Generation Interconnection
Facility Study Report

For

PJM Generation Interconnection Request
Queue Position AB2-031

Brink – Trego 115kV
13.4 MW Capacity / 20 MW Energy

Revised January / 2019

General

Meherrin Solar LLC, the Interconnection Customer (IC), has proposed a solar generating facility located at 1119 Pine Logging Rd, Skippers, VA (Greensville County). The installed facilities will have a capability of 20 MW with 13.7 MW of this output being recognized by PJM as capacity. Note that this project is an increase to the Interconnection Customer's AB1-173 / AB1-173A project, which will share the same property and connection point. The AB1-173 / AB1-173A project will have a capability of 39.6 MW with 27 MW being recognized as capacity. The total capability of the combined AB1-173 / AB1-173A and AB2-031 projects will be 59.6 MW with 40.4 MW being recognized by PJM as capacity. The proposed in-service date for the AB2-031 project is December 31, 2020. **This study does not imply an ITO commitment to this in-service date.**

Point of Interconnection

AB2-031 will interconnect with the ITO transmission system via a new single breaker tap switching station that connects on the Brink - Trego 115kV line.

Cost Summary

The AB2-031 project will be responsible for the following costs: None

A. Transmission Owner Facilities Study Summary

1. Description of Project

Queue AB2-031 is an uprate request to AB1-173 / AB1-173A to interconnect 59.6 MW (Capacity 40.4 MW) of energy from a new solar facility to be located near Emporia VA in Greensville County. The proposed facility will interconnect with ITO's existing Brink - Trego 115 kV Tap Line off of the Carolina-Clubhouse 115 kV Line via a new Meherrin Substation with one new 115 kV breaker. The requested in-service date is December 31, 2020.

2. Amendments to the System Impact Study data or System Impact Study Results

None

3. Interconnection Customer's Submitted Milestone Schedule

- Plan to break ground on November 15, 2019
- Turn over flat, graded site with one inch of gravel to ITO for new Meherrin switching station on February 1, 2020
- Permits – state level Permit By Rule and county level Final Site Plan approval complete by February 1, 2020
- Substantial site work completed November 1, 2020
- Delivery of major electrical equipment October 15, 2020
- Back Feed Power target November 15, 2020
- Commercial Operation target December 31,2020

4. Scope of Customer's Work

IC will build a solar generating facility in Greensville County, Virginia. The generating facility (Meherrin Solar) will be comprised of solar arrays. AB2-031, AB1-173 and AB1-173A consists of a total number of 18 Power Electronics HEC-US-FS3000CU 3.33MW solar inverters and 18 three MVA 34.5 kV delta / 690 V wye generator step up transformers. AB2-031, AB1-173 and AB1-173A will be connected to the POI via a 115 kV wye / 34.5kV wye grounded main collector transformer. AB2-031, AB1-173 and AB1-173A connect at a tap of the Brink – Trego 115 kV line at the new Meherrin 115kV substation.

5. Description of Facilities Included in the Facilities Study

The ITO required a Facilities Study in order to review the design, cost and schedule for: metering and associated GSU transformer relay protection and sectionalizing/fault interrupting devices as well as coordination of relay settings.

6. Total Costs of Transmission Owner Facilities included in Facilities Study

No additional costs

7. Summary of Milestone Schedules for Completion of Work Included in Facilities Study:

Facilities identified in the AB1-173 / AB1-173A Facility Study are now estimated to be as follows:

Proposed Schedule

- Engineering start February 2019
- Construction start February 2020
- Backfeed November 2020

Engineering timeline is dependent on the IC engineering contractor to be available for the Engineering start and Construction timelines are based on the IC providing a graded and permitted site to the ITO by the Construction start.

B. Transmission Owner Facilities Study Results

1. Transmission Facilities

No additional work to work identified in AB1-173 / AB1-173A Facility Study.

Attachment 1.
Single Line