulatory Agenda. This section was amended in the February 2020 Final Rule to specify that DOE would 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.

In the April 2025 RFI, DOE generally requested comments and information on whether and how the Process Rule should be amended to specify rulemaking prioritization and timelines, consistent with EPCA's requirements. 90 FR 16093, 16100 (April 17, 2025).

The Joint Advocates stated that the current Process Rule already describes the prioritization process for rulemaking activity, so no amendment is needed. (Joint Advocates, No. 31 at p. 4).

The State Agencies stated that EPCA already establishes timelines for standards to be revised. The State Agencies added that the current Process Rule allows for reasonable timelines, and that the Process Rule should not be amended to provide specific rulemaking prioritization and timelines. They further stated that any potential changes must be justified by DOE after thorough consideration of impacts and burdens. (State Agencies, No. 33 at p. 2).

The Joint Gas Associations stated that DOE should focus on the potential energy savings and the potential economic benefits as an initial screen for determining its priorities. The Joint Gas Associations argued that such focus is important, because if DOE 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. The Joint Gas Associations also supported stakeholder input in the rulemaking process and with regard to setting priorities, and they stated that commenting on the Regulatory Agenda would provide stakeholders with a chance to weigh in on these priorities. (Joint Gas Associations, No. 25 at pp. 35-36).

Upon review, DOE has tentatively determined that DOE's statutory review requirements and the current Process Rule adequately describe the prioritization setting framework as recommended by commenters. Specifically, DOE is statutorily required to

review energy conservation standards and test procedures at intervals specified by EPCA. Additionally, DOE acknowledges the benefits of considering energy savings and potential economic benefits in prioritizing rulemakings, as recommended by the Joint Gas Associations, which are already specified in section 4 of the Process Rule.

As discussed in section IV.A of this document, DOE is proposing to specify that the Department's objectives include protecting consumer choice in covered products and equipment and eliminating counterproductive requirements that increase the costs of appliances. DOE is proposing to include these objectives in the list of factors DOE will consider when establishing rulemaking priorities, and requests comment on their inclusion.

Section 6 of Executive Order 14154 specifies policies for prioritizing accuracy in environmental analyses, specifically instructing that for Federal regulatory processes, "all agencies shall adhere to only the relevant legislated requirements for environmental considerations and any considerations beyond those requirements are eliminated." Consistent with this direction, DOE is proposing to remove the consideration of environmental factors as specified in section 4(a)(2) of the Process Rule and to instead refer to potential social and private costs and benefits.

DOE has also considered the requirement to request comment as DOE begins preparation of its Regulatory Agenda each spring. DOE's rulemaking reviews are largely driven by statutory timelines, with consideration of the factors outlined in section 4 of the Process Rule. DOE's goal is to limit regulatory burden for stakeholders, and the Department has tentatively determined that there is little additional benefit provided by the current request for comment specified in section 4 of the Process Rule. Therefore, DOE is proposing to clarify in the Process Rule that DOE will request comment on rulemaking prioritization

only when circumstances weigh towards doing so. Such circumstances may include Executive Orders or other Administration initiatives or meaningful shifts in policy on which the Department would benefit from broad and early public comment. Consequently, this would move from being a prescriptive annual publication from DOE for stakeholder review to a discretionary action considered on a case-by-case basis, thereby limiting the burden associated with reviewing DOE's rulemaking documents while providing the benefit of public comment when needed. DOE notes that stakeholders may contact DOE regarding rulemaking priorities, independent of a published request for comment.

E. Coverage Determination Rulemakings (Section 5)

This section was established in the February 2020 Final Rule and describes the process DOE would follow to establish coverage for new consumer products and industrial equipment under the applicable statutory criteria of EPCA. Subsequent amendments in the December 2021 Final Rule and April 2024 Final Rule allowed DOE to seek early stakeholder input through preliminary rulemaking documents prior to a proposed coverage determination, removed a previous requirement that final coverage determinations be published prior to the initiation of any test procedure or energy conservation standard rulemaking and at least 180 days prior to publication of a test procedure NOPR, and removed the previously required 180-day period between finalization of DOE test procedures and issuance of a NOPR proposing new or amended energy conservation standards.

In the April 2025 RFI, DOE generally requested comments and information on whether and how the Process Rule should be amended to specify rulemaking prioritization and timelines, consistent with EPCA's requirements. 90 FR 16093, 16100 (April 17, 2025). Timing of coverage determinations falls within the scope of this request.

Lennox commented that DOE should require that coverage determinations be finalized at least 180 days prior to the publication of a TP NOPR for newly-covered products/equipment. The commenter argued that it is a misuse of DOE, manufacturer, and other stakeholder resources to attempt to address substantive regulatory issues until the products have been clearly and specifically defined. (Lennox, No. 26 at p. 11).

Lennox also commented that coverage determination comment periods should be at least 60 days. (Lennox, No. 26 at p. 8-9).

In response, as discussed previously, DOE is largely proposing to revert to the language in the 2020 Process Rule, including for the section on coverage determinations. As mentioned, the 2020 Process Rule required that final coverage determinations be published prior to the initiation of any test procedure or energy conservation standard rulemaking and at least 180 days prior to publication of a test procedure NOPR. DOE understands that the 180 day-period provides regulated entities with both regulatory certainty and time to reallocate capital in preparation for compliance requirements. With regard to the comment period, both the current and 2020 Process Rule include a comment period of at least 60 days, so DOE is not proposing any changes specific to this requirement.

Several commenters discussed the process that they believe DOE should follow to establish coverage for consumer products and industrial equipment, as described in this section. On this topic, Strauch commented that DOE should focus on covered products required by statute under EPCA and not expand coverage to other consumer products and industrial equipment. (Strauch, No. 18 at p. 1).

The Joint Gas Associations supported a Process Rule that limits any expansion of coverage to those narrow circumstances that satisfy the statutory requirements and purpose of EPCA. (The Joint Gas Associations, No. 25 at p. 33).

Lennox and WM Technologies stated that standards should apply to only the finished product/system level, and not to sub-systems or components. Lennox and WM Technologies further stated that component-level regulation increases burden (*e.g.*, regulatory complexity, consumer costs) and/or limits innovation. WM Technologies added that component-level and finished-product-level tests are different from each other and could produce test results that are not compatible. (Lennox, No. 26 at pp. 1, 4-5; WM Technologies, No. 14 at pp. 2-3)

In response, both the current and the 2020 Process Rule state that DOE has discretion to conduct proceedings to determine whether additional products or equipment should be covered or whether to reduce the scope of coverage under EPCA if certain statutory requirements are met, including if such coverage is necessary or appropriate to carry out the purpose of EPCA. Section 5 of appendix A. Furthermore, the statute includes definitions for the terms "consumer product" and "industrial equipment" that determine the product level subject to regulation. Finally, DOE plans to consider issues related to component-level regulation on a case-by-case basis. At this time, DOE does not believe it is necessary to provide additional context with respect to the statutory requirements and is not proposing any additional changes to the Coverage Determination Rulemakings section of the Process Rule.

F. Significant Energy Savings

1. Background

Under EPCA, any new or amended energy conservation standard must result in significant conservation of energy or, in the case of ASHRAE equipment, significant

additional conservation of energy.[11] (42 U.S.C. 6295(o)(3)(B); 42 U.S.C. 6313(a)(6)(A)(ii)(II); 42 U.S.C. 6316(a)). However, EPCA does not define "significant" as it relates to the amount of energy savings projected to result from an energy conservation standard. While DOE has generally addressed the significance of energy savings on a case-by-case basis in the context of individual energy conservation standards rulemakings, DOE has twice established sets of numerical thresholds to determine whether energy savings are significant.

In a final rule published in the *Federal Register* on December 22, 1982, DOE adopted three tests for determining whether an energy conservations standard would result in significant energy savings. 47 FR 57198 (December 1982 Final Rule). The first test deemed energy savings significant if the standard would result in the saving of 10,000 barrels per day (bpd) of oil or the saving of natural gas equivalent to 10,000 bpd of oil over the period of the average life of the product. The second test deemed energy savings significant if the standard would result in the saving of one percent of national electricity use over the period of the average life of the product. The third test deemed energy savings significant if the standard would reduce product energy consumption by 16.67 percent. *Id.* at 47 FR 57209. In *Natural Resources Defense Council v. Herrington*, 768 F.2d 1355 (D.C. Cir. 1985), the court held that, while Congress gave DOE considerable discretion to define significant energy savings, DOE's three tests were inconsistent with the purposes of EPCA. *Id.* at 1383.

In 2017, DOE once again initiated inquiry on the topic of a significant energy savings threshold in a request for information (RFI) published in the *Federal Register* on December

[11] For ASHRAE equipment, the baseline for comparison is the potential energy savings from the industry standard (*i.e.*, ASHRAE Standard 90.1). Thus, DOE can only issue a more-stringent standard if the additional energy savings are significant. (*See* 42 U.S.C. 6313(a)(6)(A)(ii)(II)).

18, 2017. 82 FR 59992, 59997. Subsequently, in the February 2019 Process Rule NOPR, DOE proposed a threshold-based analysis for determining whether energy savings are significant. 84 FR 3910, 3923 (Feb. 13, 2019). Subsequent to the February 2019 NOPR, DOE published in the *Federal Register* a notice of data availability (NODA) on July 26, 2019, which presented its energy savings data in terms of site energy usage. 84 FR 36037 (July 2019 NODA).

DOE's proposal generated significant comments both in support and in opposition, with the most salient points presented in the paragraphs that follow. (These comments are summarized in the February 2020 final rule, followed by DOE's responses. *See* 85 FR 8626, 8656-8676 (Feb. 14, 2020).)

Commenters supporting the significant energy savings threshold argued that it would support consistency across energy conservation standards rulemakings, alleviate unnecessary regulatory burdens and uncertainty on industry, assist the Department and industry with resource allocation, and help mitigate consumer cost impacts. *Id.* at 85 FR 8656-8658.

Commenters opposing the significant energy savings threshold argued that it was inconsistent with the *Herrington* decision, that it would sacrifice energy and cost savings, and that any such level would be arbitrary. *Id.* at 85 FR 8658-8662. It was also argued that a simple threshold does not account for the importance of saving energy at different times of day, such as at times of peak grid demand. *Id.* at 85 FR 8660.

After considering comments received and applying a uniform approach with respect to the energy usage examined, DOE decided to adopt a significant energy savings threshold in the February 2020 Process Rule final rule, but it adjusted the numerical value of the threshold to account for concerns raised by commenters. In that rule, DOE adopted two tests

for determining whether an energy conservation standard would result in significant energy savings. The primary test deemed energy savings significant if the standard would result in a 10-percent reduction in site energy use over a 30-year period. *Id.* at 85 FR 8675. The second test deemed energy savings significant if the standard would save 0.3 quads of site energy use over a 30-year period. DOE found that these thresholds would have significantly reduced rulemaking burden over the history of the energy conservation standards program while retaining over 95 percent of the energy savings. *Id.* DOE explained its conclusion that the adopted approach was consistent with the court's holding in *Herrington*. *See id.* at 85 FR 8669. The final rule pointed to that portion of the court's decision in *Herrington* noting that DOE could establish a threshold for significant energy savings as long as the selected level reasonably accommodates the policies of EPCA. *Id.* at 85 FR 8675. This language in the *Herrington* opinion is particularly noteworthy because it provides a judicial interpretation as to the best reading of EPCA vis-à-vis the "significant conservation of energy" provision. Under *Loper Bright Enterprises v. Raimondo*, 603 U.S. 369 (2024), it is the province of Article III courts to determine the best reading of ambiguous statutory provisions. Consequently, the *Herrington* court's pronouncement as to the permissibility of a threshold for significant energy savings suggests that DOE is on firm ground in proposing such a threshold as part of the Process Rule.

However, before these significant energy savings tests were ever utilized in a DOE rulemaking, the Department changed course and eliminated these tests from its regulations in the December 2021 Final Rule, thereby reverting once again to assessing on a case-by-case basis whether a new or amended energy conservation standard would result in significant conservation of energy. 86 FR 70892, 70893 (Dec. 13, 2021). As discussed in the April

2021 Process Rule NOPR, DOE proposed to remove the current numerical threshold for determining whether energy savings are significant for a number of reasons; however, DOE did not claim that establishing a threshold was outside its authority under EPCA. 86 FR 18901, 18905 (April 12, 2021).

In light of E.O. 14154, "Unleashing American Energy," 90 FR 8353 (Jan. 29, 2025), and the Presidential Memorandum of January 20, 2025, "Delivering Emergency Price Relief for American Families and Defeating the Cost-of-Living Crisis," 90 FR 8245 (Jan. 28, 2025), DOE has decided to once again examine the potential for using tests or numerical thresholds in determining whether energy savings from a standard would be significant. Specifically, section 2(f) of E.O. 14154 provides that it is the policy of the United States "to safeguard the American people's freedom to choose from a variety of goods and appliances, including but not limited to lightbulbs, dishwashers, washing machines, gas stoves, water heaters, toilets, and shower heads, and to promote market competition and innovation within the manufacturing and appliance industries." 90 FR 8353, 8353 (Jan. 29, 2025). Furthermore, the Presidential Memorandum of January 20, 2025, in relevant part, orders the heads of all Executive departments and agencies to "eliminate counterproductive requirements that raise the cost of home appliances." 90 FR 8245, 8245 (Jan. 28, 2025).

For these reasons, in the April 2025 RFI, DOE requested comments on ways to reduce regulatory burden, mentioning the threshold value for energy savings as an example of such an opportunity. 90 FR 16093, 16097 (April 17, 2025). DOE received several comments in response to the April 2025 RFI related to whether DOE should establish criteria or thresholds to define the term "significant energy savings." Two commenters opposed adding a significant energy savings threshold. (ASHRAE, No. 12 at pp. 2-3; NEEA, No. 36

at pp. 1-2). ASHRAE stated that there is no widely agreed to definition and that DOE should focus on achieving efficiency improvements on an individual basis, and NEEA stated that smaller incremental jumps are less burdensome and suggested assessing burden on an individual product basis. (*Id*.) Several commenters were supportive of a threshold. (AHRI, No. 28 at p. 11; BWC, No. 34 at pp. 4-5; BHI, No. 16 at pp. 2-3; Joint Gas Associations, No. 25 at p. 27; Lennox, No. 26 at pp. 2-4; MHI, No. 21 at p. 3; Strauch, No. 18 at p. 1; NAHB, No. 19 at p. 4; NEMA, No. 23 at pp. 4-5; NRECA, No. 17 at p. 2; ONE Gas, No. 37 at p. 5; Rinnai, No. 11 at p. 9; Strauch, No. 18 at p. 1; Zero Zone, No. 15 at p. 3) BWC, MHI, NAHB, and NEMA supported the thresholds from the February 2020 Process Rule. (BWC, No. 34 at pp. 4-5; MHI, No. 21 at p. 3; NAHB, No. 19 at p. 4; NEMA, No. 23 at pp. 4-5) Lennox supported a threshold of 0.3 quads or a 5-percent improvement in site energy savings. (Lennox, No. 26 at pp. 2-4) The Joint Gas Associations recommended that DOE utilize source energy when evaluating critical energy policy decisions and include the anticipated reduction of source energy consumption and impact of overall source energy consumption in the market sector, noting that gas products are at a disadvantage when using site savings due to differing site-to-source factors. (Joint Gas Associations, No. 25 at p. 19-21, 27) In addition, the Joint Gas Associations stated that any energy savings associated with fuel switching should not be permitted to be used to justify a standard. (Joint Gas Associations, No. 25 at p. 21).

Energy conservation standards that reduce consumer choice and raise costs while delivering minimal energy savings to the consumer and the Nation are counterproductive as contrary to the statutory considerations outlined in EPCA. Establishing a reasonable, consistent methodology for determining significant energy savings ensures compliance with

both the requirements of EPCA, as well as the policies and objectives set forth in these additional Executive Actions, and is responsive to the majority of stakeholder comments.

2. Proposed Threshold for Significant Energy Savings

One of the complicating factors in establishing tests or thresholds for determining significant energy savings has always been the vast difference in energy use amongst covered products and equipment. For example, the regulated site energy use of covered products and equipment ranges from less than 1 quad over a 30-year period to over 500 quads.[12] In *Herrington*, the court acknowledged that DOE may reasonably regard energy savings as not significant for a high-consumption appliance, even if the same amount would be significant for a low-consumption appliance. *Natural Resources Defense Council v. Herrington*, 768 F.2d 1355, 1376 (D.C. Cir. 1985). As a result, the court held that EPCA does not forbid DOE from setting a significant energy savings threshold as a percentage of the energy consumed by a covered product or equipment, provided that the selected level reasonably accommodates the policies of EPCA. *Id.* Keeping in mind these important considerations, DOE has tentatively concluded that a percentage-based threshold is the best way to reduce regulatory burdens while meeting the policy objectives of EPCA.

As for the specific percentage, DOE agrees with the court in *Herrington* that a significant energy savings threshold must show some awareness of the range of energy savings Congress thought worth pursuing. *Id.* at 1377. Since the inception of the program, DOE has issued 86 rules establishing energy conservation standards for covered products and equipment with a total site energy savings of 83.5 quads.[13] Without a significant energy

[12] The range is based on the standby energy use for microwave ovens compared to the energy use of electric motors.

[13] See supporting table available in *www.regulations.gov/docket/EERE-2025-BT-STD-0001*. This includes final rules published from 1989 to 2025.

savings threshold in place, DOE has generally adopted standards unless the energy savings would be genuinely trivial.[14] For example, DOE has adopted standards that would result in 0.016 (Ceiling Fan light Kits), 0.02 (Microwave Ovens), and 0.044 (Beverage Vending Machines) quads of site energy savings over a 30-year period.[15] Because the criterion for significant energy savings has, therefore, been almost without meaning (other than that trivial energy savings are not significant), DOE has essentially established standards based solely on what is economically justified and technologically feasible under EPCA. As a result, the energy savings from these standards are already close to the upper range of energy savings that is even achievable under EPCA, let alone the amount of energy savings that Congress thought was worth pursuing as "significant."

Knowing that a reasonable threshold for significant energy savings can help achieve the energy conservation objective of EPCA while reducing regulatory burden, DOE evaluated potential energy savings percentage thresholds based on what percentage of energy savings from past standards rulemakings would have been retained under a new, proposed threshold. In conducting this evaluation, however, it rapidly became apparent that it would be difficult to accommodate the policies of EPCA solely using a percentage threshold. For example, on January 17, 2001, DOE published standards for consumer water heaters that were projected to result in 4.6 quads of source energy savings. 66 FR 4474, 4475. However, those energy savings only represented a 4-percent reduction in energy use of consumer water heaters over the analysis period. As a result, similar to the February 2020 Final Rule, DOE is proposing a second threshold that would be based on the cumulative amount of energy saved

[14] *See, e.g., Energy Conservation Program: Energy Conservation Standards for Dehumidifiers*, 81 FR 38338, 38346 (June 13, 2016)(finding energy savings to be nontrivial and, therefore, "significant" within the meaning of section 325 of EPCA).
[15] See supporting table available in *www.regulations.gov/docket/EERE-2025-BT-STD-0001*.

over the 30-year analysis period. The second threshold would account for situations where standards result in significant energy savings in absolute terms that may be achieved through small percentage reductions in energy use for covered products and equipment that use more energy (*e.g.*, water heaters and central air conditioners and heat pumps).

In proposing these thresholds, DOE notes that the choice of site energy vs. source (or primary) energy is important. Site energy consumption refers to energy use at the site of the relevant equipment. For electricity from the grid, source (or primary) energy consumption is equal to the heat content of the fuels used to generate that electricity (which accounts for losses associated with the generation, transmission, and distribution of electricity).
For natural gas, oil, and propane, source energy is equivalent to site energy. Full-fuel-cycle (FFC) energy includes source energy and all energy consumed in extracting, processing, and transporting or distributing primary fuels, which are referred to as upstream activities. For natural gas, FFC energy includes leakage in upstream activities. This distinction is important, as some covered products and equipment may only use a single type of fuel (*e.g.,* central air conditioners and heat pumps (electricity)), while others may use multiple types of fuel (*e.g.,* water heaters (gas, oil, and electricity)). As the National Academies report[16] noted, for products that use multiple fuel types or when more than one fuel can be used for the same application, comparison of just the site energy will lead to incorrect inferences about the potential for energy conservation. The report stated that for these products, measuring full-fuel-cycle energy consumption would provide a more complete picture of energy used, allowing comparison across many different products. Based on ensuring an

[16] National Research Council (2009), *Review of Site (Point-of-Use) and Full-Fuel-Cycle Measurement Approaches to DOE/EERE Building Appliance Energy-Efficiency Standards: Letter Report*. Washington, DC: The National Academies Press (Available at: *www.nationalacademies.org/publications/12670*).

equitable treatment of different energy sources, DOE has tentatively determined that a significant energy savings threshold based on FFC rather than site energy use is appropriate. DOE also notes that a threshold based on FFC energy savings is consistent with DOE's historic practice of presenting projected energy savings from a rule in terms of FFC savings.

Similar to the approach taken in the February 2020 Process Rule final rule, DOE has evaluated how various potential significant energy savings thresholds would have impacted DOE's past rulemakings. 85 FR 8626, 8675 (Feb. 14, 2020). Based on this evaluation, DOE notes that a threshold based on a 10-percent reduction in FFC energy use over a 30-year period or a 2 quad reduction in FFC energy use over a 30-year period would retain 91.5 percent of the energy savings from the program while eliminating 35 percent of the rulemakings (30 of 86 rulemakings).[17] This is a clear indication that establishing a threshold for significant energy savings can yield enormous benefits and reduce burdens without frustrating the energy conservation purposes of EPCA. Manufacturers typically incur significant conversion costs to redesign models for compliance with new or amended standards, and higher production costs associated with amended standards are passed on to consumers as higher up-front purchase costs. As discussed earlier in this paragraph, DOE estimates that without a threshold, 35 percent of DOE's rulemakings have imposed those costs on the market, while contributing to less than 9 percent of the total energy savings from the program.

Further, DOE notes that failure to meet the threshold in a rulemaking for a covered product or equipment does not foreclose the possibility of a future rulemaking for that same

[17] This evaluation is based on the FFC energy savings as presented in the final rules published from 1989 through 2025. The conversion of site to FFC energy use and energy savings varies by rulemaking based on both the energy source considered for the product or equipment at issue and on the site-to-FFC multipliers current at the time of that analysis.

product/equipment achieving significant energy savings. One of the purposes of a threshold for significant energy savings is to prevent a process where DOE amends an energy conservation standard every time there is an incremental improvement in energy efficiency for a covered product or equipment which does not rise to a "significant" level. For example, the 2017 final rule for walk-in coolers and freezers was estimated to save 0.85 quads FFC over 30 years, representing an 8-percent reduction in FFC energy use. 82 FR 31808 (July 10, 2017). These energy savings would not meet the threshold of significant energy savings proposed in this NOPR. However, DOE's next walk-in coolers and freezers final rule published in 2024 was estimated to save 1.6 quads FFC over 30 years, representing a 6-percent reduction in FFC energy use. 89 FR 104616 (Dec. 23, 2024).[18] These values also would not meet the proposed thresholds for significant energy savings, but the combined energy use reduction of the two final rules would represent over 2 quads of FFC energy savings. This example indicates how the proposed energy savings thresholds would allow DOE to continue establishing amended energy conservation standards, when appropriate, while avoiding the burdensome process of the market complying with frequent incremental changes to DOE's standards. DOE has tentatively determined that this balance of achieving significant energy savings while limiting the burden of rulemakings with lower energy savings, either on a percentage or quads basis, ensures that DOE's actions are consistent with EPCA while providing certainty as to how DOE will apply statutory requirements.

Based upon this analysis, DOE proposes to amend the current Process Rule to include the provisions regarding significant energy savings from the 2020 Process rule, but to consider "significant energy savings" as at least a [10]-percent reduction in FFC energy use

[18] This final rule was subsequently withdrawn by DOE on May 20, 2025, after the President signed a resolution of disapproval under the Congressional Review Act. 90 FR 21391.

over a 30-year period or a [2] quad reduction in FFC energy use over a 30-year period. DOE also proposes to add this language specific to ASHRAE equipment and "significant additional conservation of energy" in section 9. DOE requests comment on these proposed thresholds and may also consider alternative thresholds ranging from 5 to 15 percent or from 0.5 quads to 5 quads FFC energy reduction over a 30-year period. These other thresholds and an analysis of their application to past DOE rulemakings can be found in the rulemaking docket.[19] As discussed earlier in this section, DOE has tentatively determined that these proposed thresholds best balance the energy savings associated with the program while limiting the burden associated with rulemakings projected to save less energy, either on a percentage or quads basis. DOE also requests comment on its tentative determination that thresholds should be based on FFC energy use.

As discussed, DOE plans to review its analytical methods for evaluating potential new or amended standards as part of a separate process. To the extent that DOE's analytical methods may change in a way that would impact any eventual energy savings threshold (*e.g.*, analyzing energy savings over a time period other than 30 years), DOE would consider any corresponding adjustments needed to the energy savings thresholds in a subsequent proceeding. DOE requests comment and information on any such alternative analysis and corresponding adjustments, either as part of this proceeding or the separate proceeding focusing on analytical methodologies.

DOE also recognizes that EPCA established separate sections for consumer products and for certain industrial equipment,[20] recognizing the distinct uses and markets for these categories of equipment and products. Additionally, the model redesign cycles and product

[19] See supporting table available in *www.regulations.gov/docket/EERE-2025-BT-STD-0001*.
[20] 42 U.S.C. 6291-6309 and 42 U.S.C. 6311-6317, respectively.

and equipment lifetimes also may be distinct between these categories, impacting the tradeoff of energy savings and burden associated with amended standards. DOE may consider an alternate approach under which it establishes different thresholds for covered products and equipment. To illustrate that approach, for example, DOE could alternatively specify that "significant energy savings" for covered products means at least a 10-percent reduction in energy use over a 30-year period or a 1 quad reduction in FFC energy use over a 30-year period; whereas for covered equipment significant energy savings may mean at least a 10-percent reduction in energy use over a 30-year period or a 2 quad reduction in FFC energy use over a 30-year period. DOE requests comment on whether such an alternative approach may be appropriate, as well as the specific thresholds that should be applied, for example thresholds in the range from 5 to 15 percent or from 0.5 quads to 5 quads FFC energy reduction over a 30-year period.[21]

DOE also requests comment on further alternative approaches, such as setting distinct thresholds, in terms of percentage and total FFC energy use reduction over a 30-year period (or as noted earlier over alternative analysis periods), according to the type of covered products and equipment in residential, commercial, and industrial sectors. For example, would there be a benefit to establishing separate thresholds for consumer heating and cooling equipment as compared to consumer appliances (*e.g.*, refrigerators, dishwashers, and clothes washers and dryers)? DOE specifically requests comments on whether specific thresholds should be applied to: (1) consumer heating and cooling products; (2) consumer appliances (such as refrigerators, dishwashers, and washers and dryers); (3) consumer water heating products; (4) consumer electronics; (5) other covered products; (6) commercial heating and

[21] See supporting table available in *www.regulations.gov/docket/EERE-2025-BT-STD-0001*.

cooling equipment; (7) commercial water heating equipment; (8) commercial refrigeration equipment; and (9) other covered equipment. DOE requests comment on this further disaggregated threshold approach, and on whether the 10-percent and 2 quads FFC energy use reduction over a 30-year period, or higher or lower alternatives, may be appropriate for each product or equipment grouping. DOE also acknowledges that implementation of such an approach may require further clarification regarding specific product classifications. DOE requests comment on whether further implementation guidance would be helpful and any recommendations from affected stakeholders on how to best implement such an alternate approach.

G. Process For Developing Energy Conservation Standards (Section 6)

This section was first established in the July 1996 Final Rule and describes the process DOE follows in developing energy conservation standards for covered products and equipment other than those covered equipment subject to ASHRAE/IES Standard 90.1. The February 2020 Final Rule created an "early assessment" process for seeking stakeholder input prior to commencing a rule and committed to an initial rulemaking stage prior to a proposed rule (*e.g.*, an advanced notice of proposed rulemaking ("ANOPR") or a framework document and preliminary analysis). This rule also established a threshold for "significant energy savings" of 0.3 quads or 10 percent site savings over 30 years. Subsequent amendments in the December 2021 and April 2024 Final Rules removed the energy savings threshold requirement and the requirement for a separate early assessment RFI but clarified that DOE will issue one or more documents during the pre-NOPR stage of a rulemaking, which could include a framework document, RFI, notice of data availability ("NODA"), preliminary analysis, or ANOPR.

1. Early Assessment and Pre-NOPR Stages

Several commenters supported reinstating an early assessment stage in the process for developing energy conservation standards or in general support of a formal early assessment process for both energy conservation standards and test procedure rulemakings.[22]

AHRI expressed support for an early assessment process for the amendment of existing standards. (AHRI, No. 28 at p. 8). NAHB recommended that DOE reinstate the early assessment process for soliciting stakeholder feedback well in advance of commencing an energy conservation standards rulemaking, as this reduces regulatory burden. (NAHB, No. 19 at p. 3). The Joint Gas Associations stated that a formal early assessment process can increase the efficiency of DOE's rulemaking process, as it could lead to a prompt, early decision in favor of more productive use of rulemaking resources. (Joint Gas Associations, No. 25 at p. 25). NEMA stated that the scope of coverage for a rulemaking should be thoroughly researched and addressed in a robust RFI phase to ensure clarity and consideration of all relevant data and stakeholder input before the NOPR is issued. NEMA also stated that this would reduce the likelihood of a rule that is inconsistent with the statute and, thus, vulnerable to legal challenge. NEMA recommended re-adoption of the approach in the 2020 Process Rule to mandate use of an early assessment RFI and either an ANOPR or a framework document with a preliminary analysis. (NEMA, No. 23 at pp. 7-8).

Several commenters also expressed support for requiring a pre-NOPR stage in the process for developing energy conservation standards; however, there was no consistency in recommending what that stage should be. Commenters stated that this requirement can be fulfilled with either an ANOPR or framework document with a preliminary analysis (AHRI,

[22] *See* also section IV.J.1 of this document with regard to early assessments for test procedures.

No. 28 at p. 8), an ANOPR or a preliminary analysis (APPA, No. 20 at p. 4; EEI, No. 35 at p. 4), or an ANOPR or a framework document or a preliminary analysis (NAHB, No. 19 at pp. 3-4). The Joint Gas Associations stated that the Process Rule should include multiple avenues such as an ANOPR, NODA, RFI, or NOPR/SNOPR and that DOE should explain why it determined which publication was appropriate (*e.g.*, NODA instead of ANOPR). (Joint Gas Associations, No. 25 at p. 26).

In response, DOE agrees with commenters that a formal early assessment provides an important opportunity for public input and provides regulatory certainty to stakeholders. As such, DOE is proposing to return to the language in the 2020 Process Rule regarding early assessment. While commenters did not all agree on what stages of a rulemaking should follow an early assessment, DOE has tentatively decided that specifying limited pathways as opposed to numerous options provides more regulatory certainty to stakeholders. As such, DOE also proposes to return to the language in the 2020 Process Rule regarding publishing either a Framework Document and Preliminary Analysis, or an ANOPR. DOE requests comment on these proposals.

DOE notes that the procedural requirements of section 6 of Appendix A do not apply to direct final rules. The procedural requirements for direct final rules are specified in EPCA. (42 U.S.C. 6295(p)(4)).

2. Comment Periods

When developing energy conservation standards, the current Process Rule specifies that the length of the public comment period for pre-NOPR rulemaking documents may vary depending on the circumstances of the particular rulemaking and will be determined on a case-by-case basis. At the NOPR stage, the current Process Rule specifies that there will be

no less than 60 days for public comment on the NOPR, with at least one public hearing or workshop, consistent with EPCA requirements. (42 U.S.C. 6295(p)(2); 42 U.S.C. 6306; 42 U.S.C. 6316(a)-(b)). *See* Sections 6(a)(6) and 6(b)(2) of appendix A. In contrast, the February 2020 Process rule had included a minimum comment period of 75 calendar days for pre-NOPR and NOPR rulemaking documents. 85 FR 8626, 8705-8706 (Feb. 14, 2020).

The April 2025 RFI requested comments on whether and how the Process Rule should be amended to modify public comment and review procedures for rulemakings, consistent with EPCA's requirements. 90 FR 16093, 16098 (April 17, 2025).

In response to the April 2025 RFI, several commenters expressed support for mandatory minimum comment periods in the Process Rule. AHRI stated that taking the time to allow for meaningful input is more likely to result in a streamlined process and better outcomes, and it may also reduce the likelihood of litigation. (AHRI, No. 28 at p. 9). BWC stated that a mandatory minimum comment period is ultimately beneficial to DOE, as it will allow stakeholders the full amount of time to potentially identify inaccuracies, issues, or errors that can then be adjusted and make both test procedures and energy conservation standards for covered products more robust. (BWC, No. 34 at p. 3). The Joint Gas Associations stated that the minimum statutorily specified opportunities for public input are generally inadequate and that longer comment periods should be the norm and specified in the Process Rule. (Joint Gas Associations, No. 25 at pp. 24-25).

Several commenters recommended specific comment period lengths. BWC recommended that DOE re-adopt the February 2020 Process Rule provisions, which would extend the mandatory length of comment periods to 75 days for both NOPR and pre-NOPR notices. (BWC, No. 34 at p. 2). AHRI stated that 75 days is an appropriate length of time to

gather comments in early phases of a rulemaking, but 60 days should be the minimum. AHRI further stated that if DOE believes a particular step dictates a shorter or longer comment period, it can deviate from the Process Rule and provide an explanation in the notice. (AHRI, No. 28 at pp. 9-10). AHRI also stated that if DOE shortens the comment period to 60 days, DOE should continue to freely grant reasonable requests for extension. (AHRI, No. 28 at p. 10) Rinnai recommended minimum public comment periods of 60 days for initial notices and 45 days for supplemental notices. (Rinnai, No. 11 at pp. 3, 5, 10) Lennox stated that the comment periods specified in the Process Rule should be binding so as to allow for a reasonable minimum comment period in order for stakeholders to properly review and respond to the document in question. (Lennox, No. 26 at p. 2). Lennox recommended that NOPRs have comment periods of at least 60 days from the date of publication in the *Federal Register*. Lennox also recommended that pre-NOPR documents have comment periods of at least 60 days (for the first pre-NOPR notice in a docket) or 30 days (for subsequent notices if those subsequent notices do not raise material new issues that require engineering or technical analysis). Lennox also recommended that SNOPRs and other post-NOPR documents have comment periods of at least 30 days. (Lennox, No. 26 at pp. 8-9).

Other commenters stated that public comment periods specified in the existing Process Rule are sufficient. The State Agencies stated that the current public comment and review process is robust, accessible, transparent, and has resulted in thousands of comments from across the Nation to inform DOE proceedings. The State Agencies also requested that if DOE does propose changing the public comment periods, that it also provide justification and an opportunity for additional public comment on how the proposed changes to the

Process Rule would result in an improved public comment and review process. (State Agencies, No. 33 at p. 2). NEEA recommended that DOE should maintain the current public comment and review process as codified in the Process Rule that allows for early and meaningful public engagement. The commenter stated that the current rule embeds EPCA's statutory comment requirements and provides structured opportunities for stakeholder input throughout the rulemaking process, including at the proposal stage and, in some cases, earlier through pre-rulemaking notices or stakeholder meetings. NEEA expressed opposition to any changes that would diminish the structure, duration, or significance of public comment periods. (NEEA, No. 36 at p. 2).

ACCA stated that minimum public comment periods alone are not sufficient if the procedures themselves remain opaque or are overly reliant on technical modeling that is inaccessible to small businesses. (ACCA, No. 38 at p. 3).

In response, DOE has reviewed the comments received regarding the appropriate comment periods for various documents. DOE has tentatively determined that a minimum 75-day comment period best addresses the public comments received, as it ensures stakeholders will be provided with a meaningful opportunity for public comment on every rulemaking document. Though several public comments indicate that a 60-day comment period is typically sufficient for a NOPR, commenters representative of a wide swath of affected entities also support reinstatement of the 75-day comment period. Therefore, DOE proposes to reinstate the comment periods from the 2020 Process Rule. Additionally, DOE already makes available its analytical models and technical documentation, with at least one public hearing or workshop, for all stakeholders to review during the comment period. DOE has tentatively determined that this approach is sufficiently accessible to all interested

parties. Further consideration of analytical methodologies will be addressed in a separate process, as discussed in section IV.N.1 of this document.

3. Factors to Be Considered in Selecting a Proposed Standard

Section 6 of the Process Rule includes a list of factors to be considered in selecting a proposed standard. This list is largely the same in the current Process Rule as in the 2020 Process Rule, but DOE is proposing to re-instate the language in the 2020 Process Rule for consistency. In addition, DOE is proposing minor wording changes to certain of the factors, including those discussed in the subsequent paragraphs, consistent with statutory requirements and best practices.

a. Private Impacts on Consumers

Section 6(a)(5)(iv)(B) of the Process Rule specifies that at the pre-NOPR stage, DOE will consider various factors when selecting a proposed standard, including an analysis of private impacts on consumers, including estimates of energy savings, consideration of subgroups, and other assessments of the range of impacts. As discussed, Executive Order 14154 states that it is the policy of the Department to safeguard the American people's freedom to choose from a variety of goods and appliances, including but not limited to lightbulbs, dishwashers, washing machines, gas stoves, water heaters, toilets, and shower heads. Consistent with this Executive order, DOE is proposing to add protection of consumer choice to the list of factors DOE will assess in considering the private impacts on consumer of any potential standards level. As discussed in section IV. H of this document, DOE is also proposing to add consideration of certain private economic impacts to the existing paragraph.

b. Impacts on the Environment

Section 6(a)(5)(iv)(F) of the Process Rule specifies that at the pre-NOPR stage, DOE will consider various factors when selecting a proposed standard, including an analysis of environmental impacts and estimated impacts on emissions of carbon and relevant criteria pollutants. Under EPCA, the Secretary has discretion to weigh "other factors the Secretary considers relevant." (42 U.S.C. 6295(o)(2)(B)(i)(VII)). Previously, the Secretary made a determination this consideration of environmental and emissions impacts was relevant. Currently, however, given other considerations germane to 42 U.S.C. 6295(o), the Secretary has tentatively determined that the specifics of section 6(a)(5)(iv)(F) of the Process Rule as written are no longer relevant as an additional factor for his consideration, and instead, DOE is proposing that this factor simply refer to "Other factors the Secretary considers relevant." This proposal is also consistent with the policies specified in the Executive order. More specifically, section 6 of Executive Order 14154 specifies policies for prioritizing accuracy in environmental analyses, specifically instructing that for Federal regulatory processes, all agencies shall adhere to only the relevant legislated requirements for environmental considerations, and any considerations beyond those requirements are eliminated.

H. Policies on Selection of Standards (Section 7)

This section was established in the July 1996 Final Rule and describes the Department policies concerning the selection of new or revised standards. The February 2020 Final Rule made minor amendments to align with revisions elsewhere in in the Process Rule, while the August 2020 Final Rule added a clarification that DOE would conduct a comparative analysis across all trial standard levels when determining whether a level was economically justified. The December 2021 Final Rule amended this section to remove the

requirement for a comparative analysis and to remove a section related to considerations in assessing economic justification.

1. Market Competition and Innovation

The April 2025 RFI requested comment on whether and how the Process Rule should be updated to provide additional detail on how DOE's rulemaking process can promote market competition and innovation within the manufacturing and appliance industries and on DOE's historical analysis of potential impacts of any lessening of competition under 42 U.S.C. 6295(o)(2)(B)(i)(V). 90 FR 16093, 16098 (April 17, 2025).

DOE received several comments in support of using standards to promote market competition.

Lennox commented that DOE should support domestic manufacturers by promulgating reasonable standards and enforcing compliance to prevent the entry of low-cost, non-compliant imports. (Lennox, No. 26 at p. 5)

NEMA commented that competition benefits from reasonable and consistent efficiency rules that provide a stable and level playing field. NEMA further stated that predictability and consistency in the Appliance Standards Program are essential to reduce regulatory burden. In addition, the commenter argued that sudden changes can jeopardize investments made and inventory already created, which rely on current standards and test procedures. NEMA added that the testing of products and certification is highly beneficial in protecting manufacturers and consumers against misrepresentations of performance. (NEMA, No. 23 at pp. 3-4, 6)

Ceres commented that Federal appliance standards are critical for regulatory clarity, market consistency, and innovation incentives and provide a reduction in complexity and

cost associated with meeting a patchwork of State-level regulations. Ceres added that for manufacturers, this consistency simplifies product design, production planning, and distribution logistics, thereby enabling more efficient economies of scale and streamlining compliance processes compared to having to meet different local energy efficiency rules. (Ceres, No. 22 at p. 1)

The Joint Advocates commented that efficiency standards promote market competition and innovation and cited a study[23] showing that regulations can enhance competition by creating market pressure that motivates innovation, leveling the playing field during transitions, and providing certainty that investments in efficiency improvements will be valued in the future. The Joint Advocates also pointed to another study[24] which concluded that as standards take effect, the price of older, but still-compliant products drops, and manufacturers are then incentivized to innovate so they can introduce new premium models with novel features and higher efficiency, resulting in better products that benefit all consumers. (Joint Advocates, No. 31 at p. 3)

DOE also received several comments indicating that changes to the Process Rule are not needed to promote competition and innovation.

Ceres, the Joint Advocates, Lennox, and the State Agencies commented that the existing Process Rule and/or current statute is sufficient to protect competition and innovation. (Ceres, No. 22 at p. 1; Joint Advocates, No. 31 at p. 2; Lennox, No. 26 at p. 5; State Agencies, No. 33 at p. 2)

---

[23] M. E. Porter & C. van der Linde, "Toward a New Conception of the Environment-Competitiveness Relationship," Journal of Economic Perspectives, 1995, Vol. 9, No. 4, pp. 97-118 (Available at: *www.aeaweb.org/articles?id=10.1257/jep.9.4.97*) (Last accessed July 31, 2025).

[24] A. Brucal & M.J. Roberts, "Do energy efficiency standards hurt consumers? Evidence from household appliance sales," Journal of Environmental Economics and Management, 2019, Vol. 96, pp. 88-107 (Available at: *www.sciencedirect.com/science/article/pii/S0095069617307647*) (Last accessed July 31, 2025).

Specifically, Ceres stated that the current statute already promotes market competition and innovation by directing DOE not to consider new standards or amendments that cannot be scaled to meet the market and energy conservation needs. Ceres added that completely changing the current Process Rule would ultimately reduce market competition and product availability across the Nation and put U.S. manufacturers at a disadvantage in the global marketplace. (Ceres, No. 22 at pp. 1-2)

The Joint Advocates commented that the Process Rule already includes market competition and innovation protections, including the requirement to consult with both the U.S. Attorney General and the Department of Justice in evaluating any lessening of market competition, as well as the requirement to consider the practicability to manufacture, install, and service a given technology before giving it further consideration in a rulemaking. The Joint Advocates added that the Process Rule further states that DOE will not consider technology options that cannot be scaled to meet the market need or that are proprietary. (Joint Advocates, No. 31 at pp. 2-3)

The State Agencies commented that any potential changes to the Process Rule must be analyzed across the full range of technologies covered by the Appliance Standards Program and must consider manufacturer innovation. The State Agencies stated that consideration of market competition and innovation needs no further elaboration within the Process Rule and is only appropriate at the individual rulemaking level. (State Agencies, No. 33 at pp. 1-2)

DOE received several comments recommending specific changes to the Process Rule to promote competition and innovation.

ACCA commented that recent policies have favored electrification, ignoring the energy resilience benefits of dual-fuel systems and significant barrier to full electrification. The commenter stated that such policies risk increasing market concentration, as fewer manufacturers are capable of producing compliant units and fewer contractors are equipped to install them correctly. ACCA added that pursuing full electrification could also raise costs, reduce service availability, and unintentionally burden grid infrastructure with additional seasonal loads. (ACCA, No. 38 at p. 2)

APPA stated that standards can create market distortions that negatively impact competition and innovation. APPA commented that as smart and artificial intelligence technologies become more prevalent, DOE should ensure that regulations do not eliminate innovative technologies or worsen supply chain issues. Specifically, with rising demand and existing challenges for distribution transformers such as higher costs and longer procurement times, the commenter urged DOE to avoid adopting standards that worsen these issues for minimal efficiency gains. APPA further stated that standards should not create situations where only one U.S. manufacturer has patents to make the product or key components of a product. (APPA, No. 20 at pp. 2-3)

Similarly, EEI commented that regulations should not eliminate innovative technologies. As an example, EEI stated that DOE should use annual energy metrics, where possible, instead of separate standby, off, and active-mode metrics. EEI explained that annual energy metrics support innovation by allowing manufacturers to consider trading off higher standby energy use for a "smart appliance" with lower overall annual energy use. (EEI, No. 35 at pp. 3-4)

NEMA commented that the Process Rule should explicitly require DOE to consider how a rule will affect investment and whether it will harm U.S. industry, innovation, and ultimately consumers. NEMA added that DOE should consider the impact its decisions have on investment by American companies related to innovation. (NEMA, No. 23 at pp. 3-4, 6)

After reviewing the comments received, DOE has tentatively determined that the current Process Rule Objectives should be amended to include additional provisions stating that it is DOE's policy to promote market competition and innovation consistent with the requirements of EPCA. *See* section IV.A of this document for further discussion. DOE remains cognizant of these issues and notes that the current statute and Process Rule already include mechanisms to consider the potential impacts from industry concentration, manufacturing capacity, employment, and other relevant issues. In response to ACCA, DOE notes that potential standards for products using different fuels are evaluated separately with their own economic justification. In response to APPA, DOE notes that the screening analysis already considers impacts related to proprietary technologies. In response to EEI, DOE notes that it will consider the appropriate metric in individual rulemakings, keeping in mind the requirements in EPCA related to standby mode and off mode energy use at 42 U.S.C. 6295(gg). In response to NEMA, DOE notes that it has received more specific comments related to how DOE should analyze manufacturer impacts, as discussed in section IV.N.2 of this document; the Department will analyze these issues in a separate proceeding.

2. Analytic Approaches to Address Balancing Factors in EPCA

The April 2025 RFI requested comments on whether and how the Process Rule should be updated to provide additional detail on how DOE's rulemaking process satisfies the statutory requirements for establishing new or amended energy conservation standards.

90 FR 16093, 16099 (April 17, 2025). DOE received comments related to how the Process Rule should approach analyzing the potential effects of efficiency levels, including incorporation of the statutory factors, which inform the agency's choice of a standard level.

Several commenters supported the provisions in the current Process Rule. The Joint Advocates and the State Agencies stated that the current Process Rule and EPCA already outline the detailed statutory criteria that DOE must follow in each rulemaking. (Joint Advocates, No. 31 at p. 1; State Agencies, No. 33 at p. 2) NEEA recommended that DOE should maintain its current approach in the Process Rule to assess economic viability. Specifically, the commenter encouraged DOE to maintain a comprehensive assessment of economic impacts that considers life-cycle cost savings, avoided energy system costs, macroeconomic impacts, and economic impacts to consumers. NEEA further recommended against redefining "economically justified" to have a narrow focus on short payback periods or "first cost analysis," which would undervalue long-term economic benefits. NEEA added that overlooking broader energy system costs and macroeconomic impacts will limit the ability to accelerate production of energy-intensive industries and limit economic growth potential. (NEEA, No. 36 at p. 3)

Several other commenters made specific recommendations regarding additional thresholds or evaluations DOE should make when assessing potential standards.

The Joint Gas Associations generally support an approach where DOE evaluates the cost-effectiveness of a standard versus its possible level of enhanced efficiency and added that any process of evaluation must include balancing potential energy savings with the cost of implementation. (Joint Gas Associations, No. 25 at p. 26)

When selecting a standard level, in addition to including a definition for "significant energy savings" (*See* section IV.F of this document for additional discussion on this issue), AHRI commented that the Process rule should also incorporate other factors including: (1) a cost-benefit analysis for consumers and manufacturers into the definition of "significant energy savings"; (2) thresholds or benchmarks that explain how DOE evaluates marginal energy savings in relation to consumer burden, product costs, and feature trade-offs; and (3) a methodology for comparing energy savings as it relates to the cost of compliance, particularly for products where existing efficiency levels are already high or marginal gains in energy savings require a steep expense. (AHRI, No. 28 at p. 11)

NAFEM commented that the Process Rule should specify a clear rule regarding payback period ("PBP") that can satisfy EPCA's requirement that standards be economically justified. The commenter argued that lengthy PBPs (sometimes exceeding the product's average lifetime) are impractical and not economically justified for small businesses that often operate on short planning horizons and may never recoup the cost of higher-efficiency equipment. NAFEM added that lengthy PBPs would lead small businesses to repair old equipment or purchase less-efficient refurbished units, thereby undermining EPCA's energy efficiency goals. (NAFEM, No. 13 at pp. 5-6)

NAHB commented that standards should be set strictly based on cost-effectiveness to the consumer. NAHB added that greater weight should be given to the 7-percent discount rate, as a 3-percent is not realistic in the real estate development context. (NAHB, No. 19 at p. 5)

ONE Gas commented that DOE should implement a *de minimis* threshold for consumer savings at both the individual covered product and national levels. ONE Gas

added that the *de minimis* test should be applied in the Framework Document phase and resolved at the Preliminary Analysis phase. (ONE Gas, No. 37 at p. 5)

Rinnai commented that the Process Rule should include provisions requiring DOE to conduct an affordability analysis and not set standards if some populations, such as low- or middle-income households, face net costs or excessive payback periods. (Rinnai, No. 11 at p. 12, 13) In addition, Rinnai stated that the Process Rule should require a quantitative assessment of impacts on low-income and senior households, with explicit criteria that flag when negative outcomes exceed defined thresholds. (Rinnai, No. 11 at p. 8) Further, Rinnai commented that the Process Rule should require that a standard not be set if analysis shows marginal or negative life-cycle cost outcomes, payback periods close to the product lifespan, or disproportionate burdens on low-income or senior consumers. (Rinnai, No. 11 at p. 9)

The Joint Gas Associations commented that DOE's rules should not harm any customers and should not increase costs for low-income and senior households. The Joint Gas Associations added that the Process Rule should include some criteria for fully evaluating the cost impacts on customers, in particular low-income and senior households. (Joint Gas Associations, No. 25 at pp. 17-18) The Joint Gas Associations further commented that the Process Rule should require a minimum[25] three-year payback period threshold for DOE to propose a new or revised standard. (Joint Gas Associations, No. 25 at p. 27)

The Joint Gas Associations recommended that the Process Rule should state that DOE will utilize source energy when evaluating critical energy policy decisions and that it will seek comments on the best method to use when evaluating energy efficiency measures, which may not always be the existing site-to-source conversion. (Joint Gas Associations,

[25] DOE understands the reference to a "minimum three-year payback period" in this comment to mean that DOE should only establish standards with estimated payback periods of three years or less.

No. 25 at pp. 19-21) In addition, the Joint Gas Associations stated that any energy savings associated with fuel switching should not be permitted to be used to justify a standard. (Joint Gas Associations, No. 25 at p. 21)

APPA commented that DOE should ensure that standards do not result in significantly higher upfront costs or greater total system energy losses. (APPA, No. 20 at p. 2)

ACCA recommended that the Process Rule should incorporate field-based efficiency data and installation quality metrics in the Department's cost-benefit analysis and determination of significant conservation of energy. (ACCA, No. 38 at p. 2) In response, DOE anticipates further additions and refinements to the Department's life-cycle cost analysis and payback period methodology, as well as all energy conservation standards rulemaking analytical methodologies, will be addressed in the forthcoming Analytic Framework update. Further public input will be invited on suggestions to update and improve the agency's subgroup and distributional impact analyses, such as those involving low-income senior citizens and small entities. Further public comment is also solicited in response to this proposal.

Statutory Factors and Analysis

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); 42 U.S.C. 6316(a)). In determining whether a standard is economically justified, EPCA requires DOE, to the greatest extent practicable, to consider the following seven factors: (1) The economic impact of the standard on the manufacturers

and consumers; (2) the savings in operating costs, throughout the estimated average life of the products (*i.e.,* life-cycle costs), compared with any increase in the price of, or in the initial charges for, or operating and maintaining expenses of, the products which are likely to result from the imposition of the standard; (3) the total projected amount of energy, or as applicable, water, savings likely to result directly from the standard; (4) any lessening of the utility or the performance of the products likely to result from the standard; (5) the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard; (6) the need for national energy and water conservation; and (7) other factors DOE finds relevant. (42 U.S.C. 6295(o)(2)(B)(i); (p)). As part of its consideration of these seven factors, DOE conducts and publishes an analysis in a technical support document (also known as a regulatory impact analysis (RIA)). This analysis accompanies the proposed and final rules in fulfillment of the agency's statutorily required responsibilities to provide the public with the opportunity to comment on DOE's consideration of the factors for economic justification, technological feasibility, and other factors required by EPCA. (*See* 42 USC 6295(p)). 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.

The Secretary determines whether a standard achieves the maximum improvement in energy efficiency[26] given that the standard must be both technologically feasible and economically justified. This determination is made after conducting analysis required by EPCA and considering views and comments furnished with respect to a proposed standard.

[26] "or in the case of showerheads, faucets, water closets, or urinals, water efficiency" 42 U.S.C. 6295(o)(2).

To best inform this determination, DOE proposes a "walk up" approach to evaluating prospective standards. By taking a "walk up" approach, DOE can compare each progressively more stringent standard (each increase in energy efficiency and each incremental increase in costs) to both the status quo and the standard just below it. This allows the agency and interested public to assess at each possible standard level the incremental increases in energy or water savings relative to the incremental increases in costs, including those arising out of changes in consumer choice and satisfaction. The 2020 Process Rule referred to this framework as the "comparative" approach. To reflect the general framework of that comparative approach, as well forthcoming analytic updates consistent with 42 U.S.C. 6295(o)(2)(B), this proposal refers to this concept as a "walk up."

As part of the EPCA analysis, DOE must estimate benefits of possible higher efficiency standards, including those the statute directs DOE to consider estimated energy savings and potential operating cost savings over the average life of a covered product. (42 U.S.C. 6295(o)(2)(B)(i)(II)-(III), (VII)). In estimating these anticipated benefits, DOE must also anticipate consumer behavioral changes that may temper or increase energy or cost savings, such as increased product usage (often referred to as the "rebound effect"), refurbishing of old products or purchase of used products, or substitution effects like using more energy- or water-intensive settings more frequently in response to negative impacts on product performance, or reduced costs to controlling HVAC systems due to Apps.[27] (42 U.S.C. 6295(o)(2)(B)(i)(I)). In addition, under EPCA, DOE must estimate the costs of possible higher efficiency standards, including those the statute directs DOE to consider:

[27] *See*, for example, DOE's previous consideration of potential negative impacts on clothes washer performance that could alter consumers' usage patterns at certain higher efficiency levels considered for the analysis. (89 FR 19026, 19117; March 15, 2024).

increases in price, initial installation and maintenance costs; lessening of the utility or performance (such as potential negative impacts on product cleaning performance or differences in the brightness (lumens), hue or colors of light bulbs); lessening of market competition, such as increases in market consolidation or other changes in price-setting power, and other economic impacts to manufacturers and consumers. (42 U.S.C. 6295(o)(2)(B)(i)(I -II), (IV-VII)). In estimating these anticipated costs, DOE would be analyzing consumer welfare impacts and losses to consumers and producers from foregone consumption of good the market would otherwise offer (also known as dead weight loss in economic terms), and the behavioral changes that are likely to result from possible standards. Consumer welfare in economic terms refers to the general satisfaction and well-being consumers derive from their purchases and use of products. In other words, DOE's statutory considerations regarding impacts to consumers and manufacturers, increases in prices, maintenance costs, changes in utility and performance all translate to consumer welfare impacts and related changes in consumer behavior. Under EPCA, DOE further considers losses to society when producers are willing to offer a product at a particular price and consumers are willing to purchase that product at that particular price and that exchange will no longer occur as a result of a proposed standard. In particular, under EPCA, DOE may not prescribe new standards where the standard would likely result in domestic unavailability "in any covered product (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 the Secretary's finding." (42 U.S.C. 6295(o)(4)). The unavailability of any of these characteristics translates once again to consumer welfare impacts and potential losses to society when the market is willing to make an exchange but

for the standard. In other words, the loss of features such as consistently illuminated clocks in microwaves, [28] the window in an oven door,[29] or glass doors on beverage coolers,[30] changes to the layout of residential refrigerators and clothes washers and dryers, and dishwashers would limit consumer choices and impact consumer satisfaction and well-being. The agency "screened out" these feature losses from consideration in prior analyses, and requests comment on how such screening can be improved. DOE's forthcoming analytic framework RFI and update will also offer the public an opportunity to suggest methodological and data changes the better capture these consumer impacts.

The main difference between the "walk down approach" and the "walk up approach" is that the walk down approach starts at the most stringent possible standard and "walks down" to different levels of stringency, presumptively stopping at the most-stringent standard that DOE determines is economically justified. This approach favors technological feasibility over economic justification, resulting in more stringent standards than may be appropriate under EPCA's balancing factors. In other words, under the walk down approach, DOE does not interpret the statute as requiring a netting of the benefits and costs in moving

---

[28] In the most recent energy conservation standards rulemaking for microwave ovens, DOE "screened out" from its analysis any consideration of automatic power-down of the clock display as a technology option for reducing the standby power of microwave ovens due to its impact on consumer utility. DOE found that while it is uncertain the extent to which consumers value the function of a continuous display clock, the loss of such function may result in significant loss of consumer utility. 78 FR 36316, 36362 (June 20, 2023).

[29] In the most recent energy conservation standards rulemaking for conventional cooking products, DOE screened out from its analysis any consideration of energy savings that could be achieved through removal of the glass window in the oven door, in part due to the loss of consumer utility, possible adverse impacts on cooking certain types of delicate food items, and potential safety concerns. *See* section 4.2.1.3 of the Technical Support Document accompanying the February 14, 2024, direct final rule (89 FR 11434), available at *www.regulations.gov/document/EERE-2014-BT-STD-0005-12819*.

[30] In the most recent energy conservation standards rulemaking for miscellaneous refrigeration products, DOE screened out from its analysis any consideration of energy savings that could be achieved through the replacement of glass doors with solid doors, finding that solid doors would be much less desirable to consumers and the loss of the glass doors would have an adverse impact on consumer utility. *See* section 4.2.1.1 of the Technical Support Document accompanying the May 7, 2024, direct final rule (89 FR 38762), available at *www.regulations.gov/document/EERE-2020-BT-STD-0039-0037*.

to a more progressively stringent standard. Meanwhile, the proposed approach "walks up" from the *status quo* to increasing levels of stringency. This approach allows both DOE and the public to compare easily a proposed standard's proposed energy and operating savings and economic impacts to the status quo and to the standard just below. For example, if the installation costs of a proposed water heater standard would increase by 106 percent relative to the status quo, the walk up approach would ensure that this impact is shown clearly on the cost side of the ledger. Also, other behavioral impacts that would temper estimated energy savings would be included, such as when consumers choose to repair or move to secondary markets when faced with such up-front costs. In other words, the walk up approach allows for balancing technological feasibility *and* economic justification with parity. At each increment of increased stringency, the agency must consider costs. In addition, with the agency's forthcoming analytic update, the agency's cost and benefits estimates are expected expand beyond engineering concepts to further capture economic concepts such as consumer welfare and behavioral change impacts. When technology is not feasible, then incremental cost can be very high or even infinite. While DOE conducts an engineering-based technological feasibility check as part of its existing process the agency acknowledges that feasibility in economic terms is also related to costs. Given this, the economic justification analysis also has some collinearity to technological feasibility. For instance, it may be that at higher TSLs, from an engineering perspective, the required technologically has been determined 'feasible' but that from an economic perspective the production costs are so high as to prevent widespread availability or consumption. Such technology would clearly not be found to be economically justified and from a lay person's market perspective might not be considered feasible. When technology is feasible, it may still fail at economic justification,

and EPCA requires both conditions to be satisfied. The seven EPCA factors lay out different aspects of potential economic impacts to affected parties. DOE's analytic framework RFI will delve further into methodological and conceptual tools aimed at a more complete and updated analysis of these factors:

1. The economic impact of the standard on the manufacturers and consumers: this factor broadly lays out economic impacts to manufacturers and consumers should be taken into consideration in setting conservation standards regardless of whether those impacts may by readily quantifiable or not. Readily quantifiable effects include potential energy and water savings assuming that consumers' distribution of consumption of energy and water do not change over time appreciably. Currently, DOE folds some of these impacts into the agency's life-cycle and payback period analysis. Manufacturers' compliance costs are also readily quantifiable using information collected through government data collections, public comment, DOE's tear-down and other engineering efforts, purchase of proprietary information and others. There are other economic effects that are more difficult to capture on both consumer and manufacturer sides. Estimating changes in consumers' consumption of substitute (*e.g.*, used and refurbished appliances) and complimentary goods (*e.g.*, dryers if purchasing washers; detergent choices) as a result of a conservation standard is more difficult. For example, if a clothes washer energy and water conservation standard were to adversely impact cleaning or rinsing performance, consumers that experience any such negative impacts on product performance could potentially alter their usage patterns, for example by using more energy-intensive settings more frequently (*e.g.,* Extra-Hot temperature setting); using more water-intensive cycle

options (*e.g.,* Deep Fill option; extra rinse cycles); using non-regulated cycles (*e.g.,* Heavy Duty cycle); or re-washing clothing that has not been cleaned sufficiently. Such changes to consumer usage patterns may counteract the energy and water savings that DOE has estimated would be achieved at the higher efficiency level (89 FR 19026, 19117; March 15, 2024). Similarly, if the same standard also affects how clothing is washed, then consumers may buy more powerful and expensive detergent (complimentary good) in reaction. Alternatively, if a new clothes washer standard materially increases purchase and installation costs for that appliance, consumers may choose not to purchase a clothes dryer when those purchases are very often bundled as complimentary goods. This change could result in losses to society from foregone market exchanges and losses in consumer satisfaction where preferences would typically lean towards a bundled purchase. In addition, new standards may cause manufacturers to divert resources away from improving features that consumers want. While not exhaustive, the above examples illustrate that quantitative estimates of potential energy and water savings and compliance costs may not capture important effects readily.

2. The savings in operating costs, throughout the estimated average life of the products (*i.e.,* life-cycle costs), compared with any increase in the price of, or in the initial charges for, or operating and maintaining expenses of, the products which are likely to result from the imposition of the standard: DOE is already explicitly taking this factor into consideration in the agency's life-cycle cost analysis and payback period analysis and recognizes there are elements of

consumer behavior and welfare, as well as considerations of the useful life of the appliance, that are not currently captured in this analysis.

3. The total projected amount of energy, or as applicable, water savings likely to result directly from the standard: DOE already explicitly takes this factor into consideration in the agency's lifecycle analysis and national impact analysis and recognizes there are elements of consumer behavior and welfare, such as in earlier stated examples, that may affect these estimates that are not currently captured in this analysis.
4. Any lessening of the utility or the performance of the products likely to result from the standard: consumers value different attributes of products differently. Some may value the energy and/or water efficiency savings more than the cycle time in clothes washers. Others may value cycle time more than the energy and/or water efficiency savings. Others may place value in how effectively any residual detergent is rinsed from the clothing, or how much moisture is removed from the clothing during the final spin portion of the wash cycle. If changes in energy and/or water conservation standards were to lead to a reduction in certain aspects of cleaning or rinsing performance, then consumers may be less satisfied with their clothes washers. These types of effects may be more difficult to assess quantitatively than potential energy and/or water savings and compliance costs and nonetheless should be addressed. On the other hand, consumer purchases often reveal preferences for such functions, and by statute, DOE must consider these changes in utility and performance relative to products in existence at the time a regulation being contemplated.

5. The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard: lessening of competition is a concern that DOE takes seriously. Increases in market power or significant market consolidation would likely further reduce consumer choices and lead to material increases in the prices of covered products. DOE currently applies a market concentration index (HHI) in evaluating the lessening of market competition. While this index is a helpful indicator, DOE is considering other indicators of lessening competition. Market competition can decline when fewer manufacturers participate in the market or fewer manufacturers choose to produce some product categories. When consumer purchases do not decrease by much as prices rise (in economic terms: demand is relatively inelastic) and competition decreases, manufacturers are able to set prices higher without sharply reducing the number of units sold. For example, consumers often replace large appliances such as water heaters, heat pumps, air conditioners, or refrigerators when they break down, which may result in less price flexibility for the consumer. The result is greater benefits for manufacturers (who sell fewer units at a higher price), reduced benefits for consumers (who buy fewer units at a higher price), and some loss to society (units that could have been produced and sold at lower prices are not produced and benefit no one). To account for the impacts of reduced competition, DOE is considering analysis that more formally incorporates consumer responsiveness to changes in price (price-elasticity of demand) and the likely price impacts in markets where high consolidation already exists.

6. The need for national energy and water conservation: enhanced energy efficiency, where economically justified, improves the Nation's energy security and strengthens the economy. Reduced electricity demand due to energy conservation standards is also likely to reduce the cost of maintaining the reliability of the electricity system, particularly during peak-load periods. DOE conducts a utility impact analysis to estimate how standards may affect the Nation's needed power generation capacity.
7. Other factors DOE finds relevant: In the past, the Secretary has exercised discretion under factor seven for considerations such as impacts of standards to certain subgroups such as small manufacturers or low-income senior citizens. DOE's comparative analysis can be applied to such distributional outcomes as well, and DOE continues to explore other discretionary considerations. One such consideration may be to explicitly state that the Secretary has determined that any proposed standard for which costs (including consumer welfare losses and losses to society from lost market exchanges) exceed benefits (including energy and operating cost savings) will presumptively be considered as not economically justified. More generally, the Secretary has sufficient discretion to apply a "walk up approach" under EPCA.

Energy Conservation and the Energy Paradox

The potential for appliance and other covered product buyers to voluntarily forego improvements in energy efficiency that seemingly offer savings exceeding their initial costs is one example of what is often termed the "energy efficiency gap" or "energy efficiency paradox." Economic theory predicts that, holding all else equal, individuals will

purchase more expensive energy-efficient appliances and other covered products if they expect future savings on energy expenditures to offset the higher upfront purchase costs.[31] If buyers fully internalize the expected energy savings that result from higher efficiency in their appliances and other covered products purchase decisions, manufacturers will presumably supply any improvements that buyers demand, and appliances and other covered products prices will fully reflect future energy cost savings that consumers would realize from owning – and potentially reselling – more energy-efficient models if secondary markets exist. In this case, a regulation that induces increased energy efficiency of appliances and other covered products will impose net private costs on appliance and other covered product owners and can only result in social benefits through correcting other market failures (*e.g.*, imperfect information or internalizing other negative spillover effects). If instead, regulations are issued based on the premise that consumers systematically "undervalue" cost savings generated by improvements in energy efficiency when choosing among competing models, then more stringent energy efficiency standards may lead manufacturers to adopt improvements in energy efficiency that buyers would not choose despite the cost savings they offer.

Whether the value of the resulting realized energy savings will improve consumer welfare depends on if and why consumers appear to undervalue future energy expenditures. If the apparent "undervaluation" is due to factors that are missing from the analysis – *e.g.*, tradeoffs with product functions and attributes such as cleaning performance, increased cycle times when in energy saver mode or changes in the

[31] These additional up-front costs include more than just the cost of the technology necessary to improve energy economy; because consumers have a scarcity of resources, it also includes the opportunity cost of any other desirable features that consumers give up when they choose the more energy-efficient appliances and other covered products.

starkness, warmth, or hue of light bulbs – these hidden or missing costs may be offsetting some or all of the value of energy savings and may not result in additional social benefits. The appearance of such a gap, between the level of energy efficiency that would minimize consumers' overall expenses and what they actually purchase, is typically based on engineering calculations that compare the initial cost of providing higher energy efficiency to the discounted present value of the resulting savings in future energy costs, and such analyses will not typically capture the above variables. If instead undervaluation is due to consumer or manufacturer inattention to future energy costs resulting from a market failure such as an information asymmetry, then the value of energy savings is a social benefit of the regulation. How potential buyers value improvements in the energy efficiency of new appliances and other covered products is therefore an important issue when assessing the benefits and costs of government regulation. There is a large empirical literature examining this issue that comes to varying conclusions about the extent that consumers value these future energy expenditures. As noted in the Office of Management and Budget (OMB) Circular A-4 (2003),[32] "individual preferences of the affected population should be a guiding principle in the regulatory analysis." This literature and its implications for DOE's analysis will be explored further in DOE's analytic framework update effort.

Walk up Analysis

A "walk up" analysis takes a step-wise approach to estimating increasing levels of energy conservation and the related impacts on consumers and manufacturers. Starting at the status quo (baseline), the agency would analyze the increases in benefits (including energy

[32] Office of Management and Budget. (2003). Circular A-4: Regulatory Analysis: *https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4*.

savings) and costs (including manufacturer costs) associated with progressively more stringent TSLs. DOE would use these estimates to identify a preferred option that is technically feasible and economically justified. For the "walk up" analysis the Secretary could determine economic justification by relying on either incremental effects or by relying on net benefits. Both methods examine economic justification by comparing the monetized benefits and costs at different TSLs. Once these analyses are complete, the Secretary may consider these estimates along with additional factors as noted above in determining whether to set a standard and if so, what level of stringency to propose. DOE requests comment on all aspects of the proposed walk up approach.

Illustrative Example

In the following illustrative example, DOE presents an incremental walk up approach under three scenarios: (1) where DOE is not accounting for consumer welfare and market loss (dead weight loss) impacts; (2) where DOE captures some but not all consumer welfare and market lost impacts or such impacts are relatively small; (3) where DOE robustly estimates consumer welfare and market loss impacts and those impacts are substantial. In addition, DOE presents a simple net benefits scenario.

The numbers used in the tables are for illustration only and do not reflect estimates for any particular policy.

Table 1 shown below compares monetized energy savings with monetized cost increases associated with tighter energy efficiency levels but does not include all the economic impacts envisioned by the statute (*e.g.*, consumer welfare and dead weight loss). For example, in going from the world without a standard (the baseline) to a proposed TSL 1, assume benefits of $100 (*i.e.*, estimated energy and operating cost savings), and costs of $75

(*i.e.*, cost increase and lost consumer satisfaction from reduced choices). The incremental net benefit of moving to TSL 1 equals $25. It follows that going from TSL 1 to TSL 2 has incremental benefits of $50 while the cost is $25 for an incremental net benefit of $25. Similarly, TSL 3 has an incremental net benefit of $0 and TSL 4 an incremental net benefit of -$25 (see table 1 of this document). In this scenario DOE might choose TSL 3 without considering certain impacts to consumer welfare and losses from foregone market exchanges.

In the second scenario, if consumer welfare effects such as more handwashing of dishes, dislike of lightbulb colors and behavioral changes in response to cost increases, are relatively small in comparison to the energy savings, then including these effects may not change incremental net benefits substantially (*See* Table 2 of this document). Even in this scenario, TSL 3 is no longer desirable.

On the other hand, in the third scenario if consumer effects are substantial enough to cause consumers to delay the purchase of covered products, or buy used or refurbished covered products, or engage in other major behavioral changes (see example in Table 3 of this document where the costs double when taking into account consumer effects), then this could significantly change the preferred TSL. In the illustrative example in Table 3, the agency's preferred alternative may be to not regulate.

This illustrative example demonstrates how important the appropriate analytic framework is for analyzing DOE's EPCA factors as part of either the standard selection process or in informing the determination of whether to amend an existing regulation. In cases where consumer and market impacts prove difficult to quantify, DOE may need to rely on a strong qualitative record and/or public comment to inform the Secretary's determination. Regardless of quantification or monetization, such impacts should be DOE's

analysis and should carry weight in the consideration of what constitutes economic justification. The forthcoming analytic framework RFI will solicit comment on methodology and data efforts that may better capture these impacts.

Table 1: Incremental Effects without Consumer Effects

Alternative	Energy savings (percent increase in savings)	Operating cost savings over product life	Increased cost of product over product life	Incremental Benefits relative to less stringent option	Incremental Costs relative to less stringent option	Incremental Net Benefits relative to less stringent option
Baseline	0	0	0			
TSL 1	10%	100	75	100-0=100	75-0 = 75	100-75 = 25
TSL 2	15%	150	100	150-100=50	100-75=25	50-25 = 25
TSL 3	20%	200	150	200-150=50	150-100=50	50-50 = 0
TSL 4	25%	235	210	235-200=35	210-150=60	35-60= -25

Agency may choose a higher standard.

Table 2: Incremental Effects with Minor Consumer Effects

Alternative	Operating cost savings over product life	Increased cost of product over product life	Consumer Effects	Incremental Benefits relative to less stringent option	Incremental Costs relative to less stringent option	Incremental Net Benefits relative to less stringent option
Baseline	0	0	0			
TSL 1	100	75	5	100-0=100	(75+5)-0=80	100-80= 20
TSL 2	150	100	10	150-100=50	(100+10)-80=30	50-30=20
TSL 3	200	150	15	200-150=50	(150+15)-110=55	50-55= -5
TSL 4	235	210	20	235-200=35	(210+20)-165=65	35-65 = -30

Agency may choose a lower standard.

Table 3: Incremental Effects with Major Consumer Effects

Alternative	Operating cost savings over product life	Increased cost of product over product life	Consumer Effects	Incremental Benefits relative to less stringent option	Incremental Costs relative to less stringent option	Incremental Net Benefits relative to less stringent option
Baseline	0	0	0			
TSL 1	100	75	75	100-0=100	(75+75)-0=150	100-150 = -50
TSL 2	125	100	100	125-100=25	(100+100)-150=50	25-50 = -25
TSL 3	200	150	150	200-150=50	(150+150)-200=100	50-100 = -50
TSL 4	235	210	210	235-200=35	(210+210)-300=120	35-120 = -85

Agency may choose not to regulate.

Net Benefits

Under this approach, the preferred TSL would be the standard level that maximizes the benefit of increasing the efficiency standard stringency when considering the costs of that increase. In other words, when the net benefit is maximized, the Secretary can presumptively make the determination that a proposed standard is both technologically feasible and economically justified. Under this option, TSL 1 would be the agency's preferred TSL. DOE request comment on whether the net benefit approach should be the presumptive application of the "walk up" framework.

Following public comment and peer review, DOE plans to issue analytic guidance that will aid the agency in quantifying potentially important consumer and manufacturer effects that are not currently quantified and offer transparency to the public on the details of the agency's updated EPCA analytic approach.

3. Selection of Standard Level

In addition to addressing "balancing the factors in EPCA" as described in the previous section, DOE also considered how to evaluate EPCA's statutory requirements when constructing standard levels for consideration. Many of the comments received in response to the April 2025 RFI discussed in section IV.H.2 of this NOPR are also relevant in evaluating how to construct candidate standard levels. DOE has included those comments again in the paragraphs that follow for consideration in this section. Several commenters supported the provisions in the current Process Rule. The Joint Advocates and the State Agencies stated that the current Process Rule and EPCA already outline the detailed statutory criteria that DOE must follow in each rulemaking. (Joint Advocates, No. 31 at p. 1; State Agencies, No. 33 at p. 2) NEEA recommended that DOE should maintain its current approach in the Process Rule to assess economic viability. Specifically, the commenter encouraged DOE to maintain a comprehensive assessment of economic impacts that considers life-cycle cost savings, avoided energy system costs, macroeconomic impacts, and economic impacts to consumers. NEEA further recommended against redefining "economically justified" to have a narrow focus on short payback periods or first-cost analysis, which would undervalue long-term economic benefits. NEEA added that overlooking broader energy system costs and macroeconomic impacts will limit the ability to

accelerate production of energy-intensive industries and limit economic growth potential. (NEEA, No. 36 at p. 3)

Several other commenters made specific recommendations regarding additional thresholds or evaluations DOE should make when assessing potential standards.

The Joint Gas Associations generally support an approach where DOE evaluates the cost-effectiveness of a standard versus its possible level of enhanced efficiency and added that any process of evaluation must include balancing potential energy savings with the cost of implementation. (Joint Gas Associations, No. 25 at p. 26)

When selecting a standard level, in addition to including a definition for "significant energy savings" (*See* section IV.F of this document for additional discussion on this issue), AHRI commented that the Process rule should also incorporate other factors including: (1) a cost-benefit analysis for consumers and manufacturers into the definition of "significant energy savings"; (2) thresholds or benchmarks that explain how DOE evaluates marginal energy savings in relation to consumer burden, product costs, and feature trade-offs; and (3) a methodology for comparing energy savings as it relates to the cost of compliance, particularly for products where existing efficiency levels are already high or marginal gains in energy savings require a steep expense. (AHRI, No. 28 at p. 11)

NAFEM commented that the Process Rule should specify a clear rule regarding payback period ("PBP") that can satisfy EPCA's requirement that standards be economically justified. The commenter argued that lengthy PBPs (sometimes exceeding the product's average lifetime) are impractical and not economically justified for small businesses that often operate on short planning horizons and may never recoup the cost of higher-efficiency equipment. NAFEM added that lengthy PBPs would lead small businesses to repair old

equipment or purchase less-efficient refurbished units, thereby undermining EPCA's energy efficiency goals. (NAFEM, No. 13 at pp. 5-6)

NAHB commented that standards should be set strictly based on cost-effectiveness to the consumer. NAHB added that greater weight should be given to the 7-percent discount rate, as 3-percent is not realistic in the real estate development context. (NAHB, No. 19 at p. 5)

ONE Gas commented that DOE should implement a *de minimis* threshold for consumer savings at both the individual covered product and national levels. ONE Gas added that the *de minimis* test should be applied in the Framework Document phase and resolved at the Preliminary Analysis phase. (ONE Gas, No. 37 at p. 5)

Rinnai commented that the Process Rule should include provisions requiring DOE to conduct an affordability analysis and not set standards if some populations, such as low- or middle-income households, face net costs or excessive payback periods. (Rinnai, No. 11 at p. 12, 13) In addition, Rinnai stated that the Process Rule should require a quantitative assessment of impacts on low-income and senior households, with explicit criteria that flag when negative outcomes exceed defined thresholds. (Rinnai, No. 11 at p. 8) Further, Rinnai commented that the Process Rule should require that a standard not be set if analysis shows marginal or negative life-cycle cost outcomes, payback periods close to the product lifespan, or disproportionate burdens on low-income or senior consumers. (Rinnai, No. 11 at p. 9) DOE notes that suggestions of this nature can also be offered in response to the Department's forthcoming Analytic Framework update RFI.

The Joint Gas Associations commented that DOE's rules should not harm any customers and should not increase costs for low-income and senior households. The Joint

Gas Associations added that the Process Rule should include some criteria for fully evaluating the cost impacts on customers, in particular low-income and senior households. (Joint Gas Associations, No. 25 at pp. 17-18) The Joint Gas Associations further commented that the Process Rule should require a minimum[33] three-year payback period threshold for DOE to propose a new or revised standard. (Joint Gas Associations, No. 25 at p. 27)

APPA commented that DOE should ensure that standards do not result in significantly higher upfront costs or greater total system energy losses. (APPA, No. 20 at p. 2)

Upon review of the comments, DOE notes that it is addressing procedural aspects of the Process Rule in this notice. DOE further notes that with the current Process Rule and statutory criteria, rulemaking analyses apply a primarily engineering-based approach to: (a) balance the potential energy savings against the cost of implementation; (b) perform a cost-benefit analysis for both consumers and manufacturers, including marginal energy benefits and a comparison of those benefits against the cost of compliance; (c) consider payback periods in addition to other factors such as total life-cycle cost; (d) consider discount rates determined from actual asset and debt holdings for both consumers and businesses (in addition to discount rates specified by the Office of Management and Budget); and (e) consider the potential impacts to certain consumer subgroups such as low-income or senior households.

In addition, DOE has tentatively proposed implementing presumptive thresholds on certain consumer economic-related metrics. However, the Secretary retains discretion under EPCA to weigh the seven factors and make a determination that a rule that meets these

[33] DOE understands the reference to a "minimum three-year payback period" in this comment to mean that DOE should only establish standards with estimated payback periods of three years or less.

thresholds (*e.g.*, lower percent net cost, lower percent increase in total installed cost, and lower simple payback period as a percentage of average lifetime) would not be considered economically justified. The proposed thresholds provide clarity and certainty to stakeholders regarding how the Secretary proposes to weigh EPCA criteria at 42 U.S.C. 6295(o) related to economic justification.

Specifically, DOE reviewed key analytical metrics assessed during an energy conservation standards rulemaking and has tentatively determined that the following three factors, consistent with EPCA, best reflect protecting consumer choice and affordability, and are applicable across rulemakings:

- Maximum increase in installed cost relative to the baseline total installed cost (%).
- Maximum percentage of consumers for whom the standard level is projected to result in net costs (%).
- Maximum simple payback period relative to average product lifetime (%).

These factors are already analyzed in each rulemaking as part of the life-cycle cost and payback period analysis, and relate to one or two of the factors EPCA prescribed for determining whether a standard is economically justified:

(1) The economic impact of the standard on the manufacturers and on the consumers of the products subject to the standard; and

(2) The savings in operating costs throughout the estimated average life of the product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the products that are likely to result from the imposition of the standard.

(42 U.S.C. 6295(o)(2)(B)(i)(I)-(II)).

Given that these economic thresholds are factors that DOE already considers as required by EPCA, and that the Secretary weighs in determining economic justification, DOE has tentatively determined that adopting presumptive thresholds relating to economic justification is justified under EPCA, just as setting a threshold for significant energy savings is allowable.

DOE is proposing the following thresholds as a basis for determining whether a potential standard level is not economically justified (*i.e.*, a potential standard exceeding the threshold would not be justified) consistent EPCA:

- Up to 10% increase in installed cost relative to the baseline.
- Up to 20% of consumers projected to incur net costs as a result of a new or amended standard.
- Maximum simple payback period as a percentage of average useful lifetime of a covered product of up to 50%.

DOE welcomes comments and feedback on these proposed thresholds, including whether higher or lower thresholds would be appropriate in support of the Secretary's determination regarding economic justification. Regarding payback period, DOE requests comment on alternative threshold approaches, including whether a specific duration, such as five years, would be more appropriate, or a combination threshold that applies both payback period as a percentage of average lifetime and a duration of five years, whichever duration is less. Based on comments, DOE may adopt a value that is higher or lower than the value proposed for each of these metrics, or DOE may adopt a similar metric that would also or better achieve the goals of consumer choice or affordability. DOE notes that, at any adopted level, these thresholds would each represent a point in the analysis for identifying a potential

standard level as not being economically justified. As noted earlier, the Secretary retains discretion under EPCA to weigh the seven factors. Additionally, DOE is separately conducting an analytic update to address methodological approaches in energy conservation standards rulemakings. To the extent that any methodological changes would impact the proposed metrics to be considered for economic justification, DOE would evaluate whether the numerical thresholds proposed in this NOPR require adjustment.

DOE proposes that these metrics be applied after the completion of an LCC analysis in order to inform the Secretary's determination regarding whether to regulate in consideration of whether EPCA's requirement for economic justification can be met. The threshold determination can also inform DOE's assessment of which efficiency levels in each product class could become part of a trial standard level. DOE welcomes feedback on how such thresholds could best be implemented. DOE notes that the proposed threshold approach is also consistent with E.O. 14154, "Unleashing American Energy," 90 FR 8353 (Jan. 29, 2025), and the Presidential Memorandum of January 20, 2025, "Delivering Emergency Price Relief for American Families and Defeating the Cost-of-Living Crisis," 90 FR 8245 (Jan. 28, 2025).

In conjunction with the proposed threshold approach, the proposed walk-up approach described earlier in this section builds on both DOE's engineering analysis and the prior comparative framework. DOE anticipates this proposed framework will allow the agency to estimate a wider array of impacts resulting from candidate trial standard levels and is a better read of the balancing factors required to determine economic justification under EPCA. In particular, the walk up approach, paired with DOE's forthcoming analytic update, will address methodological approaches to modeling behavior changes driven by changes in

energy conservation standards. Ultimately, DOE anticipates the Secretary will be able to utilize estimates that better reflect EPCA's balancing factors for economic justification, as well as the incremental impacts of each candidate standard in making determinations regarding whether and what to regulate and at what level.

As stated previously, the December 2021 Final Rule removed a section related to considerations in assessing economic justification. 86 FR 70892, 70908. DOE did not receive any comments directly related to this section, but is also proposing to amend the Process Rule to add back in this section as it appeared in the 2020 Process Rule in order to provide additional clarity to stakeholders in terms of how the Secretary makes decisions regarding economic justification, beyond the proposed threshold approach described in this section.

I. Test Procedures (Section 8)

This section was established in the original July 1996 Final Rule and describes the process by which DOE would establish test procedures for covered products and equipment. The February 2020 Final Rule added an early assessment process for test procedures and generally committed that DOE would adopt consensus industry test procedures unless not consistent with EPCA. Consistent with other amendments in that rule, this section of the Process Rule was also amended to require that DOE finalize a test procedure 180 days in advance of a standards proposal. The December 2021 Final Rule clarified that DOE may revise consensus industry test procedure standards for compliance, certification, and enforcement purposes, and modified application of the 180-day period between finalization of a test procedure and issuance of a standards proposal by instead specifying a 180-day period between finalization of a test procedure and the close of the standards proposal

comment period. The April 2024 Final Rule removed the requirement for an early assessment stage, instead specifying that DOE would publish one or more preliminary documents (*e.g.*, an RFI or a NODA) related to the test procedure.

1. Early Assessment and Pre-NOPR Stage

In response to the April 2025 RFI, DOE received two comments[34] in general support of a formal early assessment process for both energy conservation standards and test procedure rulemakings, which were summarized in section IV.G.1 of this document.

As DOE discussed in section IV.G.1 of this document, DOE has tentatively determined to amend the current Process Rule provisions to revert to the 2020 Process Rule requirement of an early assessment stage, and for test procedures where the early assessment indicates that DOE should proceed with a rulemaking, the 2020 Process Rule language also provides additional opportunities for early public input, such as an RFI or NODA.

2. Comment Periods

When developing test procedures, the current Process Rule specifies that the length of the public comment period for pre-NOPR rulemaking documents may vary depending on the circumstances of the particular rulemaking and will be determined on a case-by-case basis. At the NOPR stage, the current Process Rule specifies that there will be no less than 60 days for public comment on the NOPR, with at least one public hearing or workshop. (*See* 42 U.S.C. 6293(b)(2) and 42 U.S.C. 6306). *See* sections 8(a)(6) and 8(b)(2) of appendix A. The February 2020 Process rule did not include provisions specific to comment period lengths for test procedure rulemakings.

[34] (Joint Gas Associations, No. 25 at p. 25) and (NEMA, No. 23 at pp. 7-8).

In commenting on the April 2025 RFI, AHRI stated that DOE should provide at least 30 days for comment on a pre-NOPR test procedure document and urged DOE to provide a 75-day comment period on the NOPR to allow interested parties time to evaluate proposed test procedure changes including collecting and analyzing test data, as lab time is hard to come by. (AHRI, No. 28 at pp. 9-10)

DOE has tentatively determined that reinstating language regarding test procedures from the 2020 Process Rule will allow for sufficient opportunities for early input, as discussed in the previous section. DOE also notes that guardrails are provided by the statutory requirement to provide a minimum 60-day comment period on test procedure NOPRs, while allowing DOE the ability to offer longer comment periods should there be extenuating circumstances, such as the need for additional laboratory time mentioned by AHRI. As such, DOE is not proposing changes to the 2020 Process Rule language to more directly address comment periods.

3. 180-Day Period

The February 2020 Process Rule specified that 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. 85 FR 8626, 8708 (Feb. 14, 2020). The December 2021 Final Rule modified the calculation of the 180-day period. 86 FR 70892, 70912 (Dec. 13, 2021). Accordingly, the current Process Rule provides that except as provided in paragraph (e)(2) of section 8 of Appendix A, new test procedures and amended test procedures that impact measured energy use or efficiency will be finalized at least 180 days prior to the close of the comment period for a NOPR or a notice of proposed determination ("NOPD"). *See* section

8(e)(1) of appendix A. The exceptions are for test procedures developed by consensus or test procedures limited to calculation changes. *See* section 8(e)(2) of appendix A.

On this topic, the Joint Advocates stated that the current Process Rule already specifies the timing between the finalization of a test procedure and the end of the comment period for an ECS NOPR, which allows stakeholders to gain familiarity with new test procedures prior to providing comments on proposed standards. (Joint Advocates, No. 31 at p. 4)

In contrast, AHRI, the Joint Gas Associations, BWC, Lennox, NEMA, Rinnai, and Zero Zone generally supported a return to prior language in the Process Rule and expansion of the spacing between test procedure and standards rulemakings to 180 days between the issuance or publication of a test procedure final rule and the issuance or publication of an energy conservation standards NOPR. (AHRI, No. 28 at p. 12; BWC, No. 34 at pp. 2-3; Joint Gas Associations, No. 25 at p. 29; Lennox, No. 26 at pp. 2, 10-11; NEMA, No. 23 at pp. 8-9; Rinnai, No. 11 at pp. 3-5; Zero Zone, No. 15 at p. 3) Lennox stated that this full 180-day period is necessary because manufacturers' assessment of test procedures can involve extensive equipment testing, with significant lab set-up and evaluation time. (Lennox, No. 26 at pp. 2, 10-11) The Joint Gas Associations stated that adopting this proposal will ensure that the test procedures are technically correct, that they can be repeated, and that the new or amended standards can be meaningfully reviewed. (Joint Gas Associations, No. 25 at p. 29) AHRI specified that this spacing requirement would apply to test procedures that impact energy use or efficiency. (AHRI, No. 28 at p. 12)

EEI and BHI generally stated that DOE should finalize test procedures well before a proposed change to the corresponding standard. (EEI, No. 35 at p. 4; BHI, No. 16 at p. 3)

EEI stated that changes to the test procedure after that point should be limited to issues that do not impact estimated energy use, cost, or design, thereby allowing stakeholders to clearly understand potential impacts and comment appropriately. (EEI, No. 35 at p. 4) BHI stated that DOE has a record of poor judgment in deciding what constitutes minor changes. (BHI, No. 16 at p. 3)

APPA stated generally that DOE should finalize test procedures for products well before it issues an ANOPR or proposal for those products. (APPA, No. 20 at p. 4) Similarly, NAHB stated that DOE should finalize test procedures prior to issuing an ANOPR or proposal for new standards - both for existing and new test procedures, because significant changes to test procedures can significantly impact the analyses performed for standards. (NAHB, No. 19 at p. 4) NAHB also supported DOE finalizing all new or amended test procedures that impact measured energy use or efficiency 180 days prior to close of a comment period, so that stakeholders can clearly understand potential impacts and comment appropriately. (NAHB, No. 19 at p. 5)

In response, DOE has tentatively determined to amend the language in the current Process Rule to match the 2020 Process Rule language that provides 180 days between a test procedure final rule and issuance of a standards NOPR. DOE requests comments on this issue.

As discussed, section 8(e)(2) of appendix A provides exceptions to the 180-day period for test procedures developed by consensus (*See* section 8(e)(2)(i) of appendix A) or test procedures limited to calculation changes (*See* section 8(e)(2)(ii) of appendix A). The current regulatory text in this section of Appendix A contains a formatting error whereby one of the provisions relevant to test procedures developed by consensus is printed in section

8(e)(2)(ii) of appendix A, which pertains to test procedures limited to calculation changes. In this NOPR, DOE proposes to correct this formatting error. As proposed, revised section 8(e)(2)(i) of appendix A would contain the provisions specific to test procedure amendments limited to calculation changes; and section 8(e)(2)(ii) of appendix A would contain the provisions specific to test procedures developed by consensus. These proposed changes are technical in nature only.

4. Industry Standards

The February 2020 Final Rule stated that 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. 85 FR 8626, 8708 (Feb. 14, 2020). The December 2021 Final Rule modified that provision. 86 FR 70892, 70928 (Dec. 13, 2021). Specifically, the current Process Rule provides that DOE will adopt industry test procedure standards as DOE test procedures for covered products and equipment, but only if DOE determines that such procedures would not be unduly burdensome to conduct and would 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. DOE may also adopt industry test procedure standards with modifications or craft its own procedures as necessary to ensure compatibility with the relevant statutory requirements, as well as DOE's compliance, certification, and enforcement requirements. *See* section 8(d) of appendix A.

Several commenters indicated full support for DOE adopting industry standards. (AHRI, No. 28 at pp. 5-6; BHI, No. 16 at p. 3; BWC, No. 34 at p. 3; NEMA, No. 23 at p. 9) BWC strongly supported harmonization of DOE test procedures with industry standards to avoid redundant testing and reduce burdens on manufacturers. BWC encouraged DOE participation in industry working groups to raise concerns during the development of test procedures, thereby minimizing future conflicts. (BWC, No. 34 at p. 3) BHI stated that the 2020 Process Rule required DOE to use consensus test procedures with minimum modification; BHI added that this would streamline the rulemaking process, increase regulatory certainty, and reduce potential introduction of errors. (BHI, No. 16 at p. 3) NEMA recommended DOE return to the approach to industry standards reflected in the 2020 Final Rule and adopt consensus industry test standards without modification unless inconsistent with the law or impracticable. (NEMA, No. 23 at p. 9)

AHRI supported adopting consensus and proven test procedures already in use by industry and others as methods of test for all applicable products and equipment. The commenter stated that the 2020 Process Rule deferred only to those consensus procedures that are fully consistent with applicable law, thereby streamlining rulemaking and regulatory burden. AHRI added that this policy promotes innovation, accelerates market adoption, fosters competition, and reduces burden. (AHRI, No. 28 at pp. 5-6) However, AHRI stated that the Process Rule should clarify how reliance on consensus standards interacts with DOE's test-procedure-waiver process.[35] The commenter stated that when an existing procedure fails to address a specific product configuration, manufacturers may request a

[35] DOE's current test procedure waiver process includes a provision which directs DOE to publish a NOPR to amend its test procedures so as to eliminate any need for the continuation of such waiver, as soon as practicable after the granting of any waiver. As soon thereafter as practicable, DOE will publish in the *Federal Register* a final rule. 10 CFR 430.27(l).

waiver, prompting DOE to amend its procedure. AHRI added that if DOE principally relies on consensus standards, those standards are not subject to the same waiver prompt. AHRI stated that DOE should, therefore, establish a mechanism to ensure that products granted waivers are subsequently incorporated into updated procedures—either through the consensus standards body or, if necessary, via DOE action. (AHRI, No. 28 at p. 6) AHRI also recommended that DOE consider including an opportunity for DOE to adjust and address test procedure amendments on an expedited basis, such as a petition from stakeholders. The commenter stated that an expedited process would not be intended to address sweeping changes to the method of test but could fix errors or address burdensome practical challenges in execution of the test that had not been anticipated during the rulemaking stage. (AHRI, No. 28 at pp. 8-9)

Other commenters indicated that DOE should consider industry standards but could make changes. (CA IOUs, No. 32 at p. 2; Joint Gas Associations, No. 25 at p. 32; Rinnai, No. 11 at pp. 13-14) The Joint Gas Associations stated they are wary of a revised Process Rule mandating that industry standards must be used in test procedures in instances not already addressed in the statute. The Joint Gas Associations recommended that when making a determination on test procedures, the Department should give consideration to the applicable industry standard and work with stakeholders before automatically mandating the use of a particular industry standard. (Joint Gas Associations, No. 25 at p. 32) Rinnai supported use of industry standards when developing test methods, but the commenter stated that DOE should modify or decline to adopt an industry standard if doing so is necessary to ensure accuracy, consumer transparency, or alignment with EPCA. Rinnai stated that the Process Rule should provide flexibility to consider such standards, solicit stakeholder input,

and adopt them only when supported by clear and convincing evidence. (Rinnai, No. 11 at pp. 13-14) The CA IOUs stated that adopting industry test procedures is widely regarded as best practice, but the commenters acknowledged that these may not fully align with EPCA requirements and may need to be modified or enhanced to ensure they comply with law and are enforceable by being repeatable, reproducible, representative, and reasonable. (CA IOUs, No. 32 at p. 2)

DOE has a long history of monitoring the committees developing consensus standards, which allows DOE to evaluate whether the standards meet both industry's needs to minimize burden and provide representations to consumers and DOE's needs to comply with EPCA requirements and support repeatability and reproducibility to ensure a level playing field for manufacturers. This participation can also allow industry standards to incorporate the substance of waivers and address calculation changes. For this reason, upon review of comments, DOE is proposing to reinstate much of the language from the 2020 Process Rule, which limits changes to industry standards to those required for compliance with EPCA.

5. General

The April 2025 RFI requested comments on whether and how the Process Rule should be updated to provide additional detail on how DOE's rulemaking process satisfies the statutory requirements for establishing new or amended test procedures. 90 FR 16093, 16099 (April 17, 2025).

DOE received several comments related to general requirements for test procedures. AHRI stated that the Process Rule should clarify EPCA requirements that test procedures are to be representative of average use, not unduly burdensome, and repeatable and that the Process Rule should require DOE to demonstrate that test procedures do not result in indirect

performance mandates. (AHRI, No. 28 at p. 3) NAFEM stated that the Process Rule should take into account real world operating conditions and requirements, particularly related to food safety. (NAFEM, No. 13 at pp. 4-5) Heidi King Consulting stated that any test procedure must appropriately reflect the purpose of the product and its features, and that DOE should carefully consider when it is appropriate to assess energy performance at the product level versus the component level. (Heidi King Consulting, No. 30 at p. 4)

Upon review and in consideration of comments received, DOE has tentatively determined to reinstate the 2020 Process Rule language.

J. ASHRAE Equipment (Section 9)

Section 9 of the Process Rule was created by the February 2020 Final Rule and describes the process DOE will follow for conducting rulemakings for equipment subject to the "ASHRAE trigger" provisions in EPCA that apply when ASHRAE Standard 90.1 is amended with respect to standards, test procedures, or design requirements applicable to such equipment. The April 2024 Final Rule added provisions to clarify application of the 6- and 7-year lookback provisions for periodic review of standards and test procedures in the context of ASHRAE equipment.

1. Limited Circumstances and Clear and Convincing Evidence

The circumstances under which DOE will adopt a more-stringent standard than the ASHRAE standard or a different test procedure are laid out in the statute. DOE will issue a more-stringent standard than the ASHRAE Standard 90.1 level if DOE determines, supported by clear and convincing evidence, that the 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)(II)). DOE will adopt an updated test procedure for covered

ASHRAE equipment so as to be consistent with related amendments to ASHRAE Standard 90.1, unless such test standard would not meet the requirements of 42 U.S.C. 6314(a)(2)-(3) (*i.e.*, a test procedure reasonably designed to reflect energy efficiency, energy use, and estimated operating cost of a type of industrial equipment (or class thereof) during a representative average use cycle and is not unduly burdensome to conduct). (42 U.S.C. 6314(a)(4)(B)). If DOE makes such finding, by rule and supported by clear and convincing evidence, the Department may establish an amended test procedure that does meet these statutory requirements. (42 U.S.C. 6314(a)(4)(C)).

To reflect these statutory requirements, the February 2020 Process included the statement that DOE will adopt the revised ASHRAE levels or the industry test procedure, except in very limited circumstances. The February 2020 Process Rule also included a description of what qualifies as clear and convincing evidence.[36] 85 FR 8626, 8708 (Feb. 14, 2020). Both the statement and the clear and convincing description were subsequently removed from the Process Rule in the April 2024 Final Rule, deferring instead to the statutory language. 89 FR 24340, 24354 (April 8, 2024). *See* section 9(a) and (b) of appendix A.

[36] The February 2020 Final Rule stated that 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. 85 FR 8626, 8708 (Feb. 14, 2020).

The Joint Gas Associations stated that a revised Process Rule should define the process used to adopt ASHRAE Standard 90.1 equipment standards and define a mechanism for when a more-stringent equipment efficiency standard over the ASHRAE level may be pursued. (Joint Gas Associations, No. 25 at pp. 31-32)

ASHRAE and the Joint Gas Associations commented that DOE should adopt language explaining that DOE will adopt the revised ASHRAE levels or industry test procedure, except in very limited circumstances. The Joint Gas Associations argued that this was the intent contemplated by EPCA. (ASHRAE, No. 12 at p.2; Joint Gas Associations, No. 25 at pp. 31-32)

The Joint Gas Associations stated that for consideration of standards more stringent than the ASHRAE levels, DOE should be required to meet a very high bar to meet the "clear and convincing evidence" threshold and should seek public comment to assist it in making that determination. The commenters stated that to meet the "clear and convincing evidence" threshold, DOE should be required to determine that there is no substantial doubt that the more-stringent standard would result in significant additional conservation of energy, is technologically feasible and economically justified, or that the industry test procedures do not meet EPCA requirements. (Joint Gas Associations, No. 25 at pp. 31-32)

In response, DOE agrees that the intention of EPCA was for the Department to only adopt standard levels more stringent than those in ASHRAE Standard 90.1 in very limited circumstances. As such, for clarity, DOE is proposing to add that language back into the Process Rule and to largely reinstate the 2020 Process Rule language related to ASHRAE, in combination with the previous description of clear and convincing evidence. Specifically, DOE proposes to add the following language in section 9(e) of the Process Rule:

For ASHRAE equipment, DOE will adopt the revised standard levels or the industry test procedure contained or referenced in the latest version of ASHRAE Standard 90.1, as contemplated by EPCA, except in very limited circumstances.

With respect to DOE's consideration of standards more-stringent than the ASHRAE Standard 90.1 levels or changes to the industry test procedure, DOE will do so only if it can meet a very high bar to demonstrate that it has met a "clear and convincing evidence" threshold. Clear and convincing evidence would exist only where the specific facts and data 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 and 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, and DOE will take this step prior to publishing a proposed rule to adopt more-stringent standards or a different test procedure.

DOE has tentatively determined that this language reflects the intent of EPCA while providing additional clarity to stakeholders and ensuring the appropriate level of deference to the ASHRAE process. 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 is simply explaining the existing requirements of the statute, rather than seeking to change or reinterpret those requirements.

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. Recently, the term "clear and convincing evidence" was addressed in a pair of cases involving DOE. In *American Public Gas Ass'n v. United States Department of Energy*, the D.C. Circuit stated, "The requirement of 'clear and convincing evidence' as a prerequisite to informal rulemaking is unusual, perhaps unique; we are aware of no other authorization for rulemaking subject to this heightened evidentiary standard. The standard is familiar, however, from other areas of the law: clear and convincing evidence requires a factfinder (in this case the Secretary) to have an 'abiding conviction' that her findings (in this case that a more stringent standard would result in significant additional conservation of energy, would be technologically feasible, and is economically justified) are 'highly probable' to be true. *Colorado v. New Mexico,* 467 U.S. 310, 316, 104 S.Ct. 2433, 81 L.Ed.2d 247 (1984)." 22 F.4th 1018, 1025 (D.C. Cir. 2022); *see also Am. Pub. Gas Ass'n v. U.S. Dep't of Energy*, 72 F.4th 1324, 1336 (D.C. Cir. 2023).

In addition, 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 F. App'x 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 Am. 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 Univ. v. Yale*

Univ., 734 F.3d 113, 123 (2d Cir. 2013) (internal citations omitted).[37] 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*, section 301:5 Burden of Persuasion, Incidence and Measure in Civil Cases (8th ed. 2018)).

Regarding any 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 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

[37] 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."),—is equally familiar and well-defined."), *Jersey Const., Inc. v. Pennoni Assoc., Inc*., Civ. A. No. 91-7331, 1993 WL 2999 (E.D. Pa. Feb. 4, 1993) (citing *Joseph's v. Pizza Hut of Am.,, 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 n.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. United States*, 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.").

"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.

DOE requests comment on this proposal.

2. Timelines and Triggers

In the February 2020 Final Rule, the 2020 Process Rule expounded upon the timelines in EPCA for amending standards for ASHRAE equipment, combining timelines for standards and test procedures. 85 FR 8626, 8708 (Feb. 14, 2020). The April 2024 Final Rule added provisions to separately address standards and test procedures and to clarify application of EPCA's 6- and 7-year lookback provisions for periodic review of standards and test procedures for ASHRAE equipment. 86 FR 70892, 70928-70929 (Dec. 13, 2021).

The Joint Gas Associations stated that the Department should continue to follow the statutory timelines and procedural requirements in EPCA for ASHRAE equipment when adopting the ASHRAE Standard 90.1 levels, rather than those set forth in any Process Rule. (Joint Gas Associations, No. 25 at pp. 31-32) The Joint Advocates noted that for ASHRAE equipment, the Process Rule separately defines the timelines for ASHRAE trigger rulemakings. (Joint Advocates, No. 31 at p. 4) ASHRAE stated that faster adoption by DOE of amended energy conservation standards in ASHRAE Standard 90.1 would lead to lower energy costs for consumers and businesses, and the commenter added that such approach is in alignment with both OMB Circular A-119 and the National Technology Transfer and

Advancement Act ("NTTAA"), Pub. L. 104-113 (which directs Federal agencies to adopt voluntary industry consensus standards unless inconsistent with the law or impractical). (ASHRAE, No. 12 at p. 2)

In response and in consideration of the comments received, DOE has tentatively determined to largely reinstate the 2020 Process Rule language.

The Scope section of the current Process Rule (section 2) states that ASHRAE equipment is governed separately under section 9; as such, the other provisions in the Process Rule do not apply.

The Joint Gas Associations stated that in the event that DOE conducts a rulemaking to establish more-stringent standards for covered ASHRAE equipment, DOE should follow the procedures established in a revised Process Rule, while still complying with EPCA's ASHRAE-specific deadlines. (Joint Gas Associations, No. 25 at pp. 31-32) ASHRAE stated that DOE should strictly adhere to the "7 Factor Test" if promulgating energy conservation standards levels beyond ASHRAE Standard 90.1. (ASHRAE, No. 12 at p. 2)

In response, DOE notes that although the full Process Rule does not currently apply to ASHRAE equipment, ASHRAE equipment have express rulemaking timelines specified in EPCA, as well as EPCA provisions related to the 7 Factor Test for economic justification. Additionally, the clear and convincing evidence threshold for rulemakings regarding ASHRAE equipment that would go beyond the levels set forth in ASHRAE Standard 90.1 may require additional consideration throughout the rulemaking process as compared to a rulemaking for non-ASHRAE equipment. As such, DOE has tentatively determined that additional language in the Process Rule may be needed. DOE is requesting information and comments on possible improvements or considerations for ASHRAE equipment.

The April 2024 Final Rule clarified in section 9(a)(3) of the Process Rule that publication of ASHRAE Standard 90.1 is the "trigger" for DOE reviewing standards. 89 FR 24340, 24362 (April 8, 2024).

ASHRAE stated that the trigger for when DOE must consider updating energy conservation standards for covered ASHRAE equipment is when the full version of ASHRAE Standard 90.1 is updated and published. (ASHRAE, No. 12 at p. 2)

In response, DOE agrees that this is consistent with DOE's historical interpretation of what constitutes a trigger.

The February 2020 Final Rule specified that DOE's review in considering amended standards based on action by ASHRAE to amend ASHRAE Standard 90.1 was strictly limited to the specific equipment class for which ASHRAE made a change. 85 FR 8626, 8708 (Feb. 14, 2020). The current Process Rule does not include such statement. Instead, the April 2024 Final Rule amended section 9(a)(3) of the Process Rule to state that DOE considers an amendment of standard levels in ASHRAE Standard 90.1 to be only those changes resulting in an increase in stringency of standard levels relative to the current Federal standards or the adoption of a design requirement. 89 FR 24340, 24362 (April 8, 2024).

The Joint Gas Associations stated that DOE's review in adopting amendments based on action by ASHRAE should be strictly limited to the specific standards for the specific equipment for which ASHRAE has made a change. (Joint Gas Associations, No. 25 at pp. 31-32)

DOE agrees that this is historically the way that DOE has proceeded; therefore, DOE has tentatively determined that it will largely revert to this language as established in the

2020 Process Rule. DOE requests comment on this approach, and also on whether additional language regarding this topic would be appropriate in the Process Rule.

K. Direct Final Rules (Section 10) and Negotiated Rulemaking

The Direct Final Rule section was established in the February 2020 Final Rule and describes how DOE would comply with EPCA requirements specific to publication of direct final rules, including the Department's interpretation of the term "fairly representative of relevant points of view" as it applies to interested stakeholders. 85 FR 8626, 8708 (Feb. 14, 2020). The December 2021 Final Rule amended this section to clarify that DOE will implement its direct final rule authority under EPCA on a case-by-case basis including its evaluation of the meaning of "fairly representative," subject to the circumstances of a particular rulemaking. 86 FR 70892, 70929 (Dec. 13, 2021). *See* section 10 of appendix A.

The February 2020 Final Rule also included a separate section related to negotiated rulemakings, which specified that they could not result in a direct final rule. 85 FR 8626, 8708-8709 (Feb. 14, 2020). The December 2021 Final Rule removed that section, instead inserting in the Objectives section of the Process Rule (section 1) a statement that the Department encouraged consensus proposals, including those developed in accordance with the Negotiated Rulemaking Act ("NRA"), Pub. L. 104-320 (5 U.S.C. 561, *et seq*.). It also clarified in section 10 of the Process Rule that consensus recommendations developed in accordance with the NRA may result in a direct final rule. 86 FR 70892, 70925, 70929 (Dec. 13, 2021). *See* sections 1(g) and 10 of appendix A.

Several commenters expressed support for negotiated rulemakings and urged that the Process Rule should maintain procedures for their use. Lennox stated that negotiated rulemakings should be a preferred route for energy efficiency rulemaking by DOE. (Lennox,

No. 26 at p. 3) Lennox further stated that the Process Rule should require DOE to actively explore negotiated rulemakings for all major new standards. (Lennox, No. 26 at p. 11-12) BWC stated that DOE should be allowed to use a negotiated rulemaking process during the early stages, involving stakeholders who represent relevant viewpoints. (BWC, No. 34 at p. 4) The Joint Gas Associations supported including procedures for negotiated rulemakings in the Process Rule that provide for a convener and promote full stakeholder participation throughout the rulemaking process. The Joint Gas Associations stated that if used appropriately, negotiated rulemakings can be an effective and efficient means of promulgating new energy conservation standards. (Joint Gas Associations, No. 25 at p. 35) Rinnai supported the use of a negotiated process that allows DOE to identify and address technical, economic, and practical concerns early in the process. Rinnai further stated that participation should include regional utilities, national and small manufacturers, consumer representatives, and State/local energy officials. (Rinnai, No. 11 at pp. 13-14)

Several commenters recommended that negotiated rulemakings utilize a neutral convener. The Joint Gas Associations recommended that a revised Process Rule should make clear that, prior to initiating a negotiated rulemaking, DOE will 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. The Joint Gas Associations also supported DOE incorporating provisions to ensure there is opportunity for public comment before the negotiated rulemaking committee. The Joint Gas Associations stated that the use of a facilitator and the opportunity for comprehensive public input will ensure the participation of all relevant

interests in the process. (Joint Gas Associations, No. 25 at p. 35) Rinnai stated that for negotiated rulemakings to be effective, there should be a neutral convener to assess the feasibility of a negotiated rulemaking and to identify all parties significantly affected by the rule. Rinnai further stated that all stakeholders should be able to provide public comment on committee drafts and deliberations before consensus is finalized into regulation. (Rinnai, No. 11 at p. 13)

Several commenters supported the use of direct final rules ("DFR") after a consensus is reached during a negotiated rulemaking. BWC stated that if consensus is reached, DOE can issue a DFR, bypassing many administrative steps and saving time and resources. (BWC, No. 34 at p. 4) Rinnai recommended codifying in the Process Rule that DFRs are only appropriate where a representative cross-section of stakeholders—including utilities, consumers, small businesses, and small manufacturers—have actively participated in developing the proposed standard and affirmatively support its adoption without further comment. (Rinnai, No. 11 at p. 13) Rinnai also stated that negotiations should be required to represent a consensus inclusive across various constituencies and be subject to public scrutiny. Rinnai further stated that negotiations should include robust engagement with the full diversity of impacted stakeholders, particularly small and mid-sized manufacturers, distributors, professional installers, and end users. (Rinnai, No. 11 at p. 14) The Joint Gas Associations stated that at a minimum, the DFR process should include larger concerns and small businesses in the regulated industry/manufacturer community, energy advocates, energy utilities, consumers, and States. The Joint Gas Associations stated that a representative group, with respect to all proposed standards applicable to appliances that use natural gas, must include gas distribution utilities and their customers. Furthermore, the Joint

Gas Associations stated that any rules established through a DFR or a negotiated rulemaking process must still adhere to the other principles in EPCA, such as being economically justified, technologically feasible, and demonstrate significant conservation of energy. The Joint Gas Associations recommended that a revised Process Rule should reflect and formalize this inclusive approach. (Joint Gas Associations, No. 25 at pp. 33-34)

Rinnai stated that no stakeholder recommendation should be used as the primary basis for a proposed rule unless it includes participants that represent all segments of the affected industry (including small manufacturers and utilities) and includes a mechanism for dissenting views to be formally submitted. (Rinnai, No. 11 at p. 14)

Rinnai stated that analysis supporting negotiations should be required to include a competitive impact assessment (*i.e.*, examining how any stakeholder recommendation may benefit one or more participating entities). The commenter stated that this review should examine whether the proposal would create market distortions, impose barriers to entry, or provide disproportionate advantages to specific market participants or technologies. Rinnai recommended that findings should be publicly disclosed to ensure transparency and guard against regulatory capture. (Rinnai, No. 11 at p. 14)

Upon review, DOE has tentatively determined that largely returning to the language in the 2020 Process Rule regarding Direct Final Rules and the Negotiated Rulemaking Process will provide more clarity to stakeholders on how DOE will implement these mechanisms. DOE has also tentatively determined, based on review of stakeholder comments, that the text in the Objectives section of the Process Rule encouraging the development of consensus proposals, including - in certain circumstances and after careful consideration of fair representation - negotiated proposals, is appropriate, and is further

proposing to add language noting that these proposals may proceed to a direct final rule in appropriate cases.

DOE is requesting information and comments on possible improvements or considerations for the process of negotiated rulemaking under EPCA. DOE is also requesting comments on considerations for direct final rules.

L. Principles for Distinguishing Between Effective and Compliance Dates (Section 11)

This section was established in the February 2020 Final Rule and provides clarification as to the distinction between the effective and compliance dates of a final rule. 85 FR 8626, 8709 (Feb. 14, 2020). This section has not been amended since its original establishment.

While DOE did not receive any comments related to this section, DOE has tentatively determined that it would also be beneficial to clarify the prescribed date of a rule as compared to the effective and compliance dates. As noted in the current Process Rule, the effective date is the date a rule is legally operative after being published in the *Federal Register*. Under the Administrative Procedure Act, the effective date must be at least 30 days after the date of publication in the *Federal Register*. (5 U.S.C. 553(d)). For some rules, a longer period is required (*e.g.*, 60 days for a major rule under the Congressional Review Act (5 U.S.C. 801(a)(3)) and 120 days for a direct final rule issued under 42 U.S.C. 6295(p)(4)). The compliance date, on the other hand, is the specific date when manufacturers are required to use a new test procedure to make energy efficiency representations or to meet a new energy conservation standard. For test procedures, the compliance date is typically 180 days after publication in the *Federal Register*. (42 U.S.C. 6293(c)(2)). For standards, the

compliance date is typically three or five years after publication in the *Federal Register* for covered products but can vary under certain circumstances. (42 U.SC. 6295(m)(4)).

In addition to effective and compliance dates, the date a rule is prescribed is also a significant date in EPCA. For instance, under EPCA, petitions for review of a rule are required to be filed "within 60 days after the date on which such rule is prescribed." (42 U.S.C. 6306(b)(1)). DOE's longstanding interpretation has been that the prescribed date of a rule is the date the rule is published in the *Federal Register*. This view is consistent with the court's determination in *Natural Resources Defense Council v. Abraham* that "publish" and "prescribe" are "interchangeable" terms in EPCA. 355 F.3d 179, 196 (2d Cir. 2004). DOE proposes to add language clarifying that the prescribed date for a rule issued under EPCA, including direct final rules, is the date the rule is published in the *Federal Register*.

M. Other Comments

DOE received several other comments not directly linked to any specific section of the Process Rule. The Department summarizes and addresses these comments in the paragraphs that follow. However, DOE is not proposing any revisions in relation to these comments for the reasons explained.

In the April 2025 RFI, DOE requested comments and information on whether any changes to the Process Rule should be made, consistent with statutory requirements, to reduce the regulatory burden associated with test procedure and/or energy conservation standards rulemakings. 90 FR 16093, 16097 (April 17, 2025).

DOE received two comments related to changing timelines of rulemakings in response to regulatory burden. BWC stated that DOE should evaluate the cumulative regulatory burden on manufacturers early in the rulemaking process, because manufacturers

producing multiple covered products can be overwhelmed by simultaneous rulemakings. BWC stated that DOE should accept comments from manufacturers facing cumulative regulatory burdens and consider delaying rulemakings if manufacturers are overstretched by other ongoing DOE efforts. (BWC, No. 34 at p. 4) NAFEM commented that the Process Rule should require DOE to align regulatory schedules across Federal agencies and State regulations to reduce uncertainty and manufacturer burden in terms of re-tooling product lines and costs for agency re-approvals, costs for re-testing equipment and products, and costs to modify sales and marketing literature. NAFEM argued that overlapping and conflicting timelines create economic hardship, especially for small manufacturers. (NAFEM, No. 13 at pp. 3-4)

In response, DOE notes that it must comply with statutory requirements for the timing of rulemakings, and any adjustments to rulemaking timelines to address regulatory burden must be done in compliance with the statutory deadline for a given product. As such, DOE is unable to address these requested changes to regulatory timelines generally as part of the Process Rule.

Several other commenters discussed how to analyze cumulative regulatory burden; these comments will be summarized and addressed in a separate proceeding focused on the analytical methodologies used in DOE's rulemaking process.

The April 2025 RFI asked whether and how the Process Rule should be updated to provide additional detail on how DOE's rulemaking process ensures protection of consumer choice in prescribing regulations for covered consumer products and commercial/ industrial equipment as directed by EPCA. 90 FR 16093, 16097 (April 17, 2025).

Several commenters stated that EPCA and/or the current Process Rule already prioritize the interests of American consumers and consumer choice and that no changes to the Process Rule are needed. (NEEA, No. 36 at p. 3; Ceres, No. 22 at pp. 2-4; Lennox, No. 26 at p. 3; State Agencies, No. 33 at p. 1; Joint Advocates, No. 31 at p. 2) Ceres added that the current Process Rule provides market certainty critical for manufacturers to determine appliance costs for consumers. Ceres stated that without national standards, manufacturers would have to navigate individual State requirements to offer their products across the country, and that this may prevent some manufacturers from selling products in individual States, thereby creating serious variances in costs and products available from State to State. (Ceres, No. 22 at pp. 2-4)

NAHB expressed support for standards that reduce energy consumption and allow markets to offer a robust range of products that meet consumer preferences for functionality, cost, efficiency, and aesthetics. NAHB stated that EPCA requires DOE to consider this exact impact, but that the recent residential furnaces and consumer water heaters rulemakings will adversely impact consumer choice. Accordingly, the commenter recommended that compliance with these standards should be postponed. (NAHB, No. 19 at pp. 2-3)

DOE agrees that its role in implementing EPCA should include thorough assessment of the interests of American consumers and domestic manufacturers, but DOE is open to comments regarding additional ways DOE can address these interests. DOE notes that many other commenters discussed consumer choice specifically in relation to adding more clarification of how DOE interprets the EPCA provisions related to features, product classes,

and unavailability.[38] These comments may be considered in a separate proceeding related to that topic, if appropriate. In response to NAHB, DOE notes that the referenced rulemakings have already been completed and any change to the compliance date is outside the scope of this Process Rule proceeding.

Rinnai recommended requiring identification and documentation of lessons learned for any rule that is withdrawn under the Congressional Review Act ("CRA") or judicial invalidation. (Rinnai, No. 11 at p.11)

In response, DOE notes that its actions addressing rules being withdrawn as a result of CRA or judicial invalidation are based on the requirements of the CRA or the specific judicial decision. As such, DOE is not proposing additional language in the Process Rule.

PHTA recommended that any amendments to the certification, compliance, enforcement sections of Part 429 (which require a change to the reporting requirements for manufacturers to demonstrate compliance) be completed within the test procedure or energy conservation standard rulemaking, and not a separate certification rulemaking. (PHTA, No. 27 at p. 2)

DOE notes that information collected in certification reports is subject to approval from Office of Information and Regulatory Affairs ("OIRA"), consistent with the requirements of the Paperwork Reduction Act ("PRA"). DOE establishes reporting requirements consistent with the PRA and OIRA requirements for the entire range of covered products. DOE is considering how to best limit regulatory burden associated with its appliance standards program, including approaches to limit the paperwork and reporting

[38] (ACCA, No. 38 at p. 1; AHRI, No. 28 at pp. 2-3; APPA, No. 20 at p. 5; BHI, No. 16 at pp. 2-5; Heidi King Consulting, No. 30 at p. 4; Joint Advocates, No. 31 at p. 2; Joint Gas Associations, No. 25 at pp. 14-16; NAFEM, No. 13 at pp. 7-8; NEMA, No. 23 at pp. 5-6; NRECA, No. 17 at p. 2; Rinnai, No. 11 at pp. 3, 6-7, 11-12; Strauch, No. 18 at pp. 1-2; ONE Gas, No. 37 at pp. 3-4; WM Technologies, No. 14 at p. 2)

burden associated with compliance certification reporting requirements. DOE will propose any such action as part of a separate proceeding related to certification requirements.

Zero Zone recommended that DOE review how it applies uncertainty levels to analysis, test reporting and certification, and standard levels. (Zero Zone, No. 15 at pp. 1-2)

In response, DOE notes that uncertainty levels are assessed on a case- by-case basis in individual energy conservation standards and test procedure rulemakings, as needed. Given the fact-specific nature of such inquiry, DOE does not believe that a generalized statement in the Process Rule would add significant value.

APPA and EEI stated that DOE should work with Congress to reform the 3-year-lookback provision for "no new standards" determinations, perhaps by providing that a new analysis should only be required if there is a significant shipments increase. (APPA, No. 20 at p. 3; EEI, No. 35 at p. 3) APPA commented that DOE should also work with Congress to revise the "six-year-lookback" (for energy conservation standards) and "seven-year-lookback" (for test procedures) requirements contained in the Energy Independence and Security Act of 2007 ("EISA 2007") amendments to EPCA and consider changing it to six or seven years after the compliance date of a new standard. APPA argued that this would provide more time to evaluate the real-world effects of new standards before considering any amendments. (APPA, No. 20 at pp. 3, 5)

DOE acknowledges receipt of these comments and will consider further updates to the Process Rule to reflect any future amendments to EPCA, if adopted by Congress.

Lennox stated that the Process Rule should acknowledge DOE's "error correction" provisions and that these error correction provisions should be strengthened. (Lennox, No. 26 at p. 11)

In response, DOE's error correction provisions are not part of the Process Rule and DOE has tentatively decided to continue addressing them separately. *See* 10 CFR 430.5. The error correction provisions describe an optional process that the Secretary may choose to follow for a final rule that establishes or amends energy conservation standards, prior to publication of such rule in the *Federal Register*. Because this is an optional procedure and because DOE is proposing in this notice that the Process Rule would be binding on DOE, DOE has tentatively determined that addressing error correction provisions separately is appropriate. However, DOE is requesting additional comments on whether the Process Rule should reference the optional separate error correction provisions.

Several commenters discussed stakeholder engagement and transparency.

ACCA stated that DOE should provide plain-language summaries of proposed standards and technical analyses. The commenter added that DOE should expand opportunities for contractors, installers, and service professionals -- those closest to real-world performance -- to contribute data and recommendations during rulemakings. ACCA suggested that DOE should establish a small business review panel within the program, modeled on the Small Business Administration's Small Business Regulatory Enforcement Fairness Act ("SBREFA") panels, to evaluate impacts early in the rulemaking process. (ACCA, No. 38 at p. 3)

APPA recommended that DOE increase its use of Internet platforms and hybrid meetings to maximize stakeholder input and reduce the cost of rulemaking processes. (APPA, No. 20 at pp. 4-5) EEI recommended that DOE should increase its use of Internet platforms including hosting hybrid or Internet-only webinars during comment periods. (EEI, No. 35 at p. 4) NAHB encouraged DOE to focus on publicizing and justifying its rationale

for decision making throughout the rulemaking process; NAHB noted that webinars and other public forums to solicit input can increase confidence in the fairness and transparency of the rulemaking process. (NAHB, No. 19 at p. 5) Rinnai recommended requiring disclosure of all modeling assumptions, engagement with stakeholders through technical workshops, and publishing intermediate results. Rinnai also recommended requiring stakeholder webinars within 10 days of releasing major data sets or modeling changes. (Rinnai, No. 11 at p. 10)

NRECA commented that DOE should account for key issues raised by stakeholders and incorporate the information provided in its rulemakings. (NRECA, No. 17 at p. 2) APPA commented that DOE should ensure that it carefully evaluates information and analyses submitted by stakeholders. (APPA, No. 20 at pp. 4-5) NAFEM commented that DOE should participate in increased dialogue with industry. (NAFEM, No. 13 at p. 8)

Rinnai recommended requiring public availability of all life-cycle cost ("LCC") model files and key assumptions. (Rinnai, No. 11 at p. 10) Zero Zone stated that DOE should be required to share its models and allow stakeholder review. (Zero Zone, No. 15 at p. 4)

NEMA recommended that DOE consider soliciting pre-NOPR information at the earliest possible time, in order to guide the way forward, help avoid wasting resources later, and reduce the likelihood of a rule that is inconsistent with the statutory scheme and, thus, vulnerable to legal challenge. (NEMA, No. 23 at p. 8)

The Joint Gas Associations stated that the Department should use updated qualitative and quantitative analytical methods that fully document for the public that its decisions are

sound. These commenters added that any results should be fully explained and capable of being reproduced by stakeholders. (Joint Gas Associations, No. 25 at p. 18)

AHRI, NAFEM, and Zero Zone suggested that DOE should be required to provide masked test data to all stakeholders, and AHRI and NAFEM suggested that unmasked test data should be provided to the relevant manufacturer. (AHRI, No. 28 at pp. 2, 7; NAFEM, No. 13 at pp. 6-7; Zero Zone, No. 15 at pp. 2, 4) Zero Zone added that a Professional Engineer should be required to review and approve the results. (Zero Zone, No. 15 at p. 4)

The Joint Advocates stated that the Process Rule currently specifies opportunity for public comment, and DOE makes supporting materials publicly available, including technical support documents, government regulatory impact models, and the national impact analysis ("NIA") and LCC spreadsheets. Accordingly, the Joint Advocates concluded that there is no need to amend these sections of the Process Rule. (Joint Advocates, No. 31 at pp. 3-4) NEEA stated that DOE should continue to publish its analyses and field formal comment periods and stakeholder input opportunities across key rulemaking stages. Additionally, NEEA recommended DOE continue to prioritize transparency, accessibility, and consistency in how it solicits and incorporates public feedback, and the commenter opposed any changes that would diminish the structure, duration, or significance of public comment windows. (NEEA, No. 36 at p. 2) NEEA recommended DOE maintain its current commitment to transparent, peer-reviewed cost-benefit analysis, including the publication of assumptions, data, and modeling tools. (NEEA, No. 36 at p. 3)

Upon review, DOE agrees that the current Process Rule already specifies appropriate opportunities for public comment and stakeholder engagement. While DOE makes all spreadsheet models and technical support documents publicly available for stakeholder

review, the Department welcomes the opportunity to further increase transparency and reproducibility as part of the rulemaking record. DOE recognizes that in isolation such documents may be difficult to navigate without clear documentation manuals and access to underlying methodology and data. DOE will explore opportunities to increase transparency further through the Analytic Framework update. DOE already engages with stakeholders via public hearings (including hybrid meetings) and provides opportunities for stakeholders to submit relevant real-world performance data and information and provide recommendations. DOE responds to key issues raised by stakeholders and incorporates information provided in its rulemakings, where appropriate. DOE also has the ability to make additional materials available or to conduct additional stakeholder engagement as necessary. To the extent that commenters raised topics related to analytical methodologies, DOE further discusses such comments in section IV.N.1 of this document, and the Department will address these methodologies in a separate process. As such, DOE is not proposing any revisions in response to these comments at this time.

N. Topics Considered in Other Processes

1. Analytical Methodology

DOE received several comments in response to the April 2025 RFI pertaining to the analysis conducted in support of the development of energy conservation standards, including comments on the methodology and development of input values related to the general approach,[39] as well as comments pertaining to specific analyses, including: (1) the

[39] (BHI, No. 16 at pp. 5-6; BWC, No. 34 at p. 5; Joint Commenters, No. 24 at pp. 3-4; AHRI, No. 28 at pp. 2, 7-8,11-12; Joint Gas Associations, No. 25 at pp. 23-24, 37-38; APPA, No. 20 at p. 1; Joint Advocates, No. 31 at pp. 2-3; EEI, No. 35 at p. 2; State Agencies, No. 33 at p. 2; Heidi King Consulting, No. 30 at pp. 1-3; Lennox, No. 26 at pp. 6-7)

engineering analysis;[40] (2) the markups analysis;[41] (3) the energy use and life-cycle cost analysis;[42] (4) the environmental analysis[43] and full-fuel-cycle energy metrics;[44] (5) the monetization of emissions analysis;[45] (6) the utility impact analysis;[46] and (7) the manufacturer impact analysis.[47]

DOE further received additional comments specific to the following topics: (1) the approach to evaluate hard-to-quantify effects[48] and evaluate market failures;[49] (2) the cumulative regulatory burden analysis; [50] (3) considerations of any potential supply chain constraints;[51] (4) fuel neutrality and analysis of fuel switching;[52] and (5) the need for retrospective review and validation of existing standards prior to initiating new rulemakings.[53]

Given the significant volume and range of comments which require careful consideration, DOE has tentatively determined that the most appropriate path forward is to propose minor amendments to these methodology sections (*e.g.*, sections 12 through 16) of the Process Rule, but to address the detailed topics raised in these comments as part of a separate process. DOE intends to separately undertake an analytic framework RFI in which

---

[40] (Joint Gas Associations, No. 25 at p. 22; Strauch, No. 18 at p. 1; NAFEM, No. 13 at p. 8)
[41] (Joint Gas Associations, No. 25 at p. 22; Lennox, No. 26 at p. 7)
[42] (ACCA, No. 38 at p. 2; AHRI, No. 28 at pp. 4, 7; EEI, No. 35 at p. 2; Joint Gas Associations, No. 25 at pp. 22-24; Joint Advocates, No. 31 at p. 3; Lennox, No. 26 at p. 7; NAHB, No. 19 at p. 4; NMHC and NAA, No. 29 at pp. 2-5; ONE Gas, No. 37 at pp. 2-3; ONE Gas, No. 37 at pp. 2-3; Rinnai, No. 11 at pp. 3, 6-8)
[43] (APPA, No. 20 at p. 5; Ceres, No. 22 at p. 5; NEEA, No. 36 at p. 3; EEI, No. 35 at p. 5)
[44] (Joint Gas Associations, No. 25 at pp. 18-19; ONE Gas, No. 37 at pp. 4-5; Rinnai, No. 11 at pp. 3, 7-8)
[45] (AHRI, No. 28 at p. 10; BWC, No. 34 at p. 5; Ceres, No. 22 at p. 4; State Agencies, No. 33 at p. 2; Strauch, No. 18 at p. 2; NAHB, No. 19 at p. 5; NAFEM, No. 13 at p. 7; Zero Zone, No. 15 at p. 5)
[46] (ONE Gas, No. 37 at p. 4)
[47] (ACCA, No. 38 at p. 2; NAFEM, No. 13 at pp. 2-3; Rinnai, No. 11 at pp. 3, 6)
[48] (Heidi King Consulting, No. 30 at p. 5; Lennox, No. 26 at p. 5; NEMA, No. 23 at p. 6-7; NRECA, No. 17 at p. 2)
[49] (Joint Gas Associations, No. 25 at pp. 21, 22; Heidi King Consulting, No. 30 at p. 3; Rinnai, No. 11 at p. 9)
[50] (AHRI, No. 28 at p. 4; Lennox, No. 26 at p. 6; PHTA, No. 27 at pp. 1-2)
[51] (APPA, No. 20 at pp. 2-3; EEI, No. 35 at pp. 2-3)
[52] (Joint Gas Associations, No. 25 at pp. 11-15, 17; Rinnai, No. 11 at pp. 9, 12)
[53] (ACCA, No. 38 at p. 2; Joint Gas Associations, No. 25 at pp. 26-28; NAHB, No. 19 at p. 4; Rinnai, No. 11 at p. 10)

DOE will conduct a review of its analytical methods, with the goal of ensuring that rulemaking analyses incorporate best practices and address topics raised during peer review[54] of DOE's rulemaking process.

2. Product-Specific Comments

Solaray commented that DOE should consider including solar thermal water heating systems within the scope of its prioritization process for energy conservation standards and consider solar water heaters alongside conventional and hybrid technologies in future water heating rulemakings, or as a standalone or primary heating source for water. (Solaray, No. 8 at pp. 2-4)

In response, DOE plans to address the appropriate scope for water heaters as part of any future rulemakings on water heaters.

O. Severability

These procedures, interpretations, and policies for consideration of new or revised energy conservation standards and test procedures are separate and severable from one another and capable of operating independently. If any section or portion therein is stayed or determined to be invalid, or the applicability of any section to any person or entity is held invalid, it is DOE's intention that the validity of the remainder of these procedures will not be affected and will continue in effect, along with all applications thereof.

[54] The National Academies of Sciences, Engineering, and Medicine completed the peer review and transmitted to DOE its report, "Review of Methods Used by the U.S. Department of Energy in Setting Appliance and Equipment Standards," ("NAS Report") on January 7, 2022. The report is available at *https://www.nap.edu/catalog/25992/review-of-methods-used-by-the-us-department-of-energy-in-setting-appliance-and-equipment-standards*.

V. Procedural Issues and Regulatory Review

A. Review Under Executive Order 12866

Section 6(a) of Executive Order (‘‘E.O.”) 12866, “Regulatory Planning and Review,” 58 FR 51735 (Oct. 4, 1993), requires agencies to submit “significant regulatory actions” to the Office of Information and Regulatory Affairs (“OIRA”) in the Office of Management and Budget (“OMB”) for review. OIRA has determined that this proposed regulatory action constitutes a “significant regulatory action” under section 3(f) of E.O. 12866. Accordingly, this proposed regulatory action was submitted to OIRA for review under E.O. 12866.

B. Review Under Additional Executive Orders and Presidential Memoranda

DOE has examined this proposed rule and has tentatively determined that it is consistent with the policies and directives outlined in E.O. 14154, “Unleashing American Energy,” 90 FR 8353 (Jan. 29, 2025); E.O. 14192, “Unleashing Prosperity Through Deregulation,” 90 FR 9065 (Feb. 6, 2025); and Presidential Memorandum, “Delivering Emergency Price Relief for American Families and Defeating the Cost-of-Living Crisis,” 90 FR 8245 (Jan. 28, 2025).

Preliminarily, this proposed rulemaking has also been determined to be an “E.O. 14192 deregulatory action” because, within the requirements of EPCA, it intends to reduce unnecessary burdens to society by streamlining the regulatory framework and improving efficiency for regulated entities and the interested public. The primary impacts are from the proposal to make the Process Rule binding for actions that would increase stringency, so that manufacturers and other stakeholders have more certainty with respect to how individual rulemakings will proceed in the future, within laid out boundaries. In addition, the proposal re-instates a threshold for significant conservation of energy, again giving

manufactures and other stakeholders more certainty with respect to how rulemakings will proceed in the future in terms of new or amended standards while continuing to meet DOE's responsibilities under EPCA. The proposal to re-instate a comparative analysis among all analyzed TSLs would also allow DOE to best determine economic justification, consistent with statutory requirements, while promoting consumer choice and lowering first cost of appliances. In addition, the proposal related to ASHRAE equipment gives more certainty to manufacturers that DOE will only adopt standard levels above ASHRAE in very specific circumstances, allowing them to focus resources on adjusting to any revisions in ASHRAE. These benefits are difficult to quantify due to the breadth of products, and that most benefits will accrue in individual future rulemakings. Nevertheless, DOE believes these benefits would be substantial.

C. 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, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by E.O. 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 (*www.energy.gov/gc/office-general-counsel*).

This proposed rule would impose no regulatory obligations on the public, including small entities, and it would not affect the ability of any interested person, including small entities, to participate in DOE's rulemaking process. Because this proposed rule to revise DOE's Process Rule instead would only impose procedural requirements on the Department itself, DOE certifies that this proposed rule would not have a "significant economic impact on a substantial number of small entities," and, therefore, the preparation of an IRFA is not warranted. Accordingly, DOE will transmit the certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the Small Business Administration ("SBA") for review under 5 U.S.C. 605(b).

D. Review Under the Paperwork Reduction Act of 1995

DOE is not amending its existing information collections through this proposed rule. Under existing provisions, 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 (*see generally* 10 CFR part 429). 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 35 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 proposed rule, addressing clarifications to the Process Rule itself, does not contain any collection of information requirement that would trigger the PRA.

E. Review Under the National Environmental Policy Act of 1969

Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 *et seq.*), DOE has analyzed this action in accordance with NEPA, as amended, DOE's NEPA implementing regulations (set forth in 10 CFR part 1021), and DOE's NEPA implementing procedures (published outside the Code of Federal Regulations on June 30, 2025 (Available at: *www.energy.gov/nepa/articles/doe-nepa-implementing-procedures-june-2025*)). The actions formally identified in appendix A of subpart D to part 1021 represent administrative and routine actions that are excepted from NEPA based on the definition of "major Federal action" in section 111(10) of NEPA. DOE has tentatively determined that the proposed amendments to the Process rule are administrative and routine. DOE has tentatively determined that as an administrative and routine action, this proposal is not a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA and no further environmental review is needed.

F. Review Under Executive Order 13132

E.O. 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 proposed rule and has tentatively determined that it would 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 procedures by which DOE develops proposed rules to revise energy conservation standards and test procedures for covered consumer products and commercial/industrial equipment. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of this proposed rule. 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)) No further action is required by Executive Order 13132.

G. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of E.O. 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 E.O. 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 section 3(a) and section 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 tentatively determined that, to the extent permitted by law, this proposed rule meets the relevant standards of E.O. 12988.

H. 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, section 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. DOE's policy statement is also available at *www.energy.gov/sites/prod/files/gcprod/documents/umra_97.pdf*.

DOE examined this proposed rule according to UMRA and its statement of policy and has tentatively 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.

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

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. No. 105-277) requires Federal agencies to issue a Family Policymaking Assessment for any rule or policy that may affect family well-being. When developing a Family Policymaking Assessment, agencies must assess whether: (1) the action strengthens or erodes the stability or safety of the family and, particularly, the marital commitment; (2) the action

strengthens or erodes the authority and rights of parents in the education, nurture, and supervision of their children; (3) the action helps the family perform its functions, or substitutes governmental activity for the function; (4) the action increases or decreases disposable income or poverty of families and children; (5) the proposed benefits of the action justify the financial impact on the family; (6) the action may be carried out by State or local government or by the family; and whether (7) the action establishes an implicit or explicit policy concerning the relationship between the behavior and personal responsibility of youth, and the norms of society.

This proposed rule, which would amend the procedures DOE will follow in conducting rulemakings for new or amended energy conservation standards and test procedures, would 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.

J. Review Under Executive Order 12630

Pursuant to E.O. 12630, "Governmental Actions and Interference with Constitutionally Protected Property Rights," 53 FR 8859 (March 18, 1988), DOE has determined that this proposed rule would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

K. 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). Pursuant to OMB Memorandum M-19-15, Improving Implementation of the Information Quality Act (April 24, 2019), DOE published updated guidelines which are available at *www.energy.gov/sites/prod/files/2019/12/f70/DOE%20Final%20Updated%20IQA%20Guidelines%20Dec%202019.pdf*.

DOE has reviewed this proposed rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

L. Review Under Executive Order 13211

E.O. 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 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 is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) is designated by the Administrator of OIRA as a significant energy action. For any significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the regulation 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 proposes clarifications to the Process Rule that guides the Department in establishing and amending energy conservation standards and test procedures, 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 such by the Administrator at OIRA. Accordingly, DOE has not prepared a Statement of Energy Effects for this proposed rule.

M. Review Under the 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 peer reviews of the energy conservation standards development process and the analyses that are typically used and has prepared a Peer Review report pertaining to the energy conservation standards rulemaking analyses.[55] 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. Because available data, models, and

[55] The 2007 "Energy Conservation Standards Rulemaking Peer Review Report" is available at *www.energy.gov/cmei/articles/building-technologies-office-bto-peer-review-2007* (Last accessed May 11, 2026).

technological understanding have changed since 2007, DOE has engaged with the National Academy of Sciences to review DOE's analytical methodologies to ascertain whether modifications are needed to improve DOE's analyses. DOE is in the process of evaluating the resulting report[56] and plans to consider any corresponding updates needed to its analytical framework in a separate proceeding, as discussed earlier in this document. Specifically, DOE plans to publish a separate analytic framework RFI to seek public input and peer review on any necessary updates to its rulemaking analytical methodologies.

VI. Public Participation

A. Participation in the Webinar

The time and date of the webinar meeting are listed in the **DATES** section at the beginning of this document. Webinar registration information, participant instructions, and information about the capabilities available to webinar participants will be published on DOE's website at: *www.energy.gov/eere/buildings/public-meetings-and-comment-deadlines*. Participants are responsible for ensuring their systems are compatible with the webinar software.

B. Procedure for Submitting Prepared General Statements for Distribution

Any person who has an interest in the topics addressed in this document, or who is representative of a group or class of persons that has an interest in these issues, may request an opportunity to make an oral presentation at the webinar. Such persons may submit such request to make a prepared general statement to *ApplianceStandardsQuestions@ee.doe.gov*. Persons who wish to speak should include with their request a computer file in WordPerfect, Microsoft Word, PDF, or text (ASCII) file format that briefly describes the nature of their

[56] The report is available at *www.nationalacademies.org/our-work/review-of-methods-for-setting-building-and-equipment-performance-standards* (Last accessed Oct. 6, 2025).

interest in this proposed rule and the topics they wish to discuss. Such persons should also provide a daytime telephone number where they can be reached to enable DOE staff to make follow-up contact, if needed.

DOE requests persons seeking to make an oral presentation to submit an advance copy of their statements at least one week before the webinar. At its discretion, DOE may permit persons who cannot supply an advance copy of their statement to participate, if those persons have made advance alternative arrangements with the Building Technologies Office. As necessary, requests to give an oral presentation should ask for such alternative arrangements.

C. Conduct of the Webinar

DOE will designate a DOE official to preside at the webinar and may also use a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA (42 U.S.C. 6306). A court reporter will be present to record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the webinar. There shall not be discussion of proprietary information, costs or prices, market share, or other commercial matters regulated by U.S. anti-trust laws. After the webinar, interested parties may submit further comments on the proceedings, as well as on any aspect of the proposed rulemaking, until the end of the comment period.

The webinar will be conducted in an informal, conference style. DOE will present a general overview of the topics addressed in this proposed rule, allow time for prepared general statements by participants, and encourage all interested parties to share their views on

issues affecting this proposed rule. Each participant will be allowed to make a general statement (within time limits determined by DOE), before the discussion of specific topics. DOE will permit, as time permits, other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly. Participants should be prepared to answer questions by DOE and by other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this proposed rule. The official conducting the webinar will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the webinar.

A transcript of the webinar will be included in the docket, which can be viewed as described in the Docket section at the beginning of this document and will be accessible on the DOE website. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule before or after the webinar, but no later than the date provided in the **DATES** section at the beginning of this document. Interested parties may submit comments, data, and other information using any of the methods described in the **ADDRESSES** section at the beginning of this document.

Submitting comments via www.regulations.gov. The *www.regulations.gov* webpage will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment itself or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Otherwise, persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to *www.regulations.gov* information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information ("CBI")). Comments submitted through *www.regulations.gov* cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through *www.regulations.gov* before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be

viewable for up to several weeks. Please keep the comment tracking number that *www.regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery/courier, or postal mail. Comments and documents submitted via email, hand delivery/courier, or postal mail also will be posted to *www.regulations.gov*. If you do not want your personal contact information to be publicly viewable, do not include it in your comments or any accompanying documents. Instead, provide your contact information in a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via postal mail or hand delivery/courier, please provide all items on a CD, if feasible, in which case it is not necessary to submit printed copies. No telefacsimiles ("faxes") will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, that are written in English, and that are free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery/courier two well-marked copies: one copy of the document marked "confidential" including all the information believed to be confidential, and one copy of the document marked "non-confidential" with the information believed to be confidential deleted. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

VII. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of proposed rulemaking and announcement of webinar.

List of Subjects in 10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Intergovernmental relations, Reporting and recordkeeping requirements, Small businesses.

Signing Authority

This document of the Department of Energy was signed on June 30, 2026, by Audrey Robertson, Assistant Secretary (EERE) for Critical Minerals and Energy Innovation, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only,

and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on June 30, 2026

AUDREY ROBERTSON
Digitally signed by AUDREY ROBERTSON
Date: 2026.06.30 15:22:00 -04'00'

_____

Audrey Robertson
Assistant Secretary (EERE)
for Critical Minerals and Energy Innovation
U.S. Department of Energy

For the reasons set forth in the preamble, DOE is proposing to amend part 430 of chapter II, subchapter D, 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

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, when circumstances weigh towards doing so, 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. In certain circumstances proposals may also be developed in accordance with the Negotiated Rulemaking Act (5 U.S.C. 561 *et seq*.) and as outlined in section 11 of this appendix, for new or revised standards because standards with representative, broad-based support are likely to balance effectively the various interests affected by such standards. These proposals may result in a direct final rule in appropriate cases. DOE notes that the procedural requirements of section 6 of this appendix do not apply to direct final rules. The procedural requirements for direct final rules are specified in EPCA. (42 U.S.C. 6295(p)(4)).

(h) *Department policies*. In accordance with EPCA, it is the goal of the Department to preserve the availability 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 the Secretary's finding, and in doing so to safeguard the American people's freedom to choose from a variety of goods and

appliances (including but not limited to lightbulbs, dishwashers, washing machines, gas stoves, water heaters, toilets, and shower heads); to promote market competition and innovation within the manufacturing and appliance industries; to ensure that the global effects of a rule, regulation, or action shall, whenever evaluated, be reported separately from its domestic costs and benefits (energy savings and efficiency), in order to promote sound regulatory decision making and prioritize the interests of the American people; and to guarantee opportunities for public comment and rigorous, peer-reviewed scientific analysis. (42 U.S.C. 6295(o)–(p)). The Department additionally has the goal of eliminating counterproductive requirements that raise the costs of home appliances in a manner consistent with the requirements of EPCA, which includes the consideration of energy savings relative to costs to consumers and manufacturers and impacts to markets for covered products. *Id*.

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 of this appendix.

3. Mandatory Application of the Process Rule

The rulemaking procedures established in this appendix are binding on DOE for actions that are anticipated to increase the stringency of a standard or increase the scope of products subject to compliance with a standard. With respect to other actions, DOE will satisfy the

requirements in EPCA and may choose to apply additional provisions in this appendix as may be appropriate so as to maintain flexibility and to provide relief without undue delay in appropriate cases. Certain actions as indicated may be exempt from the rulemaking procedures established by this appendix and may follow such expedited process as DOE may specify.

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 costs and 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;

(9) Potential to protect consumer choice in covered products and equipment;

(10) Potential to eliminate counterproductive requirements that increase the costs of appliances; and

(11) Other relevant factors.

(b) When circumstances weigh towards doing so, 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 presumptively at least 180 days prior to publication of a proposed rule to establish a test procedure, such as where an increase of stringency is contemplated and to provide notice as contemplated under EPCA. 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 document in the *Federal Register* announcing that DOE is considering initiating a rulemaking proceeding. As part of that document, 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.

(i) If DOE determines that a new or amended standard would not satisfy applicable statutory criteria, DOE would engage in notice and comment rulemaking to issue a determination that a new or amended standard is not warranted.

(ii) 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 2.0 quads of FFC 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 FFC 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)(2) 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 2.0 quad of aggregate FFC energy savings or a 10-percent decrease in FFC 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 category 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 compliance 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 initial 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 initial 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. (Where DOE does publish a pre-NOPR document for a deregulatory action, it may reduce the comment period from the presumptive 75 days or required 60 days to something less.)

(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, further 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, production, and inventory; 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; behavioral changes in response to changes in product utility, changes in covered product price, utility,

performance, feature, and product availability, such as changes to purchase rate of products, substitution of other products, increases or decreases in usage, and other impacts of likely concern to all or some consumers, based to the extent practicable on direct input from consumers; economically based estimates of life-cycle costs or savings with sensitivity analysis; consideration of the increased initial and operating costs to consumers and the time required for energy cost savings to pay back these costs; and loss of utility and consumer welfare. Specifically, DOE will consider: the incremental installed cost as a percentage of the baseline total installed cost, the simple payback period as a percentage of the average lifetime, and the percentage of consumers for whom a standard level is expected to result in net cost. DOE will also consider the protection of consumer choice when analyzing the private impacts on consumers.

(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) Other factors the Secretary considers relevant.

(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 *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 6 of this appendix 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. The 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 will not be used as the basis for candidate standard levels if the design options result in:

(i) Life-cycle cost increases relative to the base case, using typical fuel costs, usage, and private discount rates;

(ii) More than a 10 percent increase in installed cost relative to the baseline total installed cost;

(iii) More than 20 percent of consumers projected to incur net costs; or

(iv) A simple payback period as a percentage of average lifetime of more than 50 percent.

(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 initial life-cycle cost estimate; and

(C) A combination of design options with an initial 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) *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 both technologically feasible and economically justified.

(1) *Statutory policies*. The fundamental policies concerning the selection of standards include:

(i) A trial standard level will not be proposed or promulgated if the Department determines that it is not both technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A) and 42 U.S.C. 6295(o)(3)(B)). For a trial standard level to be economically justified, the Secretary must determine that the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering the factors listed in 42 U.S.C. 6295(o)(2)(B)(i). In making such a determination, the Secretary shall compare the benefits and burdens of the standard against the benefits and burdens of the baseline case ("no new standards" case) and in incremental progression for all other trial standard levels under consideration. This comparative ("walk up") analysis includes assessing the incremental changes in costs and benefits for each TSL's benefits and burdens relative to other TSLs and as part of a holistic analysis across all TSLs. (42 U.S.C. 6295(o)(2)(B)). The Secretary will also consider, consistent with the statute, other economic measures such as the life-cycle cost analysis, manufacturer impact analysis, and other relevant measures.

(ii) If the Department determines that interested persons have established by a preponderance of the evidence that a standard level is likely to result in the unavailability in the United States of any covered product/equipment type (or class) 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 of the determination, then 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 not result in significant energy conservation, that standard level will be presumed not to be economically justified.

(D) 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.

(E) 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.

(F) 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.

(G) 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. (An early assessment stage may not be warranted for deregulatory actions.) 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, with the following exceptions:

(1) Test procedure amendments limited to calculation changes (*e.g.*, use factor or adder); or

(2) Test procedures developed in accordance with the Negotiated Rulemaking Act or by interested persons that are fairly representative of relevant points of view (including representatives of manufacturers of covered products, States, and efficiency advocates), as determined by the Secretary. Parties submitting a consensus recommendation may specify a time period between finalization of the test procedure and publication of a NOPR proposing new or amended energy conservation standards or a notice of proposed determination that standards do not need to be amended.

(e) *Compliance 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 is 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 DOE determines by rule, and supported by clear and convincing evidence, that — (1) 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 standards 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 remains 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.

(d) For ASHRAE equipment, when determining whether a more stringent standard for the equipment category at issue would result in significant additional conservation of energy pursuant to 42 U.S.C. 6313(a)(6)(A)–(C), DOE will follow the process and thresholds described in section 6(b) of this appendix, "Significant Savings of Energy."

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," including a consensus recommendation developed in accordance with the Negotiated Rulemaking Act (5 U.S.C. 561 *et seq*.). 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 42 U.S.C. 6313(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. When publishing 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 convenor 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 convenor. 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 or a Direct Final Rule. DOE will consider the approved term sheet in developing such proposed rule or Direct Final Rule. 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 Prescribed, Effective, and Compliance Dates

(a) *Dates, generally*. The prescribed, 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) *Prescribed date*. The prescribed date is the date a rule, including a direct final rule, is published in the *Federal Register*.

(c) *Effective date*. The effective date is the date a rule is legally operative after being published in the *Federal Register*.

(d) *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 and further expanded to consider economic concepts and impacts. 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 6(f) of this appendix), 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 and model anticipated manufacturer behavior in response to such standards, such as modeling considerations of cost in compliance choices. 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. 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. In analyzing the impacts of candidate/proposed trial standard levels, the Department will model consumer behavior and

welfare impacts arising out of these trial standard levels. *See* also paragraph (c) of section 6 of this appendix.

(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. In conjunction with the modeling of manufacturer and consumer behavior as a result of proposed standard levels, the Department will endeavor to estimate losses to society as a result of foregone production or 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 among other variables 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, the 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, and utilities, 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 timeline 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*. DOE will model product/equipment-specific energy-efficiency trends under no standard scenarios.

(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) *Direct and indirect impacts*. DOE will endeavor to model and estimate both direct and indirect costs and impacts resulting from candidate and proposed trial standard levels.