

FTRSTF

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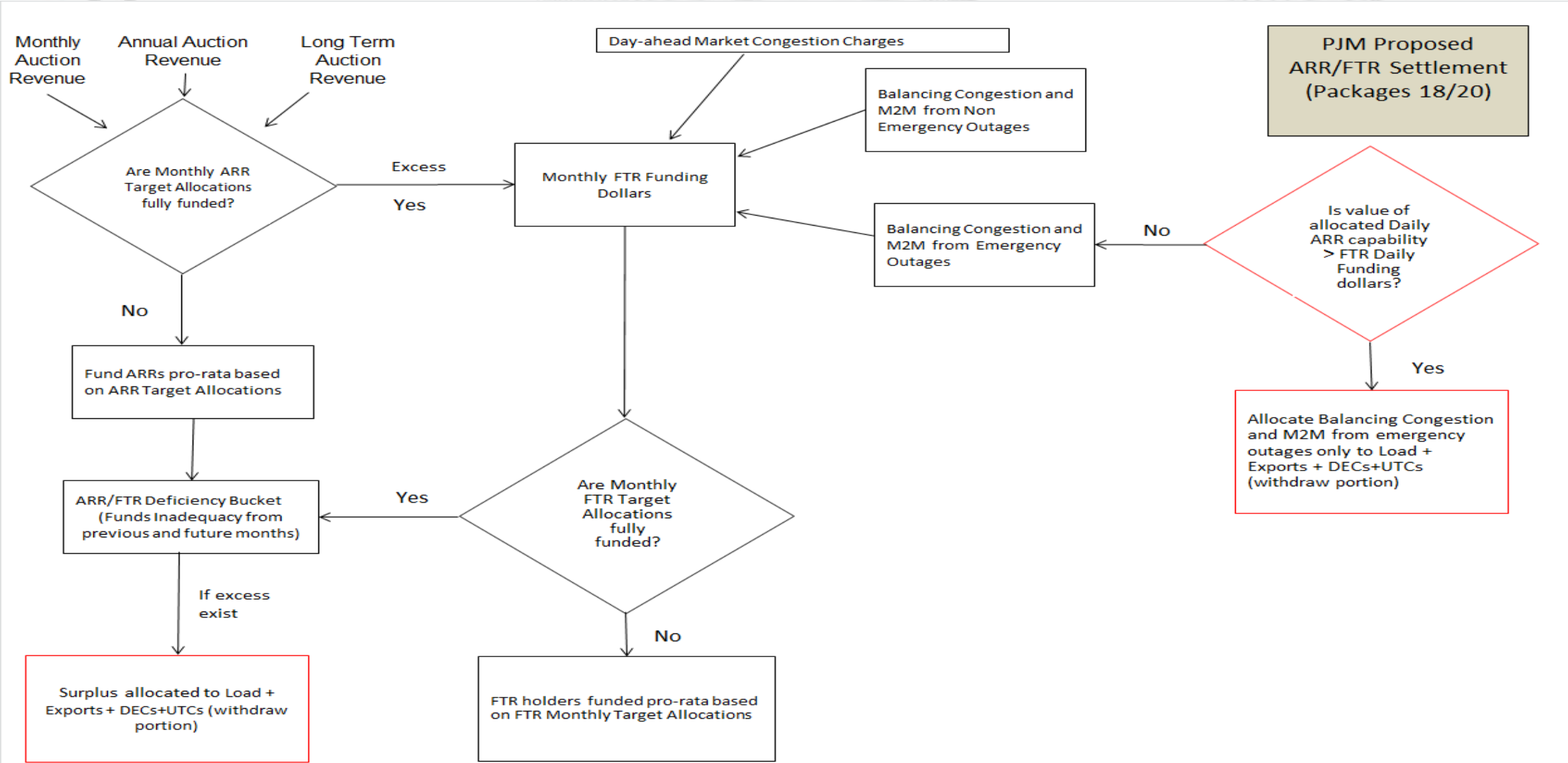
Summary of PJM Proposed Packages

- Balancing Congestion Allocation
 - Ensures only a subset of Balancing Congestion is allocated differently if the congestion hedge associated with ARR physical capability cannot be assured.
- Two different methods proposed for allocating end of planning period FTR surplus/deficiency
- Treatment in Settlement of Portfolio netting of FTRs
 - Packages with and without Portfolio netting
- Package created with no Balancing Congestion Impacts
- All packages to be effective with 2016/2017 Planning period
- *Stage 1 Historical Resources to be discussed separately*

	PJM Proposed Packages				
Design Components	18	19	20	21	22
Allocation of Balancing Congestion surplus/deficiency	Only Balancing Congestion(including M2M Payments) associated with Emergency Outages (Transmission and Generation) may be allocated to Load + Exports + DEC's + UTCs (withdraw portion) IF the value of the allocated ARR capability is greater than the FTR funding dollars. Capped at the Balancing Congestion dollars associated with emergency outages.				Status Quo
Allocation of M2M Payments surplus/deficiency					Status Quo
Allocation of FTR surplus/deficiency	FTR Surplus allocated to Load + Exports + DEC's + UTCs (withdraw portion). All deficiencies allocated to FTR Holders pro-rata based on FTR Target Allocations.	Status Quo	FTR Surplus allocated to Load + Exports + DEC's + UTCs (withdraw portion). All deficiencies allocated to FTR Holders pro-rata based on FTR Target Allocations.	Status Quo	Status Quo
Stage 1A 10 Year process	Escalation of current ARR results using zonal load forecast growth rate +1.5%				
Report of monthly payout ratios*	Use Negative Target Allocations as increase in congestion revenue in reporting of monthly payout ratios				
Treatment in settlements of Portfolio netting of FTRs	Do not allow positive FTRs to offset negative FTRs within a portfolio. Treat each FTR individually.		Status Quo		Do not allow positive FTRs to offset negative FTRs within a portfolio. Treat each FTR individually.
Historical Resources	To be discussed				
Implementation Date	2016/2017 Planning Period				

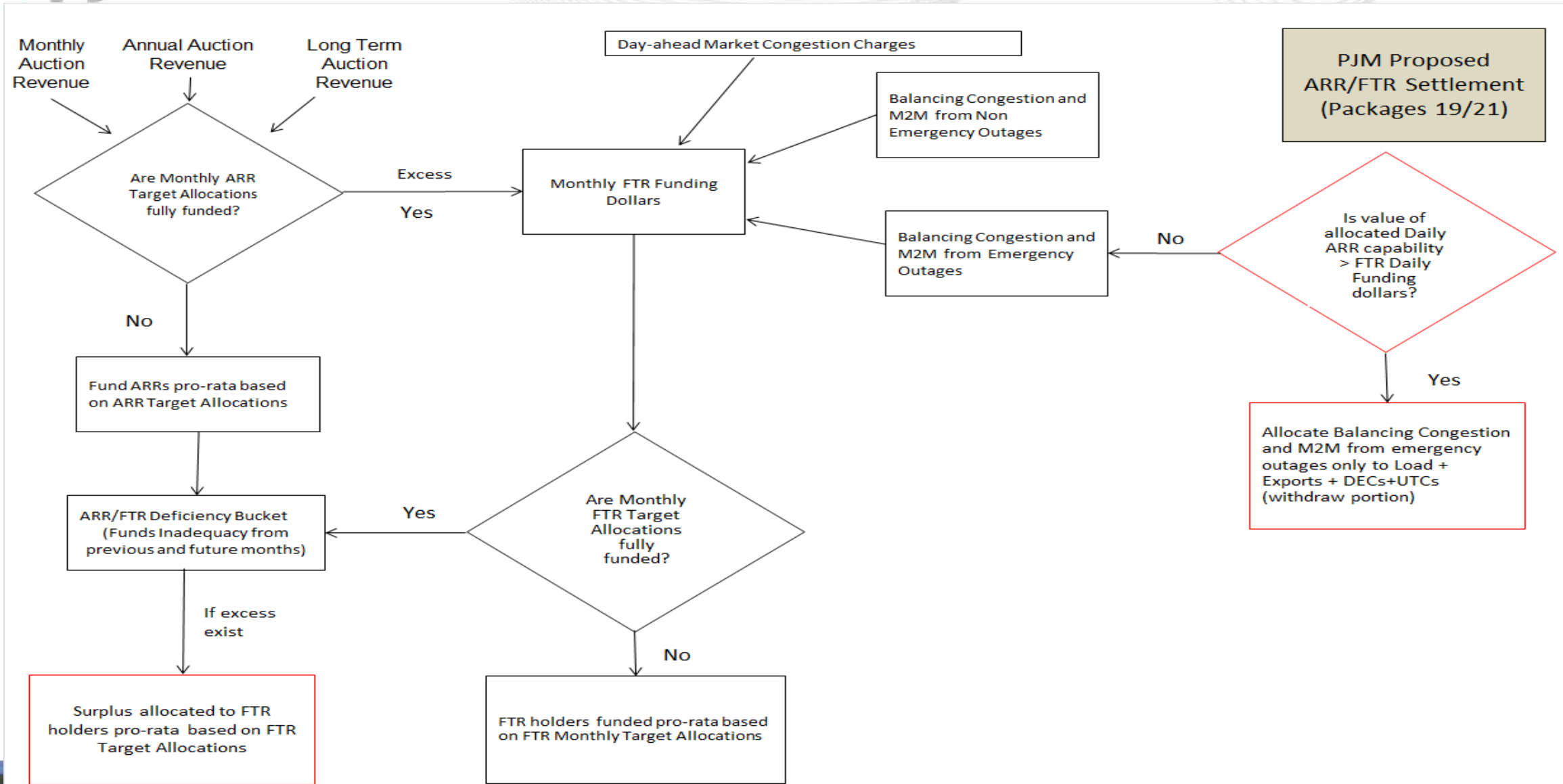


PJM Proposed Packages: Settlement Flow Chart (Packages 18 and 20)





PJM Proposed Packages: Settlement Flow Chart (Packages 19 and 21)



New Proposed Option for treatment of retirement of Stage 1 Historical Resources

- Provides maximum benefit while ensuring no increase in over allocation
- Recommended to add to all PJM packages

Historical Resources

- Retirements replaced with most valuable capacity resource for zone for upcoming planning year that is not already a historical resource and has been in service for a minimum of five years.
- The most valuable historical resource will be determined based on the previous year's Annual Auction clearing prices.
- Replacement resource MWs will be equivalent to the MWs of retired unit. If retired unit historical ARR MWs < replacement resource MWs then replacement resource MWs will be set equal to retirement resource MWs. If historical resource MWs > replacement resource MWs then additional replacement resources will be added up to the capacity of the retirement resource MWs.
- If the replacement resource creates Stage 1A infeasible MWs based on previous planning period ARR allocation or based on the 10 year Stage 1A analysis then the next most valuable resource that does not cause Stage 1A infeasible MWs will be used as the replacement.

Appendix A: Details of PJM Proposal for Balancing Congestion Allocation

FTR Revenue Adequacy

Funding Percentage

2013/2014: 72%

2014/2015*: 106%

*thru January 2015



Allocation of ARR Rights

ARR Stage 1B:

2013/2014: \$27 million

2014/2015: \$2 million

PJM Tariff and OA

7.5 Simultaneous Feasibility.....The goal of the simultaneous feasibility determination shall be to ensure that there are sufficient revenues from Transmission Congestion Charges to satisfy all Financial Transmission Rights obligations for the auction period under expected conditions and to ensure that there are sufficient revenues from the annual Financial Transmission Right Auction to satisfy all Auction Revenue Rights obligations.

FTR Funding has improved because reasons such as the follow:

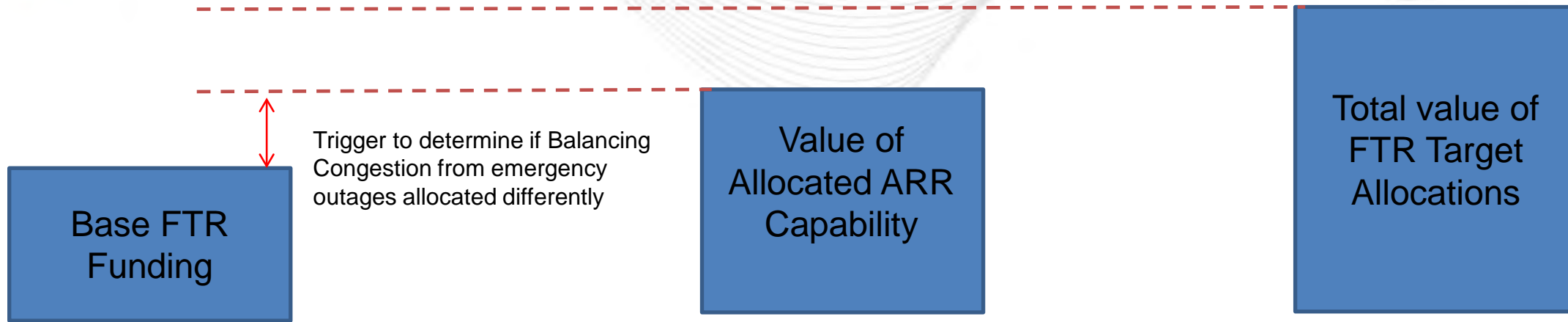
- **More restrictive ARR Allocation**
- Improved FTR Modeling
- Transmission Upgrades
- Enhanced Market Tools
- Improved M2M coordination
- New FTR rules for reducing over allocated facilities by clearing more counter flow FTRs (at expense of auction revenue)

Planning Period	Revenue Adequacy	Total Surplus
2009-10	97%	-\$28
2010-11	85%	-\$254
2011-12	81%	-\$192
2012-13	69%	-\$288
2013-14	72%	-\$677
2014-15*	106%	\$44

*through January 2015

- ARR allocation reductions have offset the balancing congestion impact of emergency outages.
- FTR improvements alone should be enough to maintain FTR Revenue Adequacy assuming the following:
 - No Emergency outages - **Impossible to avoid**
 - OR
 - ARR allocations remain reduced - **Not Optimal**
- PJM recommended solution is to allocate only Balancing congestion from emergency outages differently **only** if the emergency outages reduce funding below the approved ARR capability.
 - Should improve ARR allocations while maintaining FTR Revenue Adequacy

- ARR holders are guaranteed FTRs through the self scheduling mechanism.
- FTR Capability associated with cleared ARR MWs correlate to physical congestion hedges.
 - Additional FTR cleared capability is associated with Monthly, Long Term, and excess Annual capability.
- Balancing Congestion associated with Uncontrollable or Emergency Outages could be allocated differently **only** if this Balancing congestion reduces FTR funding below the ARR cleared capability value.
 - Ensures only a subset of Balancing Congestion is allocated differently if the congestion hedge associated with ARR physical capability cannot be assured.



- FTR Base Funding < ARR Annual Capability so this triggers the use of Balancing Congestion from emergency outages to be allocated to Load + Exports + DEC's + UTCs (withdraw portion).
- Ensures only balancing congestion from emergency outages is allocated differently if allocated ARR capacity is greater than Base FTR funding dollars and not associated with any excess monthly, long term, or annual FTRs.

$$\text{ARR DA Target Allocation} = \text{ARR MWs (Day-ahead}_{\text{Sink Cong. LMP}} - \text{Day-ahead}_{\text{Source Cong. LMP}})$$

$$\text{FTR Target Allocation} = \text{FTR MWs (Day-ahead}_{\text{Sink Cong. LMP}} - \text{Day-ahead}_{\text{Source Cong. LMP}})$$



PJM Proposed Packages – Balancing Congestion and ARR Allocation Estimated Impact (\$millions)

Planning Period	Original FTR Surplus	Balancing Congestion to be Allocated Differently	\$/MWh estimated rate for Balancing Congestion Allocation (RT Load + Exports +DECs+ UTCs (Withdraw portion)	New FTR Surplus	Projected increase in ARR value (assumed Self Scheduled)
2013/2014	-\$691.4	\$84.8	0.06	-\$606.6	\$77.9
2014/2015*	\$45.2	\$26.0	0.03	\$71.3	\$33.2

*thru January 2015



PJM Proposed Packages – Balancing Congestion and ARR Allocation Estimated Breakout

Planning Period	Balancing Congestion to be Allocated Differently (\$ millions)	Additional Balancing Congestion Cost Breakout (\$millions)			
		RT LOAD	Exports	DECs	UTCs
2013/2014	\$84.8	\$48.5	\$2.2	\$3.5	\$30.5
2014/2015*	\$26.0	\$17.4	\$0.8	\$1.3	\$6.6

Planning Period	Projected increase in ARR value (assumed Self Scheduled)
2013/2014	\$77.9
2014/2015*	\$33.2

*thru January 2015