

**Report to the Bureau of Land Management
On the Green Path North Transmission Project (GNP)
*Update and Supplementary Information for BLM
in Preparing Notice of Intent for Environmental Review***

June 2, 2008

The Green Path North Transmission Project (GNP) is a joint transmission venture for a proposed new electrical transmission line designed to access known geothermal, solar, wind and other renewable energy resources in the Salton Sea area of Imperial Valley. The project will provide a pathway for these renewables to serve loads within Southern California.

Recent project adjustments have created opportunities for the participants to assess the Project's objectives and study all possible route options and technologies. While the project originally identified the need for 1200 megawatts (MW) with a potential increase of up to 1600 MW of power, we have determined we can meet our near-term joint needs with an initial transmission capacity of 800 MW.

We plan to begin the environmental review process for the Project, together with the appropriate federal agencies, with the objectives of focusing on multiple route options and technologies, accommodating near-term renewable energy needs, and allowing for potential expansion to meet future renewable energy needs. Any expansion of GNP would be subject to further environmental review.

Moving forward, we will consider all possible transmission routes and technologies through a very open and public process. All of the Project partners share a common goal: to select a route and technology that meet the new Project objectives with the least impact on the environment and surrounding communities.

This report provides updated and supplementary information for BLM to use in developing the Notice of Intent (NOI) to prepare an Environmental Impact Statement/Environmental Impact Report (EIS/EIR). In light of the substantial changes to the project, the partners wish for this report to supersede all GNP documents previously submitted to BLM. We understand that the NOI marks only the beginning of a full review and public vetting of the project through the EIS/EIR process and look forward to partnering with the BLM and other federal agencies as we strive to deliver clean, green renewable power to customers throughout Southern California.

Justifications for GNP

Access to Renewable Energy. A clear benefit of the GNP is the ability to access and deliver renewable energy to Southern California communities from the Salton Sea area of Imperial Valley, which contains the largest untapped geothermal resources in the State of California. Estimates of undeveloped geothermal power commercially available with current technology range from a minimum of 1,300 MW to over 2,300 MW. In addition, the region possesses excellent wind and solar resources totaling several thousands of megawatts.

The benefits of increasing the renewable energy supply include reduction in greenhouse gases (GHG) associated with burning fossil fuels such as coal and natural gas, improving air quality, utilizing sustainable energy resources, guarding against market fluctuations of volatile fuel costs, and reducing dependence on foreign sources of fuel.

One of the challenges of developing renewable energy is that generation must be located at the site of available renewable energy resources. Many times these resources are not located close to existing available high-voltage transmission lines with the amount of capacity necessary to transport electrical power to major demand centers.

Such is the case with renewable resources located near the Salton Sea. Currently there is insufficient transmission capacity for SCPA power providers to meet renewable energy goals and reduce GHG emissions by accessing the large amount of renewable resources that are expected to be developed in the Imperial Valley area. Although there exists an extensive electric transmission network in the western U.S., transmitting power from generation sources in Arizona, Utah, Oregon, Nevada and Northern California to Southern California, there is no existing municipally owned and operated transmission linking the Imperial Valley to the areas served by SCPA agencies. Transmission owned by other utilities has insufficient capacity.

State and Local Mandates to Reduce Greenhouse Gas.

All electric utilities are now required to reduce greenhouse gas emissions, heightening the demand for renewable energy in California. The state of California has adopted the Global Warming Solutions Act of 2006 (AB 32) that requires greenhouse gas emissions (GHGs) to be reduced to 1990 levels by the year 2020 and sets targets for significant reductions from 2020 to 2050. The LADWP Board of Commissioners has set a goal to reduce GHG emissions in the City of Los Angeles to 35% below 1990 levels by 2030.

The state previously implemented a Renewable Portfolio Standard (RPS) that requires increasing annual retail power sales from eligible renewable resources to 20% by 2010 and current legislation contemplates requiring 33% by 2020 for the state as a whole. While that law does not apply in details to publicly owned utilities, it does require these agencies to adopt a similar RPS. LADWP, SCPA members and IID have adopted RPS policies that are in line with state requirements. For example, LADWP's Board of Commissioners set a goal of achieving 20% renewables by 2010 and 35% by 2020.

So LADWP and SCPA members must reduce their fossil fuel generation such as coal, and increase clean, renewable power such as geothermal and solar—the very resources in the Salton Sea that GPNP is designed to access and which there is currently no transmission line to Southern California. By tapping into clean, renewable resources such as geothermal and solar power, Green Path North will significantly help our service areas and the entire state reduce greenhouse gas emissions associated with global warming.

Geothermal Is Base Load Generation. The state requirements are particularly challenging for municipal utilities, such as LADWP and SCPA members, that have historically depended upon coal-fired power to meet customer demand. Coal generation represents about half of LADWP's annual energy supply and the majority (about 70%) of its base load generation (energy that is produced continuously around the clock to meet demand). As LADWP invests in renewable resources and divests of coal it must make up for the loss of base load generation. Geothermal energy is critical to successfully replacing coal with renewable energy because it is also base load generation, producing energy continuously, unlike wind or solar, which produce energy only when the sun shines and the wind blows.

Expanding IID Market Access. In addition to delivering renewable resources to SCPA member utilities, the GPNP will enable IID to increase its exports of renewable energy from the Imperial Valley to load centers throughout Southern California via interconnection points with other

utilities. The project will also increase IID's import capabilities to meet its load growth and system reliability needs.

Economic Benefits for Imperial Valley. As a key component of IID's and Imperial County's plans for renewable energy development, GPNP offers significant economic development benefits. It also would stimulate construction jobs stemming from a number of renewable energy projects in Imperial Valley that would generate energy to be transported over Green Path North. Additional benefits include land lease revenues, increased property taxes, and general economic stimulus for local hotels, restaurants and other businesses due to construction and operation of the new transmission line and renewable generation projects.

Commitment to Developing Local Renewables. LADWP and SCPA participants are not simply relying on bringing renewable energy from hundreds of miles away. The agencies are aggressively working to expand existing renewable energy and develop new renewable energy projects within our communities, ranging from solar rooftops to small hydro-electric to waste-to-energy plants at local landfills. LADWP has one of the nation's largest solar incentive programs, encouraging homeowners and businesses to install photovoltaic cells on rooftops, and is pursuing further expansion of its solar programs.

In addition, energy efficiency and demand side management are key components to LADWP and SCPA participants' long-range plans for reducing greenhouse gases. For example, LADWP has budgeted approximately \$78 million for energy efficiency and demand side management programs—a 60% increase over the previous year—and plans to grow that amount significantly in the next few years. LADWP and the City of Los Angeles also have adopted aggressive Green Building policies aimed at increasing energy efficiency in new developments.

Yet even when local renewable resources and demand side management are maximized as much as possible, they still will only provide a fraction of what is needed to meet the RPS and GHG reduction requirements.

Project Description

The GPNP will involve the construction and operation of a high-voltage transmission line with an initial capacity of 800 MW of power, with capability to expand to accommodate future increase in demand for renewable energy resources. A Project objective is to provide new transmission linking IID's transmission system to LADWP's existing transmission in the Hesperia-Victorville area. The proposal includes building a new switching station near Desert Hot Springs in the northern Coachella Valley, called Devers II, and a new switching station in the Hesperia-Victorville area, called Hesperia. Construction and operation of the transmission line will require new access roads and microwave communication sites. The length of the line would vary depending on the route selection (see Alternatives Routes).

The Project will also include new interconnection points with the LADWP Victorville substation, Southern California Edison's (SCE) Devers substation, and SCE's Lugo substation.

In addition, the Project partners plan to develop geothermal and solar facilities near the Salton Sea that would be transmitted via GPNP to Southern California public utility customers. The line will be designed to accommodate additional renewable energy in the future to achieve sustainability of GHG emission reduction required by AB 32.

LADWP has pledged that its own use of GPNP will be restricted exclusively to energy produced from renewable energy resources, specifically including a pledge that any future capacity

expansion will also serve only renewable energy. The exceptions are that LADWP may use GPNP for spot energy purchases and for the possible use of GPNP to accommodate existing nuclear power now transmitted over the Devers-Palo Verde Transmission Line 1.

Alternative Routes/Selection Process

The project will consider a range of alternatives in terms of the route as well as the configuration, design, and technologies for the proposed line. **Currently, no “preferred route” has been selected.** In coordination with federal agencies, the potential alternative routes will be selected through a screening process aimed at minimizing environmental impacts and other conflicts while accommodating the requirements of the proposed transmission line. The screening criteria seek to minimize impacts to natural conservation areas, cultural landmarks, designated national, state, and county parks, and developed private property. Criteria also maximize existing utility planning corridors and existing transmission right of ways (ROWS) where feasible.

As the Project proceeds with the EIS/EIR, the alternative routes will be evaluated based on their feasibility and ability to achieve the main project objectives. Those determined infeasible or that cannot achieve the project objectives will be eliminated from further analysis in the EIS/EIR. Those that are determined feasible and meet project objectives will then undergo a more detailed analysis in the EIS/EIR related to potential environmental impacts.

Based on preliminary analysis, a set of broad, conceptual routing options has emerged for further consideration and development. The Project has spent close to two years looking at these conceptual routing options. Each option will be subject to modifications based on more detailed screening analysis, public and agency comments, and potential impacts and feasibility. Following are brief summaries of the conceptual routing options.

Route A (West from Devers, I-10 Corridor)

Description: Follows I-10 Corridor generally west from proposed Devers II switching station, crosses south of I-10 and proceeding west to I-15. Just east of I-15, the route turns north and parallels the I-15 through Cajon Pass to proposed Hesperia switching station.

Length: 84 miles

Route B (West from Devers, San Bernardino Front Country)

Description: Heading west from proposed Devers II switching station, the route follows I-10 Corridor along same path as Route A but diverges at an undetermined location west of the Morongo Reservation. From there, it travels north, crosses I-10 and generally follows the San Bernardino front country to I-15 and Hesperia.

Distance: 81 miles

Route C (North from Devers)

Description: Travels north from the proposed Devers II switching station, paralleling existing 115-kV lines through the Big Morongo Area of Critical Environmental Concern (ACEC), between the San Gorgonio Wilderness to the west and Joshua Tree National Park to the east. The route passes east of the Bighorn Mountain Wilderness, then turns west and follows the northern boundary of the San Bernardino National Forest to Hesperia.

Distance: 79 miles

Route D (North from Devers)

Description: Route D follows same path as Route C but cuts north to intercept several existing transmission lines east of Victorville. This route would connect to the existing McCullough-Victorville lines.

Distance: 108 miles

Routes E & F (East from Coachella Valley)

Description: Routes E and F originate at the proposed Devers II switching station and travel east, generally paralleling the I-10 and following an existing transmission corridor along the southern boundary of Joshua Tree National Park. The lines cross about four miles of the park's southeast corner within the designated utility corridor. They proceed northward from Desert Center. Near the Little Piute Mountains the lines turn west and generally parallel to Interstate 40. Route E heads southwest along other existing transmission lines to Hesperia, while Route F travels further west and follows existing LADWP transmission southwest to Hesperia.

Distance: Route E - 296 miles; Route F - 313 miles

Alternative Technologies

Alternative technologies under consideration include:

- Single-circuit 500 kV AC overhead transmission line.
- Double-circuit 230-kV AC overhead transmission lines.
- Double-circuit 230-kV AC overhead transmission lines that includes undergrounding of a limited portion of the line.
- A 320 kV DC alternative that is technically capable of more extensive undergrounding along rights of way for roads and/or rail.