

California Geothermal Energy Collaborative  
**Transmission Planning Issues of Interest to Geothermal Development**

Monthly Briefing Update: **November 2005**

- 1. TransWest Express.** On November 17, 2005 Arizona Public Service (APS) hosted the kickoff meeting for its feasibility study of a major desert southwest transmission project. Geothermal interests may want to participate in or at least monitor this study and development process because it will evaluate building access to wind and geothermal resources in New Mexico.

The core of the TransWest Express proposal is to build two 500 kV lines from Wyoming to northern Arizona. The conceptual routing extends from the Bridger switchyard in SW Wyoming to Salt Lake City and then to the Navajo power plant in northern Arizona. Spur lines would be built from Bridger east to the Powder River coal mines in Wyoming; from the Navajo plant south to Phoenix; and from Navajo east to the Four Corners, to provide access to the proposed 1,500 MW Desert Rock coal plant, which APS is also studying. APS has designated the Navajo-Desert Rock line as Segment 1 of TransWest Express. This line from Four Corners to Navajo could also move New Mexico wind and geothermal resources to Arizona, southern Nevada and Southern California markets.

APS expects to complete Phase 1 of the TransWest Express project, its feasibility study, by December 2006. The project is too large for APS to undertake by itself, and it is looking for partners. Phase 1 will culminate when APS secures financial commitments from partners for Phase 2 work, which will include environmental studies and permitting, economic studies, WECC path rating, and the participation agreements for construction of the facilities in Phase 3. APS' target is to have the facilities in service by December 2012.

TransWest Express will be modeled in SSG-WI,<sup>1</sup> alongside the Frontier Line and Northern Lights projects, and in SWAT (Southwest Area Transmission) planning. SWAT participants include several members of New Mexico Governor's Transmission Task Force knowledgeable about renewable resources in the southwest. This may help keep the opportunities for transmission access for renewables under consideration in TransWest planning. APS acknowledges the wind resources in the vicinity of the project. But its announced plans for TransWest Express indicate that access to renewables is not its primary resource concern. Integrating renewables into this transmission project may require assertive participation by geothermal and wind advocates in the planning phase.

- 2. CPUC Renewables-Transmission Proceeding.** The California Public Utilities Commission has scheduled two days of workshops to determine which issues the proceeding should focus on, in priority order, and how they should be addressed. The

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<sup>1</sup> SSG-WI, the Seams Steering Group-Western Interconnection, coordinates transmission expansion planning for the entire WECC.

workshops will be December 6-7, 2005, beginning at 9:30 AM each day, at the CPUC, 505 Van Ness Avenue, San Francisco. The ruling ordering these workshops is available on the CPUC website at: <http://www.cpuc.ca.gov/PUBLISHED/RULINGS/51441.htm>. The proceeding, I.05-09-005, is titled, "Order Instituting Investigation to facilitate proactive development of transmission infrastructure to access renewable energy resources for California."

The December 7 workshop will focus on status reports of the Imperial Valley Study Group and the Tehachapi Study Group, and will provide an opportunity to comment on the plans to access geothermal resources in the Imperial Valley region.

**3. Los Angeles Department of Water and Power (LADWP); Green Path Project.**

On November 8, 2005, the LADWP Board of Commissioners, led by President Mary Nichols, convened an all-day workshop to review the Department's prospects for meeting a 20% Renewable Portfolio Standard target by 2010. The Commissioners heard presentations from, and closely questioned DWP staff and representatives of geothermal, wind, solar and biomass companies. The geothermal presenters included Subir Sanyal of Geothermex, Vince Signorotti of CalEnergy, Dave Olsen representing the Imperial Valley Study Group, and Steve Munson of Vulcan Power.

Then on November 16, Los Angeles Mayor Villaraigosa held a press conference to announce that LADWP would build the Green Path project designed, in part, to access Imperial Valley geothermal resources. The core of the Green Path is a new 100-mile, 500kV line planned to extend from the Devers-Palo Verde transmission corridor north to a new Upland substation in the northeastern sector of LADWP service territory. LADWP and the Imperial Irrigation District (IID) will cooperate to build a new connection between their two systems at a proposed Indian Hills substation on the Devers-Palo Verde line. They will also upgrade IID lines to carry Imperial Valley generation to the new LADWP-IID connection. LADWP has said it could take up to 400 MW of geothermal power across this routing.

The Green Path project will give LADWP access to generation resources (primarily gas-fired) in Arizona, across the Devers-Palo Verde transmission lines. If built as now planned, it will also provide two new connection points between the LADWP and CAISO systems. This could enable purchasers in northern California to take delivery of geothermal resources 100 miles north of the Imperial Valley. The transmission tariff imposed by LADWP for such transmission service will be a crucial factor in determining whether geothermal generators in the Imperial Valley will be able to use the new facilities to market their power to customers beyond Los Angeles.

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Monthly Briefing Updates are a service of the California Geothermal Energy Collaborative. For more information on the issues and programs discussed here, contact:

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