



***A roadmap for transmission development  
to benefit consumers in Wyoming, Colorado,  
New Mexico, and Arizona***

**Wyoming Infrastructure Authority Board Meeting  
Jackson Hole, Wyoming  
January 25, 2010**



## About the Project

### OVERVIEW

The High Plains Express (HPX) initiative is a roadmap for transmission development in the Desert Southwest and Rocky Mountain region to significantly strengthen the eastern portion of the Western grid. It would potentially incorporate the transmission projects already under development within the HPX footprint.

With added North-South and East-West transmission capability, markets for renewable energy would be broadened, system reliability would be enhanced, and the ability to make economic transfers of energy would provide cost-savings opportunities for consumers in the states of Wyoming, Colorado, New Mexico, and Arizona.

## What's New

**August 2009**

[Feasibility Study Report Released »](#)

**April 2009**

[Stakeholder Meetings Notes »](#)

**January 2009**

[Joined by the Wyoming and New Mexico Transmission Authorities »](#)

## Next Meeting

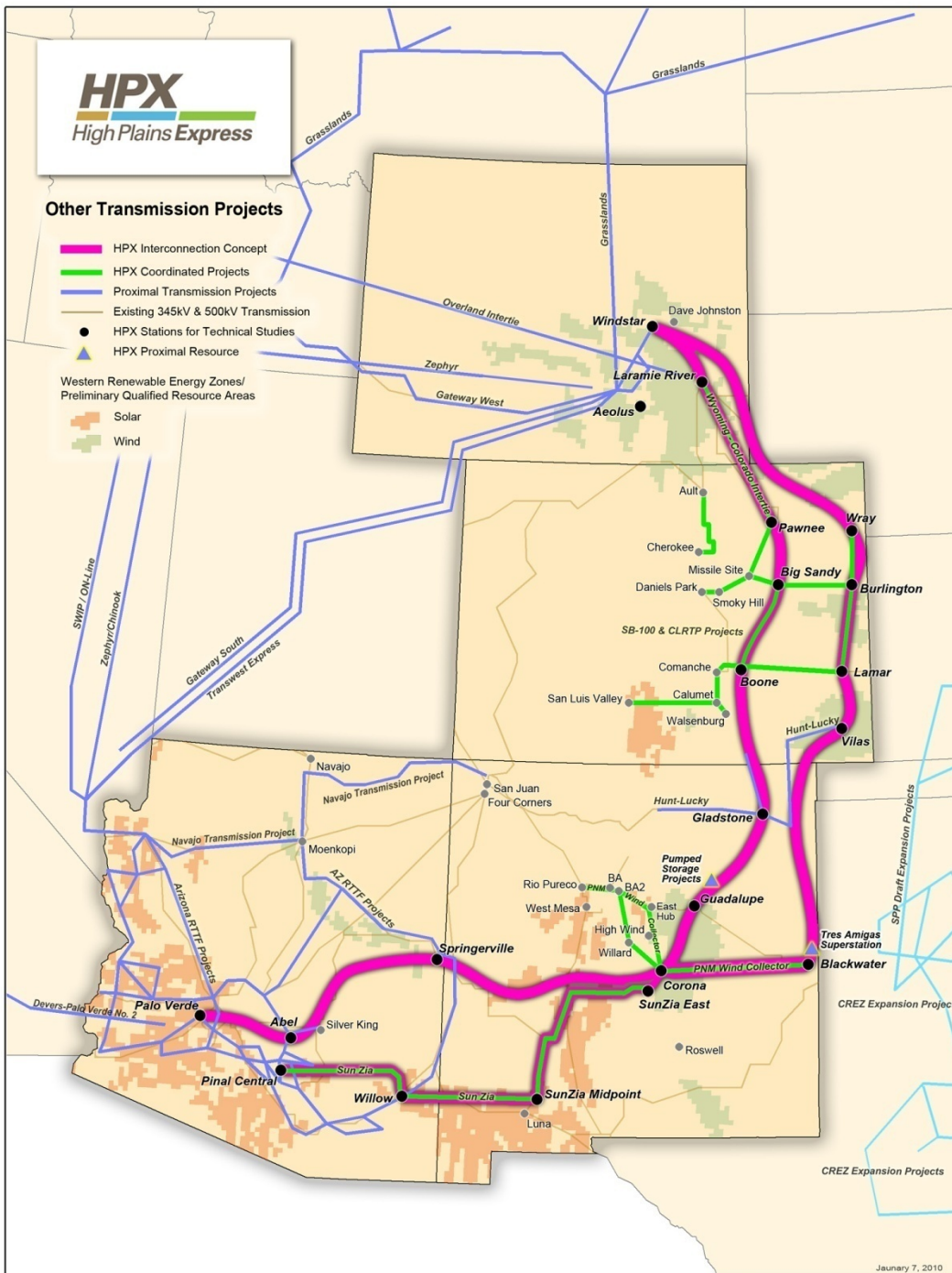
January 13, 2010

Albuquerque, NM

## Presentations

**April 2009**

[Stage 2 Stakeholder Kickoff Meeting](#)



# High Plains Express Initiative

## A Roadmap for Regional Transmission Expansion

### Description

- Two Corridors
- AC System with 19 substations
- ~3,500 MW Capacity
- ~\$5 Billion built in stages

### Benefits

- Renewable development
- Enhanced reliability
- Consumer savings
- Economic stimulus

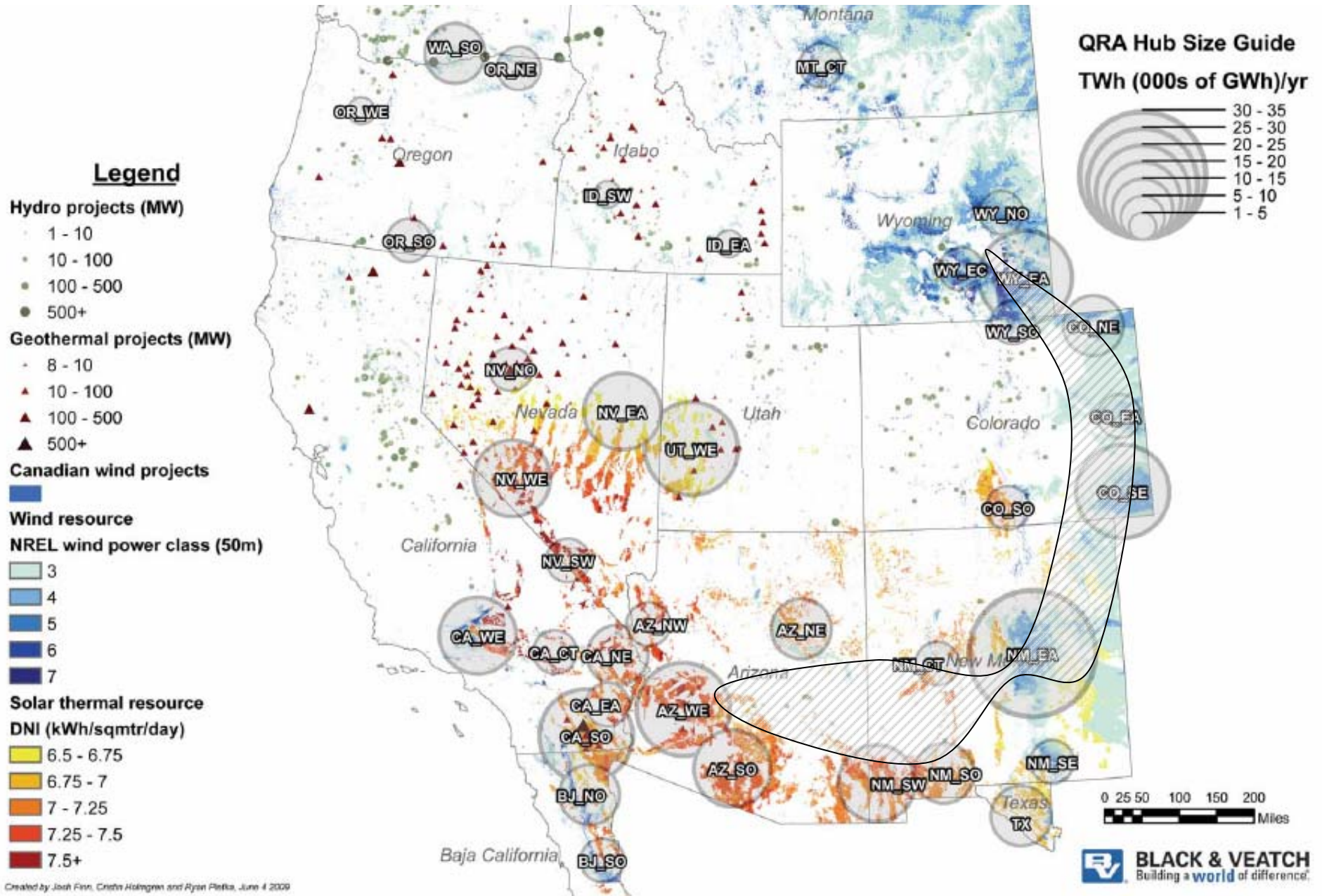
### Participants

- 7 Utilities
- 3 State Authorities
- 1 Transmission Developer

# HPX Initiative Participants

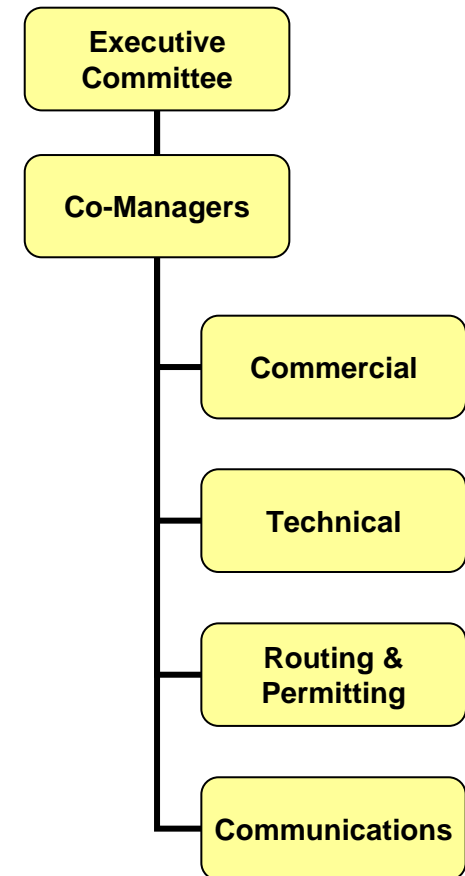


# HPX would connect the best renewables identified by WREZ

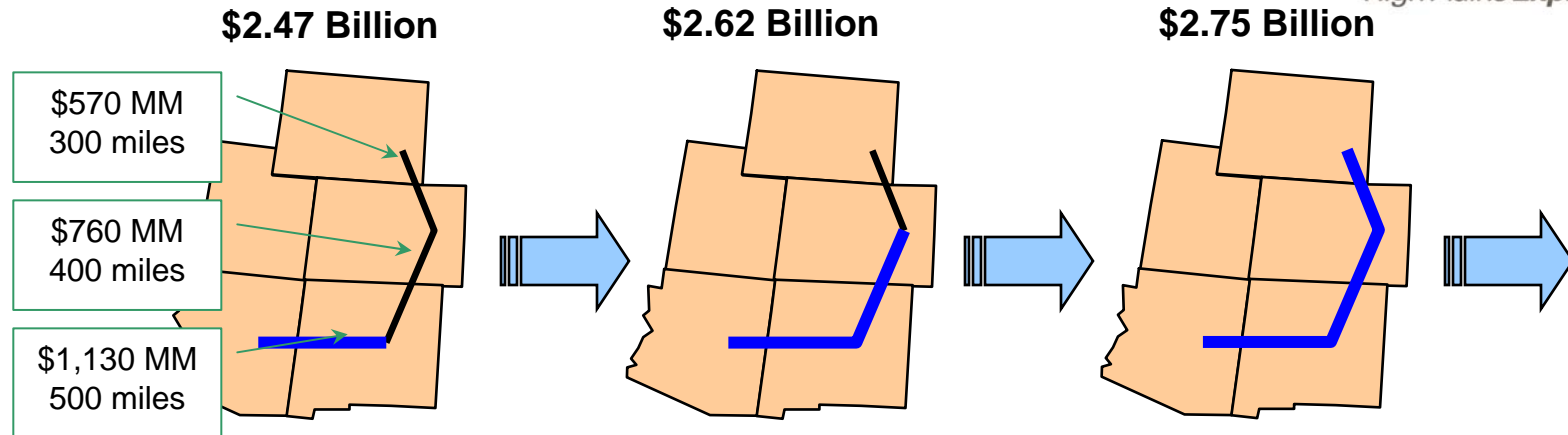


# Stage 1 $\Rightarrow\Rightarrow$ Stage 2

- Stage 1 completed in late 2007
  - Positive feasibility results
- Stage 2 initiated in early 2009
  - Management structure defined
  - Funds allocated for consultant studies managed by the four HPX committees
- Stakeholder Input
  - Meetings: 4 stakeholder meetings to date
  - HPX website
- Stage 2 completion later in 2010

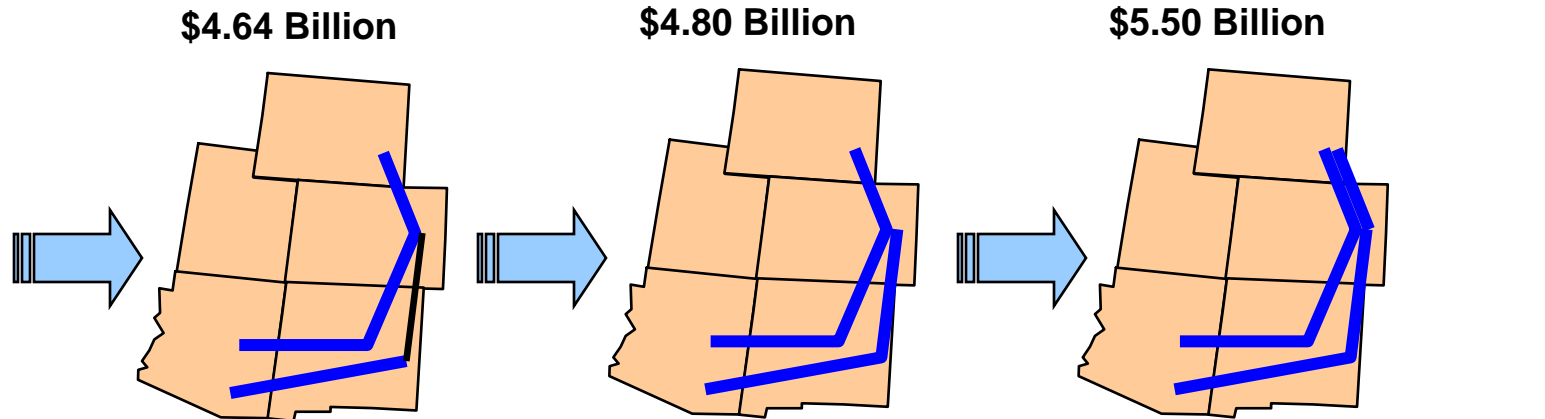


# Hypothetical Staged HPX Development (to match need with cost)



Initial 500 kV Line Operated at 345 kV between NM and WY

Staged Conversion to 500 kV with addition of 500 kV Substations as need arises



Staged Conversion of 2<sup>nd</sup> line to 500 kV with addition of 500 kV Substations as need arises

Full double 500 kV Build-out

— 500 kV operated at 345 kV (~750 MW)      — 500 kV operated at 500 kV (~1,500 MW)

# HPX's Development will be Dependent Upon.....

- Results of Stage 2 studies
- Public policy support\*
- Commercial issues
  - Participants & customers
  - Cost recovery
  - Tariff design
  - Role of state transmission authorities\* & WAPA

*\* Important role for the Wyoming Infrastructure Authority*