



PJM Compliance Obligation and Market Timelines

Adam Keech
Senior Director, Market Operations
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- March 20, 2014 – FERC Issues Notice of Proposed Rulemaking
 - RM14-2-000 is the NOPR for the gas industry
 - EL14-24-000 is a 206 docket applicable to PJM
 - Individual 206 dockets for each RTI/ISO
- EL14-24-000 requires PJM to make a compliance filing within 90 days of the date the Final Rule on RM14-2-000 is published in the Federal Register
 1. make Tariff adjustments to be compliant with the Final Rule, or,
 2. explain why the current Tariff provisions are compliant.
- The Final Rule was issued on April 17, 2015 and was published in the Federal Register on April 23, 2015.

Paragraph 19 states...

19. Accordingly, in light of our concerns stated above, we institute section 206 proceedings with respect to each ISO and RTO that will examine whether the ISO's or RTO's day-ahead scheduling is just and reasonable. *Ninety days after publication of a Final Rule in Docket No. RM14-2-000 in the Federal Register, each ISO and RTO is required (1) to make a filing that proposes tariff changes to adjust the time at which the results of its day-ahead energy market and reliability unit commitment process (or equivalent) are posted to a time that is sufficiently in advance of the Timely and Evening Nomination Cycles, respectively, to allow gas-fired generators to procure natural gas supply and pipeline transportation capacity to serve their obligations,¹³ or (2) to show cause why such changes are not necessary. In their responses, each ISO and RTO must explain how its proposed scheduling modifications are sufficient for gas-fired generators to secure natural gas pipeline capacity prior to the Timely and Evening Nomination Cycles.¹⁴*

- The Final Rule on RM14-2-000 changes the Timely Nomination deadline from 11:30 to 13:00 CCT (12:30 to 14:00 EPT).
 - Currently PJM’s Day Ahead Market results are published at 16:00 EPT and therefore do not provide sufficient notice prior to the deadline for the Timely Nomination Cycle.
- The Final Rule does not change the deadline for the Evening Nomination Cycle, currently 18:00 CCT (19:00 EPT).
 - Currently PJM’s Reliability Unit Commitment results are published between 18:30 and 20:00 EPT which does not consistently allow for sufficient notice prior to the deadline for the Evening Nomination Cycle.

- PJM feels that Tariff and OA changes must be made to be compliant with the new timelines set forth in the Final Rule on RM14-2-000.
 - This filing will be done as part of EL14-24-000.
- PJM's compliance filing is due July 23, 2015 (90-days after it was published in the Federal Register). PJM therefore intends to discuss at the May MIC and MRC, June MIC and MRC, and July MIC meetings (July MRC is on the 23rd, the due date for the filing).



Current Day-Ahead Market Timeline (EPT)

Events Occurring the Day Before the Operating Day

08:00–
12:00

12:00–
16:00

16:00–
18:00

18:00–
24:00

Data hand-off
Ops. → Mkts.

Data hand-off
Mkts. → Ops.

Data hand-off
Mkts. → Ops.

Real-time Operations
and Monitoring

Ops. Technical
Analysis
08:00 – 12:00

Day-ahead results
posted
12:00 – 16:00

Re-Bid
Period
16:00 – 18:00

Balancing Market Bid
Period Closes at 18:00
18:00 – 24:00

Market Participant
Bid/Offer Period
Before 12:00
Market participants
enter bids and offers.

- Process all the markets requests from day-ahead bids
- Post Day-ahead Market results by 16:00

Make adjustments
based on the
clearing results.

Commitments
Second
Reliability analysis
includes:

- updated offers
- unit availabilities
- PJM load forecast info.

Supplemental

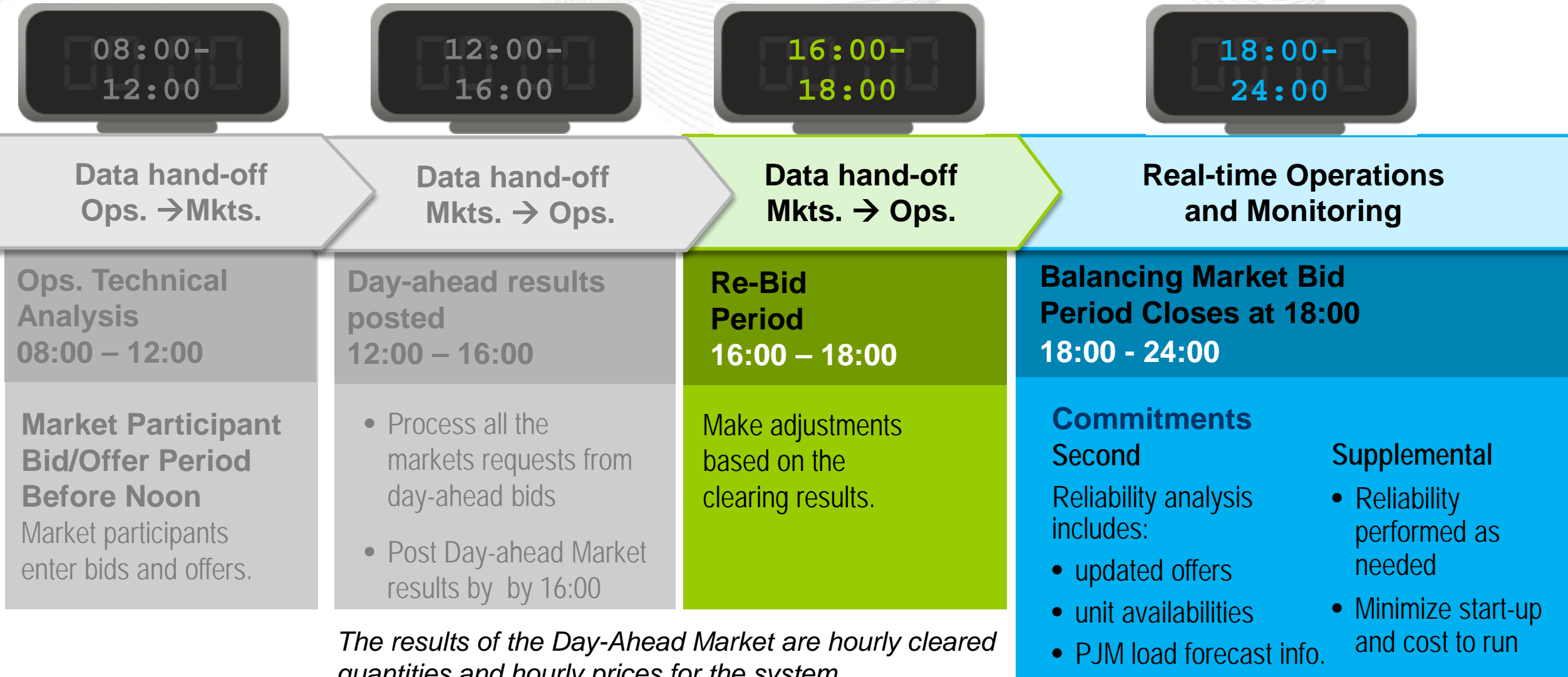
- Reliability performed as needed
- Minimize start-up and cost to run

The results of the Day-Ahead Market are hourly cleared quantities and hourly prices for the system.

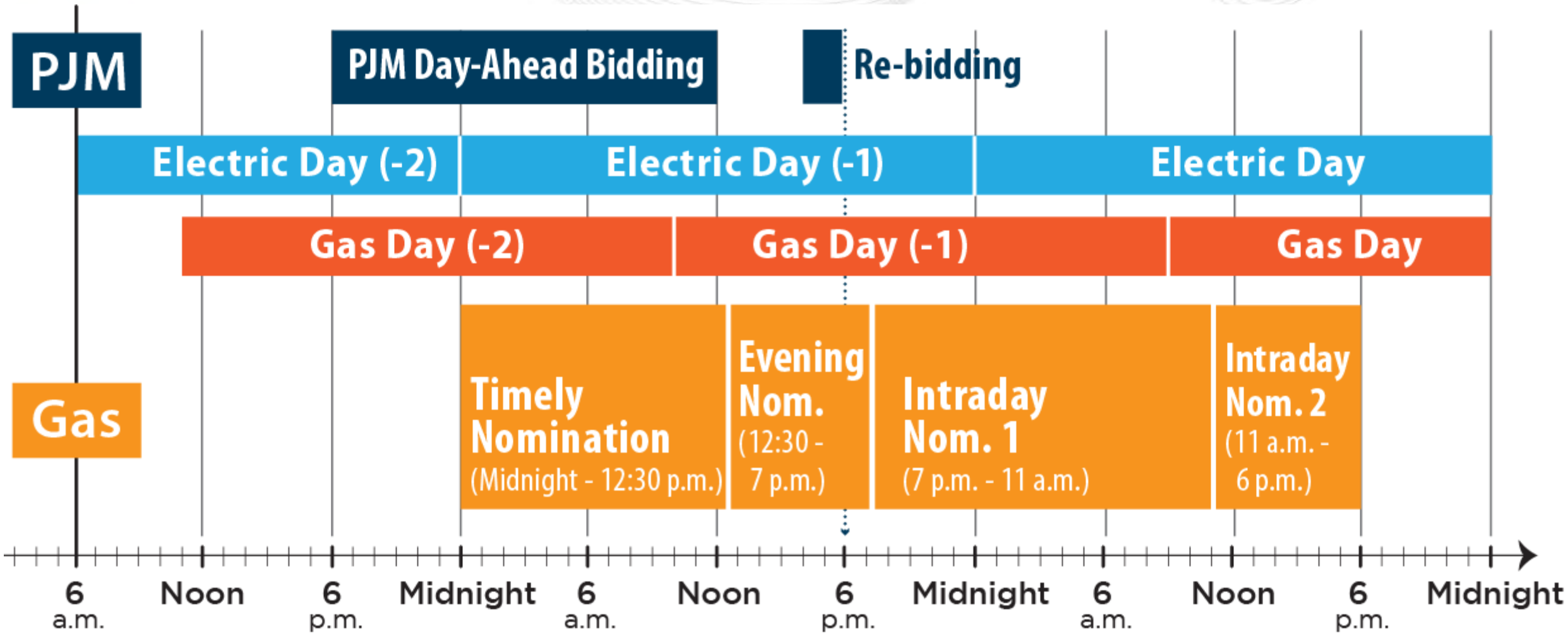


Reliability Scheduling Functions Timeline (EPT)

Events Occurring the Day Before the Operating Day



The results of the Day-Ahead Market are hourly cleared quantities and hourly prices for the system.





PJM Current & Proposed Timeline Changes Chart

Event	Current Time (EPT)	Proposed Time (EPT)
Open DA Offer Window	7 days prior	7 days prior
Close DA Offer Window	12:00	09:30
DA Clearing Window	4 hours	3.5 hours*
DA Results Published	16:00	Not later than 13:00**
PJM Re-Bid Period Opens	16:00	13:00
Timely Nomination Cycle Deadline	11:30	14:00
Evening Nomination Cycle Opens	12:30	14:00
PJM Re-Bid Period Closes	18:00	16:30
RAC Results Communicated	20:00	18:00***
Evening Nomination Cycle Deadline	19:00	19:00

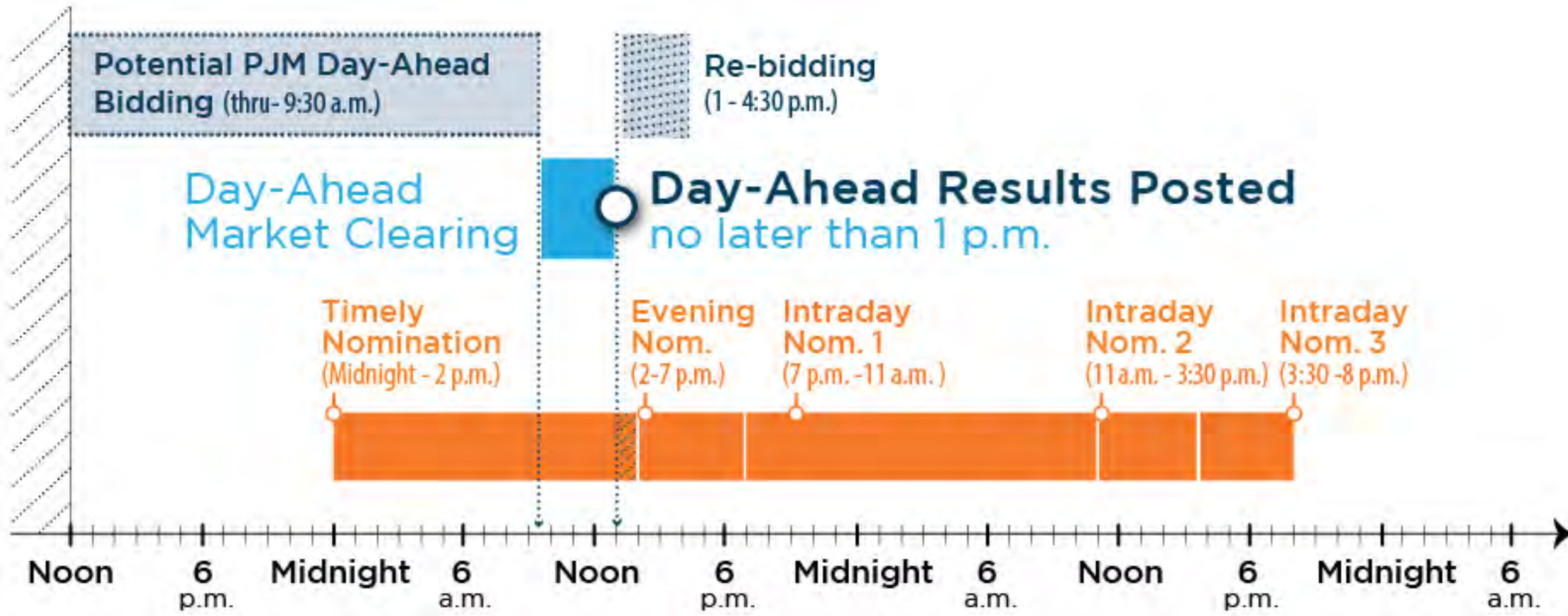
All times referenced are for the day before the market day itself and are notwithstanding any changes to generation offer flexibility.

* Initial proposal is to shrink the DA clearing window by 30 minutes. Should PJM be able to consistently meet this timeline, further condensing would be proposed.

** PJM proposes to publish the DA results as early as possible but not later than 13:00.

*** PJM will communicate RAC commitments as soon as possible following the DA commitment and RAC process to meet the Evening Nomination Cycle deadline. However, PJM may make additional commitments after that nomination cycle closes as system conditions require.

PJM Proposed Day-Ahead and Rebidding and Gas Nomination Schedule – Final FERC Order



- PJM proposed solution
 - Day Ahead Market
 - Bid window closure 09:30 EPT
 - Results published no earlier than 12:00 EPT no later 13:00 EPT
 - Allows at least 1 hour for gas nominations to be made prior to Timely Nomination Cycle deadline
 - Rebid Period and Reliability Unit Commitment
 - New rebid period from 13:00-16:30 EPT
 - Reliability Unit Commitment results provided by 18:00 EPT
 - Allows at least 1 hour for gas nominations to be made prior to Evening Nomination Cycle deadline
 - Condenses Day Ahead Market Solution window to 3.5 hours



Questions?

