

DEPARTMENT OF THE INTERIOR**Bureau of Land Management****43 CFR Parts 3000, 3200, and 3280**

[WO-310 9131 PP]

RIN 1004-AD86

Geothermal Resource Leasing and Geothermal Resources Unit Agreements**AGENCY:** Bureau of Land Management, Interior.**ACTION:** Final rule.

SUMMARY: This final rule revises the Bureau of Land Management's geothermal resources leasing and unit agreement regulations to implement the Energy Policy Act of 2005. The rule restructures regulations concerning the general geothermal leasing process and revises regulations on royalties and readjustment of lease terms, conditions, and rentals. The rule also revises regulations on lease duration and work commitment requirements, annual rental and credit of rental towards royalty, unit and communitization agreements, and acreage limitations. Additional revisions required by the Energy Policy Act include various technical corrections. Other changes in sections unaffected by changes in the statute clarify existing procedures, improve grammatical construction, conform the regulations to new administrative regulatory standards, and correct existing errors.

DATES: This rule is effective June 1, 2007.**ADDRESSES:** Further information or questions regarding this final rule should be addressed in writing to the Director (WO-300), Bureau of Land Management, 1849 C St., NW., Washington DC 20240.**FOR FURTHER INFORMATION CONTACT:** Kermit Witherbee at (202) 452-0385 or Ian Senio at (202) 452-5049. Persons who use a telecommunications device for the deaf (TDD) may contact these persons through the Federal Information Relay Service (FIRS) at 1-800-877-8339, 24 hours a day, 7 days a week.**SUPPLEMENTARY INFORMATION:**

- I. Background
- II. Discussion of Final Rule and Responses to Comments on Proposed Rule
- III. Procedural Matters

I. Background

On July 21, 2006, the Bureau of Land Management (BLM) published a proposed rule to amend existing geothermal resources leasing and unit agreement regulations (71 FR 41542).

This final rule adopts most of the provisions of the proposed rule and in so doing implements the geothermal energy provisions of the Energy Policy Act of 2005 (Pub. L. 109-58) (Energy Policy Act), which became law on August 8, 2005. Sections 221 through 236 of this Act address geothermal development and substantially amend the Geothermal Steam Act of 1970. The Geothermal Steam Act of 1970, as amended, 30 U.S.C. 1001-1028, provides the authority for the BLM to allow for the exploration, development, and utilization of geothermal resources on BLM-managed public lands, as well as geothermal resources on lands managed by other surface management agencies, such as the United States Forest Service.

One of the more significant changes in the Energy Policy Act is the general requirement, with a few exceptions, for geothermal resources to be offered through a competitive leasing process. Lands not successfully sold in the competitive process can be leased noncompetitively.

The Energy Policy Act also made significant changes in the way royalties are assessed on Federal leases. As discussed in the preamble to the proposed rule (71 FR at 41543), these changes were similar to, and in some cases identical to, recommendations in a 2005 report from the Geothermal Valuation Subcommittee (Subcommittee) of the Minerals Management Service's (MMS) Royalty Policy Committee (RPC). To simplify the valuation methodology for royalty purposes, the Energy Policy Act requires a royalty based on the "gross proceeds" from the sale of electricity from Federal geothermal leases issued after August 8, 2005 (other than leases issued in response to applications that were pending on that date for which the lessee does not elect to be subject to the royalty regulations required by the Energy Policy Act) multiplied by a royalty rate established by the BLM, rather than on the "net back" system that was used prior to the Energy Policy Act. Lessees who use geothermal resources directly will pay fees according to a fee schedule established by the MMS. Under the new law, existing lessees have the opportunity to convert the royalty provisions in their leases to those of the Energy Policy Act. The MMS is publishing a final rule to implement the changes in the Energy Policy Act simultaneously with BLM's final rule. The BLM and the MMS have worked together to coordinate their regulations.

References to the MMS regulations appear throughout the BLM's final rule

because the BLM and the MMS share responsibility with regard to the geothermal program. The BLM holds lease sales, issues geothermal leases, and generally administers the leases. The BLM establishes the terms of the leases, including royalty rates, and enforces the lease terms. The MMS is responsible for collecting rents (other than the first year's rent) and royalties, and for enforcing the royalty obligations. The MMS regulations contain provisions that carry out its responsibilities. Appropriate cross-references are contained both in the BLM and the MMS regulations.

Other changes made by the Energy Policy Act include restructured lease terms (length of time a lease is in effect) and lease term extensions, and provisions for leases for exclusive direct use of geothermal resources, without sale, that may be issued noncompetitively. The Act also increases the maximum acreage of an individual lease and gives the Secretary of the Interior greater authority to require lessees to commit to unit agreements to conserve geothermal resources.

Most of the changes in the regulations of this part implement the new provisions of the Energy Policy Act. Other changes in sections unaffected by changes in the statute clarify existing procedures, improve grammatical construction, conform the regulations to new administrative or regulatory standards, and correct existing errors. Changes based on the Energy Policy Act and substantive changes unrelated to the change in statute were discussed in detail in the preamble to the proposed rule. Both the preamble to the proposed rule and this preamble set out the basis and purpose of this final rule. In this preamble, we explain how the final rule differs from the proposed rule and discuss comments received on the proposed rule and our responses. References in this preamble to the previous rule mean the rule that is currently codified in 43 CFR and not the proposed regulations.

II. Discussion of Final Rule and Responses to Comments on Proposed Rule

The BLM received nine comments on the proposed rule published in the **Federal Register** on July 21, 2006 (71 FR 41542). In this section of the preamble, we respond to the substantive comments by subpart and/or section number. To facilitate understanding, we have also generally included a brief summary of what the subpart or section

provides. For additional explanation of the changes made to each section, please refer to the proposed rule at 71 FR 41543–41565.

Many of the comments received addressed both the BLM proposed rule and the MMS proposed rule. The BLM referred to the MMS any comments it received regarding the MMS rule. For responses to those comments, please see the MMS final rule being published simultaneously with this final rule.

Subpart 3200—Geothermal Resources Leasing

In subpart 3200, we changed the definitions section and added three sections to the end of the subpart.

Definitions

Section 3200.1 contains definitions of terms used throughout parts 3200 and 3280. As explained in the proposed rule, we removed the definitions of terms and concepts that are no longer used or were not used previously, added new definitions for terms or concepts that are new in this rule, and clarified other terms. The definitions we deleted were: “additional term,” “cooperative agreement,” “extended term,” and “pay instead of produce in commercial quantities.” The new terms defined are: “initial extension,” “additional extension,” “direct use,” “direct use lease,” “gross proceeds,” “commercial production or generation of electricity,” and “commercial production.” Terms clarified are: “geothermal exploration permit” and “geothermal steam and associated geothermal resources.”

In this final rule, we revise the definition of “commercial production or generation of electricity,” by adding language to clarify that the term includes electricity or energy that is required to produce the resource, as well as that required to convert the resource into electrical energy for sale. This was the BLM’s intent in the proposed rule. We also specify that the use of resources in this manner must be reasonable in order to discourage waste of the resource and to conform to the parallel MMS provision at 30 CFR 202.351(b)(2)(ii). As explained in the preamble to the proposed rule (71 FR 41543), the definition of this term is important in determining whether geothermal resource production is subject to royalties or direct use fees, as referenced in 30 U.S.C. 1004(b), or neither. The BLM believes it is more appropriate to consider these components as part of the electrical generation process, both: (1) To encourage the production of geothermal resources (by not imposing a fee for a necessary cost of electricity generation);

and (2) Because measurement of such usage would be difficult and expensive and the amount of moneys generated through the collection of fees would be quite small relative to the measurement effort. The BLM expects that an initial evaluation will occur at the permitting stage of whether the amount of the electricity used to produce the resource and to convert the resource into electricity is likely to be reasonable.

In reviewing subpart 3205 of the proposed rule (Direct Use Leasing), we concluded that, in accordance with the statutory provisions at 30 U.S.C. 1003(f), the definition of a “direct use lease” should include that such a lease is issued noncompetitively. Section 3205.6 of the proposed (and final) rule provides, mirroring the statute, that the BLM may issue a direct use lease only if, among other things, it “determines there is no competitive interest in the resource * * *.” If the BLM determines that land for which an applicant applied for a direct use lease is open for geothermal leasing and is appropriate for exclusive direct use operations (see definition of “direct use”), and that there is competitive interest, it will include the land in a competitive lease sale with lease stipulations limiting operations to exclusive direct use. Unlike a direct use lease that is issued noncompetitively, under a competitive lease that is limited to exclusive direct use, the resource may be sold (but it may not be used by the operator or a purchaser for the commercial generation of electricity), and the acreage restrictions will be those applicable to competitive leases rather than direct use leases. We have thus revised the definition of “direct use lease” to read as follows: “*Direct use lease* means a lease issued noncompetitively in an area BLM designates as available exclusively for direct use of geothermal resources, without sale, for purposes other than commercial generation of electricity.”

We received no comments on this section and, except for revising the definition of “direct use lease” as discussed above, have adopted it as proposed.

Types of Leases

Final section 3200.6 provides general information about the two types of geothermal leases that are issued under this rule: (1) Leases that may be used for any type of geothermal use, such as commercial generation of electricity or direct use of the resource, issued either competitively under subpart 3203 or noncompetitively under subpart 3204; and (2) Leases that may only be used for direct use without sale, i.e., direct use leases issued under proposed subpart

3205. We received no comments on this section and have adopted it as proposed. We discuss permitted uses under different types of leases in more detail in the discussion of subpart 3205 (Direct Use Leasing), below.

Transition Rules

The Energy Policy Act at 30 U.S.C. 1005(d), directed that the Secretary by regulation establish transition rules for leases issued before August 8, 2005. The only transition requirement in that section was that leases nearing the end of their terms on August 8, 2005, must be allowed 2-year extensions under certain circumstances.

Under the authority of 30 U.S.C. 1005(d), final sections 3200.7 and 3200.8 contain transition rules, addressing how this final rule applies to: (1) Leases issued before August 8, 2005, the enactment date of the Energy Policy Act; and (2) Leases issued on or after August 8, 2005, but based on lease applications pending on August 8, 2005.

Final section 3200.7(a)(1) makes leases issued before August 8, 2005, generally subject to parts 3200 and 3280, except they are subject to the regulations in effect on August 8, 2005 (43 CFR parts 3200 and 3280 (2004)), with regard to regulatory provisions relating to royalties, minimum royalties, rentals, primary term and lease extensions, diligence and annual work requirements, and renewals. Final section 3200.7(a)(1) and 3200.8(a) include a citation to 43 CFR parts 3200 and 3280 (2004) to clarify that these were the regulations in effect on August 8, 2005. The substance of the 2004 edition of 43 CFR parts 3200 and 3280 is the same as the 2005 and 2006 editions of the CFR for those parts.

Final section 3200.7(a)(2) provides that the lessee of a lease issued before August 8, 2005, may elect generally to be subject to all of the new regulations in parts 3200 and 3280, so long as the lessee makes such an election no later than 18 months after the effective date of this rule, i.e., no later than December 1, 2008. The provision notes that changes relating to royalty terms are possible only under the royalty conversion rules of final section 3212.25. As explained in the preamble to the proposed rule (71 FR 41544), this provision allowing an existing lessee to elect to be governed by the new regulations is within the BLM’s authority under 30 U.S.C. 1005(d), and was prompted by the statutory provision at 30 U.S.C. 1003(d)(2) allowing such an election to lessees whose lease applications were pending on August 8, 2005.

In reviewing this section during drafting of the final rule, we became aware that the language was confusing regarding whether a lessee could make an election under section 3200.7(a)(2) without also obtaining a conversion of royalty terms under section 3212.25. We have therefore added a sentence to this section clarifying that a lessee seeking to make an election under section 3200.7(a)(2) must also obtain a royalty rate conversion under section 3212.25 to make the election under section 3200.7(a)(2) effective. This section alternatively allows a lessee to convert only the royalty rate terms of the lease under subpart 3212.

Section 3200.7 provides that a lessee that does not convert lease terms relating to royalties may apply for a production incentive under final subpart 3212 (if eligible under that subpart). In addition, the section provides that the lessee of a lease issued before August 8, 2005, that was within 2 years of the end of its term on that date, may apply to extend the lease for up to 2 years, to allow achievement of production under the lease or to allow the lease to be included in a producing unit.

Final section 3200.8 addresses geothermal lease applications pending on August 8, 2005, and the status of leases issued pursuant to such applications. The section provides that such leases are subject to parts 3200 and 3280, except that they are subject to the regulations in effect on August 8, 2005 (43 CFR parts 3200 and 3280 (2004)), with regard to regulatory provisions relating to royalties, minimum royalties, rentals, primary term and lease extensions, diligence and annual work requirements, and renewals. However, such lessees may elect to be subject to the new regulations in their entirety. Under such an election, the royalty rate for such leases will convert to those specified in sections 3211.17(a) and 3211.18(a) and not under the process in section 3212.25.

One commenter asked whether someone could top-file over a lease application that was pending on August 8, 2005, and whether the BLM could convert the land to a KGRA (Known Geothermal Resource Area).

The informal answer given to this question at a public meeting in Reno, Nevada on August 31, 2006, was that a noncompetitive lease application pending on August 8, 2005, would have priority. However, if two or more noncompetitive lease applications filed before August 8, 2005, overlap in area, it is possible that the BLM, in processing the applications under the previous regulations, may reclassify the

area as a KGRA and require a competitive sale.

Another comment addressing proposed sections 3200.7 and 3200.8 noted that in referencing the transition provisions that also apply in the MMS rules, the BLM does not define or use the same transition terms (i.e., Class I, Class II, and Class III leases) as does the MMS (see the MMS final rule, 30 CFR 206.351). The commenter suggested that it might provide clarity if the BLM regulations utilized the same terminology as the MMS since the two rules have interrelated provisions.

We did not change the proposed rule in response to this comment. The MMS's classification system was designed to describe types of leases for royalty purposes only. In its final rule the MMS has revised its lease class definitions, but neither the proposed nor the final MMS class definitions fully describe the categories of leases for the BLM's purposes. For example, the MMS:

(1) Class I leases include both: (a) Leases existing on August 8, 2005 (existing leases), for which the lessee has not converted the royalty terms under section 3212.25; and (b) Leases issued pursuant to lease applications pending on August 8, 2005 (pending applications), for which the lessee has not made an election under section 3200.8(b). The BLM must, however, distinguish between these two sub-categories because non-converting existing leases are eligible for production incentives under section 3212.18, whereas leases issued pursuant to pending applications that do not elect to be subject to the new regulations are not eligible for production incentives;

(2) Class II leases do not distinguish between direct use leases under subpart 3205, which are restricted to direct use of the resource, and regular leases under subparts 3203 or 3204, which may have direct use. Nor does the Class II designation distinguish between leases issued pursuant to application or competitive sale after August 8, 2005, and those issued in response to pending applications where the lessee elects to be subject to the new regulations under section 3200.8(b); and

(3) Class III leases do not distinguish between: (a) Existing leases that convert only under section 3212.25 (royalty conversion only); and (b) Existing leases that convert under section 3200.7(a)(2) (electing to be subject to all new regulations, which must include a conversion under section 3212.25).

None of the foregoing distinctions is necessary for the MMS royalty purposes, but the BLM must make these distinctions in explaining to different

categories of lessees what options Congress made available to them. For these reasons, the BLM did not use the MMS classification system in its proposed rule. We did not change the rule in response to this comment.

Subpart 3201—Available Lands

Subpart 3201 addresses which lands are available for geothermal leasing and which lands are not available for geothermal leasing. It is substantively unchanged from the previous subpart. We made one minor change to section 3201.10 to make it clear that public lands and acquired lands that are administered by the Department of the Interior are available for leasing unless they are withdrawn from such use. We received no comments on this subpart.

Subpart 3202—Lessee Qualifications

Subpart 3202 addresses who may hold geothermal leases, qualifications to hold a geothermal lease, whether other persons are allowed to act on an applicant's behalf, and what happens if an applicant for a lease dies. The subpart is substantively unchanged from the previous subpart. We received no comments on this subpart and have adopted it as proposed.

Subpart 3203—Competitive Leasing

Subpart 3203 explains the new process for competitive leasing, which requires competitive leasing to the highest responsible qualified bidder except as otherwise specified. This differs from the previous process, which provided for competitive bidding only for lands within a KGRA or lands from terminated, expired, or relinquished leases, or at the BLM's discretion when there was public interest.

One commenter objected to "leasing the geothermal resource for free." The BLM disagrees that the geothermal resource will be leased for free. In accordance with the statute, final subpart 3203 provides that companies will pay bonus bids for competitive leases, and final subpart 3211 provides that lessees will pay rentals and either royalties or fees. Regarding the costs the government incurs, final section 3203.12, discussed below, provides that nominators of lands must pay a fee of \$100 per nomination plus \$.10 per acre, and final sections 3203.17 and 3204.10 provide that lease applicants must pay a processing fee to reimburse the government's processing costs.

One commenter stated that geothermal development is more akin to minerals development than to oil and gas development in that the rights to develop the land need to be secured before significant exploration can occur

because of the risk and capital cost involved. To facilitate leasing and exploration within shorter timeframes, the commenter recommended categorical exclusions to expedite exploration permits and greater use of lease stipulations to address environmental or other issues, even if such stipulations made future development of the leasehold contingent on subsequent permitting and National Environmental Policy Act (NEPA) processes. Another commenter indicated that the timeframes for compliance with the NEPA slow down the overall process and suggested that a developer could do an environmental assessment to comply with the NEPA after the developer has been issued a lease.

We did not change the rule in response to these comments. The Energy Policy Act did not address requirements under the NEPA with regard to geothermal leasing, and the suggested changes are beyond the scope of these regulations and the July 2006 proposed rule.

Final section 3203.5 explains the three stages of the competitive leasing process and summarizes the four specific circumstances in which leases would be issued on a non-competitive basis that are addressed in detail at subparts 3204 and 3205.

One commenter submitted an article entitled "What We Have Lost," authored and endorsed by numerous individuals in the geothermal industry. The article contends that competitive leasing will remove the incentive for companies, large or small, to invest in pre-lease exploration and project assessments, and maintains that an all-competitive leasing process does not fit geothermal resource development.

As the commenter realizes, the statute mandates competitive leasing. Any revision of the system prescribed by the statute would have to occur through Congressional action.

One commenter asked if land can be included in a competitive lease sale only through the nomination process. In considering this question, the BLM concluded that there may be instances where it would be in the public interest to include land in a competitive sale that has not been nominated. In response to this comment, we have revised the language of sections 3203.5 and 3203.10 to clarify that the BLM may include land in a competitive lease sale on its own initiative. We have also revised the language of section 3203.13 to provide that the BLM may hold a competitive lease sale on its own initiative even in a state where no nominations are pending. Examples of

when competitive sale of lands that have not been nominated might be in the public interest include adding to a lease sale parcels which might otherwise be drained by wells on adjacent acreage, or putting up for competitive sale land for which the BLM received an application for a direct use lease where the BLM determines that there is competitive interest.

Final section 3203.10 describes the process for nominating lands for competitive sale. In accordance with the statutory amendments, it increases to 5,120 acres (from the previous 2,560 acres) the maximum size of a lease, unless the area to be leased includes an irregular subdivision. This section also explains how a nominator must describe the lands nominated. These land description provisions were previously found at section 3204.11. The only change from those provisions is a clarification that lands surveyed under the public land rectangular survey system are to be described to the nearest aliquot part. This section also makes clear that a nominator may submit more than one nomination, as long as each nomination satisfies the acreage and land description requirements and includes the required filing fee, and that the BLM may reconfigure lands to be included in each parcel offered for sale.

Two commenters stated that the proposed rule did not address the situation of geothermal projects that contain both Federal and non-federal lands, which one commenter said constituted the majority of its projects. These commenters were concerned that a competitive leasing system could result in a developer having to wait up to 2 years to find out whether it is able to acquire a lease to Federal land parcels adjacent to or intermixed with non-federal lands on which leases could be speedily acquired. They stated that if a developer cannot control the entire resource, it cannot secure financial backing to build a power plant. They recommended revising the regulations to provide for "direct"—by which they apparently meant "non-competitive" but not exclusive direct use—leasing of Federal lands in a number of scenarios which would provide effective control to a holder of non-federal interests.

The commenters appear to be suggesting that an entity that already controls the majority of leases overlying a geothermal resource area should have the right to acquire a lease on any contiguous Federal lands. We did not change the rule in response to these comments because the statute requires a competitive leasing process except in specific circumstances. The circumstances under which Congress

decided to allow noncompetitive leasing do not include the leasing of adjacent or intermixed Federal lands. Implementing this suggestion would require statutory change. We note that once all of the Federal and private lands are leased, control of the resource can be achieved through commitment of all the lands, both Federal and private, to a unit. The unit provisions are in subpart 3280 and are discussed below.

The commenters also suggested that a less-favored alternative to noncompetitive leasing of adjacent or intermixed lands would be to grant the "contiguous resource owner" a right of first refusal in a competitive lease sale. In informal discussions at the public meeting on the proposed geothermal rule in Reno, a BLM representative may have indicated agreement with the suggestion that a contiguous resource owner might be able to obtain a right of first refusal. A careful reading of the statute, however, makes it clear that it does not provide a right of first refusal as an option to any bidder in a competitive lease sale. The language of the statute is: "Except as otherwise specifically provided by this Act, all land to be leased that is not subject to leasing under subsection (c) [noncompetitive leasing when no bids are received in a competitive lease sale] shall be leased * * * to the highest responsible qualified bidder * * *." 30 U.S.C. 1003(b)(1). The specific exceptions to including land in a competitive lease sale involve lands subject to mining claims, leases issued pursuant to applications pending when the statutory amendments were enacted, and direct use leases. Because Congress did not provide an exception for resource owners of contiguous or intermixed lands, the Department has no authority to make such an exception.

One commenter asked how lease nominations would be prioritized in terms of processing under the NEPA, and whether all of the pending lease applications would be administered before the BLM began working on nominated lands.

As explained at the public meeting in Reno, prioritization in terms of NEPA processing is not within the scope of these regulations. In general, nominations are processed on a "first-in, first-out" basis. However, the BLM may establish priorities based on the adequacy of existing NEPA documents in order to issue leases as efficiently as possible. In such circumstances, it is possible that newer nominations could be processed ahead of older ones. The BLM will begin processing nominated lands as the nominations are received.

Final section 3203.11 implements the new statutory provision, at 30 U.S.C. 1003(e), that the BLM may offer parcels as a block at a competitive sale when it is reasonable to expect that a geothermal resource that can be produced as one unit underlies those parcels.

One commenter inquired “who, when and how” it will be determined that leases should be issued as a block to avoid the “checkerboard” ownerships often arising through the competitive process. In response to this comment, we have revised the language of section 3203.11(a) to clarify that a nominator may request that leases be issued as a block or the BLM may offer leases as a block on its own initiative, and that, in either case, the BLM will offer parcels as a block only if information is available indicating that a geothermal resource that could be produced as one unit can reasonably be expected to underlie such parcels. The timing of block requests would be at the time of nomination by the nominator, or by the time of the sale notice if by the BLM’s initiative. At the time of nomination, a nominator could bring to the BLM’s attention any concerns it may have that checkerboard ownership of the parcels could impede development of the geothermal resource. The BLM may take that into consideration in deciding whether to offer the nominated lands as a block or as individual parcels.

One commenter suggested that proposed section 3203.11 be strengthened by requiring that block nominations be accompanied by geologic and scientific data sufficient to show that the nominated lands will most likely contain geothermal resources from the same pool or structure, and not rely solely on the BLM’s general knowledge of the area. We believe that proposed section 3203.11 already addresses the commenter’s concern by requiring that a nominator submit information to support its request. In response to this comment, however, we moved the language in section 3203.11(b) of the proposed rule, that “BLM may request that you provide additional information” to section (a) to clarify that it pertains to nomination block requests, and we strengthened it by replacing “request” with “require” so that it reads: “BLM may require that you provide additional information.” The BLM will not offer parcels as a block unless it determines that a geothermal resource that could be produced as one unit can reasonably be expected to underlie such parcels, and will consider available information to make that determination.

Final § 3203.12 provides for a filing fee for nominations of lands. In this final rule, the amount of the fee—\$100 per nomination plus \$0.10 per acre of lands nominated—was moved from proposed section 3203.12 to the fee schedule at section 3000.12 as explained in the preamble to the proposed rule (71 FR 41545). We also made a conforming amendment to section 3000.12. As with all fees in the fee schedule in section 3000.12, these amounts will be adjusted annually according to the change in the Implicit Price Deflator for Gross Domestic Product by way of publication of a final rule in the **Federal Register**, and will subsequently be posted on the BLM Web site (<http://www.blm.gov>) (see section 3000.12(a)).

One commenter stated that government agencies incur costs with leasing operations and those costs should be covered. The commenter wrote that the BLM and others agencies need these funds to monitor nearby springs and monitor the effects of the extraction.

The BLM agrees that the costs it incurs as a result of leasing operations should be reimbursed by the lessees. For this reason, final section 3203.12 requires a filing fee for nominations of land, as further discussed below, and final sections 3203.17, 3204.10, 3205.10, and 3211.10 provide that lease applicants must pay a processing fee to reimburse the government’s processing costs. We did not change the rule in response to this comment. We discuss monitoring below in connection with final section 3206.11 in response to another part of this commenter’s comments.

Two commenters opposed the concept of nomination fees. One commenter stated that the nomination process gives the BLM the benefit of a company’s exploration expertise, providing the BLM and the public with valuable insights for which the BLM should not charge a fee. The commenter asked at the public meeting in Reno whether a nomination was limited in acreage, that is, whether the \$100 filing fee was per lease, and in later written comments stated that the fee “is ‘per parcel,’ which has apparently been interpreted as ‘per lease.’” The commenter suggested that charging a nomination fee further discourages geothermal development on Federal lands. Another commenter suggested that the nomination fee should only cover administrative costs, and that these funds should be retained by the local BLM office for that specific purpose.

We did not change the rule in response to these comments. As explained in the preamble to the proposed rule, the BLM is authorized to charge reasonable filing fees under Section 304(a) of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1734(a) (71 FR 41545). Congress gave no indication in its amendments to the Geothermal Steam Act that it intended to insulate geothermal nominators from fees. The general Federal policy regarding fees, also discussed in the preamble to the proposed rule, is to charge a processing fee that recovers the agency’s reasonable processing costs, which corresponds to the suggestion by the second commenter just cited. The BLM does not at this time have the data necessary to determine its actual costs of processing nominations, but our experience indicates that those costs far exceed \$100 per nomination and \$0.10 per acre. In order to discourage frivolous nominations, we proposed this nominal filing fee (see Solicitor’s M—Opinion No. M–36987, “BLM’s Authority to Recover Costs of Minerals Document Processing,” at n.6). We will collect data on the actual costs of processing these nominations and expect to propose a processing fee to cover reasonable agency costs in the future.

One commenter at the August 31, 2006, public meeting in Reno asked whether a nomination of lands for a competitive sale is limited in acreage. The response correctly noted that, as provided in proposed and final section 3203.10(b), a nomination may not exceed 5,120 acres (unless the area to be leased includes an irregular subdivision), which is the maximum size of a lease (see section 3206.12). We want to clarify, however, that the nomination fee is per nomination, not per lease. Proposed and final section 3203.12 states that a nominator must submit the filing fee “with your nomination.” While each nomination is limited to the maximum acreage of a lease, in “parceling” the land before the lease sale (see explanation below) BLM may decide to offer the nominated lands as more than one lease. Thus, the \$100-per-nomination filing fee could cover more than one eventual lease, but cannot cover more than 5,120 acres (with the exception noted).

There also appears to be some confusion regarding the terminology of “nomination,” “lease,” and “parcel.” After nomination, but prior to the lease sale, the BLM will prepare the nominated lands for competitive sale. This process, often referred to as “parceling,” involves subdividing nominated areas into areas that do not

exceed the maximum allowed size for a lease; accurately describing the lands in conformance with the legal land system; and attaching appropriate stipulations from the land use plans. Thus, the fee is neither "per parcel" nor "per lease," but "per nomination." It is possible that after parceling, lands offered in a competitive sale may not be configured as originally nominated. In general, the BLM refers to lease offerings as parcels.

Regarding the comment that fees collected should be retained by the local BLM office, we explained in the preamble to the final minerals cost recovery rule (70 FR 58861, October 7, 2005) that the "BLM intends to structure its budget processes to return fees collected to the BLM office which processes the actions." Thus, the BLM has already addressed future implementation of this suggestion.

Final section 3203.13 provides that the BLM will hold a competitive lease sale at least once every 2 years in states where nominations are pending, and allows for a sale to include lands in more than one state. As explained above, we have also added language to clarify that the BLM may include land in a competitive lease sale on its own initiative. As explained in the preamble to the proposed rule (71 FR 41545), we deleted the provision at previous section 3205.13 regarding the fair market value of bids because we concluded that the competitive bidding process itself is a reflection of the fair market value of the lease. Moreover, eliminating this bidding floor may encourage more competitive bidding, which both serves the Energy Policy Act policy of encouraging development of geothermal resources and is economically beneficial to the United States to the extent leases are issued competitively, because competitive leases are issued with bonus bids and have higher rental rates.

A number of commenters urged that proposed section 3203.13 be revised to require more frequent lease sales. These commenters noted that the statute requires that lease sales be held at minimum every 2 years and does not establish a cap that would prevent more frequent leasing. Various reasons were cited in support of holding lease sales more frequently, e.g.: Long delays in the leasing process would make financing difficult or impossible and stunt development; The geothermal production tax credit has only a 2-year window; Leasing only every 2 years would not accomplish the goals of the Energy Policy Act; and Competitors could spend the time waiting for a lease sale proving up the resource to know how to outbid the nominator. Some

commenters suggested that the regulations should require the BLM to hold quarterly lease sales, as in the oil and gas program, in any state where there are nominations pending, and require that the BLM process all lease nominations within 6 months. One commenter suggested that geothermal lease sales be held in conjunction with quarterly oil and gas lease sales. A commenter also recommended that the BLM require quarterly publication of the status of pending lease nominations and the reason for further delay if the tract has not been put forward for leasing after 6 months. One commenter suggested that the rule provide that 2 years is the maximum, but that the BLM will attempt to hold a lease sale every 60 days.

We did not change the rule in response to these comments. As the commenters noted, section 3203.13 provides the same time frame as the statute at 30 U.S.C. 1003(b). As the commenters also acknowledged, nothing in the statute or the regulations precludes more frequent lease sales. The quarterly competitive sales for oil and gas are mandated by statute. Congress made the decision not to impose a similar mandate for geothermal leasing, and we decline to add such a mandate in these regulations. We recognize that more frequent lease sales may benefit geothermal development and we expect that BLM state offices will schedule sales as frequently as feasible when lands are available for leasing. The decision whether to hold geothermal lease sales in conjunction with some oil and gas lease sales will be made on a state-by-state basis. Regarding the comment that competitors could spend time before a lease sale exploring the potential resource, we note that pre-leasing exploration is available to the nominator as well as to competitors.

Final sections 3203.14 and 3203.15 describe how the BLM will notify the public of competitive lease sales, the types of information the BLM will include in a notice of sale, and how the BLM will conduct the sale. Unlike the previous regulations at subpart 3205, this final rule does not restrict the competitive sale process to sealed bids, but is flexible enough to allow other competitive sale formats, such as oral auctions. We anticipate that most sales will be conducted through oral auctions.

In order to protect the bidding process, we added at section 3203.15(c) a standard auction requirement that a bid may not be withdrawn and that a bid constitutes a legally binding commitment. This is current BLM practice both in the geothermal and oil and gas leasing programs.

We received no comments on sections 3203.14 and 3203.15 and have adopted them as proposed.

Final section 3203.17 provides information related to the payment obligations of a successful bidder. Because the proposed competitive sale process is no longer restricted to sealed bids, a bidder will not have to submit any payments unless at the end of the sale it is the high bidder. This section provides that a successful bidder must pay twenty percent of the bid, the total first year's rental, and the processing fee by close of business on the day of the sale or such other time as the BLM may specify. While the general expectation is that these payments will be made on the day of the sale, the section allows the BLM to specify another time for payments to be made if circumstances so require, such as, for example, the following business day. This section also adds personal checks to the list of financial instruments that may be used to make it easier for the successful bidder to make payments immediately after the sale. Final section 3203.17(c), like previous section 3205.16, requires that the balance of the bid be submitted within 15 calendar days after the sale.

Two commenters objected that same day payment is not practical, nor possible in some cases, since the amount of the successful bid is not known prior to auction. One suggested that provision should be made for a 5-business-day settlement period for bids.

We did not change the rule in response to these comments. The regulations at section 3203.17 provide that payment may be made by personal check, as well as other specified means, and that the BLM may specify another time for payment. We believe that these provisions provide ample opportunity for a lessee to make payment as directed under the regulation. We note that the regulations for oil and gas lease sales require payment by close of business on the day of sale, and experience shows that companies are able to comply with this provision.

Final section 3203.18 cross-references subpart 3204, which addresses noncompetitive leasing other than direct use leases.

Subpart 3204—Noncompetitive Leasing Other Than Direct Use Leases

Final subpart 3204 describes when and how the BLM will issue noncompetitive geothermal leases. The most common method of obtaining noncompetitive leases under this subpart will be applying for parcels of land that did not receive bids in a competitive sale. This subpart does not address noncompetitive leases for lands

available exclusively for direct use of geothermal resources, which are covered in final subpart 3205.

Final section 3204.5 lists the four types of lands available for noncompetitive leasing: (1) Parcels of land that did not receive bids in a competitive sale; (2) Lands available exclusively for direct use, addressed at final subpart 3205; (3) Lands subject to mining claims, addressed at final section 3204.12; and (4) Lands for which a lease application was pending on August 8, 2005, if the applicant so chooses.

One commenter suggested that oil and gas leases be allowed to include the rights to geothermal resources underlying their oil and gas leases, at least for a grandfathered period. The commenter expressed concern that if the geothermal rights were put up for competitive bid, someone else could acquire them and drill geothermal wells among the oil and gas wells, interfering with oil and gas production.

Oil and gas leases do not include the right to develop the geothermal resources; they are authorized under separate statutes and processes and a separate geothermal lease would have to be obtained. The commenter may have meant to suggest that oil and gas lessees be allowed to acquire geothermal leases for underlying resources on a noncompetitive basis. However, the statute allows noncompetitive leasing only in the four situations listed above. An oil and gas operator could apply for a noncompetitive direct use lease for the underlying geothermal resources, but if the BLM determined that there was competitive interest in a direct use lease, or that the area was appropriate for commercial generation of electricity from the geothermal resources, it would hold a competitive lease sale. It is thus possible that another entity could acquire a lease for the geothermal resources underlying the oil and gas lease. It is possible that lease stipulations could be inserted to avoid interference with a senior oil and gas lease. The statute at 30 U.S.C. 1016 contains requirements to avoid interference to protect both geothermal interests and other uses.

Final section 3204.10 requires an applicant for a noncompetitive lease to submit a processing fee and advance rent. The advance rent will be refunded if the application is rejected or withdrawn. These provisions are substantively the same as previous section 3204.12. We received no comments on this section and have adopted it as proposed.

Final section 3204.11 explains the procedures for noncompetitive leasing

of lands for which no bid is received in a competitive lease sale. This implements the statutory requirement at 30 U.S.C. 1003(c). For efficiency of administration, in the first 30 days following the competitive sale, applications will be accepted only for parcels as configured in the sale notice. To provide equal opportunity during the first 24 hours after the lease sale, all applications received for a particular parcel on the first business day after the competitive sale will be considered as simultaneously filed, and the BLM will select one at random to receive a lease offer. A fair market value bid is not required for a noncompetitive lease. It would be difficult for the BLM to determine what an appropriate bid should be in a noncompetitive situation; moreover, allowing leases to be obtained without a bid should encourage additional geothermal exploration and development. We received no comments on section 3204.11 and have adopted it as proposed.

Final section 3204.12 implements the statutory provision at 30 U.S.C. 1003(b)(3) that allows a mining claimant with an approved plan of operations to apply for a noncompetitive geothermal lease. One commenter asked if a developer has a mining claim on acreage with an approved plan of operations, whether there is the same required 2-year waiting period following a competitive lease sale as lands that do not have a mining claim.

We did not change the rule in response to this comment. Under final section 3204.12, the 2-year noncompetitive window following a competitive lease sale does not apply to a mining claimant with an approved plan of operations. A mining claimant with an approved plan of operations may file a noncompetitive lease application at any time up to the point that the BLM has accepted a bid for a lease on those lands.

Final section 3204.13 implements a portion of the statutory provision at 30 U.S.C. 1003(d)(2) that allows lease applications pending on August 8, 2005, to be processed under then-existing policies and procedures unless the applicant elects for the lease to be subject to the new leasing procedures. We received no comments on this section and have adopted it as proposed.

Final section 3204.14 governs the amendment of noncompetitive lease applications. It provides that an applicant may amend an application at any time before the BLM issues a lease if the amended application meets the requirements in this subpart and does not add lands not included in the

original application. To add lands, an applicant must file a new application. (The withdrawal of lands from noncompetitive lease applications is covered by final section 3204.15, discussed below.) This is a change from the previous regulations, as discussed in the preamble to the proposed rule, because the BLM decided that adding lands to an application was equivalent to submitting a new application, requiring a change in the priority date. We received no comments on this section and have adopted it as proposed.

Final section 3204.15 provides that for 30 days after a competitive lease sale, the BLM will not accept partial withdrawals of noncompetitive lease applications, but will only accept withdrawals of entire noncompetitive lease applications. As explained in the preamble to the proposed rule, this is a change from previous section 3204.17, and is parallel to the provision at final section 3204.11 restricting noncompetitive applications for reconfigured lease parcels for the first 30 days following a competitive sale. After 30 days, partial and whole withdrawals will be allowed at any time before the BLM issues the lease. Final section 3204.15 also provides (as did section 3204.17 of the previous regulations) that if a partial withdrawal results in failure to meet the minimum acreage required for a lease in final section 3206.12, the BLM will reject the lease application.

Subpart 3205—Direct Use Leasing

The Energy Policy Act provides the authority for the BLM to issue noncompetitive leases solely for the direct use of geothermal resources under certain conditions. Subpart 3205 is a new subpart added to describe these conditions and the process for applying for a direct use lease. This subpart implements the provisions of 30 U.S.C. 1003(f). “Direct use lease” as used in this subpart has a specific meaning. As discussed above in relation to section 3200.1 (Definitions), we have revised the definition of “direct use lease” to clarify that such a lease is issued noncompetitively. The new definition of “direct use lease” is “a lease issued noncompetitively in an area BLM designates as available exclusively for direct use of geothermal resources, without sale, for purposes other than commercial generation of electricity.” Competitive leases also allow direct use, but they are not direct use leases. Unlike a direct use lease, under a competitive lease that the BLM has decided to limit to exclusive direct use, the resource may be sold (but it may not be used by the

operator or a purchaser for the commercial generation of electricity), and the acreage restrictions will be those applicable to competitive leases rather than direct use leases.

Thus, permitted uses under different types of leases are as follows: (1) A lessee with a direct use lease may only use the resource directly itself; (2) A lessee with a competitive lease that is restricted to exclusive direct use may either use the resource directly itself or sell the resource to a purchaser who will use it only for direct use; (3) A lessee with either a competitive lease or a noncompetitive lease obtained following a sale that is not restricted to exclusive direct use may use the resource directly itself, sell the resource for direct use, use the resource for the commercial generation of electricity, or sell the resource for the commercial generation of electricity.

Final section 3205.6 addresses the conditions under which the BLM issues direct use leases. This section explains that a direct use lease may be issued to the first qualified applicant only for lands that: (1) Are open for geothermal leasing; (2) Are appropriate for exclusive direct use, without sale, for purposes other than commercial generation of electricity; (3) Do not include more acreage than reasonably necessary for the proposed use; (4) Have been the subject of a published notice that did not result in a nomination; and (5) Are of no competitive interest, as determined by the BLM. The BLM will make the determination of whether the lands are appropriate for a direct use lease on a case-by-case basis at the time of application. The advantage of a direct use lease is that it may be issued noncompetitively to the first qualified applicant and may allow additional lands to be made available for geothermal leasing that would not be available, for environmental or other reasons, if the geothermal resource could be used for the commercial generation of electricity.

We revised the title of section 3205.6 from that in the proposed rule, to read "When may BLM issue a direct use lease to an applicant?", instead of "When will", to reflect the statutory language and the language of the regulatory text. We also added a paragraph (b) to the section to clarify that if the BLM determines that land for which an applicant has applied under this subpart is open for geothermal leasing and is appropriate only for exclusive direct use operations (see definition of "direct use"), but determines that there is competitive interest in the resource, it will include the land in a competitive lease sale with

lease stipulations limiting operations to exclusive direct use.

Numerous comments were received opposing direct use leasing. One commenter predicted that direct use leasing could cause "major headaches and legal entanglements down the road" because improved technology or discovery of high-temperature resources would cause a direct use lessee to wish to produce electricity from the lease for sale offsite. The commenter suggested that because the statute permits, but does not require, direct use leasing, the BLM should "just say no" to such leasing. Another commenter agreed, asking what the BLM would do if a direct use lessee wanted to generate electricity, hypothesizing that if a direct use lessee found the resource was electrical grade, others would know and would want to file a nomination for a lease for electrical generation on the lease which the lessee had spent a great deal of money to obtain. The commenter also asked what the BLM would do if a lessee were generating electricity and wanted to drill wells for a greenhouse or other direct use.

Congress provided a detailed process for the Secretary to allow limited noncompetitive direct use leasing in certain areas. We have interpreted the statutory provisions to allow for limited direct use leasing on certain lands which: (1) Would otherwise not be open to geothermal development at all due to potential impacts to other resource values; or (2) The BLM determines do not have potential for commercial electrical generation. We agree that it is possible that improved exploration, technology, or energy economics could cause a direct use lease to have the potential for commercial generation of electricity. However, the statute is clear that Congress intended that leases permitting commercial generation of electricity are to be offered through competitive lease sales. We would therefore not allow commercial electrical generation on a direct use lease. If a direct use lessee found an electrical grade resource, it would continue to have the right to develop the resource for direct use for the duration of its lease. As was pointed out at the public meeting in Reno, nothing prevents a lessee with an unrestricted competitive lease from using the resource for direct use as well as for electrical generation. We envision direct use leases as providing a streamlined, simpler noncompetitive process for development of geothermal areas that would otherwise not be developed.

One commenter expressed concern regarding the administration of units

that contain both regular and direct use leases.

The BLM, in determining what areas are appropriate for direct use leases, will make every effort to avoid issuing direct use leases in areas with electrical generation potential. We would avoid including a direct use lease in a unit with leases that generate commercial electricity, because a direct use lease does not convey the rights to develop the resource commercially. It is possible that a unit could be formed entirely of direct use leases.

One commenter believed there were two problems that direct use leasing and a direct use fee schedule were designed to address, and that both could have been resolved without direct use leasing. First, the commenter suggested that direct use leasing would not solve the problem of undesirable features being built (i.e., power plants and transmission lines), because direct use itself could involve undesirable features (e.g., a direct use meat packing plant with feedlots, holding pens, and traffic). Second, the commenter suggested that the perceived problem of an overly-burdensome royalty rate for direct use under the previous system was created by the institution of all-competitive leasing, and could have been solved by retaining the prior leasing system and providing for a fee on all direct use and a royalty on power generation, keeping noncompetitive rentals at \$1 per acre.

Regarding the second part of this comment, it appears that the commenter may be confused regarding when the direct use fee schedule applies. In fact, as the commenter suggested was appropriate, the fee schedule applies to all direct use of the resource regardless of the type of lease. We also note that the rental for noncompetitive leases under these new regulations remains at \$1 per acre for the first 10 years. The first part of the comment, and arguments that the new competitive leasing system should be revised, should, as the commenter recognized, be addressed by Congress.

We did not change the rule in response to these comments.

Final section 3205.7 addresses the statutory acreage restrictions applicable to a direct use lease, which must not cover more than the quantity of acreage reasonably necessary for the proposed use, and in no case may exceed 5,120 acres, except in the case of an irregular subdivision. We received no comments on this section and have adopted it as proposed.

Final section 3205.10 explains the procedures for applying for a direct use lease and the types of information to be submitted with an application. The

information that is submitted is used by the BLM to determine if the requested acreage is necessary for the intended operation as described in section 3205.7. This section would also require the submission of a nonrefundable processing fee for noncompetitive lease applications, as required by section 3204.12 of the current regulations.

One commenter stated that newcomers to the industry may not understand that, under section 3205.10, a direct use lessee is permitted to produce electricity on the lease, but only to serve the load of the direct use facility, and suggested that this should be spelled out.

To clarify the rule in response to this comment, we revised the last sentence of section 3205.10(a) to utilize the defined phrase "commercial generation of electricity," instead of the proposed language "to commercially generate electricity." The sentence now reads: "You may not sell the geothermal resource and you may not use it for the commercial generation of electricity." The definition of "commercial generation of electricity" is "generation of electricity that is sold or is subject to sale, including the electricity or energy that is required to convert geothermal energy into electrical energy for sale." Electricity that is produced on a direct use lease only to serve the load of the direct use facility does not fall within this definition and, as the commenter correctly pointed out, such use is permitted.

A commenter stated that precluding the sale of the geothermal resource from a direct use lease seems counterproductive, because a purchaser might also use the resource for direct use and not for the commercial generation of electricity. The commenter asked whether, for example, a lessee could produce the resource and sell it to a direct use or power generation facility if it served only those facilities and was not sold into the power grid, or whether a lessee could use the resource directly itself, then sell the effluent to a third party for use in an adjacent district heating system not owned by the production lessee. The answer to these questions is no; a direct use lessee may not sell the resource even if it would not be used for commercial generation of electricity after sale. The BLM is constrained in drafting its regulations by the language of the statute, which provides that direct use leasing must be "exclusively for direct use of geothermal resources, without sale for purposes other than commercial generation of electricity * * *." 30 U.S.C. 1003(f). Please note the use of the phrase "without sale" in the statutory language.

The BLM does not have discretion to allow sale of the resource by a direct use lessee. A potential lessee who is interested in selling the resource for any purpose should nominate the lands for a competitive lease sale. We did not change the rule in response to this comment.

One commenter was concerned that a direct use lessee would be prohibited from selling the business or property that uses the resource that is produced or producible from the lease, or would be prohibited from transferring the lease and the resource producible therefrom.

A direct use lessee may assign (transfer) the lease. However, the lease and the business to which it supplies the geothermal resource must be transferred together to the same entity. This is because the statute prohibits sale of the resource from a direct use lease. We did not change the rule in response to this comment.

One commenter expressed concern that information required by section 3205.10(b) to apply for a direct use lease would not be available until after the lease was issued and the lessee could drill wells. The BLM disagrees. Because the statute limits a direct use geothermal lease to the quantity of acreage reasonably necessary for the proposed use, the BLM must obtain the information necessary to make this determination in advance of lease issuance. The BLM expects that the applicant will be able to explain the nature and scope of the intended use, which is what this section requires. The language of the regulation recognizes that the information provided is not necessarily complete or final, but will be based on anticipated production and development. We did not change the rule in response to this comment.

Final section 3205.12 addresses direct use lease applications for lands managed by an agency other than the BLM. The BLM will forward a copy of such an application to the other agency. If that agency consents to leasing and recommends that the lands are appropriate for a direct use lease, the BLM will consider that consent and recommendation in determining whether to issue the lease. This section requires that the BLM obtain the consent of the surface management agency before issuing a direct use lease. We received no comments on this section and have adopted it as proposed.

Final sections 3205.13 and 3205.14 allow an applicant for a direct use lease to withdraw its application at any time or amend its application, without adding new lands, prior to lease issuance. To add new lands, an

applicant must file a new application (see discussion of final section 3204.14, above). We received no comments on these sections and have adopted them as proposed.

Final section 3205.15 discusses how the BLM will inform an applicant of its decision to approve or deny a direct use lease application. We received no comments on this section and have adopted it as proposed.

Subpart 3206—Lease Issuance

Final subpart 3206 addresses lease issuance in general.

Final section 3206.10 is nearly identical to previous section 3206.10, with the addition of a provision notifying applicants that all payments must be made before the BLM will issue a lease. This addition reflects current BLM practice. We received no comments on this section and have adopted it as proposed.

Final section 3206.11 discusses what the BLM must do before issuing a lease. The section is unchanged from the previous regulations except for changing the words "will not significantly impact" at the beginning of paragraph (b), to "will not have a significant adverse impact on," which more closely tracks the language of 30 U.S.C. 1026(c).

One commenter voiced a concern regarding safeguarding thermal features of national parks.

Both the Geothermal Steam Act and the regulations already provide safeguards for thermal features of national parks. Final section 3206.11(b), in accordance with 30 U.S.C. 1026(a), provides that before issuing a lease, the BLM must determine that lease development will not have a significant adverse impact on any significant thermal feature of National Park System units. Moreover, the Geothermal Steam Act at 30 U.S.C. 1026(b) provides that the Secretary must maintain a monitoring program for significant thermal features within units of the National Park System. We did not change the rule in response to this comment.

Final section 3206.12 addresses minimum and maximum lease sizes, which were addressed in the previous regulations at section 3204.14. The maximum lease size increased from 2,560 acres to 5,120 acres, as provided at 30 U.S.C. 1006. We received no comments on this section and have adopted it as proposed.

Final section 3206.13 addresses the maximum acreage that one lessee may hold, which was addressed in the previous regulations at section 3206.12. This section is identical to the first sentence of previous section 3206.12

and implements 30 U.S.C. 1006, which sets the limit at 51,200 acres in any one State. The remainder of section 3206.12 of the previous regulations was deleted because the Energy Policy Act amendments deleted those provisions in the statute. We received no comments on this section and have adopted it as proposed.

Final section 3206.14 explains how the BLM computes acreage holdings. This section is identical to previous section 3206.13, except for minor editorial changes. We received no comments on this section and have adopted it as proposed.

Final section 3206.15, explaining how the BLM will charge acreage holdings if the United States owns only a fractional interest in the geothermal resources, is identical to previous section 3206.14, except for minor editorial changes. We received no comments on this section and have adopted it as proposed.

Final section 3206.16 explains that acreage is not chargeable against the acreage limitations if it is included in any approved unit agreement or development or drilling contract. These exclusions implement 30 U.S.C. 1017(d) and (g)(2) and were addressed at section 3206.15 in the previous regulations. The reference in the previous regulations to cooperative agreements was deleted because they are no longer mentioned in this part. We received no comments on this section and have adopted it as proposed.

Final section 3206.17 addresses what the BLM does if a lessee's holdings exceed the maximum acreage limits set in final section 3206.13. This section is identical to section 3206.16 of the previous regulations. We received no comments on this section and have adopted it as proposed.

Final section 3206.18 addresses when the BLM issues a lease. It is identical to section 3206.18 of the previous regulations, except for a minor editorial change. We received no comments on this section and have adopted it as proposed.

Subpart 3207—Lease Terms and Extensions

Final subpart 3207 explains the new system of lease terms and extensions provided at 30 U.S.C. 1005.

Final section 3207.5 summarizes the new lease terms (length of time a lease is in effect) and lease term extensions, which include: (1) A 10-year primary term and two 5-year extensions of the primary term; (2) A five-year drilling extension; (3) A production extension of up to 35 years; and (4) A renewal term of up to 55 years. We received no

comments on this section and have adopted it as proposed.

Final sections 3207.10, 3207.11, and 3207.12 address the primary term of a lease and explain the requirements for obtaining and continuing extensions of the primary term. As explained in the preamble to the proposed rule (71 FR 41547), we interpret the statute as giving the BLM authority to prescribe work requirements that must be completed by the end of the 10th lease year, in accord with the statutory language relating to work requirements and in order to give effect to the statutory 10-year primary term, and to provide a basis for deciding whether the BLM will grant the initial 5-year extension. We note that work requirements relating to the initial and additional extensions of the primary term are addressed in different paragraphs of 30 U.S.C. 1005. Paragraph (a)(2) of section 1005 mandates that for each year of an initial 5-year extension lessees must satisfy work requirements under paragraph (b) or make payments in lieu of minimum work requirements under paragraph (c). Paragraph (a)(3) provides that a lessee must be granted an additional 5-year extension if it satisfied the requirements of the initial extension; paragraph (b) then mandates minimum work requirements for each year after the 10th year of the lease.

Final section 3207.11 establishes work requirements that a lessee must meet within the 10-year primary term for a lessee to be eligible for the initial 5-year extension of the primary term. The BLM formulated its list of potential types of work that could be performed to meet the work requirements based on the statutory provision, at 30 U.S.C. 1005(b)(2). The provisions require that the work should establish a geothermal potential or, if that potential has been established, should confirm the existence of producible geothermal resources. The amount of work that must be performed is quantified as a minimum dollar expenditure per acre, as it was in the previous regulations (see previous sections 3210.13 (diligent exploration requirements) and 3208.14 (significant expenditures)).

For the work requirements that must be completed by the end of the 10th year of the lease, final section 3207.11(a) requires a \$40 per acre expenditure over the 10-year period of the primary term of the lease, which is the same expenditure that was required at section 3210.13 of the previous regulations for diligent exploration during the primary term. For work requirements for each year of the initial 5-year extension, final section 3207.12(a) requires an annual dollar expenditure of \$15 per acre, which is the same as was required at

section 3208.14 of the previous regulations for significant expenditures during a first lease extension. For work requirements for years 16 through 19 of the additional 5-year extension, final section 3207.12(c) requires an annual dollar expenditure of \$25 per acre. No work is required for the 20th year because the lessee must obtain either a drilling extension (section 3207.14) or a production extension (section 3207.15) to hold the lease beyond the 20th year. We determined that the dollar expenditure for work requirements should increase enough during an additional extension to motivate a lessee to put a lease into production if it is not already producing in commercial quantities by the end of the 15th year. As the annual expenditure requirement increases \$11 per acre after the 10th lease year (from \$40 over a 10-year period, or an average of \$4 per acre per year, to \$15 per acre per year), we require in final section 3207.12(c) that the expenditure increase by a nearly equivalent amount—\$10 per acre—after the 15th lease year (from \$15 to \$25 per acre per year). We believe this level of increase serves the purpose of encouraging diligent development of the resource.

One commenter asked whether a lessee's own work on a lease would count toward satisfaction of the work requirement if the lessee was a geologist qualified to do valuable work on a lease.

As was true under the previous regulations, a lessee's work on a lease may count toward satisfaction of the work requirement as long as it is engaged in activities that establish a geothermal potential or confirm the existence of producible geothermal resources. A lessee's geologic work on a lease may count if it results in original, independent data, for example, mapping or preparing geological cross-sections of the lease area. The dollar expenditure under such circumstances would be calculated by the equivalent cost of paying a professional geologist for similar maps or cross-sections.

Final sections 3207.11(b) and 3207.12(d) allow a lessee to make minimum annual payments instead of performing the work requirements, as provided in the statute at 30 U.S.C. 1005(c). These sections provide that a lessee may make a payment equivalent to the required work expenditure, such that the total of the payment and the value of the work performed equals the dollar value of the expenditure that would otherwise be required. As provided in the statute, these sections also allow the BLM to limit the number of years that it accepts such payments, if it determines that payments in lieu of

work requirements will impair achievement of diligent development of the geothermal resource. We concluded that such impairment determinations are more appropriately made on a case-by-case basis and therefore we did not include in the rule a specific limit on the number of years that the BLM will accept such payments.

The final rule takes a different approach than the previous rule regarding the amount of payments that are allowable in lieu of work performance, in that it does not allow payments in a lesser amount than the value of the required work. We believe this change furthers the statutory purpose of encouraging the development of geothermal resources.

The final rule also includes an automatic inflation adjustment for the minimum work requirements and for monetary payments in lieu of the work performance. Final sections 3207.11(f) and 3207.12(i) provide that the dollar amount of the requirements will be adjusted automatically every three calendar years based on the Implicit Price Deflator for Gross Domestic Product that is published annually by the U.S. Department of Commerce. Because the adjustments will simply be based on a mathematical formula, the adjustments will be made in succeeding final rules without notice and comment, which is the procedure that the BLM used in its cost recovery rule published on October 7, 2005 (70 FR 58872).

One commenter objected to the inclusion of an inflation adjustment for these payments, suggesting that such an adjustment is not authorized by law. We disagree with the comment. The statute authorizes the Secretary of the Interior to set reasonable work requirements ("The Secretary shall issue regulations prescribing minimum work requirements for geothermal leases * * *") and in lieu payments ("In lieu of the minimum work requirements * * * the Secretary shall by regulation establish minimum annual payments * * *") 30 U.S.C. 1005(b)(2) and (c). It is within the Secretary's discretion to choose a reasonable approach to setting such requirements and payments. Nothing in the statute precludes the inclusion of an inflation adjustment, which is a widely-used and generally accepted approach. We did not change the rule in response to this comment.

Final sections 3207.11(b) and 3207.12(d) provide that a lessee is exempt from work requirements if it submits documentation to the BLM showing that it has produced or utilized geothermal resources in commercial quantities. This implements 30 U.S.C. 1005(f), which provides that minimum

work requirements do not apply after the date on which the geothermal resource is utilized in commercial quantities.

Final sections 3207.11(c) and (e) and 3207.12(f) and (g) provide timeframes for a lessee to submit information to the BLM showing that it has met the work requirements or paid or produced in lieu thereof, explain the type of information that must be submitted, and explain the BLM's approval process.

Final section 3207.12(e) provides that if a lessee expends an amount greater than the dollar expenditure required in that year on suitable development activities, the lessee may apply any excess payment to any subsequent year within that same 5-year extension period. This is similar to section 3208.14(a) of the previous regulations.

Except for the comment regarding inclusion of an inflation adjustment discussed above, we received no comments on sections 3207.10, 3207.11, and 3207.12 and have adopted them as proposed.

Final section 3207.13 exempts from the work requirements a lessee whose lease overlies a mining claim when: (1) The mining claim has a plan of operations approved by the appropriate Federal land management agency; and (2) Development of the geothermal resource would interfere with the mining operations. This implements 30 U.S.C. 1005(e). We received no comments on this section and have adopted it as proposed.

Final sections 3207.14 and 3207.15 implement the 5-year drilling and 35-year production extensions provided for in the statute at 30 U.S.C. 1005(g). As explained in the preamble to the proposed rule (71 FR 41548), we conclude that the language in the statute supports applying the 5-year drilling and 35-year production extensions to individual leases, as well as to leases under cooperative or unit agreements. We received no comments on these sections and have adopted them as proposed.

Final section 3207.14 addresses qualifications for a drilling extension. As explained in the preamble to the proposed rule (71 FR 41548–41549), a lessee who submits information showing that it has met the applicable requirements (work activities or payment or production in lieu thereof) will continue in the primary term through the 20th year. Because the statute provides for a drilling extension only if a lessee is engaged in qualifying drilling operations at the time the primary term ends (see 30 U.S.C. 1005(g)), final section 3207.14 allows the drilling extension only if: (1) A

lessee was drilling over the end of the 20th lease year (when the primary term would end due to lease expiration); or (2) A lessee had failed to submit information showing that it had met the requirements for an extension of the primary term and was drilling over the end of a year subsequent to the 10th year (in which case the primary term would terminate due to a failure to comply with requirements). The section further specifies that to qualify for the drilling extension, the lessee must be drilling a well for the purposes of commercial production to a target that the BLM determines is adequate, based on the local geology and type of proposed development. The lease will expire if, at the end of the 5-year drilling extension, the lessee does not qualify for a production extension (i.e., if the lessee is not producing or utilizing the geothermal resource in commercial quantities—see discussion of final section 3207.15, below). We received no comments on this section and have adopted it as proposed.

Final section 3207.15 provides a production extension of up to 35 years for a lease that is: (1) Actually producing geothermal resources in commercial quantities; or (2) Has a well capable of producing geothermal resources in commercial quantities and the lessee is making diligent efforts to utilize the resource. This reflects the definition at 30 U.S.C. 1005(h) of "produced or utilized in commercial quantities," which is also defined at section 3200.1. The section also specifies the types of information a lessee must provide to the BLM for the BLM to determine whether to grant a production extension. A lessee with a BLM-approved utilization plan allowing for seasonal operation would be eligible for the production extension as long as it was producing or utilizing the geothermal resource in commercial quantities during the periods that the utilization plan provided for operations. We received no comments on this section. In the final rule we added a cross-reference to section 3212.15 to make it clear that a lease will not terminate if it satisfies the conditions in that section.

Final section 3207.16 provides for a preferential right of renewal of a lease for a second term that is equal to the length of the primary term including the initial and additional extensions (a total of 20 years) plus the length of the production extension (up to 35 years) for a total renewal period of up to 55 years. A renewal could be granted under such terms and conditions as the BLM deems appropriate, if at the end of the production extension, the lessee is

producing or utilizing geothermal resources in commercial quantities and the lands are not needed for any other purpose. This provision implements 30 U.S.C. 1005(g). This section also specifies that the renewal term continues only so long as the lessee is producing or utilizing geothermal resources in commercial quantities. The term “produced or utilized in commercial quantities” is defined in proposed section 3200.1. We received no comments on this section and have adopted it as proposed.

Final section 3207.17 provides that leases committed to a unit agreement that would expire before the unit term would expire may be extended to match the term of the unit if unit development has been diligently pursued. Paragraph (a) of this section is virtually identical to the previous regulation at section 3208.10(a)(4), with a slight change in wording to remove any implication that the holder of the expiring lease must be the one to have diligently pursued unit development. Final sections 3207.17 (b) and (c) establish procedures for these circumstances. Under final section 3207.17 (b), to extend the term of a lease committed to a unit, the unit operator must send to the BLM a request for lease extension at least 60 days before the lease expires showing that unit development has been diligently pursued. In the final rule we amended the paragraph (b) to make it clear that BLM may require the operator to submit additional information prior to approving the application. Final section 3207.17 (c) provides that within 30 days after receiving your complete extension request, the BLM will notify the unit operator whether it approves the request. Under final paragraph (c), the 30 days will begin running after BLM has received all information necessary to act on the application.

Final section 3207.18 provides that a lease that is eliminated from a unit is eligible for an extension if it meets the requirements for such extensions. We received no comments on this section. In the final rule we removed the references to drilling and production extensions because lands eliminated from a unit may also be eligible for an initial or additional extension of the primary term.

Previous Subpart 3208—Extending the Primary Lease Term

Previous subpart 3208 is removed because under this final rule the subject of extensions of lease terms is addressed in subpart 3207 for leases issued: (1) After August 8, 2005 (other than for leases issued in response to applications that were pending on that date for

which no election is made under section 3200.8(b)(1)); and (2) Before August 8, 2005, for which an election is made under section 3200.7(a)(2). Although removed from the CFR, the substance of previous subpart 3208 (43 CFR subpart 3208 (2004)) will continue to have vitality for leases issued before August 8, 2005, for which no election is made under section 3200.7(a)(2), and for leases issued in response to applications pending on that date for which no election is made under section 3200.8(b)(1). As discussed in an earlier section of this preamble, leases in these two categories continue to operate under certain provisions of the rules in effect on August 8, 2005, unless they elect otherwise.

We received no comments on the removal of this subpart.

Previous Subpart 3209—Conversion of Lease Producing Byproducts

Previous subpart 3209 is removed because lease conversions that subpart covered are no longer allowable under the Energy Policy Act. We received no comments on the removal of this subpart.

Subpart 3210—Additional Lease Information

Final sections 3210.10 and 3210.11 on lease segregation remain substantively unchanged from the previous sections. We received no comments on these sections and have adopted them as proposed.

Final section 3210.12 references new lease size limits. In other respects, it is substantively unchanged from the previous section. The preamble to the proposed rule mistakenly implied that the processing fee for lease consolidations was new in this rule. In fact, that fee had been previously added by the minerals cost recovery rule (see 70 FR 58854 (October 7, 2005)). We received no comments on this section and have adopted it as proposed.

This final rule removes previous sections 3210.13, 3210.14, 3210.15, and 3210.16, all of which pertained to the previous diligent exploration requirements. Work requirements are addressed in the final rule in subpart 3207 for leases issued: (1) After August 8, 2005 (other than for leases issued in response to applications that were pending on that date for which no election is made under section 3200.8(b)(1)); and (2) Before August 8, 2005, for which an election is made under section 3200.7(a)(2). Despite the removal of these sections, the substantive terms of the cited sections (in the 2004 edition of the CFR) continue to apply to leases in effect

before August 8, 2005, and leases issued on or after August 8, 2005, in response to applications pending on that date, unless the lessees elect under section 3200.7(a)(2) or section 3200.8(b)(1) to be subject to the regulatory requirements of this final rule. We received no comments on the removal of these sections.

Final section 3210.13 on leasing or locating minerals on a geothermal lease remains substantively unchanged from previous section 3210.17. We received no comments on this section and have adopted it as proposed.

Final section 3210.14, which provides that the BLM may readjust the terms and conditions of a lease, replaces previous sections 3210.18, 3210.19, and 3210.20 that related to the same topic. It implements 30 U.S.C. 1007, as revised.

One commenter objected to allowing the BLM to readjust the terms and conditions of a lease. The commenter stated that allowing such changes after the lease is issued creates uncertainty for the developer and could create financing issues.

We did not change the rule in response to this comment. As discussed below, these provisions are not substantively changed from the previous regulations (see previous sections 3210.18 and 3210.20). The statutory provision providing that the Secretary may readjust lease terms and conditions at not less than 10-year intervals and may readjust rentals and royalties at not less than 20-year intervals beginning 35 years after production (30 U.S.C. 1007) was not changed by the Energy Policy Act amendments, except for the removal of the 22.5 percent royalty cap previously included in 30 U.S.C. 1007(b). The final rule implements the new statutory provision.

Final section 3210.14(a) addresses readjustment of lease terms and conditions other than rentals and royalties; it replaces previous section 3210.18. With one exception, paragraph 3210.14(a) is substantively unchanged from previous section 3210.18. Previous section 3210.18 provided that once the BLM and the other agency reached agreement, the BLM would readjust the terms of the lease. It did not state, as the statute requires at 30 U.S.C. 1007(c), that the other agency must approve the readjustment. Final section 3210.14(a)(2) clarifies that the other agency must approve the proposed readjustment.

Final section 3210.14(b) addresses readjustment of rentals and royalties; it replaces previous section 3210.20(a). The previous 22.5 percent royalty cap for readjusted leases was removed from

the rules because that cap is no longer in the statute.

Final sections 3210.14(c), (d), and (e) implement the procedures of 30 U.S.C. 1007(b), and are somewhat different than the procedures in previous sections 3210.19 and 3210.20. Under previous sections 3210.19(a) and 3210.20(b), the BLM notified lessees in writing of proposed readjustments and provided the lessee 30 days to object in writing to the new terms. The previous rules provided further that if a lessee: (1) Did not object, the proposed new terms would become part of the existing lease; or (2) Did object, the BLM would issue an appealable final decision on the new terms and conditions. The previous rules, however, did not expressly mention certain concepts contained in the statute that are described below.

Under final sections 3210.14(c) and (d), the BLM will give a lessee a written proposal to readjust the rentals, royalties, or other terms and conditions of its lease. The lessee will have 30 days after receiving the proposal to file with the BLM an objection in writing to the proposed new terms and conditions. If the lessee does not object in writing or relinquish its lease, it will conclusively be deemed to have agreed to the proposed new terms and conditions. This concept, implied but not expressly stated in the previous rules, is taken directly from the statute. The BLM will then issue a written decision under final section 3210.14(d), setting the date that the new terms and conditions become effective as part of the lease. This decision will be in full force and effect under its own terms, and the lessee is not authorized to appeal the decision to the Department's Office of Hearings and Appeals.

We made a minor revision to proposed section 3210.14(c), changing the word "adjust" to "readjust," to be consistent with language of the statute at 30 U.S.C. 1007 and the language of the other paragraphs of section 3210.14.

Final section 3210.14(e) establishes procedures for the situations where a lessee files a timely objection to the proposed readjustment, and is intended to implement a portion of 30 U.S.C. 1007(b) that was not addressed in previous regulations.

We revised the language of proposed section 3210.14(e)(1) in this final rule to correct an error in the proposed rule. The section as proposed referred only to "readjusted rental and royalty terms":

If you file a timely objection in writing, BLM may issue a written decision making the readjusted rental and royalty terms effective no sooner than 90 days after we receive your objections, unless we reach an agreement

with you as to the readjusted terms of your lease that makes such terms effective sooner.

However, the intent, as was clear from proposed paragraphs (c), (d), and (e) taken as a whole, was to refer to not just readjusted rental and royalty terms, but to all readjusted terms and conditions. Therefore, in this final rule we substituted the words "readjusted terms and conditions" for "readjusted rental and royalty terms," and for clarity also revised the end of the sentence to refer to "readjusted terms and conditions" rather than the shorthand "readjusted terms." Final section 3210.14(e)(1) thus reads:

If you file a timely objection in writing, BLM may issue a written decision making the readjusted terms and conditions effective no sooner than 90 days after we receive your objections, unless we reach an agreement with you as to the readjusted terms and conditions of your lease that makes them effective sooner.

Under final section 3210.14(e)(2), if the BLM does not reach an agreement with the lessee by 60 days after receiving the lessee's objections, then either the lessee or the BLM may terminate the lease, upon giving the other party 30 days' notice in writing. This provision is contained in 30 U.S.C. 1007(b), but did not appear in the previous regulations. The final rule clarifies that a lease termination under paragraph (e)(2) does not affect a lessee's obligations that accrued under the lease when it was in effect, including those specified in section 3200.4.

Unlike a BLM decision under final section 3210.14(d), a lessee may appeal a BLM readjustment decision under final section 3210.14(e)(1). Final section 3210.15 addresses such appeals.

For consistency, we revised the language of proposed section 3210.15, which referred to "lease terms and conditions, or rental or royalty rate" to use the same phrase used in final section 3210.14(c): "rentals, royalties, or other terms and conditions of your lease."

Final section 3210.15 provides that if a lessee appeals the BLM's decision under section 3210.14(e)(2) to readjust rentals, royalties, or other terms and conditions of its lease, the decision will be effective during the appeal. If the lessee wins its appeal and the BLM must change its decision, the lessee will receive a refund or credit for any overpaid rents or royalties.

In summary, the BLM will provide a lessee 30 days to object to a proposed readjustment decision. If the lessee objects, the BLM may issue a written decision making the readjusted terms

and conditions effective no sooner than 90 days after receiving the objection. A lessee will have 30 days to appeal that decision under Office of Hearings and Appeals regulations. In addition to the appeal process, the BLM and the lessee can attempt to negotiate an agreement within 60 days after the BLM receives the objection. If an agreement is reached, the appeal will be withdrawn. If an agreement is not reached, either the lessee or the BLM may terminate the lease on 30 days' notice in writing, even if an appeal is pending.

We revised sections 3210.14 and 3210.15 as discussed above to correct an error in the proposed rule and to make the wording consistent.

Final sections 3210.16 and 3210.17, relating to drainage of geothermal resources, are substantively unchanged from previous sections 3210.22 and 3210.23. We received no comments on these sections and have adopted them as proposed.

Subpart 3211—Filing and Processing Fees, Rent, Direct Use Fees, and Royalties

Final subpart 3211 incorporates changes made by the Energy Policy Act to lease rental rates, royalty rates, and minimum royalty requirements.

Final section 3211.10 addresses processing and filing fees. Paragraph (b) references existing 43 CFR 3000.12 for the amount of the fees. The BLM expects to update section 3000.12 from time to time to reflect actual costs associated with these activities. We received no comments on this section and have adopted it as proposed.

Final section 3211.11 establishes rental rates for geothermal leases. The new lease rental rates are taken directly from 30 U.S.C. 1004(a)(3)(A) and (B). The Energy Policy Act significantly changed rental rates from those in the previous regulations. The rental for new noncompetitive leases (that is, leases issued on or after August 8, 2005, other than leases issued in response to applications that were pending on that date for which no election is made under section 3200.8(b)(1)) remains at \$1 per acre per year for the first 10 years; the rental for new competitive leases is \$2 per acre the first year and increases from \$2 per acre per year to \$3 per acre per year from years 2 through 10. Starting with the eleventh year, the rental rate for all new leases increases to \$5 per acre per year. Final section 3211.11(e) addresses fractional mineral interests in the same way as did previous section 3211.13.

Although we received no comments on proposed section 3211.11, we restructured it and added language to

clarify that for leases issued before August 8, 2005, for which no election is made under section 3200.7(a)(2), and for leases issued in response to applications pending on August 8, 2005, for which no election is made under section 3200.8(b)(1), the rental rate is the rate prescribed in the regulations in effect on August 8, 2005 (43 CFR 3211.10 (2004)). This is not a substantive change from the proposal, but is added as a convenience for persons trying to understand the rental structure for existing and new leases.

Final section 3211.12 is virtually the same as previous section 3211.12. The Energy Policy Act did not make any changes regarding to whom the rent is paid for the first year and subsequent years. We received no comments on this section and have adopted it as proposed.

Final section 3211.13 addresses when rental payments are due and replaces previous section 3211.11. The rule provides that rent is always due in advance. The MMS must receive annual rental payments for the upcoming year by the anniversary date of each lease year. If less than a full year remains on a lease, a lessee must still pay a full year's rent by the anniversary date of the lease. The payment of rent in advance is required by 30 U.S.C. 1004(a)(3). As this was also required in the original Geothermal Steam Act of 1970, there are no substantial changes to this portion of the provision. The reference in previous section 3211.11 to the automatic termination of leases by operation of law is not included in the new section because the statute has changed in this regard. Lease termination for non-payment of rental is addressed in final section 3213.14 of this rule and is discussed later in this preamble and in the preamble to the proposed rule at 71 FR 41557-41558.

One commenter requested a clarification of how rent will be credited towards royalty, as provided in section 3211.15, in light of the requirement of section 3211.13 that rent is due in advance. The commenter is referred to the MMS rule at 43 CFR 218.303 for this clarification. In addition to the explanation in the MMS rule text, the preamble to the proposed MMS rule provided a thorough explanation of the process, including examples (71 FR 41522). We did not change the rule in response to this comment.

Final section 3211.14 addresses whether a lessee must always pay rent on a lease. Although we received no comments on proposed section 3211.14, we restructured it and added language to clarify that only leases issued on or after August 8, 2005 (other than leases

issued in response to applications that were pending on that date for which no election is made under section 3200.8(b)(1)), and leases issued before August 8, 2005, for which an election is made under section 3200.7(a)(2), will always pay rental. As explained in the preamble to the proposed rule (71 FR 41550), the Energy Policy Act does not provide for payment of royalties in lieu of rent, or for minimum royalties during production. It provides that lessees will pay rental every year, and allows a credit of rents against royalties, as provided in this rule at section 3211.15.

The language we added to section 3211.14 explains that leases issued before August 8, 2005, for which no election is made under section 3200.7(a)(2), and leases issued in response to applications pending on that date for which no election is made under section 3200.8(b)(1), continue to be subject to the rental and minimum royalty provisions of the previous regulations (43 CFR subpart 3211 (2004)). While final sections 3200.7(a) and 3200.8(a) already provide that such leases are subject to the previous regulations in this regard, for clarity we included specific information in subpart 3211 as well. The previous regulations provided that the lessee pays rent until the lease achieves production in commercial quantities, or until lands in the lease are within the participating area of a unit agreement or cooperative plan, at which time the lessee pays royalties for lands within the participating area and rent for lands outside the participating area (see 43 CFR 3211.14, 3211.15, and 3211.17 (2004)).

Final section 3211.15, together with applicable MMS regulations, implement 30 U.S.C. 1004(e), which requires that the advance rental payments on new leases be credited towards royalty due on production in that lease year. The rule provides that a lessee may credit rental towards royalty under the MMS proposed regulations at 30 CFR 218.303. Under the statute the rental credit against royalty is allowed only for rent paid before the first day of the year for which the rental is owed. In other words, no credit is allowable for rent paid after the lease anniversary date, even if the lease is not terminated. Thus, although lessees are allowed to maintain their leases by paying rent plus a late fee within 45 days of the lease anniversary date, they may not credit such late rental payments against royalties.

Also, the Energy Policy Act does not provide for rental paid in excess of royalty to be carried over from one lease year as a credit against royalty for production in another year. Because

rental is always due on a lease, the rental payment effectively becomes the equivalent of a minimum royalty payment that was required prior to the Energy Policy Act.

Final section 3211.16 provides that rental paid cannot be credited against fees owed for direct use of geothermal resources. This provision also appears in the final MMS regulations at 30 CFR 218.304. This section is based on the Energy Policy Act, which provides at 30 U.S.C. 1004(e) that annual rentals "shall be credited to the amount of royalty that is required to be paid under the lease for that year." Please note the use of the word "royalty" in this provision of the statute.

Two commenters objected to the BLM's interpretation of 30 U.S.C. 1004(e) as providing for crediting rentals only against royalties and not against direct use fees. These commenters asserted that the statutory language was discretionary, that the BLM had chosen an unnecessarily strict and "nit picking" interpretation, and that the BLM's interpretation runs counter to the Energy Policy Act's goal of encouraging direct use development.

We did not change the proposed rule in response to these comments because we do not believe that Congress intended the word "royalty" at 30 U.S.C. 1004(e) to include direct use fees. As explained in the preamble to the proposed rule (71 FR 41551), a clear distinction exists in the statute between "royalties" and "fees." Congress provided at 30 U.S.C. 1004(b) that fees are "in lieu of royalties," thus differentiating the two. Direct use fee payments are different from royalty payments, and are therefore not included in the statutory provision for rental credits.

Final section 3211.17 establishes royalty rates on geothermal resources that are used in the commercial generation of electricity from or attributable to a geothermal lease. The Energy Policy Act (30 U.S.C. 1004(a)(1)(A) and (B)) provides for a royalty on the sale of electricity produced from geothermal resources ranging from 1 percent to 2.5 percent of gross proceeds for the first 10 years of production, and from 2 percent to 5 percent of gross proceeds thereafter (the MMS defines "gross proceeds" in 30 CFR part 206, subpart H.). The BLM interprets this section of the Energy Policy Act to apply to situations in which the lessee or its affiliate sells electricity generated by use of geothermal resources produced from or attributed to the lease. Although the statute establishes an allowable royalty range, actual royalty rates are to be

established by regulation (30 U.S.C. 1004(c)).

The royalty rates established under final sections 3211.17(a)(1)(i) and (ii), for geothermal resources that a lessee or its affiliate uses to generate electricity that it sells, are the same as the proposed rates: (1) 1.75 percent for the first 10 years of production from a lease; and (2) 3.5 percent for production in subsequent years. Final section 3211.17(a)(1)(iii) reiterates the language in the Energy Policy Act that the percentages in paragraphs (a)(1)(i) and (a)(1)(ii) must be applied to the gross proceeds from the sale of electricity, and specifies that gross proceeds must be determined in accordance with applicable MMS regulations.

Final section 3211.17(a) applies to leases issued on or after August 8, 2005, except for leases issued in response to lease applications that were pending on that date for which the lessee does not make an election under section 3200.8(b) to be subject to these new regulations. In this final rule, we changed the wording of proposed section 3211.17(a) to clarify that the election such a lessee may make is to be subject to all of the new rules; if no election is made, the lessee will be subject to the regulations in effect on August 8, 2005, with regard to the provisions specified at section 3200.8(a), including royalties.

The methodology for establishing royalty prescribed in 30 U.S.C. 1004(a)(1)(A) and (B) represents a significant change from the way royalty was previously determined. For leases issued before August 8, 2005, that do not convert royalty terms under section 3212.25, and for leases issued in response to applications that were pending on August 8, 2005, that do not make an election under section 3200.8(b)(1), a royalty rate in the range from 10 percent to 15 percent of the value of the geothermal resource will apply. Historically, arm's-length sales of geothermal resources from a lessee to a third party utility were common and the arm's-length transaction established the value of the resource. For most situations where there was no sale of geothermal resources (as is the case for virtually all existing leases), the value of the geothermal resource was artificially derived using the "netback" method developed by the MMS, a method that in practice has often resulted in almost no royalty being paid and has been cumbersome for both the MMS and the lessees. For example, the Geysers Geothermal Field lessees informed the MMS that the netback method was unworkable, and negotiated with the

MMS to adopt a simpler "percent of gross proceeds" method instead.

The Energy Policy Act simplifies the way in which royalty is valued by basing royalties on a percentage of gross proceeds derived from the sale of electricity. Section 1004(c) of the Act requires that in establishing royalty rates the Secretary must seek to provide a simplified administrative system, encourage new development, and achieve revenue neutrality for a period of 10 years when compared to the valuation methods in the previous regulations. The BLM has interpreted the revenue-neutrality requirement to require the calculation of a royalty rate that achieves program-wide revenue neutrality for the first 10 years of production when compared to royalty revenues that would have been received during those 10 years under the previous netback system. Under this interpretation, this revenue-neutrality requirement does not apply to the royalty rate after the first 10 years of production.

In establishing the proposed royalty rates, the BLM relied on the rates recommended by the MMS RPC Subcommittee. The RPC, established under the Federal Advisory Committee Act, makes recommendations on issues related to royalties on Federal resources and consists of representatives from Federal and state governments, industry, and the public at large. The Subcommittee was formed to address the MMS's geothermal royalty valuation regulations in an effort to simplify the language and reduce administrative costs to the geothermal industry. The Subcommittee was composed of members from one industry association, several geothermal producers, and two of the major states affected. The MMS and BLM representatives served as technical advisors to the Subcommittee.

The Subcommittee asked the MMS to calculate the equivalent gross proceeds rates for all geothermal plants paying royalties under the netback method in 2003 and 2004. The MMS determined that the equivalent gross proceeds rate was 3.64 percent in 2003, and 3.94 percent in 2004, with an average of 3.79 percent for the 2 years (Royalty Policy Committee, Geothermal Valuation Subcommittee Report, May 2005 ("RPC Report")), page 10).

The Subcommittee recommended rates of 1.75 percent for the first 10 years of production, and 3.5 percent thereafter. The Subcommittee reported that, "[u]nder the netback method, historically during the beginning years of an electrical generation project (between 1–10 years), lessees pay a very low percentage of the gross proceeds

from the sale of electricity and in later years of the project (after 10 years), the percentage increases * * *. The recommended proposal [1.75 percent and 3.5 percent] * * * attempts to replicate this historical trend under the netback method over the long term." (RPC Report, page 10). The report stated that "[f]or new leases, the proposal is expected to increase revenues over the next 10 years and may be revenue neutral over the long run." (RPC Report, page 11). However, it went on to state that there was "[r]isk of a negative revenue impact for the government if electricity prices are higher and/or costs are lower than anticipated; and risk of negative impact on companies if prices are lower and/or costs higher than anticipated." (RPC Report, page 12).

The BLM retained a contractor, Advanced Resources International, Inc. (ARI), to assess whether the proposed 1.75 percent royalty rate was consistent with the statutory requirement for revenue neutrality over a 10-year period. ARI recently completed for the BLM a technical memorandum entitled "Geothermal Development on Federal Lands: Projection of Royalty Impacts Resulting from the Energy Policy Act of 2005" (ARI Report). The ARI Report is publicly available and has been included in the Administrative Record for this rulemaking. A summary of the ARI Report follows, much of it derived from the ARI Report Executive Summary.

The ARI developed an analysis to compare the Energy Policy Act gross proceeds royalty rate method with the netback method to determine under what conditions the two would be revenue neutral. Focusing on the western states of California, Nevada, Utah, and Idaho, the analysis considered technology (binary and flash plants), potential areas of development, electricity prices and markets, plant sizes relative to the technology used, and financial parameters such as capital costs, operating and maintenance costs, and discount rate. The analysis assumed a 30-year project life. "Type" projects were developed based on these parameters. To obtain a programmatic view, the various states were weighted based on where development might occur (California was divided into two domains). ARI calibrated (checked) the analysis using historical data.

The ARI modeled nine programmatic cases for analysis to capture a spectrum of potential development on BLM lands. The differences between the various cases derive from adjusting those parameters to which the model was most sensitive, *i.e.*, the relative amount of binary plant development (as

compared to the total of binary plus flash plant development), future electricity prices, and capital costs. Scenarios modeled include “base,” “low,” “intermediate,” “targeted” (to achieve a 1.75 percent royalty rate during the first 10 years of production) and “high” cases. For each case, the model derived a revenue-neutral royalty rate for the first 10 years of production (or, for the targeted cases, adjusted appropriate parameters that would result in the targeted rate), as well as an accompanying revenue-neutral royalty rate for production after the first 10 years. All parameters used in the modeling were based on empirical data. The ARI Report did not recommend any particular set of royalty rates, but concluded instead that “[i]t is reasonable to expect that all scenarios modeled in the cases could be achievable (including targeted scenarios) depending upon geothermal resources, future market conditions and technology” (ARI Report, page 1).

The ARI Report base case assumes: (1) 65 percent of future geothermal development will use binary technology; (2) future electricity prices will remain flat (incorporating price supports in the applicable geographic domains under the California Renewable Energy Program); and (3) capital expenditures for plant construction (CAPEX) will be an average of data published by the Geothermal Energy Association (explained in ARI report, section 2.2.7, page 7). The ARI Report includes an explanation of all the parameters the model uses.

The ARI also performed an historical analysis of a sample of existing geothermal leases paying royalties under the netback system to determine the equivalent royalty they paid during the first 10 years of their production (see the ARI Report, Section 2.3 on p. 8). The BLM and the MMS supplied electricity sales and royalty revenue data to the contractor for nine non-Standard Offer 4 contracts for Nevada. (Standard Offer 4 contracts had a unique price structure, and would not be applicable to future geothermal leases.) This sample was based on the data that was readily available to the BLM. ARI examined this data for the first 10 years of the project lives to determine the actual effective netback royalty rate. The binary plants showed an effective royalty rate of 0.61 percent; for flash technology, the effective royalty rate was 3.52 percent. For this portfolio of binary and flash technologies, the effective royalty rate for the first 10 years of project lives was 1.11 percent as a weighted average. ARI compared these historical percentages to the percentages derived when the same

data was run in its model and found that the percentages were very close.

After thorough consideration of both the RPC Report and the ARI Report, the BLM determined that its proposed royalty rate of 1.75% for the first 10 years of production meets the statutory requirement for revenue neutrality. Both the RPC Report and the ARI Report support the conclusion that estimates of revenue neutrality are extremely sensitive to potential changes in electricity prices and capital expenditures, and the ARI Report indicated that the estimates are also very sensitive to the relative mix of geothermal technology that will be employed in the future. None of these variables can be predicted with absolute accuracy. Based on the professional judgment of the BLM geothermal program staff, the model assumed that binary technology would account for no less than 50% of new geothermal plants; the assumed percentage of binary plants in the cases analyzed in the model ranged from 50% to 65%. Regarding capital costs, while the model's base case based its capital expenditures estimate on an average of published data, the data showed that actual capital expenditures varied from that average by up to a third or more (ARI Report, page 16 n.17). The assumed capital expenditures in the cases analyzed in the model deviated from the base case by no more than 12%. The ARI Report cited to a recent article on a geothermal operation in Alaska that provides some evidence that geothermal capital costs could decline if operators begin substituting mass-produced parts (ARI Report, page 16 n. 24). Electricity prices, too, cannot be predicted with accuracy, especially considering the increasing prevalence of government-mandated use of renewable energy sources such as geothermal energy. As noted, California already has a Renewable Energy Program that contains price support provisions (which the model took into account), and Nevada is considering draft legislation that could enhance prices for renewable energy in the future.

The ARI Report demonstrates the impact of potential changes in any of these variables. For example, Targeted Case A (ARI Report, page 1, Table, column 5), changed predictions for two of the three parameters just discussed: It changed the binary plant proportion from 65% to 50%, and lowered the capital expenditures prediction by 8%. It used the same electricity price prediction as the base case. If future geothermal production met those parameters, the model shows that the revenue-neutral royalty rate for the first

10 years of production would be 1.76% and the revenue-neutral rate for years 11–30 would be 3.57%. These rates are nearly identical to the rates recommended by the RPC and proposed by the BLM in its proposed rule.

The modeling exercise makes clear that a revenue-neutral royalty rate is not simply one number that can be determined with mathematical certainty, but instead could be within a range of rates, depending on reasonable assumptions as to what the future holds. The ARI Report shows that other changes in the parameters, corresponding to other potential scenarios for future development, result in different revenue-neutral royalty rates, some higher and some lower than the BLM's proposed rates. The four targeted scenarios show that the 1.75% royalty rate for the first 10 years of production could result in revenue-neutrality in a number of different future scenarios. As noted above, all parameter variations used in the model were based on empirical data, and the ARI report concluded that “[i]t is reasonable to expect that all scenarios modeled in the cases could be achievable (including targeted scenarios) depending upon geothermal resources, future market conditions and technology” (ARI Report, page 1).

The 1.75% rate is clearly within the reasonable range of rates that would meet the statutory mandate to seek revenue neutrality for the first 10 years of production. While the BLM's interpretation of the statute is that there is no mandate of revenue-neutrality after the 10th year, the 3.5% rate for subsequent years is, nevertheless, also within the reasonable range of revenue-neutral rates. These rates have the additional advantage of being recommended by the RPC Subcommittee, which carefully gathered input from many interested parties. Consequently, the BLM believes that these rates, to which representatives of the geothermal industry agreed, will also work to encourage geothermal development.

As noted above, the royalty rate required by the Energy Policy Act, at 30 U.S.C. 1004(a)(1)(A), requires a royalty of 1 percent to 2.5 percent of gross proceeds from the sale of electricity “during the first 10 years of production under the lease.” The BLM interprets this language to mean that the 10-year period to which the 1.75 percent royalty rate applies starts during the month for which commercial operation is first achieved, and continues for 120 consecutive months, unless a suspension of operations and

production is granted under subpart 3212.

Final section 3211.17(a)(2) sets the royalty rate for the arm's-length sale of resources at 10 percent of gross proceeds from that sale. The Energy Policy Act is silent regarding the situation where the lessee sells the resource to an unaffiliated purchaser that produces electricity, rather than selling the electricity itself. To address these situations, the BLM is using the recommendations found in the RPC Report (page 9) which recommended that the lessee "pay a royalty on the geothermal resources sold under arm's-length conditions to a plant that generates electricity based on a royalty rate in the lease multiplied by the gross proceeds the lessee derives from the sale of the geothermal resources." The Geothermal Steam Act, prior to the amendments of the Energy Policy Act, required a royalty rate of 10 to 15 percent, and current BLM practice is to issue all leases with a royalty rate of 10 percent. Section 2 of the standard lease terms listed on the BLM Form 3200-24, "Offer to Lease and Lease for Geothermal Resources," sets the royalty rate at 10 percent. The 10 percent royalty rate is thus the current practice, and the Subcommittee Report concluded that it would cause "[n]o change in royalty valuation."

While the 10 percent royalty rate in the case of an arm's-length sale of resources for the commercial generation of electricity may appear to require higher payments by a lessee than the 1.75 and 3.5 percent that are required for "no-sales" situations in section 3211.17(a)(1), the actual amount of royalty paid will be roughly equivalent. This is because the 10 percent rate applies to the gross proceeds from the sale of the geothermal resource, whereas the 1.75 and 3.5 percent rates for electrical generation apply to the gross proceeds from the sale of electricity. The electricity generated represents a refined product with a much higher value than the heat resource entering a power plant. Therefore, 1.75 and 3.5 percent of a high-value product will be roughly equivalent to 10 percent of a lower value product. Because the proposed 10 percent royalty on the gross proceeds from an arm's-length sale of resource required by section 3211.17(a)(2) is the same as the royalty that would be required under existing lease terms, the provisions of this paragraph are revenue neutral.

We received no comments on section 3211.17(a) and, except for the clarification change discussed above, have adopted it as proposed.

Final section 3211.17(b) establishes the royalty rates for leases issued before August 8, 2005, where the lessee chooses to convert the royalty terms of the lease. As discussed earlier, the royalty rates will continue under the existing terms of such leases unless a lessee converts to the royalty terms of the new statute under final section 3212.25. Eligibility for and procedures for such conversions are discussed later in this preamble in the discussion of subpart 3212.

In this final rule we revised section 3211.17(b). For clarity, we separated proposed section 3211.17(b)(1) into two parts. Final section 3211.17(b)(1) addresses leases that have produced geothermal resources for the commercial generation of electricity, or to which geothermal resource production for the commercial generation of electricity has been attributed. Final section 3211.17(b)(2) addresses leases that have not produced geothermal resources, and to which geothermal resource production for the commercial generation of electricity has not been attributed. We replaced the word "previously" with the phrase "prior to submitting a request to modify the royalty rate terms of the lease under section 3212.26." We moved the information that was contained in proposed section 3211.17(b)(2), regarding application of MMS rules, to final section 3211.17(b)(1)(i) and (ii). These paragraphs are further discussed below.

Conversion of the royalty terms of existing geothermal leases is governed by Section 224(e) of the Energy Policy Act. That section does not make the royalty rate ranges in 30 U.S.C. 1004(a)(1) applicable to existing leases that convert to new royalty terms. Instead, the royalty conversion language in Section 224(e)(1)(B) of the Energy Policy Act requires that except for leases where the geothermal resource is used for a direct use to which a fee schedule applies, royalties are to be computed on a percentage of the gross proceeds from the sale of electricity. Under the statute, the royalty rate is to be set at the percent of gross proceeds to "yield total royalty payments equivalent to payments that would have been received for comparable production under the royalty rate in effect for the lease before the date of enactment * * *."

In the final rule, we divided converting leases that have already produced geothermal resources for the commercial generation of electricity into two categories under section 3211.17(b)(1). Under section 3211.17(b)(1)(i), where a lessee or its affiliate uses geothermal resources to

generate and sell electricity, the BLM will establish a royalty rate by determining a percentage of gross proceeds from the sale of electricity that it expects will result in the same total amount of royalty to be paid over the life of the lease as would be paid under the current valuation method. The determination of such a royalty rate will be done on a case-by-case basis and will be based on the information submitted by the applicant. We added the words "over the life of the lease" to the regulatory text to clarify that the statutory phrase "total royalty payments" means total payments during the existence of the lease, and not just during a particular period of production.

In this final rule, we added the category covered by section 3211.17(b)(1)(ii), where a lessee or its affiliate sells geothermal resources at arm's length to a purchaser who uses those resources to generate electricity. We provided that in such a case, the royalty rate is the rate specified in the lease instrument. This is a change from the proposed rule, in which we proposed to establish a revenue neutral royalty rate for this category of leases by applying to the gross proceeds of the purchaser's eventual sale of electricity a rate that would result in the same total amount of royalty as would be paid under the current valuation method. In reviewing MMS's draft final rule, it was discovered that the MMS rule would apply the rate that BLM sets to the gross proceeds from the lessee's sale of the resource rather than to the gross proceeds from the purchaser's sale of electricity.

As discussed above, for converting leases, section 224(e)(1)(B) of the Energy Policy Act requires that royalties be computed on a percentage of the gross proceeds from the sale of electricity, to achieve over the life of the lease "total royalty payments equivalent to payments that would have been received for comparable production under the royalty rate in effect for the lease" before enactment of the amendments. Under the previous BLM and MMS rules, arm's-length sales of geothermal resources from a lessee to a third party utility established the value of the resource. There was no need to artificially derive a value for the geothermal resource through the "netback" method. Thus, any successful method of applying a royalty rate to the gross proceeds of electricity generated by the purchaser in an attempt to achieve royalty payments equivalent to existing payments for arm's-length resource sales would result in the same outcome as applying the rate in the

existing lease to the gross proceeds from the sale of the resource. Because the existing method achieves the equivalent royalty payments mandated by the statute, we determined that for the sale of the geothermal resource under arm's-length contracts this method complies with the statute.

A royalty rate modification under section 3212.25 will thus have no immediate effect on an existing lessee that only sells geothermal resources to commercial generators of electricity. However, if such a lessee elects to be subject to all of the new regulations under section 3200.7(a)(2), it must obtain a royalty modification, which requires that the rate be addressed in section 3211.17.

In light of this revision of the final rule clarifying that MMS will apply the royalty rate for converting leases to the gross proceeds from the sale of the resource and not to the gross proceeds of electricity generated by the purchaser, it is no longer necessary that a request to modify royalty terms under section 3212.26 include documentation that a lessee selling the resource has access to the purchaser's gross proceeds derived from the sale of electricity. We therefore did not include that provision in final section 3212.26(a)(2).

Final section 3211.17(b)(2) establishes the royalty rates for leases that elect to convert to the royalty terms of the Energy Policy Act, but have never produced geothermal resources. In these cases, because the BLM will have no data on which it could base a determination of a revenue-neutral royalty rate, it will assign the royalty rates in final section 3211.17(a)(1) (1.75 percent for the first 10 years and 3.5 percent thereafter) or 3211.17(a)(2) (10 percent of the gross proceeds from the sale of the resource), whichever is applicable. In this final rule we added the reference to section 3211.17(a)(2) to account for arm's length sales of the resource. Because the royalty rates in section 3211.17(a) were derived to be revenue neutral, the BLM has concluded that this meets the intent of section 224(e)(1)(B) of the Energy Policy Act.

One commenter stated that in proposed section 3211.17, "BLM sets the royalty rate for leases that previously did not produce geothermal resources for commercial generation of electricity from Class II and III leases at 1.75 percent" and objected that no explanation was offered as to why the 1.75 percent rate would result in the same level of royalty revenue.

First, we want to clarify that the proposed rule at section 3211.17(b)(1) and the final rule at section 3211.17(b)(1)(ii) sets the royalty rates for

leases issued before August 8, 2005, that elect to convert to the royalty terms of the Energy Policy Act, but have never produced geothermal resources for the commercial generation of electricity, not at 1.75% for the life of the lease, but at 1.75% for the first 10 years of production, and 3.5% thereafter, as provided at sections 3211.17(a)(1)(i) and (ii). These are the same royalty rates that will be applied to new leases.

In establishing a process for setting royalty rates for existing leases that elect to convert to the royalty terms of the Energy Policy Act, the BLM distinguished between existing leases that have produced and those that have not produced. Under final section 3211.17(b)(1)(i), for existing leases that have a history of production, the BLM will determine on a case-by-case basis a royalty rate that will meet the statutory requirements. Under final section 3211.17(b)(1)(2), for existing leases that have never produced, the BLM will apply the same royalty rates that it will apply to new leases. The reason for this distinction is that those leases that have produced geothermal resources for the commercial generation of electricity, and which have been subject to royalty payments under the netback method, can provide enough data to perform a case-specific revenue analysis. From this analysis, a new royalty rate can be established for that case that will yield an equivalent amount of royalty. In contrast, for leases that have never produced electricity and that have never paid royalty under the netback method, there are no data available for a revenue analysis. Actual data are especially critical for royalty calculations under the netback method, because the calculation is highly dependent on the type of facility that is built and requires very specific input data, such as operation and maintenance costs, capital investment, bond yield rates, electricity sales price, and transmission line costs. The BLM concluded that equivalent royalty calculations for leases that have never produced would be unacceptably speculative. The BLM believes that the royalty rates applicable to new leases, established in section 3211.17(a)(1), which are intended to be revenue neutral on a programmatic basis, are a reasonable revenue-neutral surrogate and should apply in this situation. We did not change the rule in response to this comment.

The same commenter said that "the proposed rules imply that the BLM prescribed rates are not applicable to a Class I lease that previously produced geothermal resources which is being converted to a Class II or Class III lease" and suggested that the BLM add specific

language to section 3211.17 to ensure that the BLM's rates are still applicable.

The commenter appears to be confused regarding how the BLM will determine royalty rates for leases issued before August 8, 2005, that have produced geothermal resources and elect to convert to the royalty terms of the Energy Policy Act. The statute does not allow the BLM simply to apply to such leases the royalty rates that will apply to new leases. Section 224(e) of the Energy Policy Act provides an entirely different process for existing lessees that wish to convert to the new royalty terms than the process provided for new leases. Section 224(e)(1)(B) requires "that royalties be computed on a percentage of the gross proceeds from the sale of electricity, at a royalty rate that is expected to yield total royalty payments equivalent to payments that would have been received for comparable production under the royalty rate in effect for the lease before" August 8, 2005 (i.e., under the "netback" system). To implement this requirement, the BLM proposed at section 3211.17(b)(1) that it would seek to establish a rate to yield total royalty payments equivalent to those that would have been paid for that lease under the previous system, by which it meant it would determine the rates on a case-by-case basis. The BLM decided that a case-by-case system of determining rates was necessary because equivalent rates under the netback system are highly individualistic and must take into account the specific situation of each lease. In response to this comment, we added language to section 3211.17(b)(1)(i) to clarify that royalty rates for converting leases will be determined on a case-by-case basis.

One commenter stated that the lack of a cap on the royalty rates in section 3211.17(b) was inconsistent with the Energy Policy Act, "which set ranges for royalties (section 224(a)(1)) and which govern all federal leases including those being readjusted." The commenter also stated that a cap would be consistent with the recommendations of the RPC.

We disagree that the statute provides for a cap in determining modified royalty rates under Section 224 of the Energy Policy Act. Section 224(a)(1), cited by the commenter, which provides both a floor and a cap for royalty rates, amends Section 5 of the Geothermal Steam Act, at 30 U.S.C. 1004. Section 224(a)(2), which also amends 30 U.S.C. 1004, provides that in establishing royalty rates under that section, the Secretary must seek, among other things, to achieve a revenue-neutral royalty rate over a 10-year period. Thus,

the floor and cap do apply to the establishment of revenue-neutral rates for new leases under 30 U.S.C. 1004. However, Section 224(e)(1)(B) of the Act, which as discussed above, mandates a specific approach to modifying royalty rates for existing leases, does not amend 30 U.S.C. 1004; it is, in fact, a separate uncodified amendment. Therefore, the establishment of royalty rates under Section 224(e)(1)(B) is not subject to the royalty rate range provided at Section 224(a)(1) and codified at 30 U.S.C. 1004. We note, moreover, that if the cap at 30 U.S.C. 1004 did apply to modified existing leases, the floor would also apply. Because of the structure of the previous netback system, we believe it is likely that many existing leases for which a modified royalty rate is determined under Section 224(e)(1)(B) may have an equivalent royalty rate under the 1% floor. Thus it is likely that the lack of a specific range could work to the advantage of lessees.

Final section 3211.17(c) addresses royalty rates for existing leases and leases issued in response to applications pending on August 8, 2005, that choose not to convert to the royalty terms of the Energy Policy Act. The royalty rates for these leases have already been established in existing lease instruments. This paragraph does not establish new requirements, but is included for completeness and convenience of the reader. In this final rule, we changed the wording of proposed section 3211.17(c) to clarify that the election that may be made by lessees of leases issued in response to applications pending on August 8, 2005, is to be subject to all of the new rules. If no election is made, the lessee will be subject to the regulations in effect on August 8, 2005, with regard to the provisions specified at section 3200.8(a), including royalties. Except for the changes discussed above, we adopted sections 3211.17(b) and (c) as proposed.

Final section 3211.18 implements 30 U.S.C. 1004(b) and Section 224(e)(1)(A) of the Energy Policy Act and addresses the royalty rates for the direct use of production from or attributable to a geothermal lease.

Final section 3211.18(a) establishes rates for leases issued after August 8, 2005 (other than leases issued in response to applications that were pending on that date for which the lessee does not make an election under section 3200.8(b)), and for existing leases whose royalty terms are modified under section 3212.25. We revised the language of this section to clarify that the election that may be made by the

lessee of a lease issued in response to an application that was pending on August 8, 2005, is to be subject to the new regulations. If no election is made, the lessee will be subject to the regulations in effect on August 8, 2005, with regard to the provisions specified at section 3200.8(a), including royalties.

Final section 3211.18(a)(1) provides that a royalty rate does not apply to the direct use of geothermal resource production that a lessee or its affiliate does not sell. Instead, a lessee will pay direct use fees according to a schedule published by the MMS (see the MMS regulations at 30 CFR 206.356 for the schedule). The direct use fee schedule applies to traditional direct uses such as greenhouse heating, space heating, and industrial heating applications, as well as to non-commercial generation of electricity as described under final section 3211.18(c), below.

Under final section 3211.18(a)(2), a lessee who produces a geothermal resource and sells it at arm's length to a purchaser who uses it for direct use purposes is required to pay a royalty of 10 percent, which will be applied to the gross proceeds derived from the arm's-length sale under applicable MMS regulations at 30 CFR part 206, subpart H. Section 3211.18(a)(2) maintains the royalty rate of 10 percent that was found in previous 43 CFR 3211.10.

The Energy Policy Act does not address situations where a lessee sells geothermal resources in an arm's-length sale to a purchaser who utilizes such resources for direct use purposes. Under 30 U.S.C. 1004(b)(1)(B), the required schedule of fees applies only to those situations where the lessee "does not sell" geothermal resources. Because the royalty provisions in section 1004(a)(1) of the Act specifically refer to electrical generation, they do not cover sale for direct use, either. To the extent that a gap exists in the statute, we have filled that gap with respect to new leases under the rulemaking authority of 30 U.S.C. 1023.

Similarly, a gap exists under the royalty conversion provisions of Section 224(e)(1) of the Energy Policy Act. Section 224(e)(1)(A) establishes the royalties for converted leases that meet the requirements of 30 U.S.C. 1004(b), i.e., leases whose geothermal resources are used for direct use purposes where no sale of the geothermal resources occurs. Section 224(e)(1)(B) of the Energy Policy Act establishes the royalties for converted leases that involve the sale of electricity (royalties are to be based on a percentage of gross proceeds from the sale of electricity). Neither subparagraph establishes the royalty rate for converted leases where

a lessee sells geothermal resources in an arm's-length sale to a purchaser who utilizes such resources for direct use purposes. Thus, under final section 3211.18(a)(2), we filled that gap with respect to converted leases under the rulemaking authority of 30 U.S.C. 1023. The rate BLM has established under this final rule is the same as the rate for such sales under the previous regulations and is the same as for arm's length sales of geothermal resources for electrical generation under these regulations.

The Energy Policy Act, at 30 U.S.C. 1004(b)(3), requires that if a state, tribal, or local government is the lessee and uses geothermal resources without sale and for public purposes other than commercial generation of electricity, the Secretary must charge only a nominal fee for use of the resource. Final section 3211.18(a)(3) addresses this provision of the statute by referencing the MMS rules that implement this provision (see 30 CFR 206.366). The fee that the MMS sets must be paid in addition to the rental due on the lease.

Final section 3211.18(b) clarifies that for leases issued before August 8, 2005, that do not convert the royalty terms of their lease, and for leases issued in response to applications pending on August 8, 2005, where the lessee does not make an election under section 3200.8(b), the royalty rate is established in the lease form and those leases will continue to be subject to existing royalty rates. This paragraph does not establish new requirements, but is included for completeness and convenience of the reader. We amended the language of this section to clarify that the election that may be made by the lessee of a lease issued in response to an application that was pending on August 8, 2005, is to be subject to the new regulations. If no election is made, the lessee will be subject to the regulations in effect on August 8, 2005, with regard to the provisions specified at section 3200.8(a), including royalties.

Final section 3211.18(c) clarifies the BLM's interpretation of the meaning of non-commercial generation of electricity. If a lessee generates electricity that is used solely for the operation of a direct use facility and does not sell the electricity, this is considered a direct use subject to the direct use fee schedule.

The Energy Policy Act, at 30 U.S.C. 1004(b)(1), restricts the use of the direct use fee schedule to situations where the resource is not sold and is used "for a purpose other than the commercial generation of electricity." As discussed earlier, the statute requires a royalty based on a percentage of gross proceeds for commercial generation of electricity

(30 U.S.C. 1004(a)(1)(A) and (B)). However, the statute does not expressly address non-commercial generation of electricity, such as electricity generated to run fans, pumps, lights, automatic valves, and instrumentation in direct use facilities. If electricity is not sold, there are no gross proceeds on which to base a royalty. The BLM does not believe the intent of the Energy Policy Act is to allow the use of Federal geothermal resources to generate non-commercial electricity without compensation. Therefore, as a permissible interpretation of the statute, the BLM construes the non-commercial generation of electricity to be a direct use of the resource subject to the direct use fee schedule.

One commenter objected to the imposition of direct use fees under section 3211.18 in situations where the geothermal resource was cascaded from an electrical generation project that already pays royalty.

The BLM rejects the comment. The Energy Policy Act, at 30 U.S.C. 1004(b)(1), requires a direct use fee “for geothermal resources, that a lessee or its affiliate—(A) uses for a purpose other than the commercial generation of electricity; and (B) does not sell.” The definition of geothermal resources includes heat or other associated energy found in geothermal formations. In applications where hot water or steam is first sent through an electrical generation facility and then into a direct use facility, the heat entering the direct use facility is still considered a geothermal resource. In other words, the heat entering the direct use facility is “left over” heat from the geothermal formation that was not used by the electrical generation facility. It thus meets the definition of a geothermal resource and is used for a purpose other than the commercial generation of electricity. Therefore, if it is not sold, it is subject to direct use fees. Under the previous regulations as well (see previous section 3211.16), the BLM assessed royalties on all uses of heat energy, including those that could be characterized as “cascaded.” We did not change the rule in response to this comment.

Final section 3211.19 addresses the royalty rate on byproducts derived from geothermal resources produced from or attributable to a geothermal lease. We restructured this section in the final rule to differentiate between leases that will be governed by these final regulations and those that will remain subject in part to the previous regulations. Final section 3211.19(a)(1) implements 30 U.S.C. 1004(a)(2) by setting the proposed royalty rate on byproducts

listed in the first section of the Mineral Leasing Act (MLA), 30 U.S.C. 181, to be the same as the royalty rates in the MLA and implementing regulations, for geothermal leases subject to these final regulations. We deleted the list of byproducts included as examples in the proposed rule. The list mistakenly included oil and gas, which are excluded under the definition of “byproducts” at final section 3200.1. All minerals listed at 30 U.S.C. 181 that are not excluded under the definition of “byproducts” and are physically possible to produce as geothermal byproducts are covered by this subsection. We also deleted the example in paragraph (a)(1) of this section because it is not necessary.

In the proposed rule at section 3211.19(b), we proposed maintaining the previous royalty rate of 5% on byproducts that are not listed in the MLA, such as gold, silver, zinc, etc. The rationale for this was that there was an apparent gap in the statute; in its amendments to 30 U.S.C. 1004, the Energy Policy Act had removed the language of previous 30 U.S.C. 1004(b) that established royalties of up to 5% for such byproducts. We stated that, because it was not clear whether Congress intended to establish such royalties at zero, or to leave it to the Secretary to set an appropriate royalty rate for such byproducts, we proposed a 5% royalty rate relying on the general policy under Section 102(a)(9) of the Federal Land Policy and Management Act (FLPMA), 43 U.S.C. 1701(a)(9), that we should receive fair market value for the use of the public lands and their resources. In the proposed rule we solicited comments on whether the rate was fair and based upon an acceptable interpretation of the statute.

We received one comment objecting to the 5% royalty on byproducts that are not listed in the MLA. The commenter stated that Congress, by narrowing the scope of the language in the Geothermal Steam Act regarding royalties on byproducts, showed a clear intent not to impose a royalty on byproducts that would not be royalty-bearing if they were produced from the public lands, in accordance with testimony that industry representatives had presented on this issue. We accept this comment. After further consideration, we agree that because Section 228 of the Energy Policy Act specifically deleted the former statutory language that provided for a royalty on all byproducts and substituted language that limits royalties on byproducts to those listed in the MLA, the better interpretation is that Congress intended to eliminate royalties on byproducts that are not listed in the

MLA. We therefore revised the final rule to reflect this interpretation.

Final section 3211.19(a) implements the Energy Policy Act amendments with regard to leases issued on or after August 8, 2005 (other than leases issued in response to applications that were pending on that date for which no election is made under § 3200.8(b)(1)), and leases issued before August 8, 2005, for which an election is made under § 3200.7(a)(2). Final section 3211.19(b) provides that for leases issued before August 8, 2005, for which no election is made under § 3200.7(a)(2), and for leases issued in response to applications pending on that date for which no election is made under § 3200.8(b)(1), the royalty on all byproducts is the rate prescribed in the lease instrument, or if none is prescribed in the lease instrument, the rate prescribed in the previous regulations at 43 CFR 3211.10(b) (2004).

Final section 3211.20 provides that a lessee may credit advanced royalty toward royalty due under the MMS regulations at 30 CFR 218.305(c). This provision, and the MMS rule, implement 30 U.S.C. 1004(f)(2), which allows for crediting advanced royalty payments towards royalty due on production. We received no comments on this section and have adopted it as proposed.

In the proposed rule, we proposed removing previous section 3211.17 (“When do I owe minimum royalty?”) because minimum royalties no longer apply to new leases. In this final rule, we decided to include a section with the same title, final section 3211.21, with a paragraph (a) explaining that leases under the new regulations do not owe minimum royalty, and a paragraph (b) providing that minimum royalties do apply to certain older leases and incorporating the substance of previous section 3211.17. This section has been added for convenience and to facilitate understanding of when minimum royalties continue to apply. This section is not intended to add new requirements.

Final section 3211.21(b) clarifies that the leases to which that paragraph applies owe minimum royalty either when the royalty on actual production would be less than \$2.00 per acre or when the lease is in a period of non-production, as long as the lease remains in effect. Previous section 3211.17 implied, but did not clearly state, that minimum royalties apply to periods of non-production. However, previous section 3211.14 stated that once a lease achieved production in commercial quantities it would begin paying royalties instead of rent. There is no

exception to this obligation to pay regular or minimum royalty instead of rent. The BLM has always charged minimum royalties in periods of non-production, as well as in periods of low production. We have made this explicit in this final regulation.

Subpart 3212—Lease Suspensions, Cessation of Production, Royalty Rate Reductions and Energy Policy Act Royalty Rate Conversions

The title of final subpart 3212 has been expanded to better reflect all subject matter within this subpart.

Lease Suspensions

Final section 3212.10 addresses the difference between a suspension of operations and production and a suspension of operations. Under final section 3212.10(a), a suspension of operations and production is a temporary relief from production obligations that a lessee may request from the BLM.

This section removes economic conditions as a basis for concluding that continued operations are unjustifiable. The BLM believes that a lessee should not be able to hold a lease indefinitely merely because it is uneconomic to conduct operations. This would not promote the development and recovery of geothermal resources. In circumstances where geothermal operations are expected to become economic, the new statute provides that a lessee that is subject to the new statutory provisions could cease production for as much as 10 years in aggregate and yet hold its lease through the payment of advanced royalty (see discussion of final section 3212.15(a)(1), below).

Final section 3212.10(b) explains that a suspension of operations is when the BLM, on its own initiative, orders a lessee to stop production temporarily in the interest of conservation. The regulatory text more closely follows the statute at 30 U.S.C. 1010 than did the previous regulation. We received no comments on section 3212.10, and have adopted it as proposed.

Final section 3212.11 remains substantively unchanged from the previous regulation except that the final rule clarifies that unit obligations may be separately suspended under subpart 3287. We received no comments on this section, and have adopted it as proposed.

Final section 3212.12 is similar to the previous section except that paragraph (b) clarifies that a lessee cannot unilaterally terminate a suspension that the BLM ordered. The reference to "minimum" royalties has also been

removed because, as specified under final section 3211.21(a), minimum royalties are no longer required for certain categories of leases. For leases identified under final section 3211.21(b), minimum royalties will continue to apply and will need to resume upon termination of a suspension. We received no comments on this section, and have adopted it as proposed.

Final section 3212.13 is substantively similar to the previous rule except that during a suspension of operations, the BLM may also suspend lease or royalty obligations if it determines that a lessee would be denied all beneficial use of its lease during the period of the suspension. Although we received no comments on this section, the final rule makes it clear that the BLM has discretion to suspend a lease or royalty obligations. The proposal could have been misinterpreted to mean that BLM is required to suspend the rental or royalty obligations.

Final section 3212.14 removes the previous reference to "minimum" royalties and substitutes the word "terminate" for the previous word "cancel," because the remedy referred to should be a termination, not a cancellation. As noted above, the resumption of "rental and royalty" payments may include minimum royalty payments under final section 3211.21 for certain categories of leases. We received no comments on this section, and have adopted it as proposed.

Lease Requirements and Payments Due During a Cessation of Production

Final section 3212.15 addresses whether, and under what circumstances, a lease can remain in full force and effect if a lessee ceases production and the BLM does not grant a suspension. Section 3212.15 implements 30 U.S.C. 1004(f)(1) and (3).

In part, the intent of final section 3212.15 is to allow temporary cessations of production, lasting more than a month, without lease termination and without a lessee having to apply for a suspension of operations and production. Thus, under this final rule, the BLM will not consider production stoppages of less than one full calendar month to be a cessation of production. The BLM added this limitation for several reasons:

(1) Routine maintenance, such as plant overhauls, is an inherent part of producing a geothermal resource. While overhauls and other maintenance can last more than a month, most maintenance operations only require plant shut down for a period of days or

weeks. Because maintenance is an inherent part of producing a geothermal resource, performing maintenance for less than a month is still considered to be "production;"

(2) From an administrative standpoint, tracking shutdowns lasting less than a month would be expensive and cumbersome. The reports that the BLM receives are all based on calendar months. If a lease was shut down for an entire calendar month, the reports required by subpart 3270 would indicate zero production and this would alert the BLM to consider implementing this section of the regulations. However, if a lease produced for part of a month, the reports would indicate some quantity of production. The only way the BLM could determine if the lease was not producing for part of a month would be a physical inspection of the lease and a review of the metering records to determine when the lease was shut-in; and

(3) If a lease produces for any portion of a month, royalty would be due. As long as a lessee is diligently producing from its lease, there is no need to collect a royalty on actual production for a portion of a month and an advanced royalty for cessation of production for the remainder of the month. Accordingly, final section 3212.15 will only apply if an operation is shut down for more than a calendar month.

Final section 3212.15 contains separate paragraphs, each of which describe a set of circumstances under which a cessation of production could occur without lease termination. In this final rule, we redesignate proposed section 3212.15(a) as final section 3212.15(a)(1) and add a new section 3212.15(a)(2) that is discussed below. This has been done because only certain categories of leases are subject to the advanced royalty provisions of the new statute, and others can maintain their leases in other ways, as discussed below.

Final section 3212.15(a)(1) implements 30 U.S.C. 1004(f)(1), which allows the payment of advanced royalty in lieu of production. This paragraph applies to leases issued on or after August 8, 2005 (other than leases issued in response to applications pending on that date for which no election is made under section 3200.8(b)(1)), and to leases issued before August 8, 2005, for which an election to all of the terms of the regulation is made under section 3200.7(a)(2). For such leases, under the final rule, once commercial production is achieved, a lessee will be allowed to keep a lease in effect for a total of 10 years with no production, without having to apply for a suspension of

operations, if the lessee continues to pay advanced royalty under the final MMS regulations at 30 CFR 218.305. The BLM has interpreted 30 U.S.C. 1004(f)(1) to allow a total of 120 months (10 years) of advanced royalty payments, whether consecutive or not. As explained in the MMS rule at 30 CFR 218.305, the amount of advanced royalties due during a cessation of production for leases subject to the new statutory provision is no longer the "minimum royalty" referenced in previous sections 3211.17 and 3212.14, but is based upon an historical average monthly royalty rate.

Because 43 CFR 3207.15 (implementing 30 U.S.C. 1005(g) and (h)) provides for maintaining the lease through a production extension if the lessee has a well capable of production and makes diligent efforts to utilize the resource, we interpret the cessation of production provision at 43 CFR 3212.15(a)(1) as not requiring a well capable of production or diligent efforts to utilize the resource, as long as the lessee pays advanced royalties.

A lessee will continue to be required to pay rentals during the period for which it pays advanced royalty. The BLM has reached this conclusion because the section of the Energy Policy Act that establishes rental obligations, 30 U.S.C. 1004(a)(3), specifies that rentals are paid for each year of a lease, without exception. To understand the manner in which rental payments and rental credits will affect advanced royalty calculations and payments, see the final MMS rule.

Because the statutory language of 30 U.S.C. 1004(f)(1) is specific to leases on which royalty was previously paid, final section 3212.15(a)(1) does not apply to direct use operations where the lessee pays direct use fees instead of royalties. The Energy Policy Act does not contain an "advanced fee" counterpart for direct use. Therefore, a lessee using the geothermal resource for seasonal operations in a greenhouse, for example, could not pay advanced royalties during the months of the year when no production occurs to maintain its lease in effect. However, if the BLM approved the seasonal operations as part of the lessee's utilization plan, it would not be considered a cessation of production. If seasonal operations were not approved, the lessee would need a lease suspension to maintain the lease in effect.

Under final section 3212.15(a)(1), the term "commercial production" has a different meaning than the term "produced or utilized in commercial quantities," because the advanced royalty section is not intended to apply

to leases that have a well capable of production without having actually produced geothermal resources; it is only intended to apply to leases that have achieved actual production or are receiving allocated production through some type of agreement.

Although we did not receive a comment on this issue, in reviewing the proposed rule we recognized that a provision needed to be added to account for those leases that continue to be subject to the royalty provisions in effect on August 8, 2005, and do not have the opportunity to pay advanced royalties. Although these regulations allow leases issued before August 8, 2005, and leases issued based upon applications pending on August 8, 2005, to elect to be subject to all of the regulations of 43 CFR parts 3200 and 3280, some lessees may choose not to make such an election and will remain subject to the earlier royalty provisions. Those lessees will not be able to pay advanced royalties to maintain their leases.

However, such lessees had recourse under the earlier rules to maintain their leases by paying minimum royalties. Thus, for leases issued before August 8, 2005, for which no election is made under section 3200.7(a)(2), and for leases issued in response to applications pending on August 8, 2005, for which no election is made under section 3200.8(b)(1), final section 3212.15(a)(2) has been added to address the conditions necessary for a lease to remain in effect during the period in which there is no production and the lessee does not have an approved suspension. Under such circumstances, a lease will remain in effect if the lessee: (1) Continues to make minimum royalty payments as specified in final section 3211.21(b); (2) Maintains a well capable of production in commercial quantities; (3) Continues to make diligent efforts to utilize the geothermal resource; and (4) Satisfies any other applicable requirements. This practice was allowable under, but not well articulated in, the previous regulations (previous section 3211.17, now restored in substance as final sections 3211.21 and 3212.14).

Final section 3212.15(b) specifies other circumstances that would allow leases to remain in full force and effect without having to pay advanced royalties if production ceases. This section includes situations when the BLM: (1) Requires or causes the cessation of production; or (2) Determines that the cessation of production is required or otherwise caused by the Secretary of the Air Force, Army, or Navy; by a state or a political

subdivision of a state; or by a force majeure event. This section implements 30 U.S.C. 1004(f)(3). We received no comments on this section, and have adopted it as proposed.

Final section 3212.15(c) allows lessees to keep their leases in effect (without paying advanced royalties) during extended outages due to maintenance activities that are necessary to maintain operations. For this paragraph to apply, the maintenance would be required to last more than one calendar month and would require the BLM approval before the end of the first month in which no production occurs. To obtain approval, the lessee must demonstrate to the BLM's satisfaction that the cessation is part of required maintenance. The basis for this provision is that maintenance required to maintain operations is a production activity, not a cessation of operations. Required maintenance activities under this paragraph could include overhauling a power plant, re-drilling or re-working wells that are critical to plant operation, or repairing and improving gathering systems or transmission lines that necessitate the discontinuation of production. It should be noted that the application of paragraph (c) of this section does not affect a lessee's obligations to pay rentals or minimum royalties, whichever is applicable.

One comment requested an alternative to obtaining prior approval for maintenance activities lasting more than 1 month, as required in final section 3212.15(c). The commenter alluded to "upset" conditions for which it would be impossible to plan in advance or to obtain prior approval. We accept the comment. The intent of the proposed requirement was twofold: (1) To ensure that maintenance lasting more than a calendar month is not misconstrued to be a cessation of production requiring advanced royalties to be paid; and (2) The filing of a Geothermal Sundry Notice would give the BLM the opportunity to review the reason for the extended outage to ensure that it meets the criteria for maintenance. However, the intent of the requirement does not necessarily require that a Geothermal Sundry Notice be filed in advance of the outage. As long as the BLM is made aware of the outage prior to the end of the first month where there will be no reported production on a lease, the need for a payment of advanced royalty will be averted. Therefore, the last sentence of final section 3212.15(c) was changed to read: "You must obtain BLM approval by submitting a Geothermal Sundry Notice if the activity will require more

than 1 calendar month to be classified as maintenance under this paragraph. The Geothermal Sundry Notice must be received by BLM before the end of the first calendar month in which there will be no production.”

For those lessees subject to the royalty provisions in effect on August 8, 2005, lessees would continue to be subject to applicable minimum royalty obligations during maintenance periods, and could keep their leases in effect by satisfying the requirements of final section 3212.15(a)(2) instead of under final section 3212.15(c).

Final section 3212.16 replaces previous section 3212.15 and provides the standards for reduction, suspension, or waiver of rental or royalties. It is similar to the previous section, but more closely follows the statutory provision at 30 U.S.C. 1012. Paragraph (b) makes clear that the BLM will not approve a royalty reduction, suspension, or waiver unless all royalty interest owners other than the United States accept a similar reduction, suspension, or waiver. This provision was in the previous regulations at section 3212.16(b). We received no comments on this section.

Final section 3212.17 specifies the information that must be included with a request for a royalty or rental rate reduction, suspension, or waiver. It includes the information in previous section 3212.16, but clarifies that all of the information must be submitted. We received no comments on this section, and have adopted it as proposed.

Production Incentives

The Energy Policy Act (at Section 224(c) and (d)) establishes production incentives for new facilities and qualified expansion projects that are put into commercial operation by August 8, 2011. The incentives are in the form of a 4-year, 50 percent reduction in royalty from what otherwise would be due. Final sections 3212.18 through 3212.24, and final MMS regulations at 30 CFR 218.307, implement these statutory provisions.

If a project is defined as a “new facility,” all of the production from that facility is subject to the 50 percent reduction in royalty that would otherwise be due. If a project is defined as a “qualified expansion project,” only the additional electricity generated as a result of the project is subject to the reduced royalty. Qualifying a project as a “new facility” would generally be more difficult and would typically result in more capital expenditure than an expansion project. Although a “qualified expansion project” may be easier to achieve, strict monthly production targets would be established

that the project must meet in order to qualify.

Final section 3212.18 provides a general description of the requirements for obtaining a production incentive.

The production incentives will only be available for those leases that were issued before August 8, 2005, and that do not convert their royalty provisions under final section 3212.25. Because Section 224(c) of the Energy Policy Act specifically refers to reductions in royalty, the BLM has interpreted this to mean that the incentives are intended only for the commercial generation of electricity and not for direct use projects.

The BLM received one comment requesting clarification of section 3212.18 regarding the types of leases for which production incentives apply, and referring to the new classification of leases in the final MMS rule at 30 CFR 206.351.

The production incentives discussed in section 3212.18 are only available for leases that were in effect prior to August 8, 2005, and on which the royalty terms were not converted under section 3212.25 (equivalent to part of MMS Class 1). These criteria are listed in sections 3212.18(a) and (b), respectively. In addition, production incentives are only available for leases that provide for the commercial generation of electricity (section 3212.18(d)). Because no changes to these regulations were requested by the commenter, no changes were made. However, the MMS has made changes to its final rule to clarify these class designations.

Final section 3212.19 requires lessees seeking a production incentive to submit a written request. The BLM does not anticipate developing a specific application form for production incentive requests; a lessee can make the request in a letter. The letter can provide a description of the project and whether the applicant prefers the project to be considered a new facility or a qualified expansion project. If the applicant is requesting the project to be considered as a new facility, the letter should include sufficient technical justification to support the general criteria set forth in section 3212.22. If the applicant is requesting the project to be considered as a qualified expansion project, the letter should describe the anticipated amount of capital expenditure (section 3212.21(a)) and the estimated increase in net generation resulting from the project (section 3212.21(b)). The letter should include sufficient technical detail to support these estimates. We received no comments on this section, and have adopted it as proposed.

Final section 3212.20 describes how the BLM will review a request for a production incentive. The BLM will review incentive requests on a case-by-case basis to determine whether a proposed project meets the criteria for a qualified expansion project under final section 3212.21 or a new facility under final section 3212.22 (see the discussions below of the criteria for qualified expansion projects and new facilities). If the request does not meet the criteria for the type of project the lessee requests, the BLM will determine whether it meets the criteria for the other type of production incentive project.

Under final section 3212.20(b), if the BLM determines that a lessee has a qualified expansion project, the BLM will, as part of its approval, provide the lessee with a schedule of monthly target net generation amounts. Projects must generate greater than these amounts to qualify for the production incentive. These amounts will quantify the required 10 percent increase in net generation over the projected net generation without the project. The schedule will be specific to the facility or facilities that are affected by the project and will cover the 48-month time period during which the production incentive may apply. The lessee will receive the production incentive only for those months in which its net generation exceeds the monthly target. Averaging of production to achieve production targets will not be allowed (see the preamble discussion of section 3212.23). We received no comments on this section. However, in the final rule we make it clear that net generation must exceed the monthly target to qualify for the production incentive, as required by the Energy Policy Act.

Final section 3212.21 specifies the criteria necessary to establish a qualified expansion project for the purpose of obtaining a production incentive. Because one goal of the Energy Policy Act is to encourage new projects that will increase the amount of electricity generated from geothermal resources, the BLM will not approve projects for this incentive that do not involve significant capital expenditure. Specifically, the BLM is concerned that this provision of the Energy Policy Act could be abused if, for instance, a lessee simply opens production valves to achieve the required increase in generation. Examples of activities involving substantial capital expenditure could include: (1) The drilling of additional wells; (2) Retrofitting existing wells and collection systems to increase production rates; (3)

Retrofitting turbines or power plant components to increase efficiency; (4) Adding additional generation capacity to existing plants; and (5) Enhanced recovery projects such as augmented injection. Projects that are not associated with substantial capital expenditure, such as opening production valves or operating existing equipment at higher rates, would not be considered to be qualified expansion projects.

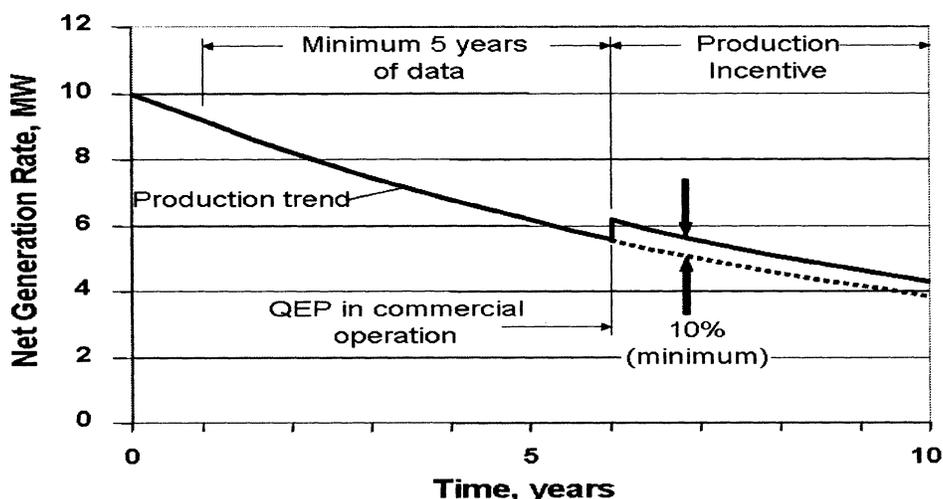
While the Energy Policy Act specifically refers to "expansion of the facility" in relation to qualified expansion projects, the BLM broadly interprets this to mean the expansion of any portion of a geothermal project that will result in increased generation. This includes not only expansion to the power plant, but also projects in the well field, such as additional drilling,

workovers, and enhanced geothermal projects, such as augmented injection or acid and fracture stimulation.

Under Section 224(d) of the Energy Policy Act, a qualified expansion project must increase "production" by more than 10 percent over the average monthly production during the previous 5 years, taking into consideration production trends that occurred in those 5 years. The BLM interprets this provision to mean that if 5 years of data are not available, the project could not be classified as a qualified expansion project. In addition, the BLM interprets the term "production" to mean "net generation," because this meets the intent of the statute to increase the amount of useable electricity from geothermal resources. The following graph illustrates these requirements:

If a lessee satisfies the criteria for a qualified expansion project, the BLM will perform a reservoir analysis of the 5 years of data that is submitted and, from that analysis, will develop a monthly schedule of target net generation amounts. The lessee could perform its own reservoir analysis and develop a schedule of target generation amounts and submit it to BLM for review. The BLM could modify this schedule. Whichever schedule BLM approves, net generation must exceed these target amounts to qualify for a reduced royalty for that month. Because the production incentive is only in effect for 4 years, a schedule will cover the 48-month period for which the production incentive may be applied. We received no comments on this section, and have adopted it as proposed.

Qualified Expansion Project Requirements



Final section 3212.22 identifies criteria for determining whether a project qualifies as a "new facility." Because the BLM does not have a formal definition for "facility" and because of the high degree of variation in projects, each application will be considered on a case-by-case basis based on the factors described in the rule. Factors listed in support of concluding that a project qualifies as a new facility include: (1) The project requires a new site license or facility construction permit if it is on Federal lands; (2) The project requires a new Commercial Use Permit; (3) The project includes at least one new turbine-generator unit; (4) The project involves a new sales contract; (5) The project involves a new or substantially larger footprint; or (6) The project is not contiguous to an existing project.

Generally, a new facility will not be: (1) Authorized only with a Geothermal Drilling Permit; (2) Constructed entirely within the footprint of an existing facility; or (3) Involve only well field projects such as drilling new wells, increasing injection, and enhanced recovery projects.

If the BLM determines that a proposed project could be approved either as a "new facility" or as "qualified expansion project," the BLM will approve the application under the category requested by the applicant. If a project does not qualify as a "new facility," the BLM will automatically review it, with no action necessary on the applicant's part, to see if it will qualify as a "qualified expansion project." We received no comments on

this section, and have adopted it as proposed.

Final section 3212.23 describes how production incentives apply to qualified expansion projects. The Energy Policy Act, at Section 224(d), requires a production incentive to be granted if a qualified expansion project resulted in greater than a 10 percent increase in production. However, that section of the Act is silent on how long the 10 percent increase would have to be maintained. The BLM is concerned that a project could exceed the target increase for a short period, yet obtain the production incentive for the entire allowable 4 year period. The BLM believes the intent of the production incentive is to encourage projects that would result in a sustainable increase in production. Therefore, final section 3212.23

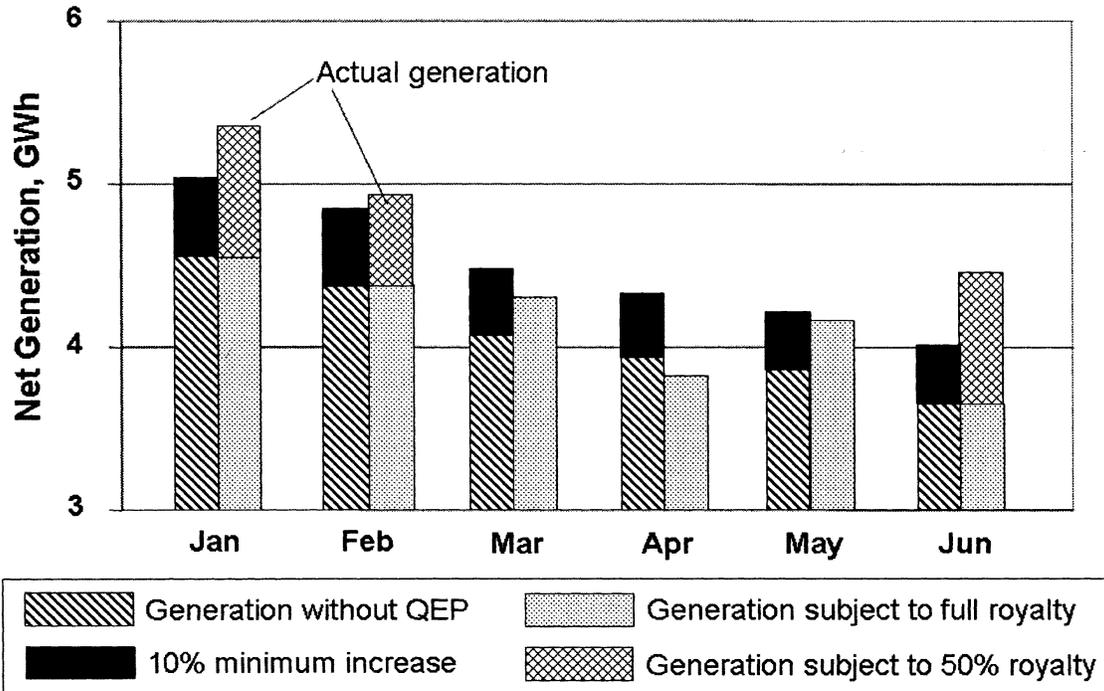
authorizes a reduced royalty only for those months where the qualified expansion project exceeds the BLM-established net generation targets.

The Energy Policy Act at Section 224(c)(1)(b), requires the production incentive to be applied to “qualified expansion geothermal energy,” which is further defined in Section 224(d)(1) of the Energy Policy Act as being a “production” increase as a result of the

expansion of the facility. The BLM interprets this to mean that the reduced royalty only applies to the increase in net generation resulting from a qualified expansion project. To define the increase in net generation, final section 3212.23 includes an equation that uses the target generation amounts defined in final section 3212.20 as a basis. The denominator of the equation (1.1) in section 3212.23 converts the target

generation amount to the baseline generation amount which represents the amount of electricity that would have been generated without the qualified expansion project. In the final rule we revised the description of the formula to make it clear exactly which production qualifies for the incentive. The following bar graph illustrates the application of the incentive for qualified expansion projects:

Application of Production Incentive for QEPs



Under final section 3212.24, for projects that qualify as “new facilities,” the royalty on all the net generation from the facility will be reduced by 50 percent for the 48-month period following the commencement of commercial operation, regardless of the amount of electricity generated. To simplify the administration and tracking of the production incentives, the production incentive takes effect on the first day of the month following the commencement of commercial operation of the project. In the final rule we added a sentence to the end of paragraph (a) to make it clear that the incentive applies to the entire commercial generation of electricity from the new facility. The amount of the production incentive for new facilities is established by the final MMS regulations. We received no comments on this section, and with the exception of adding the clarifying language, have adopted it as proposed.

Energy Policy Act Royalty Rate Conversions

Final section 3212.25(a) implements Section 224(e) of the Energy Policy Act, allowing lessees of geothermal leases issued before August 8, 2005, to request that the BLM modify their leases to convert the royalty rate terms of their leases to the royalty and direct use fee terms in the Energy Policy Act. Final section 3212.25(a) also provides that, if the BLM modifies the royalty rate terms of a lease, the new royalty rates and direct use fees will apply to all future production from or allocated to that lease. Final section 3212.25(b) references final sections 3211.17 and 3211.18 and applicable MMS regulations for the specific royalty rates and direct use fees that will apply to a modified lease.

One commenter suggested that language be added to section 3212.25 to clarify that once a lessee decides to

convert the royalty terms of its lease under this subpart, that the decision is irreversible. This comment is accepted because the intent of Section 224(e) of the Energy Policy Act is clearly to make the change in royalty terms permanent. Adding language to this effect in section 3212.25(a) will clarify the intent. Section 3212.25(a) has been changed to read in part: “You may withdraw your request before it is granted, but once you accept the new terms, you may not apply to revert to the earlier royalty rates. If your request to modify is granted, the new royalty rate or direct use fees will apply to all geothermal resources produced from your lease for as long as your lease remains in effect.”

In reviewing the comments received, the BLM was concerned that the first sentence of section 3212.25(a) could be construed to mean that certain entities besides the lessee could submit a request to modify the royalty terms of a lease. This confusion may arise because

the MMS definition of lessee (30 CFR 206.351) includes anyone “who has been assigned an obligation to make royalty, fee, or other payments required * * * .” The MMS definition also includes affiliates of the lessee who use the geothermal resource to generate electricity, in a direct use process, to recover byproducts, or who sell or transport lease production. The intent of section 3212.25(a) is that only the entity holding record title interest in a geothermal lease (the “lessee” as defined in the BLM regulations at 43 CFR 3200.5) can be granted a modification in royalty terms of the lease. To make this change, we modified this section to make it clear that “you” refers to the lessee.

In implementing Section 224(e) of the Energy Policy Act, the BLM construes the statute to mean that the only royalty term in the lease that will be converted is the royalty rate on production from, or allocated to, the lease. This is emphasized in the final rule by use in a number of places of the phrase “royalty rate terms” instead of the proposed phrase “royalty terms.”

Other lease and statutory terms pertaining to “royalty” exist, such as “minimum royalty” (see final section 3211.21 incorporating previous sections 3211.10 and 3211.17) and “advanced royalty” during cessation of production (final section 3212.15(a)(1)). Under the final rule, these terms will not be converted under an application to convert royalty rate terms pursuant to final section 3212.25. Also, the royalty rate for byproducts will not be modified under a section 3212.25 conversion. This is because Section 224(e)(2) of the Energy Policy Act specifies that the modification that may be made under that section relates to royalties that will be computed “on a percentage of the gross proceeds from the sale of electricity * * * .” Because byproducts are unrelated to the generation of electricity, the section does not apply to byproducts. In this final rule, we added a sentence to section 3212.25(a) to clarify this. As explained above, we also restructured final section 3211.19, relating to byproducts, to differentiate between leases that will be governed by these final regulations and those that will remain subject in part to the previous regulations. However, as discussed earlier, a lessee of a lease issued before August 8, 2005, can choose to make all of its lease terms subject to the new provisions adopted in this rule by making an election under section 3200.7(a)(2).

For example, under the final rule, if the lessee of a lease issued prior to August 8, 2005, elects to convert the

royalty rate terms of the lease under section 3212.25, the lessee will be subject to the new royalty rate on gross proceeds for the commercial generation of electricity and direct use fee schedule for direct use operations. Unless that lessee makes an election under section 3200.7(a)(2), however, the lessee will continue to be subject to the minimum royalty and byproduct royalty provisions of the previous regulations and will not be required to pay rental once commercial production begins. In addition, the lessee will not be able to keep its lease in effect by paying advanced royalty under section 3212.15(a)(1) if it ceases production for more than a calendar month, but would need to satisfy one of the other provisions of section 3212.15 to keep its lease in effect during a period of no production.

This interpretation as it relates to the non-conversion of minimum royalty and advance royalty provisions is based upon possible complications that could occur if some, but not all, of the other provisions changed. For example, under the Geothermal Steam Act, prior to the amendments made by the Energy Policy Act, rental on a lease was only due until the lease began actual production or was deemed to have a well capable of production. At that point, the greater of actual royalty on production or minimum royalty was due every month. If the BLM were to include the minimum royalty terms in the conversion under final section 3212.25, lessees electing to convert the royalty terms of their lease would no longer pay minimum royalty because there is no minimum royalty provision in the Energy Policy Act. But, once a lease had a well deemed capable of production, the rental commitments of the existing lease terms would end; therefore, unless the rental provisions of the new statute applied, the lessee would not pay rental or minimum royalty during a period of non-production. The BLM does not believe it was the intent of the Energy Policy Act to allow lessees to hold a lease without making some type of payment. Section 224(e) of the Energy Policy Act does not allow lessees to apply to change the rental terms of existing leases; only the royalty rate term.

In addition, if lessees did not convert the requirement at previous section 3211.10 for minimum royalty payment, then becoming subject to the payment of advanced royalties as well when production ceases for more than a calendar month would be burdensome and redundant. Absent a suspension, in cases where an existing lessee does not produce for a calendar month, the

previous minimum royalty provisions require that minimum royalty be paid (see previous sections 3211.10 and 3211.17 and final section 3211.21). The BLM believes that Congress did not intend for one lessee to pay both minimum royalty and advanced royalty if production ceases.

The BLM received no comments on its interpretation. Except for the addition of the clarification discussed above regarding byproducts, this section has been adopted as proposed. As already noted, however, existing lessees do have the option to elect to make all of the terms of their leases subject to these regulations (see section 3200.7), so that, in addition to a converted royalty rate, their leases would also be subject, for instance, both to both continual rental obligations and advanced royalty, instead of minimum royalties during a cessation of production.

Section 224(e) of the Energy Policy Act requires any lessee wishing to convert the royalty rate terms of its lease to apply to the BLM. Final section 3212.26 establishes an application process and requires certain types of information to be submitted together with the application. For electrical generation, the lessee must submit enough information to allow the BLM to determine how much royalty the lessee would have paid under the netback method, if that is the current method the lessee is using. As mentioned earlier, in situations where a lessee or its affiliate is selling geothermal resources at arm's length, before those resources are used to generate electricity, the lessee would be required to document in its application that it has access to the purchaser's gross proceeds derived from the sale of the electricity. From the information contained in the application, the BLM will calculate a new royalty rate that will result in the same amount of royalty.

Final section 3212.26(c) states that the BLM must receive an application to convert no later than 18 months following the effective date of the applicable final rule. For direct use operations, the applicable final rule is the MMS rule at 30 CFR 206.356(b)(1) (direct use fee schedule); for the commercial generation of electricity, the applicable final rule is this rule, and the application deadline is December 1, 2008. This section implements Section 224(e)(2) of the Energy Policy Act. If both the MMS and the BLM final rules are made effective on the same day, then all applications will have to be received no later than December 1, 2008. We received no comments suggesting changes to this section, and have adopted it as proposed.

Final section 3212.27 implements Section 224(e)(3) and (4) of the Energy Policy Act, and also requires the BLM to consult with the MMS in implementing the royalty conversion provision. The BLM will also review an application to ensure that the lessee has suitable meters necessary to determine the royalty due under the modified lease terms.

The final rule will allow lessees who have requested a modification of the royalty terms of their lease 30 days to reject the modified royalty rate that the BLM determines. Without a review period, lessees would essentially be committing themselves to a new royalty rate at the time they requested the modification, without knowing what the new royalty rate would be. This could involve some risk for lessees, and the BLM felt this risk would be a disincentive for lessees to apply for a conversion of royalty terms. In addition, if there were no review period, the only recourse lessees would have to a royalty percentage they found objectionable would be an appeal to the Interior Board of Land Appeals (IBLA). The BLM believes it is in the public interest to get as many leases as possible off the netback system, and that offering a review period would help facilitate this goal.

In the final rule the BLM has adopted a process in final section 3212.27(d) to allow the BLM to comply with the time specified in Section 224(e)(3)(A) of the Energy Policy Act and issue a lease modification no later than 180 days after the date of receipt of a complete application under section 3212.25. The revised procedure is as follows: (1) No later than 140 days after the day on which the BLM determines it received a complete request with all necessary information, the BLM will send the lessee written notification of the proposed royalty rate that the BLM determines to be revenue neutral; (2) No later than 30 days after the date of receipt of the BLM notification, the lessee may reject the proposed royalty rate in writing; and (3) If the lessee rejects the proposed rate, the BLM must receive written notification from the lessee no later than 30 days of the date after receipt of the BLM's notification.

The rule provides flexibility by specifying that the BLM will accept a faxed rejection notification received within the 30-day time limit, if followed by a written confirmation that the BLM must receive no later than the 179th day following the day on which it determines the complete request was received. The time frames specified will allow the BLM to issue the lease modification within the statutory time

frame. The rule also provides that if a lessee rejects the proposed royalty rate on a timely basis: (1) The BLM will not issue a decision modifying the royalty rate terms of the lease; (2) The existing royalty rate terms in the lease continue to apply; and (3) The lessee may not reapply for a royalty rate term conversion under section 3212.25 of this part. Finally, the rule provides that unless timely written notification is received from the lessee rejecting the proposed rate, the BLM will issue a decision modifying the royalty rate terms of the lease no later than 180 days after the day on which the BLM determines a complete request was received. The effective date of the new royalty rate is the first day of the month following the date on which the decision was issued. For example, a decision issued on July 21st, will become effective on August 1st. The BLM decision establishing the royalty rate will be appealable to the IBLA, but allowing the applicant to reject the new royalty rate completely before it is finalized and maintain the existing rate may serve to limit the number of appeals.

One commenter requested that the 180-day period for the BLM to respond to a request for modification of royalty terms (section 3212.27(d)) be reduced to 120 days. We did not change the rule in response to this comment. As mentioned above, the 180-day time frame is required by statute. In light of the 30-day review period now being afforded the lessee, the potential complexity of the economic analyses, and the expected volume of lease conversion requests, the BLM does not feel that 120 days would offer sufficient time to process requests.

The BLM received a comment asking for clarification of a site-specific issue regarding pre-paid royalty. We reject this comment because it addresses a specific and unique situation. These regulations preserve the royalty terms for existing leases unless a lessee chooses to convert the lease. It is not appropriate to address in these regulations specific circumstances arising under existing leases. To the extent the commenter raises a valuation issue, it should consult with the MMS.

One commenter commended the BLM and the MMS for using the royalty rates recommended by the MMS Royalty Policy Committee. The BLM acknowledges the comment and recognizes that use of these recommended royalty rates in the proposed rule reflects a consensus reached by our stakeholders.

Subpart 3213—Relinquishment, Termination, and Cancellation

Final sections 3213.10 and 3213.11, relating to lease relinquishment, contain minor changes from the previous sections. We received no comments on these sections, and with the exception of minor changes, have adopted them as proposed.

Final section 3213.12, relating to the minimum size of a remaining lease following a partial relinquishment, is amended to create an exception for direct use leases. The exception is necessary because, under 30 U.S.C. 1003(g)(1), the size of direct use leases could easily be less than 640 acres. We received no comments on this section, and have adopted it as proposed.

Final section 3213.13 contains some editorial changes. For the most part, it remains substantively unchanged from the previous regulation, but clarifies that surface and other resources need to be reclaimed as well as restored. We received no comments on this section, and have adopted it as proposed.

Final section 3213.14 implements 30 U.S.C. 1004(g), regarding the termination of a lease for failure to pay rentals on time. This section represents a substantial change from the procedures under previous sections 3213.14 through 3213.20, which were based on statutory language that was removed by the Energy Policy Act. Under previous section 3213.14 (which implemented previous 30 U.S.C. 1004(c)), failure to pay the full rental amount by the anniversary date of the lease resulted in automatic termination of the lease by operation of law. No grace period was provided for late payment. Previous section 3213.15 (which implemented a proviso in previous 30 U.S.C. 1004(c)) provided that a lease will not terminate if the MMS receives a timely rental payment that is deficient by a nominal amount. Under the previous rule, the MMS notified the lessee of the nominal deficiency and provided a date by which a further payment must be paid. If the payment was not made in the time allowed, the BLM terminated the lease as of the anniversary date of the lease. Previous sections 3213.17, 3213.18, 3213.19, and 3213.20 contained a process for petitioning for lease reinstatement if a lease terminated for failure to pay rent on time. These regulatory provisions were also based on previous 30 U.S.C. 1004(c). The Energy Policy Act removed the provisions of 30 U.S.C. 1004(c) relating to lease termination, replacing them with the provisions of current 30 U.S.C. 1004(g), described below. The new

statute contains no express process to petition for lease reinstatement.

Under the revised statute at 30 U.S.C. 1004(g)(1), a 45-day grace period beginning on the date of the failure to pay the rental (the lease anniversary date) is provided for a lessee to pay its rent in full before the BLM will terminate a lease. The Secretary must terminate any lease with respect to which rental is not paid in full on the expiration of the 45-day period beginning on the date of the failure to pay the rental. Unlike the previous statute, the new statute contains no exception for timely rental payments that are deficient by a nominal amount. The section provides further, at 30 U.S.C. 1004(g)(3), that a lease that would have otherwise terminated upon expiration of the 45-day period will not terminate if the lessee pays to the Secretary, before the end of that period, the amount of rental due plus a late fee equal to 10 percent of the amount due. Final section 3213.14(a) implements this statutory provision. This provision also makes clear that, if the MMS does not receive a lessee's rental plus the late fee by the end of the 45-day period described above, the BLM will terminate the lease. We received no comments on this section, and have adopted it as proposed.

Under 30 U.S.C. 1004(g)(2), the Secretary is required to "promptly" notify a lessee that has not paid rental required under the lease, that the lease will be terminated at the end of the 45-day period referred to in 30 U.S.C. 1004(g)(1). The MMS will provide this notification. The legislative intent of this paragraph appears to be that the Secretary should put a lessee on notice that it has a grace period to pay rental before its lease will be terminated for failure to pay. From a logistical standpoint, however, this legislative intent may be frustrated. For instance, it may take the MMS a considerable amount of time to notify lessees that the lease anniversary date has passed and that the MMS has not received the rental payment when it was due. If, for example, it were to take the MMS 30 days to provide the required notification, a lessee would only have 15 days' notice to pay within the 45-day timeframe required by paragraph (1) of the Act. As a further example, it is possible in certain circumstances that the MMS notification would not occur until after the expiration of the 45-day period, and after the BLM lease termination.

The BLM is concerned that the practical difficulties with providing a lessee with adequate notice could lead to the unintended consequence of

having leases terminate without the lessees being provided adequate notice to pay their overdue rental. Such an outcome would seem to be inconsistent with the requirement that the Secretary "promptly" notify the lessee of the unpaid rental. Final section 3213.14(b) addresses this situation and provides a remedy that the BLM believes to be consistent with Congressional intent. The final rule ensures that lessees have at least 30-days notice to pay overdue rental in full. It provides that if a lessee receives the MMS notification of the non-payment of rental less than 30 days before the end of the 45-day period, the lessee will have a full 30 days from receipt of the notice to pay its rental in full. If the MMS receives the rent plus the 10 percent late fee within 30 days after the lessee received the notification, the BLM will either not terminate the lease for non-payment of rental or will reinstate a lease that was terminated under final section 3213.14(a). In other words, every lessee will have no less than 30 days notice to either avoid a lease termination or to have its lease reinstated if it were terminated at the end of the 45-day period.

The statutory basis for final section 3213.14(b) is as follows: The statute does not expressly address the situation where, in practice, the "prompt" notification would compress the actual notice to a lessee to less than 30 days. The final rule more fully implements the Congressional intent of providing adequate notice to a lessee. Moreover, under 30 U.S.C. 1023, the Secretary may prescribe regulations that it may deem appropriate to carry out the provisions of the Act, and may include, without limitation, rules to prevent waste, conserve geothermal resources, and protect the public interest. Final section 3213.14(b) furthers all of these goals, and also implements Congressional intent to provide a fair grace period to a lessee who fails to pay rent on time. Although not directly applicable, this section is consistent with the intent of 30 U.S.C. 1011 that a lease not be terminated for any violation unless the lessee has 30 days' notice to correct the violation. We received no comments on this section, and have adopted it as proposed.

Final section 3213.15 carries forward the text of previous section 3213.16. Previous sections 3213.15, 3213.17, 3213.18, 3213.19, and 3213.20 have been removed because they do not reflect the current statute. We received no comments on removing these sections and have made these revisions as proposed.

Previous sections 3213.21 and 3213.22, relating to lease expiration,

have been removed because these matters are covered in subpart 3207, relating to terms and extensions of leases. We received no comments on removing these sections and have adopted the changes as proposed.

Final sections 3213.16, 3213.17, 3213.18, and 3213.19 clarify the provisions and terminology of previous sections 3213.23, 3213.24, and 3213.25, relating to lease cancellation and termination. Lease cancellation means undoing the lease as if it never existed. Cancellation is covered by final section 3213.16 and is limited to situations when the BLM issues a lease in error. In other circumstances, the previous rules used the term "cancel" when the appropriate term should have been "terminate." Thus, final section 3213.17 describes situations where the BLM could terminate (not cancel) a lease as of a particular date. Conforming changes are made to other provisions of the final regulations by replacement of the word "cancellation" with the word "termination." The rule also clarifies that "cancellation" does not apply to non-payment of rent which, as explained above, would be covered by final section 3213.14. In response to a request by the MMS, the BLM has clarified in final section 3213.17 that among the bases for lease termination is the nonpayment of royalties or fees under 30 CFR 206 and 218. This is not new in substance, but a reminder to lessees of the possible consequences of not making correct payments to the MMS.

Final section 3213.19 addresses circumstances where the BLM notifies a lessee that its lease is being terminated because of a violation. It clarifies the procedures of the previous section 3213.25 by specifying that a hearing may be requested in the context of the appeal of a proposed lease termination. It also follows the statutory text of 30 U.S.C. 1011 in that a lessee may avoid lease termination by diligently proceeding to correct a violation, but also states that it is insufficient to make a good faith attempt to correct the violation without actually correcting it. We received no comments on sections 3213.16, 3213.17, 3213.18, and 3213.19, and have adopted the change in terminology as proposed.

Subpart 3214—Personal and Surety Bonds and Subpart 3215—Bond Release, Termination, and Cancellation

Subparts 3214 and 3215 address bonding of geothermal operations. Most sections of the final subparts remain substantively unchanged from their previous counterparts. Changes have been implemented to clarify

terminology, and improve grammar and readability. The changes are explained below.

In final section 3214.12(c), we specify that the bond must cover rent in addition to royalty because under the Energy Policy Act rents continue for the life of the lease and do not stop when commercial production begins, as was the case under previous regulations. Such a requirement was implied in the proposed rule under section 3214.12(d), which requires the bond to cover compliance with the requirements of section 3200.4.

In final section 3214.14(b), we provide that the bond may be increased to ensure the reclamation of the surface “and other resources.” The previous regulation did not expressly include “other resources.” We received one comment requesting clarification of this language, stating a concern that it was ambiguous and open-ended. The BLM disagrees. Rather than just surface reclamation, we are concerned that the lessee’s operations could result in other environmental damage, such as to groundwater, and we want to make sure that the bond covers all appropriate reclamation and remediation.

In final section 3214.18, the title has been clarified to match the content of the section. Final section 3214.18(b) clarifies that reclamation responsibilities extend to resources other than the surface, and final section 3214.18(d) expressly mentions royalties as well as rents. We received no comments on this section, and have adopted it as proposed.

Final section 3215.13 has been reorganized for clarity. It also clarifies that even after bond termination, a surety and any other bond provider remain responsible for obligations that accrued during the period of liability while a bond was in effect. We received no comments on this section, and have adopted it as proposed.

Subpart 3216—Transfers

Subpart 3216 addresses geothermal lease transfers. The final subpart is substantively unchanged from the previous subpart. Minor changes have been adopted to clarify terminology, and improve grammar and readability.

We received one comment related to the last sentence in section 3216.13, “What are my responsibilities after I transfer my interest?” While this provision was unchanged from the previous regulations, we accept the commenter’s observation that the provision is ambiguous and have clarified the last two sentences of 3216.13 to read: “You also remain responsible for plugging and

abandoning any wells that were drilled or existing on the lease while you held your interest. You must carry out this responsibility upon the BLM’s determination at any future time that the wells must be plugged and abandoned.”

Final section 3216.14 has been changed to indicate that the filing fees for transfers are found in 43 CFR 3000.12. We received no comments on this section, and except for the change mentioned above, have adopted it as proposed.

Final section 3216.19 recognizes that direct use leases have different size constraints than regular geothermal leases. Thus, the final section relating to the size of allowable lease transfers contains an exception for direct use leases. We received no comments on this section, and have adopted it as proposed.

Subpart 3217—Cooperative Agreements

Subpart 3217 addresses cooperative agreements. The final subpart has few substantive changes from the previous subpart. Changes have been proposed to clarify terminology, and improve grammar and readability.

Subpart 3217 describes two types of cooperative agreements, unit and communitization agreements, and addresses the requirements of Federal lessees who join with others to conserve the geothermal resource under unit and communitization agreements. The Energy Policy Act, at 30 U.S.C. 1017(e), specifically authorizes the pooling of land under communitization agreements in order to develop geothermal resources where operators cannot successfully develop tracts independently. The BLM cannot approve these agreements unless the BLM determines them to be in the public interest.

Final section 3217.10, describing unit agreements, has been revised to more closely follow the statutory language at 30 U.S.C. 1017(a). The term “cooperative plan” is removed from the previous section 3217.10 because the agency does not require approval of a cooperative plan and does not use that term in a regulatory context.

Sections 3217.11 through 3217.13 are substantively unchanged from the previous regulations.

The term “operating contracts” is removed from final sections 3217.14 and 3217.15, leaving the statutory terms “drilling contract” and “development contract,” both of which appear in 30 U.S.C. 1017(g). The BLM uses the terms “drilling contract” and “development contract” interchangeably to describe the agreement parties use to

cooperatively explore under a communitization agreement. Final section 3217.14(b) includes reference to regional exploration, which typically describes the scope of drilling or development contracts. This section has also been revised to make it clear that drilling or development contracts are limited to exploration activities. Final section 3217.14(c) is added to acknowledge current BLM practice of coordinating the review of a proposed drilling or development contract with the appropriate state agencies. Final section 3217.14(d) has been changed to more accurately reflect a provision of the Energy Policy Act that requires the BLM to determine that approval of a drilling or development contract best serves or is necessary for the conservation of natural resources, public convenience or necessity, or the interests of the United States.

Section 3217.15 remains substantively unchanged from the previous regulations. We received no comments related to subpart 3217, and so the changes are adopted as proposed.

Subpart 3250—Exploration Operations—General; Subpart 3251—Exploration Operations: Getting BLM Approval; Subpart 3252—Conducting Exploration Operations; Subpart 3253—Reports: Exploration Operations; Subpart 3254—Inspection, Enforcement, and Noncompliance for Exploration Operations; Subpart 3255—Confidential, Proprietary Information; and Subpart 3256—Exploration Operations Relief and Appeals

Subparts 3250 through 3256 contain provisions regulating geothermal exploration of Federal lands. Minor changes to these subparts clarify existing terminology and procedures and make the subparts more readable.

Several changes are adopted throughout these subparts to make it clear that an approved Notice of Intent to Conduct Geothermal Resource Exploration Operations would be equivalent to a permit. In most cases the terms “Notice of Intent” or “Notice of Intent to Conduct Geothermal Resource Exploration Operations” have been substituted for the terms “exploration permit” or “permit.”

Final section 3250.10 is substantively unchanged from existing regulations and the proposed rule.

Final section 3250.11, addressing the general question related to where exploration can occur, has been moved from previous section 3251.11 of the subpart addressing exploration approval. This necessitates the renumbering of subpart 3251.

Final sections 3250.12 and 3250.13 are substantively unchanged from the previous regulations and the proposed rule.

The content of final section 3250.14 has been taken from the previous section 3250.11. This reorganization provides a more logical sequence of general questions related to the regulation of exploration operations.

There are no substantive changes to sections 3251.10 through 3251.15. As mentioned previously, the content of previous section 3251.11 has been moved to final section 3250.11 and the remaining sections have been renumbered to correspond to final sections 3251.10 through 3251.14.

Final section 3251.15(b) revises the previous section 3251.16(b) to ensure that bond release cannot occur unless operators not only have reclaimed the land surface, but also, if necessary, resolved other environmental, cultural, scenic, or recreational issues. Reclamation includes resolving the impacts of geothermal exploration activities on other resource values in addition to reclamation of the surface (see discussion and answer to comment related to section 3214.14(b)).

We received no comments on the changes to subparts 3250 through 3256, and have adopted these sections as proposed.

One commenter suggested expanding the use of categorical exclusions (CXs) under the NEPA to expedite exploration permits. Since the adoption of new categorical exclusions involves coordination and approval by the Council on Environmental Quality (CEQ), and was not part of the proposed rule, consideration of this request is beyond the scope of this final rule.

Subpart 3260—Geothermal Drilling Operations—General; Subpart 3261—Drilling Operations: Getting a Permit; Subpart 3262—Conducting Drilling Operations; Subpart 3263—Well Abandonment; Subpart 3264—Reports—Drilling Operations; Subpart 3265—Inspection, Enforcement, and Noncompliance for Drilling Operations; Subpart 3266—Confidential, Proprietary Information; and Subpart 3267—Geothermal Drilling Operations Relief and Appeals

Subparts 3260 through 3267 establish permitting and operations procedures for drilling and testing geothermal wells as well as producing or injecting geothermal resources. These subparts also address other types of geothermal well operations. No substantive changes were proposed to these subparts. Changes have been adopted to clarify

terminology and improve grammar and readability.

We received no comments on the proposed minor changes to subparts 3260 through 3267, and have adopted them as proposed.

The BLM received some general comments related to environmental concerns, the NEPA, and permitting. As a general matter, the comments concerning the NEPA raise issues beyond the scope of these regulations. The NEPA process is governed by other regulations (40 CFR parts 1500 through 1508), in addition to our operations permit requirements in the various subparts in parts 3250, 3260, and 3270, none of which are substantively changed by the rule being promulgated today. The Energy Policy Act did not make changes to portions of the statute relating to surface use rights or permit requirements, and therefore these matters, and the environmental studies and timeframes associated with these requirements, are beyond the scope of this rule.

Subpart 3270—Utilization of Geothermal Resources—General; Subpart 3271—Utilization Operations: Getting a Permit; Subpart 3272—Utilization Plan and Facility Construction Permit; Subpart 3273—How to Apply for a Site License; Subpart 3274—Applying for and Obtaining a Commercial Use Permit; Subpart 3275—Conducting Utilization Operations; Subpart 3276—Reports: Utilization Operations; Subpart 3277—Inspections, Enforcement, and Noncompliance; Subpart 3278—Confidential, Proprietary Information; and Subpart 3279—Utilization Relief and Appeals

The regulations in subparts 3270 through 3279 address the permitting and operating requirements for the utilization of geothermal resources. Except as referenced below, no other substantive changes from the previous rules are made to these subparts. Changes have been adopted to clarify terminology and improve grammar and readability. The final rule adopts the proposed rule without substantive change.

Final section 3275.14 removes the previous requirement in section 3275.14(c)(3) to measure the temperature out of a facility because this information is no longer needed for the valuation of direct use operations using the MMS fee schedules. For “no-sales” situations, lessees with leases issued under the Energy Policy Act and with leases converting to the new royalty terms under sections 3212.25 or 3200.8 are no longer required to calculate the amount of heat displaced by the

geothermal resource to compensate the Federal Government for the use of the geothermal resource. Instead, lessees will use a direct use fee schedule that is based only on inlet temperature and the monthly volume or mass produced (see the MMS regulation to be codified at 30 CFR 206.356). In developing the direct use fee schedule, the MMS assumed a fixed outlet temperature of 130 [deg]F, which greatly simplifies the metering system and the calculations.

For situations involving the arms-length sale of geothermal resources to a direct use facility and for leases issued under the previous royalty terms which do not convert to the new royalty terms, final section 3275.14(d) gives the BLM the authority to require outlet temperature recorders on a case-by-case basis, if needed.

One comment related to proposed section 3275.21, which provided that the BLM may order a lessee to drill and produce wells on its lease when the BLM finds it necessary to protect Federal interests, prevent drainage, or ensure that lease development and production occur in accordance with sound operating practices. The commenter asserted that it should be the developer's choice to drill, not the BLM's, and that the BLM should not be in a position to cause a developer to expend that kind of money. The BLM disagrees, and finalizes the rule as proposed. This provision is unchanged from the previous regulations. The BLM has the authority and responsibility to require the lessee to comply with lease terms that require a lessee to drill and produce to protect Federal interests, prevent drainage, or ensure that lease development and production occur in accordance with sound operating practices.

Final section 3276.14 eliminates the requirements of previous section 3276.14(a) to report a daily breakdown of flow, average temperature in, and average temperature out. The information requirements in previous sections 3276.14(d) and (e) are also eliminated. The purpose of the data was to allow the calculation and verification of thermal energy displaced, which was the basis for valuation in the previous MMS regulations. For leases issued under the Energy Policy Act, and for existing leases that convert to the new royalty terms of the Energy Policy Act under sections 3212.25 or 3200.8, direct use operations are valued using the MMS fee schedule that determines fees due as a function of inlet temperature and monthly volume or mass produced. Therefore, collection of the data is no longer necessary.

For situations where the resource is sold under an arm's length contract for use in a direct use facility and for leases issued with the previous royalty terms that do not convert to the royalty terms of the Energy Policy Act, the daily breakdown of flow, average temperature in, and average temperature out may still be required. However, the BLM believes these situations will be relatively rare and can be handled on a case-by-case basis under section 3276.14(d).

Part 3280—Geothermal Resources Unit Agreements

This final rule revises previous part 3280. For the most part, the final rule adopts the rules as proposed. The following identifies and discusses changes from the proposed rule.

The final rule implements the Energy Policy Act relating to unit agreements, specifically 30 U.S.C. 1017. Additionally, the final rule updates procedural requirements related to unit agreement administration. The rule clarifies the BLM's expanded authority regarding unitization, as provided under the Energy Policy Act. Under the rule, the BLM may require: (1) The formation of a unit agreement; (2) Existing Federal leases to commit to a unit agreement; (3) New leases to contain a provision requiring the lessee to agree to commit to a unit agreement if the BLM so requires; and (4) A modification of the rate of resource exploration or development within a unit. The rule also establishes that a majority interest of owners in a Federal lease has the authority to commit the lease to a unit agreement.

Other provisions of this rule do not change previous procedure or practice, but clarify and articulate unit agreement requirements. These provisions include: (1) Setting out application procedures for unit area designations and unit agreements, in the order each step typically occurs; (2) Identifying the BLM's procedures for reviewing applications and making final decisions regarding unit area designations, unit agreements, and participating areas; (3) Explaining the BLM procedures for administering a unit agreement once it is in effect; (4) Specifying how a unit operator can receive the BLM approval to modify unit terms, including those related to unit contraction; and (5) Establishing minimum initial and continuing unit development requirements and conditions for terminating the unit agreement. The final rule standardizes existing practices, assures consistent BLM procedures, and informs the public how the BLM handles unit agreements.

These provisions are described in greater detail below.

Subpart 3280—Geothermal Resources Unit Agreements: General

Final section 3280.1 explains that the purpose and scope of part 3280 is to provide holders of Federal and non-Federal geothermal leases and owners of non-Federal mineral interests the opportunity to unite under a Federal geothermal unit agreement to explore for and develop geothermal resources in a manner that is necessary or advisable in the public interest. To be consistent with the statute, the final rule uses the phrase "necessary or advisable in the public interest," derived from 30 U.S.C. 1017(a), rather than the proposed phrase "meeting the public interest."

This rule removes previous section 3280.0–3 as unnecessary. The authority citation for the part follows the Table of Contents for part 3280, and the discussion of functions within the Interior Department is covered by the Department of the Interior Departmental Manual.

Final section 3280.2 includes definitions from previous section 3280.0–5, with certain revisions. Unnecessary definitions of terms such as "agreement" and "cooperative agreement" are removed. Several definitions are added, including definitions for the terms "unit contraction provision," "plan of development," "public interest," "reasonably proven to produce" and "unit well."

A minor change from the proposal was made to the final definition of the term "unit well." Instead of stating that a unit well is located on a "lease committed to the unit agreement," the final rule provides that a unit well is located on "unitized land," a defined term.

The BLM's policy regarding the formation of units, previously included in section 3280.0–2, is revised and included in final section 3280.3. The new section sets forth the policy contained in 30 U.S.C. 1017(a) that, for the purpose of more properly conserving the natural resources of any geothermal reservoir, field, or like area, or any part thereof, lessees and their representatives can unite with each other, or jointly or separately with others, in collectively adopting and operating under a unit agreement for the reservoir, field, or like area, or any part thereof, including direct use resources, if determined and certified by the BLM to be necessary or advisable in the public interest. The BLM has decided not to adopt the proposed parenthetical phrase "whether or not any part of the

geothermal reservoir, field, or like area, is subject to any unit agreement" because it does not appear to contribute substantially to the stated policy.

Final section 3280.4 addresses the BLM's authority to require the formation of a unit agreement and to require Federal leases to be committed to a unit agreement. It implements 30 U.S.C. 1017(a)(3) and (b). Final section 3280.4(a) provides that the BLM can initiate the formation of a unit agreement, or require an existing Federal lease to commit to a unit agreement, if it is in the public interest. This implements a statutory provision and does not require the consent of a lessee. Modification of lease terms to facilitate creation and operation of the unit, however, does require lessee consent (30 U.S.C. 1017(a)(4) and final section 3280.5).

Final section 3280.4(b) states that the BLM can require that Federal leases becoming effective on or after August 8, 2005, contain a provision stating that the BLM can require commitment of the lease to a unit agreement. Under this provision the BLM can also prescribe the unit agreement to which such lease will be required to commit in order to protect the rights of all parties in interest, including the United States. This provision implements 30 U.S.C. 1017(b)(2).

As mentioned above, final section 3280.5 provides that the BLM can, with the consent of the lessees involved, establish, alter, change, or revoke rates of operations (including drilling, operations, production, and other requirements) of the leases, and make conditions with respect to the leases in connection with the creation and operation of any such unit agreement as the BLM can consider necessary or advisable to secure the protection of the public interest. This implements 30 U.S.C. 1017(a)(4)(A). The rule also provides that if leases to be included in a unit have unlike lease terms, the leases will not be required to be modified to be in the same unit. This implements 30 U.S.C. 1017(a)(4)(B).

One commenter had a number of questions concerning the applicability of the new final regulations to leases and units in existence on August 8, 2005. Specifically, the commenter asked: Are the new unit provisions applicable to existing leases within an existing unit? What if they are pre-August 8, 2005, leases? Can the existing unit be declared void even though the existing unit agreement does not provide for this? The commenter also asserted that paragraphs 3280.5(a) and (b) would be inconsistent in their application, since (b) negates (a).

To clarify these provisions of the final rule, any BLM-approved unit agreements in effect prior to June 1, 2007 will continue to be administered subject to the terms of the unit agreement, and will not be voided or canceled unless that remedy is warranted under the agreement. If the unit operator seeks the BLM's approval for a modification of the agreement, such modification will be made under the regulations in effect when the BLM acts upon the modification request. Also, the new regulations will govern unit matters not expressly addressed in existing agreements. The BLM actions taken after June 1, 2007 on new unit applications or on applications pending on June 1, 2007 will be governed by the new rules.

As to leases within units, leases in effect prior to August 8, 2005, will be administered as provided under final section 3200.7, which sets out which regulations apply to each lease. As mentioned above, leases with unlike terms are not required to be modified to be included in a unit.

The BLM does not agree that section 3280.5(b) negates section 3280.5(a). Although the BLM cannot require that leases be modified to be included in a unit, the BLM may obtain the consent of lessees to establish, alter, change, or revoke rates of operations (including drilling, operations, production, and other requirements) of the leases, and make conditions with respect to the leases, with the consent of the lessees, in connection with the creation and operation of any such unit agreement as the BLM may consider necessary or advisable to protect the public interest. Lessees will generally have an incentive to provide such consent because under final section 3281.19, the BLM cannot approve a unit agreement that does not protect the public interest.

Final section 3280.6 provides that the BLM can require a unit agreement that applies to lands owned by the United States to contain a provision under which the BLM or an entity designated in the unit agreement can alter or modify, from time to time, the rate of resource exploration, development, or production quantity or rate under the unit agreement. This final section implements 30 U.S.C. 1017(c).

Final section 3280.7 clarifies that the BLM cannot require lands that are not under Federal administration to be committed to a unit.

Subpart 3281—Application, Review, and Approval of a Unit Agreement

Final subpart 3281 reorganizes the application, review, and decision procedures for unit area designation and

the unit agreement into a sequential, step-by-step, description. The final regulations describe in detail the steps to follow and the information a prospective unit operator has to submit, as well as the process the BLM follows to make application decisions. The first step is for the BLM to designate the unit area.

Final section 3281.1 makes clear that before a unit agreement is effective, the BLM must designate the unit area and approve the unit agreement.

Final section 3281.2 provides a list of information that the unit operator must submit before the BLM can make a unit area designation. The prospective unit operator will be required to submit a geologic report, a map of the final unit area, a list of leases and tracts located in the final unit area, and any other information the BLM requires.

Final section 3281.3 provides more detail on the types of geologic information the unit operator should provide to document that the final unit area is geologically contiguous and suitable for exploration, development, and production of the resource.

Final section 3281.4 makes it clear that final unit areas are not required to be of a specific size or shape, but the size can cause the BLM to require the drilling of more than one unit well to meet minimum initial unit obligations.

Final section 3281.5 explains how the BLM will resolve conflicts between unit applications that contain overlapping areas. If separate unit applications overlap, the BLM can: (1) Approve the unit application designation which best meets public interest requirements; (2) Designate a different unit area; or (3) Require revision of the applications. The BLM will not approve any final unit agreement if it included lands committed to another unit agreement already in effect.

A change from the proposal is included in final section 3281.5(b) to make it clear that the BLM can reject an application or a portion of an application for a unit. This revision provides the BLM with greater flexibility when reviewing unit applications. Should a unit application involve lands already committed to a unit agreement, this revision will allow the BLM either to reject only the overlapping portion of the application, or to reject the entire application.

A commenter expressed concern about how the BLM, under section 3281.5, will handle a unit area application that overlaps an existing approved unit area and agreement. The commenter's concern is misplaced. Final section 3281.5(a) only describes procedures for reviewing competing

unit applications, not situations where an application is filed for a new unit in the area of an existing effective unit. Once a unit is in effect, the BLM will not accept the submittal of a new unit application which includes lands located in an effective unit.

The commenter's concerns are pertinent, however, to a situation in which an expansion of an existing unit is proposed. The commenter asserted that lessees in an existing unit that would be overlapped by a new or expanded unit should have a voice in the formation of the new or expanded unit. The commenter suggested that at the very least the rule should require the unit operator in the original unit to consult with the lessees in its unit before expanding the unit to allow existing lessees to refuse joinder to protect their lease interest and to conserve the resource. The commenter asserted that if existing lessees are not given this protection by regulation, the methods of operation of the existing unit could be jeopardized contrary to their unit agreement, and the lessees' shares of the revenues could otherwise be diluted or reduced without their consent or justification since these are apportioned on the basis of leased acreage in the unit. The commenter stated that this situation has to be clearly defined by regulation, and not left to the BLM's discretion. Finally the commenter said that the amendments to the Geothermal Steam Act do not prohibit the BLM from adopting such a regulation.

The BLM has not made any revisions based on the comment because the regulations address these concerns. Subpart 3281 specifies that the BLM must designate a unit area prior to it becoming effective. As required through the designation review process, each prospective unit operator must contact all lessees located within each respective unit area for unit commitment. This requirement has been in effect since geothermal unitization was initiated, and it should continue to provide all potential lessees with adequate information regarding unit proposals. Although a lessee is not required to agree to the expansion, the commenter is correct that under section 3280.4 the BLM can require a Federal lessee to commit to a unit, but only if all involved interests are protected.

Expanding a unit area does not affect individual revenue share. Only revising the participating area changes revenue share. The establishment or revision of a participating area is based on the informational requirements found in subpart 3282. This information, based primarily on well testing information,

provides a strong indication of the portion of the unit area that contains resources proven to be commercial. While expanding the participating area to include additional acreage and resources may reduce the percentage of total revenues to individual lessees, this short-term reduction in revenue should be balanced by the addition of commercially proven resources that will ultimately be recovered and shared by all lessees in the participating area.

Final section 3281.6 describes how the BLM determines whether to approve unit designation and how the BLM notifies operators of the decision. Among other considerations, the BLM determines if the geologic basis for the unit area is sound for the development of the unit area. This is the principal factor in deciding whether the unit area will be designated.

Under the rule, if the BLM approves a unit area designation, the prospective unit operator initiates the steps required for unit agreement approval. Final section 3281.7 describes the information a unit operator must submit to the BLM for unit agreement approval.

Consistent with previous section 3281.3, the prospective unit operator is required to provide an opportunity for all owners of mineral rights and lease interests to join the unit under final section 3281.8 and then supply the BLM with documentation of the commitment status of each lease or tract as required by final section 3281.9. Documentation includes a signed joinder agreement or evidence the interest owners were offered an opportunity to join the unit. Under 30 U.S.C. 1017(a)(2) and section 3281.9(b), a majority interest of owners in a lease can commit the lease to a unit agreement.

Final section 3281.10 explains that the BLM reviews the commitment status documentation to insure that the prospective unit operator has sufficient control of the unit area to conduct resource development in the public interest.

Final section 3281.11 addresses the required qualifications of a prospective unit operator. The qualification requirements for unit operators have not changed. This is consistent with previous section 3282.1.

One commenter described what it thought was an inconsistency in the proposal. The commenter asserted that the text of proposed section 3281.11(b), which stated that a unit operator is not required to have an interest in the unit area, was inconsistent with proposed section 3281.10 that stated that the unit operator must have sufficient control of the unit area. We agree that the proposal may have been unclear and have made

a clarifying change. Under final section 3281.11(b), a unit operator is not required to have an interest in any leases committed to the unit agreement. However, as stated at section 3281.10(a)(2), the BLM will determine if the unit operator has sufficient control of the leases committed to the unit agreement to effectively develop the resources occurring in the unit area in the public interest. Such control may be demonstrated by ownership interests, the terms of the unit agreement and other relevant documents, or by other appropriate indicia of control.

Final section 3281.12 explains that owners of geothermal rights and lease interests committed to the unit are the parties who nominate a unit operator; however, the BLM must determine if the nominee meets the qualifications before it designates the unit operator.

Final section 3281.13 addresses the formats or models for unit agreements. This section allows a unit applicant the flexibility to create a unit agreement that best matches the specific development scenario or energy market conditions in an area. The prospective unit operator can use the model unit agreement in final section 3286.1, the model with variances noted, or another format that meets the requirements outlined in the next two final regulatory sections. While previous regulations at section 3281.1 allowed for variances from a model unit agreement, the final regulations clearly describe the information that needs to be in a unit agreement should the applicant choose not to use the model agreement.

Final section 3281.14(a) is adopted as proposed (with the modification discussed below). Final section 3281.14(b) was not contained in the previous rules or the proposed rule, but has been added for the reasons discussed below. Proposed section 3281.14(b) has been redesignated and adopted as final section 3281.14(c).

Final 3281.14 does not change previous procedures related to the required provisions in a unit agreement. Previous regulations required the unit applicant to determine the minimum requirements of a unit agreement by following the model agreement. Listing the minimum requirements and terms for unit agreement should assist applicants in determining what terms and conditions are required in a unit agreement.

One commenter noted that the term (meaning "duration," for purposes of this comment) of a unit agreement appears to differ from the term of a lease. The commenter asserted that the terms should not conflict, but should be consistent with each other, and that

lease terms should be tied to production like unit terms.

The BLM has made clarifying changes to section 3281.14 in response to this comment. Except for the proposed model agreement, the proposed rule did not specify a term for a unit agreement. In the one section of the proposed rule addressing the issue, proposed section 3281.14(a)(5) required a unit agreement to specify a term, which the proposed rule characterized as "typically 5 years." Also, that section of the proposal did not specify the basis for extending the term of a unit agreement. Article 18.1 of the proposed model agreement, on the other hand, unequivocally stated that the term of a unit agreement is in fact (not just "typically") 5 years, and also specifically provided for extensions. Proposed Article 18.1 specified that unit agreements would be extended if "unitized substances are produced or utilized in commercial quantities, in which event the agreement shall continue for so long as unitized substances are produced or utilized in commercial quantities." This basis for extension, *i.e.*, tying units to production, appears to be what the commenter was seeking.

To make the issue clear and eliminate the differences between proposed section 3281.14(a)(5) and proposed Article 18.1 of the Model Agreement, the final rule does not include the "typically 5 years" language in final section 3281.14(a)(5), but instead adds a new paragraph (b) to section 3281.14 to clarify the term of a unit and the bases for extension. Final section 3281.14(b) contains the substance of Article 18.1 of the Model Agreement. Although repetitive, final Article 18.1 is adopted as proposed so as not to confuse persons relying on the model agreement.

As to the commenter's concern over the differences in duration between leases and units, this difference has not caused problems since the Geothermal Steam Act went into effect in 1970. The initial term of a unit has always been 5 years since the Geothermal Steam Act was made effective. There are numerous options for the extension of terms of either a lease or a unit so that either may remain in effect. By statute, leases have always had a primary period of 10 years that may be extended. For instance, once a lease goes into production, the term of the lease is extended for as long as production continues. Additionally, as provided at section 3207.17(a), the BLM may extend the term of a lease to match that of the unit if the lease would expire prior to the unit (see section 3207.15 for details of production extensions for leases, and sections 3284.5 and 3284.11, describing how

unit operations affect lease extensions). The term of the unit may also be extended further if drilling occurs outside of the participating area, but inside of the unit area. Because the terms of both a unit and the terms of the leases located in the participating area are extended as long as production continues, the different durations of the initial terms do not cause significant problems.

Final section 3281.15 lists the minimum initial unit obligation information that the unit agreement must contain. To meet the minimum initial unit obligation, the unit operator must diligently drill and complete at least one unit well. The information required by this section is used to insure that the well is: (1) Located on a tract committed to the unit agreement; (2) Drilled to the depth or geologic formation specified in the unit agreement, unless commercial resources are found at a shallower depth; and (3) Completed within the timeframe specified in the unit agreement. Depending on the size of the unit, the BLM can require the drilling of more than one unit well to meet the minimum initial unit obligation. Since the unit well, by definition, must be designed to produce or utilize resources in commercial quantities, the completion of a narrow diameter well can satisfy the initial obligation only if the well is capable of production in commercial quantities. The BLM will make this determination on a case-by-case basis. Other exploration operations, such as drilling temperature gradient wells, can also be used to satisfy part of the minimum initial unit obligation.

Final section 3281.16 clarifies the previous practice to submit Plans of Development for the unit at the time of unit designation, and for future activities not addressed in a previous Plan of Development. Plans of Development must be submitted to the BLM for future unit activities until the time a producible unit well is completed and begins commercial operations.

Final section 3281.17 describes the information that a unit operator must include in a Plan of Development. While the scope and types of activities described in the Plan of Development may vary, a Plan of Development must include the completion of at least one unit well.

Final section 3281.18 makes it clear that the BLM will not designate a unit area until the Plan of Development ensures that unit activities will meet the public interest requirements.

Final section 3281.19 discusses the BLM's response to a final unit

agreement. In all instances, the BLM's review of a final unit agreement must conclude that approval of the unit complies with these regulations and is in the public interest. This section of the final rule also requires the BLM to coordinate the review of a final unit agreement with appropriate State and other Federal surface management agencies. This is consistent with current practice. Under this section the BLM provides the applicant with written notification of unit rejection or approval.

Final section 3281.20 establishes the effective date of an agreement as the first day of the month following the BLM approval. The unit operator has the option of requesting that the effective date be the first day of the month in which the BLM approved the agreement, or a different date if agreed to by the BLM.

Subpart 3282—Participating Areas

Final subpart 3282 defines several procedural requirements regarding participating areas.

Section 3282.1 of the final rule defines a participating area as those portions of the unit area the BLM determines: (1) Are reasonably proven to produce in commercial quantities; or (2) Support production in commercial quantities such as through pressure support from injection wells.

Final section 3282.2 explains that commercial operations cannot begin before the BLM approval of a participating area. This is necessary to ensure proper allocation of production and royalties within the unit.

Final section 3282.3 specifies that a unit operator must propose a participating area the earlier of 30 days before starting commercial operation, or 60 days after the BLM determines a well will produce or utilize geothermal resources in commercial quantities.

Final section 3282.4 describes the general information (*e.g.*, maps showing all tracts and lease information) that the unit operator must submit to the BLM when applying for a participating area.

Final section 3282.5 describes the technical information (*e.g.*, interpretations of well performance and geology documenting the tracts contributing to production) that the unit operator must submit to the BLM when applying for a participating area.

Final section 3282.6 specifies the circumstances requiring a unit operator to apply to revise a participating area boundary. This final section also allows unit operators to request a delay in modifying participating area boundaries when active drilling is not complete.

Information on the establishment of an effective date for new or revised participating areas is contained in final section 3282.7. This section provides flexibility in establishing the effective date of a participating area, provided the date is not earlier than the effective date of the unit agreement.

Final section 3282.8 establishes the following three reasons for rejection of a revision of a participating area: (1) If the unit operator does not supply the required information; (2) If the information does not support approval; or (3) If the revision reduces the size of the participating area because of resource depletion in a certain area within the participating area. The third reason is included as a matter of equity because a lessee should not lose the benefit of unitization if its resources are depleted before other resources in the participating area. To provide otherwise would serve as a disincentive to having a lease's resources developed early in the life of a participating area.

Final section 3282.9 provides that production must be allocated equally to all lands in a participating area that are committed to the unit agreement. For instance, if a lessee owns or controls full interest in 100 acres within a participating area of 1000 acres, that lessee will be allocated 10 percent of the production from the participating area.

Final section 3282.10(a) specifies that unleased Federal lands located within the participating area receive a proportionate allocation of production for royalty purposes as if the acreage were committed to the participating area. Final section 3282.10(b) specifies that the unit operator is primarily liable for paying, and must pay, royalty to the United States for the allocated production on these unleased Federal lands. The phrase "is primarily liable for paying" is added as a clarification. The proposed rule established the unit operator payment obligation, but did not expressly mention liability.

The final rule also clarifies that in the event the unit operator does not pay any royalties owed for production from unleased Federal lands, each lessee of lands committed to the participating area is responsible for paying such royalties in the same proportion as that lessee's percentage of surface acreage within the participating area, excluding the unleased acreage. This secondary responsibility imposed upon the lessees is justified because if the lessees receive benefits from the resource produced from unleased Federal lands, they should also retain some responsibility to ensure that royalties are paid to the United States for such production.

Proposed section 3282.10(b) would have provided that if the BLM is not allowed to lease the unleased Federal lands in the participating area because of restrictions based on planning decisions or other statutory requirements, the lands would not receive an allocation of production. The BLM has decided not to adopt proposed section 3282.10(b). The final rule requires that any unleased Federal lands in the participating area must receive an allocation of production for royalty purposes. The BLM has concluded that if a unit operator is draining the resource from unleased Federal lands, payment of a proportionate royalty to the United States serves the public interest, regardless of whether the BLM can actually lease the lands. Removal of the proposed restriction does not open withdrawn lands to leasing or entry, but assures that the United States will receive a fair return if federally-owned resources from the unleased lands are produced from wells on adjoining leases.

One commenter asserted that if a developer has private lands and needs peripheral stranded Federal lands, he should be allowed to unitize to include those unleased Federal lands. The BLM agrees that unleased Federal lands may be included in a geothermal unit and in the participating area so that drainage from such lands from geothermal wells on adjoining lands may be considered to be allocated production from the unit and appropriate payments are made to the United States under section 3282.10. Although it can receive payments attributable to production of geothermal resources from unleased Federal lands, the United States will not be responsible for any portion of the costs of such production without statutory authorization and appropriation of funds for that purpose. Moreover, no surface disturbance on or other entry into the unleased Federal lands may occur without express BLM authorization separate and apart from approval of the unit and participating area.

If the unleased Federal lands contain geothermal resources into which a well needs to be drilled to develop the geothermal resources fully, a person can attempt to have such lands leased by nominating such Federal lands to be included in a geothermal lease sale. If the unleased Federal lands are only necessary for the placement of surface facilities related to development of geothermal resources on adjacent leases or tracts, a person can apply to use the Federal surface under the BLM's right-of-way regulations under 43 CFR part 2800 or for a lease, permit, or easement

under 43 CFR part 2920, whichever is applicable. However, if the lands are withdrawn or otherwise restricted from leasing, entry, or surface occupancy, such development and uses of the lands may not be possible.

Final section 3282.11 explains that the BLM may determine that a participating area can continue where only intermittent production is occurring, provided such a determination is in the public interest. The regulations describe direct use facilities that only utilize geothermal resources during winter months as an example of intermittent production that the BLM considers to be in the public interest.

Final section 3282.12 provides that a participating area will terminate when the unit operator either permanently stops commercial operations, or 60 days after receiving notification from the BLM that operations are not being conducted in accordance with the unit agreement, participating area approval, or the public interest. If the unit operator can demonstrate that the BLM's reason for termination is in error or the situation warranting the termination has been rectified, the BLM may decide not to terminate the participating area.

Subpart 3283—Modifications to the Unit Agreement

Final subpart 3283 establishes how to modify a unit agreement. This final rule adds new provisions to specify the conditions under which a unit operator can request an extension of the unit contraction date and/or a partial contraction of the unit area. Providing this flexibility for unit administration decisions by the BLM is necessary since a unit operator can spend substantial amounts of money discovering commercial resources which cannot be immediately developed due to conditions beyond the operator's control. An inability to place portions of a unit into production can subject leases to termination where either commercial resources have been found or monitoring or injection wells not directly involved in production are located. Termination would reduce additional exploration and development in the unit area, which is contrary to the public interest.

Final section 3283.1 provides that a unit operator can request a modification of the unit agreement after all unit interests have agreed to the change in the agreement. After review, the BLM notifies the unit operator in writing of the BLM's decision and effective date of approval, if applicable.

Final section 3283.2 discusses circumstances under which the unit

operator can request the BLM to revise contraction provisions of a unit agreement. Contraction provisions of a unit agreement describe how lands are removed from the unit agreement as exploration and development activities determine which lands are not capable of producing geothermal resources in commercial quantities. Under this section, an operator can also propose an extension of the unit contraction date and/or a partial contraction of the unit area. This section outlines both the information the operator must provide and information the operator should provide to the BLM in support of a request to revise contraction provisions of the unit area. The BLM will approve the request if we determine that revision is in the public interest. The BLM may also add conditions to the approval such as requiring an annual renewal or setting the timing and conditions for when phased contractions or termination of the revision can occur.

Final section 3283.3 addresses how a unit operator will know the status of a unit contraction revision request. Under the final rule, the BLM will notify the unit operator in writing of its decision. If the BLM approves the request, it will specify the term of the contraction extension and/or which lands will remain in the unit agreement. The BLM may require the unit operator to update the information required by final section 3282.3. Also, the BLM could terminate the participating area contraction revision if, in the public interest, it finds it necessary to do so.

Final section 3283.4 addresses adding or removing lands from an agreement when the BLM determines, based on information submitted by the unit operator, that new or additional geologic information modifies the basis for the unit boundary. Once the BLM notifies the unit operator of approval of the revision to the unit, the unit operator must notify all interest owners in the unit area revision.

Final section 3283.5 implements 30 U.S.C. 1017(f), which requires review of unit agreements at 5-year intervals to eliminate any lands in the unit area not necessary for unit operations. A commenter stated that a requirement for the BLM to review all unit agreements every 5 years is burdensome and potentially unnecessary. The commenter asserted that, given the BLM's limited resources, this appears to be a poor allocation of funds, particularly since there does not appear to be any history of problems to justify this priority. The BLM did not make changes to the rule based on this comment. The 5-year review

requirement is necessary to implement a statutory obligation.

Final section 3283.6 describes the purpose of the periodic review, the basis for eliminating lands from the unit, and the consequences of elimination on leased lands.

A commenter objected to the standard for eliminating leases from a geothermal unit. The commenter stated that the term "not reasonably necessary" is too subjective a basis for eliminating lands from a unit. The commenter requested that the regulation should include identifiable criteria for making such decisions.

The BLM did not change the rule based on the comment. This standard in final section 3283.6 comes from the 1988 amendment of the Geothermal Stream Act, and is the wording the BLM has used in the regulations since then. The BLM reviews the type and intensity of unit resource exploration and development to ensure that it is being conducted within operational and environmental standards and meets public interest requirements. The BLM is not aware it has caused an issue at any time when units have been reviewed. The wording is intended to provide the BLM flexibility in administering units given the broad range of development issues that may occur. Under the rule, any BLM determination to eliminate lands from a unit must be based on scientific evidence, and occur only for the purpose of conserving and properly managing the geothermal resources. To safeguard against misuse of this provision, section 3283.6(c) provides that the BLM will not eliminate any lands from a unit until the unit operator, the lessee, and any other person with a legal interest in such lands, have been given reasonable notice and opportunity to comment. The final rule uses the active voice to clarify that it is the BLM that provides the notice and opportunity for comment. The proposal was not clear because it used the passive voice.

Final section 3283.7 provides that unit operators may be changed only with the BLM's written approval.

Final section 3283.8 describes the requirements for a new operator. The new operator must meet the qualification requirements of these regulations, submit evidence of adequate bonding for Federal lands, and provide to the BLM written acceptance of the unit terms and conditions. A minor change from the proposal is included in final paragraph (a) to clarify that the "qualification" requirements are the ones to be met.

Final section 3283.9 provides that the change of unit operator is effective

when the BLM approves the new operator in writing.

Final section 3283.10 explains that the initial unit operator remains responsible for all duties and responsibilities until the BLM approves the new unit operator. This section also makes it clear that initial unit operators remain responsible for liabilities and obligations that accrue before a new unit operator is approved.

Final section 3283.11 acknowledges that a unit agreement does not modify stipulations in Federal leases. While certain lease obligations are altered by commitment of lands to a unit, lease stipulations, such as those designed to protect the environment or other resources, are not superseded by the terms of a unit agreement.

Final section 3283.12 specifies that transferees and successors in interest acquiring Federal geothermal leases committed to a unit agreement are bound by the terms and conditions of the unit agreement.

Subpart 3284—Unit Operations

Final subpart 3284 discusses unit operations, unit operator responsibilities for those operations, and how the BLM administers operational situations.

Final section 3284.1 acknowledges current practice that all phases of unit operations are required to comply with the terms and conditions of the unit agreement and operational standards and orders identified in the exploration (subpart 3250), drilling (subpart 3260), and production and utilization (subpart 3270) subparts of this rule.

Responsibilities of the unit operator are described in final section 3284.2. In general, the unit operator has primary responsibility to diligently explore and drill for, and to produce and inject, unitized geothermal resources. A separate entity can own and operate utilization facilities located within the unit area, but only the unit operator is authorized to produce and inject unitized resources and supply geothermal resources to any utilization facilities, regardless of whether the location of such facilities is within the unit. Other working interests are not authorized to conduct any drilling activities under subpart 3260 on leases committed to a unit agreement without the BLM approval. The unit operator works with the BLM and the MMS to make unit changes and must insure all moneys owed to the Federal Government for geothermal activities are paid.

Final section 3284.3 discusses what happens to the unit agreement and leases committed to the agreement if the

minimum initial unit obligations are not met and how unit operations can affect extension of lease terms. If the initial unit well obligations are not met or the unit operator relinquishes the agreement before meeting the initial unit obligations, the agreement will be voided as if it was never in effect, any lease segregations that occurred as a result of unit formation become invalid, and any extensions issued will be retroactively voided to the date the unit became effective.

Final section 3284.4 addresses actions necessary to maintain a unit agreement after a unit well has been completed. If a unit well is determined by the BLM to be producible, the unit operator must submit a final participating area application and, if no additional wells are drilled, the unit area will contract to conform to the participating area. If a unit well does not produce or utilize geothermal resources in commercial quantities, the unit operator must continue drilling unit wells within the time specified in the agreement until a unit well is completed that the BLM determines produces or utilizes geothermal resources in commercial quantities. Failure to meet this obligation to drill subsequent wells results in the unit terminating at that time.

Final section 3284.5 explains how commitment of lands to a unit agreement affects lease terms. Under final section 3284.5(a), lease extensions granted based on commitment to the unit agreement remain in force while the unit is in effect. Under final section 3207.17, a lease can receive an extension if it was committed to a unit agreement and would expire prior to the unit term expiring. Therefore, we added a cross-reference to section 3207.17 in final section 3284.5(a). If the unit operator has diligently pursued unit development, a lease can receive an extension to match the term of the unit. Final section 3284.5(b) is adopted as proposed, but corrects a mistaken cross-reference that was contained in the proposed rule.

Final section 3284.6 addresses drilling done by working interest owners other than the unit operator. The BLM may approve drilling outside the participating area only when the BLM determines the unit operator is not diligently developing the resource and drilling is in the public interest. Should a working interest owner complete a well which will produce or utilize geothermal resources in commercial quantities, the unit operator must apply to include the well in the participating area and operate the well.

Final section 3284.7 allows a lessee or operator to conduct operations on an uncommitted Federal lease located within a unit if the BLM determines that it is in the public interest and does not unnecessarily affect unit operations.

Final section 3284.8 establishes that a unit can only have one operator. Given the nature of most geothermal resources, multiple unit operators would likely violate the purpose of the unit agreement that all of the resources within the unit be developed as if they were part of one operation. If multiple operators of a unit were allowed, then they could separately develop the resource, the resource would not necessarily be conserved, and the public interest would not be served. In effect, the purpose of having a unit would be defeated.

One commenter expressed concern about the possibility of two unit operators if multiple units exist on overlapping land. As stated earlier, the BLM will not approve separate unit agreements with overlapping lands, so that the situation about which the commenter is concerned will not occur. However, in advance of unit approval, multiple prospective unit operators may propose a variety of unit areas. The designation review and final approval process is designed to insure the unit agreement which is finally made effective by the BLM best meets public interest requirements.

Final section 3284.9 allows the BLM to set or modify the rate of production or injection within the unit area to ensure protection of Federal resources.

One commenter asserted that in a unit, it should be the developer's choice to direct injection or production rates and that the BLM should not be in a position to tell how the plant should be operated. The BLM disagrees with the comment. This provision is essentially unchanged from the previous regulations, with the exception of the addition of the qualifying phrase "to ensure protection of Federal resources." The BLM has always had the authority to direct the lessee's injection or production rates to ensure that the lessee protects Federal resources. Article 10.5 of the previous model unit agreement specified that the BLM has the authority to modify the rate of prospecting and development conducted by the unit operator, as well as the quantity and rate of production. This authority is necessary to ensure protection and conservation of the Federal resources. In practice, exercise of this retained authority has led to few, if any, unresolved disputes.

Final section 3284.10 articulates the unit operator's responsibility to prevent

drainage of the unit area and ensure compensation (royalties) for drainage of geothermal resources from unitized land by wells not subject to the unit agreement.

Final section 3284.11 establishes that development and production from the unit, regardless of location within the unit, fulfills the diligent development requirements for all leases within the unit.

Final section 3284.12 requires unit operators to notify the BLM within 30 days of a change in the commitment status of any lease or tract within the unit, regardless of ownership.

Subpart 3285—Unit Termination

Unit agreement termination is discussed in final subpart 3285.

Final section 3285.1 provides that the BLM may terminate a unit agreement if the unit operator does not comply with any term or condition of the unit agreement.

Final section 3285.2 allows a unit operator to request BLM approval of a voluntary unit agreement termination after the initial unit obligation well is completed and before starting commercial operations. This can occur when the appropriate percentage of working interest owners, as specified in the unit agreement, agree to the termination. If commercial operations are occurring, the unit will remain in effect until all commercial operations cease.

Subpart 3286—Model Unit Agreement

Subpart 3286 provides a model unit agreement. Applicants for unit agreements are not required to use this model (see final section 3281.13). For the most part, the final rule adopts the revisions to the previous model agreement as proposed. Changes either from the previous rule or from the proposed rule are discussed below.

Article 1.1 of the final model agreement clarifies that it is the U.S. Department of the Interior regulations that are accepted, including both BLM and, where applicable, MMS regulations. Article 1.2 of the final model agreement clarifies that BLM operating regulations are accepted for non-federal lands within the unit and are made part of the unit agreement. The proposed model agreement did not expressly identify which agency's rules were accepted. The BLM views this as a non-substantive change because it is a clarification of what was intended in both the previous and proposed rules.

This rule adopts several revisions to Articles IV and XI of the previous model unit agreement. In these Articles, the previous model agreement referred to a

"Plan of Operation." The term "Plan of Development" is used in the final model agreement, instead, to replace Plan of Operation. This change clarifies overall permit application requirements since a Plan of Operation is part of the well drilling and testing application (sections 3261.11 and 3261.12), and is not related to the review of a unit agreement. The requirements of the Plan of Development are not substantially changed from those of the previous Plan of Operation.

Article IV of the final unit model agreement addresses automatic contraction of the participating area. Under Article IV, unitized lands that are not entitled to be within a participating area on the fifth anniversary of the effective date of the initial participating area are eliminated automatically from the unit agreement effective as of the fifth anniversary, with one exception. Under the exception, lands are not automatically eliminated from the unit agreement if diligent drilling operations are in progress on an exploratory well on the fifth anniversary. Under such circumstances, the lands covered by the exploratory drilling are not eliminated from the unit area for as long as exploratory drilling operations are continued diligently, with not more than 6 months elapsing between the completion of one exploratory well and the commencement of the next exploratory well. The previous rule required the unit to contract to the participating area if no more than 4 months, rather than 6 months, elapsed between exploratory wells. The expansion from 4 months to 6 months is referenced in a number of places in Article IV of the Model Agreement in the final rule. Expansion of this time frame to 6 months before contraction occurs provides the unit operator with greater flexibility, particularly when attempting to obtain drilling equipment. In addition, Article 4.6 provides that the BLM can authorize a specified time period in excess of 6 months between the completion of one exploratory well and the beginning of another without elimination of lands from the unit.

An editorial change from the proposed rule was made in final Article 4.7 to insert a word that was missing from the proposed rule.

We are adopting several modifications to previous Article XI. A unit operator was previously required to initiate drilling an exploratory well within 6 months after the effective date of the unit agreement. This rule modifies this requirement to allow the unit operator to conduct exploration operations as well as drilling a well to meet unit diligent development requirements. A

unit operator must complete at least one unit exploration well before the end of the term of the unit agreement or the unit will be voided and leases will not receive any benefit of unit commitment. Article XI of the previous model agreement specified that the BLM can only grant a single extension of drilling obligations of no longer than 4 months. The final rule modifies the model to allow the BLM to grant multiple extensions of time frames to meet public interest requirements. This greater flexibility in unit administration is needed to cover a wide variety of development issues facing unit operators that are beyond their control. Language in Articles 11.5 and 11.7 referring to the "actual production of unitized substances" is changed to "completing a well capable of producing or utilizing unitized substances in commercial quantities." This change allows the minimum initial unit obligation to be met either through the timely completion of a producible unit well or the initiation of actual production of unitized resources.

The final rule substantially shortens Article XV of the model agreement, related to rents and royalties. Final Article XV does not repeat substantive regulatory requirements related to rentals, royalties, rental credits, etc., which are addressed in final subpart 3211. This is not intended as a substantive change because these matters are addressed fully in both the BLM and the MMS rules (see, e.g., 43 CFR subpart 3211 and 30 CFR part 306, subpart H, and 30 CFR 318.303) and in the applicable lease instruments themselves. The key point that both the proposed and final Article XV contain is that nothing in the model agreement operates to relieve the lessees of any land from their respective lease obligations for the payment of any rental or royalty due under their leases. Repeating the requirements in the model agreement would have been complex because geothermal units can consist of leases subject to different rental and royalty terms. A restatement in Article XV might not have been complete or accurate. Final Article XV retains Article 15.1 from the previous and proposed model agreements related to unitized leases on non-Federal land. Final Article 15.3 also states, as was contained in proposed Articles 15.3 and 15.5, that rentals and royalties may be paid by working interest owners or by a unit operator.

Final Article 17.7 has been modified from the proposal to reflect that lease extensions occur through "regulation" as well as by "law." A sentence has been added to that Article stating that

the BLM has adopted a procedure in final section 3207.17 for granting lease extensions for leases committed to a unit to match the term of the unit. The sentence provides that if it is appropriate for the BLM to extend the term of a lease to match the term of the unit, the unit operator shall take the actions required for such extension under 43 CFR 3207.17. Under that section, the unit operator must send the BLM a request to extend the term of a lease committed to a unit at least 60 days before the lease expires.

We are also adopting editorial revisions to the model agreement. For instance, references in the previous model agreement to the "Director" are changed to the "Authorized Officer," the person within the BLM with the authority to make final decisions.

We are removing the following sections in subpart 3286 because the BLM does not require submission of information in the specified formats and the information contained in these sections is found elsewhere in the final rule: section 3286.1–1 Model Exhibit "A"; section 3286.1–2 Model Exhibit "B"; section 3286.2 Model unit bond; section 3286.3 Model designation of successor operator; and section 3286.4 Model change of operator by assignment.

Subpart 3287—Relief and Appeals

This subpart addresses situations where unit operators seek relief from the obligations of the unit agreement and wish to appeal a BLM decision under this part.

Final section 3287.1 allows a unit operator to request a suspension of any or all obligations under the unit agreement.

Final section 3287.2 lists the circumstances that may warrant the granting of a suspension of unit obligations. Typically they include situations beyond the unit operator's control, such as accidents, labor strikes, or Acts of God. Under this provision, the BLM can decide not to grant a suspension of unit obligations, especially the minimum initial obligation, when lengthy or indefinite periods of time are involved. For example, the BLM might not approve a suspension of minimum initial drilling obligations due to a unit operator's inability to obtain an electrical sales contract or when poor economics affect the electrical generation market, limiting the opportunity to obtain viable sales contracts.

Final section 3287.3 describes how a suspension of unit obligations affects the terms of the unit agreement. This section explains that the BLM has the

discretion to toll certain provisions of the unit agreement while allowing others to remain in effect. The BLM specifies the terms of the suspension. The rule obligates the unit operator to notify all interests in the agreement of any suspension that is granted and the terms of the suspension. The wording of the final notification provision has been changed from the proposed rule to clarify that unit interests are to be notified of any suspension granted, and not just of changes in unit agreement obligations.

Final section 3287.4 allows a unit operator to appeal decisions the BLM makes regarding unit agreement administration or operations.

IV. Procedural Matters

Effective Date

This rule becomes effective 30 days following publication, rather than 60 days, because the Department and the Geothermal Industry are interested in having competitive geothermal lease sales as soon as possible. Lease sales cannot be held until these rules become effective because it is these rules that prescribe key terms and conditions of new leases, such as royalty rates and rentals. In addition, the statute authorizes 2 year extensions of leases issued before August 8, 2005 that were within 2 years of the end of their terms on August 8, 2005. Having this rule become effective sooner will assure that lessees of such leases will have sufficient time to apply for any necessary extensions.

Executive Order 12866, Regulatory Planning and Review

This final rule will not have an effect of \$100 million or more on the economy. It will not adversely affect in a material way the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities. The regulatory changes in the nomination and leasing process, royalty system, and diligence requirements are the only provisions in the rule with potential economic impacts. However, as explained in the Regulatory Flexibility Act Threshold Analysis that follows, the royalty provisions are intended to be revenue-neutral program-wide for the next 10 years, and should not have any significant economic impact.

These regulations will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency. This rule does not change the relationships of the geothermal program with other

agencies' actions. These relationships are included in agreements and memoranda of understanding that would not change with this rule. We coordinated closely with the MMS in preparing the rule.

These regulations do not alter the budgetary effects of entitlements, grants, user fees, or loan programs or the right or obligations of their recipients; nor do they raise novel legal or policy issues.

Regulatory Flexibility Act

This rule will not have a significant economic effect on a substantial number of small entities as defined under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) (RFA). The Threshold Analysis under the RFA follows.

The U.S. Census Bureau does not identify the geothermal industry as a discrete industrial classification. Instead, firms involved in exploration and development of geothermal resources are included within other categories. For example, geothermal drilling is grouped with water well drilling; firms involved in the distribution of steam are included with steam and air-conditioning suppliers; and firms generating electricity from geothermal resources are grouped in an Other Electric Power Generation category. As a result, there is no practical way to use the U.S. Census Data to calculate the number of entities involved in the domestic geothermal industry.

As of September 30, 2004, there were 259 noncompetitive Federal leases covering 364,506 acres in Arizona, California, Idaho, Nevada, Oregon, and Utah. Almost 300,000 of those acres are located in Nevada. There were also 140 competitive leases covering 186,683 acres in California, Nevada, New Mexico, Oregon and Utah. Approximately 170,000 of those leased acres are located in California and Nevada.

Although this rule will only affect entities involved in the exploration and development of energy and mineral resources from land where the geothermal resources are administered by the BLM, there is no practical way to determine which of these firms will hold leases or operate on Federal lands in the future. The extent to which any firm is actually affected by this rule depends on whether it holds leases or operates on Federal lands.

The Small Business Administration (SBA) defines small entities involved in the geothermal industry as individuals, limited partnerships, or small companies considered at "arm's length" from the control of any parent

companies, with fewer than 500 employees.

U.S. Census data on firms by number of employees is not available. However, based on interviews of the BLM specialists involved in geothermal leasing activity and several industry representatives, and reviews of company reports, there appears to be only one known firm currently operating on Federal lands with more than 500 employees.

Based on available information, the preponderance of firms involved in geothermal resource exploration and development on Federal lands are small entities as defined by SBA. Therefore, it is reasonable to conclude that this rule will affect a "substantial number of small entities."

The regulatory changes in the nomination and leasing process, royalty system, and diligence requirements are the only provisions in the rule with potential economic impacts. However, the royalty provisions are intended to be revenue-neutral program-wide and should not have any net economic impact. The nomination filing fee is \$100 per nomination, plus 10 cents for each acre of land nominated for competitive sale. This fee will have a negative financial impact on lessees, including small entities. The BLM is authorized to charge reasonable filing fees under Section 304(a) of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1734(a). While our general policy is to charge a processing fee that recovers the agency's reasonable processing cost, the BLM does not have data on our cost of processing nominations. In 2004, the BLM issued 29 competitive and noncompetitive geothermal leases, covering 45,706 acres. With the fees, the cost of acquiring those leases would have been increased by \$2,900 due to the fixed nomination fee, and \$4,570.60 due to the per acre fee, or an average of about \$250 per lease. This nominal filing fee is not intended to reimburse the government for its processing costs, but instead to limit filings to serious applicants. We do not expect the fee to lead to any reduction in the number of serious applicants. Therefore, we do not anticipate any measurable reduction in economic activity due to the regulations.

The regulations are intended to implement provisions of the Energy Policy Act related to geothermal leasing. Those provisions in the Energy Policy Act are primarily intended to promote the exploration and development of geothermal resources on Federal lands.

The annual effect on the economy of the regulatory changes is less than \$100

million, as shown earlier in this section, and will not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local or tribal governments or communities. This rule will not create inconsistencies or otherwise interfere with an action taken or planned by another agency, also as discussed earlier. This rule does not change the relationships of the geothermal program with other agencies' actions. These relationships are included in agreements and memoranda of understanding that would not change with this rule. In addition, this rule does not materially affect the budgetary impacts of entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

Therefore, the BLM has determined under the RFA that this rule will not have a significant economic impact on a substantial number of small entities.

Small Business Regulatory Enforcement Fairness Act

This rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. That is, it would not have an annual effect on the economy of \$100 million or more; it would not result in major cost or price increases for consumers, industries, government agencies, or regions; and it would not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. See the Executive Order 12866 and RFA discussions, above.

Unfunded Mandates Reform Act

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501, *et seq.*): This rule does not impose an unfunded mandate on state, local, or tribal governments or the private sector, in the aggregate, of \$100 million or more per year; nor does this rule have a significant or unique effect on state, local, or tribal governments. The rule would impose no requirements on any of these entities. We have already shown, in the previous discussions and in the RFA threshold analysis, that the changes this rule makes will not have effects approaching \$100 million per year on the private sector. Therefore, the BLM is not required to prepare a statement containing the information required by the Unfunded Mandates Reform Act (2 U.S.C. 1531 *et seq.*).

Executive Order 12630, Government Actions and Interference With Constitutionally Protected Property Rights (Takings)

The final rule is not a government action capable of interfering with constitutionally protected property rights. A takings implication assessment is not required, since the rule is essentially administrative and does not authorize any specific activities that would result in any effects on private property. Therefore, the Department of the Interior has determined that the rule would not cause a taking of private property or require further discussion of takings implications under this Executive Order.

Executive Order 13132, Federalism

The final rule will not have a substantial direct effect on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the levels of government. It would not apply to states or local governments or state or local governmental entities. The management of Federal geothermal leases is the responsibility of the Secretary of the Interior. This rule does not alter any lease management or revenue sharing provisions with the states, nor does it impose any costs to the states. Therefore, in accordance with Executive Order 13132, the BLM has determined that this rule does not have sufficient Federalism implications to warrant preparation of a Federalism Assessment.

Executive Order 12988, Civil Justice Reform

Under Executive Order 12988, we have determined that this rule would not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order.

Paperwork Reduction Act

As required by the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3507(d)), the BLM submitted a copy of the new reporting or recordkeeping requirements to the Office of Management and Budget (OMB) for review. The BLM will not require collection of this information until the OMB has given its approval. The OMB has approved information collection requirements under OMB control numbers 1004–0074 which expires December 31, 2009, and 1004–0132 which expires March 31, 2007. At the OMB's request, the BLM is in the process of combining information collection 1004–0074 and ICR Reference Number 200607–1004–001 into information collection 1004–0132.

National Environmental Policy Act

The BLM has prepared an environmental assessment (EA) and has found that the rule would not constitute a major Federal action significantly affecting the quality of the human environment under Section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4332(2)(C). The rule has no direct effect on BLM environmental activities and decisions. It deals primarily with changes in the leasing procedures and royalty provisions of the existing regulations. The rule will not change operational standards which regulate on the ground impacts. Therefore, an environmental impact statement is not required.

Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

In accordance with Executive Order 13175, we have found that this rule may include policies that have tribal implications. The rule would make changes in the Federal geothermal leasing and management program, which does not apply on Indian tribal lands. At present, there are no geothermal leases or agreements on tribal or allotted Indian lands. If the Bureau of Indian Affairs should ever issue any leases or agreements, the BLM would then likely be responsible for the approval of any such proposed operations on all Indian (except Osage) geothermal leases and agreements. In light of this possibility, and because tribal interests could be implicated in geothermal leasing on Federal lands, the BLM contacted over 299 tribes who could potentially be impacted by this rule. We received only one response from a tribal representative, who requested that they be contacted upon publication of the final rule, but otherwise received no comments from Tribes on the rule.

Executive Order 13211, Actions Concerning Regulation That Significantly Affect Energy Supply, Distribution, or Use

In accordance with Executive Order 13211, the BLM has determined that the rule is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The changes could result in an increase in geothermal leasing and development, but any potential increases are only speculative. If geothermal leasing and development did increase, that would likely have a positive effect on energy supply.

Executive Order 13352—Facilitation of Cooperative Conservation

In accordance with Executive Order 13352, the BLM has determined that this final rule will not impede facilitating cooperative conservation; takes appropriate account of and considers the interests of persons with ownership or other legally recognized interests in land or other natural resources; properly accommodates local participation in the Federal decision-making process; and provides that the programs, projects, and activities are consistent with protecting public health and safety. The changes are essentially administrative in nature and will not have a bearing on cooperative conservation issues.

Regulatory Flexibility Act Threshold Analysis

Introduction

The Regulatory Flexibility Act (RFA) requires agencies to analyze the economic impact of proposed and final regulations and determine the extent to which there is a significant economic impact on a substantial number of small entities, and to consider regulatory alternatives that would achieve the agency's goal while minimizing the burden on small entities. The RFA establishes an analytical process for determining how public policy goals can best be achieved without erecting barriers to competition, stifling innovation, or imposing undue burdens on small entities. Executive Order 13272 reinforces executive intent that agencies give serious attention to impacts on small entities and develop regulatory alternatives to reduce the regulatory burden on small entities. To meet these requirements, the agency must either conduct a regulatory flexibility analysis or certify that the final rule will not have "a significant economic impact on a substantial number of small entities."

Number of Potentially Affected Entities

Entities that will be directly affected by this Geothermal Resource Leasing rule will include most, if not all, firms involved in the exploration and development of geothermal resources on Federal lands. Such operators are a subset of entities involved in the domestic geothermal industry.

The U.S. Census Bureau does not identify the geothermal industry as a discrete industrial classification. Instead firms involved in exploration and development of geothermal resources are included within other categories. For example, geothermal drilling is grouped with water well drilling; firms involved in the distribution of steam are

included with steam and air-conditioning suppliers; and firms generating electricity from geothermal resources are grouped in an "Other Electric Power Generation" category. Therefore, there is no practical way to use the U.S. Census Data to calculate the number of entities involved in the domestic geothermal industry.

There are a limited number of entities that currently hold Federal geothermal leases. As of May 19, 2006,¹ there were 69 different geothermal lessees identified; however, many of these lessees are composed of the same firms, individuals, and partnerships.

The latest published Public Land Statistics² data indicates there were 259 noncompetitive leases covering 364,506 acres in Arizona, California, Idaho, Nevada, Oregon and Utah. Almost 300,000 of those acres are located in Nevada. There were also 140 competitive leases covering 186,683 acres in California, Nevada, New Mexico, Oregon, and Utah. Approximately 170,000 of those leased acres are located in California and Nevada. During FY2004, 24 non-competitive geothermal leases were issued covering 37,453 acres, along with 5 competitive leases covering 8,253 acres.

Geothermal leases are issued with a primary term of 10 years. After the primary term the lease may be extended twice for up to 5 years each time. Currently there are 29,801 leased acres in non-producing status that have been under lease for 11 to 15 years, and another 107,335 acres that have been under lease for 16 to 19 years.³

Although this rule will only affect entities involved in the exploration and development of geothermal resources administered by the BLM, there is no way to determine which firms will hold leases or operate on Federal lands in the future. The extent to which the final rule has an actual impact on any firm depends on whether it holds leases or operates on Federal lands.

Impacted Small Entities

The Small Business Administration (SBA) has developed size standards to carry out the purposes of the Small Business Act; those size standards can be found in 13 CFR 121.201. The SBA defines small entities involved in the geothermal industry as individuals, limited partnerships, or small

companies considered at "arm's length" from the control of any parent companies, with fewer than 500 employees.

U.S. Census data on firms by number of employees is not available. However, based on interviews of BLM specialists⁴ involved in geothermal leasing activity and several industry representatives, and reviews of company reports, there appears to be only one known firm currently operating on Federal lands with more than 500 employees.

Based on available information, the preponderance of firms involved in geothermal resource exploration and development on Federal lands are small entities as defined by SBA. Therefore, it is reasonable to conclude that this rule will impact a "substantial number of small entities."

Direct Economic Impacts

The changes to the geothermal rule fall into a number of different areas: competitive and noncompetitive leasing, direct use leases, royalties and rentals, lease terms and conditions, unit and communitization agreements, acreage limitations, and termination provisions. However, most of the new provisions in the final rule are specifically required by the Energy Policy Act of 2005.

A major concern voiced by some industry representatives regarding the pending changes is that the requirement in the Energy Policy Act eliminated the process of applying for noncompetitive leases directly to BLM and required all leases to be offered competitively. The concern is that this provision will limit future exploration and development on Federal lands, and decrease competition within the industry. Their position is that noncompetitive leasing promotes innovation and the exploration of undeveloped resources. These concerns are worth noting; however, the requirement that all leases must first be offered competitively is included in the rule because it is a requirement of the law.

This final rule provides for the following:

- <bullet> All parcels may be leased competitively for no minimum bid;
- <bullet> Royalties for most new leases will be a percentage of gross proceeds;
- <bullet> When lessees elect to convert existing leases to leases administered under these final regulations, royalty rates will be determined on a case-by-case basis to obtain revenue neutrality;

<bullet> Nominations for competitive leasing will be charged filing fees;

<bullet> Minimum dollar amounts will be set for the work commitment requirements and payments in lieu of work expenditures; and

<bullet> Near-term production incentives will be provided.

Impact Significance

In addition to determining if a substantial number of small entities are likely to be affected by this final rule, the BLM must also determine whether the rule is anticipated to have a significant economic impact on those small entities. The RFA does not define "significant." However, significance should be seen as relative to the size of the business, the size of the competitor's business, and the impact the regulation has on larger competitors.

Royalty—The Energy Policy Act requires that the royalty on production from all future geothermal leases be a gross proceeds royalty. Based on a report⁵ prepared for the Minerals Management Service (MMS) on geothermal royalty valuation methods and a study⁶ prepared by Advanced Resources International, Inc., for the BLM, this final rule implements a gross proceeds lease royalty of 1.75% for years 1 through 10 and 3.5% after year 10 for all future leases. This change is within the parameters mandated by the Energy Policy Act.

The Act also requires that for converted leases the royalty must be revenue neutral, i.e., the royalty rate applied to gross proceeds will generate no more (or less) revenue than the previous net proceeds royalty would generate if applied to those same leases.

The Act also requires that charges for direct use of the geothermal resource be based on a fee schedule rather than a royalty. The MMS developed the fee schedule for direct use, and it is included in the MMS rule that is being finalized simultaneously with this BLM rule.

Current electrical generation lessees that remain under the previous regulations will pay the same royalties as they have been paying all along. Electrical generation lessees who modify their existing leases to the new regulation's percentage of gross proceeds method should pay the same level of royalties as they have paid under the previous regulations.

¹ U.S. Department of the Interior, Bureau of Land Management, LR2000, June 1, 2006.

² U.S. Department of the Interior, Bureau of Land Management, Public Land Statistics 2004, (<http://www.blm.gov/natacq/pls04/>).

³ U.S. Department of the Interior, Bureau of Land Management, LR2000, June 1, 2006.

⁴ BLM contacts included Richard Estabrook (CA), Rich Hoops (NV), Sean Hagerty (CA), Donna Kauffman (OR), Connie Seare, (Utah) and Gloria Baca (NM).

⁵ Royalty Policy Committee, *Geothermal Valuation Subcommittee Report*, May 2005.

⁶ Advanced Resources International, Inc., *Geothermal Development on Federal Lands: Projection of Royalty Impacts Resulting from the Energy Policy Act of 2005*, January 21, 2007.

Program wide, the royalty rates for new electric generation lessees (1.75% for years 1 through 10 and 3.5% after year 10) should result in the same overall level of royalties as they would have paid under the previous regulations. Under the new royalty scheme, new electric generation lessees that use binary power plant technology will be subject to a royalty rate that is approximately 1% higher than the effective royalty rate under the previous regulations. Operations that employ flash technology will be subject to a royalty rate that is almost 2% lower than the previous effective royalty rate for that type of power generation plants.

Lessees that currently use the resource only for direct use and do not sell the resource will have the option to convert their leases to the new fee schedule, which is expected to result in a reduction of \$60,000 per year from the previous level of royalties, a 95-percent reduction. In addition, all new direct use lessees who do not sell the resources under the new regulations will use the same fee schedule, also paying about 95 percent less than they would have under the previous regulations. The MMS has estimated that the royalty changes will result in royalty decreases for the industry as a result of the lower fees for direct use.

It should be noted that likely the most significant effect associated with changes in the royalty scheme are the accounting savings by converting from a netback to a gross proceeds royalty. This savings will be most pronounced for small entities that do not have a full time accounting department.

Filing Fees—The nomination filing fee of \$100 per nomination plus a \$0.10 per acre fee will have a minor negative financial impact on lessees, including small entities. Based on Public Land Statistics data ⁷, 29 competitive and noncompetitive geothermal leases, covering 45,706 acres, were issued in 2004. With the fees, the cost of acquiring those leases would have been increased by \$2,900 by the fixed nomination fee and \$4,570.60 by the per acre fee, or an average cost of about \$250 per lease. It is highly unlikely that cost increases of this magnitude will prevent operators from obtaining leases on lands they are interested in exploring and developing. However, due to the cost of these fees, operators may tend to minimize their nominations to only those parcels that they are truly interested in obtaining.

Work Requirements—The final regulations require the operator to have made exploration expenditures of at least \$40 per acre by the end of the tenth year. After the tenth year the expenditure requirement will be \$15 per acre per year for years 11 to 15 and \$25 per acre per year for years 16 through 19. The requirement differs from the previous regulatory requirement of \$4 per acre for the 6th year, \$6 per acre for the 7th year, \$8 per acre for the 8th year, \$10 per acre for the 9th year, \$12 per acre for the 10th year, \$15 per acre per year for years 11 through 15, and \$18 per acre per year for years 16 through 19.

For the expenditure requirement, the required amount for the first 15 years is essentially the same as the previous requirement. For the 16th through 19th years the expenditure requirement will be 28 percent higher (\$7.00 per acre) than the requirement under the previous regulations. However, the increase only applies to future Federal geothermal leases in the years 11 through 19. As discussed below, the lessees of those future leases could opt to make payments in lieu of expenditures.

Payment in Lieu of Expenditure—Both sets of regulations allow the lessee to make payments to the government in lieu of actual work expenditures. Under the final regulations the payment in lieu of work expenditures will equal the required expenditure amount; \$40 per acre by year 10, \$15 per acre per year for years 11 through 15, and \$25 per acre per year for years 16 through 19. Under the previous regulations the payment amount is \$3 per year for years six through 15 and \$6 per acre per year after year 15. For lessees, including small entities, that are not producing or actively developing their leases after the tenth year, this provision will increase the cost of holding leases. However, this increase in holding costs will only apply to future leases issued under the final regulations and those who elect to be subject to these regulations.

Non-producing leases issued under these final regulations will by the 16th year of the lease term face higher expenditure and/or payment in lieu of expenditure requirements. Assuming leasing activity on par with what occurred in FY 2004, we would have approximately 45,000 acres leased per year under the final regulations. Assuming no production and no exploration expenditures on those leases, by the 16th year of those leases' term the lessees would need to pay the government \$315,000 in payments in lieu of expenditures to hold those leases. This figure represents a highly unlikely worst case scenario in which

all lessees simply hold on to their leases without ever attempting to explore or develop the geothermal resources.

Near Term Incentives—The final regulations provide for near term production incentives for existing leases: There is a 4-year 50 percent reduction in the royalty for those leases that do not convert, which applies to new facilities or qualified expansion projects. The provision will have a positive impact on the lessees of these existing leases.

Regulatory Analysis

Executive Order 12866, the Unfunded Mandates Reform Act (UMRA), and the Small Business and Regulatory Flexibility Act (SBRFA) require agencies to undertake an analysis of the benefits and costs associated with significant regulatory actions.

The changes in the royalty system, nomination process and diligence requirements are the regulatory provisions with potential economic impacts. However, the royalty scheme is intended to be program-wide revenue-neutral and should not have any net economic impact. The filing fee will nominally increase the cost of acquiring a lease. Based on FY2004 data, the filing fee would increase the cost of obtaining a Federal geothermal lease by an average of \$250. The payment in lieu of expenditure provision will increase the cost of holding future non-producing Federal geothermal leases beyond the 15th year. As discussed above, for new leases that are not producing and are not being actively explored the payment in lieu of expenditure (holding cost) will increase by \$7.00 per acre over the previous requirements. However, since these leases are neither producing nor being actively developed it is not anticipated any measurable reduction in economic activity will occur as a result of the final regulations.

The final regulations are intended to implement certain provisions found in the Energy Policy Act related to geothermal leasing. Those provisions in the Act are primarily intended to promote the exploration and development of geothermal resources on Federal lands.

The annual effect on the economy of the regulatory changes is less than \$100 million and will not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities. This rule will not create inconsistencies or otherwise interfere with an action taken or planned by another agency. This rule does not change the relationships of the

⁷ U.S. Department of the Interior, Bureau of Land Management, Public Land Statistics 2004, (<http://www.blm.gov/natacql/pls04/>).

geothermal programs with other agencies' actions. These relationships are included in agreements and memoranda of understanding that will not change with this rule. In addition, this rule does not materially affect the budgetary impact of entitlements, grants, loan programs, or the rights and obligations of their recipients.

Authors

The principal authors of this final rule are Rich Hoops—BLM Nevada State Office, Richard Estabrook—BLM Ukiah Field Office, Cheryl Seath—BLM Bishop Field Office, Sean Hagerty—BLM California State Office, and assisted by Brenda Aird of the Assistant Secretary's Office, Kermit Witherbee—National Geothermal Program Manager, BLM's Division of Regulatory Affairs, and the Office of the Solicitor.

List of Subjects

43 CFR Part 3000

Public lands—mineral resources, Reporting and recordkeeping requirements.

43 CFR Part 3200

Geothermal energy, Government contracts, Mineral royalties, Public lands—mineral resources, Reporting and recordkeeping requirements, Surety bonds, Water resources.

43 CFR Part 3280

Geothermal energy, Government contracts, Public lands—mineral resources, Reporting and recordkeeping requirements, Surety bonds.

Dated: March 30, 2007.

Julie A Jacobson,

Deputy Assistant Secretary, Land and Minerals Management.

■ Accordingly, for the reasons stated in the preamble and under the authorities stated below, BLM amends 43 CFR parts 3000, 3200 and 3280 as follows:

PART 3000—MINERALS MANAGEMENT: GENERAL

■ 1. The authority citation for part 3000 continues to read as follows:

Authority: 16 U.S.C. 3101 *et seq.*; 30 U.S.C. 181 *et seq.*, 301–306, 351–359, and 601 *et seq.*; 31 U.S.C. 9701; 40 U.S.C. 471 *et seq.*; 42 U.S.C. 6508; 43 U.S.C. 1701 *et seq.*; and Pub. L. 97–35, 95 Stat. 357.

■ 2. Amend the table in section 3000.12(a) by adding a new entry under “Geothermal (Part 3200):” after “Lease reinstatement” as follows:

§ 3000.12 What is the fee schedule for fixed fees?

(a) * * *

FY 2006 PROCESSING FEE TABLE

Document/action	Fees
* * * * *	
Geothermal (Part 3200):	
* * * * *	
Nomination of lands ..	100 plus \$0.10 per acre of lands nominated.

■ 3. Revise part 3200 to read as follows:

PART 3200—GEOTHERMAL RESOURCE LEASING

Subpart 3200—Geothermal Resource Leasing

Sec.

- 3200.1 Definitions.
- 3200.3 Changes in agency duties.
- 3200.4 What requirements must I comply with when taking any actions or conducting any operations under this part?
- 3200.5 What are my rights of appeal?
- 3200.6 What types of geothermal leases will BLM issue?
- 3200.7 What regulations apply to geothermal leases issued before August 8, 2005?
- 3200.8 What regulations apply to leases issued in response to applications pending on August 8, 2005?

Subpart 3201—Available Lands

- 3201.10 What lands are available for geothermal leasing?
- 3201.11 What lands are not available for geothermal leasing?

Subpart 3202—Lessee Qualifications

- 3202.10 Who may hold a geothermal lease?
- 3202.11 Must I prove I am qualified to hold a lease when filing an application to lease?
- 3202.12 Are other persons allowed to act on my behalf to file an application to lease?
- 3202.13 What happens if the applicant dies before the lease is issued?

Subpart 3203—Competitive Leasing

- 3203.5 What is the general process for obtaining a geothermal lease?
- 3203.10 How are lands included in a competitive sale?
- 3203.11 Under what circumstances may parcels be offered as a block for competitive sale?
- 3203.12 What fees must I pay to nominate lands?
- 3203.13 How often will BLM hold a competitive lease sale?
- 3203.14 How will BLM provide notice of a competitive lease sale?
- 3203.15 How does BLM conduct a competitive lease sale?

- 3203.17 How must I make payments if I am the successful bidder?
- 3203.18 What happens to parcels that receive no bids at a competitive lease sale?

Subpart 3204—Noncompetitive Leasing Other Than Direct Use Leases

- 3204.05 How can I obtain a noncompetitive lease?
- 3204.10 What payment must I submit with my noncompetitive lease application?
- 3204.11 How may I acquire a noncompetitive lease for lands that were not sold at a competitive lease sale?
- 3204.12 How may I acquire a noncompetitive lease for lands subject to a mining claim?
- 3204.13 How will BLM process noncompetitive lease applications pending on August 8, 2005?
- 3204.14 May I amend my application for a noncompetitive lease?
- 3204.15 May I withdraw my application for a noncompetitive lease?

Subpart 3205—Direct Use Leasing

- 3205.6 When may BLM issue a direct use lease to an applicant?
- 3205.7 How much acreage should I apply for in a direct use lease?
- 3205.10 How do I obtain a direct use lease?
- 3205.12 How will BLM respond to direct use lease applications on lands managed by another agency?
- 3205.13 May I withdraw my application for a direct use lease?
- 3205.14 May I amend my application for a direct use lease?
- 3205.15 How will I know whether my direct use lease will be issued?

Subpart 3206—Lease Issuance

- 3206.10 What must I do for BLM to issue a lease?
- 3206.11 What must BLM do before issuing a lease?
- 3206.12 What are the minimum and maximum lease sizes?
- 3206.13 What is the maximum acreage I may hold?
- 3206.14 How does BLM compute acreage holdings?
- 3206.15 How will BLM charge acreage holdings if the United States owns only a fractional interest in the geothermal resources in a lease?
- 3206.16 Is there any acreage which is not chargeable?
- 3206.17 What will BLM do if my holdings exceed the maximum acreage limits?
- 3206.18 When will BLM issue my lease?

Subpart 3207—Lease Terms and Extensions

- 3207.5 What terms (time periods) apply to my lease?
- 3207.10 What is the primary term of my lease?
- 3207.11 What work am I required to perform during the first 10 years of my lease for BLM to grant the initial extension of the primary term of my lease?
- 3207.12 What work am I required to perform each year for BLM to continue the initial and additional extensions of the primary term of my lease?

- 3207.13 Must I comply with the requirements of §§ 3207.11 and 3207.12 when my lease overlies a mining claim?
- 3207.14 How do I qualify for a drilling extension?
- 3207.15 How do I qualify for a production extension?
- 3207.16 When may my lease be renewed?
- 3207.17 How is the term of my lease affected by commitment to a unit?
- 3207.18 Can my lease be extended if it is eliminated from a unit?

Subpart 3210—Additional Lease Information

- 3210.10 When does lease segregation occur?
- 3210.11 Does a lease segregated from an agreement or plan receive any benefits from unitization of the committed portion of the original lease?
- 3210.12 May I consolidate leases?
- 3210.13 Who may lease or locate other minerals on the same lands as my geothermal lease?
- 3210.14 May BLM readjust the terms and conditions in my lease?
- 3210.15 What if I appeal BLM's decision to readjust my lease terms?
- 3210.16 How must I prevent drainage of geothermal resources from my lease?
- 3210.17 What will BLM do if I do not protect my lease from drainage?

Subpart 3211—Filing and Processing Fees, Rent, Direct Use Fees, and Royalties

- 3211.10 What are the processing and filing fees for leases?
- 3211.11 What are the annual lease rental rates?
- 3211.12 How and where do I pay my rent?
- 3211.13 When is my annual rental payment due?
- 3211.14 Will I always pay rent on my lease?
- 3211.15 How do I credit rent towards royalty?
- 3211.16 Can I credit rent towards direct use fees?
- 3211.17 What is the royalty rate on geothermal resources produced from or attributable to my lease that are used for commercial generation of electricity?
- 3211.18 What is the royalty rate on geothermal resource produced from or attributable to my lease that are used directly for purposes other than commercial generation of electricity?
- 3211.19 What is the royalty rate on byproducts derived from geothermal resources produced from or attributable to my lease?
- 3211.20 How do I credit advanced royalty towards royalty?
- 3211.21 When do I owe minimum royalty?

Subpart 3212—Lease Suspensions, Cessation of Production, Royalty Rate Reductions, and Energy Policy Act Royalty Rate Conversions

- 3212.10 What is the difference between a suspension of operations and production and a suspension of operations?
- 3212.11 How do I obtain a suspension of operations or a suspension of operations and production on my lease?
- 3212.12 How long does a suspension of operations or a suspension of operations and production last?

- 3212.13 How does a suspension affect my lease term and obligations?
- 3212.14 What happens when the suspension ends?
- 3212.15 Will my lease remain in full force and effect if I cease production and I do not have an approved suspension?
- 3212.16 Can I apply to BLM to reduce, suspend, or waive the royalty or rental of my lease?
- 3212.17 What information must I submit when I request that BLM suspend, reduce, or waive my royalty or rental?
- 3212.18 What are the production incentives for leases?
- 3212.19 How do I apply for a production incentive?
- 3212.20 How will BLM review my request for a production incentive?
- 3212.21 What criteria establish a qualified expansion project for the purpose of obtaining a production incentive?
- 3212.22 What criteria establish a new facility for the purpose of obtaining a production incentive?
- 3212.23 How will the production incentive apply to a qualified expansion project?
- 3212.24 How will the production incentive apply to a new facility?
- 3212.25 Can I convert the royalty rate terms of my lease in effect before August 8, 2005, to the terms of the Geothermal Steam Act, as amended by the Energy Policy Act of 2005?
- 3212.26 How do I submit a request to modify the royalty rate terms of my lease to the applicable terms prescribed in the Energy Policy Act of 2005?
- 3212.27 How will BLM or MMS review my request to modify the lease royalty rate terms?

Subpart 3213—Relinquishment, Termination, and Cancellation

- 3213.10 Who may relinquish a lease?
- 3213.11 What must I do to relinquish a lease?
- 3213.12 May BLM accept a partial relinquishment if it will reduce my lease to less than 640 acres?
- 3213.13 When does relinquishment take effect?
- 3213.14 Will BLM terminate my lease if I do not pay my rent on time?
- 3213.15 How will BLM notify me if it terminates my lease?
- 3213.16 May BLM cancel my lease?
- 3213.17 May BLM terminate my lease for reasons other than non-payment of rentals?
- 3213.18 When is a termination effective?
- 3213.19 What can I do if BLM notifies me that my lease is being terminated because of a violation of the law, regulations, or lease terms?

Subpart 3214—Personal and Surety Bonds

- 3214.10 Who must post a geothermal bond?
- 3214.11 Who must my bond cover?
- 3214.12 What activities must my bond cover?
- 3214.13 What is the minimum dollar amount required for a bond?
- 3214.14 May BLM increase the bond amount above the minimum?
- 3214.15 What kind of financial guarantee will BLM accept to back my bond?
- 3214.16 Is there a special bond form I must use?

- 3214.17 Where must I submit my bond?
- 3214.18 Who will BLM hold liable under the lease and what are they liable for?
- 3214.19 What are my bonding requirements when a lease interest is transferred to me?
- 3214.20 How do I modify my bond?
- 3214.21 What must I do if I want to use a certificate of deposit to back my bond?
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Subpart 3215—Bond Release, Termination, and Collection

- 3215.10 When may BLM collect against my bond?
- 3215.11 Must I replace my bond after BLM collects against it?
- 3215.12 What will BLM do if I do not restore the face amount or file a new bond?
- 3215.13 Will BLM terminate or release my bond?
- 3215.14 When BLM releases my bond, does that end my responsibilities?

Subpart 3216—Transfers

- 3216.10 What types of lease interests may I transfer?
- 3216.11 Where must I file a transfer request?
- 3216.12 When does a transferee take responsibility for lease obligations?
- 3216.13 What are my responsibilities after I transfer my interest?
- 3216.14 What filing fees and forms does a transfer require?
- 3216.15 When must I file my transfer request?
- 3216.16 Must I file separate transfer requests for each lease?
- 3216.17 Where must I file estate transfers, corporate mergers, and name changes?
- 3216.18 How do I describe the lands in my lease transfer?
- 3216.19 May I transfer record title interest for less than 640 acres?
- 3216.20 When does a transfer segregate a lease?
- 3216.21 When is my transfer effective?
- 3216.22 Does BLM approve all transfer requests?

Subpart 3217—Cooperative Agreements

- 3217.10 What are unit agreements?
- 3217.11 What are communitization agreements?
- 3217.12 What does BLM need to approve my communitization agreement?
- 3217.13 When does my communitization agreement go into effect?
- 3217.14 When will BLM approve my drilling or development contract?
- 3217.15 What does BLM need to approve my drilling or development contract?

Subpart 3250—Exploration Operations—General

- 3250.10 When do the exploration operations regulations apply?
- 3250.11 May I conduct exploration operations on my lease, someone else's lease, or unleased land?
- 3250.12 What general standards apply to exploration operations?

3250.13 What additional BLM orders or instructions govern exploration?

3250.14 What types of operations may I propose in my application to conduct exploration?

Subpart 3251—Exploration Operations: Getting BLM Approval

3251.10 Do I need a permit before I start exploration operations?

3251.11 What is in a complete Notice of Intent to Conduct Geothermal Resource Exploration Operations application?

3251.12 What action will BLM take on my Notice of Intent to Conduct Geothermal Resource Exploration Operations?

3251.13 Once I have an approved Notice of Intent, how can I change my exploration operations?

3251.14 Do I need a bond for conducting exploration operations?

3251.15 When will BLM release my bond?

Subpart 3252—Conducting Exploration Operations

3252.10 What operational standards apply to my exploration operations?

3252.11 What environmental requirements must I meet when conducting exploration operations?

3252.12 How deep may I drill a temperature gradient well?

3252.13 How long may I collect information from my temperature gradient well?

3252.14 How must I complete a temperature gradient well?

3252.15 When must I abandon a temperature gradient well?

3252.16 How must I abandon a temperature gradient well?

Subpart 3253—Reports: Exploration Operations

3253.10 Must I share with BLM the data I collect through exploration operations?

3253.11 Must I notify BLM when I have completed my exploration operations?

Subpart 3254—Inspection, Enforcement, and Noncompliance for Exploration Operations

3254.10 May BLM inspect my exploration operations?

3254.11 What will BLM do if my exploration operations are not in compliance with my permit, other BLM approvals or orders, or the regulations in this part?

Subpart 3255—Confidential, Proprietary Information

3255.10 Will BLM disclose information I submit under these regulations?

3255.11 When I submit confidential, proprietary information, how can I help ensure it is not available to the public?

3255.12 How long will information I give BLM remain confidential or proprietary?

3255.13 How will BLM treat Indian information submitted under the Indian Mineral Development Act?

3255.14 How will BLM administer information concerning other Indian minerals?

3255.15 When will BLM consult with Indian mineral owners when information concerning their minerals is the subject of a FOIA request?

Subpart 3256—Exploration Operations Relief and Appeals

3256.10 How do I request a variance from BLM requirements that apply to my exploration operations?

3256.11 How may I appeal a BLM decision regarding my exploration operations?

Subpart 3260—Geothermal Drilling Operations—General

3260.10 What types of geothermal drilling operations are covered by these regulations?

3260.11 What general standards apply to my drilling operations?

3260.12 What other orders or instructions may BLM issue?

Subpart 3261—Drilling Operations: Getting a Permit

3261.10 How do I get approval to begin well pad construction?

3261.11 How do I apply for approval for drilling operations and well pad construction?

3261.12 What is an operations plan?

3261.13 What is a drilling program and how do I apply for drilling program approval?

3261.14 When must I give BLM my operations plan?

3261.15 Must I give BLM my drilling permit application, drilling program, and operations plan at the same time?

3261.16 Can my operations plan, drilling permit, and drilling program apply to more than one well?

3261.17 How do I amend my operations plan or drilling permit?

3261.18 Do I need to file a bond before I build a well pad or drill a well?

3261.19 When will BLM release my bond?

3261.20 How will BLM review applications submitted under this subpart and notify me of its decision?

3261.21 How do I get approval to change an approved drilling operation?

3261.22 How do I get approval for subsequent well operations?

Subpart 3262—Conducting Drilling Operations

3262.10 What operational requirements must I meet when drilling a well?

3262.11 What environmental requirements must I meet when drilling a well?

3262.12 Must I post a sign at every well?

3262.13 May BLM require me to follow a well spacing program?

3262.14 May BLM require me to take samples or perform tests and surveys?

Subpart 3263—Well Abandonment

3263.10 May I abandon a well without BLM's approval?

3263.11 What information must I give to BLM to approve my Sundry Notice for abandoning a well?

3263.12 How will BLM review my Sundry Notice to abandon my well and notify me of their decision?

3263.13 What must I do to restore the site?

3263.14 May BLM require me to abandon a well?

3263.15 May I abandon a producible well?

Subpart 3264—Reports—Drilling Operations

3264.10 What must I submit to BLM after I complete a well?

3264.11 What must I submit to BLM after I finish subsequent well operations?

3264.12 What must I submit to BLM after I abandon a well?

3264.13 What drilling and operational records must I maintain for each well?

3264.14 How do I notify BLM of accidents occurring on my lease?

Subpart 3265—Inspection, Enforcement, and Noncompliance for Drilling Operations

3265.10 What part of my drilling operations may BLM inspect?

3265.11 What records must I keep available for inspection?

3265.12 What will BLM do if my operations do not comply with my permit and applicable regulations?

Subpart 3266—Confidential, Proprietary Information

3266.10 Will BLM disclose information I submit under these regulations?

3266.11 When I submit confidential, proprietary information, how can I help ensure it is not available to the public?

3266.12 How long will information I give BLM remain confidential or proprietary?

Subpart 3267—Geothermal Drilling Operations Relief and Appeals

3267.10 May I request a variance from any BLM requirements that apply to my drilling operations?

3267.11 How may I appeal a BLM decision regarding my drilling operations?

Subpart 3270—Utilization of Geothermal Resources—General

3270.10 What types of geothermal operations are governed by these utilization regulations?

3270.11 What general standards apply to my utilization operations?

3270.12 What other orders or instructions may BLM issue?

Subpart 3271—Utilization Operations: Getting a Permit

3271.10 What do I need to start preparing a site and building and testing a utilization facility on Federal land leased for geothermal resources?

3271.11 Who may apply for a permit to build a utilization facility?

3271.12 What do I need to start preliminary site investigations that may disturb the surface?

3271.13 How do I obtain approval to build pipelines and facilities connecting the well field to utilization facilities not located on Federal lands leased for geothermal resources?

3271.14 What do I need to start building and testing a utilization facility if it is not on Federal lands leased for geothermal resources?

3271.15 How do I get a permit to begin commercial operations?

Subpart 3272—Utilization Plan and Facility Construction Permit

- 3272.10 What must I submit to BLM in my utilization plan?
- 3272.11 How do I describe the proposed utilization facility?
- 3272.12 What environmental protection measures must I include in my utilization plan?
- 3272.13 How will BLM review my utilization plan and notify me of its decision?
- 3272.14 How do I get a permit to build or test my facility?

Subpart 3273—How To Apply for a Site License

- 3273.10 When do I need a site license for a utilization facility?
- 3273.11 When is a site license unnecessary?
- 3273.12 How will BLM review my site license application?
- 3273.13 What lands are not available for geothermal site licenses?
- 3273.14 What area does a site license cover?
- 3273.15 What must I include in my site license application?
- 3273.16 What is the annual rent for a site license?
- 3273.17 When may BLM reassess the annual rent for my site license?
- 3273.18 What facility operators must pay the annual site license rent?
- 3273.19 What are the bonding requirements for a site license?
- 3273.20 When will BLM release my bond?
- 3273.21 What are my obligations under the site license?
- 3273.22 How long will my site license remain in effect?
- 3273.23 May I renew my site license?
- 3273.24 When may BLM terminate my site license?
- 3273.25 When may I relinquish my site license?
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Subpart 3274—Applying for and Obtaining a Commercial Use Permit

- 3274.10 Do I need a commercial use permit to start commercial operations?
- 3274.11 What must I give BLM to approve my commercial use permit application?
- 3274.12 How will BLM review my commercial use permit application?
- 3274.13 May I get a permit even if I cannot currently demonstrate I can operate within required standards?

Subpart 3275—Conducting Utilization Operations

- 3275.10 How do I change my operations if I have an approved facility construction or commercial use permit?
- 3275.11 What are a facility operator's obligations?
- 3275.12 What environmental and safety requirements apply to facility operations?
- 3275.13 How must the facility operator measure the geothermal resources?
- 3275.14 What aspects of my geothermal operations must I measure?
- 3275.15 How accurately must I measure my production and utilization?
- 3275.16 What standards apply to installing and maintaining meters?

- 3275.17 What must I do if I find an error in a meter?
- 3275.18 May BLM require me to test for byproducts associated with geothermal resource production?
- 3275.19 How do I apply to commingle production?
- 3275.20 What will BLM do if I waste geothermal resources?
- 3275.21 May BLM order me to drill and produce wells on my lease?

Subpart 3276—Reports: Utilization Operations

- 3276.10 What are the reporting requirements for facility and lease operations involving Federal geothermal resources?
- 3276.11 What information must I include for each well in the monthly report of well operations?
- 3276.12 What information must I give BLM in the monthly report for facility operations?
- 3276.13 What additional information must I give BLM in the monthly report for flash and dry steam facilities?
- 3276.14 What information must I give BLM in the monthly report for direct use facilities?
- 3276.15 How must I notify BLM of accidents occurring at my utilization facility?

Subpart 3277—Inspections, Enforcement, and Noncompliance

- 3277.10 When will BLM inspect my operations?
- 3277.11 What records must I keep available for inspection?
- 3277.12 What will BLM do if I do not comply with all BLM requirements pertaining to utilization operations?

Subpart 3278—Confidential, Proprietary Information

- 3278.10 When will BLM disclose information I submit under these regulations?
- 3278.11 When I submit confidential, proprietary information, how can I help ensure it is not available to the public?
- 3278.12 How long will information I give BLM remain confidential or proprietary?

Subpart 3279—Utilization Relief and Appeals

- 3279.10 When may I request a variance from BLM requirements pertaining to utilization operations?
- 3279.11 How may I appeal a BLM decision regarding my utilization operations?

Authority: 30 U.S.C. 1001–1028; 43 U.S.C. 1701 *et seq.*; and Pub. L. 109–58.

Subpart 3200—Geothermal Resource Leasing**§ 3200.1 Definitions.**

For purposes of this part and part 3280:

Acquired lands means lands or mineral estates that the United States obtained by deed through purchase, gift, condemnation or other legal process.

Act means the Geothermal Steam Act of 1970, as amended (30 U.S.C. 1001 *et seq.*).

Additional extension means the period of years added to the primary term of a lease beyond the first 10 years and subsequent 5-year initial extension of a geothermal lease. The additional extension may not exceed 5 years.

Byproducts are minerals (exclusive of oil, hydrocarbon gas, and helium), found in solution or in association with geothermal steam, that no person would extract and produce by themselves because they are worth less than 75 percent of the value of the geothermal steam or because extraction and production would be too difficult.

Casual use means activities that ordinarily lead to no significant disturbance of Federal lands, resources, or improvements.

Commercial operation means delivering Federal geothermal resources, or electricity or other benefits derived from those resources, for sale. This term also includes delivering resources to the utilization point, if you are utilizing Federal geothermal resources for your own benefit and not selling energy to another entity.

Commercial production means production of geothermal resources when the economic benefits from the production are greater than the cost of production.

Commercial production or generation of electricity means generation of electricity that is sold or is subject to sale, including the electricity or energy that is reasonably required to produce the resource used in production of electricity for sale or to convert the resource into electrical energy for sale.

Commercial quantities means either:

(1) For production from a lease, a sufficient volume (in terms of flow and temperature) of the resource to provide a reasonable return after you meet all costs of production; or

(2) For production from a unit, a sufficient volume (in terms of flow and temperature) of the resource to provide a reasonable return after you meet all costs of drilling and production.

Commercial use permit means BLM authorization for commercially operating a utilization facility and/or utilizing Federal geothermal resources.

Development or drilling contract means a BLM-approved agreement between one or more lessees and one or more entities that makes resource exploration more efficient and protects the public interest.

Direct use means utilization of geothermal resources for commercial,

residential, agricultural, public facilities, or other energy needs other than the commercial production or generation of electricity. Direct use may occur under either a regular geothermal lease or a direct use lease.

Direct use lease means a lease issued noncompetitively in an area BLM designates as available exclusively for:

(1) Direct use of geothermal resources, without sale; and

(2) Purposes other than commercial generation of electricity.

Exploration operations means any activity relating to the search for evidence of geothermal resources, where you are physically present on the land and your activities may cause damage to those lands. Exploration operations include, but are not limited to, geophysical operations, drilling temperature gradient wells, drilling holes used for explosive charges for seismic exploration, core drilling or any other drilling method, provided the well is not used for geothermal resource production. It also includes related construction of roads and trails, and cross-country transit by vehicles over public land. Exploration operations do not include the direct testing of geothermal resources or the production or utilization of geothermal resources.

Facility construction permit means BLM permission to build and test a utilization facility.

Facility operator means the person receiving BLM authorization to site, construct, test, and/or operate a utilization facility. A facility operator may be a lessee, a unit operator, or a third party.

Geothermal drilling permit means BLM written permission to drill for and test Federal geothermal resources.

Geothermal exploration permit means BLM written permission to conduct only geothermal exploration operations and associated surface disturbance activities under an approved Notice of Intent to Conduct Geothermal Resource Exploration Operations, and includes any necessary conditions BLM imposes.

Geothermal resources operational order means a formal, numbered order, issued by BLM, that implements or enforces the regulations in this part.

Geothermal steam and associated geothermal resources means:

(1) All products of geothermal processes, including indigenous steam, hot water, and hot brines;

(2) Steam and other gases, hot water, and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations;

(3) Heat or other associated energy found in geothermal formations; and

(4) Any byproducts.

Gross proceeds means gross proceeds as defined by the Minerals Management Service at 30 CFR 206.351.

Initial extension means a period of years, no longer than 5 years, added to the primary term of a geothermal lease beyond the first 10 years of the lease, provided certain lease obligations are met.

Interest means ownership in a lease of all or a portion of the record title or operating rights.

Known geothermal resource area (KGRA) means an area where BLM determines that persons knowledgeable in geothermal development would spend money to develop geothermal resources.

Lessee means a person holding record title interest in a geothermal lease issued by BLM.

MMS means the Minerals Management Service of the Department of the Interior.

Notice to Lessees (NTL) means a written notice issued by BLM that implements the regulations in this part, part 3280, or geothermal resource operational orders, and provides more specific instructions on geothermal issues within a state, district, or field office. Notices to Lessees may be obtained by contacting the BLM State Office that issued the NTL.

Operating rights (working interest) means any interest held in a lease with the right to explore for, develop, and produce leased substances.

Operating rights owner means a person who holds operating rights in a lease. A lessee is an operating rights owner if the lessee did not transfer all of its operating rights. An operator may or may not own operating rights.

Operations plan, or plan of operations means a plan which fully describes the location of proposed drill pad, access roads and other facilities related to the drilling and testing of Federal geothermal resources, and includes measures for environmental and other resources protection and mitigation.

Operator means any person who has taken responsibility in writing for the operations conducted on leased lands.

Person means an individual, firm, corporation, association, partnership, trust, municipality, consortium, or joint venture.

Primary term means the first 10 years of a lease, not including any periods of suspension.

Produced or utilized in commercial quantities means the completion of a well that:

(1) Produces geothermal resources in commercial quantities; or

(2) Is capable of producing geothermal resources in commercial quantities so

long as BLM determines that diligent efforts are being made toward the utilization of the geothermal resource.

Public lands means the same as defined in 43 U.S.C. 1702(e).

Record title means legal ownership of a geothermal lease established in BLM's records.

Relinquishment means the lessee's voluntary action to end the lease in whole or in part.

Secretary means the Secretary of the Interior or the Secretary's delegate.

Site license means BLM's written authorization to site a utilization facility on leased Federal lands.

Stipulation means additional conditions BLM attaches to a lease or permit.

Sublease means the lessee's conveyance of its interests in a lease to an operating rights owner. A sublessee is responsible for complying with all terms, conditions, and stipulations of the lease.

Subsequent well operations are those operations done to a well after it has been drilled. Examples of subsequent well operations include: cleaning the well out, surveying it, performing well tests, chemical stimulation, running a liner or another casing string, repairing existing casing, or converting the well from a producer to an injector or vice versa.

Sundry notice is your written request to perform work not covered by another type of permit, or to change operations in your previously approved permit.

Surface management agency means any Federal agency, other than BLM, that is responsible for managing the surface overlying Federally-owned minerals.

Temperature gradient well means a well authorized under a geothermal exploration permit drilled in order to obtain information on the change in temperature over the depth of the well.

Transfer means any conveyance of an interest in a lease by assignment, sublease, or otherwise.

Unit agreement means an agreement to explore for, produce and utilize separately-owned interests in geothermal resources as a single consolidated unit. A unit agreement defines how costs and benefits will be allocated among the holders of interest in the unit area.

Unit area means all tracts committed to an approved unit agreement.

Unit operator means the person who has stated in writing to BLM that the interest owners of the committed leases have designated it as operator of the unit area.

Unitized substances means geothermal resources recovered from lands committed to a unit agreement.

Utilization Plan or plan of utilization means a plan which fully describes the utilization facility, including measures for environmental protection and mitigation.

Waste means:

- (1) Physical waste, including refuse; or
- (2) Improper use or unnecessary dissipation of geothermal resources through inefficient drilling, production, transmission, or utilization.

§ 3200.3 Changes in agency duties.

There are many leases and agreements currently in effect, and that will remain in effect, involving Federal geothermal resources leases that specifically refer to the United States Geological Survey, USGS, Minerals Management Service, MMS, or Conservation Division. These leases and agreements may also specifically refer to various officers such as Supervisor, Conservation Manager, Deputy Conservation Manager, Minerals Manager, and Deputy Minerals Manager. Those references must now be read to mean either the Bureau of Land Management or the Minerals Management Service, as appropriate. In addition, many leases and agreements specifically refer to 30 CFR part 270 or a specific section of that part. Effective December 3, 1982, references in such leases and agreements to 30 CFR part 270 should be read as references to this part 3200, which is the successor regulation to 30 CFR part 270.

§ 3200.4 What requirements must I comply with when taking any actions or conducting any operations under this part?

When you are taking any actions or conducting any operations under this part, you must comply with:

- (a) The Act and the regulations of this part;
- (b) Geothermal resource operational orders;
- (c) Notices to lessees;
- (d) Lease terms and stipulations;
- (e) Approved plans and permits;
- (f) Conditions of approval;
- (g) Verbal orders from BLM that will be confirmed in writing;
- (h) Other instructions from BLM; and
- (i) Any other applicable laws and regulations.

§ 3200.5 What are my rights of appeal?

- (a) If you are adversely affected by a BLM decision under this part, you may appeal that decision under parts 4 and 1840 of this title.
- (b) All BLM decisions or approvals under this part are immediately effective and remain in effect while appeals are pending unless a stay is granted in accordance with § 4.21(b) of this title.

§ 3200.6 What types of geothermal leases will BLM issue?

BLM will issue two types of geothermal leases:

(a) Geothermal leases (competitively issued under subpart 3203 or noncompetitively issued under subpart 3204) which may be used for any type of geothermal use, such as commercial generation of electricity or direct use of the resource.

(b) Direct use leases (issued under subpart 3205).

§ 3200.7 What regulations apply to geothermal leases issued before August 8, 2005?

(a) *General applicability.* (1) Leases issued before August 8, 2005, are subject to this part and part 3280, except that such leases are subject to the BLM regulations in effect on August 8, 2005 (43 CFR parts 3200 and 3280 (2004)), with regard to regulatory provisions relating to royalties, minimum royalties, rentals, primary term and lease extensions, diligence and annual work requirements, and renewals.

(2) The lessee of a lease issued before August 8, 2005, may elect to be subject to all of the regulations in this part and part 3280, without regard to the exceptions in paragraph (a)(1) of this section. Such an election must occur no later than December 1, 2008. Any such election as it pertains to lease terms relating to royalty rates must be made under the royalty rate conversion provisions of subpart 3212. A lessee must obtain a royalty conversion under subpart 3212 to make an election under this paragraph effective.

(b) *Royalty rate conversion and production incentives.* The lessee of a lease issued before August 8, 2005, may:

(1) Choose to convert lease terms relating to royalty rates under subpart 3212; or

(2) If it does not convert lease terms relating to royalty rates, apply for a production incentive under subpart 3212 (if eligible under that subpart).

(c) *Two year extension.* The lessee of a lease issued before August 8, 2005, may apply to extend a lease that was within 2 years of the end of its term on August 8, 2005, for up to 2 years to allow achievement of production under the lease or to allow the lease to be included in a producing unit.

§ 3200.8 What regulations apply to leases issued in response to applications pending on August 8, 2005?

(a) Any leases issued in response to applications that were pending on August 8, 2005, are subject to this part and part 3280, except that such leases are subject to the BLM regulations in

effect on August 8, 2005 (43 CFR parts 3200 and 3280 (2004)), with regard to regulatory provisions relating to royalties, minimum royalties, rentals, primary term and lease extensions, diligence and annual work requirements, and renewals.

(b)(1) The lessee of a lease issued pursuant to an application that was pending on August 8, 2005, may elect to be subject to all of the regulations in this part and part 3280, without regard to the exceptions in paragraph (a) of this section.

(2) For leases issued on or after August 8, 2005, and before June 1, 2007, an election under paragraph (b)(1) of this section must occur no later than December 1, 2008.

(3) For leases issued on or after June 1, 2007, the lease applicant must make its election under paragraph (b)(1) of this section and notify BLM before the lease is issued.

Subpart 3201—Available Lands

§ 3201.10 What lands are available for geothermal leasing?

(a) BLM may issue leases on:

(1) Lands administered by the Department of the Interior, including public and acquired lands not withdrawn from such use;

(2) Lands administered by the Department of Agriculture with its concurrence;

(3) Lands conveyed by the United States where the geothermal resources were reserved to the United States; and

(4) Lands subject to Section 24 of the Federal Power Act, as amended (16 U.S.C. 818), with the concurrence of the Secretary of Energy.

(b) If your activities under your lease or permit might adversely affect a significant thermal feature of a National Park System unit, BLM will include stipulations to protect this thermal feature in your lease or permit. These stipulations will be added, if necessary, when your lease or permit is issued, extended, renewed or modified.

§ 3201.11 What lands are not available for geothermal leasing?

BLM will not issue leases for:

(a) Lands where the Secretary has determined that issuing the lease would cause unnecessary or undue degradation of public lands and resources;

(b) Lands contained within a unit of the National Park System, or otherwise administered by the National Park Service;

(c) Lands within a National Recreation Area;

(d) Lands where the Secretary determines after notice and comment

that geothermal operations, including exploration, development or utilization of lands, are reasonably likely to result in a significant adverse effect on a significant thermal feature within a unit of the National Park System;

(e) Fish hatcheries or wildlife management areas administered by the Secretary;

(f) Indian trust or restricted lands within or outside the boundaries of Indian reservations;

(g) The Island Park Geothermal Area; and

(h) Lands where Section 43 of the Mineral Leasing Act (30 U.S.C. 226–3) prohibits geothermal leasing, including:

(1) Wilderness areas or wilderness study areas administered by BLM or other surface management agencies;

(2) Lands designated by Congress as wilderness study areas, except where the statute designating the study area specifically allows leasing to continue; and

(3) Lands within areas allocated for wilderness or further planning in Executive Communication 1504, Ninety-Sixth Congress (House Document 96–119), unless such lands are allocated to uses other than wilderness by a land and resource management plan or are released to uses other than wilderness by an Act of Congress.

Subpart 3202—Lessee Qualifications

§ 3202.10 Who may hold a geothermal lease?

You may hold a geothermal lease if you are:

(a) A United States citizen who is at least 18 years old;

(b) An association of United States citizens, including a partnership;

(c) A corporation organized under the laws of the United States, any state or the District of Columbia; or

(d) A domestic governmental unit.

§ 3202.11 Must I prove I am qualified to hold a lease when filing an application to lease?

You do not need to submit proof that you are qualified to hold a lease under § 3202.10 at the time you submit an application to lease, but BLM may ask you in writing for information about your qualifications at any time. You must submit the additional information to BLM within 30 days after you receive the request.

§ 3202.12 Are other persons allowed to act on my behalf to file an application to lease?

Another person may act on your behalf to file an application to lease. The person acting for you must be qualified to hold a lease under § 3202.10, and must do the following:

(a) Sign the application;

(b) State his or her title;

(c) Identify you as the person he or she is acting for; and

(d) Provide written proof of his or her qualifications and authority to take such action, if BLM requests it.

§ 3202.13 What happens if the applicant dies before the lease is issued?

If the applicant dies before the lease is issued, BLM will issue the lease to either the administrator or executor of the estate or the heirs. If the heirs are minors, BLM will issue the lease to either a legal guardian or trustee, provided that the legal guardian or trustee is qualified to hold a lease under § 3202.10.

Subpart 3203—Competitive Leasing

§ 3203.5 What is the general process for obtaining a geothermal lease?

(a) The competitive geothermal leasing process consists of the following steps:

(1)(i) Entities interested in geothermal development nominate lands by submitting to BLM descriptions of lands they seek to be included in a lease sale; or

(ii) BLM may include land in a competitive lease sale on its own initiative.

(2) BLM provides notice of the parcels to be offered, and the time, location, and process for participating in the lease sale.

(3) BLM holds the lease sale and offers leases to the successful bidder.

(b) BLM will issue geothermal leases to the highest responsible qualified bidder after a competitive leasing process, except for situations where noncompetitive leasing is allowed under subparts 3204 and 3205, which include:

(1) Lease applications pending on August 8, 2005;

(2) Lands for which no bid was received in a competitive lease sale;

(3) Direct use lease applications for which no competitive interest exists; and

(4) Lands subject to mining claims.

§ 3203.10 How are lands included in a competitive sale?

(a) A qualified company or individual may nominate lands for competitive sale by submitting an applicable BLM nomination form.

(b) A nomination is a description of lands that you seek to be included in one lease. Each nomination may not exceed 5,120 acres, unless the area to be leased includes an irregular subdivision. Your nomination must provide a description of the lands nominated by legal land description.

(1) For lands surveyed under the public land rectangular survey system, describe the lands to the nearest aliquot part within the legal subdivision, section, township, and range;

(2) For unsurveyed lands, describe the lands by metes and bounds, giving courses and distances, and tie this information to an official corner of the public land surveys, or to a prominent topographic feature;

(3) For approved protracted surveys, include an entire section, township, and range. Do not divide protracted sections into aliquot parts;

(4) For unsurveyed lands in Louisiana and Alaska that have water boundaries, discuss the description with BLM before submission; and

(5) For fractional interest lands, identify the United States mineral ownership by percentage.

(c) You may submit more than one nomination, as long as each nomination separately satisfies the requirements of paragraph (b) of this section and includes the filing fee specified in § 3203.12.

(d) BLM may reconfigure lands to be included in each parcel offered for sale.

(e) BLM may include land in a lease sale on its own initiative.

§ 3203.11 Under what circumstances may parcels be offered as a block for competitive sale?

(a) As part of your nomination, you may request that lands be offered as a block at competitive sale by:

(1) Specifying that the lands requested will be associated with a project or unit; and

(2) Including information to support your request. BLM may require that you provide additional information.

(b) BLM may offer parcels as a block in response to a request under paragraph (a) of this section or on its own initiative. BLM will offer parcels as a block only if information is available to BLM indicating that a geothermal resource that could be produced as one unit can reasonably be expected to underlie such parcels.

§ 3203.12 What fees must I pay to nominate lands?

Submit with your nomination a filing fee for nominations of lands as found in the fee schedule in § 3000.12 of this chapter.

§ 3203.13 How often will BLM hold a competitive lease sale?

BLM will hold a competitive lease sale at least once every 2 years for lands available for leasing in a state that has nominations pending. A sale may include lands in more than one state. BLM may hold a competitive lease sale

in a state that has no nominations pending.

§ 3203.14 How will BLM provide notice of a competitive lease sale?

(a) The lands available for competitive lease sale under this subpart will be described in a Notice of Competitive Geothermal Lease Sale, which will include:

- (1) The lease sale format and procedures;
- (2) The time, date, and place of the lease sale; and
- (3) Stipulations applicable to each parcel.

(b) At least 45 days before conducting a competitive lease sale, BLM will post the Notice in the BLM office having jurisdiction over the lands to be offered, and make it available for posting to surface managing agencies having jurisdiction over any of the included lands.

(c) BLM may take other measures of notification for the competitive sale such as:

- (1) Issuing news releases;
- (2) Notifying interested parties of the lease sale;
- (3) Publishing notice in the newspaper; or
- (4) Posting the list of parcels on the Internet.

§ 3203.15 How does BLM conduct a competitive lease sale?

(a) BLM will offer parcels for competitive bidding as specified in the sale notice.

(b) The winning bid will be the highest bid by a qualified bidder.

(c) You may not withdraw a bid. Your bid constitutes a legally binding commitment by you.

(d) BLM will reject all bids and re-offer a parcel if:

- (1) BLM determines that the high bidder is not qualified; or
- (2) The high bidder fails to make all payments required under § 3203.17.

§ 3203.17 How must I make payments if I am the successful bidder?

(a) You must make payments by personal check, cashier's check, certified check, bank draft, or money order payable to the "Department of the Interior—Bureau of Land Management" or by other means deemed acceptable by BLM.

(b) By the close of official business hours on the day of the sale or such other time as BLM may specify, you must submit for each parcel:

- (1) Twenty percent of the bid;
- (2) The total amount of the first year's rental; and
- (3) The processing fee for competitive lease applications found in the fee schedule in § 3000.12 of this chapter.

(c) Within 15 calendar days after the last day of the sale, you must submit the balance of the bid to the BLM office conducting the sale.

(d) If you fail to make all payments required under this section, or fail to meet the qualifications in § 3202.10, BLM will revoke acceptance of your bid and keep all money that has been submitted.

§ 3203.18 What happens to parcels that receive no bids at a competitive lease sale?

Lands offered at a competitive lease sale that receive no bids will be available for leasing in accordance with subpart 3204.

Subpart 3204—Noncompetitive Leasing Other Than Direct Use Leases

§ 3204.5 How can I obtain a noncompetitive lease?

(a) Lands offered at a competitive lease sale that receive no bids will be available for noncompetitive leasing for a 2-year period beginning the first business day following the sale.

(b) You may obtain a noncompetitive lease for lands available exclusively for direct use of geothermal resources, under subpart 3205.

(c) The holder of a mining claim may obtain a noncompetitive lease for lands subject to the mining claim under § 3204.12.

(d) If your lease application was pending on August 8, 2005, you may obtain a noncompetitive lease under the leasing process in effect on that date, unless you notify BLM in writing that you elect for the lease application to be subject to the competitive leasing process specified in this subpart. If you elect for your lease application to be subject to the competitive leasing process in this subpart, your application will be considered a nomination for future competitive lease offerings for the lands in your application. An election made under this paragraph is not the same as an election made under § 3200.8.

§ 3204.10 What payment must I submit with my noncompetitive lease application?

Submit the processing fee for noncompetitive lease applications found in the fee schedule in § 3000.12 of this chapter for each lease application, and an advance rent in the amount of \$1 per acre (or fraction of an acre). BLM will refund the advance rent if we reject the lease application or if you withdraw the lease application before BLM accepts it. If the advance rental payment you send is less than 90 percent of the correct amount, BLM will reject the lease application.

§ 3204.11 How may I acquire a noncompetitive lease for lands that were not sold at a competitive lease sale?

(a) For a 2-year period following a competitive lease sale, you may file a noncompetitive lease application for lands on which no bids were received, on a form available from BLM. Submit 2 executed copies of the applicable form to BLM. At least one form must have an original signature. We will accept only exact copies of the form on one 2-sided page.

(1) For 30 days after the competitive geothermal lease sale, noncompetitive applications will be accepted only for parcels as configured in the Notice of Competitive Geothermal Lease Sale.

(2) Subsequent to the 30-day period specified in paragraph (a)(1) of this section, you may file a noncompetitive application for any available lands covered by the competitive lease sale.

(b)(1) All applications for a particular parcel under this section will be considered simultaneously filed if received in the proper BLM office any time during the first business day following the competitive lease sale.

You may submit only one application per parcel. An application will not be available for public inspection the day it is filed. BLM will randomly select an application among those accepted on the first business day to receive a lease offer.

(2) Subsequent to the first business day following the competitive lease sale, the first qualified applicant to submit an application will be offered the lease. If BLM receives simultaneous applications as to date and time for overlapping lands, BLM will randomly select one to receive a lease offer.

§ 3204.12 How may I acquire a noncompetitive lease for lands subject to a mining claim?

If you hold a mining claim for which you have a current approved plan of operations, you may file a noncompetitive lease application for lands within the mining claim, on a form available from BLM. Submit two (2) executed copies of the applicable form to BLM, together with documentation of mining claim ownership and the current approved plan of operations for the mine. At least one form must have an original signature. We will accept only exact copies of the form on one 2-sided page.

§ 3204.13 How will BLM process noncompetitive lease applications pending on August 8, 2005?

Noncompetitive lease applications pending on August 8, 2005, will be processed under policies and procedures existing on that date unless

the applicant notifies BLM in writing that it elects for the lease application to be subject to the competitive leasing process specified in this subpart, in which case the application will be considered a nomination for future competitive lease offerings for the lands in the application.

§ 3204.14 May I amend my application for a noncompetitive lease?

You may amend your application for a noncompetitive lease at any time before we issue the lease, provided your amended application meets the requirements in this subpart and does not add lands not included in the original application. To add lands, you must file a new application.

§ 3204.15 May I withdraw my application for a noncompetitive lease?

During the 30-day period after the competitive lease sale, BLM will only accept a withdrawal of the entire application. Following that 30-day period, you may withdraw your noncompetitive lease application in whole or in part at any time before BLM issues the lease. If a partial withdrawal causes your lease application to contain less than the minimum acreage required under § 3206.12, BLM will reject the application.

Subpart 3205—Direct Use Leasing

§ 3205.6 When may BLM issue a direct use lease to an applicant?

(a) BLM may issue a direct use lease to an applicant if the following conditions are satisfied:

- (1) The lands included in the lease application are open for geothermal leasing;
- (2) BLM determines that the lands are appropriate for exclusive direct use operations, without sale, for purposes other than commercial generation of electricity;
- (3) The acreage covered by the lease application is not greater than the quantity of acreage that is reasonably necessary for the proposed use;
- (4) BLM has published a notice of the land proposed for a direct use lease for 90 days before issuing the lease;
- (5) During the 90-day period beginning on the date of publication, BLM did not receive any nomination to include the lands in the next competitive lease sale following that period for which the lands would be eligible;
- (6) BLM determines there is no competitive interest in the resource; and
- (7) The applicant is the first qualified applicant.

(b) If BLM determines that the land for which an applicant has applied

under this subpart is open for geothermal leasing and is appropriate only for exclusive direct use operations, but determines that there is competitive interest in the resource, it will include the land in a competitive lease sale with lease stipulations limiting operations to exclusive direct use.

§ 3205.7 How much acreage should I apply for in a direct use lease?

You should apply for only the amount of acreage that is necessary for your intended operation. A direct use lease may not cover more than the quantity of acreage that BLM determines is reasonably necessary for the proposed use. In no case may a direct use lease exceed 5,120 acres, unless the area to be leased includes an irregular subdivision.

§ 3205.10 How do I obtain a direct use lease?

(a) You may file an application for a direct use lease for any lands on which BLM manages the geothermal resources, on a form available from BLM. You may not sell the geothermal resource and you may not use it for the commercial generation of electricity.

(b) In your application, you must also provide information that will allow BLM to determine how much acreage is reasonably necessary for your proposed use, including:

- (1) A description of all anticipated structures, facilities, wells, and pipelines including their size, location, function, and associated surface disturbance;
 - (2) A description of the utilization process;
 - (3) A description and analysis of anticipated reservoir production, injection, and characteristics to the extent required by BLM; and
 - (4) Any additional information or data that we may require.
- (c) Submit with your application the nonrefundable processing fee for noncompetitive lease applications found in the fee schedule in § 3000.12 of this chapter for each direct use lease application.

§ 3205.12 How will BLM respond to direct use lease applications on lands managed by another agency?

BLM will respond to a direct use lease application on lands managed by another surface management agency by forwarding the application to that agency for its review. If that agency consents to lease issuance and recommends that the lands are appropriate for direct use operations, without sale, for purposes other than commercial generation of electricity, BLM will consider that consent and recommendation in determining

whether to issue the lease. BLM may not issue a lease without the consent of the surface management agency.

§ 3205.13 May I withdraw my application for a direct use lease?

You may withdraw your application for a direct use lease any time before issuance of a lease.

§ 3205.14 May I amend my application for a direct use lease?

You may amend your application for a direct use lease at any time before we issue the lease, provided your amended application meets the requirements in this subpart and does not add lands. To add lands, you must file a new application.

§ 3205.15 How will I know whether my direct use lease will be issued?

(a) If BLM decides to issue you a direct use lease, it will do so in accordance with this subpart and subpart 3206.

(b) If BLM decides to deny your application for a direct use lease, it will advise you of its decision in writing.

Subpart 3206—Lease Issuance

§ 3206.10 What must I do for BLM to issue a lease?

Before BLM issues any lease, you must:

- (a) Accept all lease stipulations;
- (b) Make all required payments to BLM;
- (c) Sign a unit joinder or waiver, if applicable; and
- (d) Comply with the maximum limit on acreage holdings (see §§ 3206.12 and 3206.16).

§ 3206.11 What must BLM do before issuing a lease?

For all leases, BLM must:

- (a) Determine that the land is available; and
- (b) Determine that your lease development will not have a significant adverse impact on any significant thermal feature within any of the following units of the National Park System:
 - (1) Mount Rainier National Park;
 - (2) Crater Lake National Park;
 - (3) Yellowstone National Park;
 - (4) John D. Rockefeller, Jr. Memorial Parkway;
 - (5) Bering Land Bridge National Preserve;
 - (6) Gates of the Arctic National Park and Preserve;
 - (7) Katmai National Park;
 - (8) Aniakchak National Monument and Preserve;
 - (9) Wrangell-St. Elias National Park and Preserve;

(10) Lake Clark National Park and Preserve;

(11) Hot Springs National Park;

(12) Big Bend National Park (including that portion of the Rio Grande National Wild Scenic River within the boundaries of Big Bend National Park);

(13) Lassen Volcanic National Park;

(14) Hawaii Volcanoes National Park;

(15) Haleakala National Park;

(16) Lake Mead National Recreation Area; and

(17) Any other significant thermal features within National Park System units that the Secretary may add to the list of these features, in accordance with 30 U.S.C. 1026(a)(3).

§ 3206.12 What are the minimum and maximum lease sizes?

Other than for direct use leases (the size for which is addressed in § 3205.7), the smallest lease we will issue is 640 acres, or all lands available for leasing in the section, whichever is less. The largest lease we will issue is 5,120 acres, unless the area to be leased includes an irregular subdivision. A lease must embrace a reasonably compact area.

§ 3206.13 What is the maximum acreage I may hold?

You may not directly or indirectly hold more than 51,200 acres in any one state.

§ 3206.14 How does BLM compute acreage holdings?

BLM computes acreage holdings as follows:

(a) If you own an undivided lease interest, your acreage holdings include the total lease acreage:

(b) If you own stock in a corporation or a beneficial interest in an association which holds a geothermal lease, your acreage holdings will include your proportionate part of the corporation's or association's share of the total lease acreage. This paragraph applies only if you own more than 10 percent of the corporate stock or a beneficial interest in the association; and

(c) If you own a lease interest, you will be charged with the proportionate share of the total lease acreage based on your share of the lease ownership. You will not be charged twice for the same acreage where you own both record title and operating rights for the lease. For example, if you own 50 percent record title interest in a 640 acre lease and 25 percent operating rights, you are charged with 320 acres.

§ 3206.15 How will BLM charge acreage holdings if the United States owns only a fractional interest in the geothermal resources in a lease?

Where the United States owns only a fractional interest in the geothermal resources of the lands in a lease, BLM will only charge you with the part owned by the United States as acreage holdings. For example, if you own 100 percent of record title in a 100 acre lease, and the United States owns 50 percent of the mineral estate, you are charged with 50 acres.

§ 3206.16 Is there any acreage which is not chargeable?

BLM does not count leased acreage included in any approved unit agreement, drilling contract, or development contract as part of your total state acreage holdings.

§ 3206.17 What will BLM do if my holdings exceed the maximum acreage limits?

BLM will notify you in writing if your acreage holdings exceed the limit in § 3206.13. You have 90 days from the date you receive the notice to reduce your holdings to within the limit. If you do not comply, BLM will cancel your leases, beginning with the lease most recently issued, until your holdings are within the limit.

§ 3206.18 When will BLM issue my lease?

BLM issues your lease the day we sign it. Your lease goes into effect the first day of the next month after the issuance date.

Subpart 3207—Lease Terms and Extensions

§ 3207.5 What terms (time periods) apply to my lease?

Your lease may include a number of different time periods. Not every time period applies to every lease. These periods include:

- (a) A primary term consisting of:
 - (1) Ten years;
 - (2) An initial extension of the primary term for up to 5 years;
 - (3) An additional extension of the primary term for up to 5 years;
- (b) A drilling extension of 5 years under § 3207.14;
- (c) A production extension of up to 35 years; and
- (d) A renewal period of up to 55 years.

§ 3207.10 What is the primary term of my lease?

- (a) Leases have a primary term of 10 years.
- (b) BLM will extend the primary term for 5 years if:
 - (1) By the end of the 10th year of the primary term in paragraph (a), you have

satisfied the requirements in § 3207.11; and

(2) At the end of each year after the 10th year of the lease, you have satisfied the requirements in § 3207.12(a) or (d) for that year.

(c) BLM will extend the primary term for 5 additional years if:

(1) You satisfied the requirements of § 3207.12(b) or (d); and

(2) At the end of each year of the second 5-year extension you satisfy the requirements in § 3207.12(c) or (d) for that year.

(d) If you do not satisfy the annual requirements during the initial or additional extension of your primary term, your lease terminates or expires.

§ 3207.11 What work am I required to perform during the first 10 years of my lease for BLM to grant the initial extension of the primary term of my lease?

(a) By the end of the 10th year, you must expend a minimum of \$40 per acre in development activities that provide additional geologic or reservoir information, such as:

- (1) Geologic investigation and analysis;
- (2) Drilling temperature gradient wells;
- (3) Core drilling;
- (4) Geochemical or geophysical surveys;
- (5) Drilling production or injection wells;
- (6) Reservoir testing; or
- (7) Other activities approved by BLM.

(b) In lieu of the work requirement in paragraph (a) of this section, you may:

- (1) Make a payment to BLM equivalent to the required work expenditure such that the total of the payment and the value of the work you perform equals \$40 per acre (or fraction thereof) of land included in your lease; or
- (2) Submit documentation to BLM that you have produced or utilized geothermal resources in commercial quantities.

(c) Prior to the end of the 10th year of the primary term, you must submit detailed information to BLM demonstrating that you have complied with paragraph (a) or (b) of this section. Describe the activities by type, location, date(s) conducted, and the dollar amount spent on those operations. Include all geologic information obtained from your activities in your report. Submit additional information that BLM requires to determine compliance within the timeframe that we specify. We must approve the type of work done and the expenditures claimed in your report before we can credit them toward your requirements.

(d) If you do not perform development activities, make payments, or document production or utilization as required by this section, your lease will expire at the end of the 10-year primary term.

(e) If you complied with paragraph (c) of this section, but BLM has not determined by the end of the 10th year whether you have complied with the requirements of paragraph (a) or (b) of this section, upon request we will suspend your lease effective immediately before its expiration in order to determine your compliance. If we determine that you have complied, we will lift the suspension and grant the first 5-year extension of the primary term effective on the first day of the month following our determination of compliance. If we determine that you have not complied, we will terminate the suspension and your lease will expire upon the date of the termination of the suspension.

(f) Every 3 calendar years the dollar amount of the work requirements and the amount to be paid in lieu of such work required by this section will automatically be updated. The update will be based on the change in the Implicit Price Deflator-Gross Domestic Product for those 3 years.

§ 3207.12 What work am I required to perform each year for BLM to continue the initial and additional extensions of the primary term of my lease?

(a) To continue the initial extension of the primary term of your lease, in each of lease years 11, 12, 13, and 14, you must expend a minimum of \$15 per acre (or fraction thereof) per year in development activities that establish a geothermal potential or confirm the existence of producible geothermal resources. Such activities include, but are not limited to:

- (1) Geologic investigation and analysis;
- (2) Drilling temperature gradient wells;
- (3) Core drilling;
- (4) Geochemical or geophysical surveys;
- (5) Drilling production or injection wells;
- (6) Reservoir testing; or
- (7) Other activities approved by BLM.

(b) For BLM to grant the additional extension of the primary term of your lease, in year 15 you must expend a minimum of \$15 per acre (or fraction thereof) in development activities that provide additional geologic or reservoir information, such as those described in paragraph (a) of this section.

(c) To continue the additional extension of the primary term of your lease, in each of lease years 16, 17, 18,

and 19, you must expend a minimum of \$25 per acre (or fraction thereof) per year in development activities that provide additional geologic or reservoir information, such as those described in paragraph (a) of this section.

(d) In lieu of the work requirements in paragraphs (a), (b), and (c) of this section, you may:

(1) Submit documentation to BLM that you have produced or utilized geothermal resources in commercial quantities; or

(2) Make a payment to BLM equivalent to the required annual work expenditure such that the total of the payment and the value of the work you perform equals \$15 or \$25 per acre per year of land included in your lease, as applicable. BLM may limit the number of years that it will accept such payments if it determines that further payments in lieu of the work requirements would impair achievement of diligent development of the geothermal resources.

(e) Under paragraph (a) or paragraph (b) of this section, if you expend an amount greater than the amount specified, you may apply any payment in excess of the specified amount to any subsequent year within the applicable 5-year extension of the primary term. An excess payment during the first 5-year extension period may not be applied to any year within the second 5-year extension period.

(f) You must submit information to BLM showing that you have complied with the applicable requirements in this section no later than:

- (1) 60 days after the end of years 11, 12, 13, and 14;
- (2) 60 days before the end of year 15; and
- (3) 60 days after the end of years 16, 17, 18, and 19.

(g) In your submission, describe your activities by type, location, date(s) conducted, and the dollar amount spent on those operations. Include all geologic information obtained from your activities in your report. We must approve the type of work done and the expenditures claimed in your report before we can credit them toward your requirements. We will notify you if you have not met the requirements.

(h) If you do not comply with the requirements of this section in any year of a 5-year extension of the primary term, BLM will terminate your lease at the end of that year unless you qualify for a drilling extension under § 3207.13.

(i) Every three calendar years the dollar amount of the work requirements and the amount to be paid in lieu of such work required by this section will automatically be updated. The update

will be based on the change in the Implicit Price Deflator-Gross Domestic Product for those three years.

§ 3207.13 Must I comply with the requirements of §§ 3207.11 and 3207.12 when my lease overlies a mining claim?

(a) BLM will exempt you from complying with the requirements of § 3207.11 and 3207.12 when you demonstrate to BLM that:

(1) The mining claim has a plan of operations approved by the appropriate Federal land management agency; and

(2) Your development of the geothermal resource on the lease would interfere with the mining operations.

(b) The exemption provided under paragraph (a) of this section expires upon termination of the mining operations.

§ 3207.14 How do I qualify for a drilling extension?

(a) BLM will extend your lease for 5 years under a drilling extension if at the end of the 10th year or any subsequent year of the initial or additional extension of the primary term you:

(1) Have not met the requirements that you must satisfy for BLM to grant or to continue the initial or additional extensions of your primary lease term under § 3207.12, or your lease is in its 20th year;

(2) Commenced drilling a well before the end of such year for the purposes of testing or producing a geothermal reservoir; and

(3) Are diligently drilling to a target that BLM determines is adequate, based on the local geology and type of development you propose.

(b) The drilling extension is effective on the first day following the expiration or termination of the primary term.

(c) At the end of your drilling extension, your lease will expire unless you qualify for a production extension under § 3207.15.

§ 3207.15 How do I qualify for a production extension?

(a) BLM will grant a production extension of up to 35 years, if you are producing or utilizing geothermal resources in commercial quantities.

(b) Before granting a production extension, BLM must determine that you:

(1) Have a well that is actually producing geothermal resources in commercial quantities; or

(2)(i) Have completed a well that is capable of producing geothermal resources in commercial quantities; and

(ii) Are making diligent efforts toward utilization of the resource.

(c) To qualify for a production extension under paragraph (b)(2) of this

section, unless BLM specifies otherwise you must demonstrate on an annual basis that you are making diligent efforts toward utilization of the resource.

(d) BLM will make the determinations required under paragraphs (b)(1) and (b)(2)(i) of this section based on the information you provide under subparts 3264 and 3276 and any other information that BLM may require you to submit.

(e) For BLM to make the determination required under paragraph (b)(2)(ii) of this section, you must provide BLM with information, such as:

(1) Actions you have taken to identify and define the geothermal resource on your lease;

(2) Actions you have taken to negotiate marketing arrangements, sales contracts, drilling agreements, or financing for electrical generation and transmission projects;

(3) Current economic factors and conditions that would affect the decision of a prudent operator to produce or utilize geothermal resources in commercial quantities on your lease; and

(4) Other actions you have taken, such as obtaining permits, conducting environmental studies, and meeting permit requirements.

(f) Your production extension will begin on the first day of the month following the end of the primary term (including the initial and additional extensions) or the drilling extension.

(g) Your production extension will continue for up to 35 years as long as the geothermal resource is being produced or utilized in commercial quantities. If you fail to produce or utilize geothermal resources in commercial quantities, BLM will terminate your lease unless you meet the conditions set forth in § 3212.15 or § 3213.19.

§ 3207.16 When may my lease be renewed?

You have a preferential right to renew your lease for a second term of up to 55 years, under such terms and conditions as BLM deems appropriate, if at the end of the production extension you are producing or utilizing geothermal resources in commercial quantities and the lands are not needed for any other purpose. The renewal term will continue for up to 55 years if you produce or utilize geothermal resources in commercial quantities and satisfy other terms and conditions BLM imposes.

§ 3207.17 How is the term of my lease affected by commitment to a unit?

(a) If your lease is committed to a unit agreement and its term would expire

before the unit term would, BLM may extend your lease to match the term of the unit. We will do this if unit development has been diligently pursued while your lease is committed to the unit.

(b) To extend the term of a lease committed to a unit, the unit operator must send BLM a request for lease extension at least 60 days before the lease expires showing that unit development has been diligently pursued. BLM may require additional information.

(c) Within 30 days after receiving your complete extension request, BLM will notify the unit operator whether we approve.

§ 3207.18 Can my lease be extended if it is eliminated from a unit?

If your lease is eliminated from a unit under § 3283.6, it is eligible for an extension if it meets the requirements for such extension.

Subpart 3210—Additional Lease Information

§ 3210.10 When does lease segregation occur?

(a) Lease segregation occurs when:

(1) A portion of a lease is committed to a unit agreement while other portions are not committed; or

(2) Only a portion of a lease remains in a participating area when the unit contracts. The portions of the lease outside the participating area are eliminated from the unit agreement and segregated as of the effective date of the unit contraction.

(b) BLM will assign the original lease serial number to the portion within the agreement. BLM will give the lease portion outside the agreement a new serial number, and the same lease terms as the original lease.

§ 3210.11 Does a lease segregated from an agreement or plan receive any benefits from unitization of the committed portion of the original lease?

The new segregated lease stands alone and does not receive any of the benefits provided to the portion committed to the unit. We will not give you an extension for the eliminated portion of the lease based on status of the lands committed to the unit, including production in commercial quantities or the existence of a producible well.

§ 3210.12 May I consolidate leases?

BLM may approve your consolidation of two or more adjacent leases that have the same ownership and same lease terms, including expiration dates, if the combined leases do not exceed the size limitations in § 3206.12. We may

consolidate leases that have different stipulations if all other lease terms are the same. You must include the processing fee for lease consolidations found in the fee schedule in § 3000.12 of this chapter with your request to consolidate leases.

§ 3210.13 Who may lease or locate other minerals on the same lands as my geothermal lease?

Anyone may lease or locate other minerals on the same lands as your geothermal lease. The United States reserves the ownership of and the right to extract helium, oil, and hydrocarbon gas from all geothermal steam and associated geothermal resources. In addition, BLM allows mineral leasing or location on the same lands that are leased for geothermal resources, provided that operations under the mineral leasing or mining laws do not unreasonably interfere with or endanger your geothermal operations.

§ 3210.14 May BLM readjust the terms and conditions in my lease?

(a)(1) Except for rentals and royalties (readjustments of which are addressed in paragraph (b) of this section, BLM may readjust the terms and conditions of your lease 10 years after you begin production of geothermal resources from your lease, and at not less than 10-year intervals thereafter, under the procedures of paragraphs (c), (d), and (e) of this section.

(2) If another Federal agency manages the lands' surface, we will ask that agency to review the related terms and conditions and propose any readjustments. Once BLM and the surface managing agency reach agreement and the surface managing agency approves the proposed readjustment, we will follow the procedures in paragraphs (c), (d), and (e) of this section.

(b) BLM may readjust your lease rentals and royalties at not less than 20-year intervals beginning 35 years after we determine that your lease is producing geothermal resources in commercial quantities. BLM will not increase your rentals or royalties by more than 50 percent over the rental or royalties you paid before the readjustment.

(c) BLM will give you a written proposal to readjust the rentals, royalties, or other terms and conditions of your lease. You will have 30 days after you receive the proposal to file with BLM an objection in writing to the proposed new terms and conditions.

(d) If you do not object in writing or relinquish your lease, you will conclusively be deemed to have agreed

to the proposed new terms and conditions. BLM will issue a written decision setting the date that the new terms and conditions become effective as part of your lease. This decision will be in full force and effect under its own terms, and you are not authorized to appeal the BLM decision to the Office of Hearings and Appeals.

(e)(1) If you file a timely objection in writing, BLM may issue a written decision making the readjusted terms and conditions effective no sooner than 90 days after we receive your objections, unless we reach an agreement with you as to the readjusted terms and conditions of your lease that makes them effective sooner.

(2) If BLM does not reach an agreement with you by 60 days after we receive your objections, then either the lessee or BLM may terminate your lease, upon giving the other party 30 days' notice in writing. A termination under this paragraph does not affect your obligations that accrued under the lease when it was in effect, including those specified in § 3200.4.

§ 3210.15 What if I appeal BLM's decision to readjust my lease terms?

If you appeal BLM's decision under § 3210.14(e)(1) to readjust the rentals, royalties, or other terms and conditions of your lease, the decision is effective during the appeal. If you win your appeal and we must change our decision, you will receive a refund or credit for any overpaid rents or royalties.

§ 3210.16 How must I prevent drainage of geothermal resources from my lease?

You must prevent the drainage of geothermal resources from your lease by diligently drilling and producing wells that protect the Federal geothermal resource from loss caused by production from other properties.

§ 3210.17 What will BLM do if I do not protect my lease from drainage?

BLM will determine the amount of geothermal resources drained from your lease. MMS will bill you for a compensatory royalty based on our findings. This royalty will equal the amount you would have paid for producing those resources. All interest owners in a lease are jointly and severally liable for drainage protection and any compensatory royalties.

Subpart 3211—Filing and Processing Fees, Rent, Direct Use Fees, and Royalties

§ 3211.10 What are the processing and filing fees for leases?

(a) Processing or filing fees are required for the following actions:

- (1) Nomination of lands for competitive leasing;
 - (2) Competitive lease application;
 - (3) Noncompetitive lease application (including application for direct use leases);
 - (4) Assignment and transfer of record title or operating right;
 - (5) Name change, corporate merger, or transfer to heir/devisee;
 - (6) Lease consolidation; and
 - (7) Lease reinstatement.
- (b) The amounts of these fees can be found in § 3000.12 of this chapter.

§ 3211.11 What are the annual lease rental rates?

(a) BLM calculates annual rent based on the amount of acreage covered by your lease. To determine lease acreage for this section, round up any partial acreage up to the next whole acre. For example, the annual rent on a 2,456.39 acre lease is calculated based on 2,457 acres.

(b) For leases issued on or after August 8, 2005 (other than leases issued in response to applications that were pending on that date for which no election is made under § 3200.8(b)(1)), and for leases issued before August 8, 2005, for which an election is made under § 3200.7(a)(2), the rental rate is as follows:

- (1) If you obtained your lease through a competitive lease sale, then your annual rent is \$2 per acre for the first year, and \$3 per acre for the second through tenth year;
- (2) If you obtained your lease noncompetitively, then your annual rent is \$1 per acre for the first 10 years; and
- (3) After the tenth year, your annual rent will be \$5 per acre, regardless of whether you obtained your lease through a competitive lease sale or noncompetitively.

(c) For leases issued before August 8, 2005, for which no election is made under § 3200.7(a)(2), and for leases issued in response to applications pending on that date for which no election is made under § 3200.8(b)(1), the rental rate is the rate prescribed in the regulations in effect on August 8, 2005 (43 CFR 3211.10 (2004)).

(d) For leases in which the United States owns only a fractional interest in the geothermal resources, BLM will prorate the rents established in paragraphs (a), (b), and (c) of this

section, based on the fractional interest owned by the United States. For example, if the United States owns 50 percent of the geothermal resources in a 640 acre lease, you pay rent based on 320 acres.

§ 3211.12 How and where do I pay my rent?

(a) *First year.* Pay BLM the first year's rent in advance. You may use a personal check, cashier's check, or money order made payable to the Department of the Interior—Bureau of Land Management. You may also make payments by credit card or electronic funds transfer with our prior approval.

(b) *Subsequent years.* For all subsequent years, make your rental payments to MMS. See MMS regulations at 30 CFR part 218.

§ 3211.13 When is my annual rental payment due?

Your rent is always due in advance. MMS must receive your annual rental payment by the anniversary date of the lease each year. See the MMS regulations at 30 CFR part 218, which explain when MMS considers a payment as received. If less than a full year remains on a lease, you must still pay a full year's rent by the anniversary date of the lease. For example, the rent on a 2,000-acre lease for the 11th year, would be \$10,000 (\$5 per acre), due prior to the 10th anniversary of the lease.

§ 3211.14 Will I always pay rent on my lease?

(a) For leases issued on or after August 8, 2005 (other than leases issued in response to applications that were pending on that date for which no election is made under § 3200.8(b)(1)), and for leases issued before August 8, 2005, for which an election is made under § 3200.7(a)(2), you must always pay rental, whether you are in a unit or outside of a unit, whether your lease is in production or not, and whether royalties or direct use fees apply to your production.

(b) For leases issued before August 8, 2005, for which no election is made under § 3200.7(a)(2), and for leases issued in response to applications pending on that date for which no election is made under § 3200.8(b)(1), you must pay rent for all the lands in your lease until:

- (1) Your lease achieves production in commercial quantities, at which time you pay royalties; or
- (2) Lands in your lease are within the participating area of a unit agreement or cooperative plan, at which time you pay rent for lands outside the participating

area and pay royalties for lands within the participating area.

§ 3211.15 How do I credit rent towards royalty?

You may credit rental towards royalty under MMS regulations at 30 CFR 218.303.

§ 3211.16 Can I credit rent towards direct use fees?

No. You may not credit rental towards direct use fees. See MMS regulations at 30 CFR 218.304.

§ 3211.17 What is the royalty rate on geothermal resources produced from or attributable to my lease that are used for commercial generation of electricity?

(a) For leases issued on or after August 8, 2005 (other than leases issued in response to applications that were pending on that date for which the lessee does not make an election under § 3200.8(b)(1)), the royalty rate is the rate prescribed in this paragraph.

(1) If you or your affiliate sell(s) electricity generated by use of geothermal resources produced from or attributed to your lease, then:

(i) For the first 10 years of production, the royalty rate is 1.75 percent;

(ii) After the first 10 years of production, the royalty rate is 3.5 percent; and

(iii) You must apply the rate established under this paragraph to the gross proceeds derived from the sale of electricity under applicable MMS rules at 30 CFR part 206, subpart H.

(2) If you or your affiliate sell(s) geothermal resources produced from or attributed to your lease at arm's length to a purchaser who uses those resources to generate electricity, then the royalty rate is 10 percent. You must apply that rate to the gross proceeds derived from the arm's-length sale of the geothermal resources under applicable MMS rules at 30 CFR part 206, subpart H.

(b) For leases issued before August 8, 2005, whose royalty terms are modified to the terms prescribed in the Energy Policy Act of 2005 under § 3212.25, BLM will establish royalty rates under paragraphs (b)(1) and (b)(2) of this section.

(1) For leases that, prior to submitting a request to modify the royalty rate terms of the lease under section 3212.26, produced geothermal resources for the commercial generation of electricity, or to which geothermal resource production for the commercial generation of electricity was attributed:

(i) If you or your affiliate uses geothermal resources produced from or attributed to your lease to generate and sell electricity, BLM will establish a rate on a case-by-case basis that it expects

will yield total royalty payments over the life of the lease equivalent to those that would have been paid under the royalty rate in effect for the lease before August 5, 2005. The rate is not limited to the range of rates specified in 30 U.S.C. 1004(a)(1). You must apply the rate that BLM establishes to the gross proceeds derived from the sale of electricity under applicable MMS rules at 30 CFR part 206, subpart H.

(ii) If you or your affiliate sells geothermal resources produced from or attributed to your lease at arm's length to a purchaser who uses those resources to generate electricity, the royalty rate is the rate specified in the lease instrument. You must apply that rate to the gross proceeds derived from the arm's-length sale of the geothermal resources under applicable MMS rules at 30 CFR part 206, subpart H.

(2) For leases that, prior to submitting a request to modify the royalty rate terms of the lease under section 3212.26, did not produce geothermal resources for the commercial generation of electricity, and to which geothermal resource production for the commercial generation of electricity was not attributed, BLM will establish royalty rates equal to those set forth in paragraph (a)(1) or (a)(2) of this section, whichever is applicable.

(c) For leases issued before August 8, 2005, whose royalty terms are not modified to the terms prescribed in the Energy Policy Act of 2005 under § 3212.25, and for leases issued in response to applications pending on that date for which the lessee does not make an election under § 3200.8(b)(1), the royalty rate is the rate prescribed in the lease instrument.

§ 3211.18 What is the royalty rate on geothermal resources produced from or attributable to my lease that are used directly for purposes other than commercial generation of electricity?

(a) For leases issued on or after August 8, 2005 (other than leases issued in response to applications that were pending on that date for which the lessee does not make an election under § 3200.8(b)), and for leases issued before August 8, 2005, whose royalty terms are modified to the terms prescribed in the Energy Policy Act of 2005 under § 3212.25:

(1) If you or your affiliate use(s) the geothermal resources directly and do(es) not sell those resources at arm's length, no royalty rate applies. Instead, you must pay direct use fees according to a schedule published by MMS under MMS regulations at 30 CFR 206.356.

(2) 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 commercial generation of electricity, your royalty rate is 10 percent. You must apply that royalty rate to the gross proceeds derived from the arm's-length sale under applicable MMS regulations at 30 CFR part 206, subpart H.

(3) If you are a lessee and you are a state, tribal, or local government, no royalty rate applies. Instead you must pay a nominal fee established under MMS rules at 30 CFR 206.366.

(b) For leases issued before August 8, 2005, whose royalty terms are not modified to the terms prescribed in the Energy Policy Act of 2005 under § 3212.25, and for leases issued in response to applications pending on that date for which the lessee does not make an election under § 3200.8(b), the royalty rate is the rate prescribed in the lease instrument.

(c) For purposes of this section, direct use of geothermal resources includes generation of electricity that is not sold commercially and that is used solely for the operation of a facility unrelated to commercial electrical generation.

§ 3211.19 What is the royalty rate on byproducts derived from geothermal resources produced from or attributable to my lease?

(a) For leases issued on or after August 8, 2005 (other than leases issued in response to applications that were pending on that date for which no election is made under § 3200.8(b)(1)), and for leases issued before August 8, 2005, for which an election is made under § 3200.7(a)(2):

(1) The royalty rate for byproducts derived from geothermal resource production that are identified in Section 1 of the Mineral Leasing Act (MLA), as amended (30 U.S.C. 181), is the royalty rate that is prescribed in the MLA or in the regulations implementing the MLA for production of that mineral under a lease issued under the MLA; and

(2) For a byproduct that is not identified in 30 U.S.C. 181, no royalty is due.

(b) For leases issued before August 8, 2005, for which no election is made under § 3200.7(a)(2), and for leases issued in response to applications pending on that date for which no election is made under § 3200.8(b)(1), the royalty on all byproducts is the rate prescribed in the lease instrument, or if none is prescribed in the lease instrument, the rate prescribed in 43 CFR 3211.10(b) (2004).

§ 3211.20 How do I credit advanced royalty towards royalty?

You may credit advanced royalty toward royalty under MMS regulations at 30 CFR 218.305(c).

§ 3211.21 When do I owe minimum royalty?

(a) You do not owe minimum royalties for:

(1) Leases issued on or after August 8, 2005 (other than for leases issued in response to applications that were pending on that date for which no election is made under § 3200.8(b)(1)); and

(2) Leases issued before August 8, 2005, for which an election is made under § 3200.7(a)(2).

(b) For leases issued before August 8, 2005, for which no election is made under § 3200.7(a)(2), and for leases issued in response to applications pending on that date for which no election is made under § 3200.8(b)(1), you owe minimum royalty of \$2.00 per acre (to be paid to MMS) when:

(1) You have not begun actual production following the BLM's determination that you have a well capable of commercial production; or

(2) The value of actual production is so low that royalty you would pay under the scheduled rate is less than \$2.00 per acre (this applies to situations of no production, as long as the lease remains in effect).

Subpart 3212—Lease Suspensions, Cessation of Production, Royalty Rate Reductions, and Energy Policy Act Royalty Conversions**§ 3212.10 What is the difference between a suspension of operations and production and a suspension of operations?**

(a) A suspension of operations and production is a temporary relief from production obligations which you may request from BLM. Under this paragraph you must cease all operations on your lease.

(b) A suspension of operations is when BLM orders you, to stop production temporarily in the interest of conservation.

§ 3212.11 How do I obtain a suspension of operations or a suspension of operations and production on my lease?

(a) If you are the operator, you may request in writing that BLM suspend your operations and production for a producing lease. Your request must fully describe why you need the suspension. BLM will determine if your suspension is justified and, if so, will approve it.

(b) BLM may suspend your operations on any lease in the interest of conservation.

(c) A suspension under this section may include leases committed to an approved unit agreement. If leases committed to a unit are suspended, the unit operator must continue to satisfy unit terms and obligations, unless BLM also suspends unit terms and obligations, in whole or in part, under subpart 3287.

§ 3212.12 How long does a suspension of operations or a suspension of operations and production last?

(a) BLM will state in your suspension notice how long your suspension of operations or operations and production is effective.

(b) During a suspension, you may ask BLM in writing to terminate your suspension. You may not unilaterally terminate a suspension that BLM ordered. A suspension of operations and production that we approved upon your request will automatically terminate when you begin or resume authorized production or drilling operations.

(c) If we receive information showing that you must resume operations to protect the interests of the United States, we will terminate your suspension and order you to resume production.

(d) If a suspension terminates, you must resume paying rents and royalty (see § 3212.14).

§ 3212.13 How does a suspension affect my lease term and obligations?

(a) If BLM approves a suspension of operations and production:

(1) Your lease term is extended by the length of time the suspension is in effect; and

(2) You are not required to drill, produce geothermal resources, or pay rents or royalties during the suspension. We will suspend your obligation to pay lease rents or royalties beginning the first day of the month following the date the suspension is effective.

(b) If BLM orders you to suspend your operations;

(1) Your lease term is extended by the length of time the suspension is in effect; and

(2) Your lease rental or royalty obligations are not suspended, except that BLM may suspend your rental or royalty obligations if you will be denied all beneficial use of your lease during the period of the suspension.

§ 3212.14 What happens when the suspension ends?

When the suspension ends, you must resume rental and royalty payments that were suspended, beginning on the first

day of the lease month after BLM terminates the suspension. You must pay the full rental amount due on or before the next lease anniversary date. If you do not make the rental payments on time, BLM will refund your balance and terminate the lease.

§ 3212.15 Will my lease remain in effect if I cease production and I do not have an approved suspension?

In the absence of a suspension issued under § 3212.11, if you cease production for more than one calendar month on a lease that is subject to royalties and that has achieved commercial production (through actual or allocated production), your lease will remain in effect only if the circumstances described in paragraphs (a), (b), or (c) of this section apply:

(a)(1) For leases issued on or after August 8, 2005 (other than leases issued in response to applications pending on that date for which no election is made under § 3200.8(b)(1)), and for leases issued before August 8, 2005, for which an election is made under § 3200.7(a)(2), your lease will remain in effect if, during the period in which there is no production, you continue to pay a monthly advanced royalty under MMS regulations at 30 CFR 218.305. This option is available only for an aggregate of 10 years (120 months, whether consecutive or not).

(2) For leases issued before August 8, 2005, for which no election is made under § 3200.7(a)(2), and for leases issued in response to applications pending on August 8, 2005, for which no election is made under § 3200.8(b)(1), your lease will remain in effect if, during the period in which there is no production you:

(i) Continue to make minimum royalty payments as specified in § 3211.21(b) of this part;

(ii) Maintain a well capable of production in commercial quantities;

(iii) Continue to make diligent efforts to utilize the geothermal resource; and

(iv) Satisfy any other applicable requirements.

(b) The Secretary:

(1) Requires or causes the cessation of production; or

(2) Determines that the cessation in production is required or otherwise caused by:

(i) The Secretary of the Air Force, Army, or Navy;

(ii) A state or a political subdivision of a state; or

(iii) Force majeure.

(c) The discontinuance of production is caused by the performance of maintenance necessary to maintain operations. Such maintenance is

considered a production activity, not a cessation of production, and maintenance may include activities such as overhauling your power plant, re-drilling or re-working wells that are critical to plant operation, or repairing and improving gathering systems or transmission lines, that necessitate the discontinuation of production. You must obtain BLM approval by submitting a Geothermal Sundry Notice if the activity will require more than one calendar month, for it to be classified as maintenance under this paragraph. The BLM must receive the Geothermal Sundry Notice before the end of the first calendar month in which there will be no production.

§ 3212.16 Can I apply to BLM to reduce, suspend, or waive the royalty or rental of my lease?

(a) You may apply for a suspension, reduction, or waiver of your rent or royalty for any lease or portion thereof. BLM may grant your request in the interest of conservation and to encourage the greatest ultimate recovery of geothermal resources, if we determine that:

- (1) Granting the request is necessary to promote development; or
- (2) You cannot successfully operate the lease under its current terms.

(b) BLM will not approve a rental or royalty reduction, suspension, or waiver unless all rental or royalty interest owners other than the United States accept a similar reduction, suspension, or waiver.

§ 3212.17 What information must I submit when I request that BLM suspend, reduce, or waive my royalty or rental?

(a) Your request for suspension, reduction, or waiver of the royalty or rental must include all information BLM needs to determine if the lease can be operated under its current terms, including:

- (1) The type of reduction you seek;
- (2) The serial number of your lease;
- (3) The names and addresses of the lessee and operator;
- (4) The location and status of wells;
- (5) A summary of monthly production from your lease; and
- (6) A detailed statement of expenses and costs.

(b) If you are applying for a royalty or rental reduction, suspension, or waiver, you must also provide to BLM a list of names of royalty and rental interest owners other than the United States, the amounts of royalties or payments out of production and rent paid to them, and every effort you have made to reduce these payments.

§ 3212.18 What are the production incentives for leases?

You will receive a production incentive in the form of a temporary 50 percent reduction in your royalties under MMS regulations at 30 CFR 218.307 if:

- (a) Your lease was in effect prior to August 8, 2005;
- (b) You do not convert the royalty rates of your lease under § 3212.25;
- (c) By August 7, 2011, production from or allocated to your lease is utilized for commercial production in a:
 - (1) New facility (see § 3212.22); or
 - (2) Qualified expansion project (see § 3212.21); and
- (d) The production from your lease is used for the commercial generation of electricity.

§ 3212.19 How do I apply for a production incentive?

Submit to BLM a written request for a production incentive describing a project that may qualify as a new facility or qualified expansion project. Identify whether you are requesting that the project be considered as a new facility (see § 3212.22) or as a qualified expansion project (see § 3212.21) and explain why your project qualifies under these regulations. The request must be received no later than August 7, 2011.

§ 3212.20 How will BLM review my request for a production incentive?

(a) BLM will review your request on a case-by-case basis to determine whether your project meets the criteria for a qualified expansion project under § 3212.21 or a new facility under § 3212.22. If it does not meet the criteria for the type of project you requested, we will determine whether it meets the criteria for the other type of production incentive project.

(b) If BLM determines that you have a qualified expansion project, we will, as part of our approval, provide you with a schedule of monthly target net generation amounts that you must exceed to qualify for the production incentive. These amounts will quantify the required 10 percent increase in net generation over the projected net generation without the project. The schedule will be specific to the facility or facilities that are affected by the project and will cover the 48-month time period during which your production incentive may apply.

(c) If BLM determines that you have met the criteria for a new facility, we will provide you with written notification of this determination.

§ 3212.21 What criteria establish a qualified expansion project for the purpose of obtaining a production incentive?

A qualified expansion project must meet the following criteria:

(a) It must involve substantial capital expenditure. Examples include the drilling of additional wells, retrofitting existing wells and collection systems to increase production rates, retrofitting turbines or power plant components to increase efficiency, adding additional generation capacity to existing plants, and enhanced recovery projects such as augmented injection. Projects that are not associated with substantial capital expenditure, such as opening production valves and operating existing equipment at higher rates, do not qualify as expansion projects.

(b) The project must have the potential to increase the net generation by more than 10 percent over the projected generation without the project, using data from the previous 5 years. If 5 years of data are not available, it is not a qualified expansion project.

§ 3212.22 What criteria establish a new facility for the purpose of obtaining a production incentive?

(a) Criteria for determining whether a project is a new facility for the purpose of obtaining a production incentive include:

- (1) The project requires a new site license or facility construction permit if it is on Federal lands;
- (2) The project requires a new Commercial Use Permit;
- (3) The project includes at least one new turbine-generator unit;
- (4) The project involves a new sales contract;
- (5) The project involves a new site or substantially larger footprint; and
- (6) The project is not contiguous to an existing project.

(b) Generally, a new facility will not:

- (1) Be permitted only with a Geothermal Drilling Permit;
- (2) Be constructed entirely within the footprint of an existing facility; or
- (3) Involve only well-field projects such as drilling new wells, increasing injection, and enhanced recovery projects.

§ 3212.23 How will the production incentive apply to a qualified expansion project?

(a) The production incentive will begin on the first day of the month following the commencement of commercial operation of the qualified expansion project. The incentive will be in effect for up to 48 consecutive months, applicable only to those months in which the actual generation from the facility or facilities affected by

the project exceeds the target generation established by BLM. The amount of the production incentive is established in MMS regulations at 30 CFR 218.307.

(b) The production incentive will apply only to the increase in net generation. The increase in generation for any month in which the production incentive is in effect will be determined as follows:

$$\Delta G_i = G_{a,i} - \frac{G_{t,i}}{1.1}$$

where:

i is a month for which a production incentive is in effect;

[Delta]G $_i$ is the increase in generation for month i to which the production incentive applies;

$G_{a,i}$ is the actual generation in month i ;

$G_{t,i}$ is the target generation in month i , as provided in § 3212.19(b).

§ 3212.24 How will the production incentive apply to a new facility?

(a) If BLM determines that your project qualifies as a new facility, the production incentive will begin on the first day of the month following the commencement of commercial operations at that facility, and will be in effect for 48 consecutive months. The incentive applies to the entire commercial generation of electricity from the new facility.

(b) The amount of the production incentive is established in MMS regulations at 30 CFR 218.307.

§ 3212.25 Can I convert the royalty rate terms of my lease in effect before August 8, 2005, to the terms of the Geothermal Steam Act, as amended by the Energy Policy Act of 2005?

(a) If a lease was in effect before August 8, 2005, the lessee may submit to BLM a request to modify the royalty rate terms of your lease to the applicable royalty rate or direct use fee terms prescribed in the Geothermal Steam Act as amended by the Energy Policy Act of 2005. You may withdraw your request before it is granted, but once you accept the new terms, you may not revert to the earlier royalty rates. If your request to modify is granted, the new royalty rate or direct use fees will apply to all geothermal resources produced from your lease for as long as your lease remains in effect. A modification under this section does not affect the royalty rate for byproducts.

(b)(1) The royalty rate for leases whose terms are modified and production from which is used for commercial generation of electricity is prescribed in § 3211.17(b).

(2) The direct use fees or royalty rate for leases whose terms are modified and

production from which is used directly for purposes other than commercial generation of electricity is prescribed in § 3211.18(a) of this part and MMS regulations at 30 CFR 206.356.

§ 3212.26 How do I submit a request to modify the royalty rate terms of my lease to the applicable terms prescribed in the Energy Policy Act of 2005?

(a) You must submit a written request to BLM that contains the serial numbers of the leases whose terms you wish to modify and:

(1) For direct use operations, any other information that BLM may require; or

(2) For commercial electrical generation operations, for each month during the 10-year period preceding the date of your request (or from when electrical generation operations began if less than 10 years before the date of your request):

(i) The gross proceeds received by you or your affiliate from the sale of electricity;

(ii) The amount of royalty paid;

(iii) The amount of generating and transmission deductions subtracted from the gross proceeds to derive the royalty value if you are using the geothermal netback procedure under MMS regulations to calculate royalty value; and

(iv) Any other information that BLM may require.

(b) BLM must receive your request no later than:

(1) For leases whose geothermal resource production is used directly for purposes other than commercial generation of electricity, 18 months after the effective date of the schedule of fees established by MMS under 30 CFR 206.356(b); or

(2) For leases whose geothermal resource production is used for commercial generation of electricity, December 1, 2008.

§ 3212.27 How will BLM or MMS review my request to modify the lease royalty rate terms?

After you submit your request to modify the royalty rate terms under § 3212.25, BLM will:

(a) Review your application, and if BLM determines that:

(1) Your application is complete and contains all necessary information, we will notify you of the date on which your complete request was received; or

(2) Your request is not complete or does not contain all necessary information, we will notify you of the additional information that is required;

(b) Analyze the data you submitted to establish a royalty rate if the geothermal

resources are used for commercial electrical generation;

(c) Consult with MMS and any state or local governments that may be affected by the change in royalty rate terms; and

(d)(1) No later than 140 days after the day on which we determine a complete request with all necessary information was received, BLM will send you written notification of the proposed royalty rate that BLM determines to be revenue neutral.

(2) If you reject the proposed rate, we must receive written notification from you no later than 30 days after the date of your receipt of our notification. BLM will accept a faxed notification received within the 30-day time limit. However, following the fax, you must submit to BLM written notification which BLM must receive no later than the 179th day following the day on which BLM determines we received your complete request.

(3) If you reject the proposed royalty rate on a timely basis:

(i) BLM will not issue a decision modifying the royalty rate terms of your lease;

(ii) The existing royalty rate terms in your lease continue to apply; and

(iii) You may not reapply for a royalty rate term conversion under § 3212.25.

(4) Unless timely written notification is received from you rejecting the proposed rate, BLM will issue a decision modifying the royalty rate terms of your lease no later than 180 days after the day on which we determine a complete request was received. The effective date of the new royalty rate is the first day of the month following the date on which the decision was issued. For example, a decision issued on July 21, will become effective on August 1.

Subpart 3213—Relinquishment, Termination, and Cancellation

§ 3213.10 Who may relinquish a lease?

Only the record title owner may relinquish a lease in full or in part. If there is more than one record title owner for a lease, all record title owners must sign the relinquishment.

§ 3213.11 What must I do to relinquish a lease?

Send BLM a written request that includes the serial number of each lease you are relinquishing. If you are relinquishing the entire lease, no legal description of the land is required. If you are relinquishing part of the lease, you must describe the lands to be relinquished. BLM may require additional information if necessary.

§ 3213.12 May BLM accept a partial relinquishment if it will reduce my lease to less than 640 acres?

Except for direct use leases, lands remaining in your lease must contain at least 640 acres, or all of your leased lands must be in one section, whichever is less. Otherwise, we will not accept your partial relinquishment. BLM will only allow an exception if it will further development of the resource. The size of direct use leases is addressed in § 3205.07.

§ 3213.13 When does relinquishment take effect?

(a) If BLM determines your relinquishment request meets the requirements of §§ 3213.11 and 3213.12, your relinquishment is effective the day we receive it.

(b) Notwithstanding the relinquishment, you and your surety continue to be responsible for:

- (1) Paying all rents and royalties due before the relinquishment was effective;
- (2) Plugging and abandoning all wells on the relinquished land;
- (3) Restoring and reclaiming the surface and other resources; and
- (4) Complying with § 3200.4.

§ 3213.14 Will BLM terminate my lease if I do not pay my rent on time?

(a) If MMS does not receive your second and subsequent year's rental payment in full by the lease anniversary date, MMS 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 MMS does not receive your rental plus the late fee by the end of the 45-day period, BLM will terminate your lease.

(b) If you receive notification from MMS under paragraph (a) of this section more than 15 days after the lease anniversary date, BLM will reinstate a lease that was terminated under paragraph (a) of this section if MMS receives the rent plus a 10 percent late fee within 30 days after you receive the notification.

§ 3213.15 How will BLM notify me if it terminates my lease?

BLM will send you a notice of the termination by certified mail, return receipt requested.

§ 3213.16 May BLM cancel my lease?

(a) BLM may cancel your lease if it was issued in error.

(b) If BLM cancels your lease because it was issued in error, the cancellation is effective when you receive it.

§ 3213.17 May BLM terminate my lease for reasons other than non-payment of rentals?

BLM may terminate your lease for reasons other than non-payment of

rentals, after giving you 30 days written notice, if we determine that you violated the requirements of § 3200.4, including, but not limited to the nonpayment of royalties and fees under 30 CFR parts 206 and 218.

§ 3213.18 When is a termination effective?

If BLM terminates your lease because we determined that you violated the requirements of § 3200.4, the termination takes effect 30 days after the date you receive notice of our determination.

§ 3213.19 What can I do if BLM notifies me that my lease is being terminated because of a violation of the law, regulations, or lease terms?

(a) You can prevent termination of your lease if, within 30 days after receipt of our notice:

- (1) You correct the violation; or
- (2) You show us that you cannot correct the violation during the 30-day period and that you are making a good faith attempt to correct the violation as quickly as possible, and thereafter you diligently proceed to correct the violation.

(b)(1) You may appeal the lease termination. You have 30 days after receipt of our notice to file an appeal (see parts 4 and 1840 of this title). We will stay the termination of your lease while your appeal is pending.

(2) You are entitled to a hearing on the violation or the proposed lease termination if you request the hearing when you file the appeal. The period for correction of the violation will be extended to 30 days after the decision on appeal is made if the decision concludes that a violation exists.

Subpart 3214—Personal and Surety Bonds

§ 3214.10 Who must post a geothermal bond?

(a) The lessee or operator must post a bond with BLM before exploration, drilling, or utilization operations begin.

(b) Before we approve a lease transfer or recognize a new designated operator, the lessee or operator must file a new bond or a rider to the existing bond, unless all previous operations on the land have already been reclaimed.

§ 3214.11 Who must my bond cover?

Your bond must cover all record title owners, operating rights owners, operators, and any person who conducts operations on your lease.

§ 3214.12 What activities must my bond cover?

Your bond must cover:

(a) Any activities related to exploration, drilling, utilization, or associated operations on a Federal lease;

(b) Reclamation of the surface and other resources;

(c) Rental and royalty payments; and

(d) Compliance with the requirements of § 3200.4.

§ 3214.13 What is the minimum dollar amount required for a bond?

The minimum bond amount varies depending on the type of activity you are proposing and whether your bond will cover individual, statewide, or nationwide activities. The minimum dollar amounts and bonding options for each type of activity are found in the following regulations:

(a) Exploration operations—see § 3251.15;

(b) Drilling operations—see § 3261.18; and

(c) Utilization operations—see §§ 3271.12 and 3273.19.

§ 3214.14 May BLM increase the bond amount above the minimum?

(a) BLM may increase the bond amount above the minimums referenced in § 3214.13 when:

(1) We determine that the operator has a history of noncompliance;

(2) We previously had to make a claim against a surety because any one person who is covered by the new bond failed to plug and abandon a well and reclaim the surface in a timely manner;

(3) MMS has notified BLM that a person covered by the bond owes uncollected royalties; or

(4) We determine that the bond amount will not cover the estimated reclamation cost.

(b) We may increase bond amounts to any level, but we will not set that amount higher than the total estimated costs of plugging wells, removing structures, and reclaiming the surface and other resources, plus any uncollected royalties due MMS or moneys owed to BLM due to previous violations.

§ 3214.15 What kind of financial guarantee will BLM accept to back my bond?

We will not accept cash bonds. We will only accept:

(a) Corporate surety bonds, provided that the surety company is approved by the Department of Treasury (see Department of the Treasury Circular No. 570, which is published in the **Federal Register** every year on or about July 1); and

(b) Personal bonds, which are secured by a cashier's check, certified check, certificate of deposit, negotiable securities such as Treasury notes, or an

irrevocable letter of credit (see §§ 3214.21 and 3214.22).

§ 3214.16 Is there a special bond form I must use?

You must use a BLM-approved bond form (Form 3000–4, or Form 3000–4a, June 1988 or later editions) for corporate surety bonds and personal bonds.

§ 3214.17 Where must I submit my bond?

File personal or corporate surety bonds and statewide bonds in the BLM State Office that oversees your lease or operations. You may file nationwide bonds in any BLM State Office. File bond riders in the BLM State Office where your underlying bond is located. For personal or corporate surety bonds, file one originally-signed copy of the bond.

§ 3214.18 Who will BLM hold liable under the lease and what are they liable for?

BLM will hold all interest owners in a lease jointly and severally liable for compliance with the requirements of § 3200.4 for obligations that accrue while they hold their interest. Among other things, all interest owners are jointly and severally liable for:

- (a) Plugging and abandoning wells;
- (b) Reclaiming the surface and other resources;
- (c) Compensatory royalties assessed for drainage; and
- (d) Rent and royalties due.

§ 3214.19 What are my bonding requirements when a lease interest is transferred to me?

(a) Except as otherwise provided in this section, if the lands to be transferred to you contain a well or any other surface disturbance which the original lessee did not reclaim, you must post a bond under this subpart before BLM will approve the transfer.

(b) If the original lessee does not transfer all interest in the lease to you, you may become a co-principal on the original bond, rather than posting a new bond.

(c) You do not need to post an additional bond if:

- (1) You previously furnished a statewide or nationwide bond sufficient to cover the lands transferred; or
- (2) The operator provided the original bond, and the operator does not change.

§ 3214.20 How do I modify my bond?

You may modify your bond by submitting a rider to the BLM State Office where your bond is held. There is no special form required.

§ 3214.21 What must I do if I want to use a certificate of deposit to back my bond?

Your certificate of deposit must:

(a) Be issued by a Federally-insured financial institution authorized to do business in the United States;

(b) Include on its face the statement, “This certificate cannot be redeemed by any party without approval by the Secretary of the Interior or the Secretary’s delegate;” and

(c) Be payable to the Department of the Interior, Bureau of Land Management.

§ 3214.22 What must I do if I want to use a letter of credit to back my bond?

Your letter of credit must:

(a) Be issued by a Federally-insured financial institution authorized to do business in the United States;

(b) Be payable to the Department of the Interior—Bureau of Land Management;

(c) Be irrevocable during its term and have an initial expiration date of no sooner than 1 year after the date we receive it;

(d) Be automatically renewable for a period of at least 1 year beyond the end of the current term, unless the issuing financial institution gives us written notice, at least 90 days before the letter of credit expires, that it will no longer renew the letter of credit; and

(e) Include a clause authorizing the Secretary of the Interior to demand immediate payment, in part or in full:

- (i) If you do not meet your obligations under the requirements of § 3200.4; or
- (ii) Provide substitute security for a letter of credit which the issuer has stated it will not renew before the letter of credit expires.

Subpart 3215—Bond Release, Termination, and Collection

§ 3215.10 When may BLM collect against my bond?

If you fail to comply with the requirements listed at § 3200.4, we may collect money from the bond to correct your noncompliance. This amount can be as large as the face amount of the bond. Some examples of when we will collect against your bond are when you do not properly or in a timely manner:

- (a) Plug and abandon a well;
- (b) Reclaim the lease area;
- (c) Pay outstanding royalties; or
- (d) Pay assessed royalties to compensate for drainage.

§ 3215.11 Must I replace my bond after BLM collects against it?

If BLM collects against your bond, before you conduct any further operations you must either:

- (a) Post a new bond equal to the value of the original bond; or
- (b) Restore your existing bond to the original face amount.

§ 3215.12 What will BLM do if I do not restore the face amount or file a new bond?

If we collect against your bond and you do not restore it to the original face amount, we may shut in any well(s) or utilization facilities covered by that bond and may terminate affected leases.

§ 3215.13 Will BLM terminate or release my bond?

(a) BLM does not cancel or terminate bonds. We may inform you that your existing bond is insufficient.

(b) The bond provider may terminate your bond provided it gives you and BLM 30-days notice. The bond provider remains responsible for obligations that accrued during the period of liability while the bond was in effect.

(c) BLM will release a bond, terminating all liability under that bond, if:

(1) The new bond that you file covers all existing liabilities and we accept it; or

(2) After a reasonable period of time, we determine that you paid all royalties, rents, penalties, and assessments, and satisfied all permit and lease obligations.

(d) If an adequate bond is not in place, do not conduct any operations until you provide a new bond that meets our requirements.

§ 3215.14 When BLM releases my bond, does that end my responsibilities?

When BLM releases your bond, we relinquish the security but we continue to hold the lessee or operator responsible for noncompliance with applicable requirements under the lease. Specifically, we do not waive any legal claim we may have against any person under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 *et seq.*), or other laws and regulations.

Subpart 3216—Transfers

§ 3216.10 What types of lease interests may I transfer?

You may transfer record title or operating rights, but you need BLM approval before your transfer is effective (see § 3216.21).

§ 3216.11 Where must I file a transfer request?

File your transfer in the BLM State Office that handles your lease.

§ 3216.12 When does a transferee take responsibility for lease obligations?

After BLM approves your transfer, the transferee is responsible for performing all lease obligations accruing after the date of the transfer, and for plugging

and abandoning wells which exist and are not plugged and abandoned at the time of the transfer.

§ 3216.13 What are my responsibilities after I transfer my interest?

After you transfer an interest in a lease you are still responsible for rents, royalties, compensatory royalties, and other obligations that accrued before your transfer became effective. You also remain responsible for plugging and

abandoning any wells that were drilled or existing on the lease while you held your interest. You must carry out this responsibility upon the BLM's determination at any future time that the wells must be plugged and abandoned.

§ 3216.14 What filing fees and forms does a transfer require?

With each transfer request you must send BLM the correct form and pay the

transfer fee required by this section. When you calculate your fee, make sure it covers the full amount. For example, if you are transferring record title for three leases, submit \$225 with the application.

Use the following chart to determine the number and types of forms required. The applicable transfer fees are in the fee schedule in § 3000.12 of this chapter.

Type of transfer	Form required?	Form No.	Number of copies
(a) Record Title	Yes	3000-3	2 executed copies.
(b) Operating Rights	Yes	3000-3(a)	2 executed copies.
(c) Estate Transfers	No	N/A	1 List of Leases.
(d) Corporate Mergers	No	N/A	1 List of Leases.
(e) Name Changes	No	N/A	1 List of Leases.

§ 3216.15 When must I file my transfer request?

(a) File a request to transfer record title or operating rights within 90 days after you sign an agreement with the transferee. If BLM receives your request more than 90 days after signing, we may require you to re-certify that you still intend to complete the transfer.

(b) There is no specific time deadline for filing estate transfers, corporate mergers, and name changes. File them within a reasonable time.

§ 3216.16 Must I file separate transfer requests for each lease?

File two copies of a separate request for each lease for which you are transferring record title or operating rights. The only exception is if you are transferring more than one lease to the same transferee, in which case you file two copies of one transfer request.

§ 3216.17 Where must I file estate transfers, corporate mergers, and name changes?

(a) If you have posted a bond for any Federal lease, you must file estate transfers, corporate mergers, and name changes in the BLM State Office that maintains your bond.

(b) If you have not posted a bond, you must file estate transfers, corporate mergers, and name changes in the State Office having jurisdiction over the lease.

§ 3216.18 How do I describe the lands in my lease transfer?

(a) If you are transferring an interest in your entire lease, you do not need to give BLM a legal description of the land.

(b) If you are transferring an interest in a portion of your lease, describe the lands that are transferred in the same way they are described in the lease.

§ 3216.19 May I transfer record title interest for less than 640 acres?

Except for direct use leases, you may transfer record title interest for less than 640 acres only if your transfer includes an irregular subdivision or all of the lands in your lease are in a section. We may make an exception to the minimum acreage requirements if it is necessary to conserve the resource.

§ 3216.20 When does a transfer segregate a lease?

If you transfer 100 percent of the record title interest in a portion of your lease, BLM will segregate the transferred portion from the original lease and give it a new serial number with the same terms and conditions as those in the original lease.

§ 3216.21 When is my transfer effective?

Your transfer is effective the first day of the month after we approve it.

§ 3216.22 Does BLM approve all transfer requests?

BLM will not approve a transfer if:
 (a) The lease account is not in good standing;
 (b) The transferee does not qualify to hold a lease under this part; or
 (c) An adequate bond has not been provided.

Subpart 3217—Cooperative Agreements

§ 3217.10 What are unit agreements?

Under unit agreements, lessees unite with each other, or jointly or separately with others, in collectively adopting and operating under agreements to conserve the resources of any geothermal reservoir, field, or like area, or any part thereof. BLM will only approve unit agreements that we determine are in the public interest. Unit agreement

application procedures are provided in part 3280 of this chapter.

§ 3217.11 What are communitization agreements?

Under communitization agreements (also called drilling agreements), operators who cannot independently develop separate tracts due to well-spacing or well development programs may cooperatively develop such tracts. Lessees may ask BLM to approve a communitization agreement or, in some cases, we may require the lessees to enter into such an agreement.

§ 3217.12 What does BLM need to approve my communitization agreement?

For BLM to approve a communitization agreement, you must give us the following information:

- (a) The location of the separate tracts comprising the drilling or spacing unit;
- (b) How you will prorate production or royalties to each separate tract based on total acres involved;
- (c) The name of each tract operator; and
- (d) Provisions for protecting the interests of all parties, including the United States.

§ 3217.13 When does my communitization agreement go into effect?

- (a) Your communitization agreement is effective when BLM approves and signs it.
- (b) Before we approve the agreement:
 - (1) All parties must sign the agreement; and
 - (2)(i) We must determine that the tracts cannot be independently developed; and
 - (ii) That the agreement is in the public interest.

§ 3217.14 When will BLM approve my drilling or development contract?

BLM may approve a drilling or development contract when:

(a) One or more geothermal lessees enter into the contract with one or more persons; or

(b) Lessees need the contract for regional exploration of geothermal resources;

(c) BLM has coordinated the review of the proposed contract with appropriate state agencies; and

(d) BLM determines that approval best serves or is necessary for the conservation of natural resources, public convenience or necessity, or the interests of the United States.

§ 3217.15 What does BLM need to approve my drilling or development contract?

For BLM to approve your drilling or development contract, you must send us:

(a) The contract and a statement of why you need it;

(b) A statement of all interests held by the contracting parties in that geothermal area or field;

(c) The type of operations and schedule set by the contract;

(d) A statement that the contract will not violate Federal antitrust laws by concentrating control over the production or sale of geothermal resources; and

(e) Any other information we may require to make a decision about the contract or to attach conditions of approval.

Subpart 3250—Exploration Operations—General**§ 3250.10 When do the exploration operations regulations apply?**

(a) The exploration operations regulations contained in this subpart and subparts 3251 through 3256 apply to geothermal exploration operations:

(1) On BLM-administered public lands, whether or not they are leased for geothermal resources; and

(2) On lands whose surface is managed by another Federal agency, where BLM has leased the subsurface geothermal resources and the lease operator wishes to conduct exploration. In this case, we will consult with the surface managing agency regarding surface use and reclamation requirements before we approve the exploration operations.

(b) These regulations do not apply to:

(1) Unleased land administered by another Federal agency;

(2) Unleased geothermal resources whose surface land is managed by another Federal agency;

(3) Privately owned land; or

(4) Casual use activities.

§ 3250.11 May I conduct exploration operations on my lease, someone else's lease, or unleased land?

(a) You may request BLM approval to explore any BLM-managed public lands open to geothermal leasing, even if the lands are leased to another person. A BLM-approved exploration permit does not give you exclusive rights.

(b) If you wish to conduct operations on your lease, you may do so after we have approved your Notice of Intent to Conduct Geothermal Resource Exploration Operations. If the lands are already leased, your operations may not unreasonably interfere with or endanger those other operations or other authorized uses, or cause unnecessary or undue degradation of the lands.

§ 3250.12 What general standards apply to exploration operations?

BLM-approved exploration operations must:

(a) Meet all operational and environmental standards;

(b) Protect public health, safety, and property;

(c) Prevent unnecessary impacts on surface and subsurface resources;

(d) Be conducted in a manner consistent with the principles of multiple use; and

(e) Comply with the requirements of § 3200.4.

§ 3250.13 What additional BLM orders or instructions govern exploration?

BLM may issue the following types of orders or instructions:

(a) Geothermal resource operational orders that contain detailed requirements of nationwide applicability;

(b) Notices to lessees that contain detailed requirements on a statewide or regional basis;

(c) Other orders and instructions specific to a field or area;

(d) Conditions of approval contained in an approved Notice of Intent; and

(e) Verbal orders that BLM will confirm in writing.

§ 3250.14 What types of operations may I propose in my application to conduct exploration?

(a) You may propose any activity fitting the definition of "exploration operations" in § 3200.1. Submit Form 3200-9, Notice of Intent to Conduct Geothermal Resource Exploration Operations, together with the information required under § 3251.11, and BLM will review your proposal.

(b) The exploration operations regulations do not address drilling wells

intended for production or injection, which is covered in subpart 3260, or geothermal resources utilization, which is covered in subpart 3270.

Subpart 3251—Exploration Operations: Getting BLM Approval**§ 3251.10 Do I need a permit before I start exploration operations?**

BLM must approve a Notice of Intent to Conduct Geothermal Resource Exploration Operations (NOI) before you conduct exploration operations. The approved NOI, including any necessary conditions for approval, constitutes your permit.

§ 3251.11 What information is in a complete Notice of Intent to Conduct Geothermal Resource Exploration Operations application?

To obtain approval of exploration operations on BLM-managed lands, your application must:

(a) Include a complete and signed Form 3200-9, Notice of Intent to Conduct Geothermal Resource Exploration Operations that describes the lands you wish to explore;

(b) For operations other than drilling temperature gradient wells, describe your exploration plans and procedures, including the approximate starting and ending dates for each phase of operations;

(c) For drilling temperature gradient wells, describe your drilling and completion procedures, and include, for each well or for several wells you propose to drill in an area of geologic and environmental similarity:

(1) A detailed description of the equipment, materials, and procedures you will use;

(2) The depth of each well;

(3) The casing and cementing program;

(4) The circulation media (mud, air, foam, etc.);

(5) A description of the logs that you will run;

(6) A description and diagram of the blowout prevention equipment you will use during each phase of drilling;

(7) The expected depth and thickness of fresh water zones;

(8) Anticipated lost circulation zones;

(9) Anticipated temperature gradient in the area;

(10) Well site layout and design;

(11) Existing and planned access roads or ancillary facilities; and

(12) Your source of drill pad and road building material and water supply.

(d) Show evidence of bond coverage (see § 3251.15);

(e) Estimate how much surface disturbance your exploration may cause;

(f) Describe the proposed measures you will take to protect the environment and other resources;

(g) Describe methods to reclaim the surface; and

(h) Include all other information BLM may require.

§ 3251.12 What action will BLM take on my Notice of Intent to Conduct Geothermal Resource Exploration Operations?

(a) When BLM receives your Notice of Intent to Conduct Geothermal Resource Exploration Operations, we will make sure it is complete and signed, and review it for compliance with the requirements of § 3200.4.

(b) If the proposed operations are located on lands described under § 3250.10(a)(2), we will consult with the Federal surface management agency before approving your Notice of Intent.

(c) We will check your Notice of Intent for technical adequacy and we may require additional information.

(d) We will notify you if we need more information to process your Notice of Intent, and suspend the review of your Notice of Intent until we receive the information.

(e) After our review, we will notify you whether we approved or denied your Notice of Intent and of any conditions of approval.

§ 3251.13 Once I have an approved Notice of Intent, how can I change my exploration operations?

Send BLM a complete and signed Form 3260–3, Geothermal Sundry Notice, which fully describes the requested changes. Do not proceed with the change in operations until you receive written approval from BLM.

§ 3251.14 Do I need a bond for conducting exploration operations?

(a) You must not start any exploration operations on BLM-managed lands until we approve your bond. You may meet the requirement for an exploration bond in two ways:

(1) If you have an existing nationwide or statewide oil and gas exploration bond, provide a rider in an amount we have specified to include geothermal resources exploration operations; or

(2) If you must file a new bond for geothermal exploration, the minimum amounts are:

(i) \$5,000 for a single operation;

(ii) \$25,000 for all of your operations within a state; and

(iii) \$50,000 for all of your operations on public lands nationwide.

(b) See subparts 3214 and 3215 for additional details on bonding procedures.

§ 3251.15 When will BLM release my bond?

BLM will release your bond after you request it and we determine that you have:

(a) Plugged and abandoned all wells;

(b) Reclaimed the land and, if necessary, resolved other environmental, cultural, scenic, or recreational issues; and

(c) Complied with the requirements of § 3200.4.

Subpart 3252—Conducting Exploration Operations

§ 3252.10 What operational standards apply to my exploration operations?

You must keep exploration operations under control at all times by:

(a) Conducting training during your operation to ensure that your personnel are capable of performing emergency procedures quickly and effectively;

(b) Using properly maintained equipment; and

(c) Using operational practices that allow for quick and effective emergency response.

§ 3252.11 What environmental requirements must I meet when conducting exploration operations?

(a) You must conduct your exploration operations in a manner that:

(1) Protects the quality of surface and subsurface waters, air, and other natural resources, including wildlife, soil, vegetation, and natural history;

(2) Protects the quality of cultural, scenic, and recreational resources;

(3) Accommodates other land uses, as BLM deems necessary; and

(4) Minimizes noise.

(b) You must remove or, with our permission, properly store all equipment and materials not in use.

(c) You must provide and use pits, tanks, and sumps of adequate capacity. They must be designed to retain all materials and fluids resulting from drilling temperature gradient wells or other operations, unless we have specified otherwise in writing. When they are no longer needed, you must properly abandon pits and sumps in accordance with your exploration permit.

(d) BLM may require you to submit a contingency plan describing procedures to protect public health, safety, property, and the environment.

§ 3252.12 How deep may I drill a temperature gradient well?

(a) You may drill a temperature gradient well to any depth that we approve in your exploration permit or sundry notice. In all cases, you may not flow test the well or perform injection

tests of the well unless you follow the procedures for geothermal drilling operations in subparts 3260 through 3267.

(b) BLM may modify your permitted depth at any time before or during drilling, if we determine that the bottom hole temperature or other information indicates that drilling to the original permitted depth could directly encounter the geothermal resource or create risks to public health, safety, property, the environment, or other resources.

§ 3252.13 How long may I collect information from my temperature gradient well?

You may collect information from your temperature gradient well for as long as your permit allows.

§ 3252.14 How must I complete a temperature gradient well?

Complete temperature gradient wells to allow for proper abandonment, and to prevent interzonal migration of fluids. Cap all tubing when not in use.

§ 3252.15 When must I abandon a temperature gradient well?

When you no longer need it, or when BLM requires you to.

§ 3252.16 How must I abandon a temperature gradient well?

(a) Before abandoning your well, submit a complete and signed Sundry Notice, Form 3260–3, describing how you plan to abandon wells and reclaim the surface. Do not begin abandoning wells or reclaiming the surface until BLM approves your Sundry Notice.

(b) You must plug and abandon your well for permanent prevention of interzonal migration of fluids and migration of fluids to the surface. You must reclaim your well location according to the terms of BLM approvals and orders.

Subpart 3253—Reports: Exploration Operations

§ 3253.10 Must I share with BLM the data I collect through exploration operations?

(a) For exploration operations on your geothermal lease, you must submit all data you obtain as a result of the operations with a signed notice of completion of exploration operations under § 3253.11, unless we approve a later submission.

(b) For exploration operations on unleased lands or on leased lands where you are not the lessee or unit operator, you are not required to submit data. However, if you want your exploration operations to count toward your diligent exploration expenditure requirement

(see § 3210.13), or if you are making significant expenditures to extend your lease (see § 3208.14), you must send BLM the resulting data under the rules of those sections.

§ 3253.11 Must I notify BLM when I have completed my exploration operations?

After you complete exploration operations, send to BLM a complete and signed notice of completion of exploration operations, describing the exploration operations, well history, completion and abandonment procedures, and site reclamation measures. You must send this to BLM within 30 days after you:

- (a) Complete any geophysical exploration operations;
- (b) Complete the drilling of temperature gradient well(s) approved under your approved Notice of Intent to conduct exploration;
- (c) Plug and abandon a temperature gradient well; and
- (d) Plug shot holes and reclaim all exploration sites.

Subpart 3254—Inspection, Enforcement, and Noncompliance for Exploration Operations

§ 3254.10 May BLM inspect my exploration operations?

BLM may inspect your exploration operations to ensure compliance with the requirements of § 3200.4 and the regulations in this subpart.

§ 3254.11 What will BLM do if my exploration operations are not in compliance with my permit, other BLM approvals or orders, or the regulations in this part?

(a) BLM will issue you a written Incident of Noncompliance and direct you to correct the problem within a set time. If the noncompliance continues or is serious in nature, we will take one or more of the following actions:

- (1) Correct the problem at your expense;
- (2) Direct you to modify or shut down your operations; or
- (3) Collect all or part of your bond.

(b) We may also require you to take actions to prevent unnecessary impacts on the lands. If so, we will notify you of the nature and extent of any required measures and the time you have to complete them.

(c) Noncompliance may result in BLM terminating your lease, if appropriate under §§ 3213.17 through 3213.19.

Subpart 3255—Confidential, Proprietary Information

§ 3255.10 Will BLM disclose information I submit under these regulations?

All Federal and Indian data and information submitted to the BLM are subject to part 2 of this title. Part 2 includes the regulations of the Department of the Interior covering public disclosure of data and information contained in Department records. Certain mineral information not protected from disclosure under part 2 may be made available for inspection without a Freedom of Information Act (FOIA) request.

§ 3255.11 When I submit confidential, proprietary information, how can I help ensure it is not available to the public?

When you submit data and information that you believe to be exempt from disclosure by 43 CFR part 2, you must clearly mark each page that you believe contains confidential information. BLM will keep all data and information confidential to the extent allowed by 43 CFR 2.13(c).

§ 3255.12 How long will information I give BLM remain confidential or proprietary?

The FOIA (5 U.S.C. 552) does not provide a finite period of time during which information may be exempt from public disclosure. BLM will review each situation individually and in accordance with part 2 of this title.

§ 3255.13 How will BLM treat Indian information submitted under the Indian Mineral Development Act?

Under the Indian Mineral Development Act of 1982 (IMDA) (25 U.S.C. 2101 *et seq.*), the Department of the Interior will hold as privileged proprietary information of the affected Indian or Indian tribe:

- (a) All findings forming the basis of the Secretary's intent to approve or disapprove any Minerals Agreement under IMDA; and
- (b) All projections, studies, data, or other information concerning a Minerals Agreement under IMDA, regardless of the date received, related to:
 - (1) The terms, conditions, or financial return to the Indian parties;
 - (2) The extent, nature, value, or disposition of the Indian mineral resources; or
 - (3) The production, products, or proceeds thereof.

§ 3255.14 How will BLM administer information concerning other Indian minerals?

For information concerning Indian minerals not covered by § 3255.13, BLM will withhold such records as may

be withheld under an exemption to the FOIA when it receives a request for information related to tribal or Indian minerals held in trust or subject to restrictions on alienation.

§ 3255.15 When will BLM consult with Indian mineral owners when information concerning their minerals is the subject of a FOIA request?

(a) We use the standards and procedures of § 2.15(d) of this title before making a decision about the applicability of FOIA exemption 4 to information obtained from a person outside the United States Government.

(b) BLM will notify the Indian mineral owner(s) identified in the records of the Bureau of Indian Affairs (BIA), and BIA, and give them a reasonable period of time to state objections to disclosure. BLM will issue this notice following consultation with a submitter under § 2.15(d) of this title if:

(1) BLM determines that the submitter does not have an interest in withholding the records that can be protected under FOIA; and

(2) BLM has reason to believe that disclosure of the information may result in commercial or financial injury to the Indian mineral owner(s), but is uncertain that such is the case.

Subpart 3256—Exploration Operations Relief and Appeals

§ 3256.10 How do I request a variance from BLM requirements that apply to my exploration operations?

(a) You may submit a request for a variance for your exploration operations from any requirement in § 3200.4. Your request must include enough information to explain:

(1) Why you cannot comply with the regulatory requirement; and

(2) Why you need the variance to control your well, conserve natural resources, or protect public health and safety, property, or the environment.

(b) BLM may approve your request orally or in writing. If we give you an oral approval, we will follow up with written confirmation.

§ 3256.11 How may I appeal a BLM decision regarding my exploration operations?

You may appeal a BLM decision regarding your exploration operations in accordance with § 3200.5.

Subpart 3260—Geothermal Drilling Operations—General

§ 3260.10 What types of geothermal drilling operations are covered by these regulations?

(a) The regulations in subparts 3260 through 3267 establish permitting and

operating procedures for drilling wells and conducting related activities for the purposes of performing flow tests, producing geothermal fluids, or injecting fluids into a geothermal reservoir. These subparts also address redrilling, deepening, plugging back, and other subsequent well operations.

(b) The operations regulations in subparts 3260 through 3267 do not address conducting exploration operations, which are covered in subpart 3250, or geothermal resources utilization, which is covered in subpart 3270.

§ 3260.11 What general standards apply to my drilling operations?

Your drilling operations must:

- (a) Meet all environmental and operational standards;
- (b) Prevent unnecessary impacts on surface and subsurface resources;
- (c) Conserve geothermal resources and minimize waste;
- (d) Protect public health, safety, and property; and
- (e) Comply with the requirements of § 3200.4.

§ 3260.12 What other orders or instructions may BLM issue?

BLM may issue:

- (a) Geothermal resource operational orders for detailed requirements that apply nationwide;
- (b) Notices to Lessees for detailed requirements on a statewide or regional basis;
- (c) Other orders and instructions specific to a field or area;
- (d) Permit conditions of approval; and
- (e) Oral orders, which will be confirmed in writing.

Subpart 3261—Drilling Operations: Getting a Permit

§ 3261.10 How do I get approval to begin well pad construction?

(a) If you do not have an approved geothermal drilling permit, Form 3260–2, apply using a completed and signed Sundry Notice, Form 3260–3, to build well pads and access roads. Send us a complete operations plan (see § 3261.12) and an acceptable bond with your Sundry Notice. You may start well pad construction after we approve your Sundry Notice.

(b) If you already have an approved drilling permit and you have provided an acceptable bond, you do not need any further permission from BLM to start well pad construction, unless you intend to change something in the approved permit. If you propose a change in an approved permit, send us a completed and signed Sundry Notice so we may review your proposed

change. Do not proceed with the change until we approve your Sundry Notice.

§ 3261.11 How do I apply for approval of drilling operations and well pad construction?

- (a) Send to BLM:
- (1) A completed and signed drilling permit application, Form 3260–2;
 - (2) A complete operations plan (§ 3261.12);
 - (3) A complete drilling program (§ 3261.13); and
 - (4) An acceptable bond (§ 3261.18).
- (b) Do not start any drilling operations until after BLM approves the permit.

§ 3261.12 What is an operations plan?

An operations plan describes how you will drill for and test the geothermal resources covered by your lease. Your plan must tell BLM enough about your proposal to allow us to assess the environmental impacts of your operations. This information should generally include:

- (a) Well pad layout and design;
- (b) A description of existing and planned access roads;
- (c) A description of any ancillary facilities;
- (d) The source of drill pad and road building material;
- (e) The water source;
- (f) A statement describing surface ownership;
- (g) A description of procedures to protect the environment and other resources;
- (h) Plans for surface reclamation; and
- (i) Any other information that BLM may require.

§ 3261.13 What is a drilling program and how do I apply for drilling program approval?

(a) A drilling program describes all the operational aspects of your proposal to drill, complete, and test a well.

- (b) Send to BLM:
- (1) A detailed description of the equipment, materials, and procedures you will use;
 - (2) The proposed/anticipated depth of the well;
 - (3) If you plan to directionally drill your well, also send us:
 - (i) The proposed bottom hole location and distances from the nearest section or tract lines;
 - (ii) The kick-off point;
 - (iii) The direction of deviation;
 - (iv) The angle of build-up and maximum angle; and
 - (v) Plan and cross section maps indicating the surface and bottom hole locations;
 - (4) The casing and cementing program;
 - (5) The circulation media (mud, air, foam, etc.);

(6) A description of the logs that you will run;

(7) A description and diagram of the blowout prevention equipment you will use during each phase of drilling;

(8) The expected depth and thickness of fresh water zones;

(9) Anticipated lost circulation zones;

(10) Anticipated reservoir temperature and pressure;

(11) Anticipated temperature gradient in the area;

(12) A plat certified by a licensed surveyor showing the surveyed surface location and distances from the nearest section or tract lines;

(13) Procedures and durations of well testing; and

(14) Any other information we may require.

§ 3261.14 When must I give BLM my operations plan?

Send us a complete operations plan before you begin any surface disturbance on a lease. You do not need to submit an operations plan for subsequent well operations or altering existing production equipment, unless these activities will cause more surface disturbance than originally approved, or we notify you that you must submit an operations plan. Do not start any activities that will result in surface disturbance until we approve your drilling permit or Sundry Notice.

§ 3261.15 Must I give BLM my drilling permit application, drilling program, and operations plan at the same time?

You may submit your completed and signed drilling permit application and complete drilling program and operations plan either together or separately.

(a) If you submit them together and we approve your drilling permit, the approved drilling permit will authorize both the pad construction and the drilling and testing of the well.

(b) If you submit the operations plan separately from the drilling permit application and program, you must:

(1) Submit the operations plan before the drilling permit application and drilling program to allow BLM time to comply with National Environmental Policy Act (NEPA); and

(2) Submit a completed and signed Sundry Notice for well pad and access road construction. Do not begin construction until we approve your Sundry Notice.

§ 3261.16 Can my operations plan, drilling permit, and drilling program apply to more than one well?

(a) Your operations plan and drilling program can sometimes be combined to cover several wells, but your drilling

permit cannot. To include more than one well in your operations plan, give us adequate information for all well sites, and we will combine your plan to cover those well sites that are in areas of similar geology and environment.

(b) Your drilling program may also apply to more than one well, provided you will drill the wells in the same manner, and you expect to encounter similar geologic and reservoir conditions.

(c) You must submit a separate geothermal drilling permit application for each well.

§ 3261.17 How do I amend my operations plan or drilling permit?

(a) If BLM has not yet approved your operations plan or drilling permit, send us your amended plan and completed and signed permit application.

(b) To amend an approved operations plan or drilling permit, submit a completed and signed Sundry Notice describing your proposed change. Do not start any amended operations until after BLM approves your drilling permit or Sundry Notice.

§ 3261.18 Do I need to file a bond with BLM before I build a well pad or drill a well?

Before starting any operation, you must:

(a) File with BLM either a surety or personal bond in the following minimum amount:

- (1) \$10,000 for a single lease;
- (2) \$50,000 for all of your operations within a state; or
- (3) \$150,000 for all of your operations nationwide;

(b) Get our approval of your surety or personal bond; and

(c) To cover any drilling operations on all leases committed to a unit, either submit a bond for that unit in an amount we specify, or provide a rider to a statewide or nationwide bond specifically covering the unit in an amount we specify.

(d) See subparts 3214 and 3215 for additional details on bonding procedures.

§ 3261.19 When will BLM release my bond?

BLM will release your bond after you request it and we determine that you have:

- (a) Plugged and abandoned all wells;
- (b) Reclaimed the surface and other resources; and
- (c) Met all the requirements of § 3200.4.

§ 3261.20 How will BLM review applications submitted under this subpart and notify me of its decision?

(a) When we receive your operations plan, we will make sure it is complete

and review it for compliance with the requirements of § 3200.4.

(b) If another Federal agency manages the surface of your lease, we will consult with it before we approve your drilling permit.

(c) We will review your drilling permit and drilling program or your Sundry Notice for well pad construction, to make sure they conform with your operations plan and any mitigation measures we developed while reviewing your plan.

(d) We will check your drilling permit and drilling program for technical adequacy and may require additional information.

(e) We will check your drilling permit for compliance with the requirements of § 3200.4.

(f) If we need any further information to complete our review, we will contact you in writing and suspend our review until we receive the information.

(g) After our review, we will notify you as to whether your permit has been approved or denied, as well as any conditions of approval.

§ 3261.21 How do I get approval to change an approved drilling operation?

(a) Send BLM a Sundry Notice, form 3260–3, describing the proposed changes. Do not proceed with the changes until we have approved them in writing, except as provided in paragraph (c) of this section. If your operations such as redrilling, deepening, drilling a new directional leg, or plugging back a well would significantly change your approved permit, BLM may require you to send us a new drilling permit (see 43 CFR 3261.13). A significant change would be, for example, redrilling the well to a completely different target, especially a target in an unknown area.

(b) If your changed drilling operation would cause additional surface disturbance, we may also require you to submit an amended operations plan.

(c) If immediate action is required to properly continue drilling operations, or to protect public health, safety, property or the environment, BLM may provide oral approval to change an approved drilling operation. However, you must submit a written Sundry Notice within 48 hours after we orally approve your change.

§ 3261.22 How do I get approval for subsequent well operations?

Send BLM a Sundry Notice describing your proposed operation. For some routine work, such as cleanouts, surveys, or general maintenance (see § 3264.11(b)), we may waive the Sundry Notice requirement. Contact your local BLM office to ask about waivers for

subsequent well operations. Unless you receive a waiver, you must submit a Sundry Notice. Do not start your operations until we grant a waiver or approve the Sundry Notice.

Subpart 3262—Conducting Drilling Operations

§ 3262.10 What operational requirements must I meet when drilling a well?

(a) When drilling a well, you must:

- (1) Keep the well under control at all times by:

- (i) Conducting training during your operation to maintain the capability of your personnel to perform emergency procedures quickly and effectively;

- (ii) Using properly maintained equipment; and

- (iii) Using operational practices that allow for quick and effective emergency response.

(b) You must use sound engineering principles and take into account all pertinent data when:

- (1) Selecting and using drilling fluid types and weights;

- (2) Designing and implementing a system to control fluid temperatures;

- (3) Designing and using blowout prevention equipment; and

- (4) Designing and implementing a casing and cementing program.

(c) Your operation must always comply with the requirements of § 3200.4.

§ 3262.11 What environmental requirements must I meet when drilling a well?

(a) You must conduct your operations in a manner that:

- (1) Protects the quality of surface and subsurface water, air, natural resources, wildlife, soil, vegetation, and natural history;

- (2) Protects the quality of cultural, scenic, and recreational resources;

- (3) Accommodates, as necessary, other land uses;

- (4) Minimizes noise; and

- (5) Prevents property damage and unnecessary or undue degradation of the lands.

(b) You must remove or, with BLM's approval, properly store all equipment and materials that are not in use.

(c) You must retain all fluids from drilling and testing the well in properly designed pits, sumps, or tanks.

(d) When you no longer need a pit or sump, you must abandon it and restore the site as we direct.

(e) BLM may require you to give us a contingency plan showing how you will protect public health and safety, property, and the environment.

§ 3262.12 Must I post a sign at every well?

Yes. Before you begin drilling a well, you must post a sign in a conspicuous place and keep it there throughout operations until the well site is reclaimed. Put the following information on the sign:

- (a) The lessee or operator's name;
- (b) Lease serial number;
- (c) Well number; and
- (d) Well location described by township, range, section, quarter-quarter section or lot.

§ 3262.13 May BLM require me to follow a well spacing program?

BLM may require you to follow a well spacing program if we determine that it is necessary for proper development. If we require well spacing, we will consider the following factors when we set well spacing:

- (a) Hydrologic, geologic, and reservoir characteristics of the field, minimizing well interference;
- (b) Topography;
- (c) Interference with multiple use of the land; and
- (d) Environmental protection, including ground water.

§ 3262.14 May BLM require me to take samples or perform tests and surveys?

(a) BLM may require you to take samples or to test or survey the well to determine:

- (1) The well's mechanical integrity;
- (2) The identity and characteristics of formations, fluids, or gases;
- (3) Presence of geothermal resources, water, or reservoir energy;
- (4) Quality and quantity of geothermal resources;
- (5) Well bore angle and direction of deviation;
- (6) Formation, casing, or tubing pressures;
- (7) Temperatures;
- (8) Rate of heat or fluid flow; and
- (9) Any other necessary well information.

(b) See § 3264.11 for information on reporting requirements.

Subpart 3263—Well Abandonment**§ 3263.10 May I abandon a well without BLM's approval?**

(a) You must have a BLM-approved Sundry Notice documenting your plugging and abandonment program before you start abandoning any well.

(b) You must also notify the local BLM office before you begin abandonment activities, so that we may witness the work. Contact your local BLM office before starting to abandon your well to find out what notification we need.

§ 3263.11 What information must I give BLM to approve my Sundry Notice for abandoning a well?

Send us a Sundry Notice with:

(a) All the information required in the well completion report (see § 3264.10), unless we already have that information;

(b) A detailed description of the proposed work, including:

- (1) Type, depth, length, and interval of plugs;
- (2) Methods you will use to verify the plugs (tagging, pressure testing, etc.);
- (3) Weight and viscosity of mud that you will use in the uncemented portions;

(4) Perforating or removing casing; and

(5) Restoring the surface; and

(c) Any other information that we may require.

§ 3263.12 How will BLM review my Sundry Notice to abandon my well and notify me of their decision?

(a) When BLM receives your Sundry Notice, we will make sure it is complete and review it for compliance with the requirements of § 3200.4. We will notify you if we need more information or require additional procedures. If we need any further information to complete our review, we will contact you in writing and suspend our review until we receive the information. If we approve your Sundry Notice, we will send you an approved copy once our review is complete. Do not start abandonment of the well until we approve your Sundry Notice.

(b) BLM may orally approve plugging procedures for a well requiring immediate action. If we do, you must submit the information required in § 3263.11 within 48 hours after we give oral approval.

§ 3263.13 What must I do to restore the site?

You must remove all equipment and materials and restore the site according to the terms of your permit or other BLM approval.

§ 3263.14 May BLM require me to abandon a well?

If we determine that your well is no longer needed for geothermal resource production, injection, or monitoring, or if we determine that the well is not mechanically sound, BLM may order you to abandon the well. In either case, if you disagree you may explain to us why the well should not be abandoned. We will consider your reasons before we issue any final order.

§ 3263.15 May I abandon a producible well?

(a) You may abandon a producible well only after you receive BLM's approval. Before abandoning a producing well, send BLM the information listed in § 3263.11. We may also require you to explain why you want to abandon the well.

(b) BLM will deny your request if we determine that the well is needed:

- (1) To protect a Federal lease from drainage; or
- (2) To protect the environment or other resources of the United States.

Subpart 3264—Reports—Drilling Operations**§ 3264.10 What must I submit to BLM after I complete a well?**

You must submit a Geothermal Well Completion Report, Form 3260-4, within 30 days after you complete a well. Your report must include the following:

- (a) A complete, chronological well history;
- (b) A copy of all logs;
- (c) Copies of all directional surveys; and
- (d) Copies of all mechanical, flow, reservoir, and other test data.

§ 3264.11 What must I submit to BLM after I finish subsequent well operations?

(a) Submit to BLM a subsequent well operations report within 30 days after completing operations. At a minimum, this report must include:

- (1) A complete, chronological history of the work done;
- (2) A copy of all logs;
- (3) Copies of all directional surveys;
- (4) The results of all sampling, tests, or surveys we require you to make (see § 3262.14);

(4) Copies of all mechanical, flow, reservoir, and other test data; and

(5) A statement of whether you achieved your goals. For example, if the well was acidized to increase production, state whether the production rate increased when you put the well back on line.

(b) We may waive this reporting requirement for work we determine to be routine, such as cleanouts, surveys, or general maintenance. To request a waiver, contact BLM. If you do not receive a waiver, you must submit the report.

§ 3264.12 What must I submit to BLM after I abandon a well?

Send us a well abandonment report within 30 days after you abandon a well. If you plan to restore the site at a later date, you may submit a separate report within 30 days after completing

site restoration. The well abandonment report must contain:

- (a) A complete chronology of all work done;
- (b) A description of each plug, including:
 - (1) Type and amount of cement used;
 - (2) Depth that the drill pipe or tubing was run to set the plug;
 - (3) Depth to top of plug; and
 - (4) If the plug was verified, whether it was done by tagging or pressure testing; and
- (c) A description of surface restoration procedures.

§ 3264.13 What drilling and operational records must I maintain for each well?

You must keep the following information for each well, and make it available for BLM to inspect, upon request:

- (a) A complete and accurate drilling log, in chronological order;
- (b) All other logs;
- (c) Water or steam analyses;
- (d) Hydrologic or heat flow tests;
- (e) Directional surveys;
- (f) A complete log of all subsequent well operations, such as cementing, perforating, acidizing, and well cleanouts; and
- (g) Any other information regarding the well that could affect its status.

§ 3264.14 How do I notify BLM of accidents occurring on my lease?

You must orally inform us of all accidents that affect operations or create environmental hazards within 24 hours of the accident. When you contact us, we may require you to submit a written report fully describing the incident.

Subpart 3265—Inspection, Enforcement, and Noncompliance for Drilling Operations

§ 3265.10 What part of my drilling operations may BLM inspect?

(a) BLM may inspect all of your Federal drilling operations regardless of surface ownership. We will inspect your operations for compliance with the requirements of § 3200.4.

(b) BLM may inspect all of your maps, well logs, surveys, records, books, and accounts related to your Federal drilling operations.

§ 3265.11 What records must I keep available for inspection?

You must keep a complete record of all aspects of your activities related to your drilling operation available for our inspection. Store these records in a place which makes them conveniently available to us. Examples of records which we may inspect include:

- (a) Well logs and maps;

- (b) Records, books, and accounts related to your Federal drilling operations;
- (c) Directional surveys;
- (d) Records pertaining to casing type and setting;
- (e) Records pertaining to formations penetrated;
- (f) Well test results;
- (g) Records pertaining to characteristics of the geothermal resource;
- (h) Records pertaining to emergency procedure training; and
- (i) Records pertaining to operational problems.

§ 3265.12 What will BLM do if my operations do not comply with my permit and applicable regulations?

(a) We will issue you a written Incident of Noncompliance, directing you to take required corrective action within a specific time period. If the noncompliance continues or is of a serious nature, we will take one or more of the following actions:

- (1) Enter your lease, and correct any deficiencies at your expense;
 - (2) Collect all or part of your bond;
 - (3) Direct modification or shutdown of your operations; and
 - (4) Take other enforcement action under subpart 3213 against a lessee who is ultimately responsible for noncompliance.
- (b) Noncompliance may result in BLM terminating your lease. See §§ 3213.17 through 3213.19.

Subpart 3266—Confidential, Proprietary Information

§ 3266.10 Will BLM disclose information I submit under these regulations?

All Federal and Indian data and information submitted to the BLM are subject to part 2 of this title. Part 2 includes the Department of the Interior regulations covering public disclosure of data and information contained in Department records. Certain mineral information not protected from disclosure under part 2 of this title may be made available for inspection without a Freedom of Information Act (FOIA) request. BLM will not treat surface location, surface elevation, or well status information as confidential.

§ 3266.11 When I submit confidential, proprietary information, how can I help ensure that it is not available to the public?

When you submit data and information that you believe to be exempt from disclosure by part 2 of this title, you must clearly mark each page that you believe contains confidential information. BLM will keep all data and information confidential to the extent allowed by § 2.13(c) of this title.

§ 3266.12 How long will information that I give BLM remain confidential or proprietary?

The FOIA does not provide a finite period of time during which information may be exempt from public disclosure. BLM reviews each situation individually and in accordance with part 2 of this title.

Subpart 3267—Geothermal Drilling Operations Relief and Appeals

§ 3267.10 How do I request a variance from BLM requirements that apply to my drilling operations?

(a) You may file a request for a variance from the requirements of § 3200.4 for your approved drilling operations. Your request must include enough information to explain:

- (1) Why you cannot comply with the requirements of § 3200.4; and
- (2) Why you need the variance to control your well, conserve natural resources, or protect public health and safety, property, or the environment.

(b) We may approve your request orally or in writing. If BLM gives you an oral approval, we will follow up with written confirmation.

§ 3267.11 How may I appeal a BLM decision regarding my drilling operations?

You may appeal our decisions regarding your drilling operations in accordance with § 3200.5.

Subpart 3270—Utilization of Geothermal Resources—General

§ 3270.10 What types of geothermal operations are governed by these utilization regulations?

(a) The regulations in subparts 3270 through 3279 of this part cover the permitting and operating procedures for the utilization of geothermal resources. This includes:

- (1) Electrical generation facilities;
- (2) Direct use facilities;
- (3) Related utilization facility operations;
- (4) Actual and allocated well field production and injection; and
- (5) Related well field operations.

(b) The utilization regulations in subparts 3270 through 3279 do not address conducting exploration operations, which is covered in subpart 3250, or drilling wells intended for production or injection, which is covered in subpart 3260.

§ 3270.11 What general standards apply to my utilization operations?

Your utilization operations must:

- (a) Meet all operational and environmental standards;
- (b) Prevent unnecessary impacts on surface and subsurface resources;

(c) Result in the maximum ultimate recovery of geothermal resources;

(d) Result in the beneficial use of geothermal resources, with minimum waste;

(e) Protect public health, safety, and property; and

(f) Comply with the requirements of § 3200.4.

§ 3270.12 What other orders or instructions may BLM issue?

BLM may issue:

(a) Geothermal resource operational orders, for detailed requirements that apply nationwide;

(b) Notices to lessees, for detailed requirements on a statewide or regional basis;

(c) Other orders and instructions specific to a field or area;

(d) Permit conditions of approval; and

(e) Oral orders, which BLM will confirm in writing.

Subpart 3271—Utilization Operations: Getting a Permit

§ 3271.10 What do I need to start preparing a site and building and testing a utilization facility on Federal land leased for geothermal resources?

In order to use Federal land to produce geothermal power, you must obtain a site license and construction permit from BLM before you start preparing the site. Send BLM a plan that shows what you want to do, and draft a proposed site license agreement that you think is fair and reasonable. We will review your proposal and decide whether to give you a permit and license to proceed with work on the site.

§ 3271.11 Who may apply for a permit to build a utilization facility?

The lessee, the facility operator, or the unit operator may apply to build a utilization facility.

§ 3271.12 What do I need to start preliminary site investigations that may disturb the surface?

(a) You must:

(1) Fully describe your proposed operations in a Sundry Notice; and
(2) File a bond meeting the requirements of either § 3251.14 or § 3273.19. See subparts 3214 and 3215 for additional details on bonding procedures.

(b) Do not begin the site investigation or surface disturbing activity until BLM approves your Sundry Notice and bond.

§ 3271.13 How do I obtain approval to build pipelines and facilities connecting the well field to utilization facilities not located on Federal lands leased for geothermal resources?

Before constructing pipelines and well field facilities on Federal lands

leased for geothermal resources, you as lessee, unit operator, or facility operator must submit to BLM a utilization plan and facility construction permit addressing any pipelines or facilities.

Do not start construction of your pipelines or facilities until BLM approves your facility construction permit.

§ 3271.14 What do I need to do to start building and testing a utilization facility if it is not located on Federal lands leased for geothermal resources?

(a) You do not need a BLM permit to construct a facility located on either:

(1) Private land; or

(2) Lands where the surface is privately owned and BLM has leased the underlying Federal geothermal resources, when the facility will utilize Federal geothermal resources.

(b) Before testing a utilization facility that is not located on Federal lands leased for geothermal resources, send us a Sundry Notice describing the testing schedule and the quantity of Federal geothermal resources you expect to be delivered to the facility during the testing. Do not start delivering Federal geothermal resources to the facility until we approve your Sundry Notice.

§ 3271.15 How do I get a permit to begin commercial operations?

Before using Federal geothermal resources, you as lessee, operator, or facility operator must send us a completed commercial use permit (see § 3274.11). This also applies when you use Federal resources allocated through any form of agreement. Do not start any commercial use operations until BLM approves your commercial use permit.

Subpart 3272—Utilization Plans and Facility Construction Permits

§ 3272.10 What must I submit to BLM in my utilization plan?

Submit to BLM an application describing:

(a) The proposed facilities as required by § 3272.11; and

(b) The anticipated environmental impacts and how you propose to mitigate those impacts, as required by § 3272.12.

§ 3272.11 How do I describe the proposed utilization facility?

Your submission must include:

(a) A generalized description of all proposed structures and facilities, including their size, location, and function;

(b) A generalized description of proposed facility operations, including estimated total production and injection rates; estimated well flow rates,

pressures, and temperatures; facility net and gross electrical generation; and, if applicable, interconnection with other utilization facilities. If it is a direct use facility, send us the information we need to determine the amount of resource utilized;

(c) A contour map of the entire utilization site, showing production and injection well pads, pipeline routes, facility locations, drainage structures, existing and planned access, and lateral roads;

(d) A description of site preparation and associated surface disturbance, including the source for site or road building materials, amounts of cut and fill, drainage structures, analysis of all site evaluation studies prepared for the site(s), and a description of any additional tests, studies, or surveys which are planned to assess the geologic suitability of the site(s);

(e) The source, quality, and proposed consumption rate of water to be used during facility operations, and the source and quantity of water to be used during facility construction;

(f) The methods for meeting air quality standards during facility construction and operation, especially standards concerning non-condensable gases;

(g) An estimated number of personnel needed during construction and operation of the facility;

(h) A construction schedule;

(i) A schedule for testing of the facility and/or well equipment, and for the start of commercial operations;

(j) A description of architectural landscaping or other measures to minimize visual impacts; and

(k) Any additional information or data that we may require.

§ 3272.12 What environmental protection measures must I include in my utilization plan?

(a) Describe, at a minimum, your proposed measures to:

(1) Prevent or control fires;

(2) Prevent soil erosion;

(3) Protect surface or ground water;

(4) Protect fish and wildlife;

(5) Protect cultural, visual, and other natural resources;

(6) Minimize air and noise pollution; and

(7) Minimize hazards to public health and safety during normal operations.

(b) If BLM requires it, you must also describe how you will monitor your facility operations to ensure that they comply with the requirements of § 3200.4, and applicable noise, air, and water quality standards, at all times. We will consult with other involved surface management agencies, if any, regarding

monitoring requirements. You must also include provisions for monitoring other environmental parameters we may require.

(c) Based on what level of impacts that BLM finds your operations may cause, we may require you to collect data concerning existing air and water quality, noise, seismicity, subsidence, ecological systems, or other environmental information for up to 1 year before you begin operating. BLM must approve your data collection methodologies, and will consult with any other surface managing agencies involved.

(d) You must also describe how you will abandon utilization facilities and restore the site, in order to comply with the requirements of § 3200.4.

(e) Finally, you must submit any additional information or data that BLM may require.

§ 3272.13 How will BLM review my utilization plan and notify me of its decision?

(a) When BLM receives your utilization plan, we will make sure it is complete and review it for compliance with § 3200.4.

(b) If another Federal agency manages the surface of your lease, we will consult with that agency as part of the plan review.

(c) If we need any further information to complete our review, we will contact you in writing and suspend our review until we receive the information.

(d) We will notify you in writing of our decision on your plan.

§ 3272.14 How do I get a permit to build or test my facility?

(a) Before building or testing a utilization facility, you must submit to BLM a:

- (1) Utilization plan;
- (2) Completed and signed facility construction permit; and
- (3) Completed and signed site license. (See subpart 3273.)

(b) Do not start building or testing your utilization facility until we have approved both your facility construction permit and your site license.

(c) After our review, we will notify you whether we have approved or denied your permit, as well as of any conditions we require for conducting operations.

Subpart 3273—How To Apply for a Site License

§ 3273.10 When do I need a site license for a utilization facility?

You must obtain a site license approved by BLM, unless your facility will be located on lands leased as described in § 3273.11. Do not start building or testing your utilization

facility on public lands leased for geothermal resources until BLM has approved both your facility construction permit (see § 3272.14) and your site license. The facility operator must apply for the license.

§ 3273.11 When is a site license unnecessary?

You do not need a site license if your facility will be located:

- (a) On private land or on split estate land where the United States does not own the surface; or
- (b) On Federal land not leased for geothermal resources. In this situation, the Federal surface management agency will issue you the permit you need.

§ 3273.12 How will BLM review my site license application?

(a) When BLM receives your site license application, we will make sure it is complete. If we need more information for our review, we will ask you for that information and stop our review until we receive the information.

(b) If your site license is located on geothermal leases where the surface is managed by the Department of Agriculture, we will consult with that agency and obtain concurrence before we approve your application. The agency may require additional license terms and conditions.

(c) If the land is subject to section 24 of the Federal Power Act, we will issue the site license with the terms and conditions requested by the Federal Energy Regulatory Commission.

(d) If another Federal agency manages the surface, we will consult with them to determine if they recommend additional license terms and conditions.

(e) After our review, we will notify you whether we approved or denied your license, as well as any additional conditions we require.

§ 3273.13 What lands are not available for geothermal site licenses?

BLM will not issue site licenses under these regulations for lands that are not leased or not available for geothermal leasing (see § 3201.11).

§ 3273.14 What area does a site license cover?

A site license covers a reasonably compact tract of Federal land, limited to as much of the surface as is necessary to utilize geothermal resources. That means the site license area will only include the utilization facility itself and other necessary structures, such as substations and processing, repair, or storage facility areas.

§ 3273.15 What must I include in my site license application?

Your site license application must include:

(a) A description of the boundaries of the land applied for, as determined by a certified licensed surveyor. Describe the land by legal subdivision, section, township and range, or by approved protraction surveys, if applicable;

(b) The affected acreage;

(c) A non-refundable filing fee of \$50;

(d) A site license bond (see § 3273.19);

(e) The first year's rent, if applicable (see § 3273.18); and

(f) Documentation that the lessee or unit operator accepts the siting of the facility, if the facility operator is neither the lessee nor the unit operator.

§ 3273.16 What is the annual rent for a site license?

BLM will specify the annual rent in your license and the date you must pay it, if you are required to pay rent (see § 3273.18). Your rent will be at least \$100 per acre or fraction thereof for an electrical generation facility, and at least \$10 per acre or fraction thereof for a direct use facility. Send the first year's rent to BLM, and all subsequent rental payments to MMS under 30 CFR part 218.

§ 3273.17 When may BLM reassess the annual rent for my site license?

BLM may reassess the rent for lands covered by the license, beginning with the 10th year and every 10 years after that.

§ 3273.18 What facility operators must pay the annual site license rent?

If you are a lessee siting a utilization facility on your own lease, or a unit operator siting a utilization facility on leases committed to the unit, you are not required to pay rent. Only a facility operator who is not also a lessee or unit operator must pay rent.

§ 3273.19 What are the bonding requirements for a site license?

(a) For an electrical generation facility, the facility operator must submit a surety or personal bond to BLM for at least \$100,000 that meets the requirements of subpart 3214. BLM may increase the required bond amount. See subparts 3214 and 3215 for additional details on bonding procedures.

(b) For a direct use facility, the facility operator must submit a surety or personal bond to BLM that meets the requirements of subpart 3214 in an amount BLM will specify.

(c) The bond's terms must cover compliance with the requirements of § 3200.4.

(d) Until BLM approves your bond, do not start construction, testing, or any

other activity that would disturb the surface.

§ 3273.20 When will BLM release my bond?

We will release your bond after you request it and we determine that you have:

- (a) Removed the utilization facility and all associated equipment;
- (b) Reclaimed the land; and
- (c) Met all the requirements of § 3200.4.

§ 3273.21 What are my obligations under the site license?

As the facility operator, you:

- (a) Must comply with the requirements of § 3200.4;
- (b) Are liable for all damages to the lands, property, or resources of the United States caused by yourself, your employees, or your contractors or their employees;
- (c) Must indemnify the United States against any liability for damages or injury to persons or property arising from the occupancy or use of the lands authorized under the site license; and
- (d) Must restore any disturbed surface, and remove all structures when they are no longer needed for facility construction or operation. This includes the utilization facility if you cannot operate the facility and you are not diligent in your efforts to return the facility to operation.

§ 3273.22 How long will my site license remain in effect?

(a) The primary term of a site license is 30 years, with a preferential right to renew the license under terms and conditions set by BLM.

(b) If your lease on which the licensed site is located ends, you may apply for a facility permit under Section 501 of FLPMA, 43 U.S.C. 1761, if your facility is on BLM-managed lands. Otherwise, you must get permission from the surface management agency to continue using the surface for your facility.

§ 3273.23 May I renew my site license?

(a) You have a preferential right to renew your site license under terms and conditions BLM determines.

(b) If your site license is located on leased lands managed by the Department of Agriculture, we will consult with the surface management agency and obtain concurrence before renewing your license. The agency may require additional license terms and conditions. If another Federal agency manages the surface, we will consult with them before granting your renewal.

§ 3273.24 When may BLM terminate my site license?

(a) BLM may terminate a site license by written order. We may terminate your site license if you:

- (1) Do not comply with the requirements of § 3270.11; or
 - (2) Do not comply with the requirements of § 3200.4.
- (b) To prevent termination, you must correct the violation within 30 days after you receive a correction order from BLM, unless we determine that:
- (1) The violation cannot be corrected within 30 days; and
 - (2) You are diligently attempting to correct it.

§ 3273.25 When may I relinquish my site license?

You may request approval to relinquish your site license by sending BLM a written notice requesting relinquishment review and approval. We will not approve the relinquishment until you comply with § 3273.21.

§ 3273.26 When may I assign or transfer my site license?

You may assign or transfer your site license in whole or in part. Send BLM your completed and signed transfer application and a \$50 filing fee. Your application must include a written statement that the transferee will comply with all license terms and conditions, and that the lessee accepts the transfer. The transferee must submit a bond meeting the requirements of § 3273.19. The transfer is not effective until we approve the bond and site license transfer.

Subpart 3274—Applying for and Obtaining a Commercial Use Permit

§ 3274.10 Do I need a commercial use permit to start commercial operations?

You must have a commercial use permit approved by BLM before you begin commercial operations from a Federal lease, a Federal unit, or a utilization facility.

§ 3274.11 What must I give BLM to approve my commercial use permit application?

Submit a completed and signed commercial permit form, to BLM, containing the following information:

- (a) The design specifications, and the inspection and calibration schedule of production, injection, and royalty meters;
- (b) A schematic diagram of the utilization site or individual well, showing the location of each production and royalty meter. If the sales point is located off the utilization site, give us a generalized schematic diagram of the

electrical transmission or pipeline system, including meter locations;

(c) A copy of the sales contract for the sale and/or utilization of geothermal resources;

(d) A description and analysis of reservoir, production, and injection characteristics, including the flow rates, temperatures, and pressures of each production and injection well;

(e) A schematic diagram of each production and injection well showing the wellhead configuration, including meters;

(f) A schematic flow diagram of the utilization facility, including interconnections with other facilities, if applicable;

(g) A description of the utilization process in sufficient detail to enable BLM to determine whether the resource will be utilized in a manner consistent with law and regulations;

(h) The planned safety provisions for emergency shutdown to protect public health, safety, property, and the environment. This should include a schedule for the testing and maintenance of safety devices;

(i) The environmental and operational parameters that will be monitored during the operation of the facility and/or well(s); and

(j) Any additional information or data that we may require.

§ 3274.12 How will BLM review my commercial use permit application?

(a) When BLM receives your completed and signed commercial use permit application, we will make sure it is complete and review it for compliance with § 3200.4.

(b) If another Federal agency manages the surface of your lease, we will consult with that agency before we approve your commercial use permit.

(c) We will review your commercial use permit to make sure it conforms with your utilization plan and any mitigation measures we developed while reviewing your plan.

(d) We will check your commercial use permit for technical adequacy, and will ensure that your meters meet the accuracy standards (see §§ 3275.14 and 3275.15).

(e) If we need any further information to complete our review, we will contact you in writing and suspend our review until we receive the information.

(f) After our review, we will notify you whether your permit has been approved or denied, as well as any conditions of approval.

§ 3274.13 May I get a permit even if I cannot currently demonstrate I can operate within required standards?

Yes, but we may limit your operations to a prescribed set of activities and a set period of time, during which we will give you a chance to show you can operate within environmental and operational standards, based on actual facility and well data you collect. Send us a Sundry Notice to get BLM approval for extending your permit. If during this set time period you still cannot demonstrate your ability to operate within the required standards, we will terminate your authorization. You must then stop all operations and restore the surface to the standards we set in the termination notice.

Subpart 3275—Conducting Utilization Operations**§ 3275.10 How do I change my operations if I have an approved facility construction or commercial use permit?**

Send BLM a completed and signed Sundry Notice describing your proposed change. Until we approve your Sundry Notice, you must continue to comply with the original permit terms.

§ 3275.11 What are a facility operator's obligations?

You must:

- (a) Keep the facility in proper operating condition at all times by:
 - (1) Conducting training during your operation to ensure that your personnel are capable of performing emergency procedures quickly and effectively;
 - (2) Using properly maintained equipment; and
 - (3) Using operational practices that allow for quick and effective emergency response.
- (b) Base the design of the utilization facility siting and operation on sound engineering principles and other pertinent geologic and engineering data;
- (c) Prevent waste of, or damage to, geothermal and other energy and minerals resources; and
- (d) Comply with the requirements of § 3200.4.

§ 3275.12 What environmental and safety requirements apply to facility operations?

- (a) You must perform all utilization facility operations in a manner that:
 - (1) Protects the quality of surface and subsurface waters, air, and other natural resources, including wildlife, soil, vegetation, and natural history;
 - (2) Prevents unnecessary or undue degradation of the lands;
 - (3) Protects the quality of cultural, scenic, and recreational resources;
 - (4) Accommodates other land uses as much as possible;
 - (5) Minimizes noise;
 - (6) Prevents injury; and

(7) Prevents damage to property.

(b) You must monitor facility operations to identify and address local environmental resources and concerns associated with your facility or lease operations.

(c) You must remove or, with BLM approval, properly store all equipment and materials not in use.

(d) You must properly abandon the facility and reclaim any disturbed surface to standards approved or prescribed by us, when the land is no longer needed for facility construction or operation.

(e) When we require, you must submit a contingency plan describing procedures to protect public health and safety, property, and the environment.

(f) You must comply with the requirements of § 3200.4.

§ 3275.13 How must the facility operator measure the geothermal resources?

The facility operator must:

- (a) Measure all production, injection and utilization in accordance with methods and standards approved by BLM (see § 3275.15);
- (b) Maintain and test all metering equipment. If your equipment is defective or out of tolerance, you must promptly recalibrate, repair, or replace it; and
- (c) Determine the amount of production and/or utilization in accordance with methods and procedures approved by BLM (see § 3275.17).

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

- (a) For all well operations, you must measure wellhead flow, wellhead temperature, and wellhead pressure.
- (b) For all electrical generation facilities, you must measure:
 - (1) Steam and/or hot water flow entering the facility;
 - (2) Temperature of the water and/or steam entering the facility;
 - (3) Pressure of the water and/or steam entering the facility;
 - (4) Gross electricity generated;
 - (5) Net electricity at the facility tailgate;
 - (6) Electricity delivered to the sales point; and
 - (7) Temperature of the steam and/or hot water exiting the facility.
- (c) For direct use facilities, you must measure:
 - (1) Flow of steam and/or hot water; and
 - (2) Temperature of the steam or water entering the facility.
- (d) We may also require additional measurements, depending on the type of facility, the type and quality of the resource, and the terms of the sales contract.

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

It depends on whether you use a meter to calculate Federal production or royalty, and what quantity of resource you are measuring.

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

(1) If the meter measures electricity, it must have an accuracy of <plus-minus≤0.25% or better of reading;

(2) If the meter measures steam flowing at more than 100,000 lbs/hr on a monthly basis, it must have an accuracy reading of <plus-minus≤2 percent or better;

(3) If the meter measures steam flowing at less than 100,000 lbs/hr on a monthly basis, it must have an accuracy reading of <plus-minus≤4 percent or better;

(4) If the meter measures water flowing at more than 500,000 lbs/hr on a monthly basis, it must have an accuracy reading of <plus-minus≤2 percent or better;

(5) If the meter measures water flowing at 500,000 lbs/hr or less on a monthly basis, it must have an accuracy reading of <plus-minus≤4 percent or better;

(6) If the meter measures heat content, it must have an accuracy reading of <plus-minus≤4 percent, or better; or

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

(b) Any meters that you do not use to calculate Federal royalty are considered production meters, which must maintain an accuracy of <plus-minus≤5 percent or better.

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

§ 3275.16 What standards apply to installing and maintaining meters?

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

(b) If you use an orifice plate to calculate Federal royalty, the orifice plate installation must comply with "API Manual of Petroleum Measurement Standards, Chapter 14, Section 3, Part 2, Fourth Edition, April 2000."

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

(1) You must annually calibrate meters measuring electricity;

(2) You must calibrate meters measuring steam or hot water flow with a turbine, vortex, ultrasonics, or other linear devices, every 6 months, or as recommended by the manufacturer, whichever is more frequent; and

(3) You must calibrate meters measuring steam or hot water flow with an orifice plate, venturi, pitot tube, or other differential device, every month, and you must inspect and repair the primary device (orifice plate, venturi, pitot tube) annually.

(d) You must use calibration equipment that is more accurate than the equipment you are calibrating.

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

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

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

(b) If the meter is not used to calculate Federal royalty, you must correct the error and notify us within 3 working days after its discovery.

(c) If correcting the error will cause a change in the sales quantity of more than 2 percent for the month(s) in which the error occurred, you must adjust the sales quantity for that month(s) and submit an amended facility report to us within 3 working days.

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

You must conduct any tests we require, including tests for byproducts, if we find it necessary to require such tests for a given operation.

§ 3275.19 How do I apply to commingle production?

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

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

We will determine the amount of any resources you have lost through waste. If you did not take all reasonable precautions to prevent waste, we will require you to pay compensation based on the value of the lost production. If BLM finds that you have not adequately corrected the situation, we will follow

the noncompliance procedures in § 3277.12.

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

BLM may order you to drill and produce wells on your lease when we find it necessary to protect Federal interests, prevent drainage, or ensure that lease development and production occur in accordance with sound operating practices.

Subpart 3276—Reports: Utilization Operations

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

(a) When you begin commercial production and operation, you must notify BLM in writing within 5 business days.

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

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

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

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

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

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

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

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

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

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

(d) Production or injection pressure in pounds per square inch (psi). You must also specify whether this is gauge pressure (psig) or absolute pressure (psia);

(e) The number of days the well was producing or injecting;

(f) The well status at the end of the month;

(g) The amount of steam or hot water lost to venting or leakage, if the amount is greater than 0.5 percent of total lease production. We may modify this standard by a written order describing the change;

(h) The lease number or unit name where the well is located;

(i) The month and year to which the report applies;

(j) Your name, title, signature, and a phone number where BLM may contact you; and

(k) Any other information that we may require.

§ 3276.12 What information must I give BLM in the monthly report for facility operations?

(a) For all electrical generation facilities, include in your monthly report of facility operations:

(1) Mass of steam and/or hot water, in klbs, used or brought into the facility.

For facilities using both steam and hot water, you must report the mass of each;

(2) The temperature of the steam or hot water in deg. F;

(3) The pressure of the steam or hot water in psi. You must also specify whether this is psig or psia;

(4) Gross generation in kilowatt hours (kwh);

(5) Net generation at the tailgate of the facility in kwh;

(6) Temperature in deg. F and volume of the steam or hot water exiting the facility;

(7) The number of hours the plant was on line;

(8) A brief description of any outages; and

(9) Any other information we may require.

(b) For electrical generation facilities where Federal royalty is based on the sale of electricity to a utility, in addition to the information required under paragraph (a) of this section, you must include the following information in your monthly report of facility operations:

(1) Amount of electricity delivered to the sales point in kwh, if the sales point is different from the tailgate of the facility;

(2) Amount of electricity lost to transmission;

(3) A report from the utility purchasing the electricity documenting

the total number of kwh delivered to the sales point during the month, or monthly reporting period if it is not a calendar month, and the number of kwh delivered during diurnal and seasonal pricing periods; and

(4) Any other information we may require.

§ 3276.13 What additional information must I give BLM in the monthly report for flash and dry steam facilities?

In addition to the regular monthly report information required by § 3276.12, send to BLM:

(a) Steam flow into the turbine in klbs; for dual flash facilities, you must separate the steam flow into high pressure steam and low pressure steam;

(b) Condenser pressure in psia;

(c) Condenser temperature in deg. F;

(d) Auxiliary steam flow used for gas ejectors, steam seals, pumps, etc., in klbs;

(e) Flow of condensate out of the plant (after the cooling towers) in klbs; and

(f) Any other information we may require.

§ 3276.14 What information must I give BLM in the monthly report for direct use facilities?

(a) Total monthly flow through the facility in thousands of gallons (kgal) or klbs;

(b) Monthly average temperature in, in deg. F;

(c) Number of hours that geothermal heat was used; and

(d) Any other information we may require.

§ 3276.15 How must I notify BLM of accidents occurring at my utilization facility?

You must orally inform us of all accidents that affect operations or create environmental hazards within 24 hours after each accident. When you contact us, we may require you to submit a written report fully describing the incident.

Subpart 3277—Inspections, Enforcement, and Noncompliance

§ 3277.10 When will BLM inspect my operations?

BLM may inspect all operations to ensure compliance with the requirements of § 3200.4. You must give us access during normal operating hours to inspect all facilities utilizing Federal geothermal resources.

§ 3277.11 What records must I keep available for inspection?

(a) The operator or facility operator must keep all records and information pertaining to the operation of your

utilization facility, royalty and production meters, and safety training available for BLM inspection for a period of 6 years following the time the records and information are created.

(b) This requirement also pertains to records and information from meters located off your lease or unit, when BLM needs them to determine:

(1) Resource production to a utilization facility; or

(2) The allocation of resource production to your lease or unit.

(c) Store all of these records in a place where they are conveniently available.

§ 3277.12 What will BLM do if I do not comply with all BLM requirements pertaining to utilization operations?

(a) We will issue you a written Incident of Noncompliance, directing you to take required corrective action within a specific time period. If the noncompliance continues or is serious in nature, BLM will take one or more of the following actions:

(1) Enter the lease, and correct any deficiencies at your expense;

(2) Collect all or part of your bond;

(3) Order modification or shutdown of your operations; and

(4) Take other enforcement action against a lessee who is ultimately responsible for the noncompliance.

(b) Noncompliance may result in BLM terminating your lease (see §§ 3213.17 through 3213.19).

Subpart 3278—Confidential, Proprietary Information

§ 3278.10 When will BLM disclose information I submit under these regulations?

All Federal and Indian data and information submitted to BLM are subject to part 2 of this title. Part 2 includes the regulations of the Department of the Interior covering public disclosure of data and information contained in Department records. Certain mineral information not protected from disclosure under part 2 may be made available for inspection without a Freedom of Information Act (FOIA) request. Examples of information we will not treat as confidential include:

(a) Facility location;

(b) Facility generation capacity; or

(c) To whom you are selling electricity or produced resources.

§ 3278.11 When I submit confidential, proprietary information, how can I help ensure it is not available to the public?

When you submit data and information that you believe to be exempt from disclosure under part 2 of this title, you must clearly mark each page that you believe contains

confidential information. BLM will keep all data and information confidential to the extent allowed by § 2.13(c) of this title.

§ 3278.12 How long will information I give BLM remain confidential or proprietary?

The FOIA does not provide a finite period of time during which information may be exempt from public disclosure. BLM will review each situation individually and in accordance with part 2 of this title.

Subpart 3279—Utilization Relief and Appeals

§ 3279.10 When may I request a variance from BLM requirements pertaining to utilization operations?

(a) You may file a request with BLM for a variance for your approved utilization operations from the requirements of § 3200.4. Your request must include enough information to explain:

(1) Why you cannot comply with the requirements; and

(2) Why you need the variance to operate your facility, conserve natural resources, or protect public health and safety, property, or the environment.

(b) We may approve your request orally or in writing. If we give you oral approval, we will follow up with written confirmation.

§ 3279.11 How may I appeal a BLM decision regarding my utilization operations?

You may appeal our decision affecting your utilization operations in accordance with § 3200.5.

■ 4. Revise part 3280 to read as follows:

PART 3280—GEOTHERMAL RESOURCES UNIT AGREEMENTS

Subpart 3280—Geothermal Resources Unit Agreements—General

Sec.

3280.1 What is the purpose and scope of this part?

3280.2 Definitions.

3280.3 What is BLM's general policy regarding the formation of unit agreements?

3280.4 When may BLM require Federal lessees to unitize their leases or require a Federal lessee to commit a lease to a unit?

3280.5 May BLM require the modification of lease requirements in connection with the creation and operation of a unit agreement?

3280.6 When may BLM require a unit operator to modify the rate of exploration, development, or production?

3280.7 Can BLM require an owner or lessee of lands not under Federal administration to unitize their lands or leases?

Subpart 3281—Application, Review, and Approval of a Unit Agreement

- 3281.1 What steps must I must follow for BLM to approve my unit agreement?
- 3281.2 What documents must the unit operator submit to BLM before we may designate a unit area?
- 3281.3 What geologic information may a unit operator use in proposing a unit area?
- 3281.4 What are the size and shape requirements for a unit area?
- 3281.5 What happens if BLM receives applications that include overlapping unit areas?
- 3281.6 What action will BLM take after reviewing a proposed unit area designation?
- 3281.7 What documents must a unit operator submit to BLM before we will approve a unit agreement?
- 3281.8 Must a unit operator provide working interests within the designated unit area the opportunity to join the unit?
- 3281.9 How does a unit operator provide documentation to BLM of lease and tract commitment status?
- 3281.10 How will BLM determine that I have sufficient control of the proposed unit area?
- 3281.11 What are the unit operator qualifications?
- 3281.12 Who designates the unit operator?
- 3281.13 Is there a format or model a unit operator must use when proposing a unit agreement?
- 3281.14 What minimum requirements and terms must be incorporated into the unit agreement?
- 3281.15 What is the minimum initial unit obligation a unit agreement must contain?
- 3281.16 When must a Plan of Development be submitted to BLM?
- 3281.17 What information must be provided in the Plan of Development?
- 3281.18 What action will BLM take in reviewing the Plan of Development?
- 3281.19 What action will BLM take on a proposed unit agreement?
- 3281.20 When is a unit agreement effective?

Subpart 3282—Participating Area

- 3282.1 What is a participating area?
- 3282.2 When must the unit operator have a participating area approved?
- 3282.3 When must the unit operator submit an application for BLM approval of a proposed initial participating area?
- 3282.4 What general information must the unit operator submit with a proposed participating area application?
- 3282.5 What technical information must the unit operator submit with a proposed participating area application?
- 3282.6 When must the unit operator propose to revise a participating area boundary?
- 3282.7 What is the effective date of an initial participating area or revision of an existing participating area?
- 3282.8 What are the reasons BLM would not approve a revision of the participating area boundary?
- 3282.9 How is production allocated within a participating area?
- 3282.10 When will unleased Federal lands in a participating area receive a production allocation?

- 3282.11 May a participating area continue if there is intermittent unit production?
- 3282.12 When does a participating area terminate?

Subpart 3283—Modifications to the Unit Agreement

- 3283.1 When may the unit operator modify the unit agreement?
- 3283.2 When may the unit operator revise the unit contraction provision of a unit agreement?
- 3283.3 How will the unit operator know the status of a unit contraction revision request?
- 3283.4 When may the unit operator add lands to or remove lands from a unit agreement?
- 3283.5 When will BLM periodically review unit agreements?
- 3283.6 What is the purpose of BLM's periodic review?
- 3283.7 When may unit operators be changed?
- 3283.8 What must be filed with BLM to change the unit operator?
- 3283.9 When is a change of unit operator effective?
- 3283.10 If there is a change in the unit operator, when does the previous operator's liability end?
- 3283.11 Do the terms and conditions of a unit agreement modify Federal lease stipulations?
- 3283.12 Are transferees and successors in interest of Federal geothermal leases bound by the terms and conditions of the unit agreement?

Subpart 3284—Unit Operations

- 3284.1 What general standards apply to operations within a unit?
- 3284.2 What are the principal operational responsibilities of the unit operator?
- 3284.3 What happens if the minimum initial unit obligations are not met?
- 3284.4 How are unit agreement terms affected after completion of the initial unit well?
- 3284.5 How do unit operations affect lease extensions?
- 3284.6 May BLM authorize a working interest owner to drill a well on lands committed to the unit?
- 3284.7 May BLM authorize operations on uncommitted Federal leases located within a unit?
- 3284.8 May a unit have multiple operators?
- 3284.9 May BLM set or modify production or injection rates?
- 3284.10 What must a unit operator do to prevent or compensate for drainage?
- 3284.11 Must the unit operator develop and operate on every lease or tract in the unit to comply with the obligations in the underlying leases or agreements?
- 3284.12 When must the unit operator notify BLM of any changes of lease and tract commitment status?

Subpart 3285—Unit Termination

- 3285.1 When may BLM terminate a unit agreement?
- 3285.2 When may BLM approve a voluntary termination of a unit agreement?

Subpart 3286—Model Unit Agreement

- 3286.1 Model Unit Agreement.

Subpart 3287—Relief and Appeals

- 3287.1 May the unit operator request a suspension of unit obligations or development requirements?
- 3287.2 When may BLM grant a suspension of unit obligations?
- 3287.3 How does a suspension of unit obligations affect the terms of the unit agreement?
- 3287.4 May a decision made by BLM under this part be appealed?

Authority: 30 U.S.C. 1001–1028 and 43 U.S.C. 1701 *et seq.*

Subpart 3280—Geothermal Resources Unit Agreements—General**§ 3280.1 What is the purpose and scope of this part?**

(a) The purpose of this part is to provide holders of Federal and non-Federal geothermal leases and owners of non-Federal mineral interests the opportunity to unite under a Federal geothermal unit agreement to explore for and develop geothermal resources in a manner that is necessary or advisable in the public interest.

(b) These regulations identify:

- (1) The procedures a prospective unit operator must follow to receive BLM approval for unit area designation and a Federal geothermal unit agreement;
- (2) The operational requirements a unit operator must meet once the unit agreement is approved; and
- (3) The procedures BLM will follow in reviewing, approving, and administering a Federal geothermal unit agreement.

§ 3280.2 Definitions.

The following terms, as used in this part or in any agreement approved under the regulations in this part, have the following meanings unless otherwise defined in such agreement:

Minimum initial unit obligation means the requirement to complete at least one unit well within the timeframe specified in the unit agreement. If this requirement is not met, BLM deems the unit void as though it was never in effect.

Participating area means that part of the unit area that BLM deems to be productive from a horizon or deposit, and to which production would be allocated in the manner described in the unit agreement, assuming that all lands are committed to the unit agreement.

Plan of development means the document a unit operator submits to BLM defining how the unit operator will diligently pursue unit exploration

and development to meet both initial and subsequent unit development and public interest obligations.

Public interest means operations within a geothermal unit resulting in:

- (1) Diligent development;
- (2) Efficient exploration, production and utilization of the resource;
- (3) Conservation of natural resources; and
- (4) Prevention of waste.

Reasonably proven to produce means a sufficient demonstration, based on scientific and technical information, that lands are contributing to unit production in commercial quantities or are providing reservoir pressure support for unit production.

Unit agreement means an agreement for the exploration, development, production, and utilization of separately owned interests in the geothermal resources made subject thereto as a single consolidated unit without regard to separate ownerships, which provides for the allocation of costs and benefits on a basis defined in the agreement or plan.

Unit area means the area described in a unit agreement as constituting the land logically subject to development under such agreement.

Unit contraction provision means a term of a unit agreement providing that the boundaries of the unit area will contract to the size of the participating area, by having those lands outside of the participating area removed. BLM will contract the unit area if additional unit wells are not drilled and completed within the timeframe specified in the unit agreement.

Unit operator means the person, association, partnership, corporation, or other business entity designated under a unit agreement to conduct operations on unitized land as specified in such agreement.

Unit well means a well that is:

- (1) Designed to produce or utilize geothermal resources in commercial quantities;
- (2) Drilled and completed to the bona fide geologic objective specified in the unit agreement, unless a commercial resource is found at a shallower depth; and
- (3) Located on unitized land.

Unitized land means the part of a unit area committed to a unit agreement.

Unitized substances means deposits of geothermal resources recovered from unitized land by operation under and pursuant to a unit agreement.

Working interest means the interest held in geothermal resources or in lands containing the same by virtue of a lease, operating agreement, fee title, or otherwise, under which, except as

otherwise provided in a unit agreement, the owner of such interest is vested with the right to explore for, develop, produce, and utilize such resources. The right delegated to the unit operator as such by the unit agreement is not to be regarded as a working interest.

§ 3280.3 What is BLM's general policy regarding the formation of unit agreements?

For the purpose of more properly conserving the natural resources of any geothermal reservoir, field, or like area, or any part thereof, lessees and their representatives may unite with each other, or jointly or separately with others, in collectively adopting and operating under a unit agreement for the reservoir, field, or like area, or any part thereof, including direct use resources, if BLM determines and certifies this to be necessary or advisable in the public interest.

§ 3280.4 When may BLM require Federal lessees to unitize their leases or require a Federal lessee to commit a lease to a unit?

(a) BLM may initiate the formation of a unit agreement, or require an existing Federal lease to commit to a unit agreement, if in the public interest.

(b) BLM may require that Federal leases that become effective on or after August 8, 2005, contain a provision stating that BLM may require commitment of the lease to a unit agreement, and may prescribe the unit agreement to which such lease must commit to protect the rights of all parties in interest, including the United States.

§ 3280.5 May BLM require the modification of lease requirements in connection with the creation and operation of a unit agreement?

(a) BLM may, with the consent of the lessees involved, establish, alter, change, or revoke rates of operations (including drilling, operations, production, and other requirements) of the leases, and make conditions with respect to the leases, in connection with the creation and operation of any such unit agreement as BLM may consider necessary or advisable to secure the protection of the public interest.

(b) If leases to be included in a unit have unlike lease terms, such leases need not be modified to be in the same unit.

§ 3280.6 When may BLM require a unit operator to modify the rate of exploration, development, or production?

BLM may require a unit agreement applying to lands owned by the United States to contain a provision under which BLM or an entity designated in

the unit agreement may alter or modify, from time-to-time, the rate of resource exploration or development, or production quantity or rate, under the unit agreement.

§ 3280.7 Can BLM require an owner or lessee of lands not under Federal administration to unitize their lands or leases?

BLM cannot require the commitment of lands or leases not under Federal administration or jurisdiction to a Federal unit.

Subpart 3281—Application, Review, and Approval of a Unit Agreement

§ 3281.1 What steps must I follow for BLM to approve my unit agreement?

Before a unit agreement becomes effective, BLM must designate the unit area and approve the unit agreement. Procedures for designating the unit area are set forth in §§ 3281.2 through 3281.6. Procedures for approving the unit agreement are set forth in §§ 3281.7 through 3281.17.

§ 3281.2 What documents must the unit operator submit to BLM before we may designate a unit area?

(a) The unit operator must submit the following documents before BLM may designate a proposed unit area:

(1) A report detailing the geologic information and interpretation that indicates, to the satisfaction of BLM, the proposed area is geologically appropriate for unitization;

(2) A map showing:

(i) The proposed unit area;

(ii) All leases (including Federal, state, or private) and tracts (unleased privately owned land or mineral rights);

(iii) The Federal lease number and lessee; and

(iv) An individual unit tract number;

(3) A list which includes the following information as to each Federal, state, and private lease, and tracts of unleased land, to be included in the unit:

(i) The lease number;

(ii) The legal land description of each lease and tract;

(iii) The acreage of each lease or tract;

(iv) The lessor and lessee of each

lease;

(v) The mineral rights owner of any unleased tract; and

(vi) The total number of acres:

(A) In the unit area;

(B) Under Federal administration; and

(C) In private or other (such as state)

ownership; and

(4) Any other information BLM may require.

(b) Before submitting any documents, ask BLM how many copies are required.

§ 3281.3 What geologic information may a unit operator use in proposing a unit area?

(a) A unit operator may use any reasonable geologic information necessary to justify its proposed unit area. The information must document that the proposed unit area is:

- (1) Geologically contiguous; and
- (2) Suitable for resource exploration, development and production under a unit agreement.

(b) BLM will decide which information and interpretations are acceptable. BLM's acceptance of the information and interpretations may vary depending on the types and level of geologic information available for the area.

§ 3281.4 What are the size and shape requirements for a unit area?

There are no specific size or shape requirements for a unit area, except that it must meet the requirements of § 3281.3. The size of the unit area may affect the minimum initial unit obligation requirements (see § 3281.15(b)).

§ 3281.5 What happens if BLM receives applications that include overlapping unit areas?

(a) If BLM receives unit area applications that include overlapping lands, we will request that each prospective unit operator resolve the issue with the other operator(s). If the prospective operators cannot reach a resolution, BLM may:

- (1) Return all unit applications and request all applicants to revise their proposed unit areas;
- (2) Designate any unit area proposal that is geologically appropriate for unitization and best meets public interest requirements; or
- (3) Designate a different area for unitization when doing so is in the public interest.

(b) BLM will reject either an application or a portion of an application that includes lands already in an approved unit area.

§ 3281.6 What action will BLM take after reviewing a proposed unit area designation?

(a) BLM will approve the unit area designation in writing and notify the prospective unit operator once we determine that:

- (1) We have received the information required at § 3281.2;
- (2) Information available to BLM documents that the area is geologically appropriate for unitization; and
- (3) Unitization is appropriate to conserve the natural resources of a geothermal reservoir, field, or like area, or part thereof.

(b) BLM will notify a prospective unit operator in writing if we do not designate a proposed unit area.

§ 3281.7 What documents must a unit operator submit to BLM before we will approve a unit agreement?

After BLM approves a unit area designation, a unit operator must submit the following information in order for BLM to approve a unit agreement:

- (a) Documentation of tract commitment (see §§ 3281.8 and 3281.9);
- (b) The unit agreement (see § 3281.15);
- (c) The map required by § 3281.2(a)(2), if any modifications have occurred since the unit area was designated;
- (d) The list required by § 3281.2(a)(3) indicating whether each lease or tract is committed to the unit agreement; and
- (e) The plan of development.

§ 3281.8 Must a unit operator provide working interests within the designated unit area the opportunity to join the unit?

After BLM designates a unit area, the unit operator must invite all owners of mineral rights (leased or unleased) and lease interests (record title and operating rights) in the designated unit area to join the unit. The unit operator must provide the lease interests and mineral rights owners 30 days to respond. If an interest or owner does not respond, the unit operator must provide BLM with written evidence that all the interests or owners were invited to join the unit. BLM will not approve a unit agreement proposal if this evidence is not submitted.

§ 3281.9 How does a unit operator provide documentation to BLM of lease and tract commitment status?

(a) The unit operator must provide documentation to BLM of the commitment status of each lease and tract in the designated unit area. The documentation must include a joinder or other comparable document signed by the lessee or mineral rights owner, or evidence that an opportunity to join was offered and no response was received (see § 3281.8).

(b) A majority interest of owners of any single Federal lease has authority to commit the lease to a unit agreement.

§ 3281.10 How will BLM determine that I have sufficient control of the proposed unit area?

(a) BLM will determine whether:

- (1) A unit operator has sufficient control of the proposed unit area by reviewing the number and location of leases and tracts committed and their geologic potential for development in relation to the entire proposed unit area; and

(2) The committed tracts provide the unit operator with sufficient control of the unit area to conduct resource exploration and development in the public interest.

(b) If BLM determines that the unit operator does not have sufficient control of the unit area, we will not approve the unit agreement.

§ 3281.11 What are the unit operator qualifications?

(a) Before BLM will approve a unit agreement, the unit operator must:

- (1) Meet the same qualifications as a lessee (see § 3202.10 of this chapter); and
- (2) Demonstrate sufficient control of the unit area (see § 3281.10).

(b) A unit operator is not required to have an interest in any lease committed to the unit agreement.

§ 3281.12 Who designates the unit operator?

The owners of geothermal rights and lease interests committed to the unit agreement will nominate a unit operator. Before designating the unit operator, BLM must also determine whether the prospective unit operator meets the requirements of § 3281.11.

§ 3281.13 Is there a format or model a unit operator must use when proposing a unit agreement?

When proposing a unit agreement, submit to BLM:

- (a) The model unit agreement (see § 3286.1);
- (b) The model unit agreement with variances noted; or
- (c) Any unit agreement format that contains all the terms and conditions BLM requires (see §§ 3281.14 and 3281.15).

§ 3281.14 What minimum requirements and terms must be incorporated into the unit agreement?

(a) The unit agreement must, at a minimum:

- (1) State who the unit operator is, and that the unit operator and participating lessees accept the unit terms and obligations set forth in the agreement and applicable BLM regulations;
- (2) State the size and general location of the unit area;
- (3) Include procedures for revising the unit area or participating area(s);
- (4) Include procedures for amending the unit agreement;
- (5) State the effective date and term of the unit, as provided in paragraph (b) of this section;
- (6) Incorporate the minimum initial unit obligations, as specified in § 3281.15;
- (7) State that BLM may require a modification of the rate of resource

exploration or development, or the production quantity or rate, within the unit area;

(8) State that the agreement is subject to periodic BLM review;

(9) State that BLM will deem the unit agreement as void as if it were never in effect if the minimum initial unit obligations are not met;

(10) Include a plan of development; and

(11) Include a unit contraction provision.

(b) The unit agreement must provide that it terminates 5 years after its effective date unless:

(1) BLM extends such date of expiration;

(2) Unitized substances are produced or utilized in commercial quantities in which event the agreement continues for so long as unitized substances are produced or utilized in commercial quantities; or

(3) BLM terminates the agreement under subpart 3285 of this part before the end of the 5 year period.

(c) The agreement may include any other provisions or terms that BLM and the unit operator agree are necessary for proper resource exploration and development, and management of the unit area.

§ 3281.15 What is the minimum initial unit obligation a unit agreement must contain?

(a) The unit agreement must:

(1) Require the unit operator to drill, within the timeframe specified in the unit agreement, at least one unit well on a tract committed to the unit agreement;

(2) Specify the location and the minimum depth and/or geologic structure to which the initial unit well will be drilled; and

(3) Require the unit operator, upon completing a unit well, to provide to BLM in a timely manner the information required at § 3264.10 of this chapter.

(b) Depending on the size of the proposed unit area, BLM may require the minimum initial unit agreement obligation to include the drilling of more than one unit well.

(c) If necessary to aid in the evaluation of drilling locations, BLM and the unit operator may agree to include types of exploration operations as part of the initial unit obligation. An example of such work is drilling temperature gradient wells.

(d) BLM will not consider any work done prior to unit approval for the purpose of meeting initial unit obligations.

§ 3281.16 When must a Plan of Development be submitted to BLM?

(a) The prospective unit operator must submit an initial Plan of Development at

the time the unit area is proposed for designation.

(b) Subsequent Plans of Development that were not already provided must be submitted to address future unit activities to be conducted throughout the term of the unit agreement. For example, if the Plan only addressed activities until a unit well is completed, the subsequent Plan must address activities including the drilling of additional unit wells until a producible well is completed. Once a producible well is completed, the Plan or subsequent Plan must address those activities related to utilizing the resource.

(c) There is no requirement to submit a Plan of Development once unitized resources begin commercial operation.

§ 3281.17 What information must be provided in the Plan of Development?

(a) The Plan of Development must state the types of and timeframes for activities the unit operator will conduct in diligent pursuit of unit exploration and development. The Plan may address those activities that will be conducted until the minimum initial unit obligation is met, or it may address all activities that will occur through the term of the unit agreement.

(b) The Plan of Development may specify that the activities will be conducted in phases during the term of the unit agreement. For example, the number, location, and depth of temperature gradient wells, and the timeframe for the completion of these wells, may be the first phase. A second phase may include drilling of observation or slim-hole wells to a greater depth than that specified in the first phase. Completion of the unit well may be the third phase. In all cases, the Plan of Development must include the completion of at least one unit well.

§ 3281.18 What action will BLM take in reviewing the Plan of Development?

BLM will review the Plan of Development to ensure that the types of activities and the timeframes for their completion meet public interest requirements. If BLM determines that the Plan of Development does not meet these requirements, BLM will negotiate with the prospective unit operator to revise the proposed activities. BLM will not designate a unit area until the Plan of Development meets applicable requirements.

§ 3281.19 What action will BLM take on a proposed unit agreement?

BLM will:

(a) Review the proposed unit agreement to ensure that the public interest is protected and that the

agreement conforms to applicable laws and regulations;

(b) Coordinate the review of a proposed unit agreement with appropriate state agencies, and other Federal surface management agencies, if applicable;

(c) Approve the unit agreement and provide the unit operator with signed copies of the agreement, if we determine:

(1) That the unit operator has submitted all required information;

(2) That the unit agreement and the unit operator satisfy all required terms and conditions, including the requirements specified at §§ 3281.14 and 3281.15, and conform with all applicable laws and regulations; and

(3) That the unit agreement is necessary or advisable to meet the public interest;

(d) Notify the unit operator in writing if we reject the unit agreement proposal; and

(e) Reject any unit application that includes lands already committed to an approved unit agreement.

§ 3281.20 When is a unit agreement effective?

The effective date of the unit agreement approval is the first day of the month following the date BLM approves and signs it. The unit operator may request that the effective date be the first day of the month in which the agreement is signed by BLM, or a more appropriate date agreed to by BLM.

Subpart 3282—Participating Area

§ 3282.1 What is a participating area?

(a) A participating area is the combined portion of the unitized area which BLM determines:

(1) Is reasonably proven to produce geothermal resources; or

(2) Supports production in commercial quantities, such as pressure support from injection wells.

(b) The size and configuration of all participating areas and revisions are not effective until BLM approves them.

§ 3282.2 When must the unit operator have a participating area approved?

You must have an established BLM-approved participating area to allocate production and royalties before beginning commercial operations under a unit agreement to allocate production within the unit.

§ 3282.3 When must the unit operator submit an application for BLM approval of a proposed initial participating area?

The unit operator must submit an application for BLM approval of a proposed participating area no later than:

(a) 60 days after receiving BLM's determination identified in § 3281.15(a)(3) that a unit well will produce or utilize in commercial quantities; or

(b) 30 days before the initiation of commercial operations, whichever occurs earlier.

§ 3282.4 What general information must the unit operator submit with a proposed participating area application?

The unit operator must submit the following information with a participating area application:

(a) Technical information supporting its application (see § 3282.5);

(b) The information required in § 3281.2(a)(2) and (3) for the lands in the proposed participating area; and

(c) Any other information BLM may require.

§ 3282.5 What technical information must the unit operator submit with a proposed participating area application?

At a minimum, the unit operator must submit the following technical information with a proposed participating area application:

(a) Documentation that the participating area includes:

(1) The production and injection wells necessary for unit operations;

(2) Unit wells that are capable of being produced or utilized in commercial quantities; and

(3) The area each well drains or supplies pressure communication.

(b) Data, including logs, from production and injection well testing, if not previously submitted under § 3264.10 of this chapter;

(c) Interpretations of well performance, and reservoir geology and structure, that document that the lands are reasonably proven to produce; and

(d) Any other information BLM may require.

§ 3282.6 When must the unit operator propose to revise a participating area boundary?

(a) The unit operator must submit a written application to BLM to revise a participating area boundary no later than 60 days after receipt of the BLM determination described herein, when either:

(1) A well is completed that BLM has determined will produce or utilize in commercial quantities, and such well:

(i) Is located outside of an existing participating area; or

(ii) Drains an area outside the existing participating area; or

(2) An injection well located outside of an existing participating area is put into use that BLM has determined provides reservoir pressure support to production.

(b) The unit operator may submit a written application for a revision of a participating area when new or additional technical information or revised interpretations of any information provides a basis for revising the boundary.

(c) The unit operator may submit a written request to BLM to delay a participation area revision decision when drilling multiple wells in the unit is actively pursued or the drilling is providing additional technical information. A delay will not affect the effective date of any participation area revision (see § 3282.7). The request must include:

(1) The well locations;

(2) Anticipated spud and completion dates of each well;

(3) The timing of well testing and analyses of technical information; and

(4) The anticipated date BLM will receive the participation area revision for review.

(d) BLM will provide the unit operator with a written decision on the application to revise a participating area or the request to delay a participating area revision decision by BLM.

§ 3282.7 What is the effective date of an initial participating area or revision of an existing participating area?

(a) BLM will establish the appropriate effective date of an initial participating area or any revision to a participating area. The effective date may be, but is not limited to, the first day of the month in which:

(1) A well is completed that causes the participating area to be formed or revised;

(2) Commercial operations start; or

(3) New or additional technical information becomes known that provides a basis for revising the boundary (such as when production from, or injection to, an area outside the participating area first became known).

(b) The unit operator may request BLM to approve a specific effective date for the participating area or revision, but the date may not be earlier than the effective date of the unit.

§ 3282.8 What are the reasons BLM would not approve a revision of the participating area boundary?

BLM will not approve a revision of the participating area boundary:

(a) If the unit operator does not submit the required information;

(b) If BLM determines that the new or additional technical information does not support a boundary revision; or

(c) If it reduces the size of a participating area because of depletion of the resource.

§ 3282.9 How is production allocated within a participating area?

Allocation of production to each committed lease or tract within a participating area is in the same proportion as that lease's or tract's surface acreage within the participating area.

§ 3282.10 When will unleased Federal lands in a participating area receive a production allocation?

Unleased Federal lands within a participating area are treated as follows:

(a) For royalty purposes only, you must allocate production to unleased Federal lands in the participating area as if the acreage were committed to the participating area.

(b) The unit operator is primarily liable for paying and must pay royalty to the United States for such allocated production based on a rate not less than the highest royalty rate for any Federal lease in the participating area. In the event the unit operator does not pay any royalties owed under this paragraph, each lessee of lands committed to the participating area is responsible for paying such royalties in the same proportion as that lessee's percentage of surface acreage within the participating area, excluding the unleased acreage.

§ 3282.11 May a participating area continue if there is intermittent unit production?

A participating area may continue if there is intermittent unit production only if BLM determines that intermittent production is in the public interest. For example, a direct use facility may only require production to occur during winter months.

§ 3282.12 When does a participating area terminate?

A participating area terminates when either:

(a) The unit operator permanently stops operations in or affecting the participating area; or

(b) Sixty (60) days after BLM notifies the unit operator in writing that we have determined that operations in the participating area are not being conducted in accordance with the unit agreement, the participating area approval, or the public interest. If before the expiration of the 60 days, the unit operator demonstrates to BLM's satisfaction that the basis for BLM's determination is erroneous or has been rectified, BLM will not terminate the participating area.

Subpart 3283—Modifications to the Unit Agreement**§ 3283.1 When may the unit operator modify the unit agreement?**

(a) The unit operator may propose to modify a unit agreement by submitting an application to BLM that:

(1) Identifies the proposed change and the reason for the change; and

(2) Certifies that all necessary unit interests have agreed to the change.

(b) BLM will send the unit operator written notification of BLM's decision regarding the application. Proposed modifications to a unit agreement will not become effective until BLM approves them. BLM's approval may be made effective retroactively to the date the application was complete. BLM may approve a different effective date, including a date the unit operator requests and for which the unit operator provides acceptable justification.

§ 3283.2 When may the unit operator revise the unit contraction provision of a unit agreement?

(a) The unit operator may submit to BLM a request to revise the unit contraction provision of a unit agreement, if the unit operator has either:

(1) Commenced commercial operations of unitized resources; or

(2) Completed a unit well that produces or utilizes geothermal resources in commercial quantities.

(b) The request may propose an extension of the unit contraction date and/or a partial contraction of the unit area, and must include the following information:

(1) The period for which the revision is requested; and

(2) Whether an extension of the unit contraction date and/or a partial contraction of the unit area is requested.

(c) The request should address the following factors when applicable:

(1) Economic constraints that limit the opportunity to drill and utilize the resource from additional wells;

(2) Reservoir monitoring or injection wells that BLM determines are necessary for unit operations are not located in the participating area;

(3) An inability to drill additional wells is due to circumstances beyond the unit operator's control, and a unit well that has produced or utilized in commercial quantities already is located in the unit;

(4) The types and intensity of unit operations already conducted in the unit area;

(5) The availability of viable electrical or resource sales contracts;

(6) The opportunity to utilize the resource economically; or

(7) Any other information that supports revision of the unit contraction provision.

(d) BLM will consider the factors discussed along with any other information submitted, and will approve the request if we determine that the revision is in the public interest. The approval may be subject to conditions such as requiring an annual renewal, or setting the timing and conditions for when phased contractions or termination of the revision may occur.

§ 3283.3 How will the unit operator know the status of a unit contraction revision request?

BLM will notify the unit operator in writing of our decision. If we approve the request, we:

(a) Will specify the term of the contraction extension and/or which lands will remain in the unit agreement;

(b) May require the unit operator to update the informational requirements of subpart 3282; and

(c) May terminate the participating area contraction revision if we find termination is necessary in the public interest.

§ 3283.4 When may the unit operator add lands to or remove lands from a unit agreement?

(a) The unit operator may request BLM to designate the addition or removal of lands to or from a unit agreement.

(b) In order for BLM to complete a review of the unit area revision request, the unit operator must submit to BLM the information required in §§ 3281.2, 3281.3, and 3281.7.

(c) BLM will:

(1) Review the request;

(2) Determine whether the information provided is sufficient and whether the new or additional geologic information or interpretation provides an acceptable basis for the unit boundary change; and

(3) Notify the unit operator in writing of our decision.

(d) If BLM approves the revision, the unit operator must notify all owners of lease interests or mineral rights of the unit area revision.

§ 3283.5 When will BLM periodically review unit agreements?

BLM will periodically review all unit agreements to determine compliance with § 3283.6 in accordance with the following schedule:

(a) Not later than 5 years after the approval of each unit agreement; and

(b) At least every 5 years following the initial unit review.

§ 3283.6 What is the purpose of BLM's periodic review?

(a) BLM must review all unit agreements to determine whether any leases, or portions of leases, committed to any unit are no longer reasonably necessary for unit operations, and eliminate from inclusion in the unit agreement any such lands it determines not reasonably necessary for unit operations.

(b) The elimination will be based on scientific evidence, and occur only for the purpose of conserving and properly managing the geothermal resources.

(c) BLM will not eliminate any lands from a unit until BLM provides the unit operator, the lessee, and any other person with a legal interest in such lands, with reasonable notice and an opportunity to comment.

(d) Any lands eliminated from a unit under this section are eligible for a lease extension under subpart 3207 of part 3200 of this chapter if the lands meet the requirements for the extension.

§ 3283.7 When may unit operators be changed?

Unit operators may be changed only with BLM's written approval.

§ 3283.8 What must be filed with BLM to change the unit operator?

To change the unit operator, the new operator must:

(a) Meet the qualification requirements of § 3281.11;

(b) Submit to BLM evidence of acceptable bonding under §§ 3214.13 of this chapter; and

(c) File with BLM written acceptance of the unit terms and obligations.

§ 3283.9 When is a change of unit operator effective?

The change is effective when BLM approves the new unit operator in writing.

§ 3283.10 If there is a change in the unit operator, when does the previous operator's liability end?

(a) The previous unit operator remains responsible for all duties and obligations of the unit agreement until BLM approves a new unit operator. The change of the unit operator does not release the previous unit operator from any liability for any obligations that accrued before the effective date of the change (see § 3215.14 of this chapter).

(b) The new unit operator is responsible for all unit duties and obligations after BLM approves the change.

§ 3283.11 Do the terms and conditions of a unit agreement modify Federal lease stipulations?

Nothing in a unit agreement modifies stipulations included in any Federal lease.

§ 3283.12 Are transferees and successors in interest of Federal geothermal leases bound by the terms and conditions of the unit agreement?

The terms and conditions of the unit agreement are binding on transferees and successors in interest to Federal geothermal leases committed to a unit agreement.

Subpart 3284—Unit Operations

§ 3284.1 What general standards apply to operations within a unit?

All unit operations must comply with:
 (a) The terms and conditions of the unit agreement; and
 (b) The standards and orders listed in the following chart:

Type of operation	Regulations on Operational Standards (43 CFR)	Regulations on Orders or Instructions (43 CFR)
Exploration	§ 3250.12	§ 3250.13
Drilling	§ 3260.11	§ 3260.12
Production or Utilization	§ 3270.11	§ 3270.12

§ 3284.2 What are the principal operational responsibilities of the unit operator?

The unit operator is responsible for:
 (a) Diligently drilling for and developing in the public interest the geothermal resource occurring in the unit area. Only the unit operator is authorized to conduct:

- (1) Any phase of drilling authorized under subpart 3260 of this chapter, unless another person is specifically authorized by BLM to conduct drilling (see § 3284.3);
- (2) Resource development activities such as production and injection; and
- (3) Delivery of the resource for commercial operation. An entity other than the unit operator, such as a facility operator, may purchase or utilize the resource produced from the unit.

(b) Providing written notification to BLM within 30 days after any changes to the commitment status of any lease or tract in the unit area (see §§ 3281.9 and 3284.12); and

(c) Insuring that the Federal Government receives all royalties, direct use fees, and rents for activities within the participating area.

§ 3284.3 What happens if the minimum initial unit obligations are not met?

(a) If the unit operator does not drill a well designed to produce or utilize geothermal resources in commercial quantities within the timeframe specified in the unit agreement, or the unit operator relinquishes the unit agreement before meeting the minimum initial unit obligations:

- (1) BLM will deem the unit agreement void as though it was never in effect;
- (2) BLM will deem any lease extension based upon the existence of the unit as void retroactive to the date the unit was effective; and
- (3) Any lease segregations based on the unit become invalid.

(b) BLM will send the unit operator a written decision confirming that the unit agreement is void.

§ 3284.4 How are unit agreement terms affected after completion of the initial unit well?

(a) Upon completion of a unit well that BLM determines will produce or utilize geothermal resources in commercial quantities, the unit operator must submit a proposed participating area application under § 3282.3, and no additional drilling to meet unit obligations is required. If no additional drilling in the unit occurs, the unit area will contract to the participating area as specified in the unit agreement.

(b) If a unit operator drills a well designed to produce or utilize geothermal resources in commercial quantities, but the well will not produce commercially or is not producible, the unit operator must continue drilling additional wells within the timeframes specified in the unit agreement until a unit well is completed that BLM determines will produce or utilize geothermal resources in commercial quantities. BLM may terminate a unit if additional wells are not drilled within the timeframes specified in the unit agreement.

(c) The unit agreement will expire if no well that BLM determines will produce or utilize geothermal resources in commercial quantities is completed within the timeframes specified in the unit agreement.

(d) BLM will send the unit operator a written decision confirming that the unit agreement has been terminated or has expired.

§ 3284.5 How do unit operations affect lease extensions?

(a) Once the minimum initial unit obligation is met, lease extensions approved under § 3207.17 of this chapter based upon unit commitment

will remain in effect until the unit is relinquished, expires, terminates, or the lease on which the initial unit obligation was met is eliminated from the unit.

(b) As long as there are commercial operations within the unit or there exists a unit well that BLM has determined is producing or utilizing geothermal resources in commercial quantities, lease extensions for any leases or portions of leases within the participating area will remain in effect as long as operations meet the requirements of § 3207.15 of this chapter.

§ 3284.6 May BLM authorize a working interest owner to drill a well on lands committed to the unit?

(a) BLM may authorize a working interest owner to drill a well on the interest owner's lease only if it is located outside of an established participating area. However, BLM will only do so upon determining that:

- (1) The unit operator is not diligently pursuing unit development; and
- (2) Drilling the well is in the public interest.

(b) If BLM determines that a working interest has completed a well that will produce or utilize geothermal resources in commercial quantities, the unit operator must:

- (1) Apply to revise the participating area to include the well; and
- (2) Operate the well.

§ 3284.7 May BLM authorize operations on uncommitted Federal leases located within a unit?

BLM may authorize a lessee/operator to conduct operations on an uncommitted Federal lease located within a unit if the lessee/operator demonstrates to our satisfaction that operations on the lease are:

- (a) In the public interest; and
- (b) Will not unnecessarily affect unit operations.

§ 3284.8 May a unit have multiple operators?

A unit may have only one operator.

§ 3284.9 May BLM set or modify production or injection rates?

BLM may set or modify the quantity, rate, or location of production or injection occurring under a unit agreement to ensure protection of Federal resources.

§ 3284.10 What must a unit operator do to prevent or compensate for drainage?

The unit operator must take all necessary measures to prevent or compensate for drainage of geothermal resources from unitized land by wells on land not subject to the unit agreement (see §§ 3210.16 and 3210.17 of this chapter).

§ 3284.11 Must the unit operator develop and operate on every lease or tract in the unit to comply with the obligations in the underlying leases or agreements?

The unit operator is not required to develop and operate on every lease or tract in the unit agreement to comply with the obligations in the underlying leases or agreement. The development and operation on any lands subject to a unit agreement is considered full performance of all obligations for development and operation for every separately owned lease or tract in the unit, regardless of whether there is development of any particular tract of the unit area.

§ 3284.12 When must the unit operator notify BLM of any changes of lease and tract commitment status?

The unit operator must provide updated documentation of commitment status (see §§ 3281.8 through 3281.10) of all leases and tracts to BLM whenever a change in commitment, such as the expiration of a private lease, occurs. The unit operator must submit the documentation to BLM within 30 days after the change occurs. The unit operator must also notify all lessees and mineral interest owners of these changes.

Subpart 3285—Unit Termination**§ 3285.1 When may BLM terminate a unit agreement?**

BLM may terminate a unit agreement if the unit operator does not comply with any term or condition of the unit agreement.

§ 3285.2 When may BLM approve a voluntary termination of a unit agreement?

BLM may approve the voluntary termination of a unit agreement at any time:

(a) After receiving a signed certification agreeing to the termination from a sufficient number of the working interest owners specified in the unit agreement who together represent a majority interest in the unit agreement; and

(b)(1) After the completion of the initial unit obligation well but before the establishment of a participating area; or

(2) After a participating area is established, upon receipt of information providing adequate assurance that:

(i) Diligent development and production of known commercial geothermal resources will occur; and

(ii) The public interest is protected.

Subpart 3286—Model Unit Agreement**§ 3286.1 Model Unit Agreement.**

A unit agreement may use the following language:

Unit Agreement for the Development and Operation of the ——— Unit Area, County of ———, State of ———.

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This Agreement entered into as of the ——— day of ———, 20 ———, by and between the parties subscribing, ratifying, or consenting hereto, and herein referred to as

the “parties hereto”. Whereas the parties hereto are the owners of working, royalty, or other geothermal resources interests in land subject to this Agreement; and

Whereas the Geothermal Steam Act of 1970 (84 Stat. 1566), as amended, hereinafter referred to as the “Act” authorizes Federal lessees and their representatives to unite with each other, or jointly or separately with others, in collectively adopting and operating under a unit agreement for the purpose of more properly conserving the natural resources of any geothermal resources reservoir, field, or like area, or any part thereof, whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest; and

Whereas the parties hereto hold sufficient interest in the ——— Unit Area covering the land herein described to effectively control operations therein; and

Whereas, it is the purpose of the parties hereto to conserve natural resources, prevent waste, and secure other benefits obtainable through development and operations of the area subject to this Agreement under the terms, conditions, and limitations herein set forth;

Now, therefore, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below-defined Unit Area, and agree severally among themselves as follows:

Article I—Enabling Act and Regulations

1.1 The Act and all valid pertinent U.S. Department of the Interior regulations, including operating and unit plan regulations, heretofore or hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands.

1.2 As to non-Federal lands, the Bureau of Land Management (“BLM”) geothermal resources operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the laws of the State in which the non-Federal land is located, are hereby accepted and made a part of this agreement.

Article II—Definitions

2.1 The following terms shall have the meanings here indicated:

(a) *Geothermal Lease*. A lease issued under the act of December 24, 1970 (84 Stat. 1566), as amended, pursuant to the leasing regulations contained in 43 CFR Group 3200 and, unless the context indicates otherwise, “lease” shall mean a geothermal lease.

(b) *Unit Area*. The area described in Article III of this Agreement.

(c) *Unit Operator*. The person, association, partnership, corporation, or other business entity designated under this Agreement to conduct operations on Unitized Land as specified herein.

(d) *Participating Area*. That area of the Unit deemed to be productive as described in Article 12.1 herein and areas committed to the Unit by the Authorized Officer needed for support of operations of the Unit Area. The production allocated for lands used for support of operations shall be approved by the Authorized Officer pursuant to Articles 12.1 and 13.1 herein.

(e) *Working Interest.* The interest held in geothermal resources or in lands containing the same by virtue of a lease, operating agreement, fee title, or otherwise, under which, except as otherwise provided in this Agreement, the owner of such interest is vested with the right to explore for, develop, produce and utilize such resources. The right delegated to the Unit Operator as such by this Agreement is not to be regarded as a Working Interest.

(f) *Secretary.* The Secretary of the Interior or any person duly authorized to exercise powers vested in that officer.

(g) *Director.* The Director of the Bureau of Land Management or any person duly authorized to exercise powers vested in that officer.

(h) *Authorized Officer.* Any person authorized by law or by lawful delegation of authority in the Bureau of Land Management to perform the duties described.

Article III—Unit Area and Exhibits

3.1 The area specified on the map attached hereto marked "Exhibit A" is hereby designated and recognized as constituting the Unit Area, containing _____ acres, more or less. The above-described Unit Area shall be expanded, when practicable, to include therein any additional lands or shall be contracted to exclude lands whenever such expansion or contraction is deemed to be necessary or advisable to conform with the purposes of this Agreement.

3.2 Exhibit A attached hereto and made a part hereof is a map showing the boundary of the Unit Area, the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator.

3.3 Exhibit B attached hereto and made a part thereof is a schedule showing to the extent known to the Unit Operator the acreage, percentage, and kind of ownership of geothermal resources interests in all lands in the Unit Area.

3.4 Exhibits A and B shall be revised by the Unit Operator whenever changes in the Unit Area render such revision necessary, or when requested by the authorized officer, and not less than five copies of the revised Exhibits shall be filed with the authorized officer.

Article IV—Contraction and Expansion of Unit Area

4.1 Unless otherwise specified herein, the expansion and/or contraction of the Unit Area contemplated in Article 3.1 hereof shall be effected in the following manner:

(a) The Unit Operator, either on demand of the authorized officer or on its own motion and after prior concurrence by the authorized officer, shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the Unit Area, the reasons therefore, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.

(b) Said notice shall be delivered to the authorized officer, and copies thereof mailed to the last known address of each Working Interest Owner, Lessee, and Lessor whose interests are affected, advising that 30 days will be allowed to submit any objections to the Unit Operator.

(c) Upon expiration of the 30-day period provided in the preceding item 4.1(b), Unit Operator shall file with the authorized officer evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto that have been filed with the Unit Operator, together with an application in sufficient number, for approval of such expansion or contraction and with appropriate joinders.

(d) After due consideration of all pertinent information, the expansion or contraction shall, upon approval by the authorized officer, become effective as of the date prescribed in the notice thereof.

4.2 Unitized Leases, insofar as they cover any lands excluded from the Unit Area under any of the provisions of this Article IV, may be maintained and continued in force and effect in accordance with the terms, provisions, and conditions contained in the Act, and the lease or leases and amendments thereto, except that operations and/or production under this Unit Agreement shall not serve to maintain or continue the excluded portion of any lease.

4.3 All legal subdivisions of unitized lands (i.e., 40 acres by Governmental survey or its nearest lot or tract equivalent in instances of irregular surveys), no part of which is entitled to be within a Participating Area on the 5th anniversary of the effective date of the initial Participating Area established under this Agreement, shall be eliminated automatically from this Agreement effective as of said 5th anniversary. Such lands shall no longer be a part of the Unit Area and shall no longer be subject to this Agreement, unless diligent drilling operations are in progress on an exploratory well on said 5th anniversary, in which event such lands shall not be eliminated from the Unit Area for as long as exploratory drilling operations are continued diligently with not more than six (6) months time elapsing between the completion of one exploratory well and the commencement of the next exploratory well.

4.4 An exploratory well, for the purposes of this Article IV, is defined as any well, regardless of surface location, projected for completion:

(a) In a zone or deposit below any zone or deposit for which a Participating Area has been established and is in effect; or

(b) At a subsurface location under Unitized Lands not entitled to be within a Participating Area.

4.5 In the event an exploratory well is completed during the six (6) months immediately preceding the 5th anniversary of the initial Participating Area established under this Agreement, lands not entitled to be within a Participating Area shall not be eliminated from this Agreement on said 5th anniversary, provided the drilling of another exploratory well is commenced under an approved Plan of Development within six (6) months after the completion of said well. In such event, the land not entitled to be in participation shall not be eliminated from the Unit Area so long as exploratory drilling operations are continued diligently with not more than six (6) months time elapsing between the completion of one exploratory well and the commencement of the next exploratory well.

4.6 With prior approval of the authorized officer, a specified period of time in excess of six (6) months may be allowed to elapse between the completion of one well and the commencement of the next well without the automatic elimination of nonparticipating acreage.

4.7 Unitized lands proved productive by drilling operations that serve to delay automatic elimination of lands under this Article IV shall be incorporated into a Participating Area (or Areas) in the same manner as such lands would have been incorporated in such areas had such lands been proven productive during the year preceding said 5th anniversary.

4.8 In the event nonparticipating lands are retained under this Agreement after the 5th anniversary of the initial Participating Area as a result of exploratory drilling operations, all legal subdivisions of unitized land (i.e., 40 acres by Government survey or its nearest lot or tract equivalent in instances of irregular Surveys), no part of which is entitled to be within a Participating Area, shall be eliminated automatically as of the 183rd day, or such later date as may be established by the authorized officer, following the completion of the last well recognized as delaying such automatic elimination beyond the 5th anniversary of the initial Participating Area established under this Agreement.

Article V—Unitized Land and Unitized Substances

5.1 All land committed to this Agreement shall constitute land referred to herein as "Unitized Land." All geothermal resources in and produced from any and all formations of the Unitized Land are unitized under the terms of this agreement and herein are called "Unitized Substances."

Article VI—Unit Operator

6.1 _____ is hereby designated as Unit Operator, and by signature hereto as Unit Operator agrees and consents to accept the duties and obligations of Unit Operator for the discovery, development, production, distribution, and utilization of Unitized Substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interest in Unitized Substances, and the term "Working Interest Owner," when used herein, shall include or refer to Unit Operator as the owner of a Working Interest when such an interest is owned by it.

Article VII—Resignation or Removal of Unit Operator

7.1 The Unit Operator shall have the right to resign. Such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator or terminate Unit Operators rights, as such, for a period of six (6) months after notice of its intention to resign has been served by Unit Operator on all Working Interest Owners and the authorized officer, nor until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment, whichever is required by the authorized officer, unless a new Unit

Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

7.2 The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of Working Interests as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the authorized officer.

7.3 The resignation or removal of Unit Operator under this Agreement shall not terminate its right, title, or interest as the owner of a Working Interest or other interest in Unitized Substances, but upon the resignation or removal of Unit Operator becoming effective, such Unit Operator shall deliver possession of all wells, equipment, material, and appurtenances used in conducting the unit operations to the new duly qualified successor Unit Operator or, if no such new unit operator is elected, to the common agent appointed to represent the Working Interest Owners in any action taken hereunder, to be used for the purpose of conducting operations hereunder.

7.4 In all instances of resignation or removal, until a successor Unit Operator is selected and approved as hereinafter provided, the Working Interest Owners shall be jointly responsible for performance of the duties and obligations of Unit Operator, and shall not later than 30 days before such resignation or removal becomes effective appoint a common agent to represent them in any action to be taken hereunder.

7.5 The resignation or removal of Unit Operator shall not release Unit Operator from any liability for any default by it hereunder occurring prior to the effective date of its resignation or removal.

Article VIII—Successor Unit Operator

8.1 If, prior to the establishment of a Participating Area hereunder, the Unit Operator shall resign as Operator, or shall be removed as provided in Article VII, a successor Unit Operator may be selected by vote of the more than one-half of the owners of the Working Interests in Unitized Substances, based on their respective shares, on an acreage basis, in the Unitized Land.

8.2 If, after the establishment of a Participating Area hereunder, the Unit Operator shall resign as Unit Operator, or shall be removed as provided in Article VII, a successor Unit Operator may be selected by a vote of more than one-half of the owners of the Working Interests in Unitized Substances, based on their respective shares, on a participating acreage basis; provided that, if a majority but less than 60 percent of the Working Interest in the Participating Lands is owned by a party to this agreement, a concurring vote of one or more additional Working Interest Owners owning 10 percent or more of the Working Interest in the participating land shall be required to select a new Unit Operator.

8.3 The selection of a successor Unit Operator shall not become effective until:

(a) The Unit Operator so selected shall accept in writing the duties, obligations, and responsibilities of the Unit Operator; and

(b) The selection shall have been approved by the authorized officer.

8.4 If no successor Unit Operator is selected and qualified as herein provided, the authorized officer at his or her election may declare this Agreement terminated.

Article IX—Accounting Provisions and Unit Operating Agreement

9.1 Costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of Working Interests; all in accordance with the agreement or agreements entered into by and between the Unit Operator and the owners of Working Interests, whether one or more, separately or collectively.

9.2 Any agreement or agreements entered into between the Working Interest Owners and the Unit Operator as provided in this Article, whether one or more, are herein referred to as the "Unit Operating Agreement."

9.3 The Unit Operating Agreement shall provide the manner in which the Working Interest Owners shall be entitled to receive their respective share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other contracts, and such other rights and obligations, as between Unit Operator and the Working Interest Owners.

9.4 Neither the Unit Operating Agreement nor any amendment thereto shall be deemed either to modify any of the terms and conditions of this Agreement or to relieve the Unit Operator of any right or obligation established under this Agreement.

9.5 In case of any inconsistency or conflict between this Agreement and the Unit Operating Agreement, this Agreement shall govern.

9.6 Three true copies of any Unit Operating Agreement executed pursuant to this Article IX shall be filed with the authorized officer prior to approval of this Agreement.

Article X—Rights and Obligations of Unit Operator

10.1 The right, privilege, and duty of exercising any and all rights of the parties hereto that are necessary or convenient for exploring, producing, distributing, or utilizing Unitized Substances are hereby delegated to and shall be exercised by the Unit Operator as provided in this Agreement in accordance with a Plan of Development approved by the authorized officer.

10.2 Upon request by Unit Operator, acceptable evidence of title to geothermal resources interests in the Unitized Land shall be deposited with the Unit Operator and together with this Agreement shall constitute and define the rights, privileges, and obligations of Unit Operator.

10.3 Nothing in this Agreement shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes specified in this Agreement.

10.4 The Unit Operator shall take such measures as the authorized officer deems

appropriate and adequate to prevent drainage of Unitized Substances from Unitized Land by wells on land not subject to this Agreement.

10.5 The authorized officer is hereby vested with authority to alter or modify, from time to time, in the authorized officer's discretion, the rate of prospecting and development and the quantity and rate of production under this Agreement.

Article XI—Plan of Development

11.1 Concurrently with the submission of this Agreement to BLM for approval, the Unit Operator shall submit to BLM an acceptable initial Plan of Development. Said plan shall be as complete and adequate as the authorized officer may determine to be necessary for timely exploration and/or development, and to insure proper protection of the environment and conservation of the natural resources of the Unit Area.

11.2 Prior to the expiration of the initial Plan of Development, or any subsequent Plan of Development, Unit Operator shall submit for approval of the authorized officer an acceptable subsequent Plan of Development for the Unit Area which, when approved by the authorized officer, shall constitute the exploratory and/or development drilling and operating obligations of Unit Operator under this Agreement for the period specified therein.

11.3 Any Plan of Development submitted hereunder shall:

(a) Specify the number and locations of any exploration operations to be conducted or wells to be drilled, and the proposed order and time for such operations or drilling; and

(b) To the extent practicable, specify the operating practices regarded as necessary and advisable for proper conservation of natural resources and protection of the environment in compliance with section 1.1 of this Agreement.

11.4 The Plan of Development submitted concurrently with this Agreement for approval shall prescribe that the Unit Operator shall begin to drill a unit well identified in the Plan of Development approved by the authorized officer, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the ——— formation has been tested or until at a lesser depth unitized substances shall be discovered that can be produced in commercial quantities (i.e., quantities sufficient to repay the costs of drilling, completing, and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the authorized officer that further drilling of said well would be unwarranted or impracticable; provided, however, that the Unit Operator shall not in any event be required to drill said well to a depth in excess of ——— feet.

11.5 The initial Plan of Development and/or subsequent Plan of Development submitted under this Article shall provide that the Unit Operator shall initiate a continuous drilling program providing for drilling of no less than one well at a time, and allowing no more than six (6) months time to elapse between completion and testing of one well and the beginning of the

next well, until a well capable of producing or utilizing Unitized Substances in commercial quantities is completed to the satisfaction of the authorized officer, or until it is reasonably proven that the Unitized Land is incapable of producing Unitized Substances in commercial quantities in the formations drilled under this Agreement.

11.6 The authorized officer may modify the exploration operation or drilling requirements of the initial or subsequent Plans of Development by granting reasonable extensions of time when, in his or her opinion, such action is warranted and in the public interest.

11.7 Until a well capable of producing or utilizing Unitized Substances in commercial quantities is completed, the failure of Unit Operator in a timely manner to conduct any exploration operations or drill any of the wells provided for in Plans of Development required under this Article XI or to submit a timely and acceptable subsequent Plan of Development, shall, after notice of default or notice of prospective default to Unit Operator by the authorized officer, and after failure of Unit Operator to remedy any actual default within a reasonable time (as determined by the authorized officer), result in automatic termination of this Agreement effective as of the date of the default, as determined by the authorized officer.

11.8 Separate Plans of Development may be submitted for separate productive zones, subject to the approval of the authorized officer. Also subject to the approval of the authorized officer, Plans of Development shall be modified or supplemented when necessary to meet changes in conditions or to protect the interest of all parties to this Agreement.

Article XII—Participating Areas

12.1 Prior to the commencement of production of Unitized Substances, the Unit Operator shall submit for approval by the authorized officer a schedule (or schedules) of all land then regarded as reasonably proven to be productive from a pool or deposit discovered or developed; all lands in said schedule (or schedules), on approval of the authorized officer, will constitute a Participating Area (or Areas), effective as of the date production commences or the effective date of this Unit Agreement, whichever is later. Said schedule (or schedules) shall also set forth the percentage of Unitized Substances to be allocated, as herein provided, to each tract in the Participating Area (or Areas), and shall govern the allocation of production, commencing with the effective date of the Participating Area.

12.2 A separate Participating Area shall be established for each separate pool or deposit of Unitized Substances or for any group thereof that is produced as a single pool or deposit, and any two or more Participating Areas so established may be combined into one, on approval of the authorized officer. The effective date of any Participating Area established after the commencement of actual production of Unitized Substances shall be the first of the month in which is obtained the knowledge or information on which the establishment of said Participating Area is

based, unless a more appropriate effective date is proposed by the Unit Operator and approved by the authorized officer.

12.3 Any Participating Area (or Areas) established under 12.1 or 12.2 above shall, subject to the approval of the authorized officer, be revised from time to time to:

(a) Include additional land then regarded as reasonably proved to be productive from the pool or deposit for which the Participating Area was established;

(b) Include lands necessary to unit operations;

(c) Exclude land then regarded as reasonably proved not to be productive from the pool or deposit for which the Participating Area was established; or

(d) Exclude land not necessary to unit operations; and

(e) Revise the schedule (or schedules) of allocation percentages accordingly.

12.4 Subject to the limitation cited in 12.1 hereof, the effective date of any revision of a Participating Area established under Articles 12.1 or 12.2 shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated; provided, however, that a more appropriate effective date may be used if justified by the Unit Operator and approved by the authorized officer.

12.5 No land shall be excluded from a Participating Area on account of depletion of the Unitized Substances, except that any Participating Area established under the provisions of this Article XII shall terminate automatically whenever all operations are abandoned in the pool or deposit for which the Participating Area was established.

12.6 Nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the revision of a Participating Area.

Article XIII—Allocation of Unitized Substances

13.1 All Unitized Substances produced from a Participating Area established under this Agreement shall be deemed to be produced equally, on an acreage basis, from the several tracts of Unitized Land within the Participating Area established for such production.

13.2 For the purpose of determining any benefits accruing under this Agreement, each Tract of Unitized Land shall have allocated to it such percentage of said production as the number of acres in the Tract included in the Participating Area bears to the total number of acres of Unitized Land in said Participating Area.

13.3 Allocation of production hereunder for purposes other than settlement of the royalty obligations of the respective Working Interest Owners shall be on the basis prescribed in the Unit Operating Agreement, whether in conformity with the basis of allocation set forth above or otherwise.

13.4 The Unitized Substances produced from a Participating Area shall be allocated as provided herein, regardless of whether any wells are drilled on any particular part or tract of said Participating Area.

Article XIV—Relinquishment of Leases

14.1 Pursuant to the provisions of the Federal leases and 43 CFR subpart 3213, a lessee of record shall, subject to the provisions of the Unit Operating Agreement, have the right to relinquish any of its interests in leases committed hereto, in whole or in part; provided, that no relinquishment shall be made of interests in land within a Participating Area without the prior approval of the authorized officer.

14.2 A Working Interest Owner may exercise the right to surrender, when such right is vested in it by any non-Federal lease, sublease, or operating agreement, provided that each party who will or might acquire the Working Interest in such lease by such surrender or by forfeiture is bound by the terms of this Agreement, and further provided that no relinquishment shall be made of such land within a Participating Area without the prior written consent of the non-Federal Lessor.

14.3 If, as the result of relinquishment, surrender, or forfeiture, the Working Interests become vested in the fee owner or lessor of the Unitized Substances, such owner may:

(a) Accept those Working Interest rights and obligations subject to this Agreement and the Unit Operating Agreement, or

(b) Lease the portion of such land as is included in a Participating Area established hereunder, subject to this Agreement and the Unit Operating Agreement, and provide for the independent operation of any part of such land that is not then included within a Participating Area established hereunder.

14.4 If the fee owner or lessor of the Unitized Substances does not, (1) accept the Working Interest rights and obligations subject to this Agreement and the Unit Operating Agreement, or (2) lease such lands as provided in 14.3 above within six (6) months after the relinquished, surrendered, or forfeited Working Interest becomes vested in said fee owner or lessor, the Working Interest benefits and obligations accruing to such land under this Agreement and the Unit Operating Agreement shall be shared by the owners of the remaining unitized Working Interests in accordance with their respective Working Interest ownerships, and such owners of Working Interests shall compensate the fee owner or lessor of Unitized Substances in such lands by paying sums equal to the rentals, minimum royalties, and royalties applicable to such lands under the lease or leases in effect when the Working Interests were relinquished, surrendered, or forfeited.

14.5 Subject to the provisions of 14.4 above, an appropriate accounting and settlement shall be made for all benefits accruing to or payments and expenditures made or incurred on behalf of any surrendered or forfeited Working Interest subsequent to the date of surrender or forfeiture, and payment of any moneys found to be owing by such an accounting shall be made as between the parties within thirty (30) days.

14.6 In the event no Unit Operating Agreement is in existence and a mutually acceptable agreement cannot be consummated between the proper parties, the authorized officer may prescribe such

reasonable and equitable conditions of agreement as he deems warranted under the circumstances.

14.7 The exercise of any right vested in a Working Interest Owner to reassign such Working Interest to the party from whom it was obtained shall be subject to the same conditions as set forth in this Article XIV in regard to the exercise of a right to surrender.

Article XV—Rentals

15.1 Any unitized lease on non-Federal land containing provisions that would terminate such lease unless (1) drilling operations are commenced upon the land covered thereby within the time therein specified or (2) rentals are paid for the privilege of deferring such drilling operations, the rentals required thereby shall, notwithstanding any other provisions of this Agreement, be deemed to accrue as to the portion of the lease not included within a Participating Area and become payable during the term thereof as extended by this Agreement, and until the required drillings are commenced upon the land covered thereby.

15.2 Nothing herein operates to relieve the lessees of any land from their respective lease obligations for the payment of any rental or royalty due under their leases.

15.3 Rental and royalty due on the leases committed to the Unit shall be paid by Working Interest Owners responsible under existing contracts, laws, and regulations, or by the Unit Operator.

Article XVI—Operations on Nonparticipating Land

16.1 Any party hereto owning or controlling the Working Interest in any Unitized Land having a regular well location may, with the approval of the authorized officer and at such party's sole risk, costs, and expense, drill a well to test any formation of deposit for which a Participating Area has not been established or to test any formation or deposit for which a Participating Area has been established if such location is not within said Participating Area, unless within 30 days of receipt of notice from said party of his intention to drill the well, the Unit Operator elects and commences to drill such a well in like manner as other wells are drilled by the Unit Operator under this Agreement.

16.2 If any well drilled by a Working Interest Owner other than the Unit Operator proves that the land upon which said well is situated may properly be included in a Participating Area, such Participating Area shall be established or enlarged as provided in this Agreement, and the well shall thereafter be operated by the Unit Operator in accordance with the terms of this Agreement and the Unit Operating Agreement.

Article XVII—Leases and Contracts Conformed and Extended

17.1 The terms, conditions, and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development, or utilization of geothermal resources on lands committed to this Agreement, are hereby expressly modified and amended only to the extent necessary to make the same conform to the provisions

hereof. Otherwise said leases, subleases, and contracts shall remain in full force and effect.

17.2 The parties hereto consent that the Secretary shall, by his or her approval hereof, modify and amend the Federal leases committed hereto to the extent necessary to conform said leases to the provisions of this Agreement.

17.3 The development and/or operation of lands subject to this Agreement under the terms hereof shall be deemed full performance of any obligations for development and operation with respect to each and every separately owned tract subject to this Agreement, regardless of whether there is any development of any particular tract of the Unit Area.

17.4 Drilling and/or producing operations performed hereunder upon any tract of Unitized Lands will be deemed to be performed upon and for the benefit of each and every tract of Unitized Land.

17.5 Suspension of operations and/or production on all Unitized Lands pursuant to direction or consent of the Secretary or his duly authorized representative shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every tract of Unitized Land. A suspension of operations and/or production limited to specified lands shall be applicable only to such lands.

17.6 Subject to the provisions of Article XV hereof and 17.10 of this Article, each lease, sublease, or contract relating to the exploration, drilling, development, or utilization of geothermal resources of lands other than those of the United States committed to this Agreement, is hereby extended beyond any such term provided therein so that it shall be continued for and during the term of this Agreement.

17.7 Subject to the lease renewal and the readjustment provision of the Act, any Federal lease committed hereto may, as to the Unitized Lands, be continued for the term so provided in such lease, or as extended by law or regulation. If it is appropriate for BLM to extend the term of a lease to match the term of the unit, the Unit Operator shall take the actions required for such extension under 43 CFR 3207.17. This subsection shall not operate to extend any lease or portion thereof as to lands excluded from the Unit Area by the contraction thereof.

17.8 Each sublease or contract relating to the operations and development of Unitized Substances from lands of the United States committed to this Agreement shall be continued in force and effect for and during the term of the underlying lease.

17.9 Any Federal lease heretofore or hereafter committed to any such unit plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the lands committed and the lands not committed, as of the effective date of unitization.

17.10 In the absence of any specific lease provision to the contrary, any lease, other than a Federal lease, having only a portion of its land committed hereto shall be segregated as to the portion committed and the portion not committed, and the provisions of such lease shall apply

separately to such segregated portions, commencing as of the effective date hereof. In the event any such lease provides for a lump-sum rental payment, such payment shall be prorated between the portions so segregated in proportion to the acreage of the respective tracts.

17.11 Upon termination of this Agreement, the leases covered hereby may be maintained and continued in force and effect in accordance with the terms, provisions, and conditions of the Act, the lease or leases, and amendments thereto.

Article XVIII—Effective Date and Term

18.1 This Agreement shall become effective upon approval by the Secretary or his duly authorized representative, and shall terminate five (5) years from said effective date unless:

(a) Such date of expiration is extended by the authorized officer;

(b) Unitized Substances are produced or utilized in commercial quantities in which event this Agreement shall continue for so long as Unitized Substances are produced or utilized in commercial quantities; or

(c) This Agreement is terminated prior to the end of said five (5) year period as heretofore provided.

18.2 This Agreement may be terminated at any time by the owners of a majority of the Working Interests on an acreage basis, with the approval of the authorized officer. Notice of any such approval shall be given by the Unit Operator to all parties hereto.

Article XIX—Appearances

19.1 Unit Operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Department of the Interior, and to appeal from decisions, orders or rulings issued under the regulations of said Department, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior or any other legally constituted authority: Provided, however, that any interested parties shall also have the right, at their own expense, to be heard in any such proceeding.

Article XX—No Waiver of Certain Rights

20.1 Nothing contained in this Agreement shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense pertaining to the validity or invalidity of any law of the State wherein lands subject to this Agreement are located, or of the United States, or regulations issued thereunder, in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

Article XXI—Unavoidable Delay

21.1 The obligations imposed by this Agreement requiring Unit Operator to commence or continue drilling or to produce or utilize Unitized Substances from any of the land covered by this Agreement, shall be suspended while, but only so long as, Unit Operator, despite the exercise of due care and diligence, is prevented from complying with

such obligations, in whole or in part, by strikes, Acts of God, Federal or other applicable law, Federal or other authorized governmental agencies, unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of Unit Operator, whether similar to matters herein enumerated or not.

21.2 No unit obligation that is suspended under this section shall become due less than thirty (30) days after it has been determined that the suspension is no longer applicable.

21.3 Determination of creditable "Unavoidable Delay" time shall be made by the Unit Operator, subject to approval by the authorized officer.

Article XXII—Postponement of Obligations

22.1 Notwithstanding any other provisions of this Agreement, the Authorized officer, on his own initiative or upon appropriate justification by Unit Operator, may postpone any obligation established by and under this Agreement to commence or continue drilling or to operate on or produce Unitized Substances from lands covered by this Agreement when, in his judgment, circumstances warrant such action.

Article XXIII—Nondiscrimination

23.1 In connection with the performance of work under this Agreement, the Operator agrees to comply with all of the provisions of section 202(1) to (7) inclusive, of Executive Order 11246 (30 FR 12319), as amended by Executive Order 11375 (32 FR 14303), which are hereby incorporated by reference in this Agreement.

Article XXIV—Counterparts

24.1 This Agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instruments in writing specifically referring hereto, and shall be binding upon all parties who have executed such a counterpart, ratification, or consent hereto, with the same force and effect as if all such parties had signed the same document.

Article XXV—Subsequent Joinder

25.1 If the owner of any substantial interest in geothermal resources under a tract within the Unit Area fails or refuses to subscribe or consent to this Agreement, the owner of the Working Interest in that tract may withdraw said tract from this Agreement by written notice delivered to the authorized officer and the Unit Operator prior to the approval of this Agreement by the authorized officer.

25.2 Any geothermal resources interests in lands within the Unit Area not committed hereto prior to approval of this Agreement may thereafter be committed by the owner or owners thereof subscribing or consenting to this Agreement, and, if the interest is a Working Interest, by the owner of such interest also subscribing to the Unit Operating Agreement.

25.3 After operations are commenced hereunder, the right of subsequent joinder, as provided in this Article XXV, by a Working Interest Owner is subject to such requirements or approvals, if any, pertaining

to such joinder, as may be provided for in the Unit Operating Agreement. Joinder to the Unit Agreement by a Working Interest Owner at any time must be accompanied by appropriate joinder to the Unit Operating Agreement, if more than one committed Working Interest Owner is involved, in order for the interest to be regarded as committed to this Unit Agreement.

25.4 After final approval hereof, joinder by a nonworking interest owner must be consented to in writing by the Working Interest Owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such nonworking interest. A nonworking interest may not be committed to this Agreement unless the corresponding Working Interest is committed hereto.

25.5 Except as may otherwise herein be provided, subsequent joinders to this Agreement shall be effective as of the first day of the month following the filing with the authorized officer of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this Agreement, unless objection to such joinder is duly made within sixty (60) days by the authorized officer.

Article XXVI—Covenants Run With the Land

26.1 The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this Agreement terminates, and any grant, transfer, or conveyance, of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee, or other successor in interest.

26.2 No assignment or transfer of any Working Interest or other interest subject hereto shall be binding upon Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, photostatic, or certified copy of the instrument of transfer.

Article XXVII—Notices

27.1 All notices, demands, or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and personally delivered to the party or sent by postpaid registered or certified mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto, or to the ratification or consent hereof, or to such other address as any such party may have furnished in writing to the party sending the notice, demand, or statement.

Article XXVIII—Loss of Title

28.1 In the event title to any tract of Unitized Land shall fail and the true owner cannot be induced to join in this Agreement, such tract shall be automatically regarded as not committed hereto, and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title.

28.2 In the event of a dispute as to title to any royalty, Working Interest, or other

interests subject hereto, payment or delivery on account thereof may be withheld until liability for interest until the dispute is finally settled: Provided, That, as to Federal land or leases, no payments of funds due the United States shall be withheld, but such funds shall be deposited as directed by the authorized officer to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

Article XXIX—Taxes

29.1 The Working Interest Owners shall render and pay for their accounts and the accounts of the owners of nonworking interests all valid taxes on or measured by the Unitized Substances in and under, or that may be produced, gathered, and sold or utilized from, the land subject to this Agreement after the effective date hereof.

29.2 The Working Interest Owners on each tract may charge a proper proportion of the taxes paid under 29.1 hereof to the owners of nonworking interests in said tract, and may reduce the allocated share of each royalty owner for taxes so paid. No taxes shall be charged to the United States or the State of ——— or to any lessor who has a contract with his lessee which requires the lessee to pay such taxes.

Article XXX—Relation of Parties

30.1 It is expressly agreed that the relation of the parties hereto is that of independent contractors, and nothing in this Agreement contained, expressed, or implied, nor any operations conducted hereunder, shall create or be deemed to have created a partnership or association between the parties hereto or any of them.

Article XXXI—Special Federal Lease Stipulations and/or Conditions

31.1 Nothing in this Agreement shall modify special lease stipulations and/or conditions applicable to lands of the United States. No modification of the conditions necessary to protect the lands or functions of lands under the jurisdiction of any Federal agency is authorized except with prior consent in writing whereby the authorizing official specifies the modification permitted.

In witness whereof, the parties hereto have caused this Agreement to be executed and have set opposite their respective names the date of execution.

Unit operator (as unit operator and as working interest owner):

By:
Name:
Title:
Date:

Subpart 3287—Relief and Appeals

§ 3287.1 May the unit operator request a suspension of unit obligations or development requirements?

The unit operator may provide a written request to BLM to suspend any or all obligations under the unit agreement. BLM will specify the term of

the suspension and any requirements the unit operator must meet for the suspension to remain in effect.

§ 3287.2 When may BLM grant a suspension of unit obligations?

(a) BLM may grant a suspension of unit obligations when, despite the exercise of due care and diligence, the unit operator is prevented from complying with such obligations, in whole or in part, by:

- (1) Acts of God;
- (2) Federal, state, or municipal laws;
- (3) Labor strikes;
- (4) Unavoidable accidents;
- (5) Uncontrollable delays in transportation;

(6) The inability to obtain necessary materials or equipment in the open market; or

(7) Other circumstances that BLM determines are beyond the reasonable control of the unit operator, such as

agency timeframes required to complete environmental documents.

(b) BLM may deny the request for suspension of unit obligations when the suspension would involve a lengthy or indefinite period. For example, BLM might not approve a suspension of initial drilling obligations due to a unit operator's inability to obtain an electrical sales contract, or when poor economics affect the electrical generation market, limiting the opportunity to obtain a viable sales contract. BLM may grant a suspension of subsequent drilling obligations when it is in the public interest.

§ 3287.3 How does a suspension of unit obligations affect the terms of the unit agreement?

(a) BLM may suspend any terms of the unit agreement during the period a suspension is effective. During the period of the suspension, the involved

unit terms are tolled. The suspension may not relieve the unit operator of its responsibility to meet other requirements of the unit agreement. For example, the unit operator may continue to be required to diligently develop or produce the resource during a suspension of drilling obligations.

(b) The unit operator must ensure all interests in the agreement are notified of any suspension granted and the terms of the suspension.

§ 3287.4 May a decision made by BLM under this part be appealed?

A unit operator or any other adversely affected person may appeal a BLM decision regarding unit administration or operations in accordance with § 3200.5 of this chapter.

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