

Sub Region RTEP Mid-Atlantic Committee ODEC Supplemental Projects

May 20, 2021

Solutions

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 M-3 process

ODEC Transmission Zone M-3 Process

Need Number: ODEC-2021-001

Previously Presented: Need Meeting 4/14/21

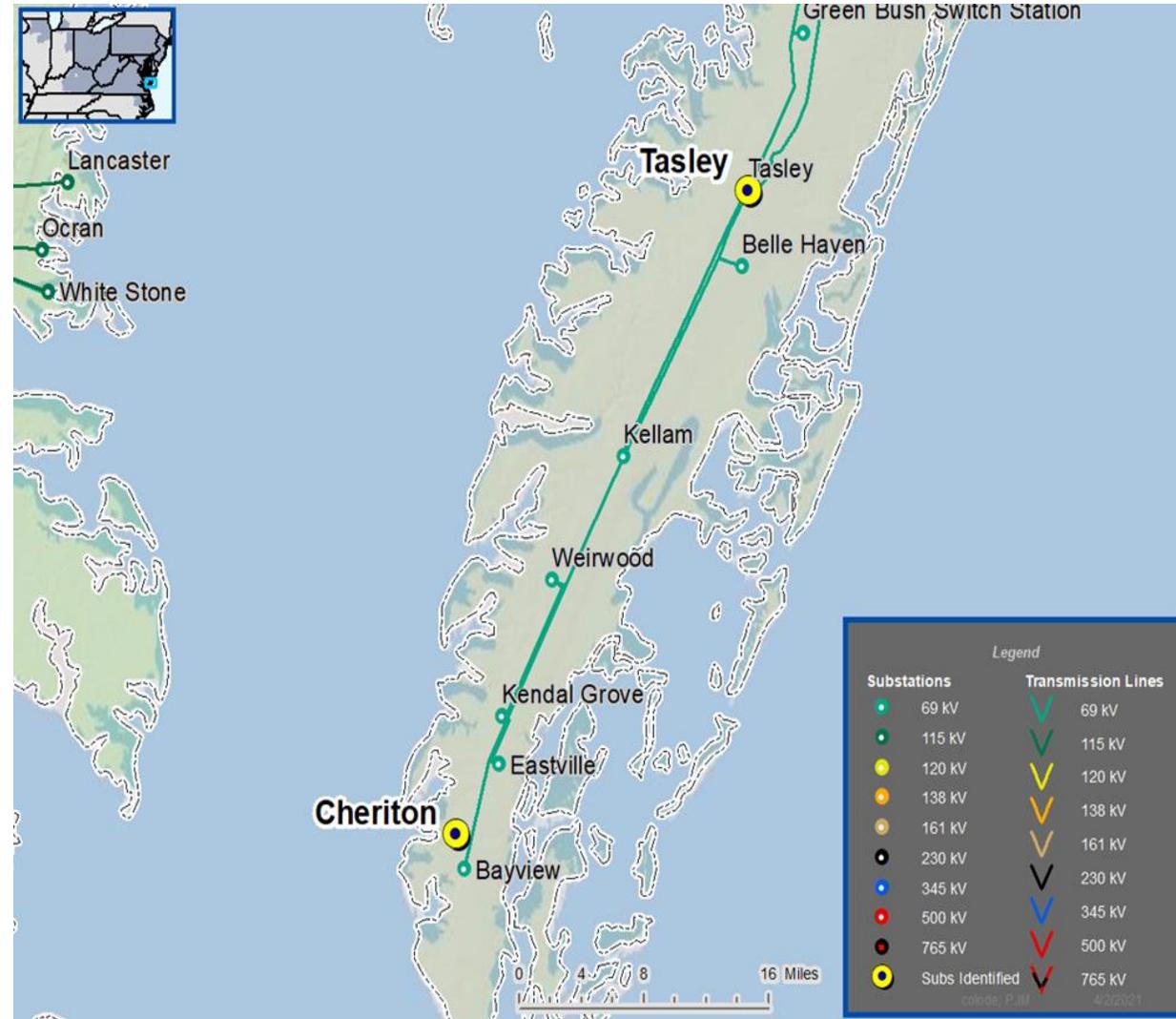
Process Stage: Solutions Meeting 5/20/21

Project Drivers:

- System reliability and performance
- Load at risk in planning and operational scenarios
- Unintentional islanding

Problem Statement:

- Protection and Control of the existing transmission system relies on over current and distance relays.
- Existing generation approximates load in multiple areas.
- Breaker failure backup relaying is currently at the next station upline and increases line clearing times.
- High speed, reliable communications does not exist between stations.
- Communications with PJM and to SCADA systems are being provided by third parties. ODEC wishes to take over these comms as one third party is planning on retiring existing equipment.
- Existing generators at Cheriton and Tasley presently detect islanding indirectly through abnormal frequency and voltage.



ODEC Transmission Zone M-3 Process

Need Number: ODEC-2021-001

Process Stage: Solutions Meeting 5/20/21

Proposed Solution:

- Install OPGW on the 110miles of transmission lines with underground fiber in the various areas where the transmission lines are underground such as airport runways or water crossings.

Alternatives Considered:

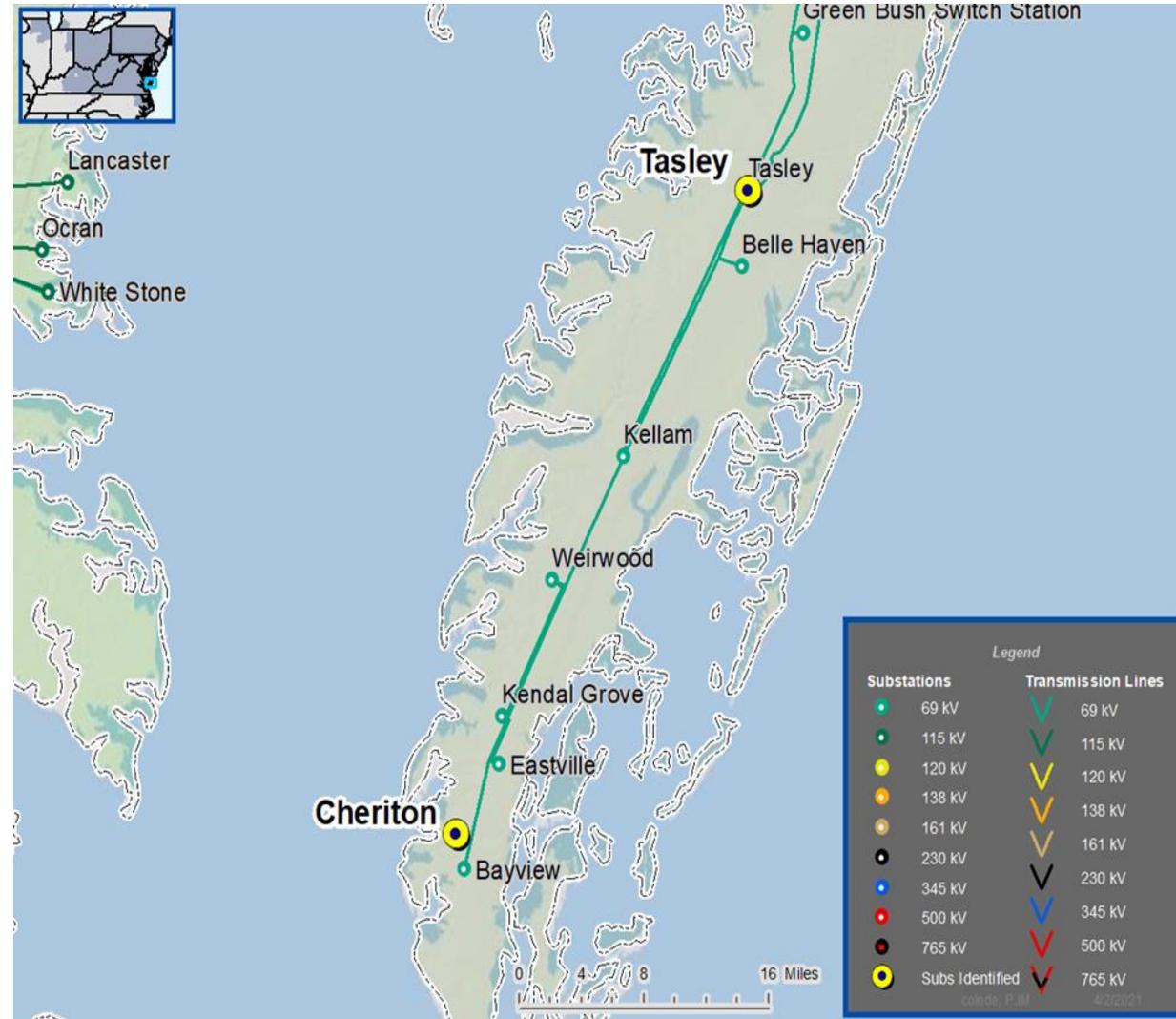
- Keeping the status quo with communications with PJM and to SCADA systems being provided by third parties. This solution doesn't provide for the high-speed protection required. Microwave options were reviewed but the permitting requirements and Right of Ways for line of sight were impractical in many areas.

Estimated Cost: \$20M

Projected In-Service: 2028 with segments being completed each year beginning in 2022.

Project Status: Preliminary Engineering

Associated Projects: None



Questions?



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
Needs	Activity	Timing
	TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
	Stakeholder comments	10 days after Needs Meeting
Solutions	Activity	Timing
	TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
	Stakeholder comments	10 days after Solutions Meeting
Submission of Supplemental Projects & Local Plan	Activity	Timing
	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
	Post selected solution(s)	Following completion of DNH analysis
	Stakeholder comments	10 days prior to Local Plan Submission for integration into RTEP
	Local Plan submitted to PJM for integration into RTEP	Following review and consideration of comments received after posting of selected solutions

Revision History

5/10/2021 – V1 – Original version posted to pjm.com