PROJECT SPOTLIGHT

PROJECT SNAPSHOT

ncs

LA CHALUPA WIND FARM
SUBSTATION ADSS FIBER RESTORATION

48-STRAND ADSS RESTORATION FOR RELIABLE WIND FARM COMMUNICATIONS

CLIENT
Acciona Energía

LOCATION
Rio Hondo, TX

PROJECT
La Chalupa Wind Farm Substation

NCS SCOPE
Fiber Optics + Fusion Splicing
ADSS Fiber Restoration

THE PROJECT STORY

FIELD RESTORATION

ADSS FIBER SUPPORT

48
STRAND SINGLE-MODE ADSS

1,600 FT
PRE-CERTIFIED FIBER

63
WIND TURBINES AT LA CHALUPA

THE RESULT: RESTORED CRITICAL FIBER COMMUNICATIONS

NCS restored the ADSS communication pathway within the outage schedule, allowing normal monitoring, control and safety operations to resume while supporting long-term fiber integrity.

THE CLIENT

Acciona Energía operates a major renewable energy portfolio in Texas. La Chalupa is the largest wind energy project in Acciona's North American portfolio, with 63 utility-scale turbines supporting its U.S. wind generation capacity.

THE CHALLENGE

During a scheduled outage, a damaged 48-strand ADSS fiber line disrupted communication between wind turbines, the substation and critical control systems. NCS also had to work around difficult road access, a fixed outage window and added aerial repair needs.

THE SOLUTION

NCS pre-certified a 1,600-ft spool of single-mode ADSS fiber, installed new fiber from Dead-End Structure 69 to Structure 71, fusion spliced it into the existing network, removed the damaged segment and re-fastened fiber at Pole 6.

ONE RESTORED FIBER PATH FOR RELIABLE WIND FARM COMMUNICATIONS.

NCS rebuilt the damaged ADSS segment, fusion spliced it into the network and completed the work within the outage schedule.

FIBER RESTORATION + CERTIFICATION

1,600-FT PRE-CERTIFIED ADSS
A 48-strand single-mode spool was pre-certified before installation.

STRUCTURE 69 TO 71
New ADSS fiber was installed between the dead-end structures.

FUSION SPLICING
The new cable was fusion spliced into the existing network and the damaged section removed.

POLE 6 RE-FASTENING
Fiber was re-fastened to support long-term performance and proper routing.

RESTORED COMMUNICATION PATHWAY

The rebuilt fiber link restored communication between turbines and the substation while supporting long-term system reliability.

FIELD EXECUTION + ADSS INFRASTRUCTURE

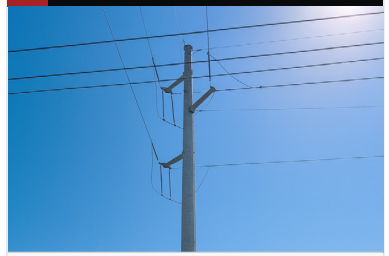
01 NEW ADSS RUN

Installed new 48-strand ADSS between Structures 69 and 71.

02 AERIAL ACCESS

Crews adapted to difficult road conditions and structure access to keep work moving.

03 SPLICE + SUPPORT HARDWARE

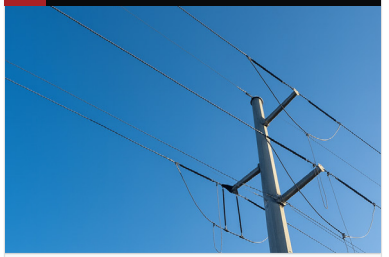


Dome splice enclosures, splice trays, defenders, grips, clamps, banding and slack storage supported the rebuilt link.

04 FIBER SUPPORT

Fiber was re-fastened and supported for long-term performance along the route.

05 FIELD RESPONSE



Additional aerial repair needs were completed within the fixed outage timeline.

06 WIND FARM OPERATIONS

Restored communications supported the return to normal monitoring, control and safety operations.

PLANNING A RENEWABLE ENERGY FIBER PROJECT?

Contact NCS for fiber optic cabling, ADSS restoration and field support.

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TEXAS OFFICE LOCATIONS

- HOUSTON
- GALVESTON
- DFW
- CORPUS CHRISTI
- RIO GRANDE VALLEY