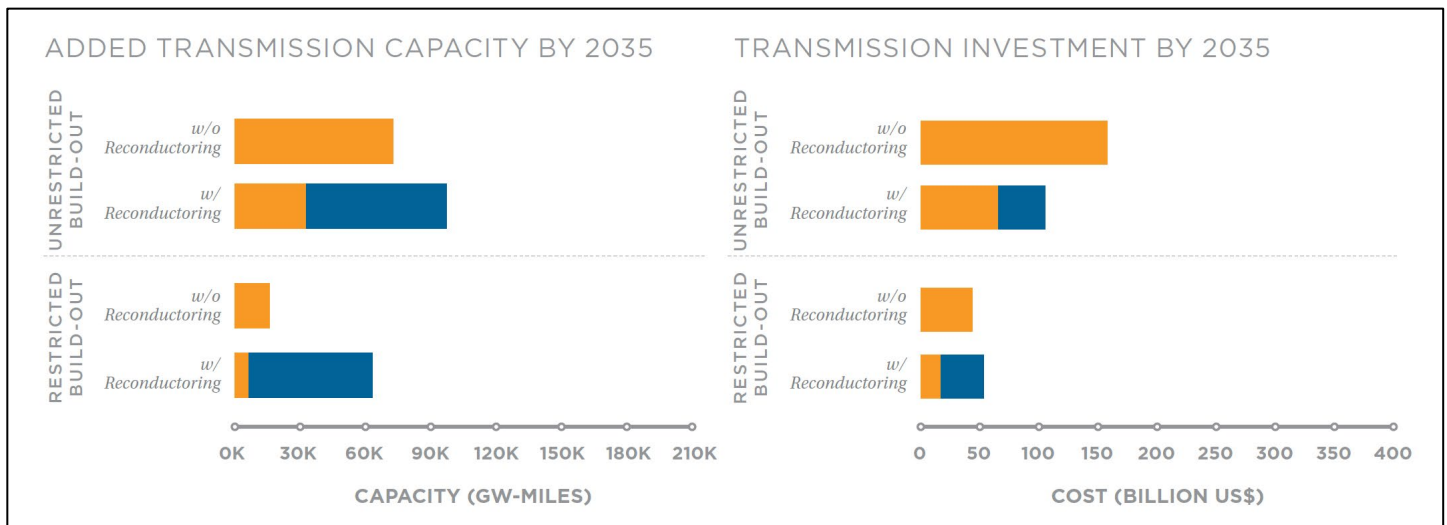


Background

The Western electric grid is facing “escalating challenges.” Addressing rapid load growth, ensuring that new generating capacity currently languishing in interconnection queues can reliably and affordably meet demand, achieving state economic development goals, and responding to extreme weather events and the increased threat of wildfires requires additional investment in the region’s electric transmission system (WestTEC 2026, p. ii; see also: Chojkiewicz, et al. 2024).

Across the West, approximately 9,400 miles of major transmission projects are under development (WestTEC 2026). However, by as early as 2035, the transmission system will not meet the needs of Western states (Energy Strategies 2024; WestTEC 2026). New transmission projects face several hurdles to development. Chief among these, complicated and fragmented regulatory oversight and siting and permitting processes often mean that new lines take 10-15 years to complete (Chojkiewicz, et al. 2024; GridWorks 2023).

Reconductoring, or replacing existing transmission lines with advanced conductors, is a viable interim and near-term solution to the West’s transmission capacity needs. Reconductoring projects can often avoid the regulatory hurdles confronting the construction of new projects (O’Boyle, et al. 2024; Solomon 2024). With an average construction timeline of 18 months to three years, reconductoring can be relatively rapidly deployed. Transmission studies suggest that reconductoring can meet up to 37% of the West’s near-term transmission capacity needs and, on average, “cost[s] less than half the price of new lines [and could save U.S. consumers] \$85 billion by 2035” (Chojkiewicz, et al. 2024, p. 26; Energy Strategies 2024). While not a long-term solution, reconductoring can ensure grid reliability “while new lines for long-term needs are concurrently planned, permitted, and constructed” (Chojkiewicz, et al. 2024, p. 6).



Reconductoring can ensure that necessary transmission capacity is added cost-effectively.

Source: Chojkiewicz, et al. 2024

Policy Opportunities

1. Reform utility incentive structures.

Reconductoring can reduce transmission spending – on which utilities earn a return – and investors may view pursuing less expensive options as a loss of revenue. State policymakers can address the financial incentive to pursue more expensive options by implementing a performance-based approach that rewards cost-effective investments while penalizing “excessive spending” (O’Boyle, et al. 2024, p. 19).

2. *Reform benefit-cost methodologies.*

While utility planning requirements direct utility commissions and utilities to consider a range of costs and benefits associated with different resources, existing planning frameworks may not capture all of the benefits of reconductoring. State policymakers can ensure that a fuller range of benefits is considered by enabling the inclusion of additional benefits during the evaluation of reconductoring proposals. As an example, Montana’s [House Bill 729](#) “allows the [utility commission] to ‘consider decreased electrical losses and any other relevant consumer, environmental, and system benefits provided by advanced conductors’” (O’Boyle, et al. 2024, p. 20).

3. *Require utilities to evaluate reconductoring.*

Policymakers can signal that reconductoring is encouraged when viable by requiring that utilities’ transmission plans evaluate reconductoring and “right-sizing” with advanced conductors alongside traditional transmission investments. When transmission plans are incorporated into the resource planning process, utilities may find that “Reconductoring is a cost-saving solution that creates headroom to reallocate capital for other expenditures while keeping rates manageable” (O’Boyle, et al. 2024, p. 19).

4. *Authorize expedited permitting.*

Policymakers can authorize expedited permitting, when appropriate, for reconductoring. While reconductoring is often subject to “a less onerous permitting process” than new greenfield development, state policymakers can evaluate their permitting processes to identify modifications that can further simplify the process (O’Boyle, et al. 2024, p. 27).

5. *Prepare the workforce.*

Policymakers can provide incentives for union training programs and authorization and funding for training programs at state schools and community colleges. While some manufacturers offer training programs to installers, “creating opportunities to upskill the current workforce to work with advanced conductors [will be an essential piece] of the puzzle” (O’Boyle, et al. 2024, p. 28).

6. *Promote regional and interstate collaboration.*

Encourage transmission developers and planners to collaborate with planners and developers in neighboring states to identify prime corridors for reconductoring across the region. Policymakers can also work with their peers in neighboring states to establish agreements to equitably allocate the costs of reconductoring regionally significant corridors.

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