WIRES CRA Charles River Associates

December 20, 2021

Value of Local Transmission Planning Report

CRA Report Demonstrates Unique Value of Local Transmission Planning to Support a Resilient and Clean Transmission Grid

KEY TAKEAWAYS

- Local transmission planning provides significant benefits and is foundational to the success of the regional planning process and achieving public policy goals.
- Local project needs are often unique and distinct from regional system issues and solutions.
- Local transmission investments play a key role in hardening the system against severe weather.

Local Transmission Project Drivers and Benefits

Local Planning Driver	System Benefit
Degraded equipment, equipment failure, obsolescence	Enhanced equipment material condition, minimization of performance risk
Minimization of outages, optimal system configuration, increased element restoration capability	Increased operational flexibility and efficiency
Need to improve system ability to anticipate, absorb, adapt to, and/or rapidly recover from a potentially disruptive event, including severe weather, geo-magnetic disturbances, physical and cyber security challenges, critical infrastructure reduction	Improved infrastructure resilience
Service to new and existing customers. Interconnect new customer load. Address customer transmission & distribution load growth, outage exposure, and equipment loading	Enhanced customer service
New Government/State regulations, new industry standards on transmission, pilot projects and other	Addressed other system needs

- Due to broad focus and longer time horizons associated with regional planning, these processes are not well suited to address local system needs related to resiliency, interconnecting customers, and replacing aging infrastructure.
- Local planning is subject to robust transparency requirements in most regions, including ample opportunity for stakeholder input and consultation.
- Both regional AND local planning are needed to achieve federal and state clean energy goals.
- Local planning provides critical support for grid modernization and distributed energy resources integration initiatives because of the way they affect the distribution system connection to local transmission.
- Regional planners are not presently equipped with the relevant subject matter experts and local presence to analyze the local system and identify needs related to asset management, resilience, customer impact, and other local needs.
- Local planners combine proximity to the local system with important expertise to design cost-efficient transmission solutions that serve their customers while maintaining system integrity.