



Empowering you to make
smart energy choices

How Can EE Mitigate Higher Winter Energy Costs and Prices?

November 13, 2014
AESP-NEEC Conference

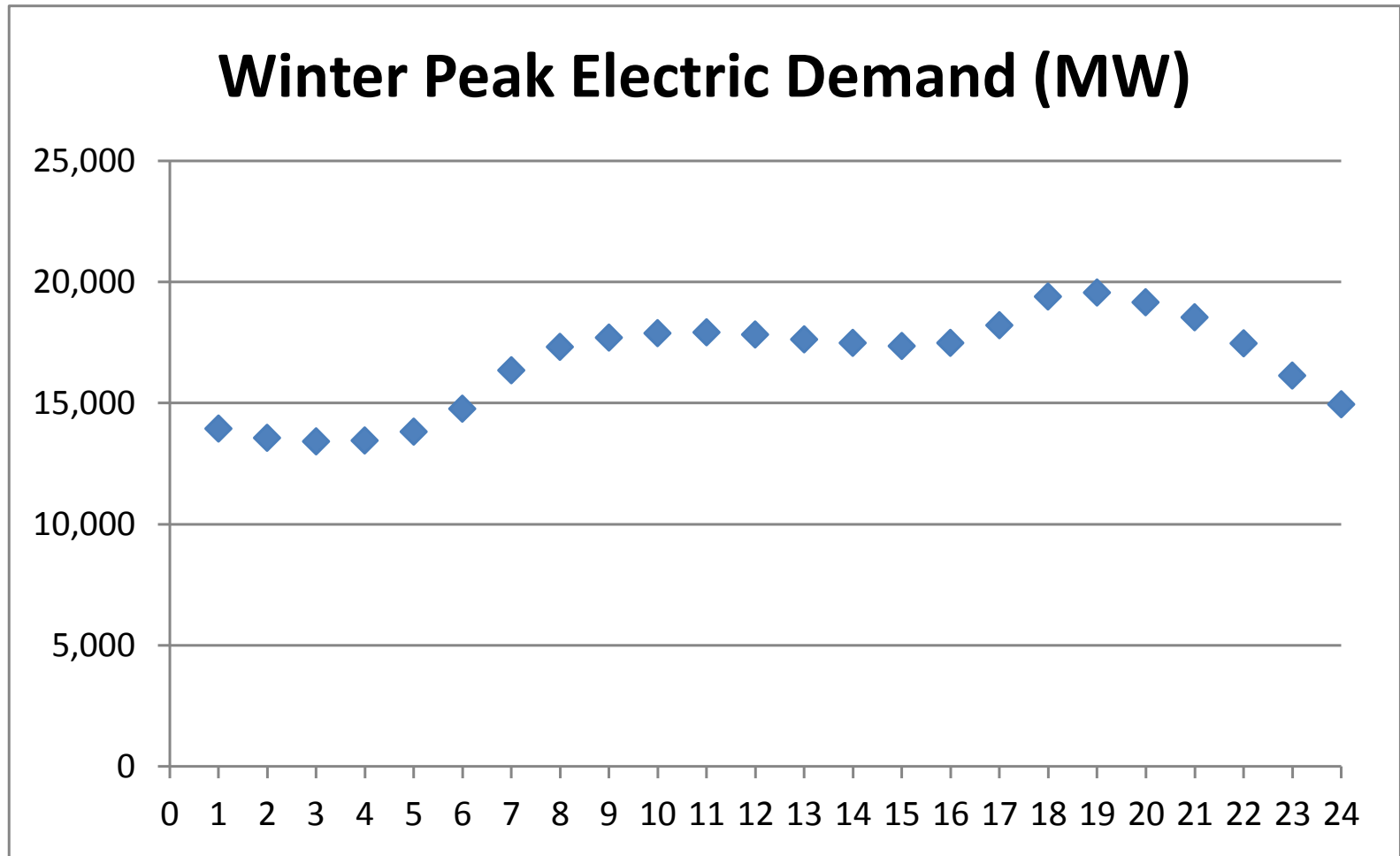
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(Adopted from presentations to the EE Board in May/June 2014)

Winter energy prices are much higher

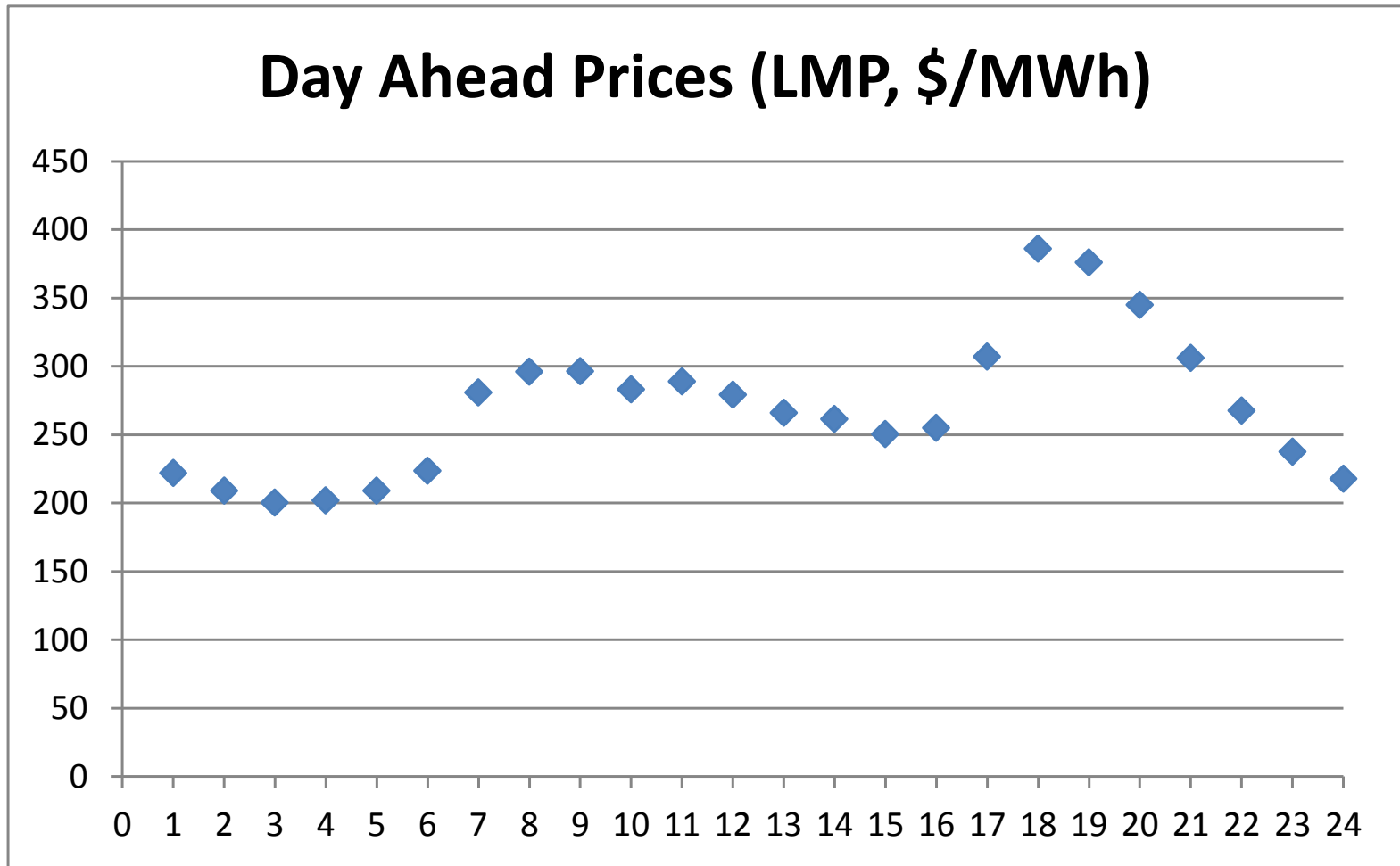
- Wholesale electric energy prices rose 55% in 2013
- Very large price spikes in the winter of 2013-2014
 - ISO: “The total value of the electric *energy* market alone in New England in December, January, and February was \$5.1 billion; that compares to \$8.0 billion for the full year of 2013 and \$5.2 billion for the full year of 2012...”
- Increase in use of natural gas for electric generation
- Some gas-fired plants have to burn oil in peak periods

- What can EE programs do to help mitigate the winter energy costs and winter energy price issues?

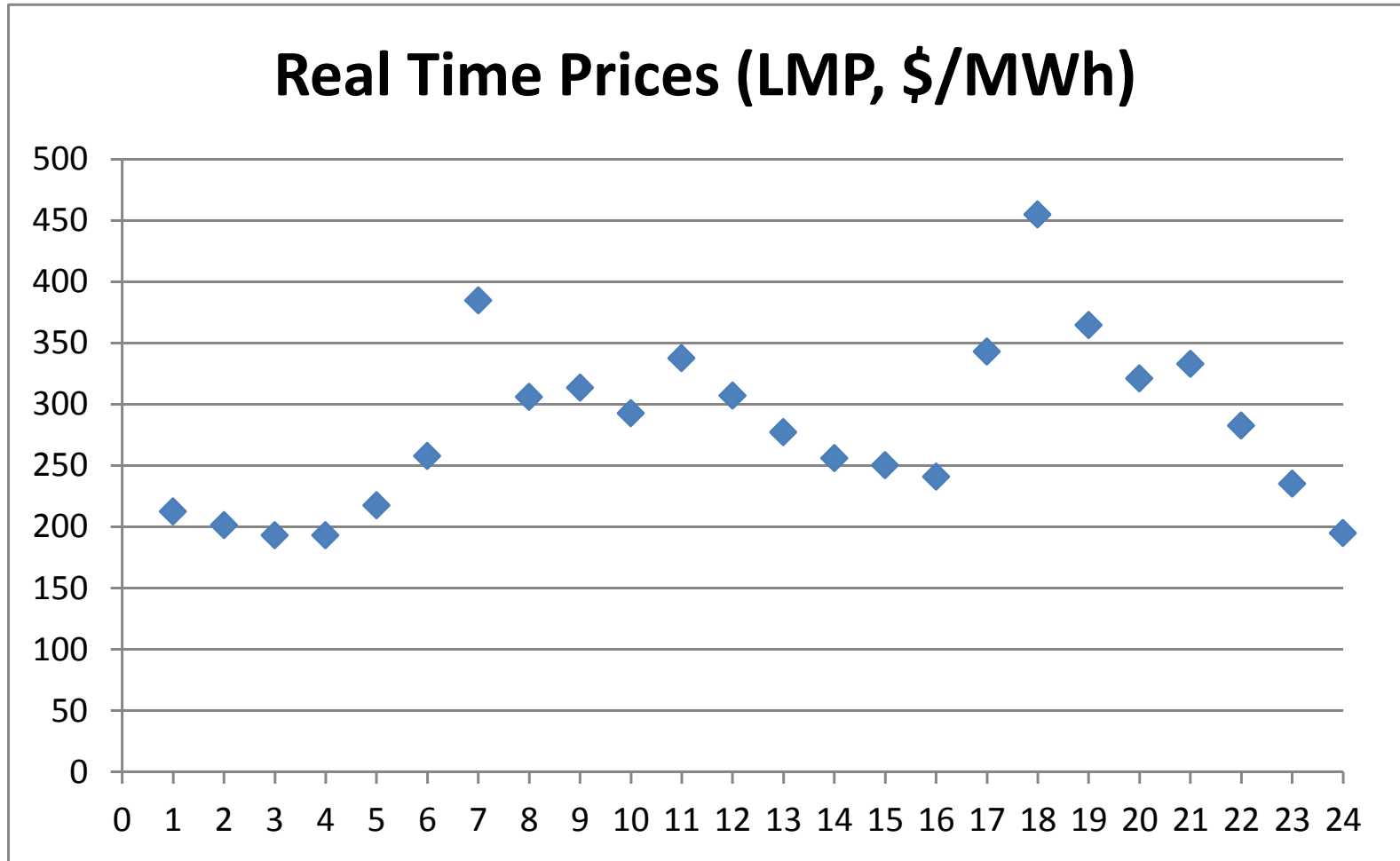
Winter electric demand, top 10 price days



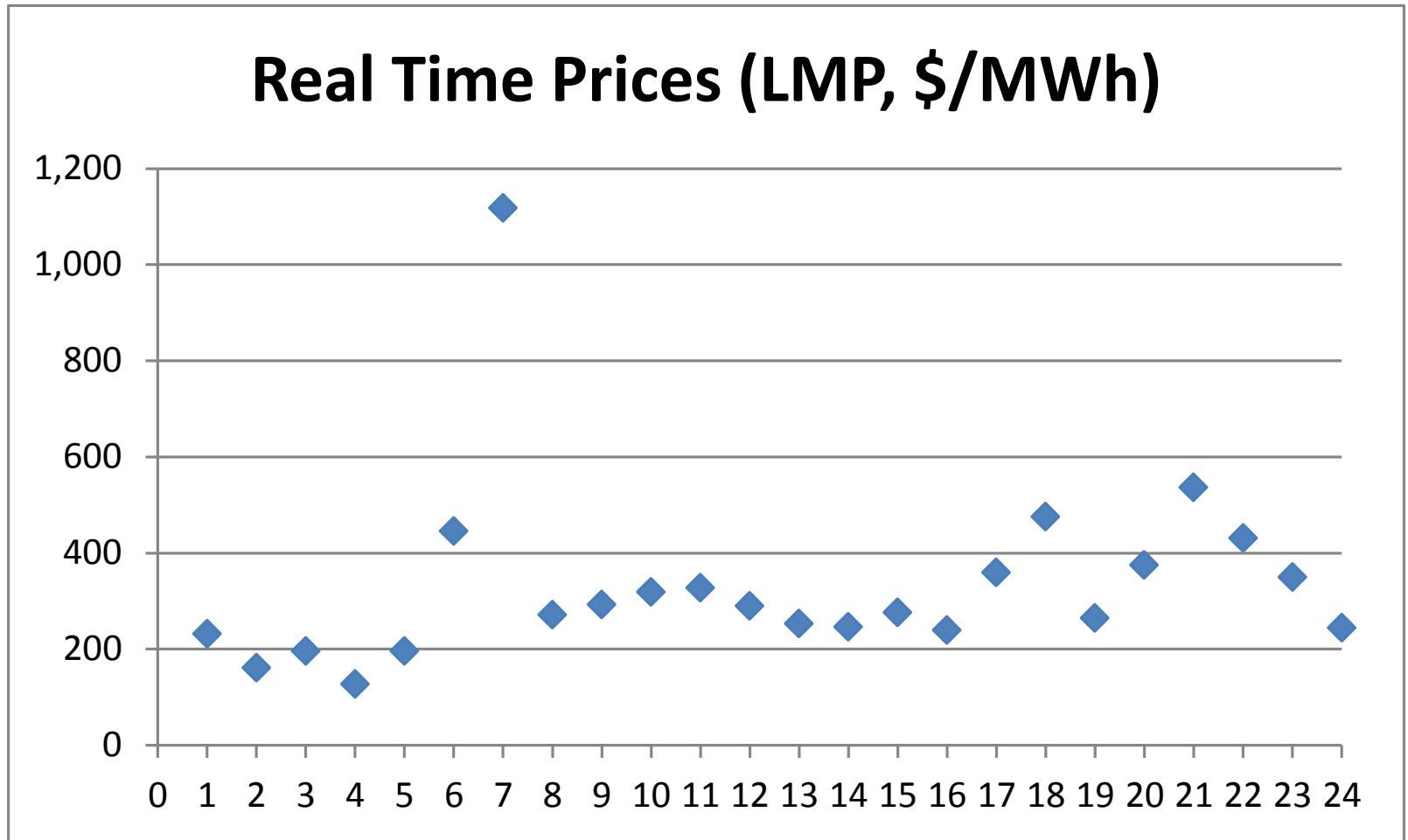
Winter energy prices follow energy demand, to some degree – but have sharper peaks



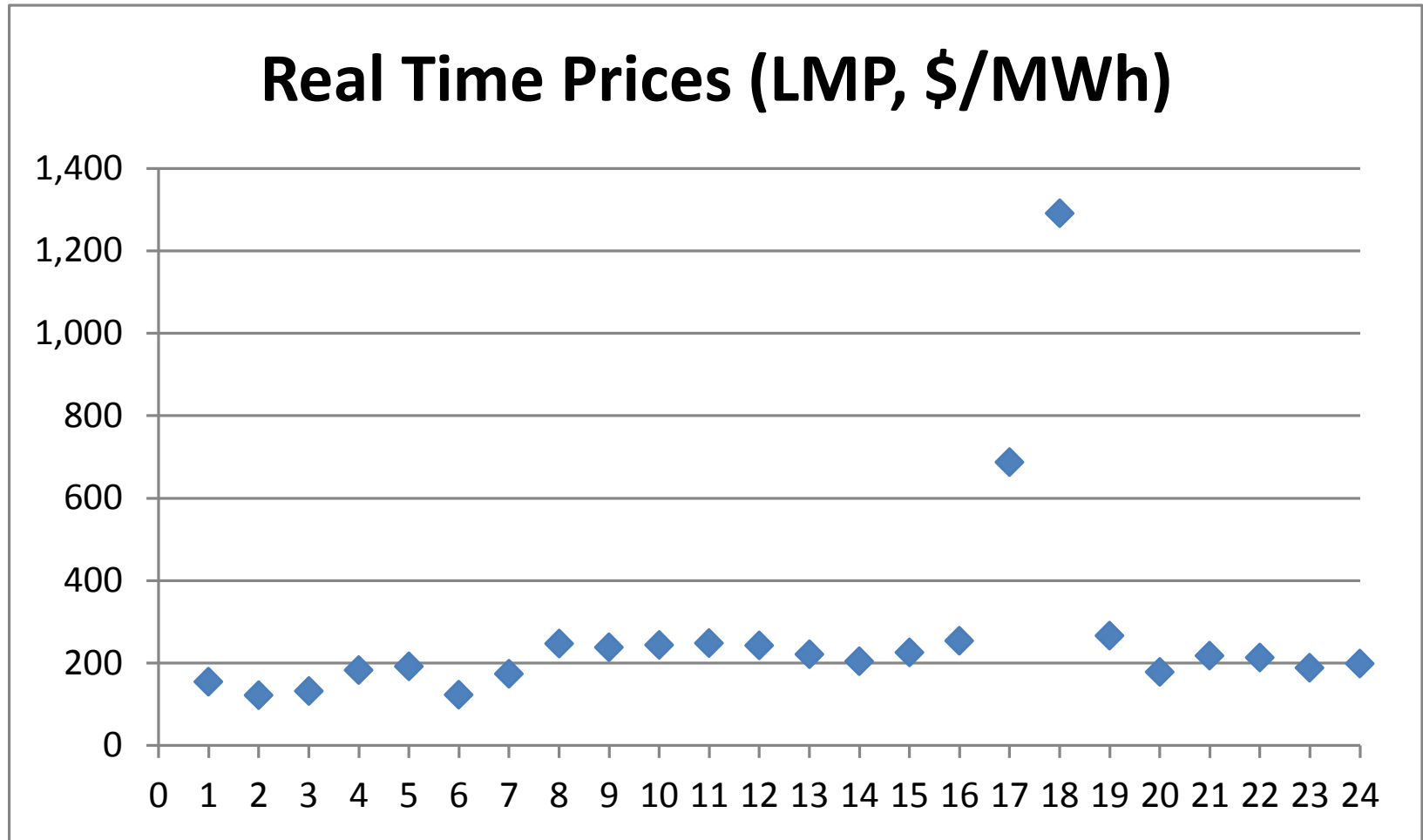
Real-time winter energy prices have even higher and sharper peaks (top 10 LMP days)



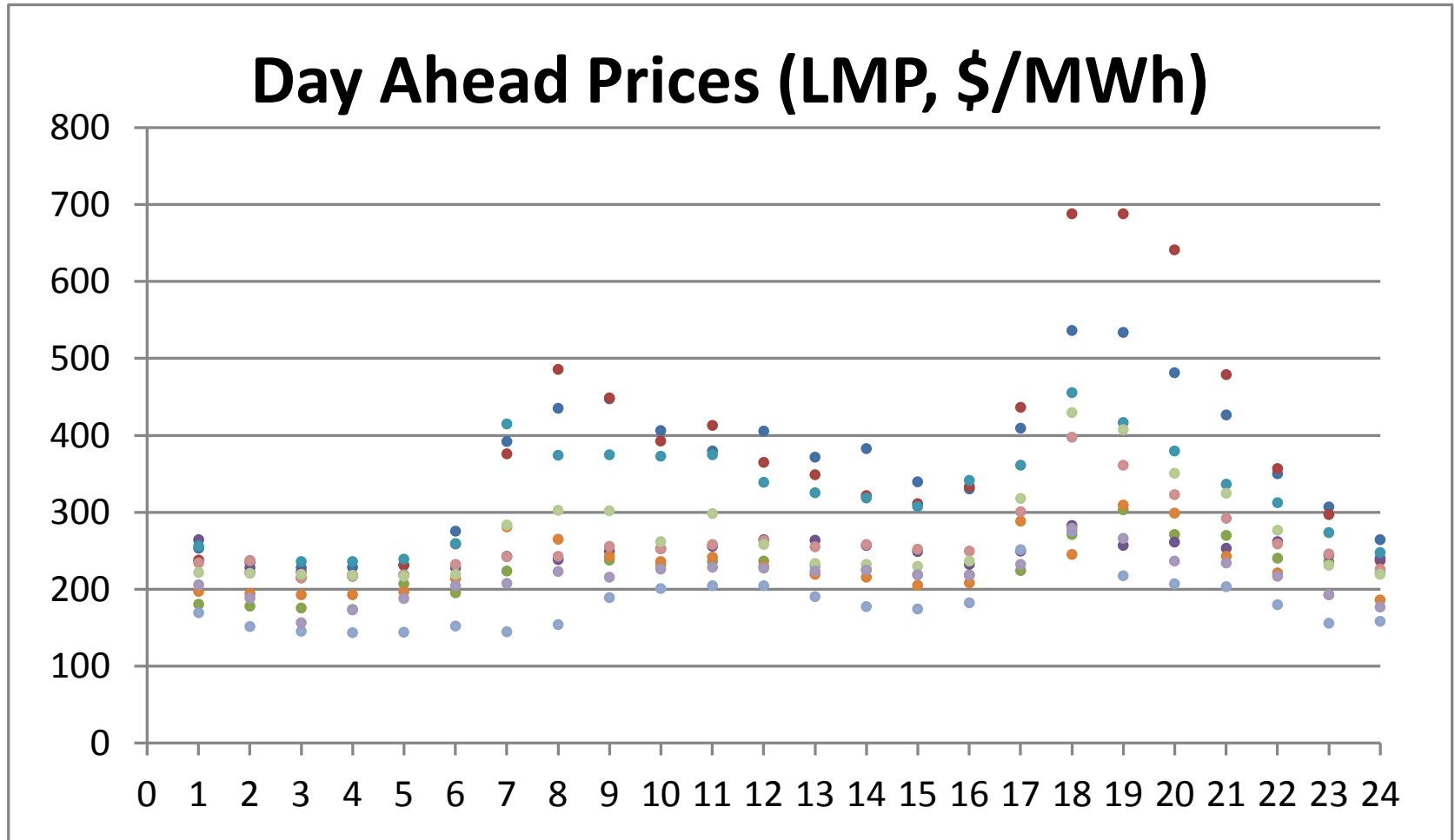
Sometimes the high prices are in the morning



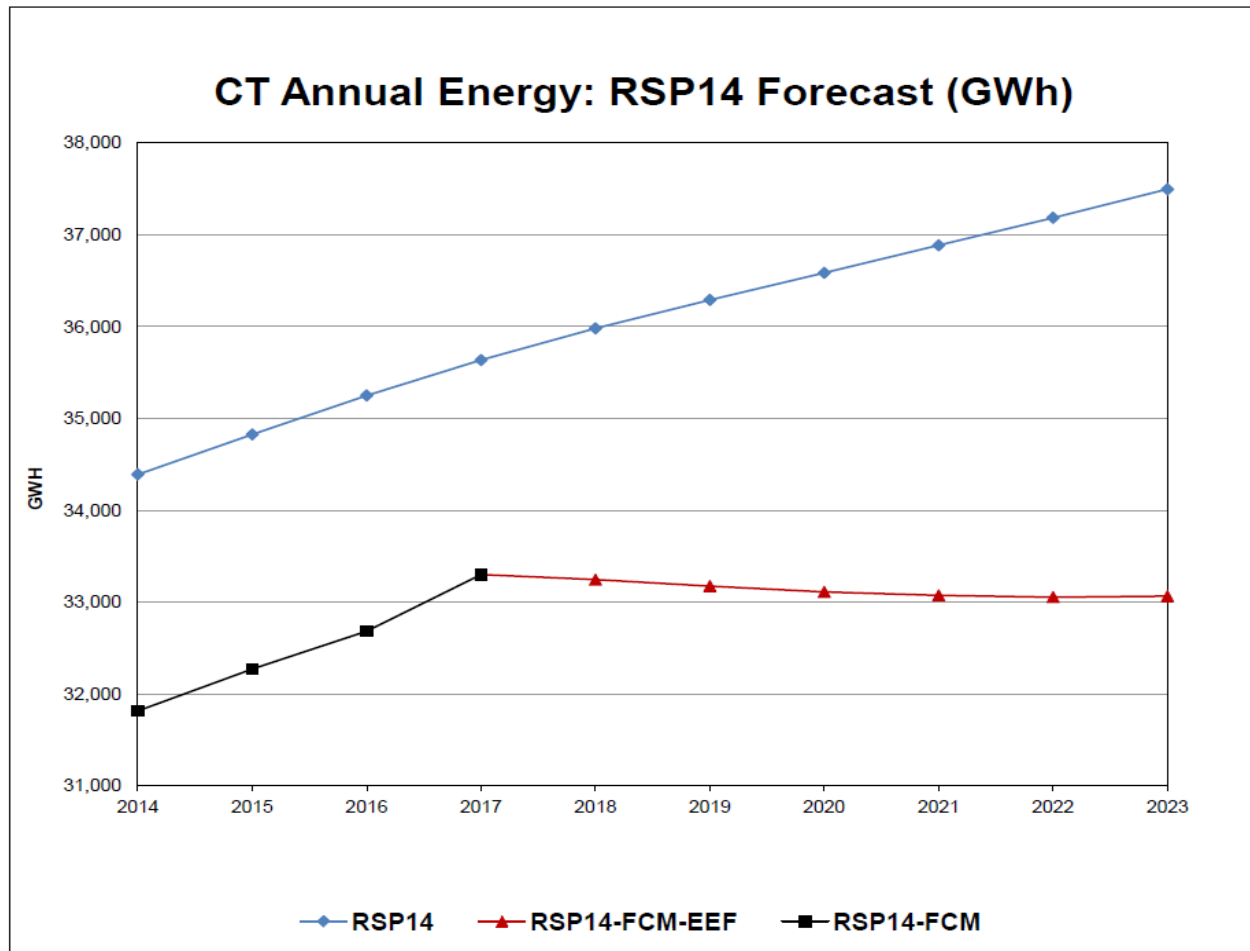
Sometimes the high prices are in the evening



Problems are not just for a few hours



EE is providing significant benefits



EE to help mitigate winter energy costs and help address winter energy price issues

- Primarily electric EE strategies to mitigate and reduce electric costs for customers
- Reduce electricity use at winter peak – at times coincident with the timing of gas pipeline constraints and congestion, to relieve some pressure on electric prices and winter peak demand
- Opportunities for targeting of electric and gas EE in advance of upcoming winters (doing something to reduce winter peak demand is crucial)

Five ideas for using EE programs to mitigate winter energy costs and winter price issues

1. Accelerate EE efforts
2. Prioritize EE efforts to focus more on reducing winter energy costs
3. Target and reallocate EE efforts
4. Expand and add to EE offerings, supported with increased EE funding
5. Geo-target EE efforts, to focus on reducing the locational contributors/causes of the problems

A few examples on the following slides

EE to mitigate winter energy issues #1

1. Accelerate EE efforts, e.g., achieve a larger portion of the 2014 and 2015 annual electric savings goals prior to December 2014.

- Accelerate residential lighting efforts (upstream strategies) to achieve savings prior to December 2014. Take the residential lighting funding remaining in the Three-Year Plan, use much of the funding for lighting promotions prior to December 2014, and spread out the remainder for lighting in December and all of 2015.
- Accelerate adoption of other winter peak measures

EE to mitigate winter energy issues #2

2. Prioritize EE efforts to focus more on winter energy costs. Focus a larger portion of EE program efforts on winter peak savings.

- Prioritize project management efforts, e.g., by prioritizing projects in the queue, those with winter peak savings
- Prioritize sales and outreach to secure new projects with winter peak savings

EE to mitigate winter energy issues #3

3. Target and reallocate EE efforts to focus more on reducing winter energy costs. Focus a larger portion of EE program funding (through reallocated EE budgets and targeted increased incentives) and/or program efforts on winter peak.

- Targeted marketing efforts and offerings to increase winter peak energy savings
- Offer targeted/higher incentives for winter peak measures
- Offer higher incentives or a “comprehensive bonus” for add-on measures

EE to mitigate winter energy issues #5

5. *Geo-target EE efforts.* Focus on reducing the locational causes of the higher winter energy prices.

- In addition to regional pipeline constraints, to what degree is *localized congestion* contributing to the high prices?
- Effective EE geo-targeting for *natural gas* savings
- Geo-target specific contributors to gas pipeline congestion, i.e., focus on reducing gas use in geographic areas that would reduce pipeline localized congestion affecting the pipeline laterals serving key gas-fired power plants

Issues to consider

- Communications and broader messaging (state and regional communications, press releases)
- EE-specific messaging and assisting customers to get to the EE offerings that would help them the most (EE messaging, call centers)
- EE program offerings – what is being offered
- Capacity to deliver the offerings to the customers, with higher customer demand
- Budget to support the EE efforts
- Evaluation – how well did it work this winter?

EE to mitigate winter energy issues #4

4. Increase EE funding to support increased EE efforts, targeted to winter peak to mitigate high winter energy prices – in *addition to above ideas*.

- Restore the full allocation of RGGI funding to the EE programs, subject to the CEFIA budget being restored
- Use a portion of EE Partners funding to increase EE efforts targeted to winter peak opportunities
- Pursue EE participation in and funding through the ISO-NE winter reliability program (note: the timing for this may be challenging for the winter of 2014-2015)