

## Bureau of Land Management, Interior

## § 3275.16

with the methods and procedures we approve (See 43 CFR 3275.17).

### § 3275.14 What aspects of my geothermal operations must I measure?

(a) For all well operations, you must measure wellhead flow, wellhead temperature, and wellhead pressure.

(b) For all electrical generation facilities, you must measure:

- (1) Steam and/or hot water flow into the facility;
- (2) Temperature of the water and/or steam into the facility;
- (3) Pressure of the water and/or steam into the facility;
- (4) Gross electricity generated;
- (5) Net electricity at the facility tailgate;
- (6) Electricity delivered to the sales point; and
- (7) Temperature of the steam and/or hot water exiting the facility.

(c) For direct use facilities, you must measure:

- (1) Flow of steam and/or hot water;
  - (2) Temperature into the facility; and
  - (3) Temperature out of the facility.
- (d) We may also require additional measurements depending on the type of facility, the type and quality of the resource, and the terms of the sales contract.

### § 3275.15 How accurately must I measure my production and utilization?

It depends on whether you use the meter in calculating Federal production or royalty, and what quantity of resource you are measuring.

(a) For meters that you use to calculate Federal royalty:

- (1) If the meter measures electricity, it must have an accuracy of  $\pm 0.25\%$  or better of reading;
- (2) If the meter measures steam flowing more than 100,000 lbs/hr on a monthly basis, it must have an accuracy of  $\pm 2$  percent or better of reading;
- (3) If the meter measures steam flowing less than 100,000 lbs/hr on a monthly basis, it must have an accuracy of  $\pm 4$  percent or better of reading;
- (4) If the meter measures water flowing more than 500,000 lbs/hr on a monthly basis, it must have an accuracy of  $\pm 2$  percent or better of reading;
- (5) If the meter measures water flowing 500,000 lbs/hr or less on a monthly

basis, it must have an accuracy of  $\pm 4$  percent or better of reading;

(6) If the meter measures heat content, it must have an accuracy of  $\pm 4$  percent or better; or

(7) If the meter measures two phase flow at any rate, we will determine meter accuracy requirements. You must obtain our prior written approval before installing and using meters for two phase flow.

(b) Any meters that you do not use to calculate Federal royalty are considered production meters, which must maintain an accuracy of  $\pm 5$  percent or better of reading.

(c) We may modify these requirements as necessary to protect the interests of the United States.

### § 3275.16 What standards apply to installing and maintaining my meters?

(a) You must install and maintain all meters we require according to the manufacturer's recommendations and specifications or paragraphs (b) through (e) of this section, whichever is more restrictive.

(b) If you use an orifice plate to calculate Federal royalty, the orifice plate installation must comply with "API Manual of Petroleum Standards, Chapter 14, Section 3, part 2, Third Edition, February, 1991."

(c) For meters used to calculate Federal royalty, you must calibrate the meter against a known standard as follows:

- (1) You must calibrate meters measuring electricity annually;
  - (2) You must calibrate meters measuring steam or hot water flow with a turbine, vortex, ultrasonics, or other linear devices, every six months, or as recommended by the manufacturer, whichever is more frequent; and
  - (3) You must calibrate meters measuring steam or hot water flow with an orifice plate, venturi, pitot tube, or other differential device, every month and you must inspect and repair the primary device (orifice plate, venturi, pitot tube) annually.
- (d) You must use calibration equipment that is more accurate than the equipment you are calibrating.

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(e) BLM may modify any of these requirements as necessary to protect the resources of the United States.

### § 3275.17 What must I do if I find an error in a meter?

(a) If you find an error in a meter used to calculate Federal royalty, you must correct the error immediately and notify BLM by the next working day of its discovery.

(b) If the meter is not used to calculate Federal royalty, you must correct the error and notify us within three days of its discovery.

(c) If correcting the error will cause a change in the sales quantity of more than 2% for the month(s) in which the error occurred, you must adjust the sales quantity for that month(s) and submit an amended facility report to us within three working days.

### § 3275.18 May BLM require me to test for byproducts associated with geothermal resource production?

Yes, you must conduct any tests we require, including tests for byproducts.

### § 3275.19 May I commingle production?

To request approval to commingle production, send us a complete and signed sundry notice. We will review your request to commingle production from wells on your lease with production from your other leases or from leases where you do not have an interest. Do not commingle production until we have approved your sundry notice.

### § 3275.20 What will BLM do if I waste geothermal resources?

We will determine the amount of any resources you have lost through waste. If you did not take all reasonable precautions to prevent waste, we will require you to pay compensation based on the value of the lost production. If you do not adequately correct the situation, we will follow the noncompliance procedures identified at 43 CFR 3277.12.

### § 3275.21 May BLM order me to drill and produce wells on my lease?

Yes, when necessary to protect Federal interests, prevent drainage and to ensure that lease development and pro-

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duction occur in accordance with sound operating practices.

## Subpart 3276—Reports: Utilization Operations

### § 3276.10 What are my reporting requirements for facility and lease operations involving Federal geothermal resources?

(a) When you begin commercial production and operation, you must notify us in writing within five business days.

(b) Submit complete and signed monthly reports to BLM as follows:

(1) If you are a lessee or unit operator supplying Federal geothermal resources to a utilization facility on Federal land leased for geothermal resources, submit a monthly report of well operations for all wells on your lease or unit.

(2) If you are the operator of a utilization facility on Federal land leased for geothermal resources, submit a monthly report of facility operations.

(3) If you are both a lessee or unit operator and the operator of a utilization facility on Federal land leased for geothermal resources, you may combine the requirements of paragraphs (b)(1) and (b)(2) of this section into one report.

(4) If you are a lessee or unit operator supplying Federal geothermal resources to a utilization facility not located on Federal land leased for geothermal resources, and the sales point for the resource utilized is at the facility tailgate, submit all the requirements of paragraphs (b)(1) and (b)(2) of this section. You may combine these into one report.

(c) Unless BLM grants a variance, your reports are due by the end of the month following the month that the report covers. For example, the report covering the month of July is due by August 31.

### § 3276.11 What information must I include for each well in the monthly report of well operations?

(a) Any drilling operations or changes made to a well;

(b) Total production or injection in thousands of pounds (klbs);

(c) Production or injection temperature in degrees Fahrenheit (deg.F);