



## OPGW ADDITIONS

**CLIENT:** Confidential

**LOCATION:** Connecticut, Massachusetts

**CONTRACT VALUE:** Less than \$1M

**START DATE:** 2019

**COMPLETION DATE:** 2022

### PROJECT DETAILS

RLC supported our client in replacing existing shield wires on multiple 115 kV and 345 kV transmission lines with OPGW. The existing lines are a mix of monopoles and h-frame structures, constructed using wood, light duty steel, and engineered steel poles. Many of the existing lines were originally installed in the mid 19-century and required field verification of the original documentation. Overall, RLC has completed the analysis and design for over 75 miles of line for the addition of OPGW in Western Massachusetts and Connecticut.

### SCOPE OF SERVICES

- Developed PLS-CADD model with Method 4 Structures to determine capacity of structures.
- Analyzed structures for multiple OPGW cables and installation tensions.
- Created reports for each line detailing the findings of the analysis.
- Developed retrofits for structures that were over utilized.
- Provided design for OPGW installation, including attachments, splices, and installation tensions.
- Supported construction with inquiries and documentation.
- Completed as-built plan and profiles for OPGW installation and modifications.
- Provided consistent analysis of existing structures and davit arms of the same type on different lines that were unable to be analyzed in PLS-CADD/Pole.
- Created streamlined reporting tables and summary of results across projects to simplify decision making and consolidate important information.
- Assigned a single point person for communication across project to ensure consistent product