

Transource AP-South (2014/15_9A) Project Reevaluation

Transmission Expansion Advisory Committee September 13, 2018

PJM TEAC – 9/13/2018 PJM©2018



History of 9A project

- Project submitted by Transource during 2014/2015 Regional Transmission Expansion Plan (RTEP) window to relieve AP-South congestion
- Initial approval benefit/cost ratio May 2016 was 2.48
- Capital cost \$340.6M used for May 2016, Sep 2017

Previous Reevaluation Processes

- Project reevaluated September 2017 Benefit/Cost ratio: 1.30
- Project reevaluated February 2018 Benefit/Cost ratio: 1.32
- Capital cost \$340.6M used for September 2017, Feb 2018
- Lower benefit/cost ratios due to reduced load payment benefits

Latest Reevaluation Process

- Project reevaluated September 2018 Benefit/Cost ratio: 1.42
- Capital cost \$366.17M



Reevaluation Model Assumptions as of August 31, 2018

- Used the current Market Efficiency Base Case (posted on 09/13/2018)
 - 2023 RTEP case, including all Board approved projects through Feb. 2018
 - Added BGE 5E project
- Model Assumptions as of August 31, 2018
 - Load forecast from 2018 PJM Load Forecast report
 - Latest ABB data release as of April 2018 with gas forecast update as of August 2018
 - Updated uniform generation expansion plan
 - Machine list from 2023 RTEP case
 - Generator status update as of May 2018, retirements as of August 2018
 - MEPETF Manual 14B change effective August 23rd
 - Generator Must Run status based on ABB's feedback and historical 2016-2018 evaluation
 - Reactive limits updated with and without 9A project
 - Updated ARR definitions to match aggregate definitions as defined in the 2018 ARR Allocation
 - Updated interregional modeling



Facility Name	Limiting Equipment (Preliminary)
Three Mile Island 500/230 kV	Transformer
Peach Bottom - Conastone 500 kV	Conductor
Hunterstown - Lincoln 115 kV	Conductor
Lincoln Tap - Lincoln 115 kV	Conductor
Lincoln - Straban 115 kV	Conductor



- The Benefit/Cost ratio for Transource 9A project is 1.42
- According to this latest analysis, the project is estimated to save \$866.2 million in congestion costs over 15 years
- There are significant reliability violations with Transource 9A removed from model
- There are RPM benefits for RTEP year due to BGE CETL increase
 - Difficult to estimate RPM benefits beyond the RTEP year due to lack of data
- Additional report will be available on PJM.com
- October/November TEAC will have reevaluation results of other projects