

### FTR Modeling Enhancements for Future Transmission Expansions

#### Problem / Opportunity Statement

During the 2017/20 Long-term FTR Auction conducted in 2016, PJM observed FTR Auction clearing prices for future years that were aligned with historic congestion patterns, suggesting a lack of full transparency to market participants into PJM's future Regional Transmission Expansion Plan (RTEP) expansions. RTEP upgrades have been planned, are under construction, or already energized, that are expected to reduce future congestion on these historic congestion patterns. This raises a concern for PJM because prices are, in-part, a reflection of expected transmission system capability which is defined by the network model on which the FTR Auction is cleared. Under today's construct, in its Long-term FTR Auction, PJM uses a network model that does not include any future transmission system expansions. Further, there is no criterion for including a specific future project in the FTR Auction model beyond six months. Therefore, PJM is concerned that its auction clearing prices for Long-term FTR Auctions may not fully reflect of the true future system capability.

While the Long-term FTR Auction has uncovered this area for improvement in modeling construct, it may apply to other FTR Auctions as well such as the Balance of Planning Period Auction.