The Race to the Finish!
A Residential Lighting Market Brief Webinar

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Northeast Energy Efficiency Partnerships
August 9th, 2016, 1-1:30pm EST

THIS WEBINAR IS BEING RECORDED AND WILL BE AVAILABLE ONLINE AT NEEP.ORG
About NEEP

Mission

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

Approach

Overcome barriers and transform markets via

_Collaboration, Education and Enterprise_

Vision

Region embraces **next generation energy efficiency** as a core strategy to meet energy needs in a carbon-constrained world

*One of six regional energy efficiency organizations (REEOs) funded by the US Department of Energy (US DOE) to link regions to US DOE guidance, products and programs*
Housekeeping

• Webinar recording and slides will be *posted* at neep.org and sent to attendees
• Will take *questions* as time permits at end of presentation. Please send questions through gotowebinar as you have them
• All lines will remain *muted*
• Please complete the *survey* at end of webinar
Just out of the Primaries...

• NEEP’s **State of the Market: A Residential Lighting Brief**!

• This Webinar:
  – Approaching Market Transformation
  – Smart Questions about Smart Lighting
  – Strategies for Victory

• Read the report.
Remember this?

Regional Goal: Reach a socket saturation of 80-90% efficient quality lighting by 2022.
Region is On Track to “Break PR”

- Racing ahead, the region could reach the goal 1-2 years early

Residential Lighting Market Transformation Curve

- Business as Usual
- Projected Market Intervention
- Adjusted curve based on 2015 actuals
How? The Debates are Over: LEDs Won!

Heavy debate schedule (up against NFL)

- Customer Uptake
- ENERGY STAR Lamps 2.0
- Efficiency Program Promotion
  - EISA 2020
Customers are Voting LED

- 2015 Socket Saturation results are in:
  - Connecticut
  - Maine
  - Massachusetts
Customers are Voting LED

- Sales Date from LightTracker, Northeast vs. USA
Customers are Voting LED

- Shipping Date from NEMA
ENERGY STAR Lamps 2.0: Marathon to Certification

• Testing is long, but lamp 2.0 population is finally growing since finalized at end of 2015
• Nearly 400 A-style LEDs certified to Version 2.0, many of which are 15,000 hour lifetimes (below) – 14 manufacturers

<table>
<thead>
<tr>
<th>Wattage Equivalency</th>
<th>40W</th>
<th>60W</th>
<th>75W</th>
<th>100W</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Certifying (in publication, late July)</td>
<td>20</td>
<td>28</td>
<td>7</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td>As of 8/4</td>
<td>24</td>
<td>33</td>
<td>9</td>
<td>18</td>
<td>84</td>
</tr>
<tr>
<td>As of this morning</td>
<td>26</td>
<td>35</td>
<td>11</td>
<td>18</td>
<td>90</td>
</tr>
</tbody>
</table>
# Program Administrators Helping to Finance the LED Campaign

<table>
<thead>
<tr>
<th>State</th>
<th>Planned 2015 Retail LED %</th>
<th>Actual % of LEDs through program in Q1, 2016</th>
<th>% LED Planned for all 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>50%</td>
<td>68%</td>
<td>65%</td>
</tr>
<tr>
<td>DC</td>
<td>34%</td>
<td>60%</td>
<td>66%</td>
</tr>
<tr>
<td>MA</td>
<td>49%</td>
<td>61.6%</td>
<td>75%</td>
</tr>
<tr>
<td>NH</td>
<td>59%</td>
<td>75.5%-88.5%</td>
<td>51%-84%</td>
</tr>
<tr>
<td>NY (PSEG LI)</td>
<td>41%</td>
<td>65%</td>
<td>63%</td>
</tr>
<tr>
<td>RI</td>
<td>27%</td>
<td>63.8%</td>
<td>75%</td>
</tr>
<tr>
<td>VT</td>
<td>48%</td>
<td>78.1%</td>
<td>96.5%</td>
</tr>
</tbody>
</table>
Tokyo, err, I mean EISA 2020!

As proposed, legal in Jan 1, 2020

In stores:

For manufacturers:

Once legacy products sell through, this is what can be expected for each wattage equivalent (at current efficacies):

- 40W
- 60W
- 75W
- 100W
- 125W
- 150W+
“We have our best minds on this...”
“We have our best minds on this...”

Dumber

Energy Savings?
Demand Response?
Equity?
Cost effective?

Smarter

• Basic control (hub & app)
• Color tuning (hub & app)
• Tuning for specific application
• Advanced functionality: app, no hub needed

Lamp Intelligence Continuum
Concluding Strategies for Gold:

1. PA should **continue to support** cost-effective ENERGY STAR residential lighting products
2. PAs transition portfolios towards **specialty/fixture LEDs**
3. PAs target LEDs in **Hard-to-Reach** Markets
4. PAs consider promotion of ENERGY STAR **smart lighting products**
5. PAs explore opportunities in residential **linear products**
6. Regional collaboration on residential lighting **research**
7. Regional coordination on **data collection and sharing**
8. Regional discussions on **savings calculation inputs** to ensure appropriate attribution
Watch the Games, Live!
In-Person Workshop, Tuesday, Sept 20th

- Registration is open
- 3 days of workshops!
  - 9/20: Res Lighting
  - 9/21: Home Energy Management Systems
  - 9/22: EM&V 2.0

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
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<tbody>
<tr>
<td>10:00</td>
<td>Welcome and Introductions</td>
</tr>
<tr>
<td>10:15</td>
<td>Ish Bulb, revisited</td>
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<tr>
<td>11:10</td>
<td>BREAK</td>
</tr>
<tr>
<td>11:30</td>
<td>“Specialty” products deep dive</td>
</tr>
<tr>
<td>12:15</td>
<td>LUNCH</td>
</tr>
<tr>
<td>1:15</td>
<td>Are we breaking up? The Future of Residential Lighting</td>
</tr>
<tr>
<td>2:30</td>
<td>BREAK</td>
</tr>
<tr>
<td>2:50</td>
<td>Smart Lighting: New Opportunities for Multiple Benefits</td>
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<tr>
<td>3:50</td>
<td>Wrap up</td>
</tr>
<tr>
<td>4:00</td>
<td>Adjourn – Thank you!</td>
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Conclusion and Next steps

• Brief and webinar will be posted at neep.org
• We look forward to seeing you in CT at the 9/20 Workshop
  – Interested in Workshop Sponsorship? Contact Lucie Carriou
• Job listing for DLC: DLC Program Specialist

Let’s go lighting!
QUESTIONS?

THANK YOU!
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