Facilities Study Report For

Physical Interconnection of PJM Generation Interconnection Request Project ID AG1-105

Mount Laurel-Barnes Junction 115 kV

December 2024

Introduction

This Facilities Study has been prepared in accordance with the PJM Open Access Transmission Tariff Part VII, and, if applicable, the Application and Studies Agreement between the Project Developer and PJM Interconnection, LLC (PJM or Transmission Provider (TP)). The Transmission Owner (TO) is Virginia Electric and Power Company (VEPCO or Dominion).

A. Transmission Owner Facilities Study Summary

1. PROJECT DESCRIPTION

The Project Developer (PD) has proposed a Solar Generating Facility located in Halifax, VA with a designated PJM Project ID of AG1-105. The installed facilities will have a total Maximum Facility Output (MFO) of 90 MW with 54 MW of this output being recognized by PJM as Capacity.

2. POINT OF INTERCONNECTION (POI)

The Generating Facility will interconnect with the Dominion transmission system via a newly constructed 115 kV three breaker ring substation, AG1-105, tapping the Chase City-Clays Mill 115 kV line 33, approximately 12.83 miles from Chase City substation and 8.28 miles from Clays Mills substation.

The construction of the new interconnection substation will result in the splitting of the existing Chase City-Clays Mill 115 kV line 33 into two lines on the transmission system. The new line numbers will be determined during the detailed engineering phase of the project.

The proposed generation interconnection is shown on the single line diagram in Attachment #1.

3. POINT OF CHANGE IN OWNERSHIP

The Point of Change in Ownership will be located between the two stations at the 115kV disconnect switch 4-hole pad inside the Dominion Energy station by the common fence.

4. SCOPE OF PROJECT DEVELOPER INTERCONNECTION FACILITIES

Project Developer will design, build, own, operate and maintain the Project Developer Interconnection Facilities on Project Developer's side of the Point of Change in Ownership (PCO). This includes, but is not limited to:

- Circuit breakers and associated equipment located between the high side of the MPT(s) or GSU(s) and the Point of Change in Ownership.
- Generator lead line from the Generating Facility to the Point of Change in Ownership.
- Relay and protective equipment, telecommunications equipment, and Supervisory Control and Data Acquisition (SCADA) to comply with the TO's Applicable Technical Requirements and Standards.

B. Transmission Owner Facilities Study Results

The following is a description of the planned Transmission Owner facilities for the physical interconnection of the proposed AG1-105 project to the Dominion transmission system. These facilities shall be designed according to Dominion Applicable Technical Requirements and Standards. Once built, Dominion will own, operate, and maintain these Facilities.

1. TRANSMISSION OWNER INTERCONNECTION FACILITIES:

A 115 kV backbone structure and foundation within the fence of the Interconnection Substation, to terminate the Project Developer's generator lead line.

Line conductor from the backbone structure to the bus position in the switchyard of the interconnection substation.

Purchase and install substation material – Transmission Owner Interconnection Facilities:

- 1. One (1), 115 kV, 2000A, 3-phase center break gang operated switch
- 2. Three (3), 115 kV, metering accuracy CCVT
- 3. Three (3), 115 kV, 500:5 metering accuracy CT
- 4. Conductor, connectors, conduits, control cables, foundations, steel structures and grounding material as per engineering standards

Purchase and install relay material – Transmission Owner Interconnection Facilities:

- 1. One (1), 1110 24" dual SEL-587Z/351A transmission bus panel
- 2. One (1), 4200 W1 bus differential CT make-up box
- 3. One (1), 1425 24" dual SEL-735 transmission and generator interconnect metering panel
- 4. One (1), 4524 revenue metering CT make-up box
- 5. One (1), 4506 3-phase CCVT potential make-up box with metering (P4)
- 6. One (1), 1323 24" SEL-487E/735 PMU and PQ monitoring panel
- 7. Two (2), 4541 control cable make-up box
- 8. Two (2), 4528A generation fiber make-up box

The Project Developer has the option to select 'Option to Build' as is their right under the PJM Generator Interconnection Agreement.

If "Option to Build" is selected, the Project Developer becomes responsible for the purchase and install of the TOIF facilities listed above, as well as the oversight costs included in 4. OTHER SCOPE OF WORK.

2. STAND ALONE NETWORK UPGRADES

For new interconnection substation:

AG1-105 Interconnection Substation (NXXXX)

A new 3 breaker ring substation, AG1-105 115 kV, will be constructed along the 115 kV transmission line 33 to interconnect the project with the Dominion transmission system.

The objective of this project is to build a 115 kV three breaker ring bus to support the new solar farm built by Project Developer. The site is located along Dominion Energy's existing 115kV, 33 line from Clays Mill Substation to Chase City Substation. The cut line will consume two of the positions in the ring bus. The third position will be for the 115 kV feed from Project Developer's Collector Station for the new solar farm.

The Project Developer will provide the property and access to the switching station. The grounding systems for each station will be tied together. All substation permitting, site preparation and grading activity will be performed by the Project Developer. All permits are the responsibility of the developer.

Substation design and relay protection are based on Dominion's Facility Interconnection Requirements, NERC Compliance Procedure FAC-001 (version 23), that is posted on PJM's website. This standard meets or exceeds the PJM Transmission and Substation Design Subcommittee Technical Requirements and the PJM Protection Standards (PJM Manual 7).

The scope of work includes the following:

Purchase and Install - Stand Alone Network Physical Facilities:

- Approximate station fence line dimensions of 360' x 260'. At a minimum, site preparation and grading will be required to extend 10' beyond these dimensions for station grounding. Additional property and site prep may be required for proper grading and stormwater management, etc.
- 2. Approximately 1,240 linear ft of 5/8" chain link, 12 ft tall, perimeter fence around the station along with the security cameras and integrators as per design 4 fence standards
- 3. Three (3), 115 kV, 3000A, 40kAIC, SF-6 circuit breaker
- 4. Six (6), 115 kV, 2000A, 3-phase center break gang operated switch
- 5. Six (6), 115 kV, relay accuracy CCVT
- 6. Two (2), 115 kV, 2000A wave trap
- 7. Two (2), line tuner
- 8. Nine (9), 90 kV, 74 kV MCOV surge arrester
- 9. Two (2), 115 kV, 2000A, 2-phase center break switch (for PVT's)
- 10. Two (2), 115 kV, 100KVA power PT's for station service
- 11. Two (2), 115 kV, 10 in-lb., 125VDC motor operator
- 12. One (1), 24' x 40' control enclosure
- 13. One (1), 125 VDC, 300 Ah station battery and 50 Amp charger (size to be verified during detail engineering)

- 14. Approximately 240 ft of cable trough with a 20 ft road crossing section
- 15. Two (2), 36" x 36" x 42" precast yard pull box
- 16. Station stone as required
- 17. Station lighting as required
- 18. Steel structures as required including switch stands, bus supports, station service transformers, CCVT and wave trap supports
- 19. Foundations as required including control house, equipment, and bus support stands
- 20. Conductors, connectors, conduits, control cables, cable trough, and grounding materials as per engineering standards

Purchase and Install - Stand Alone Network Relay Protection Equipment:

- 1. Three (3), 1510 24" dual SEL-351-7 transmission breaker with reclosing panel
- 2. Three (3), 4510 SEL-2411 breaker annunciator
- 3. Two (2), 1340 24" dual SEL-411L DCB/PLC line panel
- 4. Two (2), 4506 3-phase CCVT potential make-up box
- 5. One (1), 1603 24" SEL-451 islanding control scheme panel
- 6. Two (2), 4000 station service potential make-up box
- 7. Two (2), 4548 non-earthing switch MOAB control box
- 8. One (1), 4103 non-earthing switch MOAB AC/DC distribution box
- 9. Two (2), 4018 500A station service AC distribution panel
- 10. Two (2), 4007 225A outdoor transmission yard AC NQOD
- 11. Two (2), 4019 225A 3-phase throw over switch
- 12. Two (2), 4016 600A PVT disconnect switch
- 13. One (1), 4153c wall mount station battery monitor
- 14. One (1), 5618 SEL-3555 communications panel
- 15. One (1), 1255 station annunciator panel
- 16. One (1), 5021 SEL-2411 RTU panel
- 17. One (1), 5609 fiber optic management panel
- 18. Three (3), 4526 A circuit breaker fiber optic make-up box
- 19. One (1), 5202 26" APP 601 digital fault recorder
- 20. Six (6), 4040 security fiber/power make-up box
- 21. One (1), 5603 station network panel no. 1
- 22. One (1), 5603 station network panel no. 2
- 23. One (1), 4051 power block

- 24. One (1), 4042 D1B security utility utility ATS
- 25. One (1), 4044 225A 1Ø outdoor main security AC NQOD
- 26. Two (2), 4040 100A 1Ø outdoor security AC NQOD
- 27. One (1), 5616 station security panel
- 28. One (1), 5616 security fence panel
- 29. Two (2), 4018 225A station service AC distribution panel branch breaker
- 30. One (1), high voltage protection (HVP) box (provided by IT) (to be verified during detail engineering)
- 31. One (1), telephone interface box (to be verified during detail engineering)

The Project Developer has the option to select 'Option to Build' as is their right under the PJM Generator Interconnection Agreement.

By selecting this construction process method, the Project Developer shall secure all required real estate, obtain all necessary permits, perform site work including site preparation and grading, furnish equipment, construction personnel and ancillary materials as found in the facility study for construction of the switching station in compliance with Dominion Energy Substation Engineering Standards.

If the Project Developer selects "Option to Build", the work required is as follows:

Option to Build, Stand Alone Network Upgrade Physical Facilities – Project Developer:

- 1. Approximate station fence line dimensions of 360' x 260'. At a minimum, site preparation and grading will be required to extend 10' beyond these dimensions for station grounding. Additional property and site prep may be required for proper grading and stormwater management, etc.
- 2. Approximately 1,240 linear ft of 5/8" chain link, 12 ft tall, perimeter fence around the station along with the security cameras and integrators as per design 4 fence standards
- 3. Three (3), 115 kV, 3000A, 40kAIC, SF-6 circuit breaker
- 4. Six (6), 115 kV, 2000A, 3-phase center break gang operated switch
- 5. Six (6), 115 kV, relay accuracy CCVT
- 6. Two (2), 115 kV, 2000A wave trap
- 7. Two (2), line tuner
- 8. Nine (9), 90 kV, 74kV MCOV surge arrester
- 9. Two (2), 115 kV, 2000A, 2-phase center break switch (for PVT's)
- 10. Two (2), 115 kV, 100KVA power PT's for station service
- 11. Two (2), 115 kV, 10 in-lb., 125VDC motor operator
- 12. One (1), 24' x 40' control enclosure

- 13. One (1), 125 VDC, 300 Ah station battery and 50 Amp charger (size to be verified during detail engineering)
- 14. Approximately 240 ft of cable trough with a 20 ft road crossing station
- 15. Two (2), 36" x 36" x 42" precast yard pull box
- 16. Station stone as required
- 17. Station lighting as required
- 18. Steel structures as required including switch stands, bus supports, station service transformers, CCVT and wave trap supports
- 19. Foundations as required including control house, equipment, and bus support stands
- 20. Conductors, connectors, conduits, control cables, cable trough, and grounding materials as per engineering standards

Option to Build, Stand Alone Network Upgrade Relay Protection Equipment - Project Developer:

- 1. Three (3), 1510 24" dual SEL-351-7 transmission breaker with reclosing panel
- 2. Three (3), 4510 SEL-2411 breaker annunciator
- 3. Two (2), 1340 24" dual SEL-411L DCB/PLC line panel
- 4. Two (2), 4506 3-phase CCVT potential make-up box
- 5. One (1), 1603 24" SEL-451 islanding control scheme panel
- 6. Two (2), 4000 station service potential make-up box
- 7. Two (2), 4548 non-earthing switch MOAB control box
- 8. One (1), 4103 non-earthing switch MOAB AC/DC distribution box
- 9. Two (2), 4018 500A station service AC distribution panel
- 10. Two (2), 4007 225A outdoor transmission yard AC NQOD
- 11. Two (2), 4019 225A three phase throw over switch
- 12. Two (2), 4016 600A PVT disconnect switch
- 13. One (1), 4153c wall mount station battery monitor
- 14. One (1), 5618 SEL-3555 communications panel
- 15. One (1), 1255 Station annunciator panel
- 16. One (1), 5021 SEL-2411 RTU panel
- 17. One (1), 5609 fiber optic management panel
- 18. Three (3), 4526 A circuit breaker fiber optic make-up box
- 19. One (1), 5202 26" APP 601 digital fault recorder
- 20. Six (6), 4040 security fiber/power make-up box
- 21. One (1), 4051 power block

- 22. One (1), 4042 D1B security utility utility ATS
- 23. One (1), 4044 225A 1Ø outdoor main security AC NQOD
- 24. Two (2), 4040 100A 1Ø outdoor security AC NQOD
- 25. Two (2), 4018 225A station service AC distribution panel branch breaker

3. NETWORK UPGRADES

Transmission Line Tie-in for new interconnection substation:

Line 33, 115 kV, will be cut and looped into the new interconnection substation.

AG1-105 serves to interconnect a switching station between existing structures 33/518 and 33/519 in Halifax County, Virginia. Two (2) 115 kV custom engineered 3-pole structures and two (2) 115 kV backbone structures will be used to tie Line 33 into the new switching station. Additionally, two (2) static pole structures will be installed inside the proposed substation for shielding.

Line 33 will be renumbered to Line 1XXX from Dryburg Substation to the new substation. Line 33 will remain Line 33 from the new substation towards Barns Junction Delivery Point.

The existing 115 kV Line 33 consists of primarily single-circuit H-frame structures. The existing conductor is 1033.5 ACSR "Ortolan" and the existing shielding is one (1) DNO-8482 OPGW on the South side and one (1) 3 #6 Alumoweld on the North side. Additionally, the new conductor will be a single 768.2 ACSS/TW/HS "Maumee" and the new shielding will be with two (2) DNO-11410 OPGW. 7 #7 Alumoweld will be used to shield the new substation.

Modification to Existing Facilities:

- 1. Transfer existing 3-phase 1033.5 ACSR "Ortolan" conductor in the span from existing structure 33/518 to the back side of new structure 1XXX/519.
- 2. Transfer existing one (1) DNO-8482 OPGW in the span from existing structure 33/519 to the back side of new structure 1XXX/519 and from the ahead side of new structure 1XXX/519 to the back side of new structure 1XXX/520.
- 3. Transfer existing one (1) 3 #6 Alumoweld shield wire in the span from existing structure 33/519 to the back side of new structure 1XXX/519.
- 4. Transfer existing one (1) 3 #6 Alumoweld shield wire in the span from existing structure 33/519 to the ahead side of new structure 33/518.
- 5. Transfer existing 3-phase 1033.5 ACSR "Ortolan" conductor in the span from existing structure 33/519 to the ahead side of new structure 33/518.
- 6. Remove and replace one (1) existing OPGW strain assembly on the back side of existing structure 33/519 with one (1) new OPGW strain assembly.
- 7. Remove and replace five (5) existing single $\frac{1}{2}$ " H.S. guy wires on existing structure 33/518 with five (5) new double $\frac{1}{2}$ " H.S. guy wires.

Permanent Facilities to be Installed:

1. Install two (2) 115kV custom engineered steel double deadend 3-pole structures on foundations as follows:

- a. Structures 1XXX/519 and 33/518
- 2. Install two (2) 115kV single circuit steel backbone structures on foundations as follows:
 - a. Structures 1XXX/520 and 33/517
- 3. Install two (2) steel static pole structures on foundations as follows:
 - a. Structures 1XXX/520A and 33/517A
- 4. Install approximately 0.04 miles of one (1) DNO-11410 OPGW from proposed structures 1XXX/519 to 1XXX/520.
- 5. Install approximately 0.04 miles of two (2) DNO-11410 OPGW from proposed structures 33/517 to 33/518.
- 6. Install approximately 0.06 miles of one (1) DNO-11410 OPGW from proposed structure 33/518 to existing structure 33/519.
- 7. Install approximately 0.08 miles of one (1) 3-phase 768.2 ACSS/TW/HS "Maumee" conductor as follows:
 - a. Approximately 0.04 miles from proposed structures 1XXX/519 to 1XXX/520.
 - b. Approximately 0.04 miles from proposed structures 33/517 to 33/518.
- 8. Install approximately 0.12 miles of one (1) 7 #7 Alumoweld at the proposed substation as follows:
 - a. Approximately 0.04 miles from proposed structures 1XXX/520 to 1XXX/520A.
 - b. Approximately 0.05 miles from proposed structures 1XXX/520A to 33/517A.
 - c. Approximately 0.03 miles from proposed structures 33/517A to 33/517.
- 9. Install approximately seven (7) fiber splices:
 - a. Two (2) fiber splices are required on the following structures:
 - i. 1XXX/519 and 33/517.
 - b. One (1) fiber splice is required on the following structures:
 - i. 33/518, 33/519, and 1XXX/519.

Upgrades to neighboring facilities:

Chase City 115 kV Substation

Project AG1-105 provides for drawing work, relay resets, and field support necessary to change line 33 destination from Clays Mill to AG1-105 Generator Interconnect. The line number will remain line 33. Consult the Construction One Line.

Clay Mills 115 kV Substation

Project AG1-105 provides for drawing work, relay resets, and field support necessary to change line 33 destination from Clays Mill to AG1-105 Generator Interconnect. The line number may be changed. Consult the Construction One Line.

Mount Laurel 115 kV Substation

Project AG1-105 provides for drawing work, islanding panel addition, relay resets, and field support necessary to change line 33 destination from Mount Laurel.

Purchase and install relay material:

1. One (1), 1603 – 24" SEL-451 islanding control scheme panel

4. OTHER SCOPE OF WORK

The Project Developer will supply and own metering equipment that will provide instantaneous net MW and MVar per unit values in accordance with PJM Manuals M-01 and M-14D, and Sections 8.1 through 8.5 of Appendix 2 to the GIA.

If the Project Developer selects "Option to Build", the oversight required is as follows:

Option to Build, Stand Alone Network Physical Facilities & Oversight – Dominion:

- 1. All Physical Engineering related oversight and approvals of activities related to equipment procurement, design, construction, and energization of switching station
- 2. All Real Estate related oversight and approval of activities related to construction of switching station
- 3. All Permitting related oversight and approval of activities related to construction of switching station
- 4. All Survey related oversight and approval of activities related to construction of switching station
- 5. All Construction and Methods oversight and approval of activities related to construction and energization of switching station
- 6. All Project Management oversight activities related to construction and energization of switching station
- 7. Review and approve all riser conductor, connectors, spacers, and bolts related to connection of the switching station to the Bulk Electric Transmission System
- 8. Review and approve all material related to the integration of the security fence software package back to the Corporate Security Fusion Center

Option to Build, Stand Alone Network Relay Protection Equipment – Dominion:

- 1. All Protection & Controls Engineering oversight and approval of activities related to equipment procurement, design, construction, and energization of switching station
- 2. All relay panel installation methods oversight and approval of activities related to construction and energization of switching station
- 3. All relay, communications, security settings related to the connection of the switching station to the Bulk Electric Transmission System
- 4. One (1), 5616 station security panel

- 5. One (1), 5616 station security fence panel
- 6. One (1), 5603 network panel no. 1
- 7. One (1), 5603 network panel no. 2
- 8. One (1), high voltage protection (HVP) box (Provided by IT) (to be verified during detail engineering)
- 9. One (1), telephone interface box (to be verified during detail engineering)

Option to Build, Transmission Owner Interconnection Facilities; Physical Facilities & Oversight – Dominion:

- 1. All Physical Engineering related oversight and approvals of activities related to equipment procurement, design, construction, and energization of switching station
- 2. All Construction and Methods oversight and approval of activities related to construction and energization of switching station
- 3. All Project Management oversight activities related to construction and energization of switching station

Option to Build, Transmission Owner Interconnection Facilities Relay Protection Equipment – Dominion:

- 1. All Protection & Controls Engineering oversight and approval of activities related to equipment procurement, design, construction, and energization of switching station
- 2. All relay panel installation methods oversight and approval of activities related to construction and energization of switching station
- 3. All relay, communications, security settings related to the connection of the switching station to the Bulk Electric Transmission System

5. MILESTONE SCHEDULE FOR COMPLETION OF TO WORK

Facilities outlined in this report are estimated to take 38 months to construct, from the time the Generator Interconnection Agreement is fully executed. This schedule may be impacted by the timeline for procurement and installation of long lead items, the ability to obtain outages to construct and test the proposed facilities.

Description	Start	Finish
	month	month
Detailed Design	1	11
Permitting	3	29

Construction	27	38

6. ASSUMPTIONS IN DEVELOPING SCOPE/COST/SCHEDULE

General Assumptions:

- The estimated procurement lead time for breakers is based on current Dominion pre-ordered breaker production slots. These production slots will be assigned after the agreement is executed.
- 2. The preliminary construction schedule is dependent on outage availability.

TOIF/SANU Conceptual Design Notes:

- 1. Security and fence type design level 4.
- Currently, the scope and estimate assume DVP standard spread footer foundations. Once the soil information is available and it is prudent to change the design to "pile foundations" the DVP team should be informed to adjust the project estimate at the earliest possible opportunity.

Network Upgrades Conceptual Design Notes:

- 1. This scope assumes that an outage on Line 33 can be obtained during construction. Therefore, no costs have been accounted for in the event that a temporary line is required.
- 2. Per existing Plan and Profiles, the ROW between Dryburg Substation and Chase City Substation is 165 feet wide (80 feet for line 33 and 85 feet for line 2068). It is assumed that the developer's land acquisition will include the land required for the substation and transmission connection to the station.
- 3. All substation equipment will be included in the substation scope of work.
- 4. New LiDAR data will be required for detailed design.
 - a. LiDAR used for this conceptual design is from 2012 and was used for Project 992377. The new LiDAR should capture the rebuild of Line 33 in 2013.
- 5. A geotechnical investigation will be required for all new structures.
- 6. Existing wire tensions were modeled based on the Halifax Chase City 115kV Line 33 rebuild (project 992377). These tensions are assumed to be accurate based on Plan and Profiles. Further analysis will be required in detailed design.
- 7. Line 33 will be broken into Line 1XXX and Line 33 as part of this project. For conceptual purposes, structure numbering will remain the same when applicable, but the line number will change as necessary.
- 8. Project area code required loading includes: NESC Medium (designed to Heavy), 90mph wind, 30 mph wind 3/4" ice.
- 9. A wetland delineation has not been completed as part of this conceptual package.
- 10. A georeferenced substation location plan dated 1/8/2024 was utilized for this design.

11. Cross slopes and foundation reveals have not been accounted for in this conceptual design. Structures are designed assuming a structure elevation matching the TIN at the center of the structure.

7. REVENUE METERING REQUIREMENTS

All revenue metering needed for this interconnection project must meet the metering requirements stated in Appendix 2, section 8 of the AG1-105 GIA, and in PJM Manuals M01 and M14D. The details of applicable revenue metering requirements are given in section 4.1.6 Metering and Telecommunications of ITO's Facility Interconnection Connection Requirement NERC Standard FAC-001 posted on PJM website.

The revenue metering will be installed on the Transmission Owner side of the Point of Change in Ownership will be installed, owned and maintained by Transmission Owner.

- a. Hourly compensated MWh received from the Generating Facility to the TO;
- b. Hourly compensated MVARh received from the Generating Facility to the TO;
- c. Hourly compensated MWh delivered from the ITO to the Generating Facility; and
- d. Hourly compensated MVARh delivered from the ITO to the Generating Facility.

The Project Developer will access revenue meter via wireless transceivers or fiber cabling to meter with RS-485 or Ethernet communication port for dial-up reads. Project Developer must provide revenue and real time data to PJM from Project Developer Market Operations Center per "PJM Telemetry Data Exchange Summary" document available at PJM.com.

8. LAND REQUIREMENTS FOR INTERCONNECTION SUBSTATION

Land requirements for the Interconnection Substation needed for this interconnection project must meet the requirements in Dominion's Facility Interconnection Requirements, NERC Compliance Procedure FAC-001 (version 23), that is posted on PJM's website.

The Project Developer would be responsible for the following expectations in the area of Real Estate.

- The land required for Dominion's substation and project specific areas around must be deeded over title-in-fee.
- Any additional land needed for Storm Water Management, Landscaping, and Wetlands/Wetlands Mitigation.
- Dominion Real Estate and Counsel will provide standard real estate checklist word document. Process needs to start at least 6 months prior to closing date.
- Required subdivision plat and associated documentation to be reviewed prior to subdividing parcel with the county.
- Suitable Access Road from Substation to a Virginia/North Carolina State Maintained Roadway.
- Dominion will require access road, transmission line and utilities easement to the Substation.
- Any other Land/Permitting requirements required by the Substation.

9. ENVIRONMENTAL AND PERMITING

The Project Developer would be responsible for the following expectations in the area of Environmental and Permitting.

• Assessment of environmental impacts related to the Interconnection Facility and/or Network Upgrades including:

Environmental Impact Study requirements

Environmental Permitting

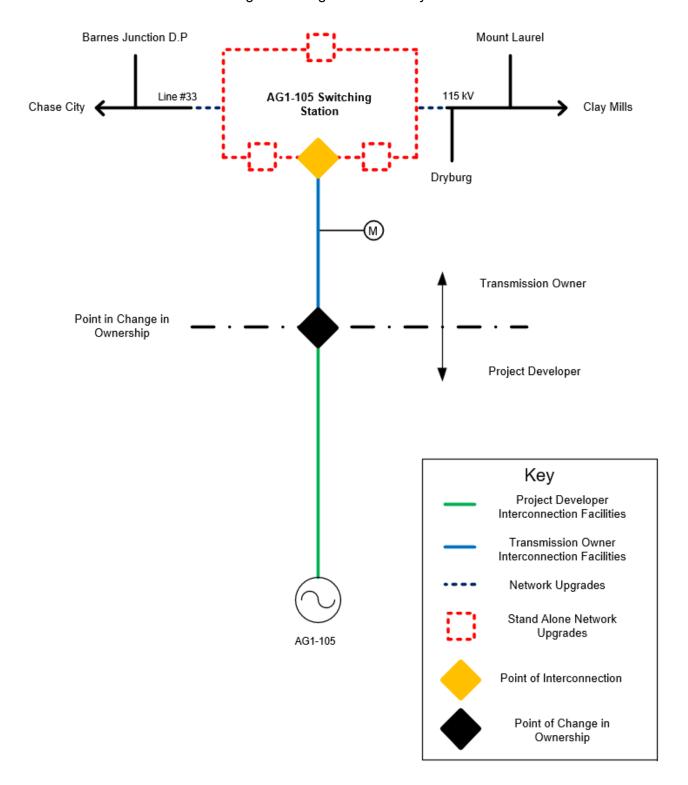
• Dominion will require a stormwater easement for substation specific stormwater design BMP's to allow access to and use of the facilities.

A maintenance agreement should be in place in perpetuity for said stormwater facilities.

- Conditional Use Permit for Substation
- Any additional land needed for Storm Water Management, Landscaping, and Wetlands/Wetlands Mitigation
- Any other Permitting requirements required by the Substation

C. APPENDICES

Attachment #1: Single line Diagram for the Physical Interconnection



Attachment #2: Substation General Arrangement

