

FTR update

FTRSTF January 28, 2015

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Emergency outages:

 Uncontrollable because of RT emergency transmission or generator outages. DA had no information about these outages while running the DA cases

Real time Operations:

 Uncontrollable because of reasons such as RT switching, RT de-rating of lines for transmission/generation control, and other various decisions made by operations that were necessary and not known of when the DA cases were ran.

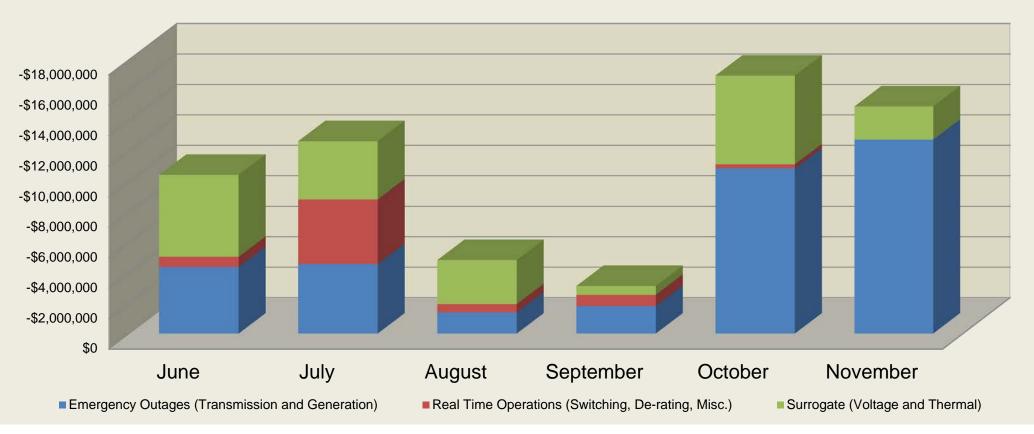
Surrogates

 Uncontrollable because of RT decisions to reduce ratings that were required for voltage or thermal control. This may have been necessary by Operations in order to get specific generator units to run and maybe to set price.



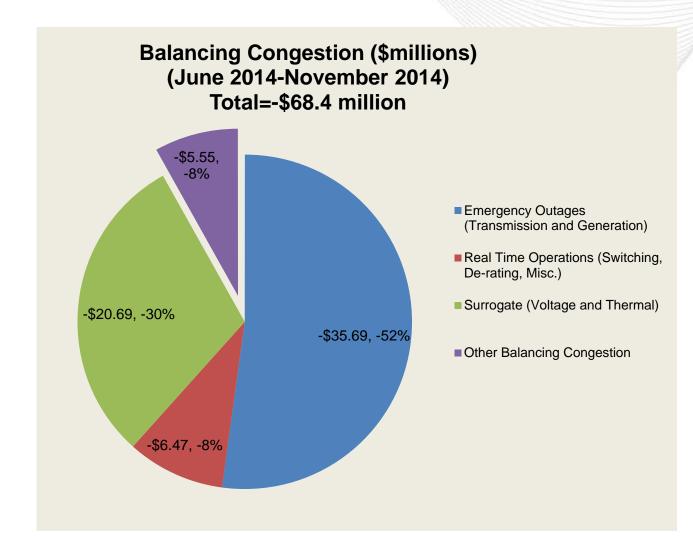
Uncontrollable Balancing Congestion







Uncontrollable Balancing Congestion



Assignments of Uncontrollable Negative Balancing Congestion (June 2014-November 2014)				
Uncontrollable Balancing Inadequacy Cause	Total (\$millions)			
Emergency Outages (Transmission and Generation)	-\$35.7			
Real Time Operations (Switching, De-rating, Misc.)	-\$6.5			
Surrogate (Voltage and Thermal)	-\$20.7			
Total Uncontrollable Negative Balancing Congestion	-\$62.9			
Other Balancing Congestion	-\$5.6			
Total Balancing Congestion	-\$68.4			



Uncontrollable Balancing Congestion Notes

- Uncontrollable Balancing congestion represented about 92% of all Balancing Congestion for the June 2014 thru November 2014 period
- Uncontrollable Balancing Congestion from Emergency Outages represented 52% of all Balancing Congestion for the June 2014 thru November 2014 period
 - Emergency outages are impossible to predict and cannot be modeled in FTR or DA
- > PJM recommends allocating a fixed 50% of Balancing congestion to RT Load + Exports
 - Balancing Congestion from uncontrollable emergency outages is ~50%
 - Fixed 50% provides certainly for more hedging/projecting
 - Should allow for use of a less conservative ARR model and result in additional Stage 1B ARRs to clear to help maximum ARR allocation and FTR Revenue Adequacy



Balancing Congestion impact

➤ Impact of allocating 50% of Balancing Congestion up to dollars necessary to achieve 100% funding

			Proposed 50% of Balancing Congestion+M2M Allocated differently			
Planning Period	Total Surplus (\$millions)	FTR Payout Ratio	50% of Balancing Congestion + M2M	Amount Allocated differently (\$millions)	New Total FTR Surplus (\$millions)	New FTR payout Ratio
2014/2015**	\$36.1	107%	-\$38.9	\$0.0	\$36.1	107%
2013/2014	-\$691.4	72%	-\$209.8	-\$209.8	-\$481.5	81%
2012/2013	-\$309.4	66%	-\$187.0	-\$187.0	-\$122.4	86%
2011/2012	-\$191.9	81%	-\$167.3	-\$167.3	-\$24.7	98%
2010/2011	-\$260.5	85%	-\$181.8	-\$181.8	-\$78.7	95%
2009/2010	-\$29.6	97%	-\$89.5	-\$29.6	\$0.0	100%

^{**}thru 12/13/14

Updated Historical Data

	ARR Credits					
Planning Period	Stage 1A	Stage 1A from Infeasible Rights	Stage 1B	50% of Balancing Congestion + M2M (\$ millions)	FTR Total Surplus (\$millions)	
2014/2015**	\$723.26	\$78.89	\$2.41	-\$61.8	\$36.1	
2013/2014	\$452.74	\$103.64	\$26.64	-\$209.8	-\$691.4	
2012/2013	\$514.21	\$92.42	\$32.13	-\$187.0	-\$309.4	

^{**2014/2015} Balancing Congestion projected for remainder of Planning Period

^{**2014/2015} FTR Total Surplus thru 12/13/14

Does not include FTR Forfeitures, adjustments, etc



PJM Recommended Package

> PJM recommends the following package based on feedback from members, Monitoring Analytics, polls, and PJM staff.

Design Component	Item	Solution Name	Description
Allocation of Balancing Congestion surplus/deficiency	1F	50% to Real-Time Load + Exports (Capped at the lower of either 50% or level necessary to achieve 100% funding)	50% of Balancing congestion, positive or negative, would be allocated to RT load + exports (Capped at the lower of either 50% or level necessary to achieve 100% funding)
Allocation of M2M Payments surplus/deficiency	2F	50% to Real-Time Load + Exports	50% of M2M Payments, positive or negative, would be allocated to RT load + exports
Allocation of FTR surplus/deficiency	3D	Excess FTR Auction revenues and Day-ahead congestion after funding FTRs to be allocated to 50% of balancing congestion up to amount paid. Additional excess allocated to FTR holders. Insufficient FTR Auction revenues and Day-ahead congestion to be allocated to FTR holders pro-rata based on Target Allocation.	This option assumes a maximum of 50% of Balancing Congestion is no longer allocated to FTR holders. Surplus dollars at end of planning period after ARR and FTR holders are paid out 100% would be allocated to those who paid the 50% of balancing congestion but not to exceed the amount that was paid. Any additional excess would go to FTR holders. Insufficient dollars to fund FTRs at end of planning period would be allocated FTR holders pro-rata based on FTR Target allocations.
Historical Resources	14C	Based on Historical Reference Year. Retirements replaced with oldest available resource committed for zone for upcoming planning year that is not already a historical resource.	This option is same as status quo but when a generator retires PJM will make available ARR requests to new generator in the same zone that has the oldest in-service date, is a capacity resource, and is not already available as a stage 1 ARR source location.
Stage 1A 10 Year process	17A	Escalation of current ARR results using zonal load forecast growth rate +1.5%	This option is same as status quo except the zonal 10 year load forecast rate would be increased by 1.5%
Treatment in settlements of Portfolio netting of FTRs	19A	Do not allow positive FTRs to offset negative FTRs within a portfolio. Treat each FTR individually.	This would change the hourly and uplift FTR payout calculation so that negative target allocations within a members portfolio cannot be used to offset positive target allocations. Portfolios that currently include negative target allocation FTRs would be impacted more by over or under funding. Sell offers would still be able to offset Buy bids within a members portfolio.
Report of monthly payout ratios	18A	Use Negative Target Allocations as increase in congestion revenue in reporting of monthly payout ratios	This option changes the monthly reporting where negative target allocations increase congestion revenue instead of lowering FTR total allocations. This is only a reporting change and has no impact on FTR Revenue adequacy.