

AMPJACK® PROJECT PROFILE



Client name: National Grid

Location: SouthEast Massachusetts - Rhode Island – AREA 1 Improvement Program

Project name: X3S & W4S 115kV
Transmission Line Capacity Increase and Refurbishment

Scope of work: Increase Line Rating, Improved Reliability, Improved communication (OPGW), Accommodate 2 New Substations

Role: Prime / Engineering design / Material Procurement / AMPJACK® System tower raises

Time frame: 2018-2019



Project Details

Ampjack completed a 115kV SEMA RI – Area I Improvement Project for National Grid in the congested urban right-of way in Fall River, MA. The project scope consisted of tower and foundation auditing to determine existing structure and foundation details and capacities, detailed engineering design which included full development of Method 4 PLS-CADD model for the project, development of tower extensions and retrofits, and foundation upgrades for the project. Detailed design of the tower family specific AMPJACK® Lift System, and construction execution using local IBEW workers. The project design requirements include evaluation of the structures due to re-conductoring of the transmission circuits and overhead ground wires.

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Project Constraints: Right of Way/Clearances, New vs Old Structures, Public Opinion, Outage/Construction Sequencing, Archeological Resources and Sensitive Environmental Conditions

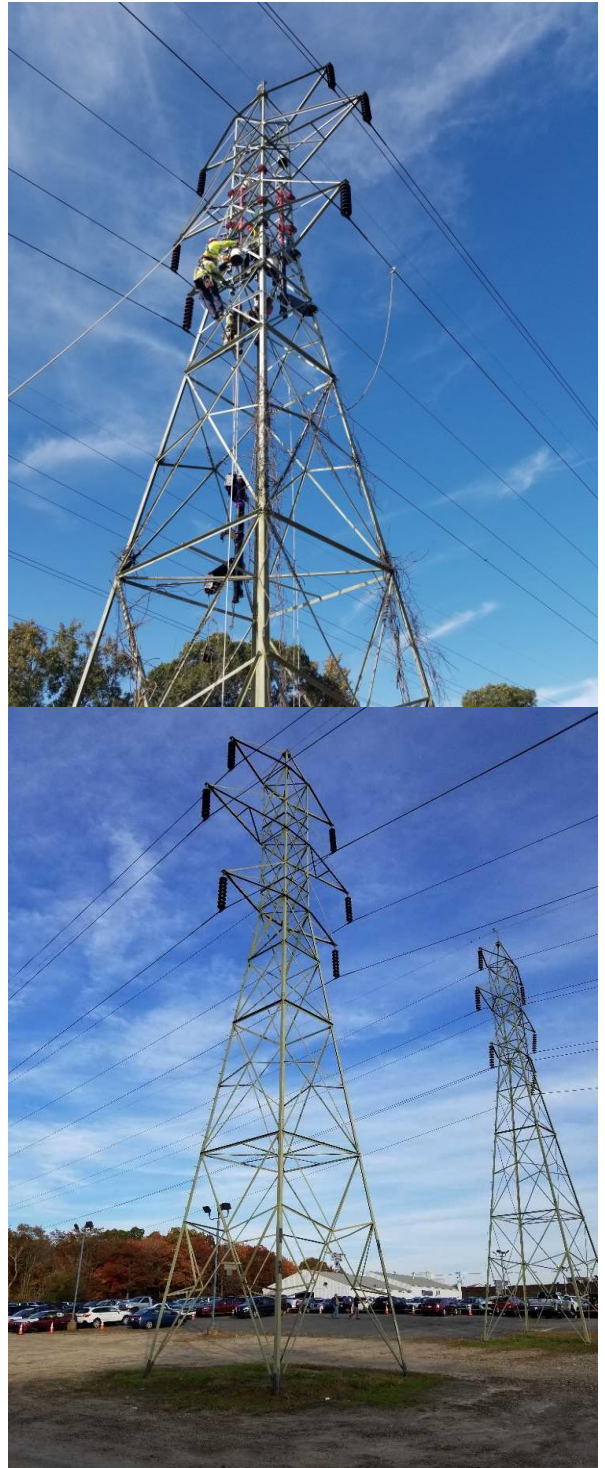
Right of Way/Clearances: Congested ROW (shared with 6-115kV circuits), densely populated area, existing tower heights were pushing minimum code clearance requirements of the bussed ACCC conductor.

Reuse Existing Lattice Tower: 95-year-old tower line, 3 tower types- Suspension, Anchor and Portal tower types, Detailed Tower and Foundation Audits and Condition Assessments, Upgrades and AMPJACK® Tower Lifts

All tower and foundation retrofits were designed and constructed by Ampjack America Ltd.



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