

NYISO's Reliability Must Run Compliance Filing

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Agenda

- ◆ **Rate Components for RMR Generator**
 - *Avoided Cost*
 - *Capital Expenditures*
 - **Claw Back of Accelerated CAP EX**
 - **Limit on CAP EX**
 - *Incentive Portion of the Rate*
 - **Availability and Performance Metrics**
- ◆ **Treatment of Market Revenues**
 - *Energy*
 - *Capacity*
- ◆ **Next Steps**

Availability and Performance Rate (APR) for RMR Generator

- ◆ ***APR = Avoidable Costs + (Availability and Performance Incentive Payments)***
 - ***Avoidable Costs***
 - *Costs that could be avoided if a unit were either (1) to cease supplying energy and capacity for a period of one year or more while retaining the ability to re-enter such markets, or (2) to retire permanently*
 - *May include accelerated cost recovery for necessary capital expenditures required to keep the unit operable for the term of the RMR agreement*
 - ***Availability and Performance payments***
 - *These payments will be incentive-based and will not be paid if the unit fails to achieve availability and performance targets that are set forth in the RMR agreement*
- ◆ ***Generator will get paid APR plus Variable Costs (RMR Settlement)***

Avoidable Costs Calculation

- ◆ **(+) Capital Expenditures necessary to keep the unit viable**
 - *NYISO will account for Capital Expenditures that are eligible to receive accelerated cost recovery separately from the other components of an RMR Unit's avoidable costs*
- ◆ **(+) Fixed Costs, including maintenance costs, that are necessary to provide the RMR service**
- ◆ **(+) Other costs that would be avoided if unit deactivated**
 - *taxes, insurance, environmental, emission rights, fuel supply agreements, operational agreements, etc.*
- ◆ **(+/-) Any other relevant data or information**

Cap Ex

- ◆ **NYISO will determine if and when a Capital Expenditure is eligible for inclusion in the Avoidable Cost calculation**
 - *NYISO will determine the timing for inclusion of the CAP Ex in the rate for the generator*
 - *NYISO will audit Cap Ex and rate may need to be adjusted up or down based upon actual costs incurred*

- ◆ **NYISO is considering implementing a threshold limit on its authority to approve Cap Ex.**
 - *Any Cap Ex determined to exceed the limit would need to be approved by FERC*
 - *NYISO is looking into how to determine appropriate limits*
 - **PJM requires capital expenditures greater than \$2M to be approved by FERC**

Claw Back of Cap Ex

- ◆ **NYISO has considered stakeholder feedback from June 24 ICAPWG and proposes that immediate claw back of the depreciated value of the capital expenditure plus the interest applicable during the contract period upon an RMR Generators return to market rates**

Treatment of Cap Ex if RMR Agreement is terminated early

- ◆ Cap Expenditures that have been made will be fully paid upon the early termination of an RMR agreement, unless termination is due to RMR generator non-performance
 - *RMR generation must retire or mothball prior to receiving full payment*
 - *Remaining cost recovery for RMR units that return to market rates will not be paid*
- ◆ NYISO will not pay for any Capital Expenditures that could be avoided due to the early termination of the RMR Agreement

Availability and Performance Payments (Incentive)

- ◆ The incentive payments will be earned based upon the RMR generator meeting the assigned targets for availability (being available for schedule and dispatch) and performance (appropriately following NYISO dispatch signals)
- ◆ The NYISO is proposing to use the NERC Equivalent Availability Factor (EAF) Metric for Availability Incentives and the Penalty Limit for Under-generation (PLU) metric for the Performance incentive
- ◆ Incentives will be measured and paid separately
 - *NYISO proposes to assign greater weight to the Availability component of the incentive than the Performance component*

Equivalent Availability Factor

- ◆ **NERC Definition: EAF measures the fraction of net maximum generation that could be provided after all types of outages are taken into account. It also measures percent of maximum generation available over time.**
 - ***Uses GADS data***
 - Initial GADS data submission is 20 days from the end of the operating month
 - ***NYISO will be able to calculate EAF for RMR Units on a Capability Year or Capability Period basis***

Penalty Limit for Under-Gen

- ◆ The performance of a unit when dispatched is measured by calculating its:
 - *Penalty Limit for Under-generation*
 - This metric calculates the MW threshold below which the unit is considered under- generating for the RTD interval
 - MST Section 25.4 references the metric as it relates to DAMAP eligibility
 - MST Section 15.3a describes the metric as part of the under – generation penalty
 - *Automatically calculated for all generator types today*
 - *NYISO can pay incentives based upon PLU metric monthly*

Participation of an RMR Unit in the NYISO-Administered Markets

- ◆ RMR units will offer into the Energy and Ancillary Service markets consistent with their NYISO-determined reference levels
 - *The NYISO's MMA Department and the MMU will work with the generator to update its reference levels to accurately reflect its variable operating costs before an RMR agreement becomes effective*
 - *RMR Generators that ordinarily provide Voltage Support or Black Start services will be expected to continue to provide these services*
- ◆ Generator will get paid APR + Variable Costs to run
 - *(Avoidable Costs + Availability Incentive earned + Performance Incentive earned) + Variable Costs*

Energy Market Settlements(1)

- ◆ **Beneficiary Loads (as identified by Planning) pay the RMR Generator its APR plus Variable Costs**
 - *Variable Costs = Energy and Ancillary Offers (consistent with reference levels) + VSS and Black Start Costs*
- ◆ **NYISO Settlements will pay the RMR Generator and charge the beneficiary loads daily**
 - *Market outcomes attributed to the generator will be credited to the beneficiary loads (Energy + Ancillary Services + ICAP Revenues)*

Energy Market Settlements(2)

- ◆ **Costs allocated to beneficiary loads are equal to:**
 - *[(Avoidable Costs + Availability Incentive earned + Performance Incentive earned) + Variable Costs] less*
 - *(Energy + Ancillary Services + ICAP Revenues)*
- ◆ **Energy, Ancillary Services and ICAP Revenues will be calculated daily**

Next Steps

- ◆ **August 10 ICAPWG Scheduled**
 - *Discuss Proposed Attachment Y Tariff Modifications*
 - *Walk through a Numerical Example for an RMR Generator*
- ◆ **August 25 ICAPWG**
 - *Discuss Proposed Draft Pro Forma RMR Agreement*
- ◆ **September 8 ICAPWG**
 - *Discuss Proposed MST Tariff Changes*
- ◆ **September 24 or 28 ICAPWG to be scheduled**
 - *Discuss proposed tariff language and open issues*
- ◆ **October 13 or 14 ICAPWG to be scheduled**
 - *Discuss final tariff language for compliance filing*
- ◆ **October 19 Compliance Filing Due**

Written Comments

- ◆ The NYISO will consider input received during today's meeting while preparing the tariff provisions and *pro forma* RMR agreement
- ◆ Stakeholders can also provide additional comments in writing to deckels@nyiso.com
 - *Comments should indicate whether or not the stakeholder is requesting that they be posted with the meeting materials*

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