February 17, 2015

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 11-RPS-01
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Draft Renewables Portfolio Standard Eligibility Guidebook (Draft RPS Guidebook)

Ormat Technologies, Inc. (NYSE: ORA) appreciates the opportunity to provide comments on the Draft RPS Guidebook. Ormat has filed comments on the previous RPS Guidebook, and has filed comments with WREGIS regarding the WREGIS Operating Rules. The RPS Guidebook is particularly important to Ormat as we operate 202 MW of geothermal generation in California and over 400 MW of geothermal generation throughout the WECC region. This letter focuses on the revised definition of Station Service and its implication on (water-dominated) geothermal power plants, where geothermal production pumps are commonly used to pump geothermal fluid from the natural underground reservoir to the generating facility, further to our comments from September 20, 2013 in response to a white paper the CEC issued at that time on this matter.

The new draft RPS guidebook includes a revised definition for Station Service: *"Station Service loads include all energy consumption necessary for the generation of electricity that can be supplied by the facility itself, and any loads not separately metered. This includes… any onsite or near-site transportation of ready-to-use energy resources from the energy resource storage site for the facility to the point in the facility where the energy resource is used to generate electricity."*

We appreciate the Energy Commission's addressing the definition of Station Service and its relation to loads used for the "*transportation of ready-to-use energy resources from the energy storage site for the facility to the point in the facility where the energy resource is used to generate electricity*". As explained in previous comments filed by Ormat, such a distinction is in line with FERC, which distinguishes between Station Power (which is a synonym to the CEC's Station Service) and Fuel Delivery Systems (which is a synonym to the CEC's "transportation of ready to use energy resources")[1,2]. However, unlike FERC which determined that a Fuel Delivery System is not Station Power, regardless of its location, the CEC proposal does not

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explain how to differentiate "near-site transportation" (which would be considered as Station Service) loads from "remote-site transportation" which, presumably, would NOT be considered as Station Service.

First, the new language suggests that the energy resource transportation system is Station Service, if it ***can*** be supplied by the facility. In the case of a geothermal power plant, the production pump load can indeed be supplied by the facility, by laying power lines that connect the pump to the facility's electricity generation system. However, other renewable technologies can also do the same. A biomethane facility can supply the electrical load of the compressor that helps transport the "*ready-to-use energy resource*" on a pipeline. Similarly, a biomass power plant operator **can** choose to haul the biomass from where it is stored ("*energy resource storage site*") to the plant using electric vehicles that are charged from the biomass facility's generation. And so, are transportation systems for biomass and biomethane power plants now considered Station Service?

Second, the new language suggests that the energy resource transportation system is Station Service, if it is "*near-site*" or "*onsite*" but does not define what these terms mean. In a geothermal facility, the production pumps can sometimes be found inside the facility's fence, while in other cases they could be several miles away from the facility. Furthermore, the geothermal resource itself can sometimes be found hundreds of feet underground, or miles underground. Why should the distance between the location of the resource to the generating facility determine whether the transportation system is Station Service or not? Comparing biomass and biomethane facilities, does the location of the compressor station in relation to the power plant determine if the compressor load is Station Service or not? Does the location of the biomass resource in relation to the generating facility determine whether the biomass transportation system is Station Service or not?

Additionally, the Commission's definition of Station Service clarifies "*Station Service loads include all energy consumption necessary for the generation of electricity that can be provided by the station itself, and* ***any loads not separately metered***". This statement creates confusion in that "necessary for the generation of electricity" is ambiguous and subjective. For example, in a biomethane facility in which the ready-to-use energy is delivered via a pipeline, it is necessary to pressurize the ready-to-use energy for transportation (energy consumption). This energy consumption can be provided by the facility itself (transmission lines can provide electrical energy over hundreds of miles), and so by the definition above, is included as Station Service. However, if the load is separately metered, and for the reasons described further above, it is not clear if the energy consumption should be included as Station Service.

In light of the above mentioned ambiguities, and in order to treat all technologies fairly, we suggest that the Commission clarify that the energy consumption for transportation of ready-to-use energy from the energy resource storage site for the facility to the point in the facility where the energy resource is used to generate electricity – to include pumping load of geothermal fluid from the underground reservoir to the power plant - is not included as Station Service, but rather is considered an Onsite Load (if separately metered per the definition provided).

To assist, we would recommend the Commission adopt the definition of Station Service as follows:

"Station Service"

"Electricity used for station service, or parasitic load, is not eligible for California's RPS. Station service loads include all energy consumption for the generation of electricity supplied by the facility itself, and any loads not separately metered. This includes, but is not limited to, pumps, condensers, pollution controls, and monitoring and control equipment. This does **not** include the transportation of ready-to-use energy resources from the energy resource storage site to the point in the facility where the energy resource is used to generate electricity, maintenance activities, vehicle transportation, cleaning, or other similar energy uses, unless these energy uses are not separately metered from a station service load.

According to the WREGIS Operating Rules Section 9.6, WREGIS Certificates will not be created for generation supplying station service. Generation supplying station service must be netted from total generation, regardless of whether the Generating Unit provides its own station service or purchases it from another entity. (See the WREGIS Operating Rules[52] for information about the netting process.)"

Ormat sincerely thanks the CEC staff for sharing this Draft RPS Guidebook. We appreciate treating all technologies fairly and defining Station Service and Onsite Load to ensure an equitable and transparent marketplace.

Respectfully,

Rahm Orenstein
VP, Business Development

[1] Norton Energy Storagea, LLC, 95 FERC 61,476 (2001)(June Order, p. 9)
[2] Ormesa LLC, 108FERC 61,200 [Docket No. QF86-681-006], Order Denying Rehearing (September 2004)