

CASE STUDY

Facility Interconnection and Transmission Line Enhancement Project for Ameren

Engaged by Ameren, EPE conducted a crucial analysis of the cost and timeline for a solar generating facility's interconnection. EPE provided comprehensive evaluation services for interconnection facilities, design considerations for a 345 kV transmission line modification and essential engineering expertise.

CHALLENGE

Ameren needed a thorough evaluation of interconnection facilities, with a specific focus on designing modifications for a 345 kV transmission line.

Additionally, EPE was entrusted with coordinating and facilitating customer-led responsibilities, including removals, relocations, and drainage. Ameren relied on EPE to navigate the complexities of obtaining land rights and easements, ensuring the seamless integration of proposed facilities.



SOLUTION

EPE executed precise modifications for a 345 kV transmission line. This involved installing new structures, conductors, shield wire, and optical ground wire, establishing a robust looped connectivity solution.

Additionally, EPE facilitated the installation of ADSS fiber-optic cable, supporting primary and redundant line relaying, and providing optional SCADA communications.

EPE strategically evaluated switchyard requirements, identifying a fenced area for the Example Switch Property. Our team actively worked towards securing perpetual easements, ensuring seamless connectivity at a delivery voltage of 345 kV. EPE's commitment extended to collaborating on the removal, relocation, grading, and drainage responsibilities, ensuring a meticulous approach to design and construction.

RESULTS

EPE's strategic solutions for Ameren proved highly successful, surpassing expectations. The 345 kV transmission line enhancement was seamlessly executed, integrating advanced technologies like optical ground wire and ADSS fiber-optic cable. This improvement not only strengthened the connectivity solution but also elevated the performance and reliability of Ameren's solar-generating facility. EPE's effective management in securing crucial land rights and easements successfully acquired perpetual easements for key properties. This tailored and punctual approach enabled Ameren to achieve a flawlessly executed and sustainable interconnection.