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[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Part 431

[Docket No. EERE-2010-BT-STD-0037]

RIN: 1904-AC39

Energy Conservation Standards for Automatic Commercial Ice Makers: Availability of Revised Rulemaking Analysis

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

ACTION: Notice of data availability (NODA); request for comment.

SUMMARY: The Energy Policy and Conservation Act of 1975 (EPCA), as amended, prescribes energy conservation standards for various consumer products and certain commercial and industrial equipment, including automatic commercial ice makers. EPCA also requires DOE to determine whether more stringent, amended standards would be technologically feasible and economically justified, and would save a significant amount of energy. DOE proposed amended energy conservation standards for automatic commercial ice makers in a notice of proposed rulemaking (NOPR) published on March 17, 2014. DOE has since updated its proposed rulemaking analysis estimating the potential economic impacts and energy savings that could result from promulgating an amended energy conservation standard for automatic commercial ice makers. This notice announces the availability of this analysis to give stakeholders an opportunity to review the revised proposed rulemaking analysis and its results, and to give

stakeholders an opportunity to comment.

DATES: DOE will accept comments, data, and information regarding this NODA submitted no later than **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Any comments submitted must identify the Notice of Data Availability for Automatic Commercial Ice Makers, and provide docket number EERE-2010-BT-STD-0037 and/or regulatory information number (RIN) 1904-AC39. Comments may be submitted using any of the following methods:

1. Federal eRulemaking Portal: www.regulations.gov. Follow the instructions for submitting comments.
2. E-mail: ACIM-2010-STD-0037@ee.doe.gov. Include docket EERE-2010-BT-STD-0037 and/or RIN 1904-AC39 in the subject line of the message.
3. Mail: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE-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.
4. Hand Delivery/Courier: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 6th Floor, 950 L'Enfant Plaza SW., Washington, DC 20024.
Telephone: (202) 586-2945. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

Docket: The docket is available for review at www.regulations.gov, including Federal Register notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials. 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.

A link to the docket web page can be found at:
<http://www.regulations.gov/#!docketDetail;D=EERE-2010-BT-STD-0037>. The regulations.gov web page contains instructions on how to access all documents in the docket, including public comments.

For further information on how to review the docket, contact Ms. Brenda Edwards at (202) 586-2945 or by email: Brenda.Edwards@ee.doe.gov.

FOR FURTHER INFORMATION CONTACT:

Mr. John Cymbalsky, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies, EE-2B, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 287-1692. Email: automatic_commercial_ice_makers@ee.doe.gov.

Ms. Sarah Butler, U.S. Department of Energy, Office of the General Counsel, Mailstop GC-71, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 586-1777. Email: Sarah.Butler@hq.doe.gov.

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I. Authority and Background

Title III, Part C¹ of the Energy Policy and Conservation Act of 1975 (EPCA or the Act), Pub. L. 94-163 (42 U.S.C. 6311-6317, as codified), established the Energy Conservation Program for Certain Industrial Equipment, a program covering certain industrial equipment,² which includes the focus of this notice: automatic commercial ice makers.

EPCA prescribes energy conservation standards for cube type automatic commercial ice makers with harvest rates between 50 and 2,500 pounds of ice per 24 hours. (42 U.S.C. 6313(d)(1)) These standards are set out for specific equipment types: self-contained ice makers using air or water for cooling, ice-making heads using air or water for cooling, and remote condensing ice makers with or without a remote compressor. Id. In a final rule published on October 18, 2005, DOE adopted the energy conservation standards and water conservation standards pursuant to this section and placed them under 10 CFR part 431, subpart H, Automatic Commercial Ice Makers. 70 FR 60407, 60415–16.

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

² All references to EPCA in this document refer to the statute as amended through the American Energy Manufacturing Technical Corrections Act (AEMTCA), Pub. L. 112-210 (Dec. 18, 2012).

EPCA requires DOE to review these standards and determine, by January 1, 2015, whether amending the applicable standards is technologically feasible and economically justified. (42 U.S.C. 6313 (d)(3)(A)) If amended standards are technologically feasible and economically justified, DOE must issue a final rule by the same date. (42 U.S.C. 6313 (d)(3)(B)) EPCA also grants DOE authority to conduct rulemakings to establish new standards for automatic commercial ice makers not covered by 42 U.S.C. 6313(d)(1). (42 U.S.C. 6313(d)(2)(A)) Pursuant to this authority, DOE identified additional automatic commercial ice maker types as candidates for standards to be established in this rulemaking. These include flake and nugget ice makers (collectively “continuous” ice makers), as well as batch type ice makers that are not included in the EPCA standards set for cube type ice makers, such as machines with harvest rates greater than 2,500 pounds ice per 24 hours.

DOE initiated the current rulemaking on November 4, 2010 by publishing on its website the “Rulemaking Framework for Automatic Commercial Ice Makers.” (The Framework document is available at:

www1.eere.energy.gov/buildings/appliance_standards/commercial/pdfs/acim_framework_2010_11_04.pdf). DOE published a notice in the Federal Register announcing the availability of the Framework document, as well as a public meeting to discuss the document. The notice also solicited comment on the matters raised in the document. 75 FR 70852 (Nov. 19, 2010). The Framework document described the procedural and analytical approaches that DOE anticipated using to evaluate energy conservation standards for automatic commercial ice makers, and identified various issues to be resolved in the rulemaking.

DOE held a public meeting on December 16, 2010, at which it: (1) presented the contents of the Framework document; (2) described the analyses it planned to conduct during the rulemaking; (3) sought comments from interested parties on these subjects; and (4) in general, sought to inform interested parties about, and facilitate their involvement in, the rulemaking. Major issues discussed at the public meeting included: (1) the scope of coverage for the rulemaking; (2) equipment classes; (3) analytical approaches and methods used in the rulemaking; (4) impacts of standards and burden on manufacturers; (5) technology options; (6) distribution channels, shipments, and end users; (7) impacts of outside regulations; and (8) environmental issues. At the meeting and during the comment period on the Framework document, DOE received many comments that assisted in identifying and resolving issues relevant to this rulemaking.

DOE then gathered additional information and performed preliminary analyses to review potential energy conservation standard levels for this equipment. This process culminated in DOE publishing notice of a second public meeting (the January 2012 notice) to discuss and receive comments regarding the tools and methods DOE used in performing its preliminary analysis, as well as the preliminary analyses results. 77 FR 3404 (Jan. 24, 2012). DOE also invited written comments on these subjects and announced the availability on its website of a preliminary analysis technical support document (preliminary TSD). *Id.* (The preliminary TSD is available at: <http://www.regulations.gov/#!documentDetail;D=EERE-2010-BT-STD-0037-0026>.) Finally, DOE sought comments concerning other relevant issues that could affect amended energy conservation standards for automatic commercial ice makers, or that DOE should address in this rulemaking. *Id.*

The preliminary TSD provided an overview of DOE's review of the standards for automatic commercial ice makers, discussed the comments DOE received in response to the Framework document, and addressed issues including the scope of coverage of the rulemaking. The document also described the analytical framework used in this rulemaking to consider amended standards for automatic commercial ice makers, including a description of the methodology, the analytical tools, and the relationships between the various analyses that are part of this rulemaking. In addition, the preliminary TSD presented in detail each analysis that DOE performed for this equipment, including descriptions of inputs, sources, methodologies, and results. These analyses, which are described in greater detail in the preliminary TSD, included (1) a market and technology assessment, (2) a screening analysis, (3) an engineering analysis, (4) an energy and water use analysis, (5) a markups analysis, (6) a life-cycle cost (LCC) analysis, (7) a payback period (PBP) analysis, (8) a shipments analysis, (9) a national impact analysis (NIA), and (10) a preliminary manufacturer impact analysis (MIA).

DOE presented the methodologies and results of the analyses set forth in the preliminary TSD at a public meeting held on February 16, 2012 (February 2012 public meeting). Interested parties provided comments on the following issues: (1) equipment classes; (2) technology options; (3) energy modeling and validation of engineering models; (4) cost modeling; (5) market information, including distribution channels and distribution mark-ups; (6) efficiency levels; (7) life-cycle costs to customers, including installation, repair and maintenance costs, and water and wastewater prices; and (8) historical shipments.

Following the February 2012 public meeting, DOE updated and revised inputs and performed analyses to establish proposed energy conservation standards for automatic commercial ice makers, which were presented in the notice of proposed rulemaking (NOPR) published on March 17, 2014. 79 FR 14845. The NOPR outlined the proposed standard levels, discussed the comments received in response to the preliminary analysis document, and presented the results of the NOPR analysis. The NOPR also included employment, utility, emissions, social cost of carbon, manufacturer impact, and regulatory impact analyses. In addition, the NOPR announced a public meeting, which was held on April 14, 2014, to discuss and receive comments regarding the tools and methods DOE used in the NOPR analysis, as well as the results of that analysis. DOE also invited written comments and announced the availability of a NOPR analysis technical support document (NOPR TSD). *Id.* (The NOPR TSD is available at: <http://www.regulations.gov/#!documentDetail;D=EERE-2010-BT-STD-0037-0061>).

The NOPR TSD described in detail DOE's analysis of potential standard levels for automatic commercial ice makers. The document also described the analytical framework used in considering standard levels, including a description of the methodology, the analytical tools, and the relationships between the various analyses. Additionally, it presented each analysis that DOE performed to evaluate automatic commercial ice makers, including descriptions of inputs, sources, methodologies, and results. DOE included the same analyses that were conducted at the preliminary analysis stage, with revisions based on comments received and additional research.

At the public meeting held on April 14, 2014, DOE presented the methodologies and

results of the analyses set forth in the NOPR TSD. Interested parties provided comments on a variety of different areas. Some key issues raised by stakeholders included: (1) whether the energy model accurately predicts efficiency improvements associated with design options; (2) the size restrictions and applications of 22-inch wide ice makers; (3) the efficiency distributions assumed for shipments of ice makers; and (4) the impact on manufacturers relating to redesign of ice maker models, in light of the proposed compliance date of 3 years after publication of the final rule.

In response to comments regarding the energy model used in the analysis, DOE held a public meeting on June 19, 2014 in order to facilitate an additional review of the model, gather additional feedback and data on the energy model, and to allow for a more thorough explanation of DOE's use of the model in the engineering analysis. 79 FR 33877 (June 13, 2014). At that meeting, DOE presented the energy model, demonstrated its operation, and described how it was used in the rulemaking's engineering analysis. DOE indicated in this meeting that it is considering modifications to its NOPR analyses based on the NOPR comments and additional research and information-gathering. (The material for the June 2014 public meeting is available at <http://www.regulations.gov/#!documentDetail;D=EERE-2010-BT-STD-0037-00109>.)

II. Current Status

DOE is considering the information obtained through stakeholder comments and through additional research and information-gathering. The purpose of this NODA is to notify industry, manufacturers, customer groups, efficiency advocates, government agencies, and other stakeholders of the availability of the revised rulemaking analysis and results, as well as the

effect of that information on the analyses prepared in support of the previously published proposed rule.

The comments received since publication of the March 2014 NOPR, including those received at the April 2014 and the June 2014 public meetings, provided inputs which led DOE to revise its analyses. Stakeholders also submitted additional information to DOE's consultant pursuant to non-disclosure agreements regarding efficiency gains and costs of potential design options. In addition, DOE reviewed additional market data, including published ratings of available ice makers, to recalibrate its engineering analysis. Generally, the revisions include modifications of inputs for its engineering, LCC, and NIA analyses, adjustment of its energy model calculations, and more thorough consideration of size-constrained ice maker applications. The analysis revisions addressing size-constrained applications included development of engineering analyses for three size-constrained equipment categories and restructuring of the LCC and NIA analyses to consider size constraints for applicable equipment classes.

Stakeholders commented at the April 2014 public meeting and in written comments on the importance of DOE allowing them an opportunity to review and comment on potential revisions of the analyses. (See, e.g., AHRI, No. 93 at p. 1) In response to these comments, DOE is issuing this NODA to announce the availability of the revised analysis DOE developed to support an amended energy conservation standard for automatic commercial ice makers, as described in section III. DOE may revise the analysis presented in today's NODA based on any new information or data obtained between now and the publication of the final rule concerning energy conservation standards for automatic commercial ice makers. DOE encourages

stakeholders to provide any additional data or information that may improve the analysis no later than **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

III. Summary of Updated Rulemaking Analyses

DOE conducted analyses of automatic commercial ice makers in the following areas: (1) engineering; (2) life-cycle cost and payback period; and (3) national impacts. The revised rulemaking analyses and their respective results (engineering, life-cycle cost, and national impacts spreadsheets) are available at:

http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/29.³ Each spreadsheet includes an introduction describing the various inputs and outputs to the analysis, as well as operation instructions. Also available on the DOE website is a document outlining the LCC/PBP and NIA results, a document defining the trial standard levels (TSLs) levels that DOE considered in the NODA analyses, and a spreadsheet with charts showing the TSLs' energy use as functions of harvest capacity.

Summary of Changes to the Engineering Analysis:

- Based on new test data, DOE made changes to the 'Percent Energy Use Reduction' values associated with individual design options. These new values are included in the Engineering Results spreadsheet (column D of the 'Design Option Curves' tab). The 'Updated Analysis' tab details which design options were changed as a result of new test data obtained through

³ These spreadsheets are also available on the rulemaking docket at <http://www.regulations.gov/#!docketDetail;D=EERE-2010-BT-STD-0037>. However, the regulations.gov docket does not support macro-enabled files. The fully-functional files with macros-enabled are available on the Department of Energy website: http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/29.

1) Non-Disclosure Agreements with DOE's engineering contractor and 2) comments made during the NOPR comment period.

- Based on new cost data, DOE made changes to the 'Individual cost' values associated with individual design options. These new values are included in the Engineering Results spreadsheet (column I of the 'Design Option Curves' tab). The 'Updated Analysis' tab details which design options were changed as a result of new data obtained through 1) Non-Disclosure Agreements with DOE's engineering contractor and 2) comments made during the NOPR comment period
- Based on comments made during the NOPR period, DOE added additional cost-efficiency curves for 22-inch width units in the IMH-A-Small-B, IMH-A-Large-B, and IMH-W-Small-B equipment classes, and an additional cost-efficiency curve for the RCU-Small-C equipment class. The new cost-efficiency curves are described in Engineering Results spreadsheet ('Design Option Curves' tab).
- Summary of Changes to the Life-Cycle Cost and Payback Period: As described above, the engineering analysis examined design options and efficiency level improvements for 22-inch units for three equipment classes under a scenario where no increase in equipment size was considered, resulting in two separate cost-efficiency curves (space constrained and non-space constrained). For the LCC/PBP analysis and the NIA, a major source of change was the integration of these two curves for these equipment classes.
- A related source of change was assessing whether the impact of equipment cabinet size increases impose additional installation costs on customers.
- Other revisions include the inclusion of additional installation costs for certain other efficiency improvements (drain water heat exchangers and larger condensers in remote

condenser units), changes in the calculation of repair costs to explicitly identify labor and material components, changes to the efficiency distribution of equipment in the baseline market, and changes to the utilization factor used to determine electricity and water usage.

The changes to the LCC and NIA are described in the document entitled ACIM NODA tabulated LCC-NIA results.

IV. Public Participation

DOE is interested in receiving comments on all aspects of the data and analysis presented in the NODA and supporting documentation that can be found at:

http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/29.

DOE is particularly interested in receiving comments on the changes that were made to the engineering and LCC-NIA as described in Section III.

Submission of Comments

DOE will accept comments, data, and information regarding this notice no later than the date provided in the **DATES** section at the beginning of this notice. Interested parties may submit comments, data, and other information using any of the methods described in the **ADDRESSES** section at the beginning of this notice.

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 below.

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 mail. Comments and documents submitted via email, hand delivery, or 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 comment 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 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 facsimiles (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 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.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when

such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

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).

Issued in Washington, DC, August 5, 2014.



Kathleen B. Hogan
Deputy Assistance Secretary for Energy Efficiency
Energy Efficiency and Renewable Energy