

RE: Comments provided from the Governor's Greenhouse Gas Reduction Goals Symposium, held July 9, 2015 at the California EPA offices, Sacramento

Dear CPUC, CEC, CAISO, CARB,

My name is Josh Nordquist with Ormat Nevada Inc. Ormat is the owner and operator of approximately 650 MW of geothermal and recovered energy generation projects worldwide. Of that, Ormat operates 193 MW of geothermal projects in California, and is currently delivering 19 MW of geothermal power to California from Nevada. Additionally, Ormat has a considerable portfolio of other clean energy projects it is developing in California and neighboring states that will be able to support California's progressive clean energy goals.

California is no stranger to geothermal energy, with well over 50 years of production. Geothermal has always provided sustainable baseload energy production to replace fossil fuel generation and nuclear power. This baseload energy will be provided to California for the indefinite future. Additionally, geothermal provides the highest local economic benefits of any renewable, the most long term clean energy jobs, and the smallest land footprint.

But geothermal can also be a major provider to reach goals set forth by Governor for California's renewable electricity production. The Geothermal Energy Association and USGS estimate over 2 GW of additional generation from geothermal resources still to be developed in California alone, not including generation from neighboring states that can be imported. That alone is generation for over 2 trillion homes and small businesses in the state.

Today, and as we have heard during the Governor's Greenhouse Gas Reduction Goals Symposium, California's grid demands new flexible and on-demand resources to adapt to ever changing solar and wind production. Intermittent sources like solar and wind require back up sources of capacity and therefore bring additional long term costs. Geothermal has been providing full range Automatic Generator Control and other ancillary services (including ramp

ORMAT NEVADA INC.

6225 Neil Road • Reno, NV 89511-1136 • Phone : (775) 356-9029 E-mail: ormat@ormat.com

Fax: (775) 356-9039 Web site:www.ormat.com



up, ramp down, and spinning reserve services) for years in Hawaii, allowing the local utility to control the generation from Hawaii's only geothermal power plant to meet energy consumption needs.

To summarize, geothermal energy provides the highest economic benefit for the state, uses the least amount of space, can alone provide the technical needs of California's electrical grid today and tomorrow, and can play a large part to meet and beat California's future goals. We ask that the Governor, CPUC, CEC, CAISO, and all other agencies take this into consideration and we very much look forward to California's continuing success as the nation's leader in a clean energy future. Thank you for your time.

Sincerely

Josh Nordquist Director, Business Development E: <u>inordquist@ormat.com</u> P: 775-356-9029