
Dominion Transmission Planning Criteria

PJM Southern Sub-regional Meeting

March 09, 2015

Criteria Summary

- **Dominion performs a annual review of the Facility Connection Document as well as the Local Transmission Planning criteria**
- **As a result of this review, the following changes occurred:**
 - **General formatting changes**
 - **Radial Transmission Criteria has been modified to include an additional driver**
 - **A new criteria has been implemented for tapping network transmission lines**

Radial Criteria

Radial transmission lines

A Radial transmission line is defined as a single line that originates in a substation, serves load and does NOT tie to any other transmission line or substation. Unlike load served from a network transmission line having two sources where a downed conductor or structure can be sectionalized for load to be served before repairs are completed, load served from a single source radial transmission line cannot be reenergized until all repairs to the line are completed.

Radial Criteria

Accordingly, loading on single source radial transmission lines will be limited to the follow:

- 100 MW Maximum
- **700 MW-Mile Exposure (MW-Mile = Peak MW X Radial Line Length)**

Once a radial loading limit exceeds any of these thresholds, an additional transmission source is required. Acceptable transmission source includes but is not limited to the following:

- Network from a separate transmission substation source (Preferred)
- Loop back to same transmission substation source
- Normally open network or loop transmission source

Limitations on direct-connect loads

Network transmission lines – Limitations on direct-connect loads

A network transmission line is defined as one that connects two network transmission substations (connect to other lines & substations) and a “Tap point” is defined as a direct connection of a customer to a network transmission line without addition of any transmission breaker or breakers to split the line.

Network transmission lines facilitate network flows and could serve directly connected (Tapped) loads. In Dominion system 500, 230, 138, 115 and 69kV lines are considered transmission and all with the exception of 500kV could be tapped to serve customer load.

In general, the number of direct-connect loads (tapped facilities) should be limited to four (4); however, good utility practice and sound engineering judgment must be exercised in application of this criteria.

2015 RTEP Assumptions for Southern Sub-region

2015 RTEP Assumptions

- **All PJM RTEP Assumptions apply**
- **Dominion uses PJM RTEP developed Power Flow models**
 - **5 year assessments – 2020 PJM RTEP Case**
 - **Beyond 6 to 15 year assessments – 2023 PJM RTEP Case**
- **Intermediate year assessments**
 - **Use MMWG series power flow cases for other years where PJM cases not available**
 - **Loads used in all power flow cases will be modeled consistent with the 2015 PJM Load Forecast Report**
 - **Generation retirements modeled as per Va./NC Integrated Resource Plans and PJM Generation Retirement Process**

2015 RTEP Approach for Baseline Assessment

- **Both PJM and Dominion perform separate analysis on Southern Sub-regional zone**
- **Must perform all analysis to satisfy NERC TPL standards**
- **PJM focus is to apply PJM criteria – Manual 14B: Attachment D**
- **Dominion focus is to apply Dominion criteria – FERC 715 filing and Facility Connection Document Exhibit A**
- **Validate each other to assure violation is real and needs a baseline upgrade prior to bringing before stakeholders**

2015 RTEP Approach for Baseline Assessment

- **Violations will be presented to TEAC and/or Subregional RTEP Committees once they have been validated as requiring a baseline upgrade**
- **Power flow cases will be available through PJM for stakeholders to provide input**
 - **This includes any cases developed and used by Dominion**
 - **Must follow PJM CEII guidelines to obtain power flow cases**

Other Assumptions

- **Will consider other assumptions and analysis suggested by stakeholders**