NEW YORK INDEPENDENT SYSTEM OPERATOR

Proposed Bid Production Cost Guarantee Enhancements

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Overview

- During the Strategic Tariff Review, two market enhancements associated with the Bid Production Cost Guarantee Payment were identified.
  - *The treatment of Bilateral Transactions when calculating DA and RT BPCG payments.*
  - *The calculation of RT BPCG for RT only regulation providers.*

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Treatment of Bilateral Transactions when calculating the DA and RT Bid Production Cost Guarantee Payment

Overview

- The existing calculation of BPCG is based on generator offer costs and revenues from LBMP energy and ancillary services.
  - Bilateral energy is not sold into the LBMP market.

- The calculation excludes the energy offer costs of bilateral transaction MWhs, the start up costs in hours with a bilateral transaction and the implied revenue from the energy schedule attributable to bilateral transactions.

Concern

- Day Ahead commitments and schedules are determined using the complete generator's offer over all hours of the day without regard to bilateral transaction schedules.
  - *This produces the lowest bid production cost solution to meet bid load requirements.*

- A generator could increase its BPCG payments by scheduling bilateral transactions in the hours where they expect to have the largest net revenues.

- This would remove these revenues from the daily BPCG calculation.

Proposal

- Calculate DA and RT BPCG for generators with bilateral transactions using implied revenues based on LBMPs, and bid costs.
  - *Include Start Up cost in calculation of BPCG regardless of the existence of bilateral transactions.*

- This makes the DA and RT BPCG calculation for generators with bilateral transactions the same as generators without bilateral transactions.

- Provides consistent treatment between scheduling and settlement.

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Treatment of Incremental Energy when calculating BPCG payments for RT regulation providers

Overview

- When calculating RT BPCG for generators without a DA schedule, the Incremental Energy costs from the units' Min Gen to Min Gen plus regulation schedule are not included in the RT Generator Bid Costs.

- The Incremental Energy revenues from the units' Min Gen to Min Gen plus regulation schedule are included in the RT Energy revenues.

- It was expected that the RT regulation bid would include the costs associated with providing the Incremental Energy.

RTD RT Energy Cost ($) Example

- The generator is scheduled in Real Time but was not scheduled in the Day Ahead Market.
  - *No real-time bilateral transactions exist.*

- *RTD Sched Trans: Gen (MW) and Hr DAM Sched Gen (MWh) =0:*

- The generator is scheduled in Real Time to provide regulation MW.

RTD RT Energy Cost ($) Example

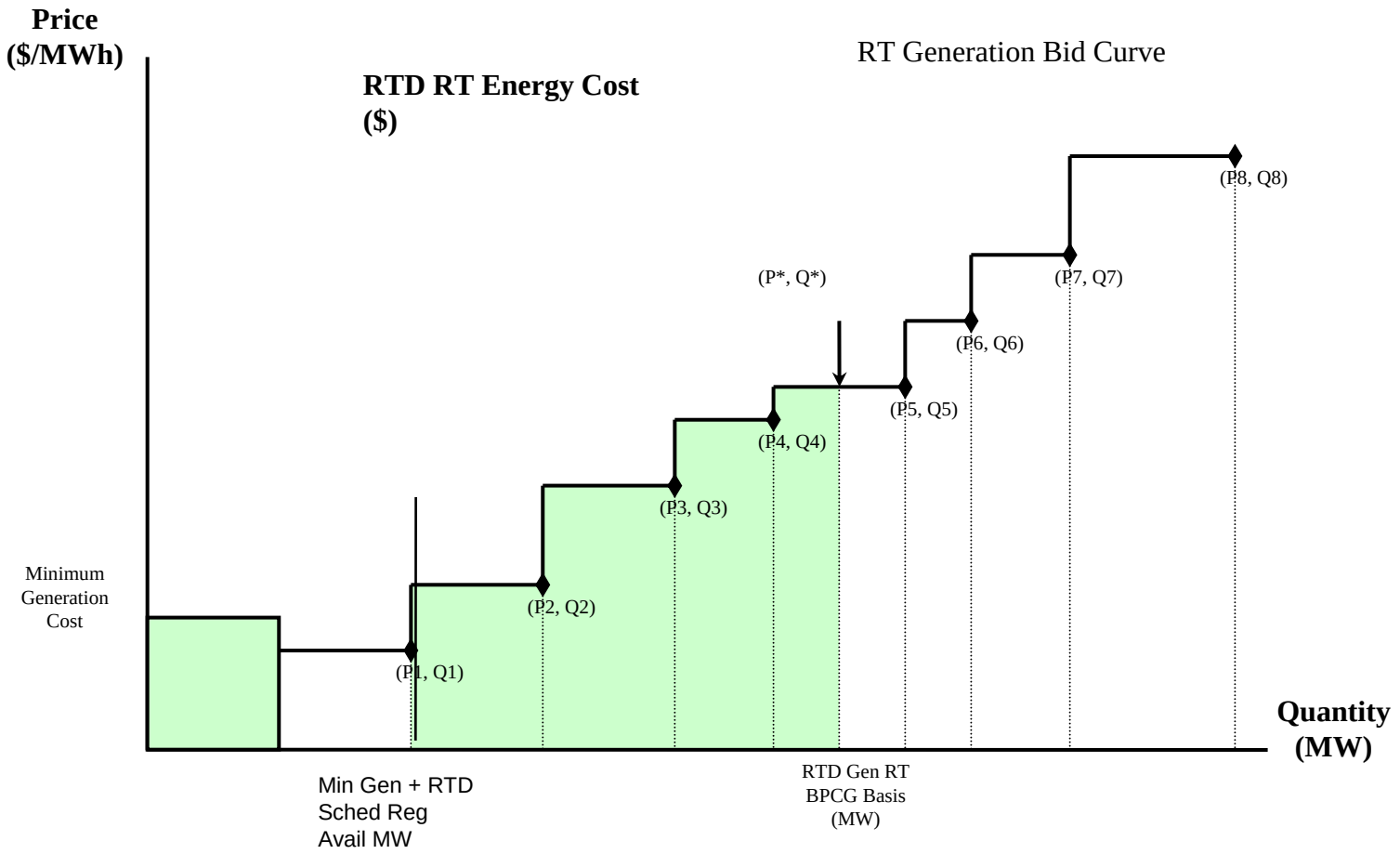
- If RTD RT Gen BPCG Basis (MW) >=

  RTD Gen Bid: Min Gen (MW) + RTD RT Sched Reg Avail (MW) , then *RTD RT Gen Bid Cost ($/Hr)* =

$$\text{RTD Gen Bid : Min Gen Cost (\$/Hr)} + \int_{\text{RTD Gen Bid : Min Gen (MW)} + \text{RTD RT Sched Reg Avail (MW)}}^{\text{RTD RT Gen BPCG Basis (MW)}} \text{RTD Gen Bid}$$

- The calculation includes the area under the generator's RT Bid curve for each dispatch segment from [RTD Gen Bid :Min Gen (MW) + RTD RT Sched Reg Avail (MW)] to RTD Gen RT BPCG Basis (MW).

RTD RT Energy Cost ($) Example



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Proposal

- Based on the current market design, the recommendation is to explicitly recognize the incremental energy costs associated with providing regulation service and not to require these Incremental Energy costs to be included in the RT Regulation bid.
  - *These Incremental Energy costs are more appropriately included in the energy portion of the RT BPCG calculation instead of the Net Ancillary Services Revenues.*

- Modify the RT BPCG calculation to include both the cost and revenue components associated with the Incremental Energy from Min Gen to Min Gen plus scheduled regulation MW's.

RTD RT Energy Cost ($) Proposed Example

- The generator is scheduled in Real Time but was not scheduled in the Day Ahead Market
  - *No real-time bilateral transactions exist.*

- RT Sched Trans: Gen (MW) and Hr DAM Sched Gen (MWh) =0:

- The generator is scheduled in Real Time to provide regulation MW.

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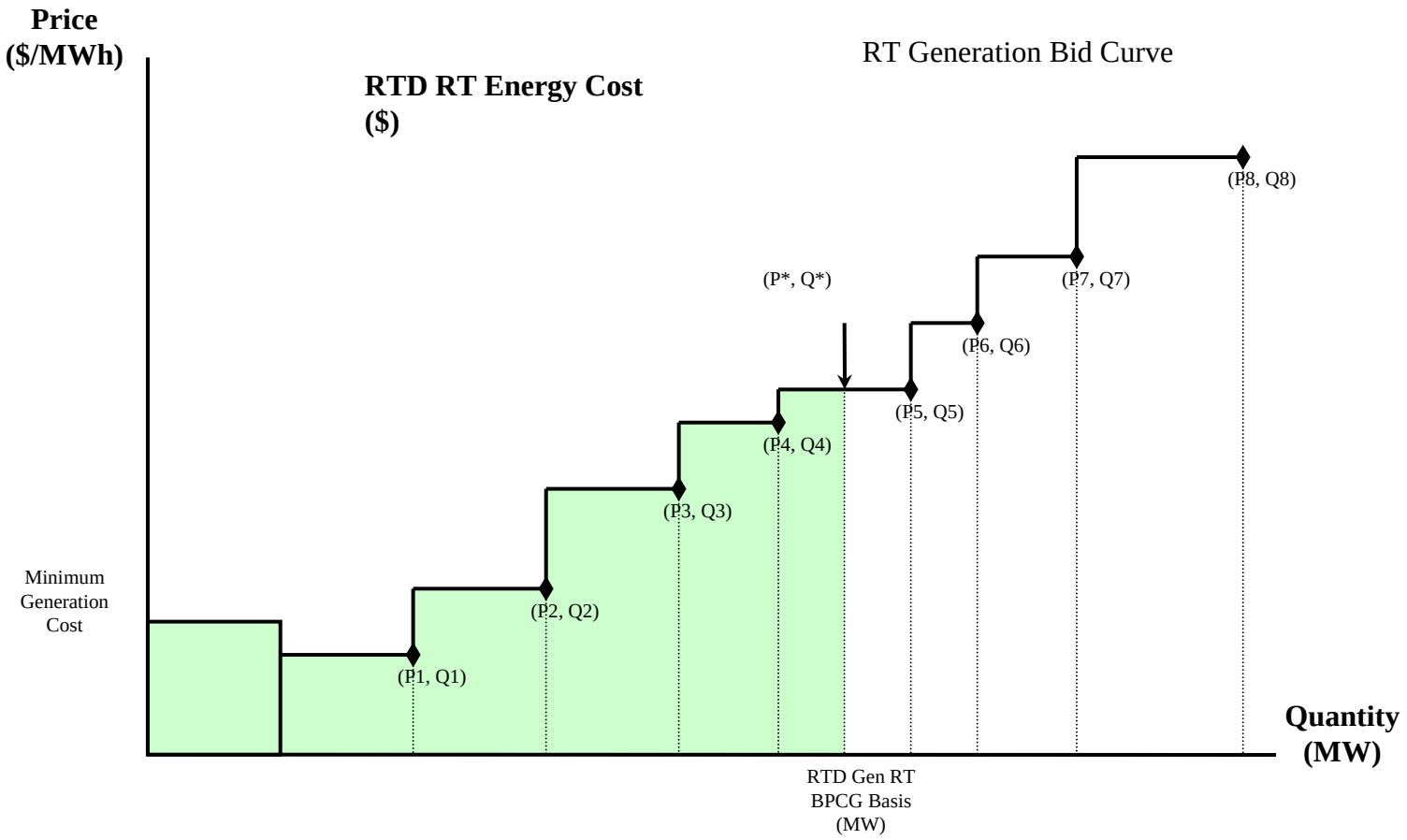
RTD RT Energy Cost ($) Proposed Example

- If RTD RT Gen BPCG Basis (MW) >= RTD Gen Bid: Min Gen (MW), then *RTD RT Gen Bid Cost ($/Hr)* =

$$\text{RTD Gen Bid : Min Gen Cost (\$/Hr)} + \int_{\text{RTD Gen Bid : Min Gen (MW)}}^{\text{RTD RT Gen BPCG Basis (MW)}} \text{RTD Gen Bid}$$

- The calculation includes the area under the generator's RT Bid curve for each dispatch segment from RTD Gen Bid :Min Gen (MW) to RTD Gen RT BPCG Basis (MW).

RTD RT Energy Cost ($) Proposed Example



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Next Steps

- Review MP feedback
- Determine final methodology
- Estimate the Level of effort
- Prioritize enhancements

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