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**BY eFiling**

September 13, 2007  
RECEIVED

Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Dockets Room 1A  
Washington, D.C. 20426

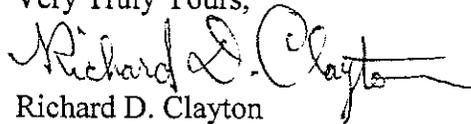
Re: Thermo No. 1 BE-01, LLC, Notice of Self-Certification  
Docket No. QF07- -000

Dear Ms. Bose:

Enclosed for filing please find a Notice of Self-Certification of Qualifying Facility Status for Small Power Production Facility in the above-referenced docket.

This filing has been submitted electronically via eFiling. Please contact the undersigned if you have any questions concerning the filing.

Very Truly Yours,

  
Richard D. Clayton

General Counsel

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**Thermo No. 1 BE-01, LLC )**

**Docket No. QF07-\_\_\_-000**

**NOTICE OF SELF-CERTIFICATION  
OF QUALIFYING FACILITY STATUS  
FOR SMALL POWER PRODUCTION FACILITY**

Pursuant to Section 292.207(a) of the regulations of the Federal Energy Regulatory Commission ("Commission"), 18 C.F.R. § 292.207(a) (2007), Thermo No. 1 BE-01, LLC, a Delaware limited liability company ("Applicant" or "Thermo No. 1 BE-01 LLC"), hereby submits this Notice of Self-Certification that one (1) geothermal power facility located on Thermo Road 9 miles west of Minersville, UT, commonly known as the Thermo No. 1 Geothermal Power Project BE-01 (the "Facility") will be a qualifying small power production facility. The Facility is a qualifying small power production facility (a "Qualifying Facility" or "QF") under Subpart B of Part 292 of the Commission's regulations. In support of this Notice of Self-Certification, the following information is submitted as required by 18 C.F.R. § 292.207(a) of the Commission's regulations and Form 556.

**FORM 556**

**PART A: GENERAL INFORMATION TO BE SUBMITTED BY ALL APPLICANTS**

**1.a Name:**

The full name of the Applicant is Thermo No. 1 BE-01, LLC. The purpose of the instant filing is self-certification pursuant to 18 C.F.R. § 292.207(a).

**1b. Address:**

The address of the Applicant is:

Thermo No. 1 BE-01, LLC  
5152 North Edgewood Drive, Suite 375  
Provo, UT 84604

**1c. Ownership of the Facility:**

Thermo No.1 BE-01, LLC is the Facility owner. Thermo No. 1 BE-01 LLC is wholly-owned by Intermountain Renewable Power, LLC which in turn is wholly-owned by Raser Power Systems, LLC ("Raser Power Systems"). Raser Power Systems is a direct wholly-owned subsidiary of Raser Technologies, Inc. ("Raser Technologies"), a Utah corporation which is publicly traded on the NYSE Arca Stock Exchange.

The operator of the Facility is Intermountain Renewable Power, LLC.

No entity that owns a direct or an indirect interest in the Facility is an "electric utility" or an "electric utility holding company" within the meaning of Section 292.206 of the Commission's regulations, or a wholly-owned or partially-owned subsidiary of an electric utility or an electric utility holding company. No entity that owns a direct or an indirect interest in the Facility is engaged in the generation or sale of electric power, or has any ownership or operating interest in any electric facilities other than qualifying facilities.

**1d. Authorized Individual Evidencing Accuracy and Authenticity of Information Provided by Applicant:**

The required signature appears at the end of this Form.

**2. Communications:**

Correspondence concerning this application should be addressed to the following persons:

Paul J. Stephan  
Thermo No. 1 BE-01, LLC  
5152 North Edgewood Drive, Suite 375  
Provo, Utah 84604  
Tel: 801-765-1200  
Fax: 801-374-3314  
Email: [paul.stephan@rasertech.com](mailto:paul.stephan@rasertech.com)

Richard D. Clayton  
Thermo No. 1 BE-01, LLC  
5152 North Edgewood Drive, Suite 375  
Provo, Utah 84604  
Tel: 801-765-1200  
Fax: 801-374-3314  
Email: [dick.clayton@rasertech.com](mailto:dick.clayton@rasertech.com)

**3a. Location of Facility:**

The Facility is located on Thermo Road 9 miles west of Minersville, UT

**3b. Utility with which QF will Transact:**

The Facility will be interconnected to the PacifiCorp transmission system, and PacifiCorp may also provide wheeling. PacifiCorp is expected to provide power during emergency interruptions. The power generated by the Facility may also be sold to PacifiCorp.

**4a. Description of Principal Facility Components:**

The Facility is a geothermal small power production facility which is supplied by a geothermal fluids gathering system.

The Facility consists of 50 UTC Power PureCycle B225 Power Systems each producing 280 gross kW. The PureCycle equipment converts heat provided by geothermal fluids into electricity utilizing the Organic Rankine Cycle. Each PureCycle unit consists of an evaporator, condenser, turbine, induction generator, cycle-pump, system controls, control valves, and piping.

The Facility is supplied with geothermal fluids from a well field which is being developed by Thermo No. 1 BE-01 LLC. The geothermal fluids are produced and transported from the geothermal production wells to the power plant. The fluids flow under pressure directly into the PureCycle evaporators. The geothermal fluid heats and vaporizes the R-245fa working fluid, which is a hydro fluoro carbon refrigerant (HFC). The working fluid expands through the turbine which is coupled to the generator. The expanding working fluids are condensed in a water-cooled condenser and pumped back to the heat exchangers in a closed loop. The Facility will utilize a hybrid cooling tower system to provide the cooling water for the condenser. The spent geothermal fluids are returned via pipelines from the power plant facilities to the injection wells. Electric power required to operate power plant auxiliary equipment and to produce, transport and re-inject the geothermal fluids is provided by the gross output of the Facility.

#### **4b. Power Production Capacity:**

The Facility will have a net power production capacity of 10.0 MW. The Facility will have a gross operating capacity of approximately 14.0 MW with station power uses of 4.0 MW.

#### **4c. Initial Operations:**

Installation of the Facility is expected to be completed by November 30, 2008. The initial operations of the Facility are expected to occur no later than December 31, 2008, with commercial operations scheduled to occur within 30 days from the date of initial operation.

**4d. Primary Energy Source of the Facility:**

The Facility produces electric energy solely by the use of the natural geothermal water, steam, or brine obtained from the geothermal wells.

**5. Average Annual Hourly Fossil Fuel Energy Inputs:**

The Facility does not use fossil fuel.

**6. Particular Characteristics of Facility that Bear on its QF Status:**

Geothermal.

**PART B: DESCRIPTION OF THE SMALL POWER PRODUCTION FACILITY**

**7. Percentage Use of Fossil Fuels:**

The Facility will be equipped with a 250 kw backup diesel generator that will be limited to start-up, testing, control use, and minimal amounts of fuel required to alleviate or prevent unanticipated equipment outages and emergencies directly affecting the public. Total use of fossil fuel is anticipated to be significantly less than 1% of the total annual energy input.

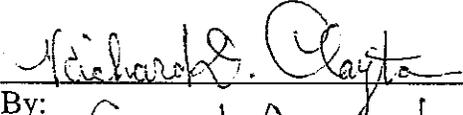
**8. Location of Other Small Power Production Facilities:**

No other power production facilities are located within one mile of the Facility

### Conclusion

The Facility satisfies the size and fuel use criteria governing small power production facilities as set forth in Section 292.203(a) of the Commission's regulations. 18 C.F.R. § 292.203(a). In addition, the Facility satisfies the Commission's ownership criteria as set forth in Section 292.206 of the Commission's regulations. 18 C.F.R. § 292.206. Accordingly, the Facility is a qualifying geothermal small power production facility which is entitled to the exemptions afforded by Sections 292.601 and 292.602 of the Commission's regulations. 18 C.F.R. §§ 292.601 and 292.602.

Respectfully submitted,

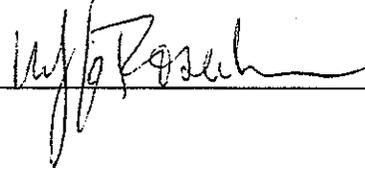
  
By: \_\_\_\_\_  
Title: General Counsel

Dated: September 13, 2007

## CERTIFICATE OF SERVICE

Pursuant to Sections 292.207(a)(ii) and 385.2010 of the Commission's regulations, I hereby certify that I have served a copy of the foregoing Notice of Self-certification, which contains a completed Form 556, upon the Rocky Mountain Power division of PacifiCorp at 825 NE Multnomah, Portland, OR 97232, and the Public Utilities Commission of Utah located at Heber Wells Building 4<sup>th</sup> Floor, 160 East 300 South, Salt Lake City, Utah 84111.

Dated at Provo, Utah, this 13 day of September 2007.

  
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