

Transmission Interconnection Request Queue Project V2-007

General

The Interconnection Customer (IC), has proposed a Transmission Interconnection Request to reductor the Allegheny Power Bedington-Harmony Junction 138kV circuit with 954 ACSS/TW conductor. V2-007 was studied as a reductoring of the Bedington-Harmony Junction 138kV transmission line and was evaluated for compliance with reliability criteria for summer peak conditions in 2013. The proposed in-service date is June 1, 2010.

Network Impacts

Potential network impacts are as follows:

Generator Deliverability

No problems identified.

Multiple Facility Contingency

No problems identified.

Contribution to Previously Identified Overloads

No problems identified.

New System Reinforcements

None

Contribution to Previously Identified System Reinforcements

None

Stability and Reactive Power Requirement

Not required.

Short Circuit

Not required.

Cost Estimates and Construction Schedule

Cost estimates and schedules to complete the work necessary to support the V2-007 request are as follows:

Work Scope

- Reconductor approximately 6.31 miles of 954 ACSR from Bedington to Harmony Junction with 954 Cardinal ACSS/TW high temperature conductor. Assume two steel poles are to be replaced and that no shield wire is to be replaced. NOTE: This reconductor work will result in a summer emergency 4-hour rating of 1582 A at 150C. A higher temperature rating would result in excessive sag into the underbuilt facilities on this line. As such, a higher rating using this same conductor is achievable, but would necessitate a complete rebuild of the line.

The estimated cost to perform this work is **\$2,185,415** in 2010 dollars.

- Upgrade line terminal equipment at Bedington. Equipment to be replaced includes: line risers, connectors and RTU equipment for compatibility with 954 ACSS/TW high temperature conductor.

The estimated cost to perform this work is **\$81,763** in 2010 dollars

NOTE: The above costs do not include tax gross-up. The tax adder for West Virginia is 1.2128.

Schedule

The requested in-service date of 6/1/2010 cannot be met. Engineering, permitting, construction and material lead times for a project of this scope make this date unachievable. The estimated project duration for this work is **24 months**.