

Storm Hardening Project Large Southeastern U.S. Power Utility

Project Description

BHI Energy (BHI) was contracted to support the Storm Hardening Project for a large U.S. power utility by performing field engineering, distribution engineering and computer-based analysis and design functions to strengthen and enhance (i.e., harden) the electrical grid via its feeder system with supporting poles, conductors and equipment.

BHI's initial project scope included review of the utility GIS system and feeder mapping data as supplied by a third-party contractor, and verification of the efficacy and reliability of the data and drawings. This is done via computer system analysis and actual field observations. Upon conclusion of field investigative efforts, BHI cross-checks the maps and data so that only data that actually exists in the field, with full attributes of each feeder system, is accurately reflected in maps, drawings and within software programs.

BHI provides distribution-engineered designs using the utility's software programs and submits additional drawings as required. Upon completion of the design of the hardening efforts, BHI performs peer checks and quality assurance checks as part of the BHI Supervisor quality validation process. Field constructability reviews with utility field specialists are the final step in the quality review process before handing off the approved design for feeder and component construction.

BHI project deliverables include:

- Mainline feeder reviews & change requests
- Pole structure analysis (GIS)
- Dig-safe reviews & forms for permit reviews and submittals
- Non-standard sketched and drawings, upon request
- Online documents and process checklists
- Peer checks and oversight (QA) process
- Comprehensive environmental reviews & checklists
- EON notices and pole set notifications, per joint ownership agreements
- OH & UG constructability review document
- Petitions and Grand documentations, as needed



Above: Utility feeder system sub-station

Below: BHI field technicians perform analysis & observations of poles



