GEOTHERMAL ENERGY ASSOCIATION

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Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
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April 13th, 2016

RE: Assessment of transmission options to access and facilitate renewable energy development at and around the Salton Sea regarding the Renewable Energy Transmission Initiative 2.0.

The Geothermal Energy Association (GEA) would like to remind State Water Resources Control Board about the values associated with geothermal development at the Salton Sea and provide a few brief updates from RETI 2.0 on transmissions capacity in Imperial County. The Salton Sea region is an area of high priority and interest to the geothermal industry. The resources inside Imperial County are some of the largest in the world capable of producing an additional 1,700 to 2,300 MW of geothermal power by 2030. This power could be used in-state, or exported to surrounding states.

Developing California geothermal resources keeps the economic and tax benefits of developing renewable energy technology in state. In addition, solar development is currently exempt from property taxes. Meanwhile geothermal operators pay property taxes providing the largest income streams to communities in the Salton Sea region. An average sized facility of 20 MW will pay $6.3 to $11 million dollars in property taxes over the lifetime of the facility. The plants in Imperial Country are expected to be much larger and lease/own significantly more land than this typical plant.

Some transmission options available immediately to export this power include Path 42 where there are 600MW expandable to 1,455MW and additional 380MW out of the Imperial Valley connection according the Imperial Irrigation District at the March 16th RETI 2.0 workshop. This is line capacity immediately available for geothermal development resources.

In addition, the industry has begun experimenting with desalinization/filtration stations that can be added run off of surplus energy, enabling a steady water supply to enable mitigation of issues related to the Salton Sea. Also, IID was awarded a grant for a project that will create a habitat at the Salton Sea through desalination using the combined energy from "waste" steam generated by geothermal facilities.

On the topic of financial value, the latest CPUC Energy Division Staff Paper on Draft 2016 Portfolios for Generation and Transmission Planning discusses adding geothermal resources to the electricity grid, reduces overall grid costs, reduces the overall amount of curtailments, increases resource diversity, and has shown to be a critical technology that reduces overall electricity rates in a post 33% RPS world.[1] Another study by Center for Energy Efficiency and Renewable Technologies found, "geothermal energy is worth $66.2/MWH (6.62 cents/kwh) more than solar PV energy at a 50% RPS." Furthermore this research finds, "incorporating the additional geothermal generation reduces CO_2 emissions compared to the base

[1] http://www.cpuc.ca.gov/RPS_Calculator/

case and saves the electricity system up to $75 in operational costs for every MWH of added geothermal generation. The potential savings could be as much as 2% of total system costs by 2030."[2]

In conclusion, if geothermal development is allowed to stall at the Salton Sea, the State of California will miss the benefits of geothermal development to help with habitat and dust suppression projects. RETI 2.0 has begun to lay out many of the points surrounding transmission discussed in this letter, but the Geothermal Energy Association wishes to bring these specific points to the attention of the State Water Resources Control Board as well.

Sincerely,

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[2] "The Value of Salton Sea Geothermal Development in California's Carbon Constrained Future" Jim Caldwell and Liz Anthony