Appendix – Errata

Section 1, Introduction

Change: On page 5, update paragraph as follows:

The goal of the design should be to assign the rights to 100 percent of the congestion revenues to load. But the actual results fall well short of that goal. The current allocation of congestion revenue resulted in a total of ~~$2,405.6~~ $2,209.1 million in unreturned congestion revenue to ARR holders, and only a ~~69.6~~ 71.2 percent congestion offset over the last eight planning periods.

Change: On page 65, update paragraph as follows:

The current ARR/FTR design does not serve as an efficient way to ensure that load receives all the congestion revenues or has the ability to receive the auction revenues associated with all the potential congestion revenues. Total ARR and self scheduled FTR revenue offset only ~~63.8, 86.5, 98.1, 50.7 and 84.7~~ 65.3, 90.3, 100.0, 50.0 and 87.6 percent of total congestion costs including congestion in the Day- Ahead Energy Market and the balancing energy market for the 2014/2015, 2015/2016, 2016/2017, 2017/2018 and the first four months of 2018/2019 planning periods.

Section 5, Capacity Market

Change: On page 251, update paragraph as follows:

In the 2021/2022 RPM Base Residual Auction, EMAAC had 4,352.6 MW of CTRs with a total value of ~~$487,459,785~~ $40,877,295, PSEG had 4,990.5 MW of CTRs with a total value of ~~$960,336,601~~ $70,238,159, ATSI had 6,402.8 MW of CTRs with a total value of ~~$1,284,412,293~~ $73,219,252, ComEd had 1,527.9 MW of CTRs with a total value of ~~$129,676,100~~ $30,978,820, and BGE had 5,125.6 MW of CTRs with a total value of ~~$1,584,218,328~~ $112,812,971.

Section 11, Congestion and Marginal Losses

Change: On page 524, update paragraph as follows:

The current ARR/FTR design does not serve as an efficient way to ensure that load receives all the congestion revenues or has the ability to receive the auction revenues associated with all the potential congestion revenues. Total ARR and self scheduled FTR revenue offset only ~~63.8, 86.5, 98.1, 50.7 and 84.7~~ 65.3, 90.3, 100.0, 50.0 and 87.6 percent of total congestion costs including congestion in the Day- Ahead Energy Market and the balancing energy market for the 2014/2015, 2015/2016, 2016/2017, 2017/2018 and the first four months of 2018/2019 planning periods.

Section 13, Financial Transmission and Auction Revenue Rights

Change: On page 645, update paragraph as follows:

The current ARR/FTR design does not serve as an efficient way to ensure that load receives all the congestion revenues, or has the ability to receive the auction revenues associated with rights to all the potential congestion revenues. Total ARR and self scheduled FTR revenue offset ~~98.1~~ 100.0 percent of total congestion costs including congestion in the Day-Ahead Energy Market and the balancing energy market for the 2016/2017 planning period, before the allocation of balancing congestion and M2M payments to load. For the 2017/2018 planning period, after the reallocation of balancing congestion and M2M payments, ARR and self scheduled FTR revenue offset ~~50.7~~ 50.0 percent of total congestion.

Change: On page 651, update paragraphs as follows:

Load was made significantly worse off as a result of the changes made to the FTR/ARR process by PJM based on the FERC order of September 15, 2016. ARR revenues were significantly reduced for the 2017/2018 FTR Auction, the first auction under the new rules. ARRs and self scheduled FTRs offset ~~50.7~~ 50.0 percent of total congestion costs for the 2017/2018 planning period rather than the ~~55.6~~ 60.5 percent offset that would have occurred under the prior rules, a difference of $~~124.9~~ 125.8 million. There was a significant amount of congestion in January 2018 which adversely affected the congestion offset value of ARRs. ARR revenue is fixed at annual auction prices, but congestion revenue varies with congestion. The net increase in ARR value from the reassignment of balancing congestion and M2M payments to load, as predicted by proponents of the reassignment, did not occur.

If these allocation rules had been in place beginning with the 2011/2012 planning period, ARR holders would have received a total of $~~1,159.1~~ 1,160.0 million less in congestion offsets from the 2011/2012 through the 2017/2018 planning period. The total overpayment to FTR holders for the 2011/2012 through 2017/2018 planning period would have been $1,315.1 million. The underpayment to load and the overpayment to FTR holders is a result of several factors in the rules, all of which mean the transfer of revenues to FTR holders and the shifting of costs to load. Load is now required to pay for balancing congestion, which significantly increases costs to load and significantly increases revenues paid to FTR holders while degrading the ability of ARRs to provide a predictable offset to congestion costs. PJM will continue to clear counter flow FTRs using auction revenues greater than the ARR target allocations in order to make it possible to sell more prevailing flow FTRs. FTR holders will also receive day-ahead congestion revenues in excess of target allocations. FTR holders will also receive additional auction revenue, which is what FTR holders were willing to pay for FTRs above what is provided to ARR holders through ARR target allocations on defined paths.

Beginning with the 2018/2019 planning period, surplus auction revenue, which is defined as day-ahead congestion revenue and surplus auction revenue remaining after funding ARRs, and then FTRs, will be allocated to ARRs pro-rata based on ARR target allocations.16 This surplus revenue is generated by a failure of the current ARR/FTR construct to make all congestion revenue rights available to load in the form of ARRs. All congestion revenue belongs to ARR holders, and PJM's new surplus congestion allocation rule is an attempt to get closer to that goal. However, under the current rules, ARR holders will only have access to this surplus after full funding of FTRs is accomplished, which does not fully recognize ARR holders' primary rights to this surplus congestion revenue. If this rule had been in effect for the 2017/2018 planning period, ARRs and FTRs would have offset ~~76.8~~ 81.1 percent of total congestion rather than ~~50.7~~ 50.0 percent. For the first four months of the 2018/2019 planning period, if the surplus auction revenue were distributed to load, load would have offset ~~95.9~~ 87.6 percent of congestion costs. Under the previous rule, which did not include the allocation of this surplus to load, load would have offset only ~~84.7~~ 76.3 percent of their congestion costs.

Change: On page 675, update paragraphs as follows:

The allocation of balancing congestion and M2M payments to load went into effect in the 2017/2018 planning period. If these rules had been in place beginning with the 2011/2012 planning period, ARR holders would have received a total of $1,034.2 million less in congestion offsets from the 2011/2012 through the 2016/2017 planning period. The total overpayment to FTR holders for the 2011/2012 through 2016/2017 planning period would have been $944.4 million. The actual underpayment to load in the 2017/2018 planning period was $~~124.9~~125.8 million with a $370.7 million overpayment to FTR holders. If the surplus congestion from the first four months of the 2018/2019 planning period were allocated to load, the underpayment to load in the same period would have been $~~14.1~~19.6 million.

Allocating surplus congestion revenue to load rather than FTRs in the 2018/2019 planning period would have improved the total congestion offset for load to ~~95.9~~ 87.6 percent from ~~100.0~~ 95.9 percent under the old rules or ~~84.7~~ 76.3 percent under the rules that allocated balancing congestion to load. ~~For the first four months of the 2018/2019 planning period, if load had not been allocated balancing congestion they would have been able to completely offset their congestion costs, even without surplus revenue.~~

Change: On page 675, update Table 13-20 as follows:

Table 13-20 ARR and FTR total congestion offset (in millions) for ARR holders: 2011/2012 through 2018/2019

Revenue					Pre 2017/2018 (Without Balancing)		2017/2018 (With Balancing)		Post 2017/2018 (With Surplus)	
Planning Period	ARR Credits	FTR Credits	Total Congestion	Excess Revenue	ARR/FTR Offset	Percent Offset	Revenue Received	Percent Offset	Revenue Received	New Offset
2011/2012	$512.2	$249.8	$749.7	($192.5)	$762.0	100.0%	$598.6	79.8%	$598.6	79.8%
2012/2013	$349.5	$181.9	$524.8	($292.3)	$531.4	100.0%	$275.9	52.6%	$275.9	52.6%
2013/2014	$337.7	$456.4	$1,870.6	($678.7)	$794.0	42.4%	$574.1	30.7%	$574.1	30.7%
2014/2015	$482.4	$404.4	$1,357.6	$139.6	$886.8	65.3%	$686.6	50.6%	$826.2	60.9%
2015/2016	$635.3	$223.4	$951.1	$42.5	$858.8	90.3%	$744.8	78.3%	$787.3	82.8%
2016/2017	$640.0	$169.1	$780.8	$72.6	$809.1	100.0%	$727.7	93.2%	$800.3	100.0%
2017/2018	$427.3	$294.2	$1,192.6	$371.2	$721.5	60.5%	$595.7	50.0%	$966.9	81.1%
2018/2019*	$177.0	$46.9	$244.8	$38.3	$234.8	95.9%	$186.9	76.3%	$225.2	87.6%
Total	$3,561.5	$2,026.0	$7,672.1	($499.3)	$5,598.3	73.0%	$4,390.5	57.2%	$5,054.6	65.7%

* Four months of 2018/2019 planning period