



California Energy Commission <b>DOCKETED</b> <b>12-EPIC-01</b>
TN # 68195 OCT 25 2012

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October 25, 2012

California Energy Commission  
Re: Docket No. **12-EPIC-01**  
1516 Ninth Street  
Sacramento, CA 95814-5512

RE: October 31 Commission Meeting Consideration of EPIC Program

Dear Commissioners,

On behalf of the Geothermal Energy Association, I wish to express support for the inclusion of geothermal energy in the First Triennial Investment Plan for the Electric Program Investment Charge (EPIC) Program. Geothermal power today provides a substantial portion of California's renewable power, and there is no question that the resource is available to expand production significantly in the future. To achieve expansion of geothermal power in the state, policies need to consider all of the costs and all of the values provided by alternative power sources. But, in addition to fair market signals, there is a need for investment in new technology and other measures to help improve the cost-effectiveness of geothermal power.

We believe that supporting the efforts outlined in the Proposed 2012-2014 Investment Plan - Staff Draft Report being considered on October 31<sup>st</sup> by the Commission would facilitate meeting AB 32's goals of emission reductions at the least total system cost by promoting more cost-effective geothermal power production in the state.

Section S4.3 of the Investment Plan outlines the "Proposed Funding Initiative: Develop Advanced Technologies and Strategies to Improve the Cost-Effectiveness of Geothermal Energy Production." This section correctly identifies as some of the objectives which the EPIC funds could help achieve as:

- Improved exploration and drilling technology;
- More accurate and lower cost resource characterization;
- Reduced lead times for project development;
- Development of clear answers to permitting and environmental questions;
- Improving techniques to enhance and ensure reservoir productivity;
- Developing downhole, high-temperature tools and electronics;
- Refinement of key reservoir modeling tools;
- Improve the efficiency of power plant energy conversion and power plant cooling technology;
- and more.

In addition to the key issues identified in the report, we would recommend that the EPIC program consider supporting efforts to properly characterize the load balancing roles possible with geothermal power plants. We believe geothermal power can provide both firm and flexible power for the system. Cost-effective emissions reductions will mean displacing baseload power provided by coal, and the benefits and potential for baseload renewable power such as geothermal to do so should be better understood. Also, with more intermittent power resources being utilized in the state, there will be a growing need for power plants which can meet firming needs, and we believe that properly designed geothermal power plants may be able to meet these needs.

The report before the Commission correctly points out that the US Department of Energy has a significant research program in the geothermal area, and the Geothermal Resource Development Account also funds certain geothermal efforts. Leveraging both funding sources, and coordinating research efforts with them is appropriate. However, we believe that through the EPIC Program CEC should provide solicitations seeking meritorious proposals not otherwise supported by DOE or GRDA.

Moreover, we wish to point out that there is sometimes a mischaracterization of GRDA funding. While GRDA funding is somewhat unique, it should be recognized that it comes from a portion of the royalties paid by geothermal companies. Royalty payments from geothermal production are a financial benefit to the state government and local counties not characteristic of other renewable power technologies.

In conclusion, we support the proposal to include geothermal initiatives in the EPIC Program. Making an investment in new technology and other measures to help improve the cost-effectiveness of geothermal power could help unleash the still largely untapped potential of California's geothermal resources.

Thank you for considering our views.

Sincerely,

A handwritten signature in cursive script, appearing to read "Karl Gawell".

Karl Gawell  
Executive Director