



TPA Exhibit No. \_\_\_\_

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

Transmission Expansion Advisory Committee  
September 13, 2018

PJM TEAC - 9/13/2018

PJM 2018

TPA Exh. 14  
A-2017-2640195  
A-2017-2640200  
2-25-19  
Harrisburg



- 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 23<sup>rd</sup>
    - 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



## Reliability Violations with 9A Removed

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



## Conclusion

- 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