

Dominion Supplemental Projects

Transmission Expansion Advisory
Committee
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 M-3 process

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2020-0026

Process Stage: Need Meeting 08/04/2020

Project Driver: Customer Service

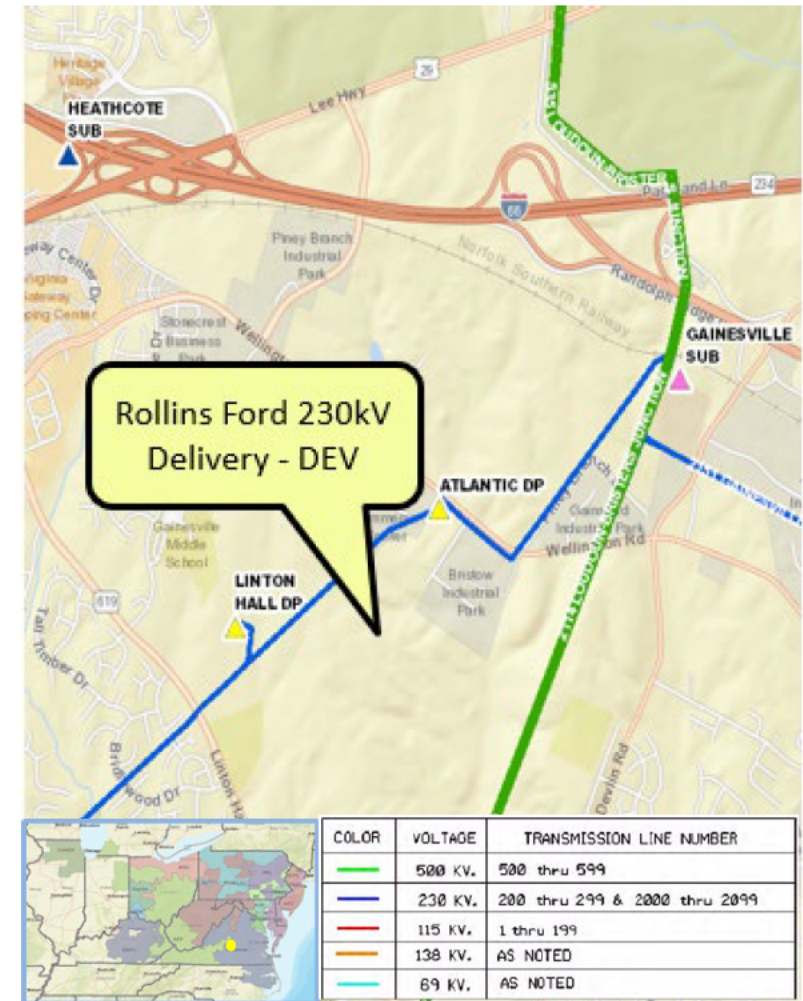
Specific Assumption References:

Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

Problem Statement:

NOVEC has submitted a DP Request for a new substation (Rollins Ford) to accommodate a new datacenter campus in Prince William County. NOVEC has requested a 230kV ring bus connection. Since the total load requested is less than 100 MW, NOVEC will be required to pay excess facilities for all equipment required for the ring bus configuration above a T-tap. Requested in-service date is 12/31/2021.

Initial In-Service Load	Projected 2032 Load
Summer: 1.0 MW	Summer: 89.6 MW



Dominion Transmission Zone: Supplemental Equipment Material Condition, Performance and Risk

Need Number: DOM-2020-0027

Process Stage: Need Meeting 08/04/2020

Project Driver: Equipment Material Condition, Performance, and Risk

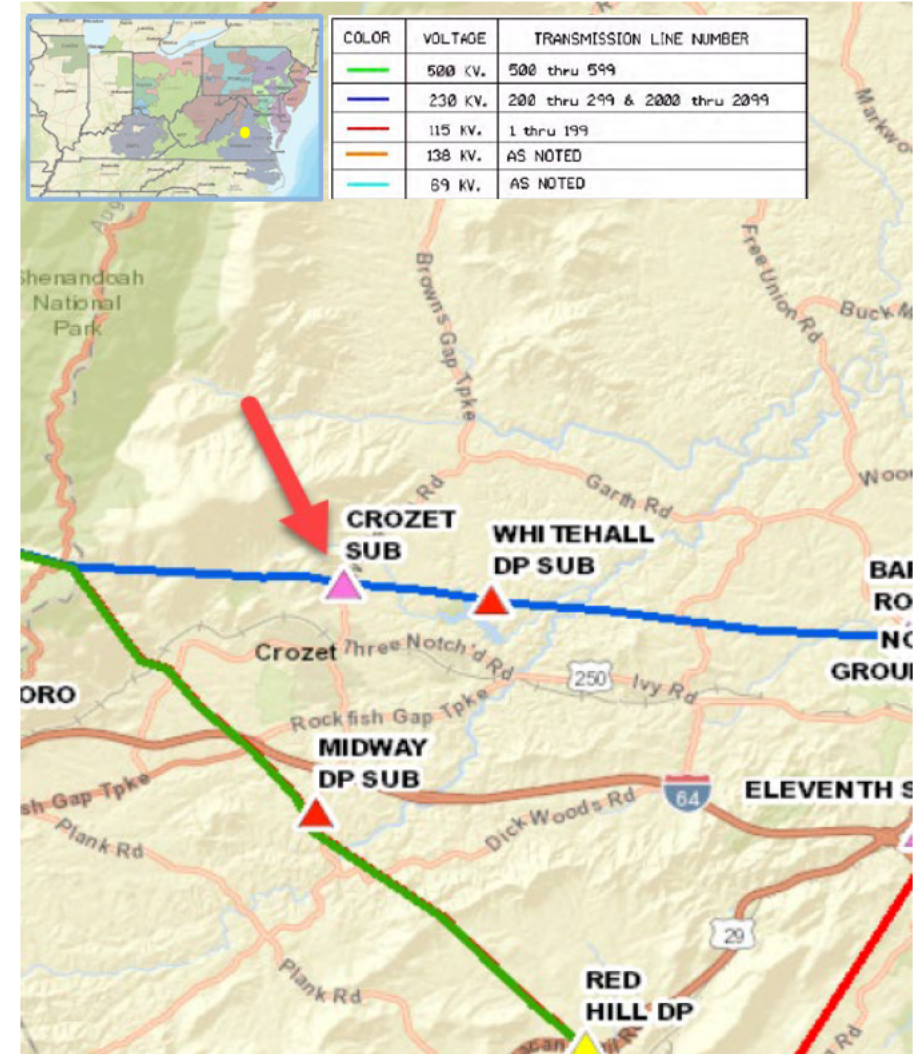
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2019

Problem Statement:

Line# 233 switches 23339 and 23336 are less than 15 years and have operating issues. These issues include the following:

- Multiple bottle failures
- The vertical drive pipe U-joints have broken multiple times
- System Control Center's records show they are inoperable (blue tagged)



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

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2020-0021

Process Stage: Solutions Meeting 08/04/2020

Previously Presented: Need Meeting 07/07/2020

Project Driver: Customer Service

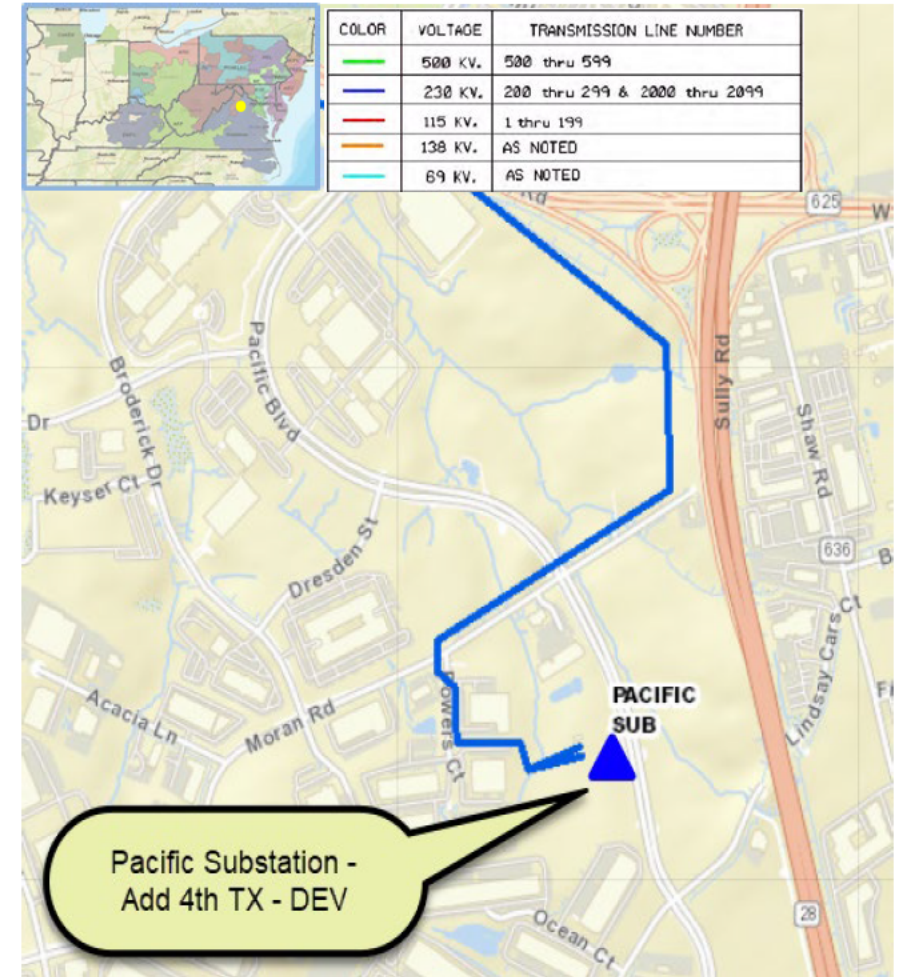
Specific Assumption References:

Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

Problem Statement:

DEV Distribution has submitted a DP Request to add a 4th distribution transformer at Pacific Substation in Loudoun County. The new 112MVA transformer is being driven by continued load growth in the area and contingency loading for loss of one of the existing transformers. Requested in-service date is 12/15/2021.

Initial In-Service Load	Projected 2025 Load
Summer: 200 MW	Summer: 252 MW



Dominion Transmission Zone: Supplemental Pacific 230kV Delivery- Add 4th TX - DEV

Need Number: DOM-2020-0021

Process Stage: Solutions Meeting 08/04/2020

Proposed Solution:

Install a 1200 Amp, 50kAIC circuit switcher and associated equipment (bus, switches, relaying, etc.) to feed the new transformer at Pacific .

Estimated Project Cost: \$0.40 M

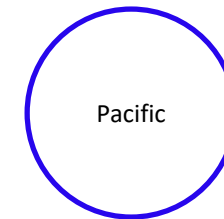
Alternatives Considered:

No feasible alternatives

Projected In-service Date: 12/15/2021

Project Status: Engineering

Model: 2025 RTEP



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2020-0022

Process Stage: Solutions Meeting 08/04/2020

Previously Presented: Need Meeting 07/07/2020

Project Driver: Customer Service

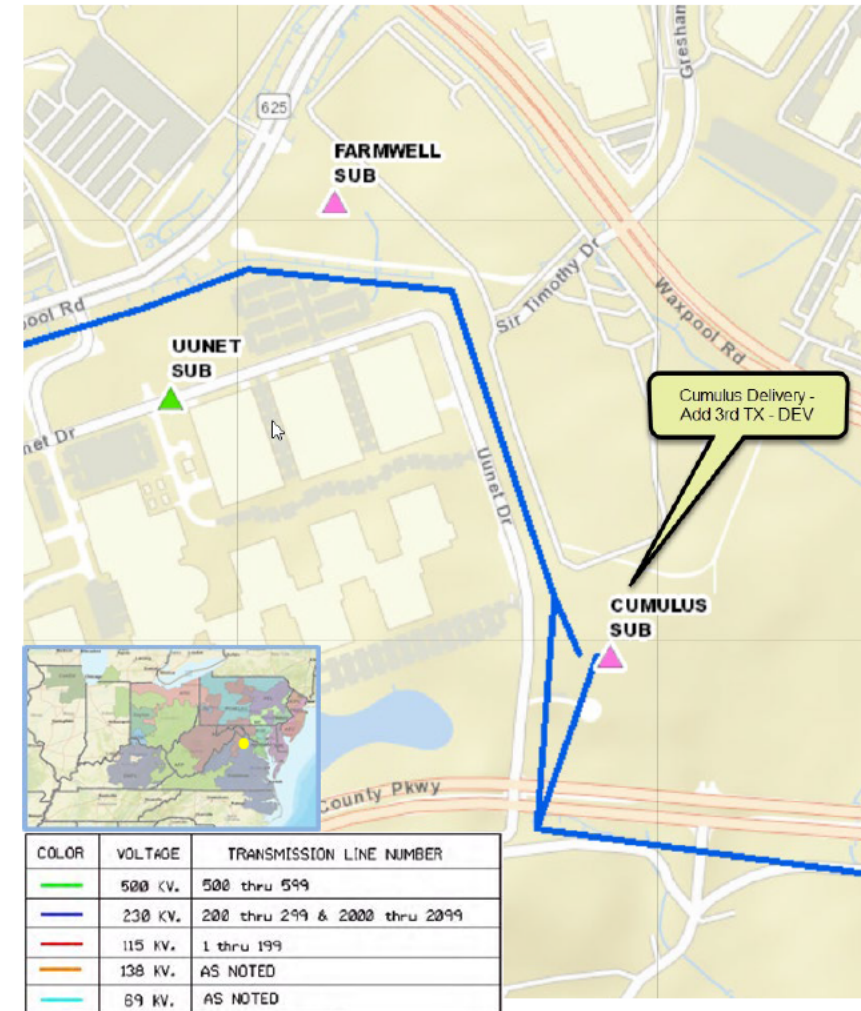
Specific Assumption References:

Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

Problem Statement:

DEV Distribution has submitted a DP Request to add a 3rd distribution transformer at Cumulus Substation in Loudoun County. The new 84 MVA transformer is being driven by continued load growth in the area and contingency loading for loss of one of the existing transformers. Requested in-service date is 03/01/2022.

Initial In-Service Load	Projected 2025 Load
Summer: 130.4 MW	Summer: 252 MW



Dominion Transmission Zone: Supplemental Cumulus 230kV Delivery- Add 3rd TX - DEV

Need Number: DOM-2020-0022

Process Stage: Solutions Meeting 08/04/2020

Proposed Solution:

Install a 1200 Amp, 40kAIC circuit switcher and associated equipment (bus, switches, relaying, etc.) to feed the new transformer at Cumulus.

Estimated Project Cost: \$0.40 M

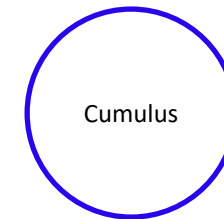
Alternatives Considered:

No feasible alternatives

Projected In-service Date: 03/01/2022

Project Status: Engineering

Model: 2025 RTEP



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2020-0023

Process Stage: Solutions Meeting 08/04/2020

Previously Presented: Need Meeting 07/07/2020

Project Driver: Customer Service

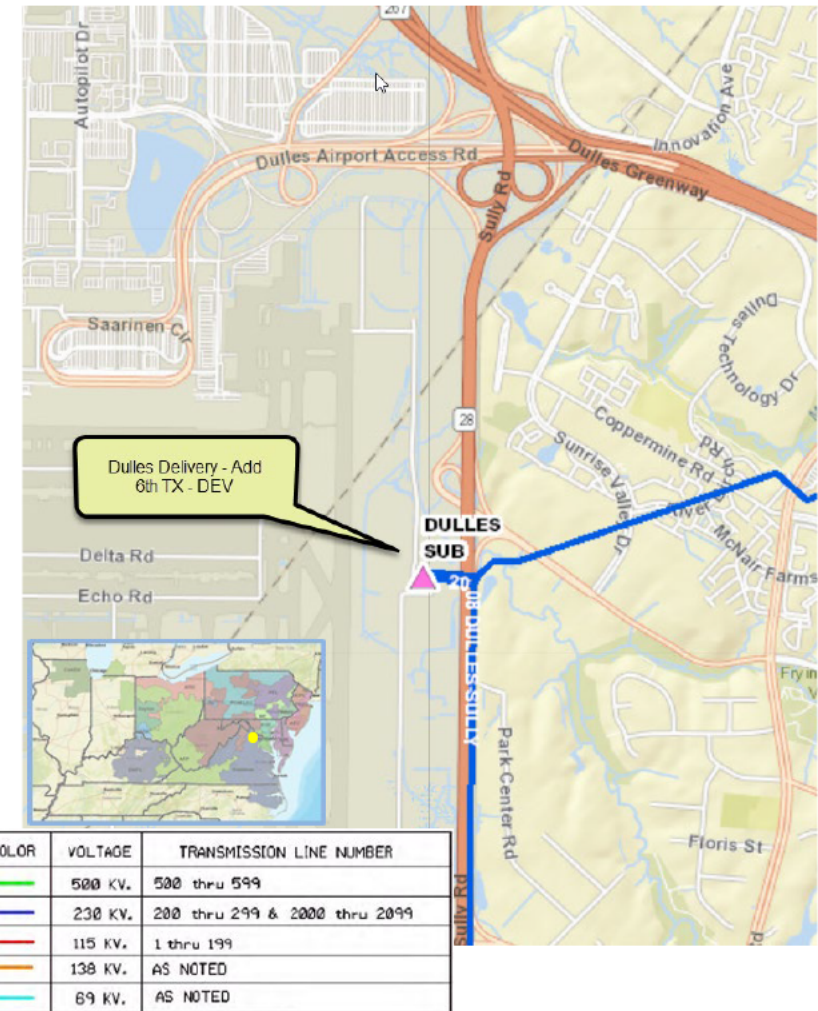
Specific Assumption References:

Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

Problem Statement:

DEV Distribution has submitted a DP Request to add a 6th distribution transformer at Dulles Substation in Fairfax County. The new 84 MVA transformer is being driven by continued load growth in the area and contingency loading for loss of one of the existing transformers. Requested in-service date is 08/01/2021.

Initial In-Service Load	Projected 2025 Load
Summer: 204.6 MW	Summer: 241.3 MW



Dominion Transmission Zone: Supplemental Dulles 230kV Delivery- Add 6th TX - DEV

Need Number: DOM-2020-0023

Process Stage: Solutions Meeting 08/04/2020

Proposed Solution:

Install a 3000 Amp switch, 1200 Amp, 40kAIC circuit switcher and associated equipment (bus, relaying, etc.) to feed the new transformer at Dulles.

Estimated Project Cost: \$0.60 M

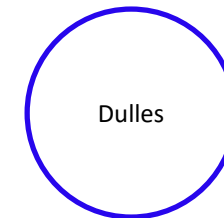
Alternatives Considered:

No feasible alternatives

Projected In-service Date: 08/01/2021

Project Status: Engineering

Model: 2025 RTEP



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2020-0024

Process Stage: Solutions Meeting 08/04/2020

Previously Presented: Need Meeting 07/07/2020

Project Driver: Customer Service

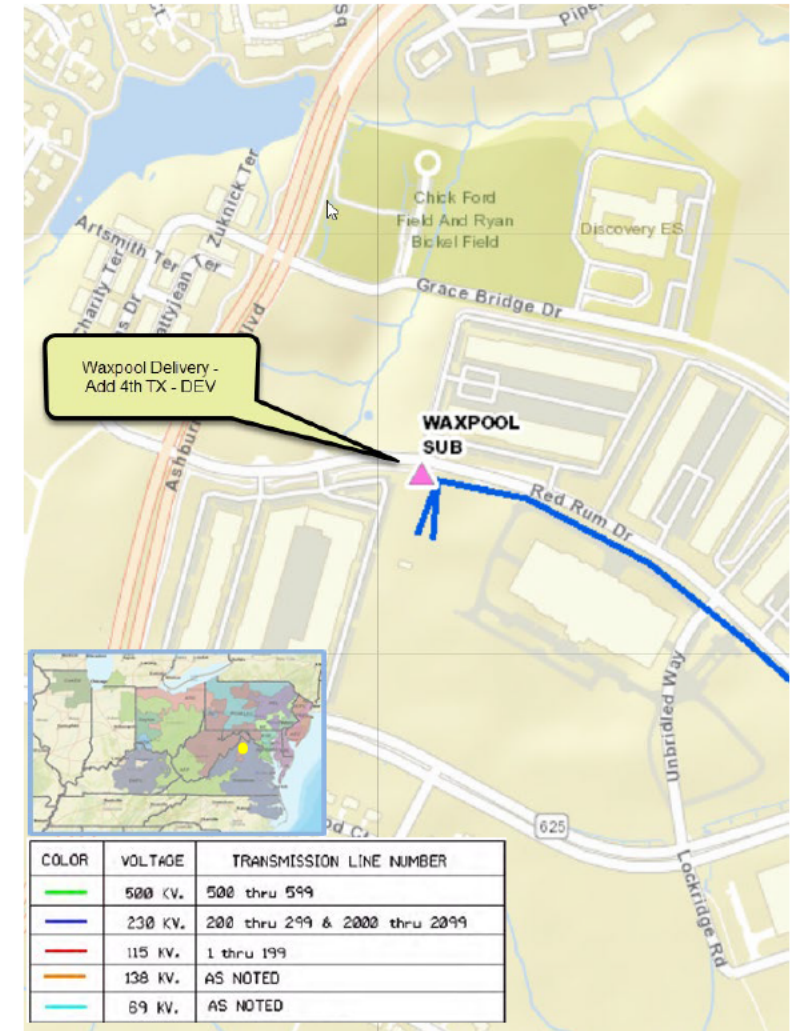
Specific Assumption References:

Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

Problem Statement:

DEV Distribution has submitted a DP Request to add a 4th distribution transformer at Waxpool Substation in Loudoun County. The 84 MVA new transformer is being driven by continued load growth in the area and contingency loading for loss of one of the existing transformers. Requested in-service date is 04/01/2022.

Initial In-Service Load	Projected 2025 Load
Summer: 185.5 MW	Summer: 223.6 MW



Dominion Transmission Zone: Supplemental Waxpool 230kV Delivery- Add 4th TX - DEV

Need Number: DOM-2020-0024

Process Stage: Solutions Meeting 08/04/2020

Proposed Solution:

Install a 1200 Amp, 40kAIC circuit switcher and associated equipment (bus, switches, relaying, etc.) to feed the new transformer at Waxpool.

Estimated Project Cost: \$0.40 M

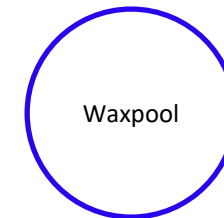
Alternatives Considered:

No feasible alternatives

Projected In-service Date: 04/01/2022

Project Status: Engineering

Model: 2025 RTEP



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

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