Generation Interconnection
Facility Study Report

For

PJM Generation Interconnection Request
Queue Position AC2-075

Jacksonville – Renaker 138kV

April 2021

General

The Interconnection Customer (IC), has proposed a solar generating facility located in Harrison County, Kentucky. The installed facilities for AC2-075 will have a total capability of 20 MW with 13.4 MW of this output being recognized by PJM as capacity. The proposed in-service date for this project is May 1, 2023. **This study does not imply a EKPC commitment to this in-service date.**

This project will be installed adjacent to the existing AC1-074 solar generating facility. The installed AC1-074 facilities will have a total capability of 80 MW with 56 MW of this output being recognized by PJM as capacity. The installed facilities (AC1-074 & AC2-075) will have a total capability of 100 MW with 69.3 MW of this output being recognized by PJM as capacity.

Point of Interconnection

AC2-075 will interconnect with the EKPC Transmission system along the Jacksonville – Renaker 138kV line.

Cost Summary

The AC2-075 project will be responsible for the following costs:

Description	Total Cost
Attachment Facilities	$ 0
Direct Connection Network Upgrades	$ 0
Non Direct Connection Network Upgrades	$ 0
Allocation for New System Upgrades	$ 0
Contribution for Previously Identified Upgrades	$ 0
Total Costs	**$ 0**

A. Transmission Owner Facilities Study Summary

1. Description of Project

The Interconnection Customer (IC), has proposed a solar generating facility located in Harrison County, Kentucky. The installed facilities for AC2-075 will have a total capability of 20 MW with 13.4 MW of this output being recognized by PJM as capacity. The proposed in-service date for this project is May 1, 2023. **This study does not imply a EKPC commitment to this in-service date.**

This project will be installed adjacent to the existing AC1-074 solar generating facility. The installed AC1-074 facilities will have a total capability of 80 MW with 56 MW of this output being recognized by PJM as capacity. The installed facilities (AC1-074 & AC2-075) will have a total capability of 100 MW with 69.3 MW of this output being recognized by PJM as capacity.

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

- In November 2019, LG&E determined that an affected systems study is not required for the AC2-075 project. Therefore the AC2-075 project is not responsible for the upgrade along the Trimble-Clifty 345kV line.

- It is assumed that the scope of work required for the existing AC1-074 project is completed before the AC2-075 project can go in service: Build 138kv switching station at Jacksonville Tap including associated transmission line work. Estimated Time: 18 months. Since the AC1-074 & AC2-075 projects are going in service at the same time, there is no additional work required for AC2-075

3. Interconnection Customer's Submitted Milestone Schedule

IC's requested Commercial Operation Date (COD) for the generation facility is **May 1, 2023**. Milestone details were not provided for the IC's schedule.

4. Scope of Customer's Work

Developer will construct facilities, including the Solar generation system and generation step-up (GSU) transformer, and connect to the new 138 kV switching station. The AC2-075 project is a 20MW increase over the AC1-074 project.

The Point of Interconnection ("POI") will be the IC side of a 138 kV disconnect switch. The location of this switch will be determined during project scoping, and EKPC may require that this switch be located in the IC's substation. The IC substation shall be constructed adjacent to the new EKPC switching station (referred to as "Harrison County" herein). The IC customer will install 138 kV bus work or conductor from this 138 kV disconnect switch to their associated equipment. The IC will be responsible for acquiring all right of way, easements, and environmental approvals and permits for both the IC required facilities and any facilities that are

to be constructed by EKPC. The IC will be responsible for constructing, owning, operating, and maintaining its facilities, and EKPC will have no responsibility for any of these activities.

5. Description of Facilities Included in the Facilities Study

Since the AC1-074 & AC2-075 projects are going in service at the same time, there is no additional work required for AC2-075

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

None

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

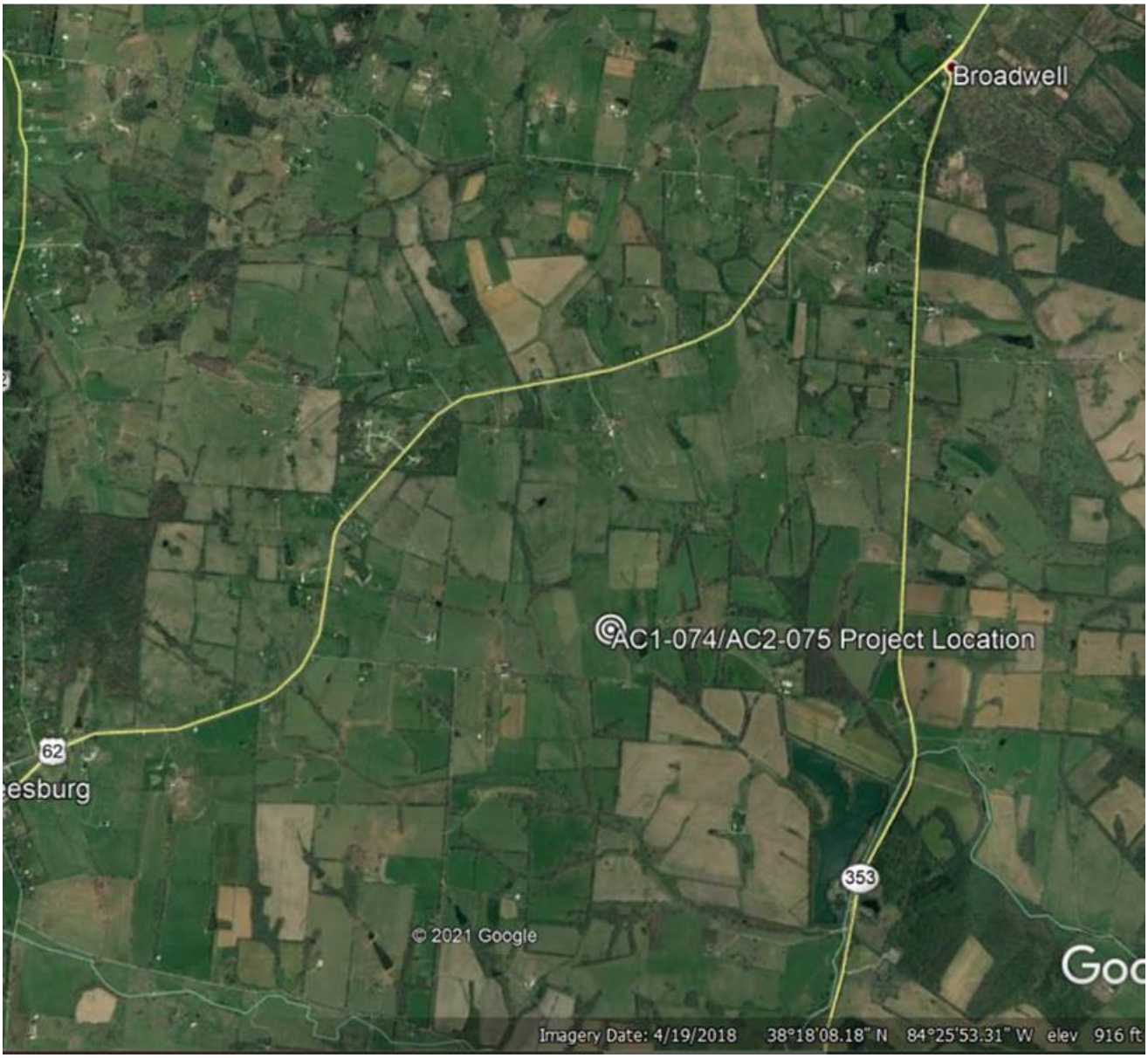
Please refer to Schedule J of the AC1-174 Construction Service Agreement.

B. Transmission Owner Facilities Study Results

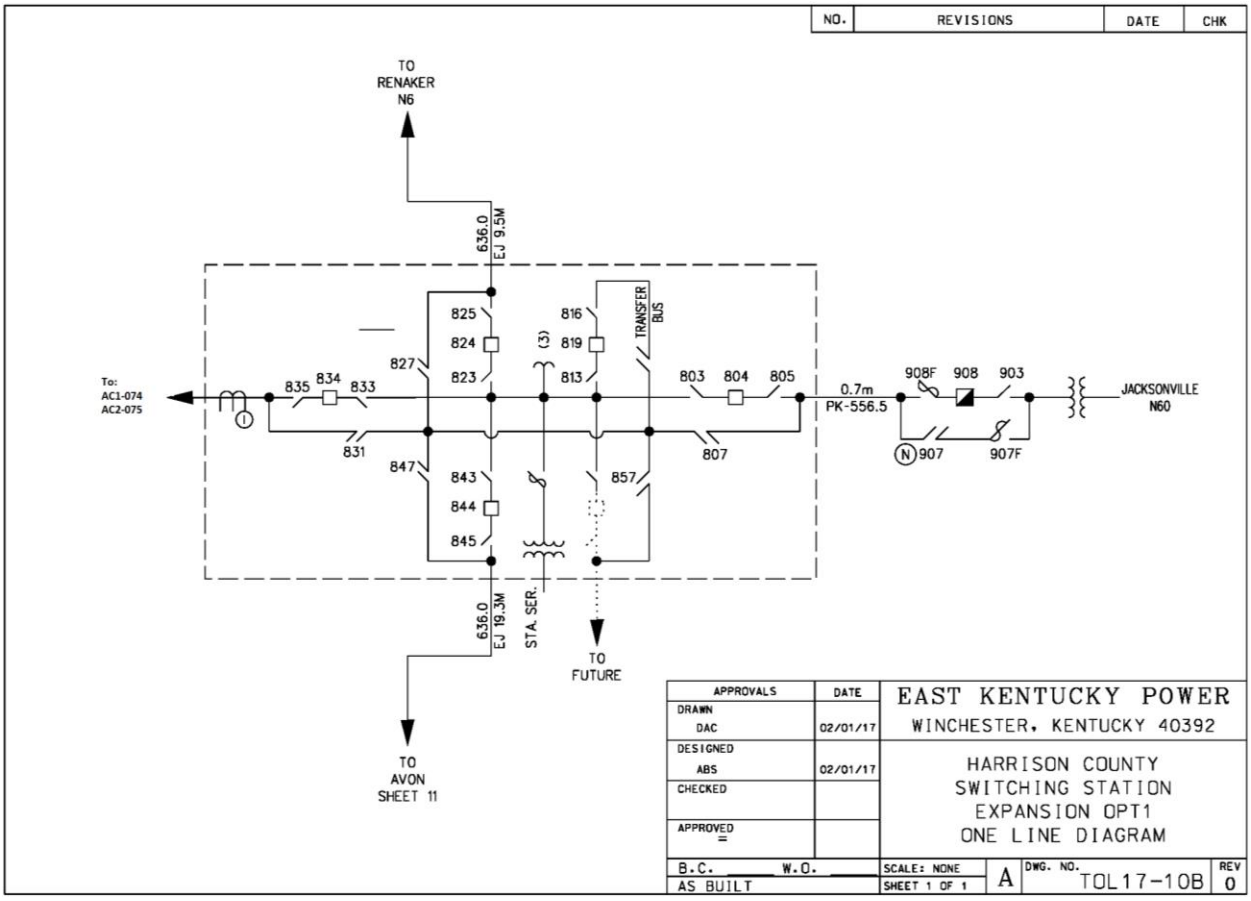
Since the AC1-074 & AC2-075 projects are going in service at the same time, there is no additional work required for AC2-075. Please refer to the AC1-074 Facilities Study for the following:

- Transmission Lines – New
- Transmission Line – Upgrades
- New Substation/Switchyard Facilities
- Upgrades to Substation / Switchyard Facilities
- Metering & Communications
- Environmental, Real Estate and Permitting Issues
- Summary of Results of Study

Attachment 1. Site Location



Attachment 2. Engineering Single Line Diagram



Attachment 3. Planning Single Line Diagram