Facilities Study Report

For

Physical Interconnection of

PJM Generation Interconnection Request

Project ID AH1-665

Goddard - Plumville 138 kV II

Introduction

This Facilities Study has been prepared in accordance with the PJM Open Access Transmission Tariff, as well as the Application and Studies Agreement between the Project Developer and PJM Interconnection, LLC (PJM or Transmission Provider (TP)). The Transmission Owner (TO) is East Kentucky Power Cooperative (EKPC).

This Facility Study was performed to satisfy the Phase 2 Facility Study requirement of the PJM Tariff. The Facility Study is intended to provide scope, cost and schedule estimates for the project as currently defined and approved for Phase 2 study. In the event project changes are made during DP2 that impact this report, updates will be provided as part of the Phase 3 report. Following execution of the project's final agreement, this report will not be updated to account for other changes made as part of the agreements modification clause and instead the scope change process will be followed.

A. Transmission Owner Facilities Study Summary

1. PROJECT DESCRIPTION

The Project Developer (PD) has proposed an uprate to a planned/existing Solar Generating Facility located in Fleming County, Kentucky with a designated PJM Project ID of AH1-664.

The project is an increase to the planned AH1-664 project and will share the same Point of Change in Ownership.

The AH1-665 project is an 80 MW (53.5 MW capacity) uprate to the previous project. The total installed facilities will have a capability of 180 MW with 120.3 MW of this output being recognized by PJM as Capacity.

2. POINT OF INTERCONNECTION (POI)

The Generating Facility will interconnect with the EKPC transmission system via the Mt. Carmel Road 138 kV Switching Station as described in the AH1-664 Phase II Facility studies report.

3. POINT OF CHANGE IN OWNERSHIP

The Point of Change in Ownership (PCO) will remain unchanged from what is described in the AH1-664 Phase II Facilities study report.

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 PCO. This includes, but is not limited to:

- Circuit breakers and associated equipment located between the high side of the Main Power Transformer(s) or Generator Step-Up Transformer(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.

The proposed facility must meet EKPC's published facility connection requirements. The latest version of these requirements can be accessed via the following link:

https://www.pjm.com/planning/design-engineering/to-tech-standards/ekpc.aspx

Reference section 5.2.3 for inverter-based generating facilities.

B. Transmission Owner Facilities Study Results

The following is a description of the planned Transmission Owner facilities for the physical interconnection of the proposed AH1-665 project to the EKPC transmission system. These facilities shall be designed according to EKPC Applicable Technical Requirements and Standards. Once built, EKPC will own, operate, and maintain these Facilities.

1. TRANSMISSION OWNER INTERCONNECTION FACILITIES:

No additional Transmission Owner Interconnection Facilities are required beyond those described in the AH1-664 Facilities study report.

2. STAND ALONE NETWORK UPGRADES

No additional Stand Alone Network Upgrades are required beyond those described in the AH1-664 Facilities study report.

3. NETWORK UPGRADES

No additional Network Upgrades are required beyond those described in the AH1-664 Facilities study report.

4. OTHER SCOPE OF WORK

No other scope has been identified for this project.

5. MILESTONE SCHEDULE FOR COMPLETION OF EKPC WORK

A milestone schedule is not included as there is no additional construction work required for EKPC facilities beyond those described in the AH1-664 Phase II Facilities study report.

6. ASSUMPTIONS IN DEVELOPING SCOPE/COST/SCHEDULE

No work for EKPC facilities is required beyond those described in the AH1-664 Phase II Facilities study report.

7. REVENUE METERING REQUIREMENTS

The cost for installation of the metering facilities contained in the new EKPC substation is included in the substation costs provided in the AH1-664 Facilities study cost estimates.

8. LAND REQUIREMENTS FOR INTERCONNECTION SUBSTATION

There are no additional land requirements for AH1-665 outside those described in the AH1-664 Phase II Facilities study report.

9. APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

There are no additional applicable technical requirements and standards for AH1-665 outside of those described in the AH1-664 Phase II Facilities study report.

10. ENVIRONMENTAL AND PERMITING

No additional permits/approvals are required for AH1-665 outside of those described in the AH1-664 Phase II Facilities study report.