

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 5/31/2013

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power
Production or Cogeneration Facility

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**SOUTH DAKOTA PUBLIC
UTILITIES COMMISSION**

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) OREG 1, Inc.		
1b Applicant street address c/o Ormat Nevada Inc. 6225 Neil Road		
1c City Reno	1d State/province Nevada	
1e Postal code 89511	1f Country (if not United States)	1g Telephone number 775-356-9029
1h Has the instant facility ever previously been certified as a QF? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF _____ - _____ - _____		
1j Under which certification process is the applicant making this filing? <input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply) <input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
1l What is the purpose and expected effective date(s) of this filing? <input checked="" type="checkbox"/> Original certification; facility expected to be installed by <u>7/22/06</u> and to begin operation on <u>7/22/06</u> <input type="checkbox"/> Change(s) to a previously certified facility to be effective on _____ (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19) <input type="checkbox"/> Name change and/or other administrative change(s) <input type="checkbox"/> Change in ownership <input type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output <input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. <input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19) <input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted <input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

Contact Information	2a Name of contact person Tina Calilung		2b Telephone number 775-356-9029 ext. 32222	
	2c Which of the following describes the contact person's relationship to the applicant? (check one)			
	<input type="checkbox"/> Applicant (self) <input type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant <input checked="" type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter <input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter			
	2d Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/> Ormat Nevada Inc.			
	2e Street address (if same as Applicant, check here and skip to line 3a) <input checked="" type="checkbox"/>			
	2f City		2g State/province	
	2h Postal code		2i Country (if not United States)	
Facility Identification and Location	3a Facility name OREG 1-CS7			
	3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input type="checkbox"/> 6243 County Road 81			
	3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.			
	Longitude <input type="checkbox"/> East (+) _____ degrees <input type="checkbox"/> West (-) _____ degrees		Latitude <input type="checkbox"/> North (+) _____ degrees <input type="checkbox"/> South (-) _____ degrees	
	3d City (if unincorporated, check here and enter nearest city) <input type="checkbox"/> St. Anthony		3e State/province North Dakota	
3f County (or check here for independent city) <input type="checkbox"/> Morton		3g Country (if not United States)		
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.			
	4a Identify utility interconnecting with the facility Basin Electric Power Cooperative			
	4b Identify utilities providing wheeling service or check here if none <input type="checkbox"/> Basin Electric Power Cooperative			
	4c Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> Basin Electric Power Cooperative			
	4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> Mor-Gran-Sou			

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1) OREG 1, Inc.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	100 %
2) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
3) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
4) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
5) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
6) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
7) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
8) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
9) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
10) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist.

Full legal names of electric utility or holding company upstream owners	% equity interest
1) Ormat Nevada Inc.	100 %
2) Ormat Technologies Inc.	100 %
3) _____	_____ %
4) _____	_____ %
5) _____	_____ %
6) _____	_____ %
7) _____	_____ %
8) _____	_____ %
9) _____	_____ %
10) _____	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator

Ormat Nevada Inc.

Energy Input

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- | | | |
|---|---|--|
| <input type="checkbox"/> Biomass (specify) | <input type="checkbox"/> Renewable resources (specify) | <input type="checkbox"/> Geothermal |
| <input type="checkbox"/> Landfill gas | <input type="checkbox"/> Hydro power - river | <input type="checkbox"/> Fossil fuel (specify) |
| <input type="checkbox"/> Manure digester gas | <input type="checkbox"/> Hydro power - tidal | <input type="checkbox"/> Coal (not waste) |
| <input type="checkbox"/> Municipal solid waste | <input type="checkbox"/> Hydro power - wave | <input type="checkbox"/> Fuel oil/diesel |
| <input type="checkbox"/> Sewage digester gas | <input type="checkbox"/> Solar - photovoltaic | <input type="checkbox"/> Natural gas (not waste) |
| <input type="checkbox"/> Wood | <input type="checkbox"/> Solar - thermal | <input type="checkbox"/> Other fossil fuel (describe on page 19) |
| <input type="checkbox"/> Other biomass (describe on page 19) | <input type="checkbox"/> Wind | <input type="checkbox"/> Other (describe on page 19) |
| <input checked="" type="checkbox"/> Waste (specify type below in line 6b) | <input type="checkbox"/> Other renewable resource (describe on page 19) | |

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

- Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)
- Anthracite culm produced prior to July 23, 1985
 - Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
 - Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
 - Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
 - Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
 - Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
 - Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
 - Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
 - Materials that a government agency has certified for disposal by combustion (describe on page 19)
 - Heat from exothermic reactions (describe on page 19)
 - Residual heat (describe on page 19)
 - Used rubber tires
 - Plastic materials
 - Refinery off-gas
 - Petroleum coke
- Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	8,100 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	670 kW
7c Electrical losses in interconnection transformers	0 kW
7d Electrical losses in AC/DC conversion equipment, if any	0 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	0 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	670.0 kW
7g Maximum net power production capacity = 7a - 7f	7,430.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The facility is located on a gas pipeline compressor station which has gas-fired turbines used to compress natural gas. Using an ORMAT® Recovered Energy REG® system installed to the gas turbine exhaust, the facility extracts the turbine's waste heat to generate electrical power using an ORMAT® Energy Converter (OEC) unit, which is a pre-packaged power unit based on the principle of the thermodynamic Organic Rankine Cycle (ORC) technology. Similar to the classical steam cycle, external heat source in the form of hot thermal oil will provide the heat to the power cycle. The organic cycle motive fluid is a hydrocarbon selected in this application for optimal utilization of the available heat, with due regard given to thermodynamic and economic performance.

Heat from the gas turbine is transferred to the Waste Heat Oil Heater (WHOH) using diverter valves regulating the combustion gases flow between the WHOH coil and a bypass stack. The WHOH is a tube-type heat exchanger in which thermal oil is circulated within its tubes. The gas turbine exhaust gases are cooled by the thermal oil flowing in the tubes before venting to the atmosphere through the exhaust stack. The heated oil is used to preheat and then vaporize the motive fluid in the OEC's pre-heater and vaporizer, respectively. After the oil has been cooled it is returned back to the WHOH to complete the cycle. (continued on p. 19)

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).																
	8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest. Check here if no such facilities exist. <input checked="" type="checkbox"/>																
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; text-align: center;">Facility location (city or county, state)</th> <th style="width: 15%; text-align: center;">Root docket # (if any)</th> <th style="width: 35%; text-align: center;">Common owner(s)</th> <th style="width: 20%; text-align: center;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: center;">kW</td> </tr> <tr> <td>2) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: center;">kW</td> </tr> <tr> <td>3) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: center;">kW</td> </tr> </tbody> </table>	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF -	_____	kW	2) _____	QF -	_____	kW	3) _____	QF -	_____	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity													
	1) _____	QF -	_____	kW													
	2) _____	QF -	_____	kW													
	3) _____	QF -	_____	kW													
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed																	
8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act? <input type="checkbox"/> Yes (continue at line 8c below) <input checked="" type="checkbox"/> No (skip lines 8c through 8e)																	
8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes <input type="checkbox"/> No <input type="checkbox"/>																	
8d Did construction of the facility commence on or before December 31, 1999? Yes <input type="checkbox"/> No <input type="checkbox"/>																	
8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes <input type="checkbox"/> No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.																	
Certification of Compliance with Fuel Use Requirements	Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.																
	9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel: <input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.																
	9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually: <input checked="" type="checkbox"/> Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.																