MINUTES
MHCC REGULATORY ENFORCEMENT SUBCOMMITTEE MEETING

April 2, 2019

Teleconference

(Approved at the August 6, 2019 Regulatory Enforcement Subcommittee Teleconference)

MINUTES
MANUFACTURED HOUSING CONSENSUS COMMITTEE (MHCC)
REGULATORY ENFORCEMENT SUBCOMMITTEE MEETING

April 2, 2019

Teleconference

Call to Order

The Manufactured Housing Consensus Committee (MHCC) Regulatory Enforcement Subcommittee meeting was held via teleconference on Tuesday, April 2, 2019 at 1:00 p.m. (EDT). Chairman, Michael Moglia, called the meeting to order at 1:05 p.m. Kevin Kauffman, Administering Organization (AO) Home Innovation Research Labs, called the roll and announced that a quorum was present. Teresa Payne, Acting Administrator of the Office of Manufactured Housing Programs and Designated Federal Official (DFO), welcomed the subcommittee members and the public to the teleconference. DFO Payne introduced the HUD staff present at the meeting. Guests were asked to introduce themselves. See APPENDIX A for a list of meeting attendees.

Approval of the Minutes

Motion to approve the minutes of the November 28, 2016 MHCC Regulatory Subcommittee meeting.

Maker: Alan Spencer Second: Jim Husom

The motion carried.

The AO reminded the subcommittee about the task that they were assigned by the MHCC. At the September 2018 MHCC meeting, the Committee made the following motion: "***Regulatory Enforcement Subcommittee to review the energy standards in the MHCSS with specific focus on the RFI from DOE. The subcommittee to review each of the questions/issues from the RFI and provide recommendations to the MHCC on the proposed action.***"

Representatives from HUD's Office of Policy Development and Research (PD&R) were available to answer questions and provide context to their report on Comparable Cost Figures Similar to EERE-2009-BT-BC-0021 [NODA Packages – Draft Result July 2018]. See APPENDIX B. Calvin Johnson from PD&R noted that PD&R were given only five weeks to complete this report. Due to limited time for the review, PD&R did not have time to develop its own data and PD&R also did not have access to DOE's data. The PD&R report evaluated DOE's cost data and methodology. The PD&R report reached the following conclusions – "*PD&R does not object to the methodologies and assumptions used within DOE's LLC* (life-cycle cost) *and annualized spreadsheets. In conclusion, PD&R concurs with the methodology and resulting cost figures.*"

After PD&R's question and answer section, the subcommittee moved to answer the list of questions/issues from DOE's Notice of Data Availability (NODA). The issues/questions have been abridged for these minutes but APPENDIX C (Notice of Data Availability (NODA) on Energy Conservation Standards for Manufactured Housing) has the unabridged and original version of the issues/questions. The issues/questions have been ***italicized and bolded*** and the subcommittee's answers are in red. Any relevant and accompanying discussion for each of these issues/questions is in plain text.

List of Issues / Question from Notice of Data Availability (NODA) on Energy Conservation Standards for Manufactured Housing –

June 2016 Proposal's Assumptions

1. ***What analytical aspects related to DOE's June 2016 proposal – aside from those specifically noted later in this document (NODA) – should DOE consider re-examining as part of its ongoing consideration of a final rule for manufactured housing? (Within this context, this request also encompasses whether DOE's analysis sufficiently addresses the cost-effectiveness of standards based on the current IECC code when considering the code's impact on both the purchase price of manufactured housing and on total life-cycle construction and operating costs. Why should DOE reconsider these aspects and what specific changes, if any, should DOE make to them? As part of this request, DOE is interested in any specific supplemental supporting data regarding any changes that commenters may suggest.) [Refer to 83 FR 38075 – Issue 1]***

    - Windows and Insulation would be a larger cost increase than predicted. R values/U values requirements in the table deviate (are lesser) than the requirements in the 2018 IECC table R402.1.2
    - The lower cost packages would require manufacturers to carry/provide multiple different options for each window. Manufacturers are more likely to only stock the windows meeting the most stringent requirements, which simplifies the inventory for the manufacturer.

    Mark Weiss shared an insight regarding the work performed by DOE's working group. Mr. Weiss expressed, that the working group data is invalid, because there was no transparency in the process of that work group. In the working group process, there is absolutely no consideration to regulatory enforcement cost. Smaller manufactures believe that the cost increase would be just over $6,000 which is vastly different than the $2,000 predicted by working group. The Obama era social cost of carbon construct has been revoked and it was included in the working groups calculations, this should by itself invalidate the cost benefit analysis that came along with the proposed rule.

    Stacey Epperson, who was on the DOE working group as well, stated that the process was data-driven, thoughtful, and the group made sure to balance cost, efficiency, and total cost of operations.

2. ***a. DOE seeks comment regarding the CFPB's findings (CFPB Report on "Manufactured-Housing Consumer Finance in the United States"). Are these findings reasonably accurate or are there other factors that DOE should consider when determining the economic impact of energy conservation standards on the ability of purchasers to buy manufactured homes? Assuming that these findings are reasonably accurate, what role, if any, should they play in shaping the standards that DOE ultimately adopts for manufactured housing and why? If the CFPB's findings are not accurate, what specific shortcomings do they have and what assumptions/changes should DOE apply when determining the stringency and types of standards the agency should establish for manufactured housing? [Refer to 83 FR 38076 – Issue 2a]***

    b. DOE's own data from its Residential Energy Consumption Survey of 2015 suggests that manufactured housing households pay about 60% more for their energy per square foot than the entire housing stock. Is this estimate accurate—and if so, why? What specific factors contribute to this condition? If this estimate is not accurate, why—what specific factors are being overlooked in the survey that contribute to this inaccuracy? [Refer to 83 FR 38076 – Issue 2b]

- This report is from 2015 perhaps the installation/construction techniques have improved since then, which could lead to some inaccuracies.
    - Air sealing
    - Duct leaking/sealing
- Reliance on square footage for primary basis of comparison for energy usage is not a proper metric. The energy usage cost for the dwelling may be more per sq. ft than a traditional site-built home, but the total energy usage cost of the dwelling is generally less, which is important for the value proposition for manufactured homes.

The subcommittee discussed the CFPB findings that were considered in determining the economic impact of energy conservation standards on the ability of purchasers to buy manufactured homes. Devin Leary-Hanebrink, MHI, noted that manufactured housing represents 15 – 20% of the housing in some states and affordability is the primary driver for manufactured housing. The CFBP report is silent on the tax implication on purchasing housing and reports incorrectly on the financial decisions available to the end user. The subcommittee also discussed the validity of using square footage as a basic of comparison for energy usage.

Ownership-Related Costs

3. Manufactured housing owners tend to be lower-income than other homeowners,10 and are also likely to finance their manufactured housing purchase using high-rate chattel loans. As a result, the Department is particularly interested in comments and data regarding the affordability of manufactured housing and how the options outlined in this NODA would affect upfront manufactured housing affordability. DOE also seeks comment on whether and how the different approaches outlined in this NODA would differently affect the affordability of manufactured homes. [Refer to 83 FR 38076 – Issue 3]

DOE seeks public input on each of the following items:

- ***Affordability is a combination of upfront cost, which may price out some consumers at time of purchase, and operating costs, which will affect all manufactured housing owners over a longer time horizon. The Department seeks comments that provide information on how to weigh these components in defining ''affordability,'' with particular focus on affordability for low-income consumers.***
    - Upfront cost should be considered slightly more important when defining affordability. (60% upfront cost, 40% operating cost) End result of keeping initial cost to consumers low.
- ***While the cost of site-built home efficiency upgrades may be recouped when an owner sells the home, the same may not be true of manufactured homes because (1) manufactured housing owners have relatively short tenancies and (2) the resale market for manufactured housing is highly constrained, such that the original owner will likely not recoup upfront efficiency investments if the payback period exceeds tenancy. DOE seeks additional information from commenters on the manufactured housing resale market that would inform the Department's consideration of what a reasonable payback period would be. If available, the Department also seeks information on the distribution of manufactured housing tenancy rates.***
    - Reasonable payback period should be no longer than 7-10 years

- ***The Department is also interested in comments that inform whether special consideration should be given to affordability, particularly given that low-income and older consumers are disproportionately represented among manufactured housing owners.***
    - Affordability should remain a major consideration for manufactured housing
- ***The Department seeks data and information regarding basing standards on the most recent version of the IECC, in particular, whether standards based on the most recent version of the IECC would not be cost effective or that standards more stringent than the most recent version of the IECC would be cost effective, in either case based on the impact of the adoption of the IECC standards on the purchase price of manufactured housing and on total lifecycle construction and operating costs.***
    - A jump from the current standards to the most recent version of the IECC is a monumental leap. IECC does not necessarily take affordability into account when revising/updating construction codes. Affordability is statutory requirement to any home constructed under the MHSSC.

4. ***DOE is aware that efficiency standards for manufactured housing may affect consumers in different regions differently and seeks information on (1) the disparate regional effects of a standard, and (2) whether these effects are mitigated by use of tiered standards or a tiered labeling program. [Refer to 83 FR 38077 – Issue 4]***

   The subcommittee members didn't have any comments for DOE on this question.

5. ***DOE seeks to better understand the market for manufactured homes. Available sources provide information regarding the average or median manufactured housing purchase price 15 or the proportion of manufactured housing owners who borrowed different amounts to finance their manufactured housing purchase, but do not directly show the distribution of manufactured housing prices across the market and the percentage of consumers who purchase at each price category. DOE is interested in such information, particularly to the extent that such information could inform the consideration of threshold standards. [Refer to 83 FR 38077 – Issue 5]***

   The subcommittee members didn't have any comments for DOE on this question.

Prescriptive and Performance-Based Standards

6. ***DOE is interested in feedback regarding whether any aspects of its 2016 proposal need further consideration and if so, why. For comments pointing to weaknesses or strengths with respect to DOE's proposal, the agency seeks any supporting data in addition to that which DOE has already made public as part of the manufactured housing standards rulemaking docket. [Refer to 83 FR 38077 – Issue 6]***
    - Forcing a prescriptive standard on a performance-based code is potentially not achievable. This will affect the overall affordability of the home.

Alternative Approaches

7. ***DOE seeks comment on whether it should consider and implement a cost-based tier structure with respect to regulating the energy efficiency of manufactured housing. DOE notes that a tiered approach could better address some of the concerns that may exist with respect to the first-time costs that purchasers***

may encounter with more efficient—but more expensive—manufactured homes. If so, why—and if not, why not? [Refer to 83 FR 38078 – Issue 7]

- Having a tiered option in place in addition to the current base MHCSS standard, which would provide consumers potential upgrades or options could help address the combination of energy efficiency and affordability.

Based on the discussion, tier approach was encouraging as it helps to balance affordability and energy efficiency. DOE gives option and empower consumer to go above the MHCSS standard.

8. ***Consumers may fail to optimize the efficiency of their homes due to a lack of available information on the benefits of energy savings. The Department is seeking comments on the benefit of providing consumers with such information, which preserves consumer choice, and the best way to provide consumers with information that they can easily understand and put to use. [Refer to 83 FR 38078 – Issue 8]***

- ***What information is available to consumers when they make manufactured housing purchasing decisions, and what additional information would be useful? Further, how can the Department add value in the provision and display of information?***

    - Information regarding benefits of energy savings should be provided by the home manufacturer, which would be forwarded to each retailer who presents it to the consumer prior to purchase.

Alan Spencer noted that the best information would be provided at the retail level. The information would come from the manufacturer, to the retailer and then to the consumer.

- ***DOE seeks comments regarding whether access to information is a barrier to manufactured housing consumers, and if so, what is the magnitude of this barrier (i.e. to what extent does the lack of information prevent consumers from purchasing efficient homes)?***

    - Information regarding benefits of energy savings should be provided by the home manufacturer which would be forwarded to each retailer who presents it to the consumer prior to purchase.

9. ***DOE is also considering a number of approaches that would increase consumer access to information and increase the efficiency of manufactured homes. [Refer to 83 FR 38078 – Issue 9]***

- ***In weighing these approaches, the Department seeks comment on the advantages and disadvantages of using a tiered approach for efficiency standards versus using a single national standard that would apply to all manufactured homes within a single climate zone. DOE also seeks information regarding what a labeling framework would need to consider if a tiered approach were used and what the costs of such an approach would likely be. The Department further seeks comment on the advantages and disadvantages of using a tiered approach to labeling requirements versus a single national labeling standard for manufactured homes.***

    - A “one size fits all” approach for all homes could be cost prohibitive. Homes in mild climates do not need to meet the same specifications as homes in harsh climates. On the other hand, a tiered approach with too many tiers could also be cost prohibitive, this would also

complicate transportation aspect of manufactured homes. Use of the current three MHCSS climate zones would be beneficial. (request input from full MHCC)

- ***Within the tiered options discussed above, the Department seeks public input on what the appropriate criteria are to use for establishing thresholds (e.g., price, cost, region, etc.) and how best to define these criteria (e.g., manufacturer added cost, retail price, etc.). DOE also seeks public input on other factors that it should consider when establishing tiered standards.***
    - (request input from full MHCC)

10. ***Is new information available on the relationship between tightening the home envelope and indoor air quality? If so, what is the nature of that information, why should DOE consider it, and how should the agency integrate it into its analyses? [Refer to 83 FR 38079 – Issue 10]***

    The subcommittee members didn't have any comments for DOE on this question.

11. ***DOE is particularly interested in baseline measures of air flow in recently-built manufactured housing against which to measure any potential reductions in air changes per hour (''ACH''). DOE also seeks information related to what the appropriate ACH threshold is for maintaining adequate indoor air quality. [Refer to 83 FR 38079 – Issue 11]***

    The subcommittee members didn't have any comments for DOE on this question.

12. ***What potential health and safety costs of incremental reductions in ACH and/or indoor air quality should the Department consider when evaluating this approach and why? What steps should DOE consider taking to reduce these costs while preserving indoor air quality for manufactured home residents and what disadvantages, if any, are there to each of these specific steps? [Refer to 83 FR 38079 – Issue 12]***

    The subcommittee members didn't have any comments for DOE on this question.

13. ***Regarding the overall structure of DOE's approach to its proposed climate zones, should these zones be reconsidered—and if so, why? Should DOE use HUD's existing climate zones? If DOE were to develop its own climate zones, what factors should it consider in doing so? What factors would support the continued use of the proposed climate zones and how do those factors weigh against using HUD's existing climate zones or in favor of adjusting them further? [Refer to 83 FR 38079 – Issue 13]***

    - Use of the current three MHCSS climate zones would be beneficial. Implementation of new energy standard will be implemented more efficiently due to familiarity to current standard.

Compliance Lead-Times

14. ***Should DOE continue to apply a one-year lead-time to the energy conservation standards for manufactured housing? Does the approach—i.e. single uniform national standard versus a multi-tiered national standard—impact the amount of lead-time manufacturers would require to meet the applicable standards? If so, why—and if not, why not? If DOE were to adopt an approach that presented different compliance options in the form of cost-based tiers, would manufacturers require more, less, or the same amount of lead-time as the agency's proposal (i.e. one year)? Why or why not? [Refer to 83 FR 38079 – Issue 14]***

- Once the new standard(s) are adopted into the MHCSS and regulations, the manufacturers should have at least 18 months to comply.

15. ***With respect to the manufactured housing standards that DOE promulgates, DOE seeks comment on what enforcement mechanism would be the most appropriate to apply and why. In considering enforcement mechanisms, DOE is interested in information concerning the burden and cost impacts for suggested approach(es), as well as the compliance lead-time needed by the industry. Further, DOE seeks information as to whether enforcement cost of any suggested approach may extend beyond the manufacturing industry to the sales and distribution channels that interface with prospective purchasers. [Refer to 83 FR 38079 – Issue 15]***

    - Naturally HUD should be the enforcement entity, however they will require additional positions and fiscal provisions to enforce the new standard. Enforcement of these new standards should fall under HUD's manufactured housing program (HUD, the third parties, SAAs etc.) and should be consistent with the cost benefit requirements of the Manufactured Housing Act. DOE should not be included in the implementation or enforcement of these new standards.

DFO Payne thanked the subcommittee members and the subcommittee chair – Michael Moglia – for a productive meeting. The MHCC Regulatory Enforcement Subcommittee adjourned at 4:00 p.m. (EDT).

APPENDIX A:
Subcommittee Attendees

April 2, 2019

	Regulatory Enforcement	
	3282, 3285, 3286, 3288	
	Name	**Attendance**
Users	Stacey Epperson	Y
	Loretta Dibble	N
	Catherine Yielding	Y
	Dave Anderson	Y
Producers	Alan Spencer	Y
	Sean Oglesby	N
	Michael Wade	Y
	Cameron Tomasbi	Y
General Interest / Public Official	James Husom	Y
	Michael Moglia	Y
	David Tompos	N
	Mitchel Baker	Y

HUD Staff
Teresa Payne, DFO
Demetress Stringfield
Tommy Daison
Dennaire Anderson
Leo Houtt
Patricia McDuffie
Glorianna Peng
Alan Field
Mike Blanford
Mike Hollar
Calvin Johnson
Barton Shapiro
Keith Becker
Jason McJury
Barry Ahuruonye
Angelo Wallace
Dorian Hawkins

Other Participants
Mark Weiss, Manufactured Housing Association for Regulatory Reform (MHARR)
Devin Leary-Hanebrink, Manufactured Housing Institute (MHI)
Kara Beigay, Manufactured Housing Institute (MHI)
Robert Parks, MHCC member
Robert Garcia, MHCC member
Bob Gorleski, PFS Corporation
Tommy Colley, MHCC Chair

AO Staff,

Home Innovation Research Labs
Kevin Kauffman
Nay Shah

MHCC MEETING
April 2, 2019

APPENDIX B:
PD&R Report on Comparable Cost Figures Similar to EERE-2009-BT-BC-0021 [NODA Packages – Draft Result July 2018]

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, D.C. 20410-6000

OFFICE OF POLICY DEVELOPMENT
AND RESEARCH

October 26, 2018

MEMORANDUM FOR: Teresa B. Payne, Acting Administrator, HABC

THROUGH: Todd M. Richardson, General Deputy Assistant Secretary, R

FROM: Calvin E. Johnson, Deputy Assistant Secretary for Research, Evaluation and Monitoring, RR

Adam Bibler, Acting Director, Affordable Housing Research and Technology Division, RRT

SUBJECT: Evaluation of Cost Figures Found in Department of Energy's NODA Packages-Draft Results July 2018

This memorandum (memo) is in response to a request from HUD's Manufactured Housing Consensus Committee (MHCC) for the Office of Policy Development and Research (PD&R) to evaluate cost figures from the Department of Energy's (DOE) Notice of Data Availability (NODA)[1]; it describes PD&R's review of the applicable data and supporting documentation, and specifically, does not object to DOE's cost figures.

This memo is organized as follows:

Section I provides context relating to MHCC's request for PD&R support in reviewing the cost figures described within DOE's NODA. Section II provides a historical perspective of HUD and DOE's roles in regulating energy conservation in manufactured housing. Section III describes PD&R's process of reviewing relevant data and contacting individuals knowledgeable of the subject matter. Section IV describes PD&R's response to MHCC's request for support in reviewing DOE's cost figures.

I. MHCC Request for PD&R Support

On September 11, 2018, MHCC met in Washington, D.C. to review DOE's Energy Conservation Program: Energy Conservation Standards for Manufactured Housing, Notice of Data Availability Request for Information. As a result of their review and deliberation, MHCC made the following request to PD&R:

[1] Federal Register, 'Energy Conservation Program: Energy Conservation Standards for Manufactured Housing; Notice of data availability; request for information', 3 Aug. 2018, https://www.regulations.gov/document?D=EERE-2009-BT-BC-0021-0203

MHCC requests HUD's PD&R to submit a document to the MHCC which includes comparable cost figures similar to EERE-2009-BT-BC-0021 [NODA Packages-Draft Results July 2018] (Appendix A) by November 14, 2018.

II. Regulating Energy Conservation in Manufactured Housing

Section 413 of the Energy Independence and Security Act of 2007 (EISA)[2] requires DOE to establish regulation standards for energy conservation in manufactured housing. This authority specified that the established standards must be based on the most recent version of the International Energy Conservation Code (IECC) (including supplements), except in cases in which the IECC is found to not be cost-effective, or a more stringent standard would be more cost-effective. Based on the impact of the IECC on the purchase price of manufactured housing and on total life-cycle construction and operating costs.[3]

Prior to Section 413 of EISA, HUD regulated energy conservation for manufactured housing under 24 CFR 3280, Subpart F – Thermal Protection.[4] This authority was established under the Manufactured Home Construction and Safety Standards (MHCSS), which mandates federal standards for the design, construction, and installation of all manufactured (HUD-code) homes.

III. Reviewing Relevant Data and Contacting Individuals Knowledgeable of Manufactured Housing

In response to MHCC's request, PD&R staff conducted a review of relevant documents and background materials from the Energy Conservation Standards for Manufactured Housing public comment webpage[5] and contacted multiple individuals with expertise in manufactured housing related-energy matters.

The information collected in Appendix A was assembled by DOE with the assistance of members of the Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC) Manufactured Housing Working Group (Working Group), which was formed to provide DOE with advice and recommendations related to the development of the Energy Conservation Standards for Manufactured Housing.

In July 2014, the Working Group was established and comprised of 22 stakeholders from the manufactured housing industry, which included one member from ASRAC and one DOE representative (see Appendix B). The Working Group convened six times between August and October 2014 to negotiate and successfully reach consensus on proposed federal standards for energy conservation in manufactured housing. For the purposes of these meetings, DOE defined consensus as at least a two-thirds "supermajority" in favor of a recommendation.

---

[2] U.S. Government Publishing Office, 'Public Law 110-140: Energy Independent and Security Act of 2007 (121 Stat. 1492; Date: 12/19/07).' https://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

[3] U.S. Department of Energy, 'Energy Efficiency Standards for Manufactured Housing,' https://www.energycodes.gov/energy-efficiency-standards-manufactured-housing.

[4] U.S. Government Publishing Office, '24 CFR 3280 – Manufactured Home Construction and Safety Standards, Subpart F – Thermal Protection,' https://www.gpo.gov/fdsys/pkg/CFR-2010-title24-vol5/pdf/CFR-2010-title24-vol5-part3280-subpartF.pdf.

[5] U.S. Regulations, 'Energy Efficiency Standards for Manufactured Housing,' https://www.regulations.gov/docket?D=EERE-2009-BT-BC-0021.

The elements of the energy conservation measures and cost data were developed with input from the Working Group. Specifically, the cost data were derived from a survey of 20 manufactured housing producers, ranging in size and location. Although the cost data was collected in 2014, DOE's analysis included multiplicative factors that accounted for inflation.

IV. Review of DOE Cost Figures

As stated, the basis for DOE's cost figures was a survey of producers. PD&R staff was not able to recreate the survey conducted by the Working Group given the short timeframe provided by MHCC. In order to conduct an independent survey, PD&R must abide by the requirements of the Office of Management and Budget's (OMB) Paperwork Reduction Act (PRA), which requires multiple public notices and has a review period that lasts approximately six to nine months. However, PD&R believes that it is unlikely that the findings of an independent survey would differ significantly from the cost data collected by the Working Group. PD&R notes that the cost packages assume national average sales tax and property tax rates; however, changing these values to more localized parameters would minimally affect the analysis. Consequently, PD&R does not object to the cost figures provided by DOE.

Although the request from MHCC was to analyze the cost figures used by DOE, PD&R has also reviewed the savings associated with the analysis associated with energy efficiency packages. DOE used a life-cycle cost (LLC) analysis[6] to determine the cost effectiveness of the requirements in the proposed rule and compared the results to the existing federal requirements (baseline) for manufactured homes found within MHCSS. DOE's effort consisted of annualizing the costs, including the added financing costs of the energy efficiency packages, and averaging the savings based on the prevalence of different forms of heating within regions. The analysis relies on assumptions about the inflation rate of commodities, interest rates on various types of loans, and the shares of home purchasers who finance their housing with either chattel or real estate loans, or cash.

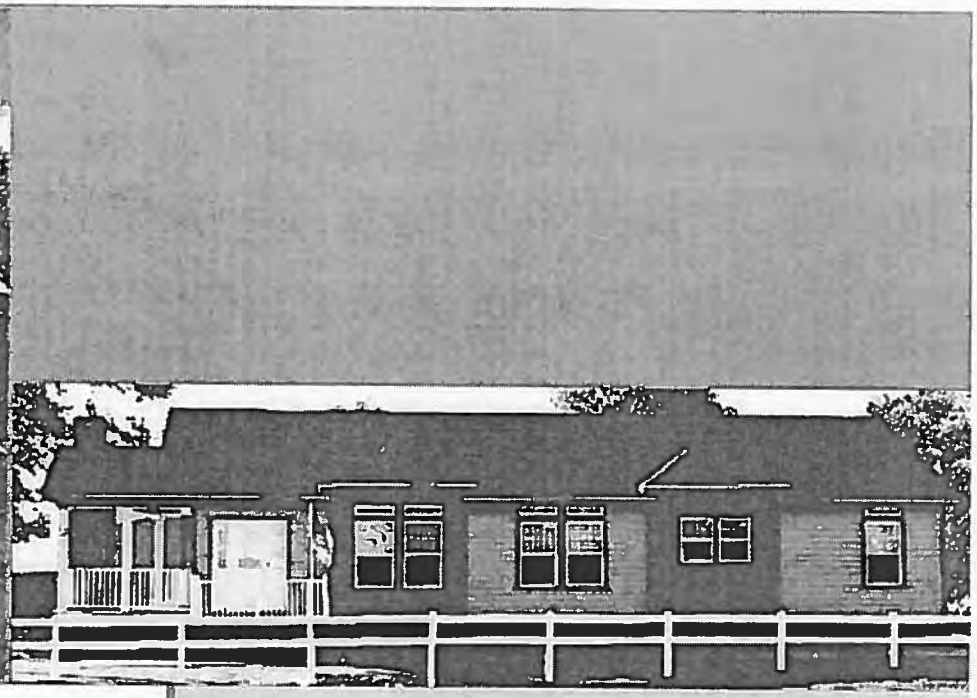
Broadly speaking, PD&R does not object to the methodologies and assumptions used within DOE's LLC and annualized spreadsheets. However, PD&R notes two areas where DOE has used a static assumption in place where more dynamic approaches would add value. For one, the energy use predicted by each improvement package is fixed and does not appear to vary in response to the improvements themselves. Further review of the relevant behavioral literature and modeling process used to produce the energy consumption rates would be necessary to validate this assumption. Additionally, the regional shares of various heating types are fixed. Given that the analysis suggests that homeowners with certain forms of heating will save more money as a result of the efficiency packages, it is worth investigating whether the share of owners with each source would change over time in response to the rule.

In conclusion, PD&R concurs with the methodology and resulting cost figures. PD&R remains willing to assist HUD's Manufacture Housing Program as DOE continues its rulemaking process.

---

[6] U.S. Department of Energy, 'Manu_Housing_NODA_LCC_2018_07_27.xlsm,' https://www.regulations.gov/docket?D=EERE-2009-BT-BC-0021

Appendix A – Manufactured Housing NODA Packages – Draft Results July 2018



U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Manufactured Housing

NODA Packages – Draft Results

Department of Energy
Building Technologies Office
EERE-2009-BT-BC-0021

July 2018

Description of Packages

PACKAGE 1:

This package would maximize the energy savings of a manufactured home, but exclude envelope and duct sealing to maximize energy savings.

PACKAGE 2:

This package would maximize the energy savings of a manufactured home, but allow envelope and duct sealing to maximize energy savings.

Method:

- Energy savings is maximized by minimizing Uo of the home.
- Package 1 and 2 are created for incremental price targets of $500, $1000, and $1500.
- Incremental costs and savings calculations are based on methods and data presented in the 2016 NOPR.

Package 1 (no sealing): HUD CZ 1

NOPR CLIMATE ZONE 1 – HUD Zone 1	Single Section					
HOUSTON, TX	Efficiency Measures Description				Incremental Costs and Savings Results (2017$)	
Component	HUD (Current Practice)*	$500 Cost Package	$1000 Cost Package	$1500 Cost Package	$500 Cost Package	$1000 Cost Package	$1500 Cost Package
Wall	N/A (R-11)	R-13	R-11	R-13	$68.27	$0.00	$68.27
Ceiling	N/A (R-22)	R-30	R-22	R-22	$451.74	$0.00	$0.00
Floor	N/A (R-22)	R-19	R-19	R-19	-$136.44	-$136.44	-$136.44
Window U-factor	N/A (1.08)	1.08	0.5	0.35	$0.00	$1,048.43	$1,495.84
Window SHGC	N/A (0.70)	0.7	0.6	0.33			
U_o	0.116	0.1071	0.0937	0.0854			
Envelope Leakage (ACH)	8	N/A (8)	N/A (8)	N/A (8)	$0.00	$0.00	$0.00
Duct Leakage (cfm25/100 ft^2 CFA)	N/A (12)	N/A (12)	N/A (12)	N/A (12)	$0.00	$0.00	$0.00
Domestic HW	None	R-3	R-3	R-3	$55.18	$55.18	$55.18
Total Incremental Cost					$438.76	$967.17	$1,482.86
Average Annual Energy Bill Savings					$105.85	$157.88	$270.22
Simple Payback Period					6.6	9.7	8.6
Average Annual Energy Bill Savings (AEO High Oil and Gas Resource)					$103.48	$154.42	$264.45
Simple Payback Period (AEO High Oil and Gas Resource)					6.7	9.8	8.7

*The energy efficiency measures presented provide one potential path to comply with the HUD Uo requirement.

Package 1 (no sealing): HUD CZ 1

NOPR CLIMATE ZONE 2 – HUD Zone 1	Single Section					
JACKSON, MS	Efficiency Measures Description				Incremental Costs and Savings Results (2017$)		
Component	HUD (Current Practice)*	$500 Cost Package	$1000 Cost Package	$1500 Cost Package	$500 Cost Package	$1000 Cost Package	$1500 Cost Package
Wall	N/A (R-11)	R-13	R-11	R-13	$68.27	$0.00	$68.27
Ceiling	N/A (R-22)	R-30	R-22	R-22	$451.74	$0.00	$0.00
Floor	N/A (R-22)	R-19	R-19	R-19	-$136.44	-$136.44	-$136.44
Window U-factor	N/A (1.08)	1.08	0.5	0.35	$0.00	$1048.43	$1,495.84
Window SHGC	N/A (0.70)	0.7	0.6	0.33			
U_o	0.116	0.1071	0.0937	0.0854			
Envelope Leakage (ACH)	8	N/A (8)	N/A (8)	N/A (8)	$0.00	$0.00	$0.00
Duct Leakage (cfm25/100 ft^2 CFA)	N/A (12)	N/A (12)	N/A (12)	N/A (12)	$0.00	$0.00	$0.00
Domestic HW	None	R-3	R-3	R-3	$55.18	$55.18	$55.18
Total Incremental Cost					$438.76	$967.17	$1,482.86
Average Annual Energy Bill Savings					$131.29	$181.61	$287.31
Simple Payback Period					5.5	8.6	8.1
Average Annual Energy Bill Savings (AEO High Oil and Gas Resource)					$128.33	$177.59	$281.11
Simple Payback Period (AEO High Oil and Gas Resource)					5.5	8.6	8.2

*The energy efficiency measures presented provide one potential path to comply with the HUD Uo requirement.

Package 1 (no sealing): HUD CZ 2

NOPR CLIMATE ZONE 3 – HUD Zone 2	Single Section					
MEMPHIS, TN	Efficiency Measures Description				Incremental Costs and Savings Results (2017$)	
Component	HUD (Current Practice)*	$500 Cost Package	$1000 Cost Package	$1500 Cost Package	$500 Cost Package	$1000 Cost Package	$1500 Cost Package
Wall	N/A (R-11)	R-13	R-13	R-19	$68.27	$68.27	$674.12
Ceiling	N/A (R-22)	R-22	R-22	R-22	$0.00	$0.00	$0.00
Floor	N/A (R-19)	R-13	R-22	R-22	-$81.95	$136.44	$136.44
Window U-factor	N/A (0.5)	0.35	0.31	0.31	$447.41	$627.99	$627.99
Window SHGC	N/A (0.6)	0.33	0.25	0.25			
U_o	0.096	0.0920	0.0819	0.0728			
Envelope Leakage (ACH)	8	N/A (8)	N/A (8)	N/A (8)	$0.00	$0.00	$0.00
Duct Leakage (cfm25/100 ft^2 CFA)	N/A (12)	N/A (12)	N/A (12)	N/A (12)	$0.00	$0.00	$0.00
Domestic HW	None	R-3	R-3	R-3	$55.18	$55.18	$55.18
Total Incremental Cost					$488.92	$887.88	$1,493.73
Average Annual Energy Bill Savings					$140.63	$167.33	$277.20
Simple Payback Period					5.4	8.3	8.7
Average Annual Energy Bill Savings (AEO High Oil and Gas Resource)					$137.47	$163.48	$270.44
Simple Payback Period (AEO High Oil and Gas Resource)					5.5	8.4	8.7

*The energy efficiency measures presented provide one potential path to comply with the HUD Uo requirement.

Package 1 (no sealing): HUD CZ 3

NOPR CLIMATE ZONE 4 – HUD Zone 3	Single Section					
CHICAGO, IL	Efficiency Measures Description				Incremental Costs and Savings Results (2017$)	
Component	HUD (Current Practice)*	$500 Cost Package	$1000 Cost Package	$1500 Cost Package	$500 Cost Package	$1000 Cost Package	$1500 Cost Package
Wall	N/A (R-13)	R-21	R-21	R-21	$746.16	$746.16	$746.16
Ceiling	N/A (R-30)	R-22	R-22	R-30	-$451.74	-$451.74	$0.00
Floor	N/A (R-22)	R-22	R-30	R-30	$0.00	$406.52	$406.52
Window U-factor	N/A (0.35)	0.32	0.31	0.31	$86.24	$180.57	$180.57
Window SHGC	N/A (0.33)	0.33	0.25	0.25			
U_o	0.079	0.0713	0.0659	0.0610			
Envelope Leakage (ACH)	8	N/A (8)	N/A (8)	N/A (8)	$0.00	$0.00	$0.00
Duct Leakage (cfm25/100 ft^2 CFA)	N/A (12)	N/A (12)	N/A (12)	N/A (12)	$0.00	$0.00	$0.00
Domestic HW	None	R-3	R-3	R-3	$55.18	$55.18	$55.18
Total Incremental Cost					$435.85	$936.70	$1,388.44
Average Annual Energy Bill Savings					$138.79	$153.87	$233.40
Simple Payback Period					5.9	11.2	10.8
Average Annual Energy Bill Savings (AEO High Oil and Gas Resource)					$129.14	$143.54	$217.96
Simple Payback Period (AEO High Oil and Gas Resource)					6.0	11.3	11.0

*The energy efficiency measures presented provide one potential path to comply with the HUD Uo requirement.

Package 2 (with sealing): HUD CZ 1

NOPR CLIMATE ZONE 1 – HUD Zone 1	Single Section					
HOUSTON, TX	Efficiency Measures Description				Incremental Costs and Savings Results (2017$)	
Component	HUD (Current Practice)*	$500 Cost Package	$1000 Cost Package	$1500 Cost Package	$500 Cost Package	$1000 Cost Package	$1500 Cost Package
Wall	N/A (R-11)	R-13	R-13	R-13	$68.27	$68.27	$68.27
Ceiling	N/A (R-22)	R-22	R-22	R-22	$0.00	$0.00	$0.00
Floor	N/A (R-22)	R-19	R-30	R-19	-$136.44	$406.52	-$136.44
Window U-factor	N/A (1.08)	1.08	1.08	0.5	$0.00	$0.00	$1,048.43
Window SHGC	N/A (0.70)	0.7	0.7	0.6			
U_o	0.116	0.1120	0.1048	0.0909			
Envelope Leakage (ACH)	8	5	5	5	$253.85	$253.85	$253.85
Duct Leakage (cfm25/100 ft^2 CFA)	N/A (12)	4	4	4	$209.70‡	$209.70‡	$209.70‡
Domestic HW	None	R-3	R-3	R-3	$55.18	$55.18	$55.18
Total Incremental Cost					$450.57	$993.53	$1,499.00
Average Annual Energy Bill Savings					$186.95	$188.70	$301.86
Simple Payback Period					3.9	8.6	8.0
Average Annual Energy Bill Savings (AEO High Oil and Gas Resource)					$182.81	$184.50	$295.23
Simple Payback Period (AEO High Oil and Gas Resource)					3.9	8.7	8.1

*The energy efficiency measures presented provide one potential path to comply with the HUD Uo requirement.

‡ The package assumes duct sealing requirements would require following prescriptive duct sealing methods to achieve the duct leakage numerical performance value, without needing to perform testing.

Package 2 (with sealing): HUD CZ 1

NOPR CLIMATE ZONE 2 – HUD CZ 1	Single Section					
JACKSON, MS	Efficiency Measures Description				Incremental Costs and Savings Results (2017$)	
Component	HUD (Current Practice)*	$500 Cost Package	$1000 Cost Package	$1500 Cost Package	$500 Cost Package	$1000 Cost Package	$1500 Cost Package
Wall	N/A (R-11)	R-13	R-13	R-13	$68.27	$68.27	$68.27
Ceiling	N/A (R-22)	R-22	R-22	R-22	$0.00	$0.00	$0.00
Floor	N/A (R-22)	R-19	R-30	R-19	-$136.44	$406.52	-$136.44
Window U-factor	N/A (1.08)	1.08	1.08	0.5	$0.00	$0.00	$1,048.43
Window SHGC	N/A (0.70)	0.7	0.7	0.6			
U_o	0.116	0.1120	0.1048	0.0909			
Envelope Leakage (ACH)	8	5	5	5	$253.85	$253.85	$253.85
Duct Leakage (cfm25/100 ft^2 CFA)	N/A (12)	4	4	4	$209.70‡	$209.70‡	$209.70‡
Domestic HW	None	R-3	R-3	R-3	$55.18	$55.18	$55.18
Total Incremental Cost					$450.57	$993.53	$1,499.00
Average Annual Energy Bill Savings					$231.25	$238.10	$365.64
Simple Payback Period					3.2	7.0	6.7
Average Annual Energy Bill Savings (AEO High Oil and Gas Resource)					$226.04	$232.71	$357.48
Simple Payback Period (AEO High Oil and Gas Resource)					3.3	7.0	6.8

*The energy efficiency measures presented provide one potential path to comply with the HUD Uo requirement.
‡ The package assumes duct sealing requirements would require following prescriptive duct sealing methods to achieve the duct leakage numerical performance value, without needing to perform testing.

Package 2 (with sealing): HUD CZ 2

NOPR CLIMATE ZONE 3 – HUD Zone 2	Single Section					
MEMPHIS, TN	Efficiency Measures Description				Incremental Costs and Savings Results (2017$)	
Component	HUD (Current Practice)*	$500 Cost Package	$1000 Cost Package	$1500 Cost Package	$500 Cost Package	$1000 Cost Package	$1500 Cost Package
Wall	N/A (R-11)	R-13	R-19	R-21	$68.27	$674.12	$814.43
Ceiling	N/A (R-22)	R-22	R-22	R-22	$0.00	$0.00	$0.00
Floor	N/A (R-19)	R-19	R-19	R-22	$0.00	$0.00	$136.44
Window U-factor	N/A (0.5)	0.5	0.5	0.5	$0.00	$0.00	$0.00
Window SHGC	N/A (0.6)	0.6	0.6	0.6			
U_o	0.096	0.0909	0.0818	0.0779			
Envelope Leakage (ACH)	8	5	5	5	$253.85	$253.85	$253.85
Duct Leakage (cfm25/100 ft^2 CFA)	N/A (12)	N/A (12)	N/A (12)	4	$0.00	$0.00	$209.70‡
Domestic HW	None	R-3	R-3	R-3	$55.18	$55.18	$55.18
Total Incremental Cost					$377.31	$983.15	$1,469.60
Average Annual Energy Bill Savings					$200.51	$310.78	$382.11
Simple Payback Period					3.2	5.5	6.6
Average Annual Energy Bill Savings (AEO High Oil and Gas Resource)					$195.03	$302.38	$371.93
Simple Payback Period (AEO High Oil and Gas Resource)					3.3	5.5	6.6

*The energy efficiency measures presented provide one potential path to comply with the HUD Uo requirement.

‡ The package assumes duct sealing requirements would require following prescriptive duct sealing methods to achieve the duct leakage numerical performance value, without needing to perform testing.

Package 2 (with sealing): HUD CZ 3

NOPR CLIMATE ZONE 4 – HUD Zone 3	Single Section					
CHICAGO, IL	Efficiency Measures Description				Incremental Costs and Savings Results (2017$)	
Component	HUD (Current Practice)*	$500 Cost Package	$1000 Cost Package	$1500 Cost Package	$500 Cost Package	$1000 Cost Package	$1500 Cost Package
Wall	N/A (R-13)	R-21	R-21	R-21	$746.16	$746.16	$746.16
Ceiling	N/A (R-30)	R-22	R-22	R-22	-$451.74	-$451.74	-$451.74
Floor	N/A (R-22)	R-22	R-22	R-38	$0.00	$0.00	$578.30
Window U-factor	N/A (0.35)	0.49	0.31	0.32	-$347.68	$180.57	$86.24
Window SHGC	N/A (0.33)	0.71	0.25	0.33			
U_o	0.079	0.0775	0.0710	0.0647			
Envelope Leakage (ACH)	8	5	5	5	$253.85	$253.85	$253.85
Duct Leakage (cfm25/100 ft^2 CFA)	N/A (12)	4	4	4	$209.70‡	$209.70‡	$209.70‡
Domestic HW	None	R-3	R-3	R-3	$55.18	$55.18	$55.18
Total Incremental Cost					$465.47	$993.73	$1,477.69
Average Annual Energy Bill Savings					$350.43	$424.80	$441.14
Simple Payback Period					2.8	4.3	6.2
Average Annual Energy Bill Savings (AEO High Oil and Gas Resource)					$321.28	$395.94	$410.48
Simple Payback Period (AEO High Oil and Gas Resource)					2.8	4.4	6.3

*The energy efficiency measures presented provide one potential path to comply with the HUD Uo requirement.

‡ The package assumes duct sealing requirements would require following prescriptive duct sealing methods to achieve the duct leakage numerical performance value, without needing to perform testing.

Draft Results Summary

		$500 Cost Package 1	$1000 Cost Package 1	$1500 Cost Package 1	$500 Cost Package 2	$1000 Cost Package 2	$1500 Cost Package 2
Total Incremental Cost	DOE CZ 1 – Houston (HUD CZ 1)	$438.76	$967.17	$1,482.86	$450.57	$993.53	$1,499.00
Average Annual Energy Bill Savings		$105.85	$157.88	$270.22	$186.95	$188.70	$301.86
Average Annual Cash Flow*		$72.18	$83.65	$156.42	$152.38	$112.45	$186.81
Simple Payback Period		6.6	9.7	8.6	3.9	8.6	8.0
LCC Savings		$645.33	$636.96	$1,270.10	$1,478.15	$930.01	$1,582.25
Annualized Costs at 7% DR (in 000s, 2016$)		$4,953	$10,862	$16,569	$5,086	$11,155	$16,746
NPV Costs at 7% DR (in 000s, 2016$)		$61,464	$134,786	$205,606	$63,118	$138,427	$207,803
Total Incremental Cost	DOE CZ 2 – Jackson (HUD CZ 1)	$438.76	$967.17	$1,482.86	$450.57	$993.53	$1,499.00
Average Annual Energy Bill Savings		$131.29	$181.61	$287.31	$231.25	$238.10	$365.64
Average Annual Cash Flow*		$97.61	$107.38	$173.51	$196.67	$161.85	$250.60
Simple Payback Period		5.5	8.6	8.1	3.2	7.0	6.7
LCC Savings		$910.13	$883.84	$1,447.90	$1,939.68	$1,444.66	$2,246.53
Annualized Costs at 7% DR (in 000s, 2016$)		$3,065	$6,721	$10,252	$3,147	$6,902	$10,361
NPV Costs at 7% DR (in 000s, 2016$)		$38,029	$83,397	$127,217	$39,054	$85,650	$128,575
Total Incremental Cost	DOE CZ 3 – Memphis (HUD CZ 2)	$488.92	$887.88	$1,493.73	$377.31	$983.15	$1,469.60
Average Annual Energy Bill Savings		$140.63	$167.33	$277.20	$200.51	$310.78	$382.11
Average Annual Cash Flow*		$103.11	$99.19	$162.56	$171.55	$235.33	$269.32
Simple Payback Period		5.4	8.3	8.7	3.2	5.5	6.6
LCC Savings		$955.26	$817.29	$1,328.59	$1,693.25	$2,209.21	$2,444.26
Annualized Costs at 7% DR (in 000s, 2016$)		$2,639	$4,774	$7,983	$2,039	$5,281	$7,856
NPV Costs at 7% DR (in 000s, 2016$)		$32,747	$59,240	$99,062	$25,302	$65,529	$97,485
Total Incremental Cost	DOE CZ 4 – Chicago (HUD CZ 3)	$435.85	$936.70	$1,388.44	$465.47	$993.73	$1,477.69
Average Annual Energy Bill Savings		$138.79	$153.87	$233.40	$350.43	$424.80	$441.14
Average Annual Cash Flow*		$105.34	$81.99	$126.84	$314.71	$348.54	$327.73
Simple Payback Period		5.9	11.2	10.8	2.8	4.3	6.2
LCC Savings		$975.61	$609.91	$959.35	$3,113.94	$3,342.43	$3,004.71
Annualized Costs at 7% DR (in 000s, 2016$)		$4,115	$8,800	$12,986	$4,394	$9,330	$13,808
NPV Costs at 7% DR (in 000s, 2016$)		$51,063	$109,200	$161,140	$54,521	$115,779	$171,350
Annualized Costs at 7% DR (in millions, 2016$)	National (SS+MS)**	$64	$146	$224	$60	$145	$224
NPV Costs at 7% DR (in millions, 2016$)		$796	$1,816	$2,780	$743	$1,802	$2,782

*Average Annual Cash Flow = Average Annual Energy Bill Savings – (Average Annual Mortgage Payments + Average Annual Property Tax Payments)
Note: Most buyers finance the home, meaning the increased upfront cost (down payment) is 10% to 20% of the total incremental cost.
**National (SS+MS) results correspond to all single-section and multi-section MH affected by the standards. All other results are for single-section only.

Appendix B - ASRAC Manufactured Housing Working Group Membership

Working Group Member	Company
Joseph Hagerman	Department of Energy
John Caskey	ASRAC, National Electrical Manufacturers Association
Keith Dennis	National Rural Electrical Cooperative Association
Ishbel Dickens	National Manufactured Home Owners Association (NMHOA)
Scott Drake	East Kentucky Power Cooperative
Stacey Epperson	Next Step Network
Mark Ezzo	Clayton Homes, Inc.
Richard Hanger	Housing Technology and Standards
Bert Kessler	Palm Harbor Homes, Inc.
Eric Lacey	Responsible Energy Codes Alliance
Emanuel Levy	Systems Building Research Alliance
Michael Lubliner	Washington State University Extension Energy Program
Rob Luter	Lippert Components, Inc.
Richard Potts	Virginia Department of Housing and Community Development
Robin Roy	Natural Resources Defense Council
Manuel Santana	Cavco Industries
Peter Schneider	Efficiency Vermont
Lois Starkey	Manufactured Housing Institute
David Tompos	NTA, Inc.
Lowell Ungar	American Council for an Energy-Efficient Economy
Michael Wade	Cavalier Home Builders
Mark Weiss	Manufactured Housing Association for Regulatory Reform

MHCC MEETING
April 2, 2019

APPENDIX C:
DOE'S NOTICE OF DATA AVAILABILITY [NODA]

Proposed Rules

Federal Register
Vol. 83, No. 150
Friday, August 3, 2018

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF ENERGY

10 CFR Part 460

[EERE–2009–BT–BC–0021]

RIN 1904–AC11

Energy Conservation Program: Energy Conservation Standards for Manufactured Housing

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of data availability; request for information.

SUMMARY: The U.S. Department of Energy (DOE) is announcing this notice of data availability (''NODA'') and soliciting public input regarding data relating to certain aspects in developing energy conservation standards for manufactured housing. These data are likely to help serve as support for DOE's further refinement of certain aspects of its proposed standards for these structures. They may also serve as the basis for DOE's restructuring of its approach in laying out the framework for standards that would apply to manufactured housing. DOE is seeking comment on these data along with several options that it is currently considering that could form an alternative basis for regulating the energy efficiency of manufactured housing. DOE also seeks any additional information that might further inform the agency's views regarding the manner in which to regulate these structures.

DATES: Written comments and information are requested and will be accepted on or before September 17, 2018.

ADDRESSES: Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at *http://www.regulations.gov.* Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by docket number EERE–2009–BT–BC–0021, by any of the following methods:

1. *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

2. *Email: to Manufactured_Housing@ee.doe.gov.* Include EERE–2009–BT–BC–0021 in the subject line of the message.

3. *Postal Mail:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 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:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza SW, Suite 600, Washington, DC 20024. 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 telefacsimilies (faxes) will be accepted. For detailed instructions on submitting comments and additional information on the rulemaking process, see section III 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 *http://www.regulations.gov.* All documents in the docket are listed in the *http://www.regulations.gov* index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

The docket web page can be found at *https://www.regulations.gov/docket?D=EERE-2009-BT-BC-0021.* The docket web page contains simple instructions on how to access all documents, including public comments, in the docket. See section III for information on how to submit comments through *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT:

Ms. Sofie Miller, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE–5B, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 287–1943. Email: *Manufactured_Housing@ee.doe.gov.*

Mr. Michael Kido, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 586–8145. Email: *Michael.Kido@hq.doe.gov.*

For further information on how to submit a comment or review other public comments and the docket, contact the Appliance and Equipment Standards Program staff at (202) 287–1445 or by email: *Manufactured_Housing@ee.doe.gov.*

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Introduction

Manufactured housing comprises a housing category that consists of structures constructed in a factory, built on a permanent chassis, and transportable in one or more sections that are then erected on-site. See 24 CFR 3280.2 This type of housing has traditionally been regulated by the Department of Housing and Urban Development (''HUD''), which has regulated these structures with the purpose of reducing personal injuries, deaths, property damage, and insurance costs, and to improve the quality, durability, safety, and affordability of these homes. *See* 42 U.S.C. 5401(b). Consistent with its statutory authority, HUD has created a comprehensive regulatory framework to address a variety of aspects related to these structures, including certain elements related to their energy efficiency. *See, e.g.* 24 CFR 3280.507(a) (specifying thermal insulation requirements) and 24 CFR 3280.508(d) (detailing requirements related to the installation of high-efficiency heating and cooling equipment in manufactured homes). HUD's standards are preemptive nationwide and differ from standards developed under the auspices of (and published by) the International Code Council (''ICC''). The ICC standards,

known as the International Energy Conservation Code (''IECC''), have been adopted by many state and local governments in establishing minimum design and construction requirements for the energy efficiency of residential and commercial buildings. However, due to the preemptive nature of HUD's standards, the ICC standards are not currently applied to manufactured housing. Consistent with this approach and Federal law, DOE is tasked with evaluating whether the adoption of standards based on the most recent version of the IECC would satisfy the applicable statutory requirements.

A. Authority and Background

Section 413 of the Energy Independence and Security Act of 2007, Public Law 110–140 (December 19, 2007) (''EISA'') requires DOE to establish by regulation standards for the energy efficiency of manufactured housing. See 42 U.S.C. 17071(a)(1). Prior to establishing these regulations, DOE must satisfy two conditions—(1) provide manufacturers and other interested parties with notice and an opportunity for comment and (2) consult with the Secretary of HUD, who may then ''seek further counsel from the Manufactured Housing Consensus Committee.'' [1] 42 U.S.C. 17071(a)(2). These standards must generally be based on the most recent version of the IECC, except where DOE finds that the IECC is not cost effective, or a more stringent standard would be more cost effective. A finding that standards based on the IECC are not cost effective or that standards more stringent than the IECC are cost effective would be based on the impact of the adoption of the IECC standards on the purchase price of manufactured housing and on total life-cycle construction and operating costs. See 42 U.S.C. 17071(b)(1). In establishing its standards, DOE may consider:

- The design and factory construction techniques of manufactured housing,
- The climate zones established in the U.S. Department of Housing and Urban Development's Manufactured Home Construction and Safety Standards (''the HUD Code'') rather than the climate zones included as part of the IECC, and
- Alternative practices that result in net estimated energy consumption equal to or less than the specific IECC standards. *See* 42 U.S.C. 17071(b)(2).

In addition, EISA provides that a manufacturer who violates the regulations established by DOE under 42 U.S.C. 17071(a) ''is liable to the United States for a civil penalty in an amount not exceeding 1 percent of the manufacturer's retail list price of the manufactured housing.'' *See* 42 U.S.C. 17071(c).

B. Rulemaking History

In the years since EISA became law, DOE has undertaken several steps down the complex regulatory path of fulfilling Section 413's directive for promulgating new regulations under the processes and conditions set forth in the statute. After studying the issue, on February 22, 2010, DOE published an advanced notice of proposed rulemaking and request for comment identifying 13 distinct issues concerning energy efficiency in manufactured housing about which it sought public input. *See* Energy Standards for Manufactured Housing, 75 FR 7556, 7557 (February 22, 2010). After receiving and considering the submitted comments, DOE prepared a draft notice of proposed rulemaking (''draft NOPR'') and submitted it to the Office of Information and Regulatory Affairs (''OIRA'') in the Office of Management and Budget for review, pursuant to Executive Order 12866. Ultimately, the draft NOPR did not clear the OIRA review process, and DOE withdrew it on March 13, 2014.[2]

Following the withdrawal of the draft NOPR from OIRA, DOE notified the public of its intent to establish a negotiated rulemaking working group for manufactured housing. DOE believed that this approach would be ''better suited to resolving complex technical issues'' concerning the standards, among other benefits. 79 FR 33874 (June 13, 2014). The working group was convened and met for a total of 12 days over a three-month period. *See* Energy Conservation Program: Energy Efficiency Standards for Manufactured Housing, 80 FR 7550, 7551 (February 11, 2015).[3] These meetings led to the adoption of a term sheet detailing numerous technical recommendations for energy efficiency standards for manufactured housing. *See* Document ID EERE–2009–BT–BC–0021–0107.[4] Also, in accordance with a recommendation from the working group, DOE sought further public comment regarding some technical issues that had arisen in the rulemaking process. *See* 80 FR 7551–7553. In addition to these extensive efforts to solicit comments from the public and the expertise of the working group, DOE also held meetings with HUD throughout the regulatory process and engaged in discussions with the Manufactured Housing Consensus Committee. *See* 81 FR 39762–39763, 39765. It has also conferred with various other stakeholders. *See id.* 81 FR 39763, 39765.

On June 17, 2016, DOE published in the **Federal Register** a NOPR, which, in addition to comprehensively describing DOE's analysis, was accompanied by a technical support document detailing DOE's analyses supporting that proposal. *See* 81 FR 39756. See also Document ID EERE–2009–BT–BC–0021–0136.[5] The agency also prepared a draft environmental assessment pursuant to the National Environmental Policy Act, on which it sought public input, particularly regarding the impacts of the proposed standards on the indoor air quality of manufactured homes. *See* Draft Environmental Assessment for Notice of Proposed Rulemaking, ''Energy Conservation Standards for Manufactured Housing'' With Request for Information on Impacts to Indoor Air Quality, 81 FR 42576 (June 30, 2016). DOE received nearly 50 comments on the proposed rule during the comment period. After considering those comments, DOE prepared a draft final rule governing energy efficiency in manufactured housing and submitted it to OIRA for review under Executive Order 12866. OIRA received the draft final rule on November 1, 2016.[6] Again,

[1] HUD describes its Manufactured Housing Consensus Committee as ''a statutory Federal Advisory Committee body charged with providing recommendations to the Secretary on the revision and interpretation of HUD's manufactured home construction and safety standards and related procedural and enforcement regulations. The [Committee] is charged with developing proposed model installation standards for the manufactured housing industry.'' *https://www.hud.gov/program_offices/housing/rmra/manufacturedhousings/cc1* (last accessed on July 9, 2018).

[2] The withdrawn date can be found at *https://www.reginfo.gov/public/do/eoAdvancedSearch* and entering ''1904–AC11'' for the RIN and checking ''Concluded'' under ''Review Status''. Additionally, while the OIRA review was ongoing, on June 25, 2013, DOE published a request for information in which it sought additional public input regarding four identified issues related to its rulemaking. See Energy Efficiency Standards for Manufactured Housing, 78 FR 37995, 37996–37997 (June 25, 2013).

[3] *See also* Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC)—Manufactured Housing Working Group, 79 FR 48097 (August 15, 2014); Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC)—Manufactured Housing Working Group, 79 FR 59154 (October 1, 2014).

[4] Available at: *https://www.regulations.gov/document?D=EERE-2009-BT-BC-0021-0107.*

[5] Available at: *https://www.regulations.gov/document?D=EERE-2009-BT-BC-0021-0136.*

[6] *See supra,* note 2. On November 9, 2016, DOE also published a notice of proposed rulemaking for test procedures, as a companion to the draft energy efficiency standards rule for manufactured housing. *See* Energy Conservation Program: Test Procedures for Manufactured Housing, 81 FR 78733 (November 9, 2016). Test procedures specify how those subject

however, DOE's draft final rule did not clear the OIRA review process and was withdrawn on January 31, 2017.[7]

II. Request for Information

Since the publication of DOE's proposals, the agency has re-examined its available data and re-evaluated its approach in developing standards for manufactured housing. In particular, HUD made DOE aware of the adverse impacts on manufactured housing affordability that would likely follow if DOE were to adopt the approach laid out in its June 2016 proposal. As a result, and in consideration of specific suggestions offered by HUD, DOE initiated a review of its data and analysis and has begun reconsidering the framework to use in regulating these structures. In particular, DOE had previously considered a regulatory regime similar to the one it administers with regard to appliance and commercial equipment standards, *i.e.,* setting a uniform, minimum mandatory level of efficiency that must be achieved by all subject products. However, DOE's authority to establish energy efficiency standards for appliance standards is separate from its authority to establish energy conservation standards for manufactured homes. Thus, DOE is examining if it must set a single, mandatory level of efficiency. As a result of this re-examination, DOE developed a number of alternatives on which it seeks further input from the public. These alternatives would facilitate a variety of different levels of efficiency. In developing these alternatives, DOE gave careful consideration to a variety of factors, including the first-time costs related to the purchase of these homes. In the following sections, DOE presents a series of issues on which it seeks input to aid in the development of the technical and economic analyses regarding each of these potential alternatives to the proposed regulatory framework contained in DOE's June 2016 standards proposal.

Additionally, DOE welcomes comments on other issues relevant to the conduct of this process that may not specifically be identified in this document. In particular, DOE notes that under Executive Order 13771, ''Reducing Regulation and Controlling Regulatory Costs,'' Executive Branch agencies such as DOE are directed to manage the costs associated with the imposition of expenditures required to comply with Federal regulations. *See* 82 FR 9339 (February 3, 2017). Consistent with that Executive Order, DOE encourages the public to provide input on measures DOE could take to lower the cost of its regulations applicable to manufactured housing consistent with the requirements of EISA.

A. June 2016 Proposal's Analytical Assumptions

As with any of its appliance and equipment standards rulemaking proposals, DOE made a number of analytical assumptions to determine what minimum level of efficiency it should use in establishing mandatory energy conservation standards for manufactured housing. These assumptions spanned a variety of factors, including affordability, which climate zones to use, which solar heat gain coefficient (''SHGC'') to use in a given climate zone, the price elasticity value to use in DOE's calculation of potential impacts, whether to include certification, compliance, and enforcement costs as part of DOE's analysis, and whether the tightening of a manufactured home's building envelope—which is what the proposed standards were designed to help accomplish—would impact indoor air quality by increasing the likelihood of trapping pollutants inside the building.

Issue 1: What analytical aspects related to DOE's June 2016 proposal—aside from those specifically noted later in this document—should DOE consider re-examining as part of its ongoing consideration of a final rule for manufactured housing? (Within this context, this request also encompasses whether DOE's analysis sufficiently addresses the cost-effectiveness of standards based on the current IECC code when considering the code's impact on both the purchase price of manufactured housing and on total life-cycle construction and operating costs. *See* 42 U.S.C. 1771(b)(1). Why should DOE reconsider these aspects and what specific changes, if any, should DOE make to them? As part of this request, DOE is interested in any specific supplemental supporting data regarding any changes that commenters may suggest.

Additionally, in further researching the manufactured housing market, DOE has examined additional information from a variety of sources. Of particular note is information from the Consumer Financial Protection Bureau (''CFPB''), which released a report in 2014 that focused on this particular market.[8] That report, ''Manufactured-Housing Consumer Finance in the United States,'' [hereinafter, ''CFPB Report''] detailed the characteristics of manufactured housing consumers and the market for manufactured home financing. Key findings from the report include:

- Manufactured home ownership varies widely by region, with the majority of manufactured homes located outside of metropolitan areas;
- Manufactured home owners tend to have lower incomes and less net worth than their counterparts who own site-built homes;
- There is an extremely constrained secondary market for manufactured homes, following the collapse of the manufactured home market in the late 1990s through the early 2000s;
- Most manufactured-housing purchasers who finance their homes obtained a loan of between $10,000 and $80,000, with a median loan value of $55,000.

These data suggest that manufactured housing purchasers face substantial constraints compared to traditional home purchasers. In turn, these constraints may make purchasers of manufactured homes more price-sensitive to potential changes that would impact the costs to construct (and purchase) a manufactured home.[9]

The CFPB data also point to certain key demographic characteristics. On a regional level, the CFPB noted that manufactured housing is more common in certain regions than others—with this type of housing being more common in the South and the West than in certain Northeastern states. Manufactured homes are also much more prevalent in rural areas, with about ⅔ of all occupied manufactured homes being located outside of metropolitan statistical areas; in these areas, 14% of homes are manufactured homes. Manufactured housing as a proportion of occupied housing units is lowest in Maryland, New Jersey, Connecticut, Hawaii and Massachusetts (1%) and highest in South Carolina, New Mexico, and Mississippi (17%, 16%, and 15%, respectively). *See* CFPB Report, at 10–12.

to energy efficiency standards are to confirm products are in compliance with such standards.

[7] *See supra,* note 2.

[8] See *https://files.consumerfinance.gov/f/201409_cfpb_report_manufactured-housing.pdf.*

[9] The CFPB Report also suggests that manufactured home consumers are particularly cost-driven: ''There is evidence that some households who move into manufactured housing are less satisfied with their homes than those who choose to move into site-built housing. These results suggest that for at least some households, the choice to live in a manufactured home may be more cost-driven than quality-driven.'' CFPB, *Manufactured-housing consumer finance in the United States,* at 22 (September 2014) [hereinafter, ''CFPB Report''] (available at *http://files.consumerfinance.gov/f/201409_cfpb_report_manufactured-housing.pdf*).

Further, manufactured home owners are more likely to be older and likely to have lower incomes or net worth. The median annual income of families living in manufactured homes is also slightly over $26,000, and the median net worth of these families is $26,000 (a quarter of that of families in site-built homes). *See id.* at 16–18.

The CFPB also made a number of other observations with respect to the available financial data it examined.

First, it indicated that the manufactured home market collapsed in the late 1990s through the early 2000s as consumers experienced loan repayment difficulties driven by low-quality manufactured home lending. Following the collapse, at least eight large lenders exited the manufactured home lending market, some of which drove losses in the secondary market. *See generally id.* at 26–29. At the time of CFPB's report, sales and production remained depressed with an extremely constrained resale market for manufactured homes. *See id.* at 6, 26–28, 37.

Second, most manufactured-housing purchasers finance between $10,000 and $80,000, with a loan median of $55,000. *See id.* at 30. Owners of manufactured homes finance different amounts depending on whether they finance the costs of only the manufactured home or the costs of both the home and the land on which it is sited. *See id.* at 21.

Manufactured home owners who finance their homes tend to pay higher interest rates than their site-built home counterparts. A key reason for this difference is that the vast majority of manufactured housing stock is titled as chattel, and as a result is eligible only for chattel financing. Chattel financing is typically offered to purchasers at a significantly higher interest rate than the rates offered to their site-built home counterparts. While some manufactured home owners who also own the land on which the manufactured home is sited may be eligible for mortgage financing, there is a tradeoff between lower origination costs with significantly higher interest rates (chattel loans) and higher origination costs with significantly lower interest rates and greater consumer protections (mortgage). *See id.* at 23–25.

Issue 2: a. DOE seeks comment regarding the CFPB's findings. Are these findings reasonably accurate or are there other factors that DOE should consider when determining the economic impact of energy conservation standards on the ability of purchasers to buy manufactured homes? Assuming that these findings are reasonably accurate, what role, if any, should they play in shaping the standards that DOE ultimately adopts for manufactured housing and why? If the CFPB's findings are not accurate, what specific shortcomings do they have and what assumptions/changes should DOE apply when determining the stringency and types of standards the agency should establish for manufactured housing?

b. DOE's own data from its Residential Energy Consumption Survey of 2015 suggests that manufactured housing households pay about 60% more for their energy per square foot than the entire housing stock. Is this estimate accurate—and if so, why? What specific factors contribute to this condition? If this estimate is not accurate, why—what specific factors are being overlooked in the survey that contribute to this inaccuracy?

B. Ownership-Related Costs

DOE's analysis for its June 2016 proposal considered the economic impacts of the proposed standards on individual manufactured home purchasers. Similar to its approach toward appliance standards, these analyses focused on the prospect of applying a single, uniform minimum standard that all manufactured homes of a given size (single- or multi-section) and in a given climate zone (*i.e.,* region of the country would need to meet. Necessarily, this approach examined the overall economic impacts in a broad fashion by applying a uniform standard to all manufactured housing units within a given climate zone and home size category. However, the approaches that the Department has taken with respect to appliance standards may not be suitable in the case of manufactured housing, which fills a distinct need for housing for a particular subset of consumers. In particular, under the statutory provision requiring the Department to develop standards for manufactured housing, the standards must generally be based on the most recent version of the IECC, except where DOE finds that the IECC is not cost effective, or a more stringent standard would be more cost effective. A finding that standards based on the IECC are not cost effective or that standards more stringent than the IECC are cost effective would be based on the impact of the adoption of the IECC standards on the purchase price of manufactured housing and on total life-cycle construction and operating costs. As a result, the approach presented by the working group (and adopted by DOE in its proposal) may have inadvertently overlooked certain factors and yielded an incomplete picture regarding the potential impacts flowing from its proposal and whether the standards must be based on the most recent version of the IECC. Consequently, DOE is seeking comment on a variety of issues related to these factors to help further inform its views regarding the economic impacts related to the establishment of energy efficiency standards for manufactured housing, and how those impacts effect use of the most recent version of the IECC.

Issue 3: Manufactured housing owners tend to be lower-income than other homeowners,[10] and are also likely to finance their manufactured housing purchase using high-rate chattel loans. As a result, the Department is particularly interested in comments and data regarding the affordability of manufactured housing and how the options outlined in this NODA would affect upfront manufactured housing affordability. DOE also seeks comment on whether and how the different approaches outlined in this NODA would differently affect the affordability of manufactured homes.

Additionally, as part of this inquiry, DOE seeks public input on each of the following items:

a. Affordability is a combination of upfront cost, which may price out some consumers at time of purchase, and operating costs, which will affect all manufactured housing owners over a longer time horizon. The Department seeks comments that provide information on how to weigh these components in defining ''affordability,'' with particular focus on affordability for low-income consumers.

b. The Department also seeks comment on what a reasonable payback period might be for efficiency in manufactured homes, and any relevant tradeoffs between upfront cost and payback period that the Department should consider to avoid creating a situation where the upfront cost increases may price consumers out of the market for new homes, even if those costs might be recouped over time. While the cost of site-built home efficiency upgrades may be recouped when an owner sells the home, the same may not be true of manufactured homes because (1) manufactured housing owners have relatively short tenancies [11]

[10] ''Certain consumer segments are disproportionately represented among owners and renters of manufactured homes, in particular older consumers, consumers that have completed only high school, households with relatively low income, and households with relatively low net worth.'' CFPB Report, at 13.

[11] *See* Consumer Financial Protection Bureau, Manufactured-housing consumer finance in the United States, September 2014 at 42–43: *http://files.consumerfinance.gov/f/201409_cfpb_report_manufactured-housing.pdf.*

and (2) the resale market for manufactured housing is highly constrained,[12] such that the original owner will likely not recoup upfront efficiency investments if the payback period exceeds tenancy. DOE seeks additional information from commenters on the manufactured housing resale market that would inform the Department's consideration of what a reasonable payback period would be. If available, the Department also seeks information on the distribution of manufactured housing tenancy rates.

c. The Department is also interested in comments that inform whether special consideration should be given to affordability, particularly given that low-income and older consumers are disproportionately represented among manufactured housing owners.[13] Executive Order 13563, which reinforces the principles of Executive Order 12866, indicates that agencies ''may consider (and discuss qualitatively) values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts'' [14] where appropriate and permitted by law.

d. The Department seeks data and information regarding basing standards on the most recent version of the IECC, in particular, whether standards based on the most recent version of the IECC would not be cost effective or that standards more stringent than the most recent version of the IECC would be cost effective, in either case based on the impact of the adoption of the IECC standards on the purchase price of manufactured housing and on total life-cycle construction and operating costs.

Issue 4: DOE is aware that efficiency standards for manufactured housing may affect consumers in different regions differently, and seeks information on (1) the disparate regional effects of a standard, and (2) whether these effects are mitigated by use of tiered standards or a tiered labeling program.

Issue 5: DOE seeks to better understand the market for manufactured homes. Available sources provide information regarding the average or median manufactured housing purchase price [15] or the proportion of manufactured housing owners who borrowed different amounts to finance their manufactured housing purchase,[16] but do not directly show the distribution of manufactured housing prices across the market and the percentage of consumers who purchase at each price category. DOE is interested in such information, particularly to the extent that such information could inform the consideration of threshold standards.

C. Prescriptive and Performance-Based Standards

In DOE's June 2016 standards proposal, the agency laid out two possible approaches it was considering at the time. The first option involved potential prescriptive requirements that would apply to a variety of components used in constructing the thermal envelope of a given manufactured home. These requirements laid out prescribed specifications related to thermal resistance (R-value) for wall, ceiling, and floor insulation, thermal transmittance specifications (U-factor) for windows, skylights, and doors, and glass glazing (SHGC) requirements. *See* 81 FR 39757. These prescriptive levels would vary based on the climate zone in which the home is located. 81 FR 39766. The second option presented a potential performance-based approach that would establish a maximum overall thermal transmittance for requirement for the building structure's thermal envelope (Uo) and set additional U-factor and SHGC requirements. *See id.* Like with the prescriptive approach, these requirements would also vary by climate zone.

In addition to these approaches, DOE also considered including provisions for determining U-factor, R-value, SHGC, and Uo. It also considered establishing prescriptive requirements for installation of insulation and sealing the building's thermal envelope and duct system to limit air leakage, which would in turn reduce potential thermal losses. *See id.*

Issue 6: DOE is interested in feedback regarding whether any aspects of its 2016 proposal need further consideration and if so, why. For comments pointing to weaknesses or strengths with respect to DOE's proposal, the agency seeks any supporting data in addition to that which DOE has already made public as part of the manufactured housing standards rulemaking docket.

D. Alternative Approaches

DOE is also considering an altogether different approach consisting of incremental packages that maximize energy savings of a manufactured home within certain incremental cost parameters. These options respond to concerns from stakeholders, including HUD, regarding the potentially prohibitive upfront costs of its 2016 proposed standards. As a result, this analysis illustrates packages that maximize energy savings within incremental cost thresholds of $500, $1,000, or $1,500. DOE is seeking comment on whether any of the cost threshold packages presented here (*i.e.* either $500, $1,000, or $1,500), when applied as a national standard, would address the concerns of stakeholders regarding the high upfront cost of its 2016 proposed standards. Further, DOE developed two sets of cost threshold packages: One set includes envelope and duct sealing as options to include in the cost threshold packages, and one set does not include envelope and duct sealing regardless of cost effectiveness.

Unlike the tiered standards discussed in this NODA, these cost threshold packages illustrate the costs and benefits of a potential national standard that would apply across the fleet of manufactured homes. However, given the Department's interest in tailoring its standards to consumers with differing preferences and needs, DOE is also soliciting comments on whether it can employ a tiered approach to these standards, wherein the $500, $1,000, and $1,500 cost packages could be applied to, or offered as an option for, various segments of the market for manufactured homes.

The Department also recognizes the value of providing accurate information on potential energy savings. In addition to being low incremental or additional cost to manufacturers, better informed consumers are empowered to make choices that meet their individual needs for energy savings within their own personal economic circumstances. This approach builds on the guidance in Executive Order 12866, which instructs each agency to identify opportunities to provide information the public can use to make informed choices.[17] To this end, the Department is considering a tiered labeling approach that would classify various levels of energy savings based on stringency and categorize these options within certain tiers, such as a Brass, Bronze, Silver, Gold, and Platinum tier, wherein the Platinum tier

[12] Kevin Jewell. ''Manufactured Housing Appreciation: Stereotypes and Data.'' Consumers Union, Southwest Regional Office. May 2003. Page 6. *http://consumersunion.org/pdf/manufacturedhousing/Appreciation.pdf.*

[13] *See* footnote 10, supra.

[14] Executive Order 13563, Section 1(c), 76 FR 3821 (January 21, 2011).

[15] *See* U.S. Census Bureau, *Cost and Size Comparison: New Manufactured Homes and Single-Family Site Built Homes (2007–2014),* for example.

[16] *See* Consumer Financial Protection Bureau, *Manufactured-housing consumer finance in the United States,* September 2014, for example.

[17] Executive Order 12866, ''Regulatory Planning and Review,'' 58 FR 51735 (October 4, 1993) (Section 1(b)(3)).

would represent the most efficient products on the market and Brass would represent the least efficient.

Consequently, DOE is evaluating the following options:

Package 1—This package would maximize the energy savings of a manufactured home at an upfront cost of either $500, $1,000, or $1,500. The accompanying analysis illustrates the associated lifecycle costs and payback period for each potential standard level across climate zones.[18] This package would exclude envelope and duct sealing to maximize energy savings under any of the cost threshold options examined.

Package 2—Like Package 1, this package would maximize the energy savings of a manufactured home at an upfront cost of either $500, $1,000, or $1,500. The accompanying analysis illustrates the associated lifecycle costs and payback period for each potential standard level across climate zones.[19] Unlike Package 1, this package would allow envelope and duct sealing to maximize energy savings under all of the cost threshold options examined.

Package 3—Rather than setting a national standard within a specified cost threshold, this option would create a framework where several different tiers of energy efficiency would be offered to consumers based on their particular needs and pricing sensitivities. These tiers would be based on cost increments, which, for purposes of DOE's current analysis, would be based on $500 increments with a cap at $1,500.

Package 4—This package would require each manufactured home to include a label prior to sale indicating expected energy use and savings. The labeling system would be tiered in the sense that different levels of energy savings would be labeled differently, such as by being categorized with a Brass, Bronze, Silver, Gold, or Platinum rating. These tiers would be based on potential energy savings. The Department is considering this package in conjunction with any of the other alternatives discussed above or with potential alternatives that may be suggested in response to this request for comment.

Package 5—Finally, to ensure that manufactured housing continues to be a viable source for affordable housing, this package would exclude all manufactured homes with a cost level and retail purchase price (not including land costs) equal to or less than the loan limit established in accordance with Section 2(b)(1)(C) of the National Housing Act, 12 U.S.C. 1703(b)(1)(C), plus 5% (Title I Loan Limits). (Currently = $73,162 or 1.05 × $69,678.) Similarly, under this package, DOE would apply a higher price threshold ($294,515) under the same conditions—*i.e.* cost level and purchase price (not including land costs)—that would encourage (but not require) manufactured housing at a certain price to meet DOE's standards. For all other manufactured housing that exceeds this level, DOE could apply one of the package approaches described under Packages 1 through 4.

In evaluating these various options, DOE is considering a scenario where manufacturers continue to offer more economical versions of manufactured homes for certain segments of the market that are currently available but that may not necessarily fall into one of the cost incremental categories described above. A regime in which manufacturers continue to offer those manufactured homes that are currently available on the market as well as variants at greater levels of efficiency would allow particularly price sensitive individuals who may not have the financial means to pursue other housing options to maintain their ability to purchase a manufactured home of their choice while also allowing those with greater means who desire increased energy efficiency to purchase a manufactured home that suits their desires. Under any of these scenarios, DOE would consider developing a labeling framework to inform consumers regarding these options. DOE also seeks comment on implementing a tiered labeling system in conjunction with the other options discussed in this document to address any potential information asymmetry and preserve consumer choice.

Issue 7: DOE seeks comment on whether it should consider and implement a cost-based tier structure with respect to regulating the energy efficiency of manufactured housing. DOE notes that a tiered approach could better address some of the concerns that may exist with respect to the first-time costs that purchasers may encounter with more efficient—but more expensive—manufactured homes. If so, why—and if not, why not?

Issue 8: Consumers may fail to optimize the efficiency of their homes due to a lack of available information on the benefits of energy savings. Recognizing this, the NODA presents an option that would provide tiered labeling for consumers to compare and contrast information on upfront costs and long-term energy savings across manufactured housing structures. The Department is seeking comments on the benefit of providing consumers with such information, which preserves consumer choice, and the best way to provide consumers with information that they can easily understand and put to use.

a. What information is available to consumers when they make manufactured housing purchasing decisions, and what additional information would be useful? Further, how can the Department add value in the provision and display of information?

b. DOE seeks comments regarding whether access to information is a barrier to manufactured housing consumers, and if so, what is the magnitude of this barrier (*i.e.* to what extent does the lack of information prevent consumers from purchasing efficient homes)?

Issue 9: DOE is also considering a number of approaches that would increase consumer access to information and increase the efficiency of manufactured homes.

a. In weighing these approaches, the Department seeks comment on the advantages and disadvantages of using a tiered approach for efficiency standards versus using a single national standard that would apply to all manufactured homes within a single climate zone. DOE also seeks information regarding what a labeling framework would need to consider if a tiered approach were used and what the costs of such an approach would likely be. The Department further seeks comment on the advantages and disadvantages of using a tiered approach to labeling requirements versus a single national labeling standard for manufactured homes.

b. Within the tiered options discussed above, the Department seeks public input on what the appropriate criteria are to use for establishing thresholds (*e.g.,* price, cost, region, etc.) and how best to define these criteria (*e.g.,* manufacturer added cost, retail price, etc.). DOE also seeks public input on other factors that it should consider when establishing tiered standards.

With respect to tightening a manufactured home's building envelope, the agency notes that this technique appears to be a cost-effective way to increase energy efficiency. However, many previous commenters, including HUD's Manufactured Housing Consensus Committee, raised the possibility that sealing requirements may pose challenges for indoor air

[18] *See https://www.regulations.gov/document?D=EERE-2009-BT-BC-0021-0200.*

[19] *See* footnote 18, supra.

quality.[20] Degraded indoor air quality could introduce additional costs in terms of health and safety or operation and maintenance that may impede the cost efficacy of these approaches.

Previous commenters have submitted existing literature on manufactured housing indoor air quality, including a report from the Centers for Disease Control and Prevention (''CDC''), an agency within the Department of Health and Human Services (''HHS''). The CDC report, which was prepared in conjunction with HUD, found generally that indoor air can contain a number of contaminants that contribute to health complaints, and that indoor air quality is of particular concern in manufactured housing due to its confined spaces and, in some cases, lower ventilation and air exchange rates.[21] In addition, the CDC report found that ''manufactured structures with relatively less air circulation may develop higher levels of indoor contaminants.'' However, comprehensive data on air quality in manufactured homes was unavailable at the time of CDC's report.[22]

Issue 10: Is new information available on the relationship between tightening the home envelope and indoor air quality? If so, what is the nature of that information, why should DOE consider it, and how should the agency integrate it into its analyses?

Issue 11: DOE is particularly interested in baseline measures of air flow in recently-built manufactured housing against which to measure any potential reductions in air changes per hour (''ACH''). DOE also seeks information related to what the appropriate ACH threshold is for maintaining adequate indoor air quality.[23]

Issue 12: What potential health and safety costs of incremental reductions in ACH and/or indoor air quality should the Department consider when evaluating this approach and why? What steps should DOE consider taking to reduce these costs while preserving indoor air quality for manufactured home residents and what disadvantages, if any, are there to each of these specific steps?

Issue 13: Regarding the overall structure of DOE's approach to its proposed climate zones, should these zones be reconsidered—and if so, why? Should DOE use HUD's existing climate zones? If DOE were to develop its own climate zones, what factors should it consider in doing so? What factors would support the continued use of the proposed climate zones and how do those factors weigh against using HUD's existing climate zones or in favor of adjusting them further?

E. Compliance Lead-Times

The June 2016 proposal used a compliance date lead-time of one year from the publication of a final rule. DOE proposed a lead-time of one year under the belief that this amount of time would be sufficient to allow manufacturers to transition their designs, materials, and factory operations and processes to comply with the finalized version of the energy conservation standards that DOE considered adopting. In light of the amount of time that has elapsed since the date of DOE's June 2016 proposal, and the possibility that the agency may explore an alternative approach for regulating the energy efficiency of manufactured homes through the use of a tiered system along with variants of DOE's earlier proposal that would rely on HUD's three climate zones, DOE is interested in soliciting public comment on whether its proposed lead-time remains appropriate.

Issue 14: Should DOE continue to apply a one year lead-time to the energy conservation standards for manufactured housing? Does the approach—*i.e.* single uniform national standard versus a multi-tiered national standard—impact the amount of lead-time manufacturers would require to meet the applicable standards? If so, why—and if not, why not? If DOE were to adopt an approach that presented different compliance options in the form of cost-based tiers, would manufacturers require more, less, or the same amount of lead-time as the agency's proposal (*i.e.* one year)? Why or why not?

Issue 15: With respect to the manufactured housing standards that DOE promulgates, DOE seeks comment on what enforcement mechanism would be the most appropriate to apply and why. In considering enforcement mechanisms, DOE is interested in information concerning the burden and cost impacts for suggested approach(es), as well as the compliance lead-time needed by the industry. Further, DOE seeks information as to whether enforcement cost of any suggested approach may extend beyond the manufacturing industry to the sales and distribution channels that interface with prospective purchasers.

III. Submission of Comments

DOE invites all interested parties to submit in writing by the date listed in **DATES**, comments and information on matters addressed in this notice and on other matters relevant to DOE's consideration of energy conservation standards for manufactured housing. These comments and information will aid in the development of energy conservation standards for these structures.

Submitting comments via *http://www.regulations.gov.* The *http://www.regulations.gov* web page 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 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. 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 *http://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 *http://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 *http://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

[20] *https://www.regulations.gov/document?D=EERE-2009-BT-BC-0021-0162.*

[21] CDC and HHS. Safety and Health in Manufactured Structures (2011) [hereinafter, ''Safety and Health''].

[22] Safety and Health, at p. 25.

[23] As of 2003, ASHRAE and HUD had established a minimum whole-house ventilation requirement of 0.35 ACH for achieving appropriate indoor air quality. See *https://www.huduser.gov/publications/pdf/moisturereport.pdf.*

comment may not be viewable for up to several weeks. Please keep the comment tracking number that *http://www.regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery, or mail. Comments and documents submitted via email, hand delivery, or mail also will be posted to *http://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 on 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, please provide all items on a CD, if feasible. 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, written in English and 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. According 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 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. Submit these documents via email or on a CD, if feasible. 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).

DOE considers public participation to be a very important part of the process for developing test procedures and energy conservation standards. DOE actively encourages the participation and interaction of the public during the comment period in each stage of the rulemaking process. Interactions with and between members of the public provide a balanced discussion of the issues and assist DOE in the rulemaking process. Anyone who wishes to be added to the DOE mailing list to receive future notices and information about this process should contact Appliance and Equipment Standards Program staff at (202) 287–1445 or via email at *Manufactured_Housing@ee.doe.gov.*

Signed in Washington, DC, on July 31, 2018.

Cathy Tripodi,

Acting Assistant Secretary, Energy Efficiency and Renewable Energy.

[FR Doc. 2018–16650 Filed 8–2–18; 8:45 am]

BILLING CODE 6450–01–P

FEDERAL DEPOSIT INSURANCE CORPORATION

12 CFR Parts 308 and 327

RIN 3064–AE75

Rules of Practice and Procedure

AGENCY: Federal Deposit Insurance Corporation.

ACTION: Notice of proposed rulemaking and request for comments.

SUMMARY: The Federal Deposit Insurance Corporation (FDIC) proposes to amend its rules of practice and procedure to remove duplicative, descriptive regulatory language related to civil money penalty (CMP) amounts that restates existing statutory language regarding such CMPs, codify Congress's recent change to CMP inflation-adjustments in the FDIC's regulations, and direct readers to an annually published notice in the **Federal Register**—rather than the Code of Federal Regulations (CFR)—for information regarding the maximum CMP amounts that can be assessed after inflation adjustments. These revisions are intended to simplify the CFR by removing unnecessary and redundant text and to make it easier for readers to locate the current, inflation-adjusted maximum CMP amounts by presenting these amounts in an annually published chart. Additionally, the FDIC proposes to correct four errors and revise cross-references currently found in its rules of practice and procedure.

DATES: Comments must be received by October 2, 2018.

ADDRESSES: You may submit comments, identified by RIN 3064–AE75, by any of the following methods:

- *Agency website: http://www.fdic.gov/regulations/laws/Federal/.* Follow the instructions for submitting comments on the Agency website.
- *Email: Comments@fdic.gov.* Include the RIN 3064–AE75 in the subject line of the message.
- *Mail:* Robert E. Feldman, Executive Secretary, Attention: Comments, Federal Deposit Insurance Corporation, 550 17th Street NW, Washington, DC 20429.
- *Hand Delivery:* Comments may be hand-delivered to the guard station at the rear of the 550 17th Street Building (located on F Street) on business days between 7 a.m. and 5 p.m.

Public Inspection: All comments received must include the agency name and RIN for this rulemaking. All comments received will be posted without change to *http://www.fdic.gov/regulations/laws/Federal/*—including any personal information provided—for public inspection. Paper copies of public comments may be ordered from the FDIC Public Information Center, 3501 North Fairfax Drive, Room E–1002, Arlington, VA 22226 by telephone at (877) 275–3342 or (703) 562–2200.

FOR FURTHER INFORMATION CONTACT: Graham N. Rehrig, Senior Attorney, Legal Division, (202) 898–3829, *grehrig@fdic.gov,* or Sydney Mayer, Attorney, Legal Division, (202) 898–3669.

SUPPLEMENTARY INFORMATION: