## Transmission Expansion Advisory Committee DPL Supplemental Projects

August 4, 2020

## Needs

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the $\mathrm{M}-3$ process

## Need Number: DPL-2020-0001

Process Stage: Needs Meeting 08/04/2020

## Project Driver:

- Operational Flexibility and Efficiency
- Other - Industry Recommendations


## Specific Assumption Reference:

- Enhancing system functionality, flexibility or operability
- Remedy recurring operational problems
- Industry recommendations
- PJM Relay Subcommittee Directional Comparison Blocking (DCB) recommendations effective 4/17/2014
- Recommendations recognize DCB is widely used and dependable line protection scheme, but when certain elements of DCB schemes fail to operate, they often trip more equipment than is necessary.
- The tolerance for overtrips may be unacceptable when the stability of large generating units is adversely affected.
- A protection scheme more secure than DCB is recommended in cases where additional analysis reveals stability concerns.


## Problem Statement:

- The 500 kV 5015 line running from Red Lion Substation to the Hope Creek Nuclear Station (PSEG) has experienced 9 faults in a span of 10 years due to avian activity and lightning strikes, most recently occurring twice in April 2020. The line is currently protected by power line carrier and requires a more reliable method for fault detection and isolation to prevent possible overtrips.
- Access to multiple towers can only be accomplished by boat, making faults more difficult to locate and detect, adding to the need for more accurate fault location methods
- 5015 line is critical to the operation of the Hope Creek and Salem Generating plants.



## Questions?

## Planning <br> ... Community

## Appendix

## High level M-3 Meeting Schedule

| Assumptions | Activity | Timing |
| :--- | :--- | :--- |
|  | Posting of TO Assumptions Meeting information | 20 days before Assumptions Meeting |
|  | Stakeholder comments | 10 days after Assumptions Meeting |
|  | Activity | Timing |
|  | TOs and Stakeholders Post Needs Meeting slides | 10 days before Needs Meeting |
| Stakeholder comments | 10 days after Needs Meeting |  |
|  | Activity |  |
| Solutions | TOs and Stakeholders Post Solutions Meeting slides | 10 days before Solutions Meeting |
| Stakeholder comments | 10 days after Solutions Meeting |  |
| Supplemental | Activity | Do No Harm (DNH) analysis for selected solution |
| Projects \& Local | Post selected solution(s) | Timing |
| Slan | Stakeholder comments | Following completion of DNH analysis |

## Revision History

7/24/2020 - V1 - Original version posted to pjm.com

