

Generator Deliverability Test Modifications Update

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- PJM provided a full education session of the new proposal accompanied by analytical results comparing the status quo approach to the new approach at the 2/23/2022 special PC session "CIRs for ELCC Resources"
- PJM held an additional special PC session on 3/4/2022 to address questions
- PJM subsequently received additional questions and stakeholder feedback and is in the process of responding and refining the PJM Package
- A final special PC session has been scheduled on April 28 prior to bringing to a first read in June



Revised Review and Approval Timeline

PC First PC Endorsement 7/12/2022 Effective Date TBD

MRC First Read Endorsement Read Endorsement Read Endorsement 7/27/2022 8/24/2022

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Discussion Of Updated Analytical Results For Light Load

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RTEP Baseline - Proposal Impact Summary - UPDATE

Violation Driver		St	ummer	1	Winter	Lig	ht Load	Total
Higher Intermittent	# of Violations:		2		0		2	4
	\$M Cost	\$	7.00	\$	-	\$	12.00	\$ 19.00
Block Dispatch	# of Violations:		1		1		5	7
	\$M Cost	\$	28.00	\$	8.50	\$	99.00	\$ 135.50
Block Dispatch + Lower Intermittent Helpers	# of Violations:		2		0		0	2
	\$M Cost	\$	11.50	\$	-	\$	-	\$ 11.50
	# of Violations:		5		1		7	13
Impact of All Drivers	\$M Cost	\$	46.50	\$	8.50	\$	111.00	\$ 166.00

Two light load block dispatch-related violations determined to longer be valid so total cost went down from \$185M to \$166M

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Solar Output During New Light Load Period

- Current light load period considers only nighttime hours with NO solar output
- New light load period is defined as 40-60% of peak load during the hours of 10AM-3PM
- Mainly occurs during Spring and Fall days

Solar % Max Output During Light Load

MAAC	P80%	Average
Solar Fixed	78%	52%
Solar Tracking	86%	56%

PJM West	P80%	Average
Solar Fixed	82%	53%
Solar Tracking	82%	54%

DOM	P80%	Average
Solar Fixed	87%	59%
Solar Tracking	85%	58%



Queue Scenario Using CPs: <u>Light Load</u> <u>Solar @ Average Output</u>

Violations Under Status Quo

	PJM East	PJM West	PJM South	TOTAL
Single	5	33	0	38
Common Mode	1	7	0	8
TOTAL	6	40	0	46

Violations Under Proposal (Solar @ P80% Output)

	PJM East	PJM West	PJM South	TOTAL
Single	13	27	74	114
Common Mode	11	21	16	48
TOTAL	24	48	90	162

Violations Under Proposal (Solar @ Avg Output)

	PJM East	PJM West	PJM South	TOTAL
Single	7	21	31	59
Common Mode	10	14	8	32
TOTAL	17	35	39	91



Queue Scenario Using CPs: Light Load

- Many of the light load violations also show up as summer violations
- After accounting for the summer violations
 - Status quo: 25 of 46 violations remain in light load
 - New test, solar @ P80% output: 57 of 162 violations remain in light load
 - New test, solar @ avg output: 29 of 91 violations remain in light load
- Because PJM has harmonized summer and light load dispatch and testing procedures under the new proposal, there is a much higher overlap between summer and light load violations
- In addition, the new light load procedure will use a lower temperature rating set (higher line ratings) which will reduce the number of remaining violations under the new proposal even further when applied to these results

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