Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

**1. Relationship With the HUD Code**

Potential inconsistencies or conflicts between the proposed rule and the HUD Code, as discussed in detail in section II.B.1 of this document.

**2. Scope and Effective Date**

The scope and effective date of the proposed rule, as discussed in section III.B.1.a) of the document. DOE requests comment on whether a one-year compliance period would be sufficient for manufacturers to transition their designs, materials, and factory operations and processes in order to comply with the finalized DOE energy conservation standards and for DOE to develop and implement regulations to enforce its standards. DOE also requests comments on what additional lead time should be allowed if it elects to use HUD's existing enforcement system, which would require HUD to adopt the energy standards resulting from this rulemaking. The agency also requests comment on whether there are any particular timing considerations that the agency should consider due to manufacturers choosing to comply with either the prescriptive or thermal envelope compliance paths.

**3. Definitions**

Proposed additions, exclusions, modifications, and potential inconsistencies among the definitions proposed under this rule, the HUD Code, and the 2015 IECC, as discussed in section III.B.1.b) of this document.

**4. Air Barrier**

Potential clarification on the meaning of the term ``air barrier,'' as discussed in section III.B.1.b) of this document.

**5. Tubular Daylighting Devices**

Whether to include tubular daylighting devices in the definition of the term ``fenestration,'' as discussed in section III.B.1.b) of this document.

**6. Climate Zones**

The proposal to establish four climate zones and the specific categorization of states and counties included in each climate zone, as discussed in section III.B.2.a) of this SUPPLEMENTARY INFORMATION and chapter 4 of the TSD. DOE also requests comment on the proposed use of four climate zones relative to adopting the three HUD climate zones and whether there are any potential impacts on manufacturing costs, compliance costs, or other impacts, in particular in Arizona, Texas, Louisiana, Mississippi, Alabama, and Georgia, where the agency has proposed two different energy efficiency standards within the same state.

**7. Home Size**

The proposal to establish separate requirements for single- and multi-section manufactured homes, as discussed in section III.B.2.a) of this document.

**8. Paths for Compliance With the Building Thermal Envelope Standards**

The proposal to establish prescriptive and performance options for achieving compliance with the proposed building thermal envelope requirements, the requirements of each option, and their equivalency in terms of overall thermal performance, as discussed in section III.B.2.b) of this SUPPLEMENTARY INFORMATION and chapter 6 of the TSD.

**9. Insulated Siding**

The proposal to include a requirement similar to section R402.1.3 of the 2015 IECC while excluding the insulated siding specification, as discussed in section III.B.2.b) of this document.

**10. U-Factor Alternatives**

**11. The proposed U-factor alternatives and their equivalency with the prescriptive R-value requirements for ceiling, wall, and floor insulation, as discussed in section III.B.2.b) of the NOPR.**

**12. Calculation of Average SHGC**

The proposal to include an area-weighted average calculation of SHGC for compliance with Sec. 460.102(c), as discussed in section III.B.2.b) of this document.

**13. Insulation Installation Requirements for Floors**

Whether the insulation installation requirements in Sec. 460.103, including installation of insulation in floors, may be readily implemented by the manufactured housing industry, as discussed in section III.B.2.c) of this document.

**14. Design Criteria for Envelope Sealing**

The effectiveness of the prescriptive building thermal envelope sealing requirements, as discussed in section III.B.2.d) of this SUPPLEMENTARY INFORMATION.

**15. Impact of Envelope Sealing on Indoor Air Quality**

The potential impacts associated with the reduction in levels of natural air infiltration (through sealing leaks in the building thermal envelope), if any, relative to the minimum requirements of the HUD Code on reduced indoor air quality, the importance of natural air infiltration for whole-house ventilation strategies in manufactured housing, the relationship between the proposed standards and the mechanical ventilation requirements under the HUD Code, the basis by which the ICC determines a whole-house ventilation strategy is safe, and the minimum total air flow (in ACH units) through a manufactured home that is required to adequately protect public health and safety, as discussed in section V.E of this document.

**16. Duct Sealing**

The proposed duct sealing and duct leakage requirements, as discussed in section III.B.3.a) of this document.

**17. Thermostats and Controls**

The proposed requirements for thermostats and controls, and any potential inconsistencies with the HUD Code, as discussed in III.B.3.b) of this document.

**18. Demand Recirculation Systems**

The initial decision not to propose requirements related to demand recirculation systems in this rule, as discussed in section III.B.3.c) of this document.

**19. Drain Water Heat Recovery Units**

The initial decision not to propose requirements related to drain water heat recovery units, as discussed in section III.B.3.c) of this document.

**20. Equipment Sizing**

The proposed requirements for equipment sizing and the applicability of ACCA Manuals S and J, as discussed in section III.B.3.e) of this document.

**21. Lighting Equipment Standards**

The initial determination not to propose lighting equipment standards specific to manufactured housing, as discussed in section III.C.6 of this document.

**22. Simulated Performance Alternative**

The exclusion of a simulated performance alternative as a pathway to compliance, as discussed in section III.C.7 of this document.

**23. Waivers and Exception Relief**

A process for authorizing manufacturers to obtain waivers or exception relief from the energy conservation requirements, as discussed in section II.B.3 of this document.

**24. Compliance and Enforcement Program Options**

The potential options DOE may consider in a future rulemaking regarding compliance and enforcement, as discussed in section III.E of this document.

**25. Compliance and Enforcement Program Costs and Time Requirements**

The estimated costs (only direct compliance and enforcement costs, not engineering costs for redesign) and time (design compliance review, inspection frequency and duration, administrative procedures) associated with the potential compliance and enforcement options, as discussed in section III.E of this document.

**26. Increased Costs of Components**

The assumptions underlying DOE's analyses associated with the increased costs of manufactured home components, as discussed in section IV.A of this document.

**27. Lifecycle Cost Analysis**

The methodology and initial findings of the lifecycle cost analysis, as discussed in IV.A of this SUPPLEMENTARY INFORMATION and chapter 8 of the TSD.

**28. Affordability**

The affordability of the proposed rule, with respect to the increased purchase cost, reduced operating costs (energy bills), and total lifecycle cost, as discussed in IV.A of this SUPPLEMENTARY INFORMATION and chapter 8 of the TSD.

**29. Manufacturer Impacts Analysis--Markups**

Whether manufacturer and retailer mark-ups for the base-case and standards case other than the primary estimate should be considered. (e.g., a combined mark-up of 2.30 has historically been used in the past to assess combined manufacturer and retailer mark-ups to determine potential first cost impacts on consumers), as discussed in IV.B of this SUPPLEMENTARY INFORMATION and chapter 12 of the TSD.

**30. Shipments Analysis**

The methodology and initial findings of the shipments analysis, as discussed in section IV.B of this SUPPLEMENTARY INFORMATION and chapter 10 of the TSD.

**31. Shipment Growth Rate**

The estimate of the future growth rate of manufactured home shipments, as discussed in section IV.C of this SUPPLEMENTARY INFORMATION and chapter 10 and appendix 11A of the TSD.

**32. Price Elasticity**

The estimate of the price elasticity of demand of manufactured homes, as discussed in section IV.C of this SUPPLEMENTARY INFORMATION and chapter 10 and appendix 11A of the TSD.

**33. National Impacts Analysis**

The methodology and initial findings of the national impacts analysis, as discussed in section IV.C of this SUPPLEMENTARY INFORMATION and chapter 11 of the TSD.

**34. Emissions Analysis**

The methodology and results of the emissions analysis and the proper monetization of emissions, as discussed in section IV.D of this SUPPLEMENTARY INFORMATION and chapter 13 of the TSD.