

Regional Transmission Expansion Process (RTEP) Incremental Auction Revenue Rights (IARRs) MIC Update for 2019/20 Planning Period

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Market Simulation

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Overview

- PJM Operating Agreement requires annual RTEP IARR analysis
- The analysis may trigger IARRs for following RTEP:
 - Backbone Upgrades
 - Non-Backbone Upgrades: cost responsibility is assigned to 1) noncontiguous zones or 2) Merchant Transmission Providers
- The analysis must be completed before Annual ARR process
- Key Takeaways
 - No RTEP IARRs could be awarded for 2019/20 planning period



- Prior to awarding an IARR path for an eligible RTEP project,
 PJM evaluates a constraint that is most relieved by an RTEP upgrade (i.e. "Impacted Facility")
- Once an impacted facility is identified, PJM will then evaluate an eligible IARR path that could be awarded subject incremental transfers based on following:
 - IARR Source Points are aggregated pricing points (comprised of up to ten generator busses) with most flow increase
 - Sink Points are aggregated pricing point consisting of the zone with the most flow increase



IARR analysis comprised of a incremental transfer study

Transfer Type	Description	Table Reference (Appendix)		
Pre Upgrade Transfer	Prior to applying the upgrade using IARR path, perform a transfer capability assessment	Pre-Upgrade ARR Capability		
Post Upgrade Transfer	After applying the upgrade using IARR path, perform a transfer capability assessment	Post-Upgrade ARR Capability		
Incremental Transfer	Calculate delta transfer capability by subtracting pre transfer capability from post transfer capability	IARR MW		



 All IARR-eligible RTEP upgrades scheduled to be in-service by end of 2019/20 planning period were analyzed

All IARR-eligible RTEP upgrades did not produced IARRs



APPENDIX



RTEP IARR Analysis Results for 2019/20 Planning Period

			In-Service		Pre-Upgrade	Post-Upgrade		IARR	
Project #	Туре	Upgrade Description	Date	Impacted Facility*	ARR Capability	Pre-Upgrade Limit	ARR Capability	Post-Upgrade Limit	MW
		Upgrade substation equipments at							
		Conastone and Peach Bottom 500 kV							
b2766.1		(on the Peach Bottom – Conastone 500		Peach Bottom -		BAGLEY 230 KV BAG-GRA I/o		BAGLEY 230 KV BAG-GRA I/o	
b2766.2	Backbone	kV circuit) and increase facilities' ratings	6/1/2020	Conastone 500 KV	0	L230.Bagley-RaphaelRoad.2313	0	L230.Bagley-RaphaelRoad.2313	0
		Increase ratings of Peach Bottom							
		500/230 kV transformer to 1479 MVA		Peach Bottom -		BAGLEY 230 KV BAG-GRA I/o		BAGLEY 230 KV BAG-GRA I/o	
b2694	Merchant	normal/1839 MVA emergency	6/1/2019	Conastone 500 KV	0	L230.Bagley-RaphaelRoad.2313	0	L230.Bagley-RaphaelRoad.2313	0
		Replace station equipment at Nelson,							
		ESS H-471 and Quad Cities; Upgrade							
		conductor ratings of Cordova - Nelson,							
		Quad Cities - ESS H-471 and ESS H-							
b2692.1,		471 - Nelson 345 kV lines and mitigating		Cordova - Nelson		15616 Cherry Valley-Silver Lake		15616 Cherry Valley-Silver Lake	
b2692.2	Merchant	sag limitations	6/1/2019	345 KV	0	I/o 15502 Nelson-Electric Jct.	0	I/o 15502 Nelson-Electric Jct.	0
		Reconductor Michigan City - Bosserman		Michigan City -		Dumont - Stillwell 345 flow		Dumont - Stillwell 345 flow Dumont -	
b2973	Merchant	138kV	6/1/2020	Bosserman 138 kV	0	Dumont - wilton center 765	0	wilton center 765	0
				Roxanna - Praxair		Burnham-Munster 345 I/o		Burnham-Munster 345 I/o Dumont -	
b2975	Merchant	Reconductor Roxana - Praxair 138kV	6/1/2020	138 kV	0	Dumont - Wilton Center 765	0	Wilton Center 765	0

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