



**Update to SWAT Oversight Committee**  
**May 20, 2009**

**Robert Kondziolka**  
**Salt River Project**

# HPX Initiative Participants



# Vision

- The HPX initiative is a proactive plan for the expansion and reinforcement of the transmission grid in the states of Wyoming, Colorado, New Mexico and Arizona.
- The goal is to develop a high-voltage backbone transmission system that will
  - enhance reliability,
  - provide economic benefits to consumers,
  - increase access to renewable and other diverse generation resources within regional energy resource zones, and
  - complement and coordinate with other regional transmission projects.

# High Plains Express Initiative

## A Roadmap for Regional Transmission Expansion

### Description

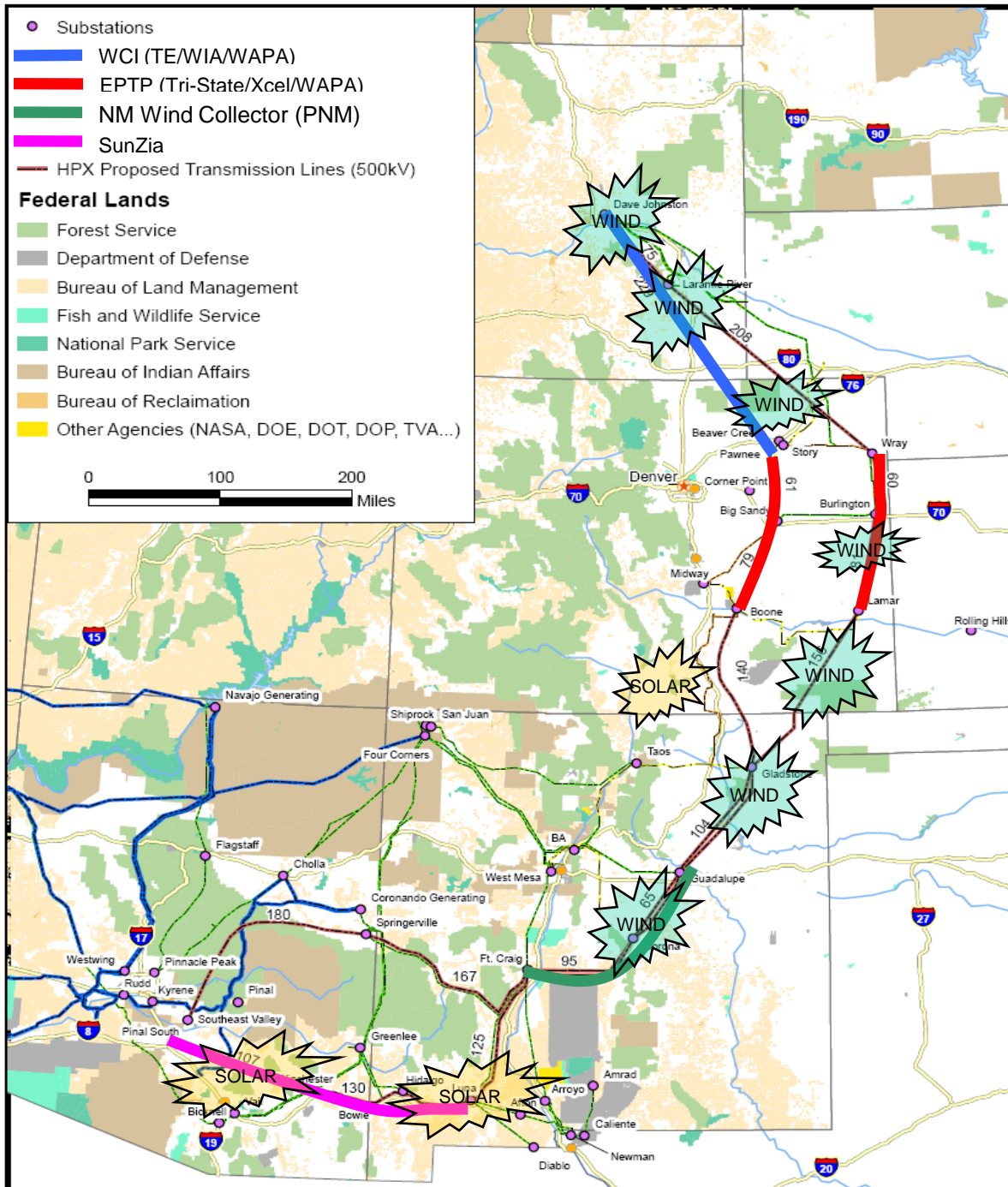
- Two 500 kV AC Lines
  - Exact Routes TBD
- ~3,500 MW Capacity
- ~\$5 Billion

### Benefits

- Renewable development
- Enhanced reliability
- Consumer savings

### Participants

- 7 Utilities
- 3 State Agencies
- 1 Transmission Developer



# HPX Description

- An AC system enhancement to further connect the states of Arizona, New Mexico, Colorado, and Wyoming
- Two 1,250 mile long, 500 kV, AC transmission lines
  - Double-circuit 345 kV option to be considered
- Modeled as interconnected with the existing grid at 14 substations, where power would be uploaded and downloaded
- 3,500 – 4,000 MW of transmission capacity
- \$5.1 billion cost estimate; modeled 2017 operation
- Potential to integrate with four transmission projects already under study or development within the HPX footprint
- Open planning process vetted with stakeholders

# Anticipated Benefits

- Enhanced reliability
- Improved access to renewable energy
- Consumer savings in all HPX states
- Economic stimuli for all HPX states
- Roadmap for regional transmission expansion

# 1st Stage Feasibility Results

- Technical Studies
  - Operationally feasible
- Cost/Benefit Studies
  - Benefits outweigh costs
- Conceptual Routing
  - No apparent fatal flaws
- Next Steps (2nd Stage Feasibility)
  - More detail needed to confirm feasibility
  - Identification of commercial arrangements
- Report issued June 2008

# Next Steps

- Constructing individual segments over time following a “roadmap” approach to transmission expansion suited to each HPX state’s needs
  - Modeling of sequential injections from south-to-north?
  - Telescoped approach, with greater capacity in south?
- Assessing the performance and costs of renewable resource integration and dispatch
  - To what extent are dispatchable resources required?
- Assessing public and regulatory policies potentially applicable to HPX
- Further quantification of the overall cost impacts and benefits that could be achieved from the HPX initiative
  - Include benefit/cost modeling of various resource mixes

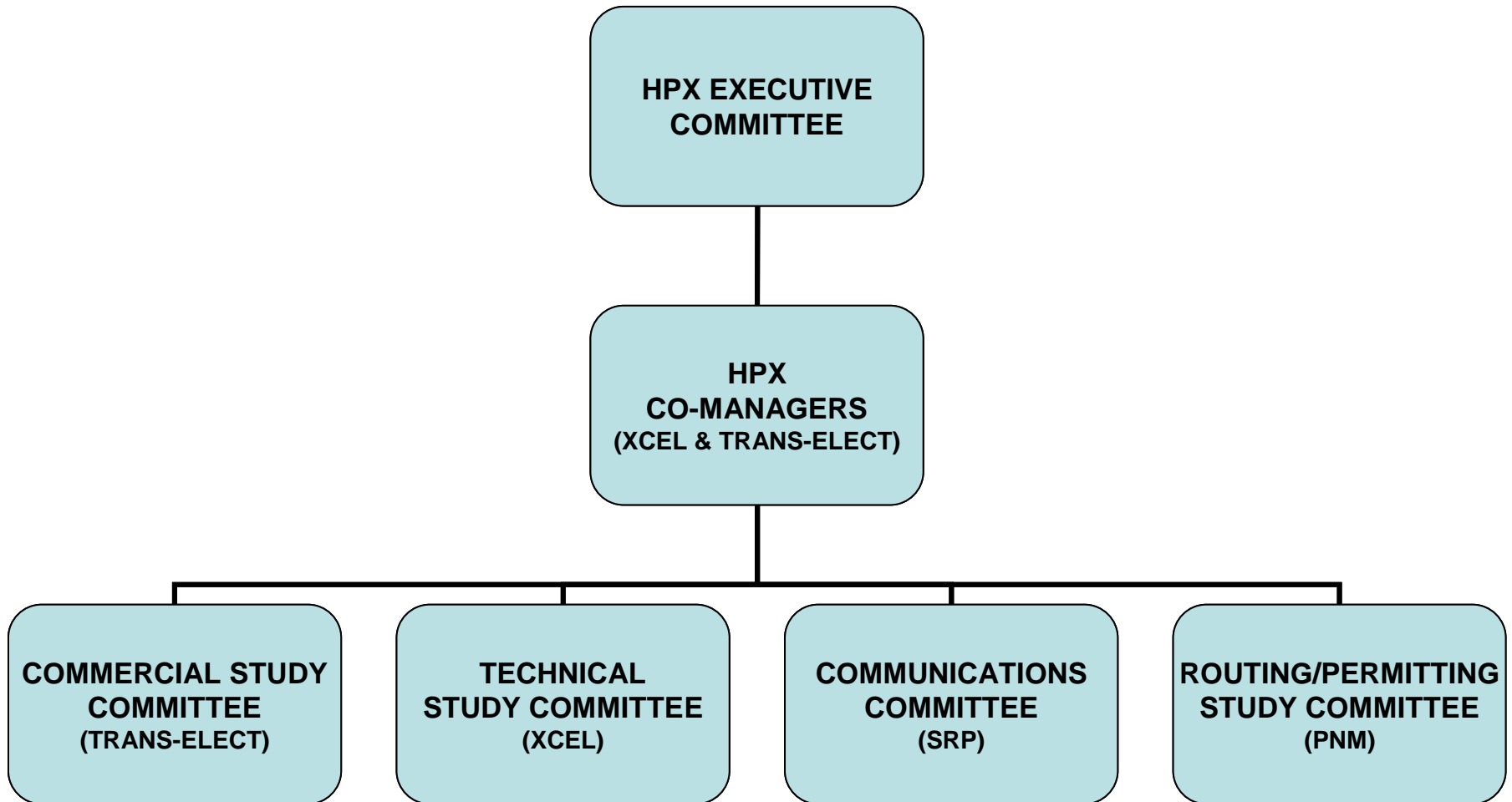
# Next Steps, cont.

- Investigation of cost allocation and recovery mechanisms, including potential for a regional tariff for segments and/or the entire HPX initiative
- Continuing an open stakeholder approach and outreach to secure input on the transmission planning process
- Identifying business structures, ownership shares, development funding requirements, work plans and project development schedules for consideration in further assessing the viability of the HPX initiative

# Stage 2 Feasibility

- Timeline: 2009 – 1Q2010
- Stakeholder Kickoff Meeting April 17, 2009
- Detailed studies conducted by independent parties, organized under 4 committees
- “Component projects”
  - WCI
  - EPTP
  - NM Wind Collector
  - SunZia
- Extensive legislative activity focused on renewable energy and transmission
  - Planning, Siting, Cost Allocation

# HPX Stage 2 Organization



# **WECC Regional Planning Review Process Purpose**



- 1. Foster broad planning perspective;***
- 2. Promote efficient system operation;***
- 3. Ensure all relevant planning issues considered;***
- 4. Provide procedures for coordinated planning;***
- 5. Involve Member Representatives, member executives, regulators, existing planning bodies, environmental groups, land use groups, and other non-utility interest groups in the process;***
- 6. Allow stakeholders to identify efficiencies;***
- 7. Provide for dispute resolution.***

***April 2, 2009 - Initiated WECC Regional Planning Review Process with submittal letter and notification to WECC members***



## About the Project

OVERVIEW

PROJECT MAP

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 »](#)

**June 2009**  
[HPX Transmission Study Published »](#)

**April 2009**  
[Stakeholder Meetings Notes »](#)

**January 2009**  
[Joined by the Wyoming and New Mexico Transmission Authorities »](#)

## Next Meeting

**April 17th – 8pm**  
Louisville Rec. Center  
Louisville, Colo.  
*Open to the public*  
[Download Agenda »](#)

## Presentations

**February 2009**  
Feasibility Study Overview  
[Download Now »](#)



**Questions Should be Directed to:**

**Robert Kondziolka**

**(602) 236-0971**

**[Robert.kondziolka@srpnet.com](mailto:Robert.kondziolka@srpnet.com)**