



Residential Sector Concurrent Session

Serving Program Needs with
North American Specifications



Agenda

- ▶ What is a spec?
- ▶ Why do we use common specs?
- ▶ What types of specs are there?
- ▶ What are the challenges with setting specs?
- ▶ What's the difference between ENERGY STAR and CEE specs?
- ▶ Discussion

What is a specification?

▼ Definitions:

- “Detailed description of design criteria for a piece of work” – Princeton
- “Explicit set of requirements to be satisfied by a material, product, or service” – Wikipedia

▼ In CEE parlance, specs are tools for voluntary programs; standards are requirements

- Minimum efficiency performance standards

▼ Specs can be unique or common

Why use common specs?

- ▶ CEE was formed by efficiency programs to satisfy a need for common specs
 - Goal was to achieve sufficient consistency and scale to bring about a change in the refrigerator market
- ▶ Members still use this model today but...
 - We now include more than just white goods
 - We now cover both products and practices
 - Our work has grown increasingly complex

Performance Specs

- ▶ Sets bar for where product/service needs to perform to qualify, but is indifferent as to how that performance is achieved
 - A refrigerator must be 20% more efficient than standard
- ▶ Can also include non-energy requirements
- ▶ Used in:
 - Appliances, lighting, electronics, HVAC equipment, new homes performance path

Prescriptive Specs

- ▶ Identifies the specific components/steps required to achieve desired efficiency
 - A refrigerator must use a specific compressor and insulation type
- ▶ Can also include non-energy requirements
- ▶ Used in:
 - HVAC quality installation, new homes builder option package

Other Types of Specs

▼ Specs for Efficiency Programs

- Home Performance with ENERGY STAR
- CEE Program Guides
 - Light fixtures and ceiling fans
 - Electronics
 - Existing homes (under development now)

▼ Specs for Information Needs

- CEE Directory of AHRI Verified Equipment
- SSL test reports (under development now)

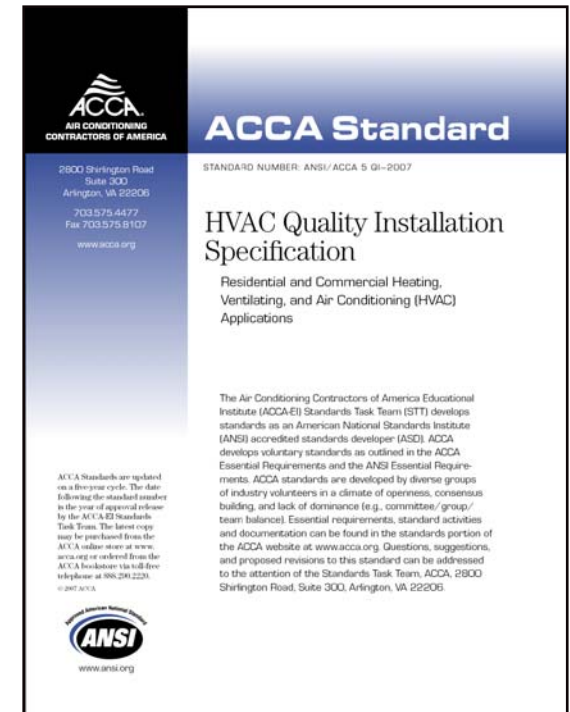
Challenges to Setting Specs

◀ Finding the right inputs

- Lack of test procedures for key elements
- Lack of data to inform decisions

◀ Matching the tool with the application

- ENERGY STAR specs can't do everything!
- Neither can CEE specs!



ENERGY STAR and CEE

▶ ENERGY STAR

- A brand
- Defines efficiency
 - Captures 25% of products available in market now
- Binary: yes/no
 - When tiers exist, they are used to set future levels






▶ CEE

- Not a brand
- Defines super efficiency
 - Differentiates higher levels, not necessarily available in market now
- Tier(s) set above ENERGY STAR
 - Often have multiple tiers
 - Seek alignment at Tier 1

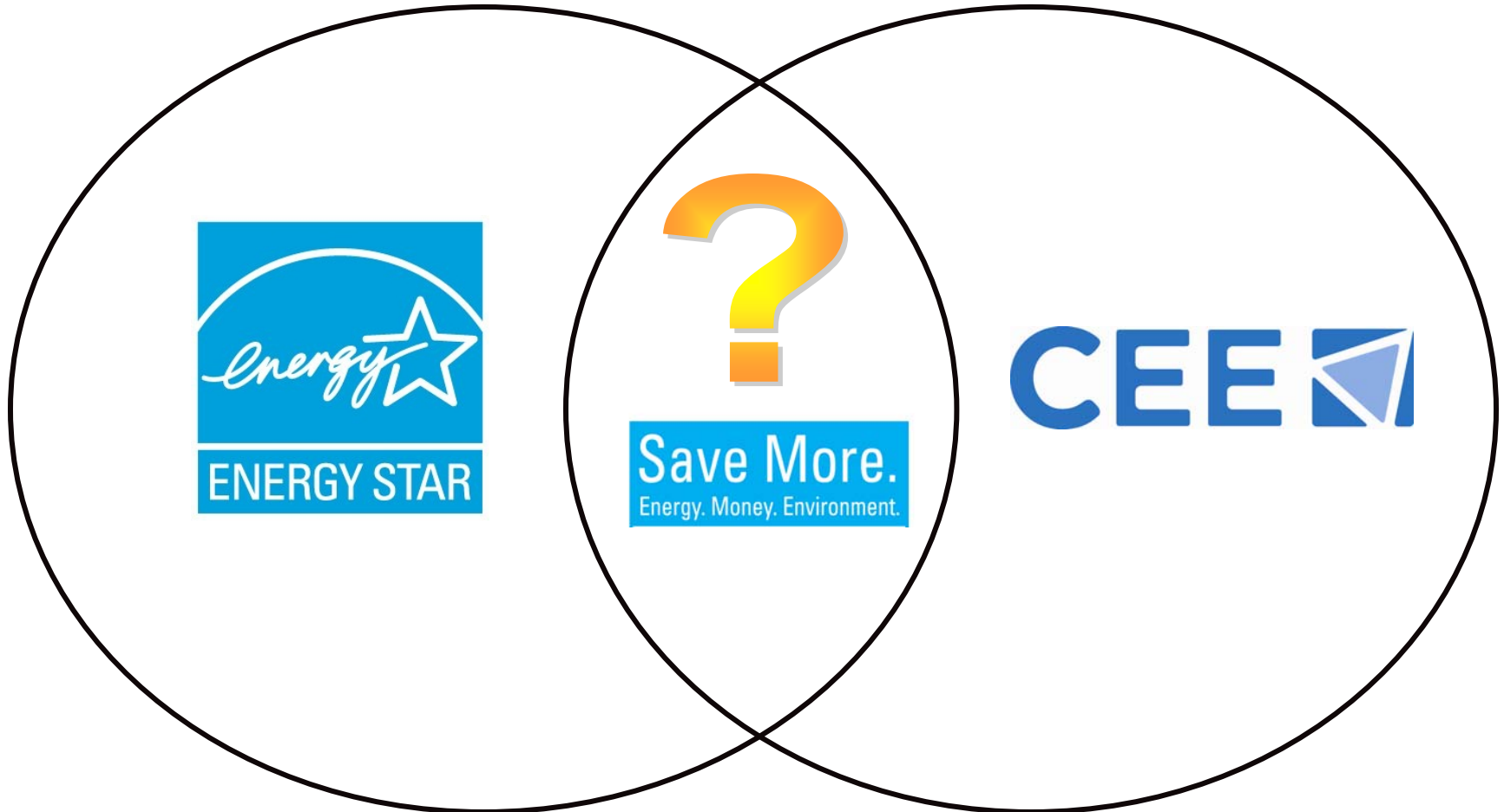
To align or not to align?

Product	Aligned	Not Aligned
Clothes Washers		x
Dishwashers	x	
Refrigerators	x	
Room AC		x
Televisions	x	
Central AC	x	
Air Source Heat Pumps		x

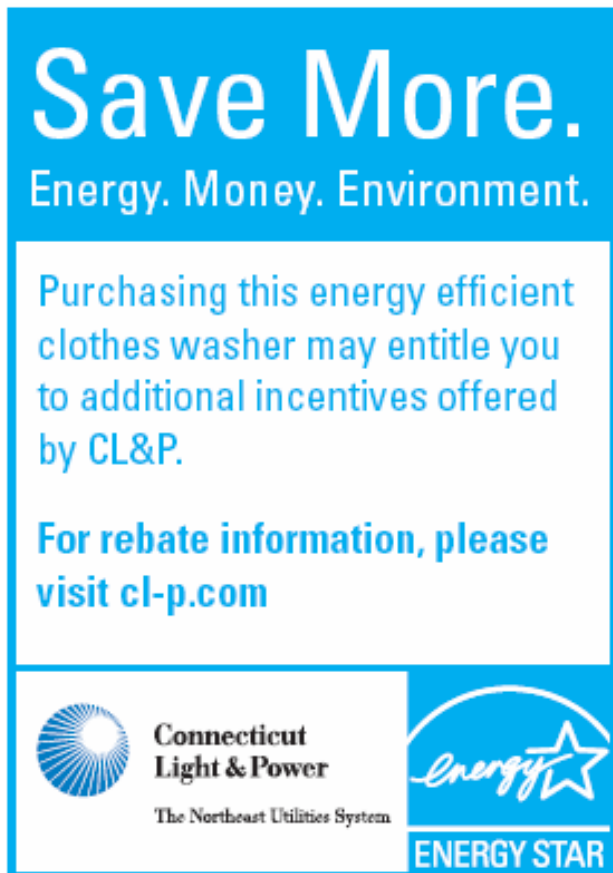
Different Specs for Different Needs

	ENERGY STAR	CEE
Label products for consumers		
Ensure no sacrifice in quality with EE		
Identify near-term cost effective products		
Communicate future needs to industry		
Set “stretch” levels to advance efficiency		

Using ENERGY STAR to Promote Higher Tiers




Save More with ENERGY STAR




Save More.
Energy. Money. Environment.

Purchasing this energy efficient clothes washer may entitle you to additional incentives offered by CL&P.

For rebate information, please visit cl-p.com

 Connecticut Light & Power
The Northeast Utilities System

 ENERGY STAR

- ▶ Parameters for Use
 - CEE specs exist
 - Additional incentives
 - Monitored or policed by efficiency programs
 - Takes place retail setting
- ▶ Current Product Scope
 - Household Appliances
 - Televisions

Discussion Questions

- ▶ What kinds of specs have you found most valuable for your programs?
 - For what purposes? At what times?
- ▶ How can our work on common specs respond to changing times and changing markets?
 - Consumer electronics: fast moving markets
 - Appliances: nearing max technical potential?