

Multi-Agency Coordination is the key to successful Renewable Integration and System Reliability.



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CLEANPOWER

Ultra-High Voltage Transmission and Integrating Renewables and Large Loads; Josh Potts – Technical Manager, T&D, Ulteig

INTRODUCTION

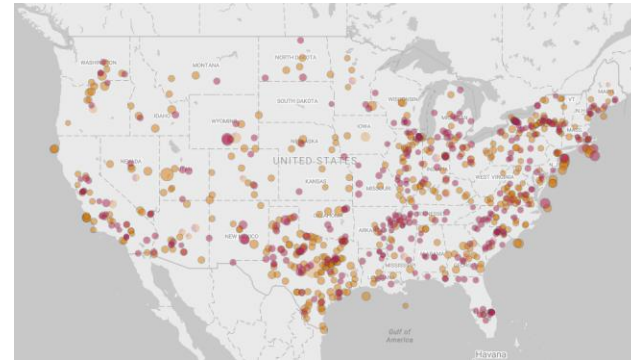
As the US Grid faces surging demand from new industries and the rapid growth of renewable generation, the need for reliable, flexible, and sustainable infrastructure is urgent. Transmission congestion, aging assets, and extreme weather events threaten progress. Addressing these challenges requires a shift from isolated project development to holistic, corridor-based planning – where renewable generation, large loads, and transmission investment are integrated into unified mega projects.

METHODS

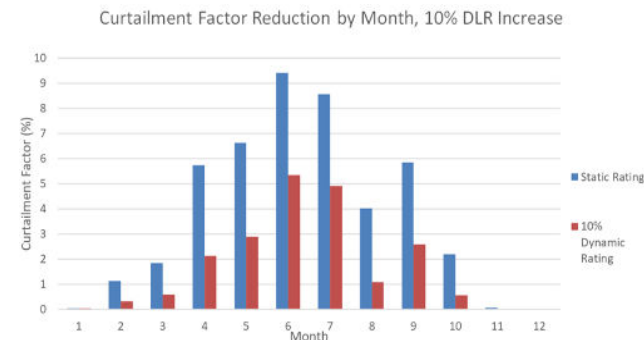


Supporting integrated renewable and large-load development, PSS®E/TARA evaluated reliability and interconnection performance, while PLEXOS® quantified congestion, curtailment, LMP impacts, and the value of GETs and DLR.

DISCUSSION

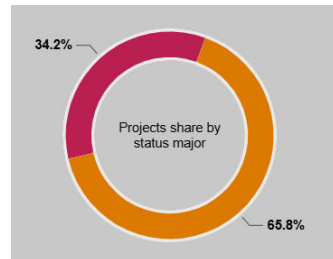


RESULTS



Results show that transmission constraints and electrical proximity drive curtailment risk, interconnection costs, and project viability, while DLR can reduce curtailment impacts.

Ulteig



● Planning - early
● Planning - advanced

224.1 Capacity (GWac)
1,069 Projects

Additional contributions by:
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