



Informing the Transmission Discussion

A Look at Renewables Integration
and Resilience Issues for Power
Transmission in Selected Regions
of the United States

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Preface

This report was prepared by ScottMadden, Inc. for WIRES.¹ The study includes a comprehensive overview of the current state of play of the electric industry and conducts a region-by-region examination of the challenges posed by changing energy resources, increasing electrification, and a greater need and preference for location-constrained renewables integration, in addition to addressing growing concerns about and risks to the resilience of the North American electric power system. The study also explores how these issues should be considered from an interregional transmission development perspective.

One of the clear takeaways from the report is that transmission can, and should, play a significant role in addressing the challenges raised by these factors. In particular, as more states, utilities, and other companies are mandating or committing to clean energy targets and agendas, it will not be possible to meet those goals without additional transmission to connect desired resources to load. Similarly, the current transmission system will need further expansion and hardening beyond the traditional focus on meeting reliability needs if the system is to be adequately designed and constructed to withstand and timely recover from disruptive or low probability, high-impact events affecting the resilience of the bulk power system.

To the extent all of these signs point toward a need for more transmission, time is of the essence. In the current environment, transmission is increasingly more difficult to build and operate. With transmission projects taking ten years or longer to be built and put into service, decisions regarding any transmission projects required to meet renewables integration and resilience concerns must be made with sufficient lead time if they are to play a role in meeting needs existing today, much less in the future. WIRES offers this report to facilitate a comprehensive review and discussion by planners, policy makers, regulators, and all those who are interested in the development of a robust transmission grid that is adequate to meet environmental and resilience goals.

WIRES solicits and looks forward to comments and questions regarding the study, which can be submitted to www.wiresgroup.com.²

¹ WIRES is an international non-profit trade association of investor-, member-, and publicly-owned entities dedicated to promoting investment in a strong, well-planned, and environmentally beneficial high voltage electric transmission grid. WIRES members include integrated utilities, regional transmission organizations, renewable energy developers, and engineering, environmental, and economic policy consulting firms. WIRES' principles, its studies, and all public comments are available at www.wiresgroup.com.

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