

AC Transmission

Public Policy Evaluation:

Capacity Market Metric

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Key Attributes of the Capacity Market Benefit

- The Capacity Market Benefit metric captures the long-term impacts on capacity market costs
- The Capacity Market Benefit is to be additive to production cost savings, providing the total market-based economic benefit of a given project
- The Capacity Market Benefit metric is not to be utilized in the AC Transmission Public Policy evaluation process to differentiate projects, but to demonstrate the significant economic benefits associated with the broad range of projects proposed

Overall Design of the Capacity Market Benefit

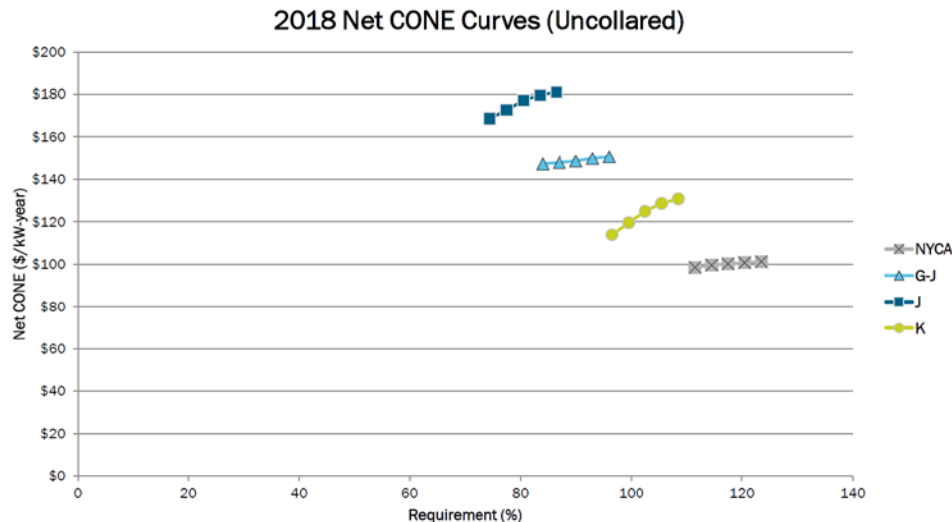
- Calculate the change in long-term procurement costs attributable to the AC Transmission projects over the twenty-year study period
- Total capacity costs are calculated by summing the procurement costs from each capacity region
- Procurement costs are calculated as the capacity requirement multiplied by the applicable Net CONE
- Capacity requirements are determined by the annual peak loads for each year of the study period, and the reliability criteria that the Loss-of-Load-Expectation not exceed one day in ten years

Optimizer Functionality

- **Minimizes overall procurement costs by removing and shifting capacity :**
 - Removing capacity from surplus zones (A, C, D)
 - Shifting capacity between transmission constrained zones (G-K) and upstate
- **Optimizes statewide and capacity region capacity procurement**
- **Observes all emergency transfer criteria interface limits**
- **Capacity prices derived from Net CONE curves for each capacity region (as a function of quantity sited in each region)**

Net Cone Curves Utilized

- Reflect updates to the 2017 Net CONE curves and Reference Points
- Identical to those curves used in the analysis presented to ICAPWG on Feb. 6, 2018



*http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-02-06/ICAPWG_2-06-18_AlternativeMethodsforLCRs_Final.pdf

Caveats to the Capacity Benefit Evaluation

- **No adjustments to Net Cone curves for changes in EAS or gross CONE values**
 - Actual changes in energy and ancillary revenues (EAS) may result in varying adjustments to Reference Points over time
 - Actual changes in gross cost of new entry (CONE) may occur due to changes in technology, input factors, market conditions
- **All four Net CONE curves adjusted uniformly through study period by a single escalation factor**
 - Actual market conditions may disproportionally impact Net CONE curves in the different localities
- **Does not represent a forecast of capacity requirements or prices**
 - Emphasis is on the change in procurement costs under tested conditions
- **Long-term planning analysis**
 - Process is not designed to mirror the setting of near-term capacity requirements

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Next Steps

- **Review methodology with stakeholders at today's session**
- **Incorporate stakeholder feedback as appropriate and feasible**
- **Report back results of the Capacity Market Benefits analysis at the May 10th ESPWG**

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- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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