

# **NYISO 2019/2020 ICAP Demand Curve Reset Review Kick Off Meeting**

NYISO ICAPWG

August 23, 2019

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## Introductions

- Analysis Group (AG)
  - Paul Hibbard, Principal
  - Dr. Todd Schatzki, Principal
  - Chris Llop, Manager
  - Charles Wu, Associate
  - Others with wholesale market experience
  
- Burns & McDonnell (B&M)
  - Matt Lind P.E. MBA, Economics liaison
  - Stephanie Villarreal P.E., Cost estimates lead
  - Mary Hauner-Davis, Permitting / regulatory lead
  - Others with relevant regulatory and engineering experience

## Analysis Group Role

- Estimate net energy and ancillary services (“EAS”) revenues for peaking plants
  - Tariff specifies that net EAS be determined under conditions in which the available capacity is equal to the sum of the minimum Installed Capacity requirement and the peaking plant’s capacity
  - ‘Adjustment factors’ are also used in the economic optimization process used to determine Locational Minimum Installed Capacity Requirements (“LCRs”)
- Develop cost of capital assumptions
- Perform demand curve modeling

## Burns & McDonnell Role

- Identify peaking units for each Locality and Rest of State (“ROS”)
  - Tariff defines the peaking unit as the unit with the technology that results in the lowest fixed costs and highest variable costs among all other units’ technology that are economically viable
- Establish construction cost and specifications of peaking units
  - Tariff requires that DCR assess the current localized levelized embedded cost of a peaking plant in each Locality, the ROS, and any New Capacity Zone
  - Other technologies will also be assessed for informational purposes

## **Part I: Technology Choice and Construction Cost**

- Identify peaking units for each Locality and ROS
- Establish cost and specifications of peaking units

## **Part II: Estimation of Net Operating Revenues**

- Determine method and data
- Estimate net EAS revenues for peaking plants
- Determine level of excess adjustments

## **Part III: Demand Curve Modeling**

- Estimate (seasonal) net cost of new entry (CONE) at tariff specified level of excess
- Assess slope, shape and zero crossing point of the ICAP Demand Curves

- **Q4 2019 - Q1 2020**
  - Discuss DCR principles and framework
  - Evaluation of any potential tariff revisions
  - Review of net EAS estimation method and data sources
  - Initial discussion of DCR assumptions
  
- **Q1 – Q2 2020**
  - Finalize net EAS modeling
  - Finalize DCR method and assumptions
  - Peaking unit technology costs
  - Review level of excess (LOE) adjustment factors (AF)
  - Demand curve model development and discussion
  
- **Q2 – Q3 2020**
  - Finalize demand curve model
  - Final discussions and input
  - Draft report
  - NYISO staff draft recommendations
  
- **Q3 – Q4 2020**
  - Final report and NYISO final recommendations
  - NYISO Board review
  - FERC filing

## **Many aspects of the DCR will resemble past resets**

- Overall approach to setting the ICAP Demand Curves – the three components
  - Technology choice/construction costs
  - Estimation of net energy and ancillary services revenues
  - Demand curve modeling
- Working with stakeholders through the ICAPWG to receive input on assumptions

## **The particulars of the approaches to be taken – methods and application – could differ from past approaches**

- Still under review by AG, B&M
- Not anticipating significant methodological changes
- Certain modifications could arise through consultant deliberations and stakeholder input

- Peaking plant
  - Technologies
  - Dual-fuel capability
  - Impact of public policy in plant technology considerations
- Net EAS model elements
  - Potential new market designs, and/or changing revenue sources
  - Model method and structure
  - Data sources, coding language
- Fuel costs, including natural gas pricing hubs (selection; blending)
- ICAP Demand Curve shape, slope, zero crossing point
- Financial parameters in demand curve model
- Annual updating – process and data sources



- Extended DCR periodicity from three years to four years
- Introduced annual updating of ICAP Demand Curve parameters, based on the most recent, publicly-available historical information related to market prices and technology specific escalation indices
- Developed a historical net EAS revenues model used to estimate net EAS revenues in a repeatable and transparent manner
- Lessons to carry over
  - DCR process is complex – coordinated and continuous deliberation with stakeholders key to reaching the best outcome
  - Maintain focus on simplicity, transparency, reproducibility/predictability
  - Move development of assumptions earlier; encourage *early* stakeholder engagement on controversial issues
  - Continue focus on key “levers” –EAS market pricing, LOE AFs, financial assumptions, peaking plant technologies and costs

- Analysis Group and NYISO will address questions and comments brought up throughout the stakeholder process using an issue tracker

ID #	Priority	Issue Status	Issue Type: Decision / Task	Topic	Description	Next Steps	Date Added	Due Date	Close Date	Decision Made	Resolution Notes / Citation

# Contact

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