Further Thoughts on Two-Tier Pricing

NEPOOL IMAPP Stakeholder Process

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Outline

- Clarifications in Response to Feedback
- Key Objectives
- The Two-Tier Picture

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Feedback

- Will two-tier pricing apply to resources with existing state support?
  - In general, no. NRG's proposal is to apply this treatment to *new* state-supported resources entering the market, and to existing resources that receive *new* state support.
- Will the NRG two-tier proposal result in FCM purchases 'on the demand curve?'
  - The results will be very close, if not identically, on the demand curve. By pro-rating the quantity of all obligations, the problem of 'over-buying' is resolved.
- Will the NRG two-tier proposal create incentives to depart from bidding risk-adjusted going-forward costs?
  - As Jim Wilson describes[1], there may be a slight incentive to shade bids slightly higher. Our expectation is that the reduction in risk and the increase in opportunity for two-settlement (PfP) payments will have a larger, offsetting effect.

1 http://nepool.com/uploads/IMAPP_20161021_NESCOE_2Tiered_Pricing_Analysis.pdf

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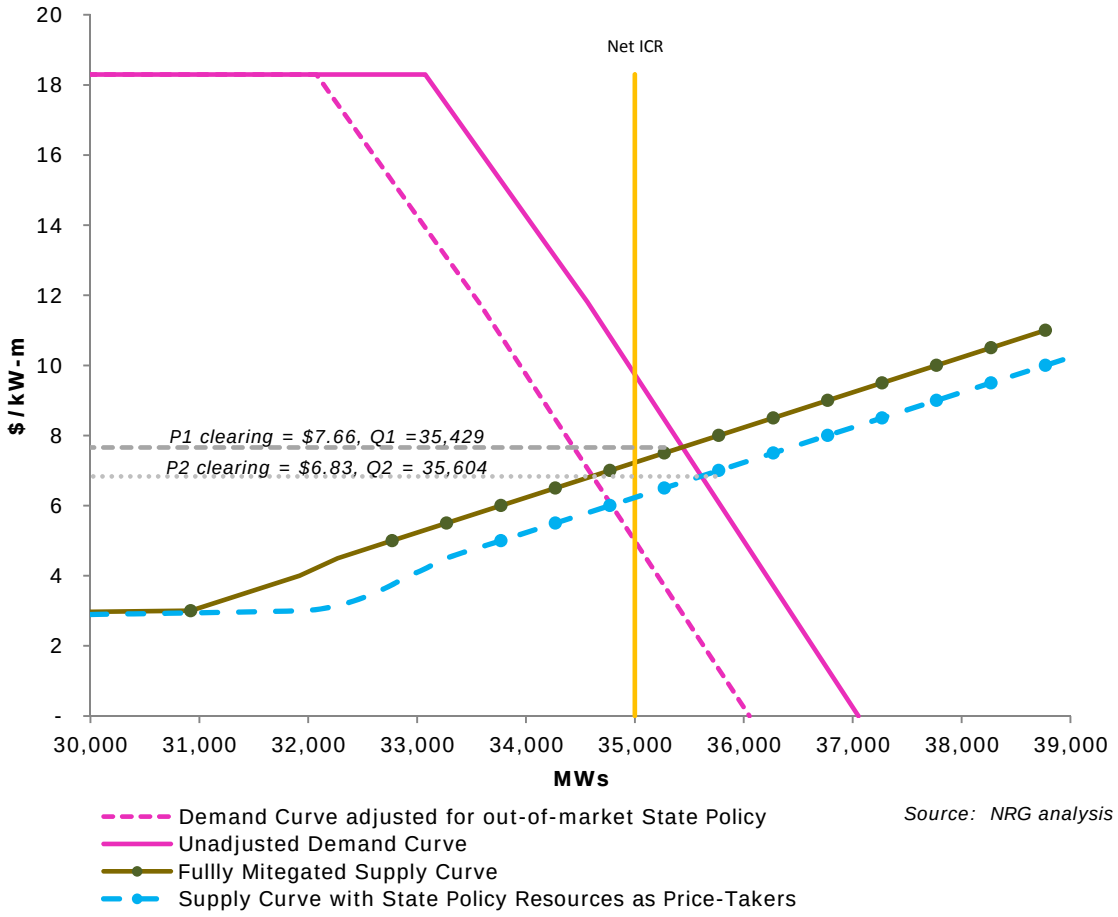
IMAPP Objectives

- ✓ **States' Objective 1**: Accommodate states' near-term procurement mandates in wholesale markets with existing or revised market rules, to maintain reliability at least cost.
  - ✓States will be proceeding with mandated contracting processes
  - ✓According to the States, the existing renewable technology resource (RTR) exemption 'reasonably accommodates' state objectives
- ✓ **Wholesale Suppliers' Objective 1**: Support and accommodate states' policy objectives without bearing the full cost of them through wholesale market price suppression
  - ✓Just as states insist that policy mandates of one state not impose costs on consumers in another state, state policies should not impose undue burdens on investors relying on FERC-jurisdictional markets.
  - ✓Wholesale markets are the basis for building and maintaining reliability infrastructure, and need to be free of distortion from entry and exit driven by non-market/non-economic factors

The near-term issue – FCM Price Formation

- ✓ With full application of mitigation, i.e., all resources offering at a competitive level (green supply curve), the clearing price in this example is **$7.66/kW-mo**, and the cleared quantity is 35,429MW.
  - o The total market cost is $7.66/kW-mo x 35,429MW = **$3,257 million**
- ✓ With 1,000MW of State Policy (SP) Qualified Capacity inserted as price-takers (blue supply curve), the clearing price is **$6.83/kW-mo**, and the cleared quantity is 35,604MW
  - o The total (market) using the blue curve would be $6.83/kW-mo x 35,604MW = **$2,918 million**
  - o *This is the price-suppression effect of out-of-market capacity*
- ✓ Adjusting the market demand (dotted pink demand curve) leads to similar price suppression. Clearing with the green supply stack, the clearing price would be **$6.83/kW-mo**, and the cleared quantity would be 34,604MW
  - o The total market cost is $6.83/kW-mo x 34,604MW = **$2,838 million**

Illustrative FCM auction pricing



Source: NRG analysis

Questions?