Chapter 3
Valuation Standards for Electrical Generation

This chapter describes the standards in 30 CFR 1206.352 for valuing geothermal resources used to generate electricity. These resources generally consist of steam, hot water, and hot brines. ONRR valuation standards classify contracts for the sale according to the resource's disposition:

- You sell geothermal resources under an arm's-length contract.
- You do not sell your geothermal resources but use them to generate electricity in your own power plant.

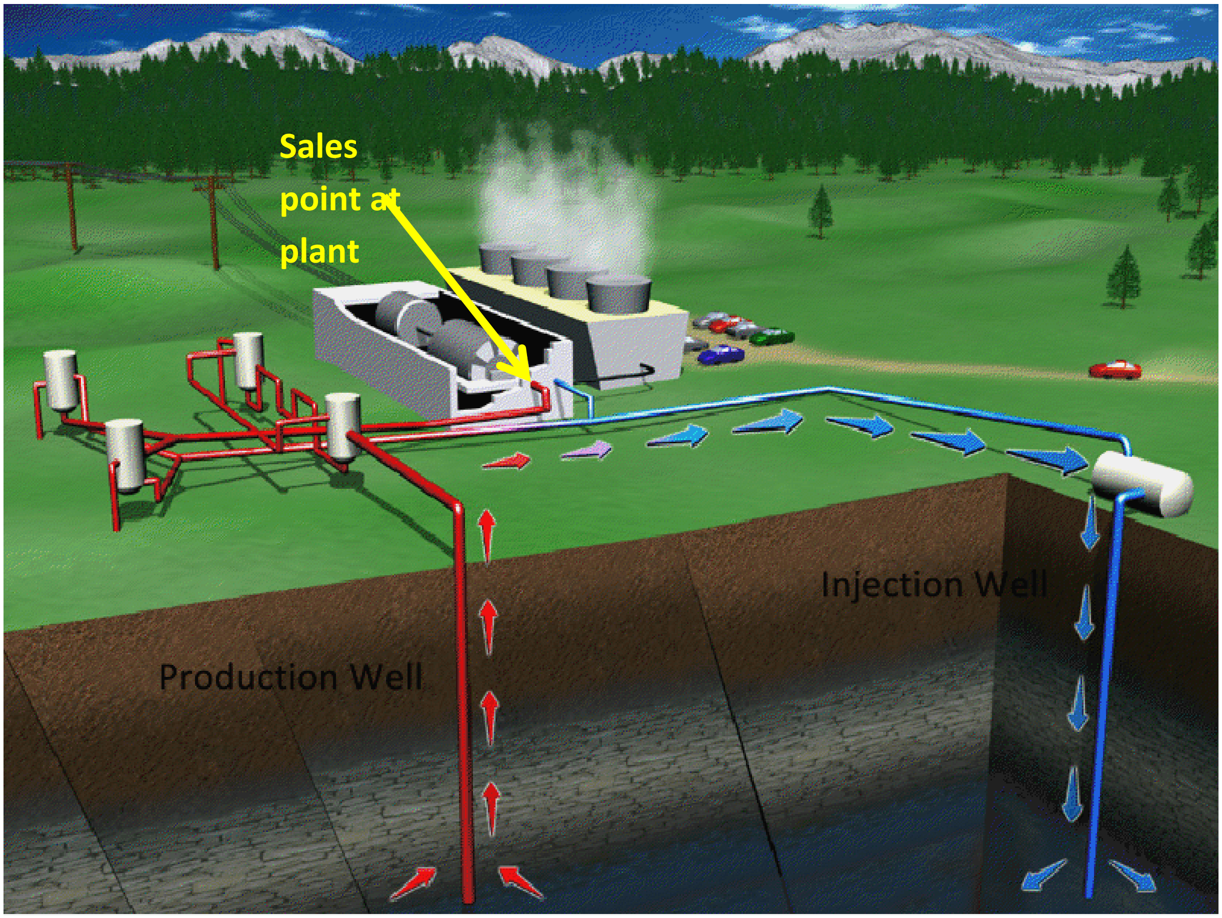
Valuation standards for resources sold under an arm's-length contract focus on the contract's gross proceeds, with the conditions that the gross proceeds reflect total consideration and reasonable value. (See "Exceptions to acceptance of arm's-length gross proceeds" on page 2-11.)

3.1 If You Sell Geothermal Resources at Arm's-Length that the Purchaser Uses to Generate Electricity

As a general rule, you determine the value of the electrical generation resources sold under an arm's-length contract as the gross proceeds accruing under that contract and the regulations at 30 CFR 1206.352. After gross proceeds are determined you calculate the royalty on the resource one of two separate ways. You take the gross proceeds times the lease royalty rate, or gross proceeds times the royalty rate BLM prescribes.

Royalty = (Lease) Royalty Rate x Value of Production

Figure 3.1



EXAMPLE 3-1

Valuing Geothermally- Produced Electricity Sold Under an Arm's-Length Contract to a Power Plant. As a lessee of a Federal lease, you sell geothermally- produced electricity from your own power plant to a non-affiliated power purchaser. Your Class 2 lease royalty rate is 1.75%.

Summary Data

Lease	Contract	Contract Type	Production kWh	Price ($/kWh	Gross Proceeds ($)
Federal	Green Energy Inc.	Arm's length (AL)	1,402,000	0.04	56,080

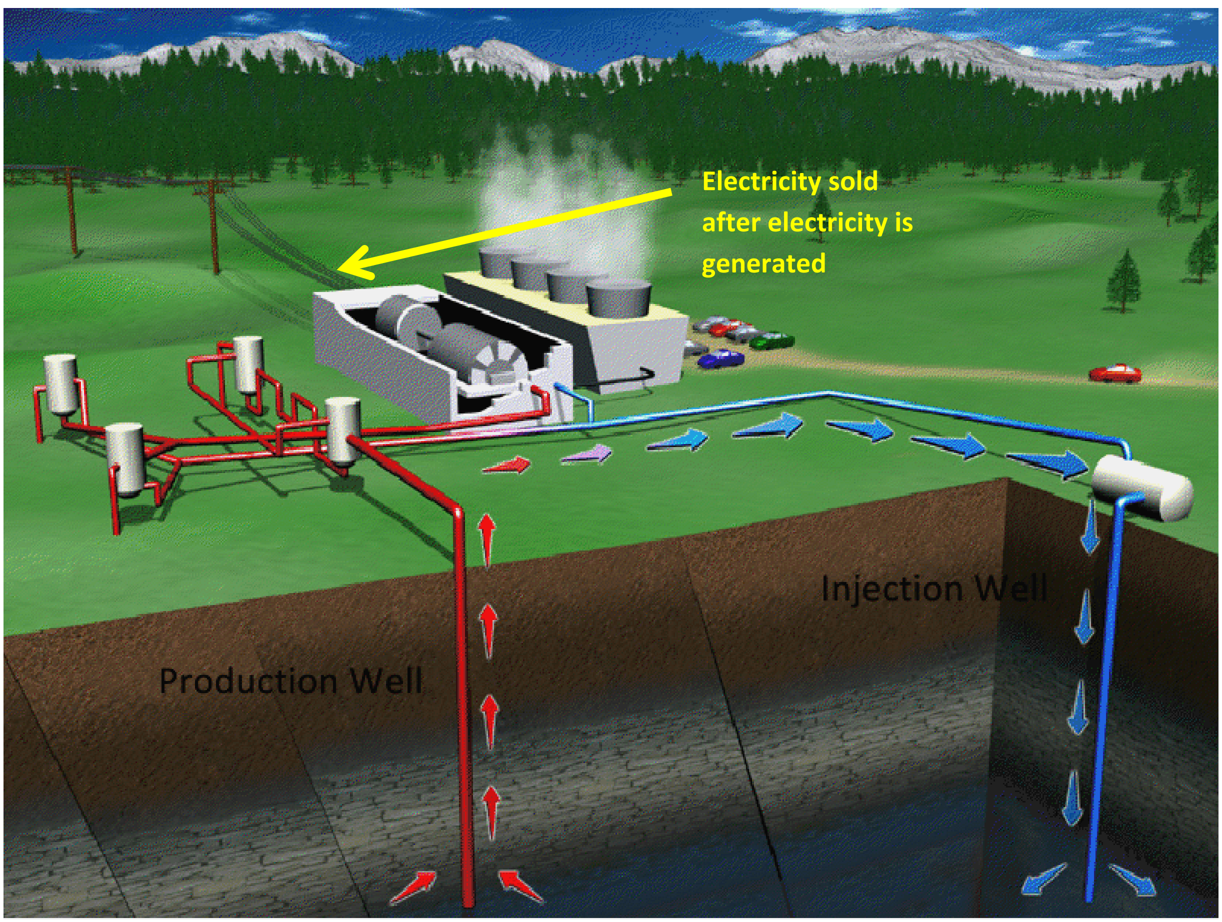
Form 2014 Entries

Sales Volume... .. 1,402 lbs
Sales Value... $56,080

Royalty Value Prior to Allowances........ $56,080 * 0.0175 = $981.40

3.2 If You Use the Geothermal Resources in Your Own Power Plant for the Generation and Sale of Electricity- Percent of Gross Proceeds Method.

Figure 3.2



This method of valuing geothermal resources is known as "the percent of gross proceeds method." As a general rule, for Class 2 and some Class 3 leases, you determine the value of geothermal resources used to generate electricity in your own power plant as the gross proceeds accruing to you from the arm's-length sale of electricity times the lease royalty rate or the rate that the BLM assigns you (30 CFR 1206.352). However, you must satisfy the following two conditions to justify the contract gross proceeds (or contract prices) as value:

1. The sales contract must reflect the total consideration actually transferred, either directly or indirectly, from the buyer to the seller (30 CFR 1206.361(b)). Total consideration is synonymous with the full definition and intent of gross proceeds as discussed in section 2.7.2 *Gross Proceeds*. However, the value can never be less than the gross proceeds, including any additional consideration you receive. We may require you through audit to certify that your arm's-length contract includes all of the consideration paid to you by the buyer, either directly or indirectly, for the geothermal resource.

2. The gross proceeds received under the contract must reflect reasonable value (30 CFR 1206.361(b)). If ONRR determines through audit that the gross proceeds do not reflect the reasonable value of the resource because of misconduct by or between the contracting parties, or because you have otherwise breached your duty to market the production to the mutual benefit of yourself and the Federal Government, ONRR may require you to increase the gross proceeds to reflect any additional consideration. ONRR may require you to use another valuation method in the regulations applicable to dispositions other than under an arm's-length contract.

Example 3-2- Valuing Electricity produced from your unit in your own power plant using your own geothermal resources

- The lease is in a unit and has an allocation factor of 43 percent.
- The production/sales month is October 2016.
- You use the geothermal production in your own power plant and sell the generated electricity to a local utility. Royalties are based on a percentage of the gross proceeds from electricity sales with a 1.75% royalty rate for the first 10 years.
- During the month you delivered 32,845,600 kWh of electricity and receive $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 x 0.43)
Royalty value	$12,358.16 ($706,180.40 x 1.75%)

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

Product Code	31
Sales Type Code	NARM
Sales MO/YR	102016
Transaction Code	01
Sales Volume	14123608
Sales Value	706180.40
Royalty Value Prior to Allowances	12358.16

3.2.1 *Electricity Value*

The *electricity value* is the total amount of revenues (gross proceeds) that you receive under your sales contract for the delivery of electricity during your accounting month. In most cases this amount includes your energy payment, capacity payment, and bonus capacity payment. Any other monies or consideration exchanged for the delivery of electricity may also affect the electricity value; the principles of total consideration and reasonable value apply to electricity sales as they do to the sales of geothermal fluids.

Allocating Value to Leases

The percent of gross proceeds procedure derives the royalty value of all Federal geothermal resources that a power plant uses. If you use geothermal resources from more than one lease, you must allocate the value to each lease based on one of the following:

- The proportion of measured wellhead or lease production, as the Bureau of Land Management (BLM) approves.
- The allocation schedule in your unitization or communitization agreement, as BLM approves.
- Any other measurement or allocation method that BLM approves.

3.3 Advanced Royalty

ONRR allows for advanced payment of royalties if production ceases in order to hold Class 2 and 3 leases. lease. Below are instructions on how to pay advanced royalties.

If you are required to pay advanced royalties under 43 CFR § 3212.15(a)
To retain your lease:

(a) You must pay an advanced royalty monthly equal to the average monthly royalty you paid under 30 CFR part 206, subpart H for the last 3 years the lease was producing. If your lease has been producing for less than 3 years, then use the average monthly royalty payment for the entire period your lease has been producing continuously;

(b) ONRR must receive your advanced royalty payment prior to the first day of each month for which production has ceased;

(c) You may credit any advanced royalty you pay against your future production royalties recouped after your lease resumes production. You may not reduce the amount of any production royalty paid for any year below zero.

EXAMPLE 3-3

Advanced royalties for cessation of production. This example shows how to calculate advanced geothermal royalties.

Assumptions:

- The royalty rate is 12 ½ percent.
- The production/sales month is October 2016, and production has ceased.
- Production started in October, 2006 and continued until August, 2016.
- You sell steam to a nonaffiliated owner of a geothermal power plant.
- The sales contract establishes a geothermal value of $0.015 per net kWh of generated electricity.
- The average pay statement from the month of first production (October, 2006) is 26,140,500 kWh of net electricity generated. You received an average payment of $392,107.50 for the steam.

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

Form ONRR 2014 Fact Sheet

Product Code	31
Sales Type Code	ARMS
Sales MO/YR	102016
Transaction Code	32
Royalty Value	49013.44

Please contact ONRR Royalty Valuation at royaltyvaluation@onrr.gov if you have any questions on how to do these calculations.

3.4 Credit for "in-kind" delivery of electricity to states or counties

All lessees may take a credit against royalties owed on geothermal resources for delivery of electricity "in-kind" to states and counties that receive a portion of royalty revenues rather than full payment in monies.

Please contact ONRR Royalty Valuation at royaltyvaluation@onrr.gov if you have any questions on how to do these calculations.

3.5 Improper Valuations

If during an audit or compliance review ONRR finds that you improperly determined value, we will direct you to correct your value or prescribe a different valuation procedure (30 CFR 1206.361(a)). You will be liable for any difference between the royalties paid and the royalties due under the value that ONRR determines, plus late payment interest on underpaid amounts pursuant to 30 CFR 1218.302. If the corrected value or prescribed valuation procedure results in an overpayment, ONRR will give you instructions for taking a credit. You are not entitled to interest on royalty overpayments.

A value determination by ONRR is not an appealable decision or order under 30 CFR part 1290. If you received an order requiring you to pay royalty on the same basis as the value determination, you may appeal that order under 30 CFR part 1290.

3.6 How Do I Request a Value Determination or Gross Proceeds Determination?

If you are unsure of your valuation procedure, you may request a value determination from ONRR (30 CFR 1206.364). Send your valuation requests to us at the address given in Appendix A. Include a description of your operation, copies of sales contracts, and any other information pertinent to the valuation of your geothermal production. You must continue to pay royalties on production while we make our value or gross proceeds determination.

If you request an alternative valuation method, you must propose the valuation method you intend to use and include all information supporting your proposal. Remember, you must receive our approval to use an alternative valuation method and explain why the first method (netback) is unworkable. You may use your proposed valuation method for royalty calculations until we issue a decision. If we approve your proposed valuation method, you must use that method until one of the following occurs:

- The circumstances of your production and/or utilization change, at which time you must notify us with a new valuation request.
- ONRR instructs you to use a different valuation method.
- ONRR issues new valuation regulations.

If ONRR disapproves your proposed valuation method, we will prescribe a method to you. You must then adjust all your past royalty reports to reflect the prescribed method (30 CFR 1206.364). If our prescribed method results in additional royalty due, you must pay the additional royalty plus interest. If our prescribed method results in royalty overpayments, we will give you instructions for taking a credit against future royalty payments. You are not entitled to interest on royalty overpayments.

Please contact ONRR Royalty Valuation at royaltyvaluation@onrr.gov.

3.7 Recordkeeping and Availability

You must save all data and records relevant to your royalty valuation (30 CFR 1206.360) Therefore, keep the following documents:

- All contracts related to the sale or purchase of geothermal resources.
- All contracts related to the sale, purchase, generation, and transmission of electricity generated from the geothermal resource.
- Any other contracts or other items that may bear on the valuation of the resource or are necessary to support your valuation.
- All ONRR valuation decisions and other written communications relevant to your valuation.
- Records of capitalized costs and equipment to support netback calculations.

For Federal geothermal leases, you must keep records relevant to your monthly royalty calculations for six years after the records are generated, unless we instruct otherwise. For Indian geothermal leases, records must be kept without a time limit as there is no statute of limitation for these leases unlike Federal leases.

These records include, but are not limited to, quantities produced and/or sold and prices received for sales of the resource. For netback valuation, keep your value calculations and all source documents supporting your claimed costs. You must make all records, contracts, and other documents supporting your valuations available to authorized ONRR personnel or ONRR-designated agents upon request (30 CFR 1206.360). See also 30 CFR 1212.351.

3.8 Dismantlement Cost Refunds

At the end of your project's life, and upon completion of dismantlement and salvage operations, you may take a one-time annual *dismantlement cost refund* of royalties equal to the royalty amount of actual power plant and transmission line dismantlement costs that exceed your salvage income (30 CFR 1206.353(o) and 1206.354(o)). Calculate the refund as follows:

Dismantlement Cost Refund =
Royalty Rate × (Dismantlement Costs – Salvage Income)

Contact the ONRR royalty valuation group for instructions on taking the refund at royaltyvaluation@onrr.gov.