“New England on the Cutting Edge”
NECPUC Symposium 2016
June 7, 2016
Three Eras of Saving Energy

1. Conservation (doing less)
2. Energy Efficiency (doing it more efficiently)
3. Smart Efficiency (only doing it when you need it)
What Drives the Third Era?

Reductions in the cost of:

- Sensors
- Telecom
- Computing
The Nest Learning Thermostat
How Can Thermostats Help?

• Cost?
• Carbon?
• Reliability?
We have proof. nest.com/realsavings

12% on heating
(2X as much as traditional programmable thermostat)

saves

$130 to $145
average savings a year

15% on cooling

Based on independent studies by Energy Trust of Oregon, Vectren, and NIPSCO.
Cost: MA DOER Winter 2015
>22,000 participants / 7 blizzards

Seasonal Savings cut heating use by an average of 3.6%!

87% “Qualified” for the program
68% Opted in to the program
$21 Average savings per thermostat
Carbon: Ontario Case Study

- Each Nest Thermostat can save 0.5 tonnes per year of carbon emissions, based on gas savings and the fuel mix of Ontario’s electric system.
- 100,000 Nests equal taking 15,000 cars off the road for a year.
Reliability: Electric Demand Response

- 85% events completed without adjustment
- 55% cooling load reduction
- 1.2 kW reduction per thermostat

Data from 1000s of participants
Plus: A Growing Ecosystem of Partners
Questions?

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