



DUPLEX CATENARY SUPPORT SYSTEM (CSS)

Safe reconductoring solution for simplex-to-duplex and duplex-to-duplex upgrades

SIMPLEX TO DUPLEX

RECONDUCTORING
SUPPORT

DUPLEX TO DUPLEX

ASSET
RENEWAL

INFRASTRUCTURE PROTECTION

DURING CONDUCTOR
REPLACEMENT

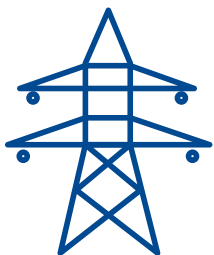
CONVENTIONAL TOOLS

EASY
DEPLOYMENT

LOWER PROJECT IMPACT

REDUCED
DISRUPTION

TRANSMISSION GRIDS



The Duplex Catenary Support System (CSS) is an innovative reconductoring solution developed by Omexom for simplex-to-duplex and duplex-to-duplex transmission line upgrades. By supporting conductors during replacement, it protects infrastructure, crossings, transport corridors, buildings and public spaces beneath the line, enabling safe, efficient and cost-effective capacity upgrades while minimizing disruption to communities and landowners.



THE CHALLENGE

- Utilities need to increase capacity within existing transmission corridors
- Electrical and mechanical protection is critical during reconductoring
- Simplex-to-duplex upgrades must accommodate headboard passage
- Conventional methods often require temporary structures, increasing cost and complexity



KEY BENEFITS

- Supports simplex-to-duplex and duplex-to-duplex reconductoring
- Provides protection during conductor replacement
- Reduces or eliminates temporary structures such as hurdles and nets
- Minimizes impacts on landowners, communities, and adjacent activities
- Deployable by line crews using standard tools and work practices

THE CSS APPROACH

Protect → Support → Reconductor → Upgrade

Conductor Support During Reconductoring

The CSS supports conductors throughout the reconductoring process, creating a protected working environment while maintaining safe separation from assets and infrastructure beneath the transmission line.

Designed for Capacity Upgrades

The system is specifically designed to accommodate simplex-to-duplex conductor replacement while enabling the passage of the headboard used during the pull-through operation.

Practical Implementation

The solution can be installed and deployed by line mechanics using standard tools and established transmission construction methods, simplifying field implementation and reducing training requirements.

Reduced Construction Impact

By providing protection directly through the catenary support system, projects can avoid many of the additional temporary protection structures traditionally required, helping reduce site disturbance and project costs.



TYPICAL USE CASE: Simplex-to-duplex reconductoring projects | Duplex-to-duplex conductor replacement | Asset refurbishment programs | Transmission line modernization and capacity upgrades | Projects requiring protection of critical infrastructure during reconductoring

OMEXOM

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