

Treatment of Voluntary RECs in RPM

Ken Schuyler
Manager, Renewable Services
Market Implementation Committee
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- FERC's December 2019 Order expands the MOPR to resources entitled to State Subsidies. Renewable Energy Certificates (RECs) sold for compliance with a state mandate are considered a form of state subsidy.
- FERC's December 2019 Order defines a State Subsidy as:
 - "a direct or indirect payment, concession, rebate, subsidy, non-bypassable consumer charge, or other financial benefit that is (1) a result of any action, mandated process, or sponsored process of a state government, a political subdivision or agency of a state, or an electric cooperative formed pursuant to state law, and that (2) is derived from or connected to the procurement of (a) electricity or electric generation capacity sold at wholesale in interstate commerce, or (b) an attribute of the generation process for electricity or electric generation capacity sold at wholesale in interstate commerce, or (3) will support the construction, development, or operation of a new or existing capacity resource, or (4) could have the effect of allowing a resource to clear in any PJM capacity auction."

December 2019 Order, 169 FERC ¶ 61,239 at P 9.



- A renewable resource (and resource uprate) meeting one of the following criteria is eligible for the categorical RPS Exemption from the MOPR rules:
 - has cleared an auction prior to 12/19/2019
 - has executed ISA/WMPA/CSA on or before 12/19/2019
 - has unexecuted ISA/WMPA/CSA filed with FERC on or before 12/19/2019
- Renewable resource for this purpose defined as a generation resource with output that varies as a function of its energy source, such as wind, solar, run of river hydro and other renewable resources.
- Resources not qualifying for the RPS Exemption can elect the Competitive Exemption by certifying to forgo the State Subsidy for the relevant delivery year.



Self-Identification & Competitive Exemption

- The owner of any resource that is eligible to receive a state-subsidy for the relevant delivery year must self-identify such resource in Capacity Exchange as a State-Subsidized Resource
- The owner of a State-Subsidized Resource may certify in Capacity
 Exchange that it will forgo the state-subsidy for the relevant delivery year
 (i.e., competitive exemption)
 - Once elected, the Competitive Exemption will automatically apply to all subsequent auctions elected for that delivery year.
- The identification of a resource as a State-Subsidized Resource will carry across delivery years, until changed by the resource owner.



Facilitating the Competitive Exemption

PJM proposes to facilitate adherence to the competitive exemption by requiring the resource owner to notify PJM EIS that it has selected the Competitive Exemption for a future delivery year and cleared the auction. In this notification, the resource owner:

- Commits to register the resource and retire its RECs in PJM GATS
- Instructs PJM EIS to prevent RECs from that resource for the relevant delivery year from being retired for compliance with a State Renewable Portfolio Standard (RPS) or Zero Emission Standard (ZES), or being exported to another tracking system
- Authorizes PJM EIS to provide a report to PJM and MMU listing those PJM Resources that have forgone State Subsidies for a given delivery year



Potential implementation in GATS:

- Flag for PJM resources selecting the PJM Competitive Exemption in a delivery year
- Validations to prevent flagged RECs from being retired for specific state programs, or exported to other registries
- Report for the GATS Administrator that can be provided to PJM or MMU upon request listing those resources flagged as selecting the PJM Competitive Exemption in a given delivery year



APPENDIX



PJM Environmental Information Services, Inc.

- Formed in February 2005
- Capitalized independently of PJM Interconnection, L.L.C.
- PJM members have no cost responsibility or liability

Generation Attribute Tracking System (GATS)

- GATS is owned and administered by PJM EIS
- Tracks environmental attributes of generation
- Supports reporting and verification requirements related to environmental compliance (e.g., state Renewable Portfolio Standards) and related markets
- Costs borne solely by GATS users



- All MWhs of PJM generation are tracked.
- A certificate market separate from energy is enabled for renewable generation.
 - Certificates (i.e., credits) traded separate from energy
 - Certificates can have different value depending on their attributes (e.g., fuel type, location, date of generation, etc).
- It is a single information system that will support a range of reporting, verification, and compliance requirements (e.g., disclosure, RPS, voluntary retail markets, etc).
- It is a regional system that will enable PJM states and market participants to support varying needs and priorities.
- A system that is flexible enough to meet evolving state requirements.



GATS Statistics

(as of January 2020)

- 20,400 Accountholders
- 233,500 Registered Renewable Generators located in 21 states plus DC:

NJ	113,625	IN	1,064	IA	21
MD	69,591	WV	409	SC	16
PA	22,058	NC	305	WI	13
IL	9,940	KY	292	TN	5
DE	5,698	MI	133	AL	2
DC	5,400	GA	50	ND	2
ОН	2,515	NY	27		
VA	2,318	MO	22		

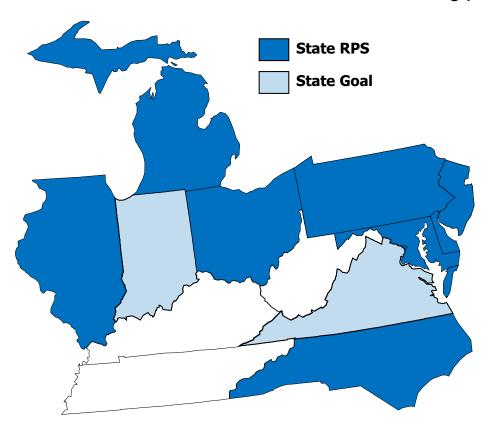
Facilities Registered in GATS

- 231,556 solar PV facilities in 19 states & DC
- 8,313 MWs of Solar PV nameplate capability
- 1,400 PJM Generators in wholesale market
- 526 PJM Generators that are RPS-Eligible





State Renewable Portfolio Standards (RPS) require suppliers to utilize wind and other renewable resources to serve an increasing percentage of total demand.



DSIRE: www.dsireusa.org December 2019

State RPS Targets

☼ NJ: 52.5% by 2030

☼ MD: 50% by 2030

☼ DE: 25% by 2026

☼ DC: 100% by 2032

☆ PA: 18%* by 2021

☆ IL: 25% by 2026

OH: 8.5% by 2026

☼ NC: 12.5% by 2021 (IOUs)

MI: 15% by 2021

VA: 15% by 2025

IN: 10%* by 2025

☼ Minimum solar requirement

Includes non-renewable "alternative" energy resources



Retiring RECs in GATS

Certificate Transfer Parameter Entry Transfer certificates to Select an Account Holder ₹ Another Account Holder Transfer Type: Select Transfer Type ▼ Subaccount Select a Subaccount ▼ State Select a State v Retail LSE Subaccount Period Select One ▼ RPS Yes No **CEPS** NOTE: Your contact information will display on the bulletin board even if you have selected not to have your contact information displayed on the Account Holder Report. **Bulletin Board** Reserve Used by the Account Holder Billable State INDIANA ▼ for compliance with a state RPS Compliance Period Jan 2019-Dec 2019 ▼ Note: Transferring certificates Renewable Portfolio Retail LSE Subaccount Select a Subaccount ▼ into the Reserve Subaccount Standard can only be undone by the Used by the Account Holder Environmental Claim GATS Administrator. to make environmental State Select a State ₩. claims or to take out of circulation for environmental benefits reasons Sold as a part of a retail Confirmation of Sale Yes No Used by the Account Holder for a Green-e Energy Certified Voluntary Market Sale certificate-only product to an Purchaser end-use customer that does State Select a State ₹ | not have a GATS account Reporting Year Select a Year ▼ Exported off-system to a third Confirmation of Sale Yes No party in a region that does Purchaser not have a compatible State Select a State v tracking system Compatible Tracking System | Select a System | v Exported to a compatible tracking system Receiving Account Holder Receiving Account Holder ID Expired RECS removed from Expired Comments circulation Reservation Reason Other State Select a State ₹ Used by the Account Holder Select a State ▼ rved. for compliance with a state Reporting Period Select a Period ▼ Zero Emission Standard

Improving Market Efficiency and Transparency



Information publicly available to improve market transparency:

https://www.pjm-eis.com/reports-and-events/public-reports.aspx

- Aggregator/Broker Listing
 - Listing of Aggregators and Brokers in GATS
- Renewable Generators Registered in GATS
 - Listing of all RE systems and their State RPS Enrollment(s)
- Solar Weighted Average Price
 - Listing of SREC Trades by State, by Month
- Bulletin Board & Buyer's Bulletin Board
 - Listing of Credits for Sale/Purchase
- RPS Eligible Certificates & RPS Retired Certificates
 - Listing of Eligible / Used RECs (i.e., supply and demand)