Draft Outline of COMENTS FOR CONSUMER (Residential) Gas Boilers**

- I. Identity and Interest
- II. Procedural History
- III. Overview of the NOPR
- **IV.** Comments
 - A. Gas-Fired Water Boilers
 - i. The Proposed Standard of 95% AFUE for Gas Fired Water Boilers Are Not Economically Justified
 - ii. DOE's "Random Assignment" Methodology is Unreasonable
 - a. The Mechanics of Random Assignment
 - b. Random Assignment Simulates Extreme and Unreasonable Purchasing Behavior.
 - 1. Economic Considerations Do Influence Purchasing Behavior
 - 2. Random Assignment Assumes that Economic Considerations Never Matter
 - c. <u>Random Assignment Unreasonably Skews the Results of DOE's Analysis</u>.
 - d. <u>DOE's Failure to Address the Errors Created by Random Assignment is</u> <u>Unreasonable.</u>
 - e. Alternatives to Random Assignment
 - 1. Accounting for "Green" Purchasers
 - 2. "Split Incentives"/Extreme Sensitivity to Initial Costs
 - 3. Informational Market Failures
 - 4. Imperfect Economic Decision-Making
 - a. Cases in Which No "Investment" in Efficiency is Required
 - b. Investments with Very Obvious Economic Outcomes
 - c. Investments with Less Obvious Economic Outcomes
 - d. <u>The Remaining Cases</u>
 - iii. DOE Incorrectly Modeled Home Gas Water Boiler and Energy Usage Based on Household Characteristics
 - B. DOE Inappropriately Relies on Outdated Data in Its Analysis
 - C. The "Unavailability" Provisions of the Statute Preclude the Adoption of the Proposed Standard for Gas Water Boilers.
 - **D.** DOE Fails to Appropriately Consider Manufacturer Burden in Its Analysis
 - E. DOE Fails to Appropriately Consider the Impacts of Fuel Switching in Its Analysis
 - F. DOE Ignores Establishing Separate Product Classes for Non-Condensing and Condensing Storage for Gas Boiler Models that would address the legislative requirement to retain covered product availability in DOE appliance efficiency rulemakings,
 - G. DOE's Uses Flawed Energy Prices in Its Analysis
 - H. DOE Must Address the Errors Found in the Model
 - I. DOE Failed to Provide Adequate Opportunity to Comment
 - J. Executive Orders 12866 and 13563
 - K. Regulatory Flexibility Act
- V. Conclusion