



Qualifying Transmission Upgrades in RPM

MIC - March 2014

- Define a QTU as a supply resource in RPM
- Describe RPM auction eligibility requirements for QTUs
- Explain RPM collateral requirements for QTU participation
- Describe RPM delivery year performance assessments for QTUs



What is a Supply Resource in RPM?

In RPM, Resources are =

Generation Resources

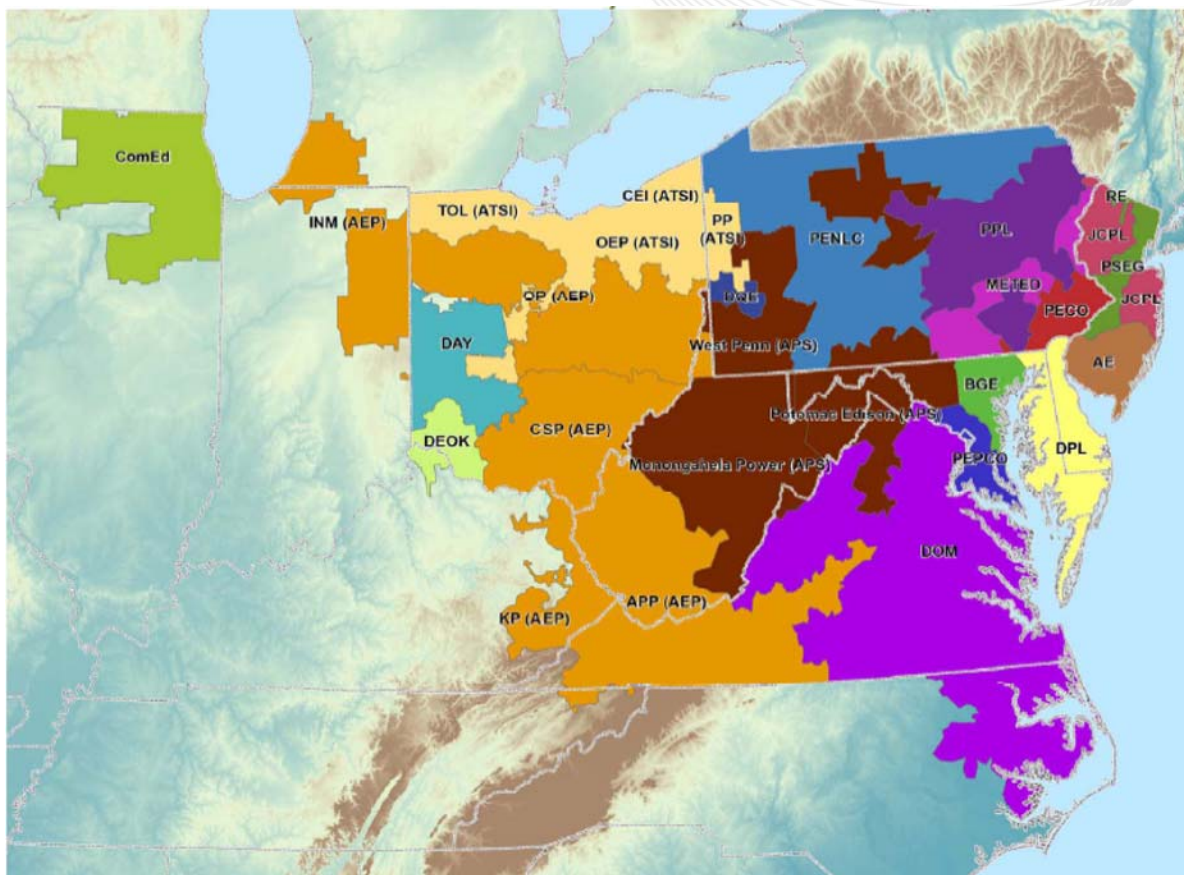
Demand Resources
(DR)

Energy Efficiency
Resources
(EE)

Qualifying
Transmission
Upgrades
(QTU)



Requirements for RPM Base Residual Auction Participation



- Executed Facilities Study Agreement
- Conform to all applicable standards of the PJM RTEP Process
- In-service date on or before the start of the Delivery Year
- Incremental import capability value assigned by PJM Planning at least 45 days prior to auction



QTU Auction Revenue

The auction revenue for a Qualifying Transmission Upgrade that clears in the BRA is:

Locational Price Adder of Sink LDA – **Locational Price Adder of Source LDA**



RPM Collateral Requirements for QTUs

Pre-Auction

The greater of (i) \$20/ MW-day or (ii) 30% of the PJM Net CONE, times the number of days in the Delivery Year.

Post-Auction

The greater of (i) \$20/MW-day or (ii) 20% of the Sink LDA Clearing Price, times the number of days in the Delivery Year.

- 50% reduction in collateral for executed full (not provisional) Interconnection Service Agreement
- No collateral required once the QTU is in service



Qualifying Transmission Upgrade - What if there is a Delay?

What if there is a delay?

- If the upgrade cleared in the BRA and is not completed by the start of the Delivery Year, the party should provide a replacement in the form of an equivalent amount of capacity resource within the Sink LDA.
- If replacement capacity is not provided, a Transmission Upgrade Delay Penalty will be applied.

Transmission Upgrade Delay Penalty (Daily) =

QTU Delay Penalty
Rate

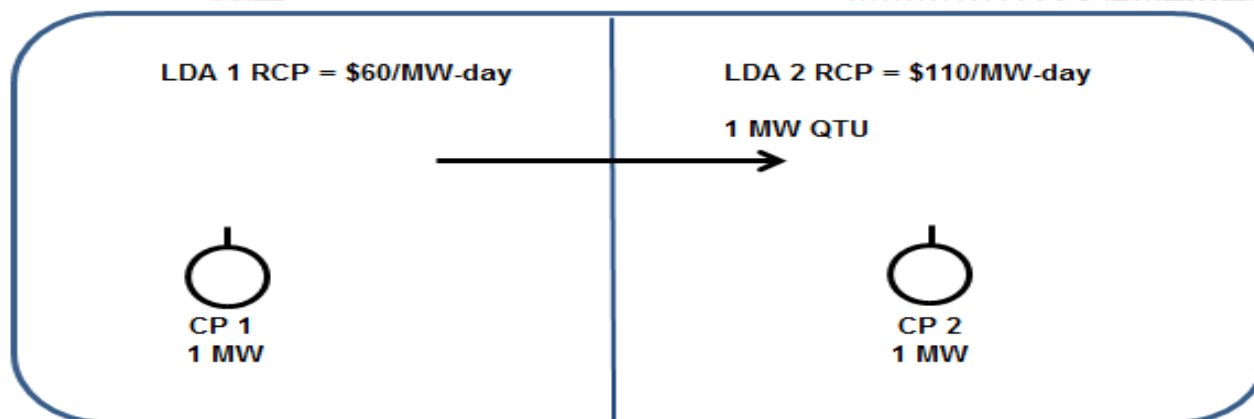


Cleared MW Amount
of Incremental Import
Capability Not
Delivered

QTU Penalty Rate = the higher of:
(1) [2 * (Sink Locational Price Adder) - (Source
Locational Price Adder)] or,
(2) Sink LDA Net CONE less the Resource
Clearing Price of Source LDA

Daily Capacity Resource Deficiency Penalty for Generation, Annual DR and EE equals the Weighted Average Resource Clearing Price for such resource plus the higher of 20% of the Party's Weighted Average Resource Clearing Price for such resource or, \$20/MW-day.

	Capacity Resource (Generation, DR or EE)	QTU
RPM Revenue	Cleared Resource MW * RCP	Cleared QTU MW * (Sink LDA RCP - Source LDA RCP)
Capacity Deficiency Penalty	RCP + greater of [(0.2 * RCP) or (\$20)]	greater of [(2 * (Sink LDA RCP - Source LDA RCP)) or (Sink LDA Net CONE - Source LDA RCP)]
Post Auction Credit Rate	greater of [(0.2 * RCP) or (\$20)]	greater of [(0.2 * Sink LDA RCP) or (\$20)]



	CP 1	CP 2	QTU
RPM Revenue	1 MW * \$60 = \$60/MW-day	1 MW * \$110 = \$110/MW-day	1 MW * (\$110 - \$60) = \$50/MW-day
Capacity Deficiency Penalty	\$60 + greater of [\$12 or \$20] = \$80/MW-day	\$110 + greater of [\$22 or \$20] = \$132/MW-day	greater of [(2*(\$110 - \$60) or (\$277 - \$60))] = \$217/MW-day
Net Penalty	\$80 - \$ 60 = \$20/MW-day	\$132 - \$110 = \$22/MW-day	\$217 - \$50 = \$167/MW-day
Post Auction Credit Rate	greater of [\$12 or \$20] = \$20/MW-day	greater of [\$22 or \$20] = \$22/MW-day	greater of [\$22 or \$20] = \$22/MW-day
Replacement Requirements	Available MWs or cleared Buy Bid located in LDA 1 or LDA 2	Available MWs or cleared Buy Bid located in LDA 2	Available MWs or cleared Buy Bid located in LDA 2

Questions?