

PJM Market Efficiency Re-evaluation Process

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Market Efficiency Process Enhancement
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- Applies to market efficiency projects approved during previous RTEP Windows
- Using the current Market Efficiency Base Case
- Analysis performed individually, one project at a time
- Projects must meet the B/C criterion of 1.25

- Create a new base case by removing/reversing the topology related to the approved market efficiency project
- Measure the impact of adding back the approved market efficiency project
- Measure benefits for 15-year period starting with the in-service date
- For RPM projects also measure the capacity benefits
- Calculate the new B/C ratios



Example Reevaluation Results

PJM Window Project ID	Baseline#	Type	Area	Constraint	Cost (\$mill)	In-Service Date	B/C 2014/15 Window	BC Reevaluation 2017
201415_1-2A	b2690	Upgrade	PPL/BGE	Safe Harbor to Graceton 230 kV	\$ 1.10	2019	14.4	1.72
201415_1-2B	b2691	Upgrade	ME/PPL	Brunner Island to Yorkana 230 kV	\$ 3.10	2019	22.2	2.84
201415_1-4I	b2697.1-2	Upgrade	AEP	Fieldale to Thornton 138 kV	\$ 0.75	2019	101.2	9.47
201415_1-4J	b2698	Upgrade	AEP	Jacksons Ferry to Cloverdale 765 KV	\$ 0.50	2019	62	46.18
201415_1-9A	b2743.1-8, b2752.1-7	Greenfield	APS/BGE	AP-South	\$340.60	2020	2.48	1.30
201415_1-10B	b2693	Upgrade	COMED	Wayne to South Elgin 138 kV	\$ 0.10	2019	6.4	20.5
201415_1-10J	b2692.1-2	Upgrade	COMED	Cordova to Nelson 345 kV	\$ 24.60	2019	1.9	1.59
201415_1-10D	b2728	Upgrade	COMED	Loretto-Wilton 345 kV (RPM)	\$ 11.50	2019	64.5	New In-Service Date: 12/31/2017
201415_1-11H	b2694	Upgrade	PECO	Peach Bottom 500 kV	\$ 9.70	2019	3	5.70
201415_1-12A	b2689.1-2	Upgrade	DUQ	Dravosburg to West Mifflin 138 kV	\$ 11.18	2018	2	2.63
201415_1-13E	b2695	Upgrade	DPL	Worcester to Ocean Pines (I) 69 kV	\$ 2.40	2019	65.3	10.14
201415_1-18G	b2688.1-3	Upgrade	APS	Taneytown to Carroll 138 kV	\$ 5.20	2019	90.1	8.50
201415_1-18I	b2696	Upgrade	APS/ATSI	Krendale to Shanor Manor 138 kV	\$ 0.60	2019	123.4	78.88
Optimal Caps	b2729	Upgrade	DOM	AP-South	\$ 8.98	2019	15.4	2.16

- Cumbersome process requiring the need to analyze all projects
 - Projects that are not costly
 - Projects that are still needed (congestion driver is still there)
- Results may not be accurate as removing the approved Market Efficiency project from the current base case may introduce reliability violations
- The project may have incurred significant development costs up to the re-evaluation date.
- Regulatory challenges

Appendix A – Operating Agreement & Manual References

- Scope, PJM requirements & Member requirements
- <http://www.pjm.com/about-pjm/member-services.aspx>
- PJM Manual 14B, Section 2.6:
<http://www.pjm.com/~media/documents/manuals/m14b.ashx>
- PJM Operating Agreement, Schedule 6, Section 1.5.7:
<http://www.pjm.com/media/documents/merged-tariffs/oa.pdf>
- PJM Market Efficiency Practices <http://www.pjm.com/~media/planning/rtep-dev/market-efficiency/pjm-market-efficiency-modeling-practices.ashx>