

Transmission Infrastructure

What should we do to prevent blackouts?

Northwest Power and Conservation Council

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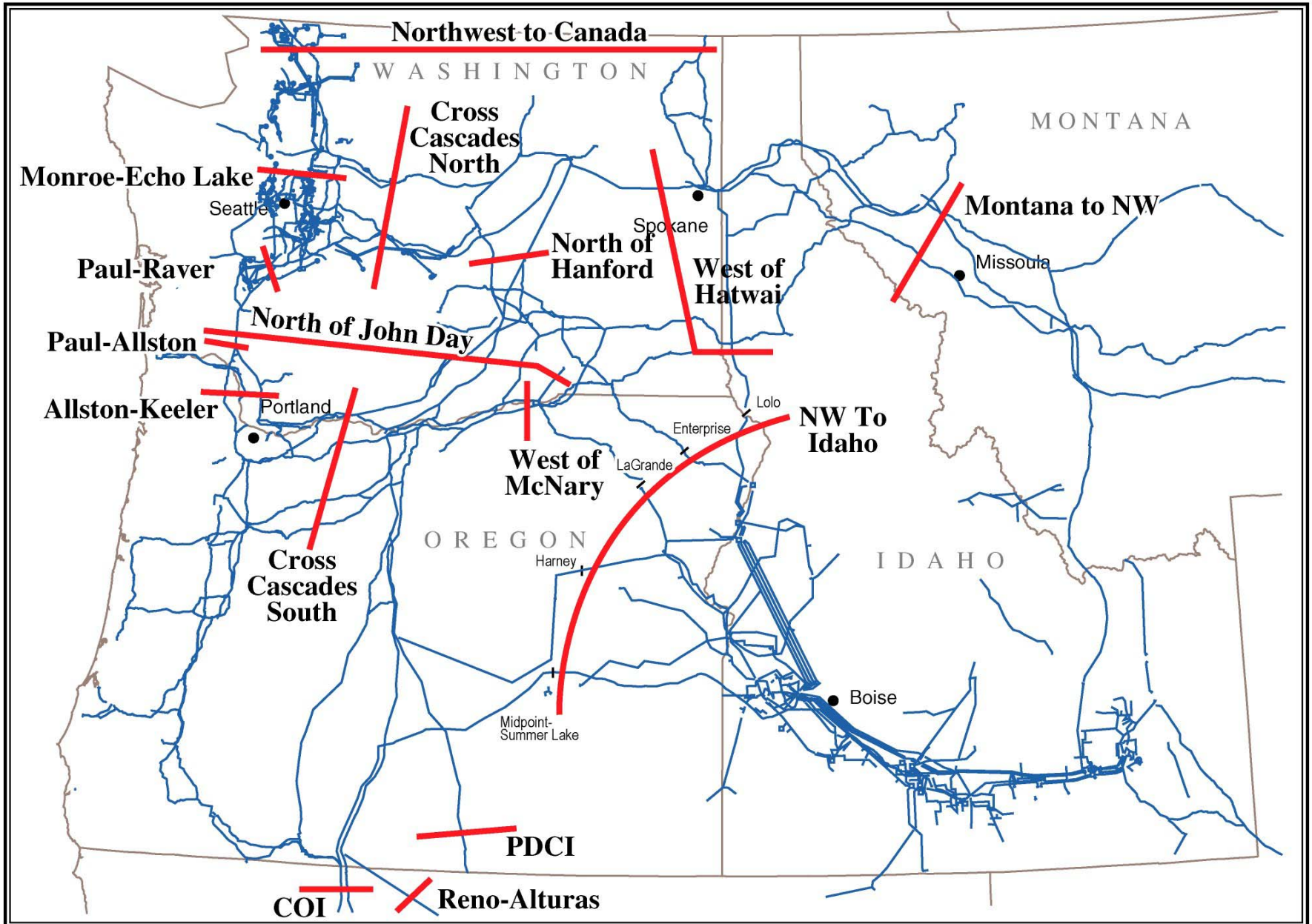
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System is Stressed

- Northwest grid reliability improved since 1996
- However system continues to show signs of stress
 - Two close calls during summer 2003
 - June 4: instability problems near Spokane, Wash.
 - July 19-20: overbooked transmission paths between Montana and Idaho

Potential NW Constrained Paths



Note: Other Potentially Constrained Paths may be identified over time.

More Transmission Needed

- Even with reinforcements after the August, 1996 blackout, more transmission is needed:
 - Reinforce load centers and integrate needed generation resources
 - Relieve congestion
 - Add reliability margin back into the grid
 - Help the competitive wholesale market work

Building Infrastructure

- In 2001, BPA developed an infrastructure program calling for 20 new projects throughout the Northwest to shore up the grid
 - Received borrowing authority from Congress to start first few critical projects
 - \$700 million in 2003 (\$300 for transmission projects)
 - Six key projects currently under construction require about \$500 million to complete
- Proposed projects reviewed by Infrastructure Technical Review Committee
 - Regional utility experts
- Key question for entire industry is access to capital
 - Financially secure industry is more apt to invest where necessary

PROPOSED BPA TRANSMISSION LINE PROJECTS STATUS of the G20 INFRASTRUCTURE ADDITIONS

Legend

- Underway or Completed
- Substation Project
- On Hold
- Other Projects
- BPA Transmission Lines
- Indian Reservation
- Associated BPA Substation

Miles 0 10 20 40 60 80 100

Map ch#02011 Nov. 2002



Current Infrastructure Projects

- Today six projects are underway
 - Three projects involve new transmission lines
 - First new infrastructure built by BPA in more than 15 years
 - BPA is ahead of the curve with new infrastructure projects currently underway

What should we do to prevent blackouts?

- Infrastructure investment
- National mandatory reliability standards with financial teeth
- One utility regional transmission planning