

Regional Transmission Expansion Process (RTEP) Incremental Auction Revenue Rights (IARRs) Update for 2021/22 Planning Period

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Sr. Engineer II, Market Simulation Market Implementation Committee February 10, 2021



- PJM offers various IARR products for transmission expansions that add incremental capability to the PJM system
 - Generator/Merchant transmission facility interconnections
 - Customer funded network upgrade requests (attachment EE)
 - RTEP incremental-rights eligible required transmission enhancements
- All IARR products have the following characteristics
 - IARR MWs are awarded for the incremental capability created for the life of the facility or 30 years, whichever is less
 - Must be simultaneously feasible with all existing Stage 1 ARRs
 - Valued each year based on Annual FTR Auction clearing prices
- PJM Operating Agreement requires annual RTEP IARR analysis



- Analysis may trigger IARRs for the following RTEP upgrades:
 - Backbone Upgrades
 - Non-Backbone Upgrades: cost responsibility is assigned to 1) non-contiguous zones or 2) Merchant Transmission Providers
- PJM evaluates constraint most relieved by the RTEP upgrade
 - See appendix for projects analyzed for 21/22
- PJM determines an eligible path and evaluates if IARRs could be awarded:
 - Source: aggregate pnode up to ten generator buses
 - Sink: zone
 - MWs: if available, allocated similar to project cost (percentage by zone, by NSPL)

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- All IARR-eligible RTEP upgrades scheduled to be in-service for 2021/22 planning period were analyzed
 - No IARRs produced
- Previously approved RTEP IARRs will populate at FTR Center prior to Annual ARR starts
 - Members can reject or reduce MWs through FTR Center

Effective RTEP IARRs available can be found <u>here</u>



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RTEP IARR Update for 2021/2022



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Appendix



RTEP IARR Analysis for 2021/22 Planning Period

			i			-3387				-
				Pre-		Post-				
				Upgrade		Upgrade				
			In-Service	ARR		ARR				
Project #	Туре	Upgrade Description	Date	Capability	Pre-Upgrade Limit	Capability	Post-Upgrade Limit	IARR MW	Source	Sink
		Add a new 500 kV bay at Hope							HAYRD5-8, HOPECREE25	
		Creek (Expansion of Hope Creek			LORETTO 138 KV LOR-VIE I/o		LORETTO 138 KV LOR-VIE I/o		KV UNIT 1, SALEM 13 KV	
		substation) and a new 500/230			230/138.PineyGrove.AT20+L23		230/138.PineyGrove.AT20+L23		SALEM1-3, CUMB AE 13.8	
b2633	Backbone	kV autotransformer	6/1/2021	0	0.PinyGrve-IndinR.23002	0	0.PinyGrve-IndinR.23002	0	KV CT 2, CUMB AE 13.8 KV	DPL
		Convert Trenton-Burlington 138							MERCER, LAWRESUB,	
		kV circuits to 230 kV circuits			CEDARGRO230 KV CED-		CEDARGRO230 KV CED-		CLARKSVI, EFLEMING,	
b2836,		(PSEG MTB (Metuchen –			CLIB I/o L230.CedarGrove-		CLIB I/o L230.CedarGrove-		ENGLISHT, ATLANTIC,	
b2837	Merchant	Trenton – Burlington) project)	6/1/2021	0	Clifton-Athenia.K-2263	0	Clifton-Athenia.K-2263	0	FRENEAU,SRIVER	PSEG
									SPRINGSP,	
									WOODSTOWSP,	
									ROSELANDSP,	
									WCALDWELSP,	
		Wreck and re-build the VFT –			CEDARGRO230 KV CED-		CEDARGRO230 KV CED-		CEDARGROPSP,	
		Warinanco – Aldene 230 kV			CLIB I/o L230.CedarGrove-		CLIB I/o L230.CedarGrove-		HINCHMANSP, JACKPSSP,	
b2955	Merchant	circuit with paired conductor.	12/31/2020	0	Clifton-Athenia.K-2263	0	Clifton-Athenia.K-2263	0	COOKRDSP	PSEG
									LADYSMCT GT1-4,	
		Add a 2nd 500/230 kV 840 MVA							BIRCHWD, FOURRIVR	
		transformer at Dominion's							NUG1,5	
b3027.1	Backbone	Ladysmith Substation	6/1/2021	0	AP SOUTH for I/o BLA-BED	0	AP SOUTH for I/o BLA-BED	0	,NRTHECK,SHACKLFD	DOM

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