

CASE STUDY

Union Solar/High Point Solar Reactive Capability Testing

EPE's client was developing a 100 MW solar project and sought assistance with coordinating key stakeholders, including their regional transmission organization (PJM), the testing facility, and the Transmission Owner. The project required Reactive Capability Testing to ensure minimal impact on system operators and maintain system stability.

CHALLENGE

The client was required to perform a reactive power capability test for their 100 MW solar project, connected to the PJM Transmission Grid. Testing needed to be coordinated between PJM, the testing facility, and the Transmission Owner to ensure that the impact on system operators was minimized. This form of testing is intended to demonstrate reactive capability for those conditions where reactive power reserves or voltage control would be required.



SOLUTION

EPE developed a detailed dynamic schedule/tracker for the client that consists of all required tasks in order to reach COD. The schedule is focused on the Generator Markets and Operation (GMO) Phase.

The schedule guided the client through the process, clearly detailing tasks and deadlines, as well as tracking completed tasks.

In order to compliment this schedule, EPE also developed a document summarizing the PJM Manual 14 Series and other requirements for generators attempting to achieve COD.

This document also included required tests that needed to be performed, a brief description of the PJM tools and their functionality, and specific requirement for solar farms.

EPE guided the client through most of the technical meetings regarding the GMO tasks and assisted the client with the D-curve and Reactive Power Capability Tests.

The EPE team developed testing procedures for these tests, as well as testing results for delivery to the client and the TSP.

RESULTS

EPE's guidance allowed the client to understand and seamlessly work through the GMO Phase and Commissioning Phase of the PJM Interconnection Process. EPE's detailed schedule also allowed the client to stay on track and within budget.