



# Federal Standards\* and Remaining Opportunities in Residential Lighting

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# Northeast Energy Efficiency Partnerships



*“Assisting the Northeast & Mid-Atlantic Region in Reducing Total Carbon Emissions 80% by 2050”*

## Mission

Accelerate energy efficiency as an essential part of demand-side solutions that enable a sustainable regional energy system

## Vision

That the region embraces next generation energy efficiency as a core strategy to meet energy needs in a carbon-constrained world

## Approach

Overcome barriers and transform markets through *Collaboration, Education, and Enterprise*



**One of six REEOs funded in-part by U.S. DOE to support state and local efficiency policies and programs.**

# Federal General Service Lamps Standard: Complex process from the start



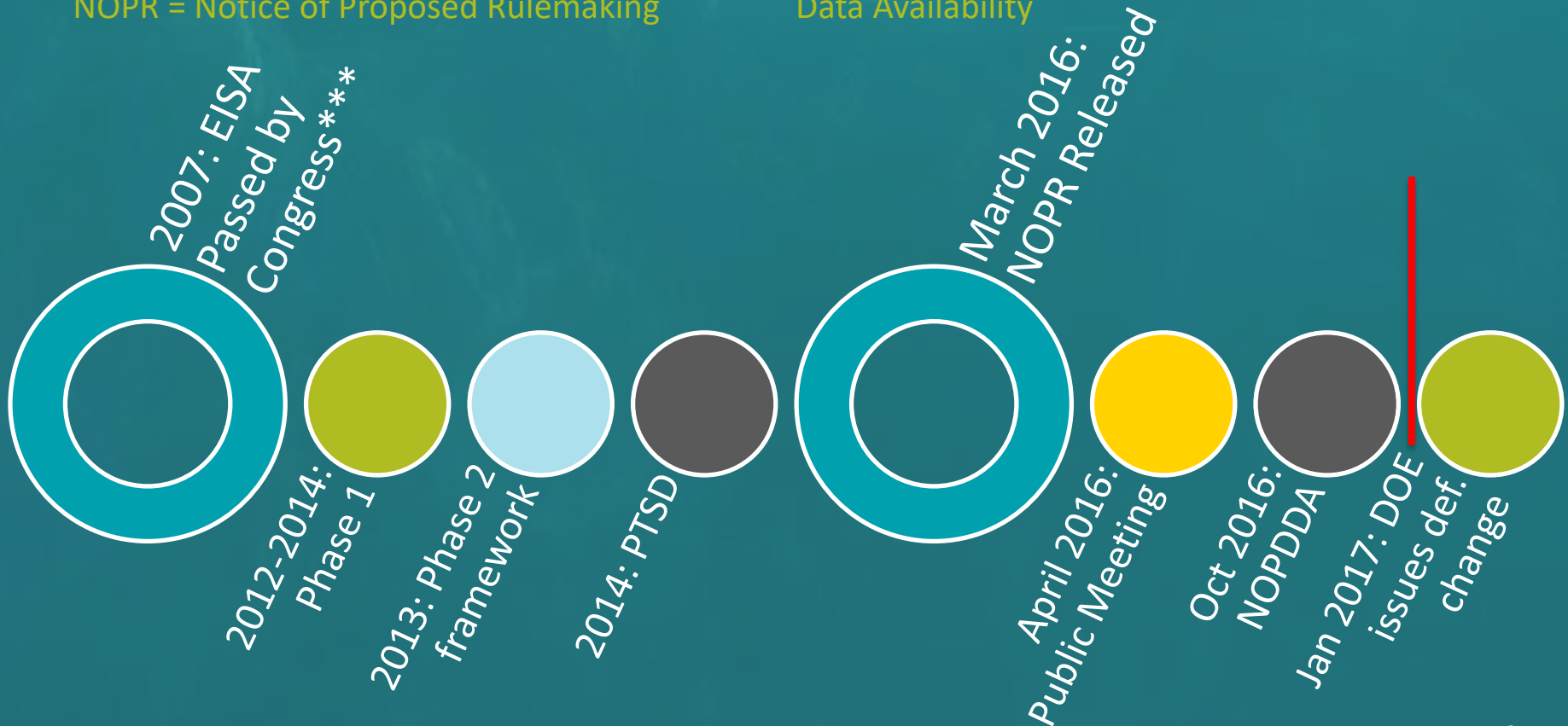
- Timeline:

EISA = Energy Independence and Securities Act  
NOPR = Notice of Proposed Rulemaking

GSL = General Service Lamps

PTSD = Preliminary Technical Support Document

NOPDDA = Notice of Proposed Definition and Data Availability



# \*\*\*But what about this Backstop I keep hearing about?!?!

- When congress passed EISA in 2007, they included a “backstop” provision
  - The “backstop” would set a 45lumen/watt minimum efficiency standard on sales of GSLs that would go into effect starting 1/1/2020 if DOE did not complete their set of obligations for phase 2 of the rulemaking.
  - No final rule was issued by 1/1/2017
  - \*



# Impact of New Definition: Summary

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- **A Lamps**
  - Reflector Lamps
  - Decorative Lamps
  - 3-way lamps
  - Shatter Resistant
  - Vibration and Rough Service lamps\*
  - Higher lumen limit included (3,300lm vs. 2,600lm before)

More details: <https://www.gpo.gov/fdsys/pkg/FR-2017-01-19/pdf/2016-32013.pdf>



# General Service Lighting: Since January...



## Federally:

- Spring: NEMA files lawsuit against DOE
- July: NEMA and DOE reach a settlement agreement
  - DOE agrees to a set of next steps for the rulemaking
- August: DOE issues RFI/NODA (Request for Information, Notice of Data Availability)
  - Comments were due 10/16



## And in California...

- March: CA Energy Commission issues advisory stating their intention to enforce CA lighting standards as planned starting 1/1/2018
  - including 45lpw Backstop
- August: NEMA files lawsuit against CEC over plans for 2018



# What does this all mean?!?

## Here's what we know:

- Market share of LEDs is growing and growing.
- Programs make a difference at transforming markets.
- Regardless of EISA, by the time we get to 2020, where will the LED market be? Will the success of programs have already transformed the market?

## **Recommendation: Focus on robust, ENERGY STAR focused residential lighting programs in 2018 and 2019.**

- The LED cat is already out of the bag.
- Small amounts of potential savings from post-2020 res lighting programs should be **icing**, not the cake.

# Near-term Program Considerations: Questions to ask yourself



- What is your % LED socket saturation in specialty applications?
  - Could this relatively low number justify increased promotion?
- How do ENERGY STAR LEDs compare to other LEDs in the market?
  - If it still makes sense to influence consumer choices for **quality**, then a program still makes sense
- Post 2020, would you consider a program for **much more efficient and/or higher quality LEDs?**





# Ideas for focus now (potentially post 2020)



- Growth of home **horticulture** use-cases
  - LED is a great application, “plant lights” still exempted
- Low-lumen **decorative** (candelabra)
  - have great LED alternative, focus on hospitality chandeliers, <310lm isn’t covered by new definition
- “**Specialty**”, including high lumen output, decorative, globes, directional, small diameter, 3-way
  - ENERGY STAR LEDs exist, but what is the **incremental cost**?
- Residential **linear** lamps
  - ~10% of sockets, what is the current baseline??
- Going **deep with retailers**
  - The big and medium players are hooked onto LED, focus on bridging divide with smaller, non-traditional retailers

# Thank you!



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