# Chapter 7 Reporting Geothermal Royalty and Other Geothermal Lease Payments

# 7.1 Introduction

ONRR published new regulations on April 30, 2007, to implement the provisions of the Energy Policy Act of 2005 (EPAct) governing the payment of royalty on geothermal resources produced from Federal leases and the payment of direct use fees in lieu of royalties. The EPAct provisions amend the Geothermal Steam Act of 1970 (GSA). The new regulations amend the current ONRR geothermal royalty valuation regulations and simplify the royalty and direct use fee calculations for geothermal resources for leases issued under the EPAct and leases whose terms are modified under the EPAct. This chapter is a revision of the original chapter and includes changes made necessary by passage of the act.

# 7.2 How to Use This Chapter

This chapter is divided into three sections which correspond to the three classes of geothermal leases designated in the new ONRR regulations at 30 CFR 1206.351.

#### Class I Leases

Explains how to report lease financial obligations for Class I leases. *Class I lease* means: (1) A lease that BLM issued before August 8, 2005, for which the lessee has not converted the royalty rate terms under 43 CFR 3212.25; or (2) A lease that BLM issued in response to an application that was pending on August 8, 2005, for which the lessee has not made an election under 43 CFR 3200.8(b).

#### **Class II Leases**

Explains how to report lease financial obligations for Class II leases. *Class II lease* means: A lease that BLM issued after August 8, 2005, but also includes leases issued in response to an application that was pending on August 8, 2005, and for which the lessee does not make an election under 43 CFR 3200.8(b).

#### **Class III Leases**

The ONRR regulations at 30 CFR 1206.351 define *Class III lease* as: A lease that BLM issued before August 8, 2005 for which the lessee has converted to the royalty rate or direct use fee terms under 43 CFR 3212.25.

### 7.3 Class I Leases

# 7.3.1 Geothermal Lease Financial Obligations Reported on Form ONRR-2014 (Report of Sales and Royalty Remittance)

Geothermal lease payments reported on Form ONRR-2014 include:

- **Rents** for leases that are not producing and do not have a well capable of producing geothermal resources in commercial quantities (as determined by BLM); or for geothermal facility site licenses;
- Minimum royalties for producing leases that do not meet their minimum royalty obligation from actual production royalties, or for nonproducing leases that have a well capable of producing geothermal resources in commercial quantities (as determined by BLM);
- **Production royalties** for producing leases;
- Near term production incentives;
- Credits for in-kind deliveries of electricity to states and/or counties; and
- Compensatory royalties for geothermal resources that are avoidably lost, wasted, or drained (as determined by BLM). See Transaction Code 10, Compensatory Royalty Payment on page 4-11.

# 7.3.2 Important Terms to Know

You should be familiar with terms specific to the valuation and reporting of geothermal resources. Several of these terms are defined in the regulations and the *Geothermal Payor Handbook* — *Class 1 Leases*. These terms are used in the reporting examples that follow:

- Alternative fuel method
- Delivered electricity
- Direct use resources
- Displaced thermal energy
- Electrical generation resources
- Geothermal byproducts

- Geothermal resources
- Gross proceeds less deductions procedure

**"You"** refers to the geothermal lessee, operator, reporter, or royalty payor. Although a royalty payor may not be the lessee for a particular lease, a royalty payor has the same reporting and valuation obligations as the lessee. (See definition of *lessee* at 30 CFR 1206.351.) However, the lessee of record is ultimately responsible for properly reporting and paying royalties and other geothermal lease payments.

#### 7.3.3 **Rents**

Use transaction code 04 to report rents on nonproducing geothermal leases and site licenses.

If ONRR does not receive your second and subsequent year's rental payment in full by the lease anniversary date, ONRR will notify you that the rent payment is overdue. You have 45 days after the anniversary date to pay the rent plus a 10 percent late fee. If ONRR does not receive your rental plus the late fee by the end of the 45-day period, BLM will terminate your leases. If you receive notification from ONRR more than 15 days after the lease anniversary date, BLM will reinstate a lease that was terminated if ONRR receives the rent plus a 10 percent late fee within 30 days after you receive the notification (see 43 CFR 3213.14).

To report the 10 percent late payment fee, write a letter to ONRR listing the lease number and reason for the late payment fee, enclose the payment, and send it to ONRR at:

Office of Natural Resources Revenue PO Box 25627 Denver CO 80225-0627

If you have questions, call 1-800-525-0309.

See Transaction Code 04, Rental Payment on page 4-29 for additional information on reporting rents.

#### **Nonproducing leases** are those leases that:

- Have never produced;
- Do not have a well capable of producing geothermal resources in commercial quantities (as determined by BLM);
- Are not included in a producing (or formerly producing) cooperative or unit agreement; or
- Were segregated when a unit formed.

You are required to pay lease rent until your lease achieves production or you complete a well capable of producing geothermal resources in commercial quantities. Rental rates are given in your lease document. You may have additional rent in lieu of performing diligent exploration during the 6th through 10th years of the lease's primary term or in lieu of commercial production during lease extensions. See 43 CFR subparts 3208, 3210, and 3211 for more information on lease rents.

**Site licenses** are issued by BLM for the siting of geothermal utilization facilities on geothermal leases. Rent is due on a site license only if the facility operator is different from the lessee or unit operator. Rental rates are given in the site license approval. See 43 CFR subpart 3273 for more information on site licenses.

#### **EXAMPLE**

**Rent on nonproducing leases.** This example shows how to report geothermal rents on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 006-098765-0.
- The anniversary date of the lease is October 1, 2019.
- This lease is in its second year and is non-producing.
- The lease acreage is 2,560 acres, and the lease rent is \$2.00 per acre.
- You pay by Electronic Fund Transfer (EFT) to ONRR. Submit the Form ONRR-2014 and the rental payment by the lease's anniversary date. Report the payment due month in the Sales Month/Year field.

The information reported on the Form ONRR-2014 is shown on the fact sheet below.

1

#### Form ONRR-2014 Fact Sheet

#### **Detail Line**

**API Well Number** 0060987650 **ONRR** Lease Number

**ONRR** Agreement Number

**Product Code** 

**Line Number** 

**Sales Type Code** 

Sales MO/YR 102019 **Transaction Code** 04

**Adjustment Reason Code** 

**Sales Volume** 

Gas MMBtu

**Sales Value** 

**Royalty Value Prior to** 5120.00

**Allowances** 

**Transportation** 5120.00

**Allowance Deduction** 

**Processing Allowance** 

**Deduction** 

5120.00 **Royalty Value Less** 

**Allowances** 

**Payment Method Code** 03

**Payment Information** 

**EFT Payments** 5120.00 **Total All Payments** 5120.00

Less Available Credits: Doc. ID **Net Payment** 5120.00 **Rent on site licenses.** Follow the same procedure to report rent on site licenses as you do for nonproducing leases. Report the site license number in the ONRR Lease Number field.

# 7.3.4 **Minimum Royalty**

Use transaction code 02 to report minimum royalties on leases that:

- Produce commercially but do not satisfy their minimum royalty requirement through payment of production royalties, or
- Do not produce but have a well capable of producing geothermal resources in commercial quantities (as determined by BLM).

Your minimum royalty payment is due on or before the end of the lease year. For example, if the lease year runs from December 1 through November 30, your minimum royalty payment is due no later than November 30.

Minimum royalties for geothermal leases are \$2.00 per acre per year. For leases in commercial production that do not meet their minimum royalty requirement through production royalties, the minimum royalty due is the difference between the minimum royalty amount and the actual royalties paid.

#### **E**XAMPLE

**Minimum royalty due:** This example shows how to report minimum royalties on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 027-023456-0.
- The lease year is May 1, 2018, through April 30, 2019.
- The lease produced for part of the year.
- The lease acreage is 2,240 acres; minimum royalty is \$2.00/acre. Accordingly, your minimum royalty obligation is \$4,480.
- The production royalty payments, both actual and estimated, for the lease year total is \$3,750. Therefore, you owe additional royalty of \$730.
- This example is focusing on paying minimum royalty. You must also pay your production royalty. (Calculation of production royalty not shown here.)
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number 1

**API Well Number** 

ONRR Lease Number 0270234560

**ONRR Agreement Number** 

**Product Code** 

**Sales Type Code** 

**Sales MO/YR** 042019

**Transaction Code** 02

**Adjustment Reason Code** 

**Sales Volume** 

Gas MMBtu

Sales Value

**Royalty Value Prior to** 730.00

**Allowances** 

**Transportation** 

**Allowance Deduction** 

**Processing Allowance** 

**Deduction** 

**Royalty Value Less** 730.00

**Allowances** 

Payment Method Code 03

**Payment Information** 

**EFT Payments** 730.00 **Total All Payments** 730.00

Less Available Credits: Doc. ID

Net Payment 730.00

# 7.3.5 **Production Royalty**

You must pay royalties on all geothermal resources, including geothermal byproducts and commercially demineralized water that are either:

- Produced from the lease and are sold or utilized, or
- Reasonably predisposed to sale or utilization.

See 30 CFR 1202.351 and Chapters 2, 3, 4, and 5 of the *Geothermal Payor Handbook* — *Class 1 Leases* for additional information on geothermal resources requiring royalty and exceptions.

Royalties on geothermal production are due by the end of the month following the month of production. Do not submit a Form ONRR-2014 for those months you do not produce.

You must pay all geothermal royalties in value.

#### For all Class I leases:

Report your gross proceeds from the sale of electricity or geothermal resources in the Sales Value field of Form ONRR-2014.

Report your generation deductions (if applicable) in the Processing Allowance field of Form ONRR-2014.

Report your transmission deductions (if applicable) in the Transportation Allowance field of Form ONRR-2014.

The following Form ONRR-2014 fields do not apply to geothermal royalty reporting; therefore, these fields should be left blank:

- API Well Number
- Gas MMBtu

#### **Product Codes**

Geothermal product codes are divided into two groups—fluid geothermal resources and geothermal byproducts. Fluid geothermal resources are further subdivided based on their usage (electrical generation or direct use) and unit of measure. You can use geothermal product codes singularly or in combination, depending on the production's disposition. For example, you might use your production to generate electricity, recover and sell a byproduct, and sell the power plant condenser fluids to a direct-use facility. This situation would require you to report three product codes; specific product codes would depend on the production's usage (electrical generation or direct use), the unit of measure used in its valuation (kWh, MMBtu, hundreds of gallons, etc.), and the byproduct type (sulfur, silica, etc.). You should report different product codes on separate Form ONRR-2014 lines.

Fluid geothermal resources: For reporting purposes, fluid geothermal resources (or fluid geothermal production) include steam, hot water, hot brines, and related heat and other associated energy. Product codes for fluid geothermal resources relate first to the production's usage — electrical generation or direct use — and then to its unit of measure. The unit of measure may be in terms of mass, such as pounds; volume, such as gallons; electricity, such as kilowatt hours (kWh); thermal energy, such as British thermal units (Btu); or other measurement units approved by ONRR. The unit of measure is usually either specified in your sales contract or dictated by the method used to value the production. Measurement standards for reporting and paying royalties on geothermal fluids are given in 30 CFR 1202.353, with examples given in Chapters 2, 3, 4, and 5 of the Geothermal Payor Handbook — Class 1 Leases. For example, if valuation is in terms of electrical energy, you must report your production in terms of kilowatt hours to the nearest whole kWh. If valuation is in terms of thermal energy, you must report your production in terms of millions of Btu (MMBtu) to the nearest whole million Btu.

Use the following product codes to report geothermal fluids used to generate electricity (electrical generation resources).

<b>Product Code</b>	Description
31	Electrical generation, kWh
32	Electrical generation, thousands of pounds (generally applicable only to dry steam resources)
33	Electrical generation, MMBtu
34	Electrical generation, other measurement unit approved by ONRR

Use the following product codes to report geothermal fluids used in direct-use processes (direct use resources):

<b>Product Code</b>	Description
35	Direct use, MMBtu
36	Direct use, hundreds of gallons
37	Direct use, other measurement unit approved by ONRR

In some cases, the method of valuing the resource dictates the reported unit of measure. See Chapters 2, 3, 4, and 5 of the *Geothermal Payor Handbook* — *Class 1 Leases* for additional valuation instructions.

Geothermal byproducts: Geothermal byproducts are any mineral or minerals — other than oil, hydrocarbon gas, and helium — that are commercially recovered from produced geothermal fluids. (See 30 CFR 1206.351 for complete definition of geothermal byproducts.) Use the following product codes to report geothermal byproducts; note the associated units of measure.

<b>Product Code</b>	Description
38	Commercially demineralized water, reported in hundreds of gallons
41	Sulfur, reported in long tons (replaces product code 19 for geothermal sulfur)
42	Carbon dioxide, reported in thousands of cubic feet (Mcf)
43	Silica, reported in pounds
44	Other geothermal byproduct not listed above; contact ONRR for unit of measure

#### Sales Type Codes

Use the following sales type codes to report royalties on geothermal production.

Sales Type Code	Description
ARMS	Geothermal resources (i.e., steam or brine) or byproducts sold under an arm's-length sales contract. Also report ARMS when the geothermal resources are used to generate electricity in your or your affiliate's power plant and that generated electricity is sold under an arm's-length sales contract.
NARM	Geothermal resources or byproducts not sold under an arm's-length contract. Also report NARM when the geothermal resources are used to generate electricity and that generated electricity is used by you or your affiliate's utility.

You can use sales type codes singularly or in combination, depending on the resource's disposition. Report different sales type codes on separate lines.

#### **Transaction Codes**

Use the following transaction codes to report geothermal royalties on the value of production or on proceeds associated with production.

<b>Transaction Code</b>	Description
01	Royalty on value of production
10	Compensatory royalty on value of drained, avoidably lost, or wasted production
11	Byproduct transportation allowances
14	Royalty on severance tax and other production tax reimbursements
25	Geothermal netback true-up
53	Royalty on payments or reimbursements for effluent and other fluid injection
54	Royalty on payments or reimbursements for geothermal field operations, other than effluent and other fluid injection

You can use these transaction codes singularly or in combination, depending on the resource's disposition and, or selling arrangements. Report different transaction codes on separate lines.

#### Royalty Examples

The following examples cover reporting royalties under many combinations of uses, sales types, product codes, and transaction codes applicable to geothermal production. Although the examples may not specifically fit your particular reporting situation, the elements presented here should guide you in completing your Form ONRR-2014. You can find more examples in Chapters 2, 3, 4, and 5 of the Geothermal Payor Handbook — Class 1 Leases. For transaction codes not covered by these examples, such as compensatory royalty (Transaction code 10), see Chapter 4.

For answers to questions not covered in this handbook or the *Geothermal Payor Handbook* — *Class I Leases*, contact us at the address or telephone numbers listed in Appendix A.

#### EXAMPLE

**Arm's-length sales.** This example shows how to report geothermal royalties on Form ONRR-2014 when you sell the resource under an arm's-length sales contract.

#### **Assumptions:**

- The ONRR-converted lease number is 171-035041-0.
- The royalty rate is 12 1/2 percent.
- The production/sales month is October 2019.
- You sell steam to a nonaffiliated owner of a geothermal power plant. The sales contract establishes a price of \$0.015 per thousands of lbs of steam, plus \$0.0003 per thousands of lbs of steam for effluent injection. The purchaser also pays \$10,000 per month for production operations and field maintenance.
- The pay statement for the month shows 26,140,500 thousand lbs of steam, with payments of \$392,107.50 for the steam, \$7,842.15 for effluent injection, and \$10,000.00 for production operations and field maintenance.
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1	2	3
API Well Number			
ONRR Lease Number	1710350410	1710350410	1710350410
ONRR Agreement Number			
<b>Product Code</b>	32	32	32
Sales Type Code	ARMS	ARMS	ARMS
Sales MO/YR	102019	102019	102019
Transaction Code	01	53	54
Adjustment Reason Code			
Sales Volume	26140500	26140500	26140500
Gas MMBtu			
Sales Value	392107.50	7842.15	10000.00
<b>Royalty Value Prior to Allowances</b>	49013.44	980.27	1250.00
Transportation Allowance Deduction			
<b>Processing Allowance Deduction</b>			
<b>Royalty Value Less Allowances</b>	49013.44	980.27	1250.00
<b>Payment Method Code</b>	03	03	03

# **Payment Information**

**EFT Payments** 51243.71 **Total All Payments** 51243.71

**Less Available Credits: Doc. ID Net Payment** 51243.71

#### EXAMPLE

**Not arm's-length sales, direct use.** This example shows how to report geothermal royalties on Form ONRR-2014 when you value the resource by the alternative fuel method.

#### **Assumptions:**

- The ONRR-converted lease number is 030-044368-0.
- The royalty rate is 10 percent.
- The production/sales month is December 2019.
- You use the geothermal production as process heat in a vegetable dehydration plant and value the production by the alternative fuel method.
- During the month you displaced 23,875 MMBtu of thermal energy. The displaced thermal energy value is \$99,081.25.
- The alternative fuel value in this example is natural gas. (\$4.15 per MMBtu)
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number 1 **API Well Number ONRR Lease Number** 0300443680 **ONRR Agreement Number Product Code** 35 **Sales Type Code NARM** Sales MO/YR 122019 **Transaction Code** 01 **Adjustment Reason Code Sales Volume** 23875 Gas MMBtu **Sales Value** 99081.25 **Royalty Value Prior to** 9908.13 **Allowances Transportation Allowance Deduction Processing Allowance Deduction** 9908.13 **Royalty Value Less Allowances Payment Method Code** 03

#### **Payment Information**

**EFT Payments** 9908.13 **Total All Payments** 9908.13

**Less Available Credits: Doc. ID Net Payment** 9908.13

#### EXAMPLE

Where you use your own resource in your own power plant. This example shows how to report geothermal royalties on Form ONRR-2014 when you value the resource by the gross proceeds less deductions procedure and you also have byproduct sales.

#### **Assumptions:**

- The ONRR-converted lease number is 027-025280-0.
- The BLM-assigned lease royalty rate is 12 ½ percent for geothermal fluids and 5 percent for byproducts.
- The lease is in a unit and has an allocation factor of 43 percent.
- The production/sales month is October 2019.
- You use the geothermal production in your own power plant and sell the generated electricity to a local utility. You use the gross proceeds less deductions procedure to value the production. You also recover sulfur and sell it under an arm's-length sales contract.
- During the month you delivered 32,845,600 kWh of electricity and received gross proceeds of \$1,642,280.00. You received \$12,500 for the sale of 500 long tons of sulfur. You incurred trucking charges of \$1,750.00 to transport the sulfur from the power plant to the point of sale.

Delivered electricity  $14,123,608 \text{ kWh} = (32,845,600 \text{ kWh} \times 0.43)$ 

Sales Value  $$706,180.40 = ($1,642,280.00 \times 0.43)$ 

Generation Deduction (Processing Allowance)  $$37,500 = ($300,100 \text{ x} \\ 0.125)$ 

Transmission Deduction (Transportation Allowance)  $\$8,401.7 = (67,213.8 \times 0.125)$ 

Sulfur sales  $215 \text{ tons} = (500 \text{ tons} \times 0.43)$ 

Sulfur value  $\$5,375.00 = (\$12,500.00 \times 0.43)$ 

Trucking charges  $$752.50 = (\$1,750.00 \times 0.43)$ 

• You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1	2
<b>API Well Number</b>		
<b>ONRR Lease Number</b>	0270252800	0270252800
ONRR Agreement Number		
<b>Product Code</b>	31	41
Sales Type Code	NARM	ARMS
Sales MO/YR	102019	102019
<b>Transaction Code</b>	01	01
<b>Adjustment Reason Code</b>		
Sales Volume	14123608	215
Gas MMBtu		
Sales Value	706180.49	5375.00
Royalty Value Prior to	88272.55	268.75
Allowances		
Transportation	8401.7	37.63
Allowance Deduction		
Processing Allowance	37500	
Deduction		
Royalty Value Less Allowances	42370.82	231.12
<b>Payment Method Code</b>	03	03

# **Payment Information**

**EFT Payments** 42601.94 **Total All Payments** 42601.94

Less Available Credits: Doc. ID Net Payment 42601.94

#### **EXAMPLE**

Where you use your own resource in your own power plant with effluent sold arm's length to a direct-use facility. This example shows how to report geothermal royalties on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 027-020825-0.
- The royalty rate is 10 percent.
- The lease is in a unit and has an allocation factor of 21 percent.
- The production/sales month is October 2019.
- You use the geothermal production in your own power plant and sell the generated electricity to a local utility. You use the gross proceeds less deductions procedure to value production.
- You sell the hot effluent from the power plant to an adjoining greenhouse under an arm's-length agreement. The greenhouse operator pays \$0.60 per hundred gallons, plus \$0.02 per hundred gallons to re-inject the spent geothermal fluids.
- During the month you delivered 32,845,600 kWh of electricity and received \$1,642,280.00.
- You also delivered 50,000 gallons of power plant effluent to the greenhouse operator and received \$30,000 for the fluid delivery and \$1,000 for reinjection.
- Lease allocations:

Delivered electricity 6,897,576 kWh = (32,845,600 kWh x 0.21)

Sales value  $$344,878.8 = ($1,642,280 \times 0.21)$ 

Generation Deduction (Processing Allowance) = \$809,523.81 x 0.21 x

0.10 = \$17,000

Transmission Deduction (Transportation Allowance) =  $(44,461.90 \times 0.21)$ 

x (0.10) = \$933.70

Effluent delivery  $10,500 \text{ gallons} = (50,000 \text{ gallons } \times 0.21)$ 

Effluent value  $$6,300.00 = ($30,000.00 \times 0.21)$ 

Re-injection payment  $$210.00 = ($1,000.00 \times 0.21)$ 

• You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1	2	3
<b>API Well Number</b>			
<b>ONRR Lease Number</b>	0270208250	0270208250	0270208250
ONRR Agreement Number			
<b>Product Code</b>	31	36	36
Sales Type Code	NARM	ARMS	ARMS
Sales MO/YR	102019	102019	102019
<b>Transaction Code</b>	01	01	53
Adjustment Reason Code			
Sales Volume	6897576	10500	10500
Gas MMBtu			
Sales Value	344878.8	6300.00	210.00
<b>Royalty Value Prior to Allowances</b>	34487.88	630.00	21.00
Transmission Deduction (Transportation Allowance)	933.7		
Generation Deduction (Processing Allowance)	17000		
<b>Royalty Value Less Allowances</b>	16554.18	630.00	21.00
<b>Payment Method Code</b>	03	03	03

# **Payment Information**

**EFT Payments** 17205.18 **Total All Payments** 17205.18

**Less Available Credits: Doc. ID Net Payment** 17205.18

#### 7.3.5.1 Near Term Production Incentives

Use transaction code 01 to report new or qualified expansion production.

NOTE

If you qualify for a production incentive under BLM regulations at 43 CFR 3212, your royalty due on the production BLM determines to be qualified for a production incentive under 43 CFR subparts 3212.21 and 3212.22 is 50 percent of the amount of the total royalty that would otherwise be due under 30 CFR part 1206, subpart H.

#### EXAMPLE

**Arm's-length sales for qualified expansion projects.** This example shows how to report geothermal royalties on Form ONRR-2014 when you sell the resource under an arm's-length contract.

#### **Assumptions:**

- The ONRR-converted lease number is 171-035041-0.
- The royalty rate is 12 ½ percent with a reduction to 6 ¼ percent for four years for new production.
- The production/sales month is October 2019.
- You sell steam arm's length to a nonaffiliated owner of a geothermal power plant. The sales contract establishes a price of \$0.015 per thousand lbs of steam, plus \$0.0003 per thousand lbs of steam for effluent injection. The purchaser also pays \$10,000 per month for production operations and field maintenance.
- The pay statement for the month shows 26,140,500 thousand lbs of steam, with payments of \$392,107.50 for the steam of which \$78,421.50 is allocated to new production, \$7,842.15 for effluent injection of which \$1,568.43 is allocated to new production, and \$10,000.00 for production operations and field maintenance of which \$2,000.00 is allocated to new production.
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1	2	3	4	5	6
API Well Number						
ONRR Lease Number	1710350410	1710350410	1710350410	1710350410	1710350410	1710350410
ONRR Agreement Number						
<b>Product Code</b>	32	32	32	32	32	32
Sales Type Code	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS
Sales MO/YR	102019	102019	102019	102019	102019	102019
Transaction Code	01	01	53	53	54	54
Adjustment Reason Code						
Sales Volume	20912400	5228100	20912400	5228100	20912400	5228100
Gas MMBtu						
Sales Value	313686	78421.50	6272.73	1568.42	8000	2000
Royalty Value Prior to Allowances	39210.75	4901.34	784.09	98.03	1000	125
Transportation Allowance Deduction						
Processing Allowance Deduction						
Royalty Value Less Allowances	39210.75	4901.34	784.09	98.03	1000	125
Payment Method Code	03	03	03	03	03	03

# **Payment Information**

**EFT Payments** 46119.21 **Total All Payments** 46119.21

**Less Available Credits: Doc. ID Net Payment**46119.21

#### EXAMPLE

Where you use your own resource in your own power plant as a BLM approved new facility. This example shows how to report geothermal royalties on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 027-025280-0.
- The lease qualifies as a new facility with a 5 percent (reduced from 10 percent) royalty rate for four years.
- Because this qualifies as a new facility, all production has a reduced royalty rate for four years.
- The production/sales month is October 2019.
- You use the geothermal production in your own power plant and sell the generated electricity to a local utility.
- During the month, you delivered 32,845,600 kWh of electricity and received \$1,642,280.00.
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1
<b>API Well Number</b>	
<b>ONRR Lease Number</b>	0270252800
<b>ONRR</b> Agreement Number	
<b>Product Code</b>	31
Sales Type Code	NARM
Sales MO/YR	102019
<b>Transaction Code</b>	01
Adjustment Reason Code	
Sales Volume	32845600
Gas MMBtu	
Sales Value	1642280.00
<b>Royalty Value Prior to</b>	82114.00
Allowances	
<b>Transmission Deduction</b>	2000.00
(Transportation Allowance)	
<b>Generation Deduction</b>	30000.00
(Processing Allowance)	
<b>Royalty Value Less</b>	50114.00
Allowances	
<b>Payment Method Code</b>	03

# **Payment Information**

**EFT Payments** 50114.00 **Total All Payments** 50114.00

**Less Available Credits: Doc. ID Net Payment**50114.00

Upon approval from the Bureau of Land Management (BLM), ONRR will provide written instructions to a royalty payor for taking credit for in-kind deliveries of electricity to states or counties.

# 7.4 Class II Leases

This section explains how to report lease financial obligations for Class II leases. "Class II lease" refers to a lease that BLM issued after August 8, 2005, but also includes leases issued in response to an application that was pending on August 8, 2005, and for which the lessee does not make an election under 43 C.F.R. 3200.8(b).

# 7.4.1 Geothermal Lease Term Financial Obligations Reported on Form ONRR-2014 (Report of Sales and Royalty Remittance)

Geothermal lease payments reported on Form ONRR-2014 include:

- **Rents** all Class II geothermal leases require rentals regardless of producing status.
- **Production royalties** for producing leases.
- Credits for in-kind electricity delivery to states and/or counties may be taken against production royalties.
- Direct use fee schedule.
- Advanced royalties for cessation of production.
- Compensatory royalties for geothermal resources that are avoidably lost, wasted, or drained (as determined by BLM). (See *Transaction code 10*, *Compensatory Royalty Payment on page 4-11*.

# 7.4.2 Important Terms to Know

You should be familiar with terms specific to the valuation and reporting of geothermal resources. Several of these terms are defined in the regulations and the *Geothermal Payor Handbook* — *Class 2 & 3 Leases*. These terms are used in the reporting examples that follow:

- Delivered electricity
- Direct-use resources
- Electrical generation resources
- Geothermal byproducts
- Geothermal resources

#### 7.4.3 **Rents**

Rental rates and rental due dates are given in your lease document. Use transaction code 05 to report recoupable rents on all geothermal leases.

*See 43 CFR Subpart 3211.11 – 16 for more information on rents.* 

If ONRR does not receive your second and subsequent year's rental payment in full by the lease anniversary date, ONRR will notify you that the rent payment is overdue. You have 45 days after the anniversary date to pay the rent plus a 10 percent late fee. If ONRR does not receive your rental plus the late fee by the end of the 45-day period, BLM will terminate your leases. If you receive notification from ONRR more than 15 days after the lease anniversary date, BLM will reinstate a lease that was terminated if ONRR receives the rent plus a 10 percent late fee within 30 days after you receive the notification (see 43 CFR 3213.14).

To report the 10 percent late payment fee, write a letter to ONRR listing the lease number and reason for the late payment fee, enclose the payment, and send to ONRR at:

Office of Natural Resources Revenue PO Box 25627 Denver CO 80225-0627

If you have questions, call 1-800-525-0309.

#### **EXAMPLE**

**Rent.** This example shows how to report geothermal rents on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 006-098765-0.
- The anniversary date of the lease is October 1, 2019.
- This lease is a competitive lease in its second year.
- The lease acreage is 2,560 acres, and the lease rent is \$3.00 per acre.
- You pay by EFT to ONRR.

Submit Form ONRR-2014 and the rental payment by the lease's anniversary date. Report the month in which the payment is due in the Sales Month/Year field.

#### **Detail Line**

Line Number 1

**API Well Number** 

ONRR Lease Number 0060987650

**ONRR Agreement Number** 

**Product Code** 

**Sales Type Code** 

Sales MO/YR 102019 Transaction Code 05

**Adjustment Reason Code** 

**Sales Volume** 

Gas MMBtu

**Sales Value** 

**Royalty Value Prior to** 7680.00

**Allowances** 

**Transportation** 

**Allowance Deduction** 

**Processing Allowance** 

**Deduction** 

**Royalty Value Less** 7680.00

**Allowances** 

Payment Method Code 03

**Payment Information** 

**EFT Payments** 7680.00 **Total All Payments** 7680.00

Less Available Credits: Doc. ID

**Net Payment** 7680.00

# 7.4.3.1 Credit for In-Kind Deliveries of Electricity to States or Counties

Upon approval from the Bureau of Land Management (BLM), ONRR will provide written instructions to a royalty payor for taking credit for in-kind deliveries of electricity to states or counties.

# 7.4.3.2 Rental Credits

The regulations at 30 CFR 1218.303 allow you to credit annual rental against royalty due for the same year.

#### EXAMPLE

**Rental Credits.** This example shows how to report rental credits on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 006-098765-0.
- The royalty rate is 12 ½ percent.
- The anniversary date of the lease is October 1, 2019.
- The lease acreage is 2,500 acres; rent is \$3.00/acre. Accordingly, your total rental payment on October 1, 2019 was \$7,500.00.
- You sell steam to a nonaffiliated owner of a geothermal power plant. The sales contract establishes a price of \$0.015 per thousand lbs of steam.
- The pay statement for the month shows 346,667 (thousand lbs of steam), with payments of \$5,200.00 for the steam.
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1	2
<b>API Well Number</b>		
<b>ONRR Lease Number</b>	0060987650	0060987650
<b>ONRR</b> Agreement Number		
<b>Product Code</b>		32
Sales Type Code		ARMS
Sales MO/YR	102019	102019
<b>Transaction Code</b>	05	01
<b>Adjustment Reason Code</b>		
Sales Volume		346667
Gas MMBtu		
Sales Value		5200.00
Royalty Value Prior to	-650.00	650.00
Allowances		
Transportation Allowance Deduction		
Processing Allowance Deduction		
Royalty Value Less Allowances	-650.00	650.00
<b>Payment Method Code</b>	03	03

# **Payment Information**

EFT Payments 0.00 Total All Payments 0.00

Less Available Credits: Doc. ID
Net Payment 0.00

**Note:** Credit for any month cannot exceed the royalty owed.

#### 7.4.3.3 Site Licenses

Site licenses are issued by BLM for the siting of geothermal utilization facilities on geothermal leases. Rental rates are given in the site license approval. Rent is due on a site license only if the facility operator is different from the lessee or unit operator.

See 43 CFR Subpart 3273 for more information on site licenses.

We must receive your site license rent payment on or before the anniversary date of the lease or site license. Example: For a lease or site license effective June 1, 1994, your rental payment must reach us no later than June 1 of each succeeding year.

See Transaction Code 04, Rental Payment on page 4-29, for information pertaining to site licenses.

#### **Production royalties**

You must pay royalties on all geothermal resources, including geothermal byproducts that are:

- Produced from the lease and are sold or used by lessee, or
- Reasonably susceptible to sale or use by the lessee, or
- All proceeds derived from the sale of electricity produced using geothermal resources produced from a lease.

ONRR will allow free of royalty or direct use fees geothermal resources that are:

- Unavoidably lost or reinjected before use on or off the lease, as determined by BLM;
- Reasonably necessary for the lessee to generate plant parasitic electricity or electricity for Federal lease operations; or
- Otherwise used for Federal lease operations related to commercial production or generation of electricity.

See 30 CFR 1202.351 and Chapter 2 of the *Geothermal Payor Handbook* — *Class* 2 & 3 Leases for additional information on geothermal resources requiring royalty and exceptions.

Royalties on geothermal production are due by the end of the month following the month of production. Do not submit a Form ONRR-2014 for months you do not produce.

You pay all geothermal royalties in value except for in-kind deliveries of electricity to states or counties.

For all Class II leases, report the gross proceeds from the sale of electricity as the "Sales Value" on the Form ONRR-2014.

The following fields on Form ONRR-2014 do not apply to geothermal royalty reporting; leave these fields blank:

- API Well Number
- Gas MMBtu

#### **Product Codes**

Geothermal product codes are divided into two groups—fluid geothermal resources and geothermal byproducts. Fluid geothermal resources are further subdivided based on their usage (electrical generation or direct use) and unit of measure.

You can use geothermal product codes singularly or in combination, depending on the production's disposition. For example, you might use your production to generate electricity, recover and sell a byproduct, and sell the power plant condenser fluids to a direct-use facility. This situation would require you to report three product codes; specific product codes would depend on the production's usage (electrical generation or direct use), the unit of measure used in its valuation (kWh, MMBtu, millions of gallons, etc.), and the byproduct type. Report different product codes on separate lines.

Fluid geothermal resources. For reporting purposes, fluid geothermal resources (or fluid geothermal production) include steam, hot water, hot brines, and related heat and other associated energy. Product codes for fluid geothermal resources relate first to the production's usage — electrical generation or direct use — and then to its unit of measure. The unit of measure may be in terms of mass, such as pounds; volume, such as gallons; electricity, such as kilowatt hours (kWh); thermal energy, such as British thermal units (Btu); or other measurement units approved by ONRR. The unit of measure is usually either specified in your sales contract or dictated by the method used to value the production. Measurement standards for reporting and paying royalties on geothermal fluids are given in 30 CFR 1202.353, with examples given in ONRR's *Geothermal Payor Handbook* — *Class 2 & 3 Leases*. For example, if valuation is in terms of electrical energy, you must report your production in terms of kilowatt hours to the nearest whole kWh. If valuation is in terms of thermal energy, you must report your production in terms of millions of Btu (MMBtu) to the nearest whole million Btu.

Use the following product codes to report geothermal fluids used to generate electricity (electrical generation resources):

<b>Product Code</b>	Description
31	Electrical generation, kWh
32	Electrical generation, thousands of pounds (generally applicable only to dry steam resources)
33	Electrical generation, MMBtu
34	Electrical generation, other measurement unit approved by ONRR

Use the following product codes to report geothermal fluids used in direct-use processes (direct use resources):

<b>Product Code</b>	Description
35	Geothermal direct use, MMBtu
36	Geothermal direct use, hundreds of gallons
37	Geothermal direct use, other
45	Direct use, millions of gallons
46	Direct use, millions of pounds

In some cases, the method of valuing the resource dictates the reported unit of measure. See the *Geothermal Payor Handbook* — *Class 2 & 3 Leases* for additional valuation instructions.

Geothermal byproducts. Geothermal byproducts are any mineral or minerals — other than oil, hydrocarbon gas, and helium — found in solution or in association with geothermal steam. (See 30 CFR 1206.351 for complete definition of geothermal byproducts.) Use the following product codes to report geothermal byproducts; note the associated units of measure.

<b>Product Code</b>	Description
38	Commercially demineralized water, reported in hundreds of gallons
41	Geothermal byproduct - sulfur
42	Geothermal byproduct - carbon dioxide
43	Geothermal byproduct - silica
44	Other geothermal byproduct not listed above; contact ONRR for unit of measure

# Sales Type Codes

Use the following sales type codes to report royalties on geothermal production.

Sales Type Code	Description
ARMS	Geothermal resources sold under an arm's-length sales contract (i.e., steam or brine) or byproducts sold under an arm's-length sales contract. Also report ARMS when the geothermal resources are used to generate electricity in your or your affiliate's power plant and that generated electricity is sold under an arm's-length sales contract.
NARM	Geothermal resources or byproducts not sold under an arm's-length contract. Also report NARM when the geothermal resources are used to generate electricity and that generated electricity is used by you or your affiliate's utility.

You can use sales type codes singularly or in combination, depending on the resource's disposition. Report different sales type codes on separate lines.

#### **Transaction Codes**

Use the following transaction codes to report geothermal royalties or fees on the value of production or on proceeds associated with production:

<b>Transaction Code</b>	Description		
01	Royalty on value of production		
04	Rental payment		
05	Recoupable rent		
10	Compensatory royalty on value of drained, avoidably lost, or wasted production		
11	Byproduct transportation allowances		
14	Royalty on severance tax and other production tax reimbursements		
16	Well fee (use for Direct Use Fee Schedule)		
32	Advanced Royalty		
33	Advanced Royalty Recoupment		
53	Royalty on payments or reimbursements for effluent and other fluid injection		
54	Royalty on payments or reimbursements for geothermal field operations, other than effluent and other fluid injection		

You can use these transaction codes singularly or in combination, depending on the resource's disposition and/or selling arrangements. You must report different transaction codes on separate lines.

#### Royalty Examples

The following examples cover reporting royalties under many combinations of uses, sales types, product codes, and transaction codes applicable to geothermal production. Although the examples may not specifically fit your particular reporting situation, the elements presented here should guide you in completing your Form ONRR-2014. You can find more examples in the Geothermal Payor Handbook — Class 2 & 3 Leases. For transaction codes not covered by these examples, such as compensatory royalty (transaction code 10), see Chapter 4.

For answers to questions not covered in this handbook or the *Geothermal Payor Handbook* — *Class 2 & 3 Leases*, contact us at the address or telephone numbers listed in Appendix A.

#### EXAMPLE

**Arm's-length sales.** This example shows how to report geothermal royalties on Form ONRR-2014, when you sell the resource under an arm's-length sales contract.

#### **Assumptions:**

- The ONRR-converted lease number is 171-035041-0.
- The royalty rate is 12 ½ percent.
- The production/sales month is October 2019.
- You sell steam to a nonaffiliated owner of a geothermal power plant. The sales contract establishes a price of \$0.015 per thousands of lbs of steam, plus \$0.0003 per thousands of lbs of steam for effluent injection. The purchaser also pays \$10,000 per month for production operations and field maintenance.
- The pay statement for the month shows 26,140,500 thousand lbs of steam, with payments of \$392,107.50 for the steam, \$7,842.15 for effluent injection, and \$10,000.00 for production operations and field maintenance.
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1	2	3
API Well Number			
<b>ONRR</b> Lease Number	1710350410	1710350410	1710350410
ONRR Agreement Number			
<b>Product Code</b>	32	32	32
Sales Type Code	ARMS	ARMS	ARMS
Sales MO/YR	102019	102019	102019
Transaction Code	01	53	54
Adjustment Reason Code			
Sales Volume	26140500	26140500	26140500
Gas MMBtu			
Sales Value	392107.50	7842.15	10000.00
<b>Royalty Value Prior to Allowances</b>	49013.44	980.27	1250.00
Transportation Allowance Deduction			
<b>Processing Allowance Deduction</b>			
<b>Royalty Value Less Allowances</b>	49013.44	980.27	1250.00
<b>Payment Method Code</b>	03	03	03

# **Payment Information**

**EFT Payments** 51243.71 **Total All Payments** 51243.71

**Less Available Credits: Doc. ID Net Payment** 51243.71

#### **EXAMPLE**

When you use your own resource in your own power plant. The following example shows how to report geothermal royalties on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 027-025280-0.
- The lease is in a unit and has an allocation factor of 43 percent.
- The production/sales month is October 2019.
- You use the geothermal production in your own power plant and sell the generated electricity arm's length to a local utility. Royalties are based on a percentage of the gross proceeds from electricity sales with a 1.75 percent royalty rate for the first 10 years.
- During the month you delivered 32,845,600 kWh of electricity and received \$1,642,280.00.
- Lease allocations:

Delivered electricity 14,123,608 kWh = (32,845,600 kWh x 0.43)

Gross proceeds  $$706,180.40 = (\$1,642,280 \times 0.43)$ Royalty value  $$12,358.16 = (\$706,180.40 \times 1.75\%)$ 

• You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1
<b>API Well Number</b>	
<b>ONRR Lease Number</b>	0270252800
ONRR Agreement Number	
Product Code	31
Sales Type Code	NARM
Sales MO/YR	102019
Transaction Code	01
Adjustment Reason Code	
Sales Volume	14123608
Gas MMBtu	
Sales Value	706180.40
Royalty Value Prior to Allowances	12358.16
<b>Transportation Allowance Deduction</b>	
<b>Processing Allowance Deduction</b>	
<b>Royalty Value Less Allowances</b>	12358.16
Payment Method Code	03

# **Payment Information**

**EFT Payments** 12358.16 **Total All Payments** 12358.16

**Less Available Credits: Doc. ID Net Payment** 12358.16

## 7.4.3.4 Credit for In-Kind Deliveries of Electricity to States or Counties

Upon approval from the Bureau of Land Management (BLM), ONRR will provide written instructions to the royalty payor for taking credit for in-kind deliveries of electricity to states or counties.

#### Direct Use Fee Schedule

Use transaction code 16 to report direct use fees on leases that use geothermal resources in direct use applications and are not sold.

Use the direct use fee schedule, inputting the temperature and quantity of geothermal resources to calculate your fee.

Do not multiply the fee times the lease royalty rate.

Direct use fees are due 30 days after the end of the month in which production was used.

#### EXAMPLE

**No sales, direct use.** This example shows how to report geothermal royalties on Form ONRR-2014 when you value the resource by the Direct Use Fee Schedule.

## **Assumptions:**

- The ONRR-converted lease number is 030-044368-0.
- The royalty rate is 10 percent. **Note:** The lease royalty rate is already included in the fee schedule, so you do not need to use it in your fee calculation.
- The production/sales month is December 2019.
- You use the geothermal production as process heat in a vegetable dehydration plant and value the production by the Direct Use Fee Schedule.
- During the month, you produced 39,255,645,800 gallons of hot water for the month with an average monthly inlet temperature (° F) of 135°.
- You multiply the appropriate fee (\$/million gallons) from the schedule below by the number of gallons you produced from the direct use lease for this month.
  - (1) You must use the following fee schedule to calculate fees due under this section:

# Direct Use Fee Schedule (Hot Water)

If your average monthly inlet temperature (°F) is		then your fees are	
At least	But less than	(\$/million gallons) (\$/million pounds	
130	140	2.524	0.307
140	150	7.549	0.921
150	160	12.543	1.536
160	170	17.503	2.150
170	180	22.426	2.764
180	190	27.310	3.379
190	200	32.153	3.993
200	210	36.955	4.607
210	220	41.710	5.221
220	230	46.417	5.836
230	240	51.075	6.450
240	250	55.682	7.064
250	260	60.236	7.679
260	270	64.736	8.293
270	280	69.176	8.907
280	290	73.558	9.521
290	300	77.876	10.136
300	310	82.133	101750
310	320	86.328	11.364
320	330	90.445	11.979
330	340	94.501	12.593
340	350	98.481	13.207
350	360	102.387	13.821

<sup>(</sup>i) For direct use geothermal resources with an average monthly inlet temperature of 130° F or less, you must pay only the lease rental. NOTE: For Direct Use, use Transaction Code 04, rent is not recoupable for direct use.

# • You pay by EFT to ONRR.

#### **Detail Line**

Line Number 1
API Well Number

ONRR Lease Number 0300443680

**ONRR** Agreement Number

**Product Code** 45

**Sales Type Code** NARM

**Sales MO/YR** 122019

**Transaction Code** 16

**Adjustment Reason Code** 

**Sales Volume** 39255.65

Gas MMBtu

**Sales Value** 

**Royalty Value Prior to Allowances** 99081.25

**Transportation Allowance Deduction** 

**Processing Allowance Deduction** 

**Royalty Value Less Allowances** 99081.25

Payment Method Code 03

**Payment Information** 

**EFT Payments** 99081.25 **Total All Payments** 99081.25

**Less Available Credits: Doc. ID Net Payment** 99081.25

#### EXAMPLE

Where you use your own resource in your own power plant, with effluent sold to a direct use facility. This example shows how to report geothermal royalties on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 027-020825-0.
- The lease royalty rate is 1.75 percent.
- If you or your affiliate sell(s) the geothermal resources at arm's length to a purchaser who uses the resources for purposes other than the commercial generation of electricity, your royalty rate is 10 percent.
- The lease is in a unit and has an allocation factor of 21 percent.
- The production/sales month is October 2019.
- You use the geothermal production in your own power plant and sell the generated electricity arm's length to a local utility. Royalties are based on gross proceeds times the lease royalty rate of 1.75 percent.
- You sell the hot effluent from the power plant to an adjoining greenhouse under an arm's-length agreement. The greenhouse operator pays \$0.60 per hundred gallons, plus \$0.02 per hundred gallons to re-inject the spent geothermal fluids.
- During the month, you delivered 32,845,600 kWh of electricity and received \$1,642,280.00. Royalties are based on a percentage of the gross proceeds from electricity sales with a 1.75 percent royalty rate for the first 10 years.
- You also delivered 50,000 gallons of power plant effluent to the greenhouse operator and received \$30,000 for the fluid delivery and \$1,000 for reinjection.
- Lease allocations:

Delivered electricity 6,897,576 kWh = (32,845,600 kWh x 0.21)
Gross proceeds \$344,878.80 = (\$1,642,280.00 x 0.21)

Royalty value \$6,035.38 = (\$344,878.80 x 1.75%)

Efficient delivery 10,500 bundred cellane = (50,000 bundred)

Effluent delivery 10,500 hundred gallons = (50,000 hundred)

gallons  $\times 0.21$ )

Effluent value  $$6,300.00 = ($30,000.00 \times 0.21)$ Re-injection payment  $$210.00 = ($1,000.00 \times 0.21)$ 

• You pay by EFT to ONRR.

## **Detail Line**

Line Number	1	2	3
API Well Number			
<b>ONRR</b> Lease Number	0270208250	0270208250	0270208250
ONRR Agreement Number			
<b>Product Code</b>	31	36	36
Sales Type Code	NARM	ARMS	ARMS
Sales MO/YR	102019	102019	102019
Transaction Code	01	01	53
Adjustment Reason Code			
Sales Volume	6897576	10500	10500
Gas MMBtu			
Sales Value	344878.80	6300.00	210.00
<b>Royalty Value Prior to Allowances</b>	6035.38	630.00	21.00
Transportation Allowance Deduction			
<b>Processing Allowance Deduction</b>			
<b>Royalty Value Less Allowances</b>	6035.38	630.00	21.00
<b>Payment Method Code</b>	03	03	03

# **Payment Information**

**EFT Payments** 6686.38 **Total All Payments** 6686.38

**Less Available Credits: Doc. ID Net Payment** 6686.38

## 7.4.3.5 Advanced Royalties for Cessation of Production

Use transaction code 32 to report advanced royalties

You must pay an advanced royalty monthly equal to the average monthly royalty you paid under 30 CFR part 1206, subpart H (including the amount against which you applied the annual rental as a credit) for the last three years the lease was producing. If your lease has been producing for less than three years, then use the average monthly royalty payment for the entire period your lease has been producing continuously;

- (a) ONRR must receive your advanced royalty payment before the end of each full calendar month in which no production occurs; and
- (b) You may credit any advanced royalty you pay against production royalties you owe after your lease resumes production. You may not reduce the amount of any production royalty paid for any year below zero.

#### **EXAMPLE**

**Advanced royalties for cessation of production.** This example shows how to report advanced geothermal royalties on Form ONRR-2014.

## **Assumptions:**

- The ONRR-converted lease number is 171-035041-0.
- The royalty rate is 12 ½ percent.
- The production/sales month is October 2019, and production has ceased.
- You sell steam arm's length to a nonaffiliated owner of a geothermal power plant.

The sales contract establishes a price of \$0.015 per thousand lbs of steam.

- The average pay statement from the month of first production (October 2018) is 26,140,500 thousand lbs of steam. You received an average payment of \$392,107.50 for the steam.
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1
API Well Number	
ONRR Lease Number	1710350410
<b>ONRR Agreement Number</b>	
<b>Product Code</b>	32
Sales Type Code	ARMS
Sales MO/YR	102019
Transaction Code	32
Adjustment Reason Code	
Sales Volume	26140500
Gas MMBtu	
Sales Value	392107.50
<b>Royalty Value Prior to Allowances</b>	49013.44
<b>Transportation Allowance Deduction</b>	
<b>Processing Allowance Deduction</b>	
<b>Royalty Value Less Allowances</b>	49013.44
Payment Method Code	03

## **Payment Information**

**EFT Payments** 49013.44 **Total All Payments** 49013.44

**Less Available Credits: Doc. ID Net Payment**49013.44

## Additional Information on Reporting Geothermal Royalties

You can find additional information regarding geothermal royalty reporting in the *Geothermal Payor Handbook* — *Class 2 & 3 Leases*, which contains information on geothermal resources valuation and royalty reporting requirements.

# 7.5 Class III Leases

#### Class III leases

Existing leases that convert under section 43 CFR 3200.7(a)(2) (electing to be subject to all new regulations, which must include a conversion under section 43 CFR 3212.25). These leases have identical lease financial obligations as Class II leases EXCEPT they have different lease royalty rates from Class II leases, assigned by BLM, unless they are not producing as of August 8, 2005, in which case they will have a 1.75 percent royalty rate for 10 years.

# 7.5.1 Geothermal Lease Financial Obligations Reported on Form ONRR-2014 (Report of Sales and Royalty Remittance)

Geothermal lease payments reported on Form ONRR-2014 include:

- **Rents** all geothermal Class III leases require rentals regardless of producing status.
- **Production royalties** for producing leases.
- Credits for in-kind electricity delivery to states and/or counties may be taken against production royalties.
- Direct use fee schedule.
- Advanced royalties for cessation of production.
- **Compensatory royalties** for geothermal resources that are avoidably lost, wasted, or drained (as determined by BLM).

See Transaction Code 10, Compensatory Royalty Payment on page 4-11.

# 7.5.1.1 Important Terms to Know

You should be familiar with terms specific to the valuation and reporting of geothermal resources. Several of these terms are defined in the regulations and the *Geothermal Payor Handbook* — *Class 2 & 3 Leases*. These terms are used in the reporting examples that follow:

- Delivered electricity
- Direct use resources
- Electrical generation resources
- Geothermal byproducts
- Geothermal resources

## 7.5.1.2 **Rents**

Rental rates and rental due dates are given in your lease document. Use transaction code 05 to report rents on all geothermal leases. Rent is due on Class III leases regardless of production status.

See 43 CFR Subpart 3211 for more information on rents.

If ONRR does not receive your second and subsequent year's rental payment in full by the lease anniversary date, ONRR will notify you that the rent payment is overdue. You have 45 days after the anniversary date to pay the rent plus a 10 percent late fee. If ONRR does not receive your rental plus the late fee by the end of the 45-day period, BLM will terminate your leases. If you receive notification from ONRR more than 15 days after the lease anniversary date, BLM will reinstate a lease that was terminated if ONRR receives the rent plus a 10 percent late fee within 30 days after you receive the notification (see 43 CFR 3213.14).

To report the 10 percent late payment fee, write a letter to ONRR listing the lease number and reason for the late payment fee, enclose the payment, and send to ONRR at:

Office of Natural Resources Revenue PO Box 25627 Denver CO 80225-0627

#### EXAMPLE

**Rent.** This example shows how to report geothermal rents on Form ONRR-2014 **Assumptions:** 

- The ONRR-converted lease number is 006-098765-0.
- The anniversary date of the lease is October 1, 2019.
- This lease is a competitive lease in its second year.
- The lease acreage is 2,560 acres, and the lease rent is \$3.00 per acre.
- You pay by EFT to ONRR.

Submit Form ONRR-2014 and the rental payment by the lease's anniversary date. Report the month in which the payment is due in the Sales Month/Year field.

#### **Detail Line**

Line Number 1

**API Well Number** 

ONRR Lease Number 0060987650

**ONRR** Agreement Number

**Product Code** 

**Sales Type Code** 

**Sales MO/YR** 102019

**Transaction Code** 05

**Adjustment Reason Code** 

Sales Volume Gas MMBtu

Sales Value

**Royalty Value Prior to Allowances** 7680.00

**Transportation Allowance Deduction** 

**Processing Allowance Deduction** 

**Royalty Value Less Allowances** 7680.00

Payment Method Code 03

## **Payment Information**

**EFT Payments** 7680.00 **Total All Payments** 7680.00

**Less Available Credits: Doc. ID** 

**Net Payment** 7680.00

## 7.5.1.3 Rental Credits

The regulations at 30 CFR 1218.303 allow you to credit annual rental against royalty due for the same year.

#### **EXAMPLE**

**Rental Credits.** This example shows how to report rental credits on Form ONRR-2014.

## **Assumptions:**

- The ONRR-converted lease number is 006-098765-0.
- The royalty rate is 12 ½ percent.
- The anniversary date of the lease is October 1, 2019.
- The lease acreage is 2,500 acres; rent is \$3.00/acre.
- Accordingly, your total rental payment on October 1, 2019 was \$7,500.00.
- You sell steam arm's length to a nonaffiliated owner of a geothermal power plant.
- The sales contract establishes a price of \$0.015 per thousand lbs of steam.
- The pay statement for the month shows 346,667 thousand lbs of steam, with payments of \$5,200.00 for the steam.
- You pay by EFT to ONRR.

## **Detail Line**

Line Number	1	2
<b>API Well Number</b>		
ONRR Lease Number	0060987650	0060987650
<b>ONRR Agreement Number</b>		
<b>Product Code</b>		32
Sales Type Code		ARMS
Sales MO/YR	102019	102019
<b>Transaction Code</b>	05	01
<b>Adjustment Reason Code</b>		
Sales Volume		346667
Gas MMBtu		
Sales Value		5200.00
Royalty Value Prior to Allowances	-650.00	650.00
Transportation Allowance Deduction		
<b>Processing Allowance Deduction</b>		
<b>Royalty Value Less Allowances</b>	-650.00	650.00
<b>Payment Method Code</b>	03	03

# **Payment Information**

EFT Payments	0.00
<b>Total All Payments</b>	0.00

Less Available Credits: Doc. ID
Net Payment 0.00

**Note:** Credit for any month cannot exceed the royalty owed.

#### 7.5.1.4 Site Licenses

Site licenses are issued by BLM for the siting of geothermal utilization facilities on geothermal leases. Rental rates are given in the site license approval. Rent is due on a site license only if the facility operator is different from the lessee or unit operator. (See 43 CFR Subpart 3273 for more information on site licenses.)

We must receive your site license rent payment on or before the anniversary date of the lease or site license. For example, for a lease or site license effective June 1, 1994, your rental payment must reach us no later than June 1 of each succeeding year.

See Transaction Code 04, Rental Payment on page 4-29, for information pertaining to site licenses.

#### 7.5.1.5 **Production Royalty**

You must pay royalties on all geothermal resources, including geothermal byproducts that are either:

- Produced from the lease and are sold or utilized, or
- Reasonably susceptible to sale or utilization.

See 30 CFR 1202.351 and Chapter 2 of the *Geothermal Payor Handbook* — *Class 2 & 3 Leases* for additional information on geothermal resources requiring royalty and exceptions.

Royalties on geothermal production are due by the end of the month following the month of production. Do not submit a Form ONRR-2014 for those months you do not produce.

You pay all geothermal royalties in value except for in-kind deliveries of electricity to states or counties.

The following fields on Form ONRR-2014 do not apply to geothermal royalty reporting; leave these fields blank:

- API Well Number
- Gas MMBtu

#### **Product Codes**

Geothermal product codes are divided into two groups—fluid geothermal resources and geothermal byproducts. Fluid geothermal resources are further subdivided based on their usage (electrical generation or direct use) and unit of measure.

You can use geothermal product codes singularly or in combination, depending on the production's disposition. For example, you might use your production to generate electricity, recover and sell a byproduct, and sell the power plant condenser fluids to a direct-use facility. This situation would require you to report three product codes; specific product codes would depend on the production's usage (electrical generation or direct use), the unit of measure used in its valuation (kWh, MMBtu, hundreds of gallons, etc.), and the byproduct type. Report different product codes on separate lines.

Fluid geothermal resources: For reporting purposes, fluid geothermal resources (or fluid geothermal production) include steam, hot water, hot brines, and related heat and other associated energy. Product codes for fluid geothermal resources relate first to the production's usage—electrical generation or direct use—and then to its unit of measure. The unit of measure may be in terms of mass, such as pounds; volume, such as gallons; electricity, such as kilowatt hours (kWh); thermal energy, such as British thermal units (Btu); or other measurement units approved by ONRR. The unit of measure is usually either specified in your sales contract or dictated by the method used to value the production. Measurement standards for reporting and paying royalties on geothermal fluids are given in 30 CFR 1202.353, with examples given in ONRR's *Geothermal Payor Handbook*—*Class 2 & 3 Leases*. For example, if valuation is in terms of electrical energy, you must report your production in terms of kilowatt hours to the nearest whole kWh. If valuation is in terms of thermal energy, you must report your production in terms of millions of Btu (MMBtu) to the nearest whole million Btu.

Use the following product codes to report geothermal fluids used to generate electricity (electrical generation resources):

<b>Product Code</b>	Description
31	Electrical generation, kWh
32	Electrical generation, thousands of pounds (generally applicable only to dry steam resources)
33	Electrical generation, MMBtu
34	Electrical generation, other measurement unit approved by ONRR

Use the following product codes to report geothermal fluids used in direct-use processes (direct use resources):

<b>Product Code</b>	Description
35	Direct use, MMBtu
36	Direct use, hundreds of gallons
37	Direct use, other measurement unit approved by ONRR
45	Direct use, millions of gallons
46	Direct use, millions of pounds

In some cases, the method of valuing the resource dictates the reported unit of measure. See the *Geothermal Payor Handbook* — *Class 2 & 3 Leases* for additional valuation instructions.

Geothermal byproducts: Geothermal byproducts are any mineral or minerals—other than oil, hydrocarbon gas, and helium—that are commercially recovered from produced geothermal fluids. (See 30 CFR 1206.351 for complete definition of geothermal byproducts.) Use the following product codes to report geothermal byproducts; note the associated units of measure.

<b>Product Code</b>	Description
38	Commercially demineralized water, reported in hundreds of gallons
44	Other geothermal byproduct not listed above; contact ONRR for unit of measure

#### Sales Type Codes

Use the following sales type codes to report royalties on geothermal production.

Sales Type Code	Description
ARMS	Geothermal resources sold under an arm's-length sales contract (i.e., steam or brine) or byproducts sold under an arm's-length sales contract. Also report ARMS when the geothermal resources are used to generate electricity in your or your affiliate's power plant and that generated electricity is sold under an arm's-length sales contract.
NARM	Geothermal resources or byproducts not sold under an arm's-length contract. Also report NARM when the geothermal resources are used to generate electricity and that generated electricity is used by you or your affiliate's utility.

You can use sales type codes singularly or in combination, depending on the resource's disposition. Report different sales type codes on separate lines.

#### **Transaction Codes**

Use the following transaction codes to report geothermal royalties or fees on the value of production or on proceeds associated with production:

<b>Transaction Code</b>	Description
01	Royalty on value of production
10	Compensatory royalty on value of drained, avoidably lost, or wasted production
11	Byproduct transportation allowances
14	Royalty on severance tax and other production tax reimbursements
16	Well fee (use for Direct Use Fee Schedule)
32	Advanced Royalty
33	Advanced Royalty Recoupment
53	Royalty on payments or reimbursements for effluent and other fluid injection
54	Royalty on payments or reimbursements for geothermal field operations, other than effluent and other fluid injection

You can use these transaction codes singularly or in combination, depending on the resource's disposition and/or selling arrangements. You must report different transaction codes on separate lines.

#### Royalty Examples

The following examples cover reporting royalties under many combinations of uses, sales types, product codes, and transaction codes applicable to geothermal production. Although the examples may not specifically fit your particular reporting situation, the elements presented here should guide you in completing your Form ONRR-2014. You can find more examples in the Geothermal Payor Handbook — Class 2 & 3 Leases. For transaction codes not covered by these examples, such as compensatory royalty (transaction code 10), see Chapter 4.

For answers to questions not covered in this handbook or the *Geothermal Payor Handbook* — *Class 2 & 3 Leases*, contact us at the address or telephone numbers listed in Appendix A.

#### **EXAMPLE**

**Arm's-length sales.** This example shows how to report geothermal royalties on Form ONRR-2014 when you sell the resource under an arm's-length sales contract.

#### **Assumptions:**

- The ONRR-converted lease number is 171-035041-0.
- The royalty rate is 12 ½ percent.
- The production/sales month is October 2019.
- You sell steam arm's length to a nonaffiliated owner of a geothermal power plant. The sales contract establishes a geothermal value of \$0.015 per thousands of lbs of steam, plus \$0.0003 per thousands of lbs of steam for effluent injection. The purchaser also pays \$10,000 per month for production operations and field maintenance.
- The pay statement for the month shows 26,140,500 thousand of lbs of steam, with payments of \$392,107.50 for the steam, \$7,842.15 for effluent injection, and \$10,000.00 for production operations and field maintenance.
- You pay by EFT to ONRR.

## **Detail Line**

Line Number	1	2	3
API Well Number			
ONRR Lease Number	1710350410	1710350410	1710350410
ONRR Agreement Number			
<b>Product Code</b>	32	32	32
Sales Type Code	ARMS	ARMS	ARMS
Sales MO/YR	102019	102019	102019
Transaction Code	01	53	54
Adjustment Reason Code			
Sales Volume	26140500	26140500	26140500
Gas MMBtu			
Sales Value	392107.50	7842.15	10000.00
<b>Royalty Value Prior to Allowances</b>	49013.44	980.27	1250.00
Transportation Allowance Deduction			
<b>Processing Allowance Deduction</b>			
<b>Royalty Value Less Allowances</b>	49013.44	980.27	1250.00
<b>Payment Method Code</b>	03	03	03

# **Payment Information**

**EFT Payments** 51243.71 **Total All Payments** 51243.71

**Less Available Credits: Doc. ID Net Payment** 51243.71

#### EXAMPLE

Where you use your own resource in your own power plant. This example shows how to report geothermal royalties on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 027-025280-0.
- The lease is in a unit and has an allocation factor of 43 percent.
- The production/sales month is October 2019.
- You use the geothermal production in your own power plant and sell the generated electricity arm's length to a local utility. Royalties are based on a percentage of the gross proceeds from electricity sales with a 1.75 percent royalty rate for the first 10 years.
- During the month, you delivered 32,845,600 kWh of electricity and received \$1,642,280,00.
- Lease allocations:

Delivered electricity 14,123,608 kWh = (32,845,600 kWh x 0.43) Gross proceeds \$706,180.40 = (\$1,642,280.00 x 0.43) Royalty value \$12,358.16 = (\$706,180.40 x 1.75%)

• You pay by EFT to ONRR.

#### **Detail Line**

Line Number 1 **API Well Number ONRR** Lease Number 0270252800 **ONRR Agreement Number Product Code** 31 **Sales Type Code NARM** Sales MO/YR 102019 **Transaction Code** 01 **Adjustment Reason Code Sales Volume** 14123608 Gas MMBtu **Sales Value** 706180.40 **Royalty Value Prior to Allowances** 12358.16 **Transportation Allowance Deduction Processing Allowance Deduction Royalty Value Less Allowances** 12358.16 **Payment Method Code** 03

## **Payment Information**

**EFT Payments** 12358.16 **Total All Payments** 12358.16

**Less Available Credits: Doc. ID Net Payment** 12358.16

## 7.5.1.6 Credit for In-Kind Deliveries of Electricity to States or Counties

Upon approval from the Bureau of Land Management (BLM), ONRR will provide written instructions to the royalty payor for taking credit for in-kind deliveries of electricity to states or counties.

#### Direct Use Fee Schedule

Use transaction code 16 to report direct use fees on leases that use geothermal resources in direct use applications and are not sold.

Use the direct use fee schedule, inputting the temperature and quantity of geothermal resources to calculate your fee.

Do not multiply the fee times the lease royalty rate.

Direct use fees are due 30 days after the end of the month in which production was used.

#### **EXAMPLE**

**No sales, direct use.** This example shows how to report geothermal royalties on Form ONRR-2014 when you value the resource by the Direct Use Fee Schedule.

#### **Assumptions:**

- The ONRR-converted lease number is 030-044368-0.
- The royalty rate is 10 percent. **Note:** The lease royalty rate is already included in the fee schedule, so you do not need to use it in your fee calculation.
- The production/sales month is December 2019.
- You use the geothermal production as process heat in a vegetable dehydration plant and value the production by the Direct Use Fee Schedule.
- During the month you produced 39,255,645,800 gallons of hot water for the month with an average monthly inlet temperature (° F) of 135°.
- You multiply the appropriate fee (\$/million gallons) from the schedule below by the number of gallons you produced from the direct use lease for this month.

(1) You must use the following Direct Use Fee Schedule to calculate fees due under this section.

Direct Use Fee Schedule (Hot Water)

If your average monthly inlet temperature (°F) is		then you	r fees are
At least	But less than	(\$/million gallons) (\$/million pounds	
130	140	2.524	0.307
140	150	7.549	0.921
150	160	12.543	1.536
160	170	17.503	2.150
170	180	22.426	2.764
180	190	27.310	3.379
190	200	32.153	3.993
200	210	36.955	4.607
210	220	41.710	5.221
220	230	46.417	5.836
230	240	51.075	6.450
240	250	55.682	7.064
250	260	60.236	7.679
260	270	64.736	8.293
270	280	69.176	8.907
280	290	73.558	9.521
290	300	77.876	10.136
300	310	82.133	101750
310	320	86.328	11.364
320	330	90.445	11.979
330	340	94.501	12.593
340	350	98.481	13.207
350	360	102.387	13.821

- (i) For direct use geothermal resources with an average monthly inlet temperature of 130°F or less, you must pay only the lease rental.
- You pay by EFT to ONRR.

## **Detail Line**

Line Number	1
<b>API Well Number</b>	
<b>ONRR Lease Number</b>	0300443680
<b>ONRR Agreement Number</b>	
Product Code	45
Sales Type Code	NARM
Sales MO/YR	122019
<b>Transaction Code</b>	16
<b>Adjustment Reason Code</b>	
Sales Volume	39255.65
Gas MMBtu	
Sales Value	
<b>Royalty Value Prior to Allowances</b>	99081.25
<b>Transportation Allowance Deduction</b>	
<b>Processing Allowance Deduction</b>	
<b>Royalty Value Less Allowances</b>	99081.25
<b>Payment Method Code</b>	03

# **Payment Information**

**EFT Payments** 99081.25 **Total All Payments** 99081.25

**Less Available Credits: Doc. ID Net Payment** 99081.25

#### **EXAMPLE**

Where you use your own resource in your own power plant with effluent sold to a direct use facility. This example shows how to report geothermal royalties on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 027-020825-0.
- Lease royalty rate of 1.75 percent for first 10 years.
- If you or your affiliate sell(s) the geothermal resources at arm's length to a purchaser who uses the resources for purposes other than the commercial generation of electricity, your royalty rate is 10 percent.
- The lease is in a unit and has an allocation factor of 21 percent.
- The production/sales month is October 2019.
- You use the geothermal production in your own power plant and sell the generated electricity arm's length to a local utility. Royalties are based on gross proceeds times the lease royalty rate.
- You sell the hot effluent from the power plant to an adjoining greenhouse under an arm's-length agreement. The greenhouse operator pays \$0.60 per gallon, plus \$0.02 per gallon to re-inject the spent geothermal fluids.
- During the month you delivered 32,845,600 kWh of electricity and received \$1,642,280.00. Royalties are based on a percentage of the gross proceeds from electricity sales with a 1.75 percent royalty rate for the first 10 years.
- You also delivered 50,000 gallons of power plant effluent to the greenhouse operator and received \$30,000 for the fluid delivery and \$1,000 for reinjection.
- Lease allocations:

Delivered electricity 6,897,576 kWh = (32,845,600 kWh x 0.21)Gross proceeds \$344,878.80 = (\$1,642,280.00 x 0.21)Royalty value \$6,035.38 = (\$344,878.80 x 1.75%)Effluent delivery 10,500 gallons = (50,000 gallons)

x 0.21)

Effluent value  $$6,300.00 = (\$30,000.00 \times 0.21)$ Re-injection payment  $$210.00 = (\$1,000.00 \times 0.21)$ 

• You pay by EFT to ONRR.

## **Detail Line**

Line Number	1	2	3
API Well Number			
ONRR Lease Number	0270208250	0270208250	0270208250
ONRR Agreement Number			
<b>Product Code</b>	31	36	36
Sales Type Code	NARM	ARMS	ARMS
Sales MO/YR	102019	102019	102019
Transaction Code	01	01	53
Adjustment Reason Code			
Sales Volume	6897576	105	105
Gas MMBtu			
Sales Value	344878.80	6300.00	210.00
<b>Royalty Value Prior to Allowances</b>	6035.38	630.00	21.00
Transportation Allowance Deduction			
<b>Processing Allowance Deduction</b>			
<b>Royalty Value Less Allowances</b>	6035.38	630.00	21.00
<b>Payment Method Code</b>	03	03	03

# **Payment Information**

**EFT Payments** 6686.38 **Total All Payments** 6686.38

**Less Available Credits: Doc. ID Net Payment** 6686.38

## 7.5.1.7 Advanced Royalties for Cessation of Production

- Use transaction code 32 to report advanced royalties.
- You must pay an advanced royalty monthly equal to the average monthly royalty you paid under 30 CFR part 1206, subpart H (including the amount against which you applied the annual rental as a credit) for the last three years the lease was producing. If your lease has been producing for less than three years, then use the average monthly royalty payment for the entire period your lease has been producing continuously.
- ONRR must receive your advanced royalty payment before the end of each full calendar month in which no production occurs.
- You may credit any advanced royalty you pay against production royalties you owe after your lease resumes production. You may not reduce the amount of any production royalty paid for any year below zero.

#### **E**XAMPLE

**Advanced royalties for cessation of production.** This example shows how to report advanced geothermal royalties on Form ONRR-2014.

#### **Assumptions:**

- The ONRR-converted lease number is 171-035041-0.
- The royalty rate is 12 ½ percent.
- The production/sales month is October 2019 and production has ceased.
- You sell steam arm's length to a nonaffiliated owner of a geothermal power plant.
- The sales contract establishes a price of \$0.015 per thousand lbs of steam.
- The average pay statement since the month of first production (October 2018) is 26,140,500 thousand lbs of steam. You received an average payment of \$392,107.50 for the steam.
- You pay by EFT to ONRR.

#### **Detail Line**

Line Number	1
API Well Number	
<b>ONRR</b> Lease Number	1710350410
<b>ONRR Agreement Number</b>	
<b>Product Code</b>	32
Sales Type Code	ARMS
Sales MO/YR	102019
<b>Transaction Code</b>	32
<b>Adjustment Reason Code</b>	
Sales Volume	26140500
Gas MMBtu	
Sales Value	392107.5
<b>Royalty Value Prior to Allowances</b>	49013.44
Transportation Allowance Deduction	
<b>Processing Allowance Deduction</b>	
<b>Royalty Value Less Allowances</b>	49013.44
<b>Payment Method Code</b>	03

# **Payment Information**

**EFT Payments** 49013.44 **Total All Payments** 49013.44

**Less Available Credits: Doc. ID Net Payment**49013.44

## Additional Information on Reporting Geothermal Royalties

You can find additional information regarding geothermal royalty reporting in the *Geothermal Payor Handbook* — *Class 2 & 3 Leases*, which contains information regarding geothermal resources valuation and royalty reporting requirements.