

FTR Credit Exposure from Transmission Changes Solution Option "A"

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- Transmission upgrades in congested areas may reduce congestion such that the FTR credit calculation using historical values might no longer provide adequate risk coverage
 - Primary concern is prevailing flow paths into congested areas
- Option “A” would use PJM’s Production Costing model (PROMOD) to simulate transmission changes, and would increase credit requirements if simulation indicates an increased credit exposure from the transmission changes
 - The fundamental credit calculation framework would not change
 - Only historic values would be adjusted based on the simulation

- Method for adjusting historical values for Annual (Year 0) and LTFTR Years 1-3 based on Production Costing cases:
 1. Separate Production Costing* cases used for each year
 - Existing planning cases used for Year 0 and Year 3
 - Cases for Year 1 and Year "-1" created from Year 0 by adjusting for planned upgrades between years
 - Year 2 would use Year 1 data
 2. Percentage congestion change calculated for each node in each year based on difference between yearly case and the Year "-1" case
 3. Delta percentages for each year applied to 50/30/20 historical values to create adjusted historical values for each node in each year

*Currently, PROMOD is used for Production Costing cases

- Method for adjusting historical values for Annual (Year 0) and LTFTR Years 1-3 based on Production Costing cases (cont'd)
 4. Path value calculated with both actual and adjusted 50/30/20 values
 5. Difference compared against threshold percentage
 - If difference less than threshold, actual values would be used for all calculations
 6. Credit calculation for prevailing flow paths would use the lower path value
 7. Credit calculation for counterflow paths would use the higher path value

- No incremental credit exposure since credit requirements would never be lower than requirements under current rules
 - Threshold would let credit requirements target major changes and eliminate “noise” in simulation runs
- Historical values would normally be adjusted once each spring, just as they are now
 - Tariff would allow for additional adjustment for significant additional transmission changes



FTR Historical Value Adjustments for Transmission Upgrades Production Costing* Cases

-3	-2	-1	0	1	2	3
CY 2014	CY 2015	CY 2016	PY 17/18	PY 18/19	PY 19/20	PY 20/21
Used for Hist. 20%	Used for Hist. 30%	Used for Hist. 50%	Annual Auction	LTFTR Year 1	LTFTR Year 2	LTFTR Year 3
		Production Costing As-Is-1 Case	Production Costing "As-Is" Case	Production Costing As-Is+1 Case	Use As-Is+1 Case	Production Costing "Base" Case
Production Costing Results:		\$10	\$9	\$8	\$8	\$6
Production Costing Delta Percentages:			-10%	-20%	-20%	-30%

Proposed historical value adjustments for all FTR years (years 0 through 3) would use Production Costing percent deltas from the "As-Is-1" case

* Currently, PROMOD is used for Production Costing cases



FTR Historical Value Adjustments for Transmission Upgrades Solution Option “A” - Example

-3	-2	-1	0	1	2	3
CY 2014	CY 2015	CY 2016	PY 17/18	PY 18/19	PY 19/20	PY 20/21
Used for Hist. 20%	Used for Hist. 30%	Used for Hist. 50%	Annual Auction	LTFTR Year 1	LTFTR Year 2	LTFTR Year 3
		Production Costing As-Is-1 Case	Production Costing “As-Is” Case	Production Costing As-Is+1 Case	Use As-Is+1 Case	Production Costing “Base” Case
Production Costing Results:		\$10	\$9	\$8	\$8	\$6
Production Costing Delta Percentages:			-10%	-20%	-20%	-30%
Actual 50/30/20 Value = \$11		Adj. Values* =	\$9.90	\$8.80	\$8.80	\$7.70
Prevailing flow paths use:			\$9.90	\$8.80	\$8.80	\$7.70
Counterflow paths use:			\$11	\$11	\$11	\$11

* Proposed adjusted historical values for all FTR years (years 0 through 3) would use Production Costing percent deltas from the Yr “-1” case and apply those percent deltas to the actual 50/30/20 historical values