

PROJECT PROFILE / **SOLAR GENERATION INTERCONNECTION**

DELIVERING A POWERFUL INTERCONNECTION WITH COMPREHENSIVE SERVICES

A municipal utility required a new 345-kV transmission line and substation for grid interconnection of a solar generation plant. To execute the project quickly and seamlessly, we are providing full-service solutions — from concept to completion — with an integrated team approach.



EXTENSIVE COLLABORATION CONNECTS 255 MW OF GREEN ENERGY TO THE TEXAS GRID

A municipal utility's multifaceted, large-voltage interconnection project is being planned, designed and built by a multidisciplinary team.

When owners of the new Concho Bluff Solar generation plant in West Texas approached Garland Power & Light (GP&L) for grid interconnection, the municipal utility knew the project would be extensive and multilayered. To address all aspects of the 255-megawatt (MW) interconnection, from transmission studies and environmental assessments to design and construction, GP&L turned to our team for comprehensive services for the entire project.

We worked with GP&L to divide the project into four phases. During Phase 1, our team provided a transmission study that evaluated the Electric Reliability Council of Texas (ERCOT) grid to verify the line selected by GP&L was the most viable option. The results confirmed for GP&L that adding a new 10-mile 345-kV transmission line to connect to an existing 345-kV line was the right approach.

Armed with the study's documentation, we began Phase 2 by preparing and submitting a single-route Certificate of Convenience and Necessity (CCN) to the Public Utility Commission (PUC) of Texas. This process included preparation of a thorough

environmental assessment of the proposed project, considering potential impacts and addressing all local, state and federal regulations, guidelines and standards. We also provided in-depth information regarding the look and cost of the line, and received an expedited approval of the CCN.

With CCN approval quickly finalized, we commenced Phase 3 with detailed design of the 10-mile, 345-kV transmission line and a new substation. This infrastructure will tap into GP&L's existing 345-kV line at a new switching station, requiring surveying, geotechnical services and more. With design approved by the municipal utility, the final phase of the project is anticipated to begin in the summer of 2020. Phase 4 will involve field engineering to oversee construction of the line and switching station, and assist GP&L with mitigating any on-site project issues in this remote location.

Work on this multifaceted, high-voltage project began in 2019. Through seamless collaboration with our full-service in-house disciplines, GP&L anticipates the interconnection to be live by late 2020 — successfully delivering a new wealth of green energy to Texas consumers.

PROJECT STATS

CLIENT

Garland Power & Light

LOCATION

Texas

ANTICIPATED COMPLETION

Late 2020

345-kV

TRANSMISSION LINE

1

SUBSTATION