BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations	Rulemaking 11-10-023 (October 20, 2011)

COMMENTS OF ORMAT TECHNOLOGIES ON MARCH 20, 2013 RESOURCE ADEQUACY WORKSHOP IN ACCORDANCE WITH PHASE 2 SCOPING MEMO AND MARCH 11, 2013 ADMINISTRATIVE LAW JUDGE RULING

ORMAT TECHNOLOGIES, INC.
Paul Thomsen
Director – Policy and Business Development
6225 Neil Road
Reno, NV 89511
Telephone: (775) 356-9029
Facsimile: (775) 823-5401
E-mail: PThomsen@ormat.com

April 5, 2013

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations	Rulemaking 11-10-023 (October 20, 2011)

COMMENTS OF ORMAT TECHNOLOGIES ON JANUARY 23, 2013 RESOURCE ADEQUACY WORKSHOP AND MARCH 20, 2013 WORKSHOP IN ACCORDANCE WITH PHASE 2 SCOPING MEMO AND ALJ RULING

Pursuant to the procedural schedule set forth in the Ruling of the Assigned Commissioner and Administrative Law Judge issued by the Commission on December 6, 2012, ("Scoping Memo"), as revised by the Administrative Law Judge's Ruling Resetting Schedule for Comments on Phase 2 Resource Adequacy Issues on March 11, 2013, ("ALJ Ruling"), Ormat Technologies, Inc. ("Ormat") respectfully submits its comments related to the workshop held on January 23, 2013, the ALJ Ruling and the Prehearing Conference held on March 20.

I. Opening remarks

Ormat Technologies is a world leader in the geothermal industry, with over four decades of experience in the development of state-of-the-art, environmentally sound generation. Ormat currently operates 575 MW of net capacity, out of which approximately 200 MW from geothermal facilities in two geothermal basins in California (the Imperial Valley and the Mammoth Lakes area), and is in the process of developing additional geothermal resources in California and other western states. Geothermal

resources provide base-load renewable generation that does not contribute to the "net load" issues that are driving the need for more flexible capacity to compensate for the large ramps that result from the impact of variable renewable resources such as wind and solar PV. Ormat is concerned that the focus on how to determine flexible capacity needs does not appear to be coupled with an evaluation of appropriate price signals to differentiate between resources that contribute to the need for additional flexible capacity and those which do not contribute to the problem. These comments will focus primarily on the cost allocation issue.

II. What constitutes Flexible Capacity?

Most resources that have the ability to provide flexible capacity are natural gas fueled generators. To assure the maximum amount of flexible generation is available, Ormat recommends that the Commission define the term so that available preferred resources, particularly demand response, storage and dispatchable renewable resources be included. For example, Ormat has the ability to operate its geothermal resources in a manner that provides flexibility while recirculating the geothermal fluid for later use, making it possible to use a non-GHG emitting resource rather than a gas-fueled generator to provide flexibility[1]. While such an installation might require equipment modifications and comes at the cost of deferring some RPS generation, there may be circumstances under which the benefits of a renewable flexible resource warrant the deferral. Defining flexible resources as widely as possible to account for the greatest amount of available flexible capacity is therefore a good policy decision.

[1] A study of this capability has been performed by Aspen Environmental and is available.

III. How to Allocate Flexible Capacity Costs

Both the Joint Parties and the Energy Division proposals would allocate the flexible capacity obligation based on each LSE's load share, without initially accounting for the LSE's net impact on the need for flexible capacity. As a result, LSEs that meet their RPS obligations with base-load resources (that do not contribute to intermittent resource ramps) are treated the same as LSEs that use intermittent resources to meet their obligation. This omission creates a strong disincentive for procuring more stable and predictable renewable resources, should those resources be priced higher, that reduce flexibility requirements and associated costs. Unfortunately, tracking and classifying every MW generated and allocating it to the responsible LSE is likely to require a significant investment in time and resources at the CAISO and may not be a practical solution. Nonetheless, tracking the overall flexible capacity cost would make it possible to identify an appropriate "renewable integration adder" to use in comparing firm versus variable RPS resource offerings. While allocating the cost of integration service to RPS contracts is outside the scope of this proceeding, accurately tracking those costs and providing the information so the Commission would make such an assessment possible is an appropriate component of the Resource Adequacy proceeding. It is therefore very important that the cost of flexible capacity, versus system capacity, be reported to the Commission so it can be incorporated into RPS procurement decisions.

IV. Conclusion

Ormat appreciates the opportunity to submit these comments, and looks forward to working with the Commission and other stakeholders in this proceeding going forward.

Respectfully submitted,

/S/ Paul Thomsen

Paul Thomsen
ORMAT TECHNOLOGIES, INC.
Director – Policy and Business Development
6225 Neil Road
Reno, NV 89511
Telephone: (775) 356-9029
Facsimile: (775) 823-5401

E-mail: PThomsen@ormat.com

Dated: April 5, 2013