

SLV Electric System Improvement Project



Improving system reliability and increasing capacity for member systems:

- **San Isabel Electric**
(Pueblo West)
- **San Luis Valley Rural Electric Cooperative**
(Monte Vista)

Project benefits

- ... upgrade the existing transmission system in the San Luis Valley
- ... improve system reliability
- ... prevent voltage collapse under peak loads



Purpose and need

... the existing electrical system has reached its limit due to continued residential and irrigation growth

...radial nature of the existing system a major concern

... proposing a 230-kilovolt transmission line between the Walsenburg and the San Luis Valley Substations



Voltage collapse

The total load in the San Luis Valley peaked in 2002 at 146 megawatts.



Transmission support for renewable energy

What does it mean for San Luis Valley?

- Boost economic development opportunities
 - New commercial and industrial operations
 - Small businesses
- Export solar energy resource to major load centers



Jurisdiction and Existing Electric Utilities

Legend

Study Area

Existing Electric System (Tri-State, Acal, Western, SLVREC, ARCO)

- Substation/Switching Station
- 115-kV Transmission Line
- 230-kV Transmission Line
- 69-kV Transmission Line

Hydrology

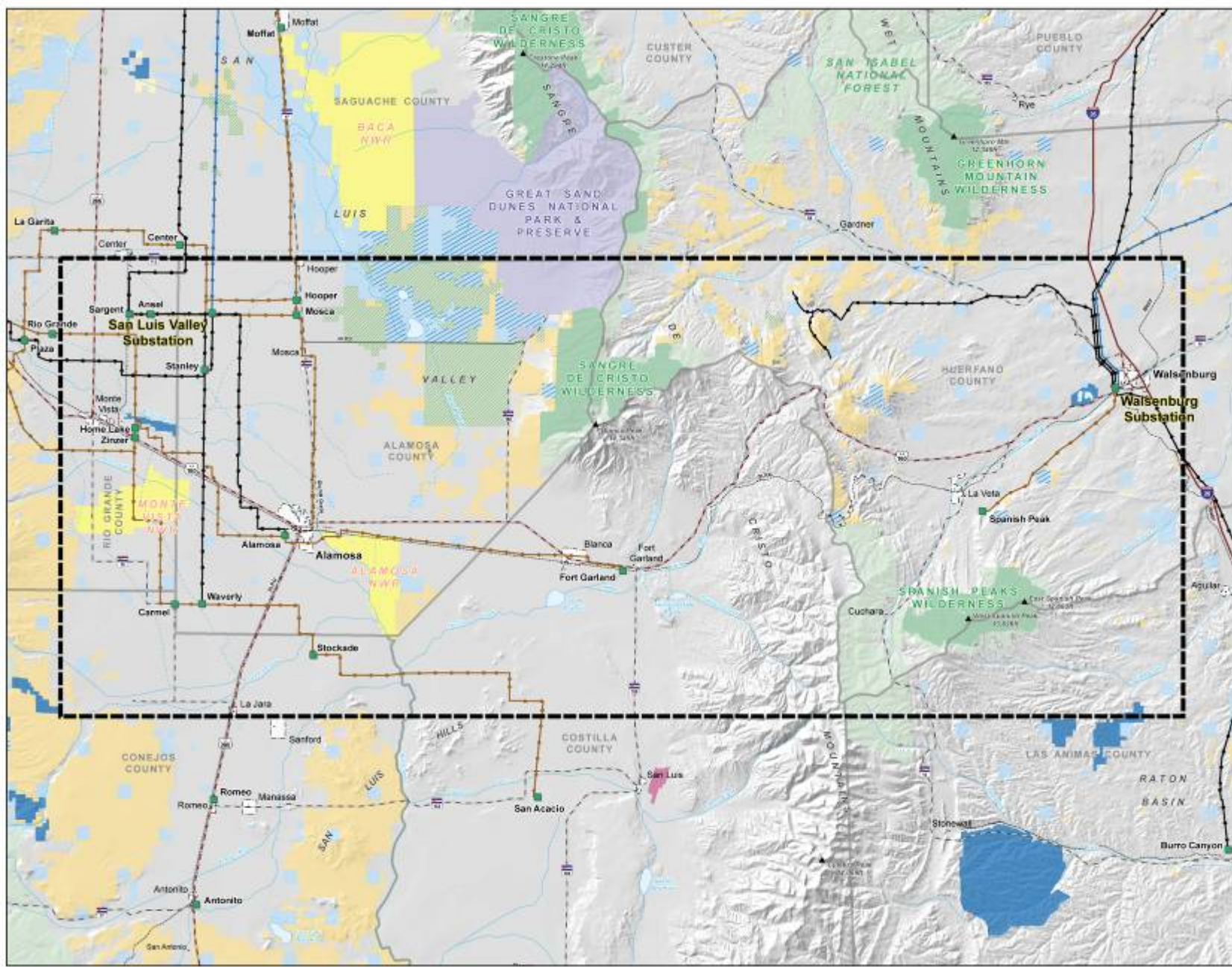
- Perennial Stream, Creek, or River
- Canal or Ditch

Land Status (CSU, CO SLB, National Atlas)

- State
- Department of Defense
- CO State Stewardship
- National Land Trust Land
- City Boundary
- National Park Service
- Indian Reservation
- US Forest Service
- USFS Wilderness Area
- US Fish & Wildlife Service
- Bureau of Land Management
- State Wildlife Area
- County



Project Area: 2001
 Source: ©2007 National Atlas, 2000, Data: NOAA, SLVREC
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Project Budget: \$52 million

2008

... rights-of-way

... substation improvements

... line construction



Estimated schedule

July '08 – Nov '10 *Environmental Process*

July '08 – July '09 *Permitting*

July '08 – Nov '10 *Land Acquisition*

Feb '09 – Jan '10 *Engineering*

Nov '10 – Oct '11 *Construction*

Estimated in-service - 4th quarter 2011



CEDA Board Discussion Points

Potential CEDA Criteria

- *Investment Grade Rating for Participants*
- *Consistent with State Energy Policy*
- *Facilitate the development of Renewable Resources*

CEDA Board Discussion Points

Potential CEDA Criteria

- *Incremental Capacity on a project that is already underway*
- *CEDA's required return on the project*
- *Other ?*

Tri-State Project Discussion Points

Why this Project ?

- *Multiple Benefits (Reliability, Load Growth, Renewable Resource Potential)*
- *Investment Grade Utility Partner(s) – Tri-State & potentially Xcel*
- *Consistent with SB 100 and State Policy Direction*