**DOE Residential Furnace Energy Standards**

**Stakeholder Meeting: Proposed Rule Options and Approaches**

OBJECTIVE:

The purpose is to encourage mutual understanding of our diverse perspectives, and in particular, to explore whether there is a need and a reasonable prospect for a flexible mechanism in the standard to deliver the best consumer, business and environmental outcomes.

NOTES:

The Department of Energy has proposed a new minimum efficiency standard for furnaces which represents tremendous potential benefits for consumers, energy savings, and the environment. Stakeholders have mutual interest in ensuring these savings are achieved while mitigating potential unintended consequences.

Stakeholders discussed practical concerns with a condensing standard, including:

* High cost of installation in some residences
* Fuel switching: implications for middle and low income individuals and the potential for unintended consequences
* Actual energy consumption considering AFUE, standby and off mode, and Fan Efficiency Ratio
* Rebound effect: consumer utility/comfort vs. Energy savings
* Implications for codes and the trajectory of new appliances/applications and efficiency i.e. ductless solutions and cold climate applications; integrated solutions

Flexible standards approaches were discussed and new ideas were proposed, including:

* *Regional Standard*
* *Installation based waiver*
* *Waiver included in Rule (not installation based)*
* *Two Product Approach – AGA/APGA proposal or other capacity-based product categories*
* *CAFÉ/averaging*
* *New Metric (including FER, Standby, other)*
* *Adjustment Factor*
	+ *Inside the box like more efficient fan, standby & off mode, smart controls (static pressure shut off)*
	+ *Outside the box like insulation, ACCA QI standard*
* *Effective Date or Tiered/Phased in approach (2019 fan standard eff. Date)*

There appeared to be interest in further discussing several of these ideas. Several working groups were proposed. We propose that it may be appropriate for these working groups to operate under Chatham House Rules (non-attribution of any comments or positions taken in working groups).

**NEXT STEPS:**

Form working groups based on interest:

1. Technical Working group to explore AFUE adjustment factors
2. Installation-based waiver (with 2-products or regional standard)
3. CAFÉ/Averaging(with or without legislation)
4. New Metric
5. Others?

ATTENDEES:

* Denise Adamucci, PGW
* Karim Amrane, AHRI
* Tim Ballo, EarthJustice
* Samantha Bresler, NEEP
* Dave Calabrese, Daikin
* Kathryn Clay, AGA
* Mark Cooper, CFA
* Jose Esparza, Southwest Gas
* John Gibbons, Carrier
* Jim Hearing, The Laclede Group
* Marshall Hunt, PG&E
* John Hurst, Lennox
* Dan Lapato, APGA
* Ben Longstreth, NRDC
* Tom Massaro, New Jersey Natural Gas
* Joanna Mauer, ASAP
* Charlie McCrudden, ACCA
* John Melchi, HARDI
* Karen Meyers, Rheem
* Rick Murphy, AGA
* Steve Nadel, ACEEE
* Elizabeth Noll, NRDC
* Robin Roy, NRDC
* Harvey Sachs, ACEEE
* Dave Schryver, APGA
* Rodney Sobin, ASE
* Frank Stanonick, AHRI
* Rusty Tharp, Goodman Manufacturing
* Jim Vershaw, Ingersoll Rand
* Dave Winningham, Allied Air