

# IPA Energy Efficiency Procurement

Discussion Document

June 18, 2014



# Purpose

Energy efficiency programs that deliver kWh reductions during peak hours will lead to lower prices during peak times, and a lower overall supply cost.

One reason the procurement of incremental energy efficiency pursuant to Section 16-111.5B of the Act was directed by the General Assembly was to reduce procurements during peak hours, when demand and prices for electricity are highest.

# Overview

## IPA Annual Procurement

### Peak Time

### Energy Efficiency

**Three potential procurement vehicles:**

Peak Hours



Reductions during fixed set of peak hours

High Load



Guaranteed reductions during high load periods.

High Prices



Reductions when prices exceed a price threshold

### Off Peak/ Annual EE

### Supply

# Peak Hours



- Establish a fixed set of peak hours, and procure reductions during those peak hours for standard energy efficiency products.
- **Recommendation:**
  - The fixed set of peak hours to be chosen should be summer afternoons between 2pm and 6pm, non-holiday weekdays, from June 1 through August 31.
  - These are the same set of hours used by PJM to measure energy efficiency in their capacity market, which are intended to cover those hours in which the annual peak load is most likely to occur.
- This would be the simplest to include in existing procurement methodology.

# High Load



- Procure demand reductions for the highest load days of the year.
- High Load hours must meet at least two criteria:
  1. Must be set at a low-enough number of hours that would allow competition from various demand reduction providers. Too high and you limit participation.
  2. Must define a set of hours large enough to achieve the effect desired. Too small and you don't achieve the desired savings.
- **Recommendation:**
  - Choose High Load hours whose actual system load is predicted to be within 5% of the seasonal peak load forecast for the summer months, June 1 – August 31.
  - A threshold at this level should result in approximately 60 High Load hours each summer, based upon 2012 data.
- This would require active communication to providers through an operator.

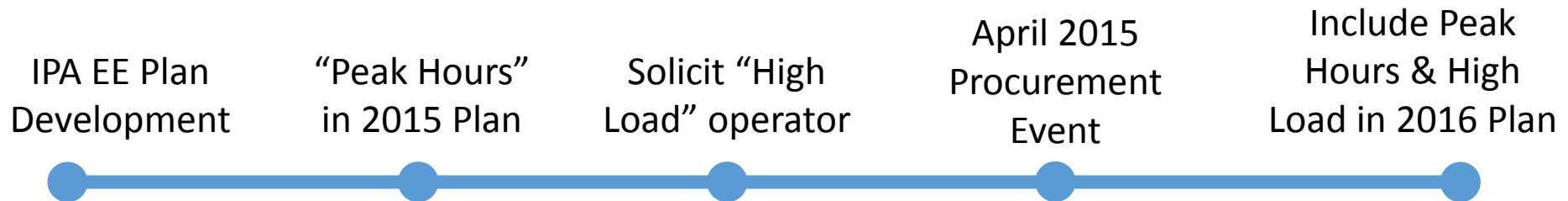
# High Prices



- Set a market benchmark, and direct ComEd and Ameren to procure demand reductions through their voluntary programs when day-ahead wholesale supply costs exceed the benchmark price.
- The high-priced hours can be determined by the wholesale day-ahead market prices in the PJM and MISO control areas.
- **Recommendation:**
  - Conduct workshops to determine technical and policy needs for ComEd and Ameren to procure demand reductions as part of their balancing portfolio.

# Recommendations

- Pursue **Peak Hours** Energy Efficiency during 2015 IPA procurement.
- Solicit a **High Load** procurement operator during 2014-15 for inclusion in 2016 IPA Procurement.
- Conduct further workshops with ComEd and Ameren Illinois to evaluate **High Prices** strategy.



# Diving Deeper – Peak Hours



Peak Hour Energy Efficiency during 2015 IPA procurement.

- Procure Energy Efficiency as a supply resource.
- “Super Peak” hours: 2 pm – 6 pm, June 1 – August 31.
- ~260 Hours / year
- Period: TBD
- Price: set by auction or by benchmark
- Quantity: All cost effective
- M&V: Interval meter data or TRM
- **Overlap with 16-111.5B:** Procure program’s peak hours outside of TRC
- Procure **first** in order to lower supply procurement



# Timeline – Peak Hours



September 2014:	Include in DRAFT Procurement Plan
	<ul style="list-style-type: none"><li>• Outline Program and Procurement Process</li><li>• Specify Requirements</li></ul>
December 2014:	Final Procurement Plan
April 2015:	IPA Procurement Event
June 2015:	2015 Peak Hour Program Period Start
August 2015:	2015 Peak Hour Program Period End
October 2015:	2016 Peak Hour Program Procurement
February 2016:	<i>[e.g. PJM 2016/17 3<sup>rd</sup> Incremental Auction]</i>
April 2016:	IPA Procurement Event
June 2016:	2016 Peak Hour Program Period Start

# Open Questions

- October procurement?
- Should IPA pursue 1, 2 or all 3 strategies?
- How many years should the IPA procure products?
- What should be the minimum size of a provider?
- What is proper M&V?
- What credit requirements should exist for providers?
- What are proper penalties for failing to perform?