

January 25, 2010

**To: CTPG Staff**

**Re: Initial Study Report For The 2010 Statewide Conceptual Transmission Plan to Reach a 33% RPS**

Terra-Gen Power (TGP) hereby submits these comments on "2010 Phase 1 CTPG 2020 Study Report -Draft" ("Report"), the CTPG's initial conceptual plan to help California meet a 33% Renewable Portfolio Standard (RPS). Our comments address access to the considerable geothermal resources – reliable, non-intermittent resources – that are planned to be developed in the California and Nevada states.

The Report includes a new Control-Inyokern 230kV transmission line to access the resources in Nevada. This would supplement the 115kV Owens Valley-Inyokern-Kramer system rebuild to 230kV that is included in the base cases for Cases A, B, and L.

TGP strongly supports both of these transmission projects, as far as they go – there is ample evidence of sufficient renewable-energy potential in Nevada, as well as the Owens Valley and Inyokern area, to support it. However, we have two major concerns, about transmission capability at either end of the new/enhanced transmission lines, which should be addressed in Phase 2:

- **Transmission into the CAISO system from Nevada;** and
- **Takeaway capability from Inyokern to Kramer.**

These concerns are described further below. We appreciate the opportunity to offer these comments and look forward to seeing them reflected in the CTPG's Phase 2 analysis.

**Transmission into the CAISO system from Nevada:** Unless the scope of this project is expanded, it is not likely that geothermal energy from Nevada will be able to utilize the proposed new transmission lines and serve California load. Specifically, the project should be enhanced to address these critical issues:

- **Limited Path 52 transfer capability:** This double-circuit 55 kV line between Control and Silver Peak substations provides only severely limited transfer capability and cannot accommodate anything near the probable energy flows into California from northern and central Nevada geothermal facilities. Expansion of the Inyo Group project should be considered to include upgrades to this path.
- **Resources in northern Nevada:** The CTPG report includes no northern Nevada resources, in contrast to the RETI Phase 2A Report, which assumed significant development potential there. TGP believes that at least 200MW of installed capacity, with about 1,600 GWh of annual production, should be assumed for this area. Expansion of the Inyo Group project into Nevada should be considered to include a collector system for the geothermal resources in Nevada with a CAISO injection point at an expanded Control/Inyokern substation.
- **Transmission limitations in Nevada:** While the State of Nevada has recently completed a conceptual transmission plan, the export options considered in that report do not appear to include a terminus at Silver Peak, and it is not clear which export options will be pursued, or how or when those decisions will be made. Thus, the CTPG plan should include other options, *e.g.*, selected extension of the CAISO transmission system from Silver Peak into Nevada.

**Transmission from Inyokern to Kramer:** TGP is concerned that the conceptual plan does not provide enough takeaway capability from Inyokern to Kramer. While the transmission line rebuild in the Base Cases would extend into Kramer, the terminus of the new transmission line is Inyokern, not Kramer. This could create a bottleneck at Inyokern as both the Nevada and Owens Valley and Inyokern generation must go through the Inyokern-Kramer line to access loads. Not only a new transmission line between Inyokern and Kramer is needed to bring the resources located north of Kramer to southern California, but also those resources outside of the state; in specific, those resources located in Nevada.

The CTPG should consider extending the new transmission lines all the way to Kramer, to address this issue. This could be done either directly or through addition of a line segment from Inyokern to Kramer.

Sincerely,

A handwritten signature in black ink, appearing to read 'Omar Alejandro Martino'. The signature is written in a cursive style with a large, prominent initial 'O'.

Omar Alejandro Martino  
Terra-Gen Power, LLC