

and survival operations in the event of a major disaster.

(Pub. L. 105-78, title I, Nov. 13, 1997, 111 Stat. 1475.)

CODIFICATION

Section was enacted as part of the appropriation act cited as the credit to this section, and not as part of the Federal Mine Safety and Health Act of 1977 which comprises this chapter.

SIMILAR PROVISIONS

Similar provisions were contained in the following prior appropriation acts:

Pub. L. 104-208, div. A, title I, §101(e) [title I], Sept. 30, 1996, 110 Stat. 3009-233, 3009-240.

Pub. L. 104-134, title I, §101(d) [title I], Apr. 26, 1996, 110 Stat. 1321-211, 1321-218; renumbered title I, Pub. L. 104-140, §1(a), May 2, 1996, 110 Stat. 1327.

Pub. L. 103-333, title I, Sept. 30, 1994, 108 Stat. 2545.

Pub. L. 103-112, title I, Oct. 21, 1993, 107 Stat. 1088.

Pub. L. 102-394, title I, Oct. 6, 1992, 106 Stat. 1797.

Pub. L. 102-170, title I, Nov. 26, 1991, 105 Stat. 1112.

Pub. L. 101-517, title I, Nov. 5, 1990, 104 Stat. 2195.

Pub. L. 101-166, title I, Nov. 21, 1989, 103 Stat. 1164.

Pub. L. 100-436, title I, Sept. 20, 1988, 102 Stat. 1686.

Pub. L. 100-202, §101(h) [title I], Dec. 22, 1987, 101 Stat. 1329-256, 1329-262.

Pub. L. 99-500, §101(i) [H.R. 5233, title I], Oct. 18, 1986, 100 Stat. 1783-287, and Pub. L. 99-591, §101(i) [H.R. 5233, title I], Oct. 30, 1986, 100 Stat. 3341-287.

Pub. L. 99-178, title I, Dec. 12, 1985, 99 Stat. 1107.

Pub. L. 98-619, title I, Nov. 8, 1984, 98 Stat. 3310.

Pub. L. 98-139, title I, Oct. 31, 1983, 97 Stat. 876.

Pub. L. 97-377, title I, §101(e)(1) [title I], Dec. 21, 1982, 96 Stat. 1878, 1883.

Pub. L. 97-92, §101(a) [H.R. 4560, title I], Dec. 15, 1981, 95 Stat. 1183.

Pub. L. 96-536, §101(a) [incorporating H.R. 4389, title I, for FY 1980], Dec. 16, 1980, 94 Stat. 3166.

Pub. L. 96-123, §101(g) [H.R. 4389, title I], Nov. 20, 1979, 93 Stat. 925.

Pub. L. 95-480, title I, Oct. 18, 1978, 92 Stat. 1570.

Pub. L. 95-355, title I, Sept. 8, 1978, 92 Stat. 529.

CHAPTER 23—GEOTHERMAL STEAM AND ASSOCIATED GEOTHERMAL RESOURCES

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CHAPTER REFERRED TO IN OTHER SECTIONS

This chapter is referred to in sections 191, 226-3, 530 of this title; title 16 sections 410mm-1, 460yy-1, 539g, 543c; title 43 section 299.

§ 1001. Definitions

As used in this chapter, the term—

- (a) “Secretary” means the Secretary of the Interior;
- (b) “geothermal lease” means a lease issued under authority of this chapter;
- (c) “geothermal steam and associated geothermal resources” means (i) all products of geothermal processes, embracing indigenous steam, hot water and hot brines; (ii) steam and other gases, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations; (iii) heat or other associated energy found in geothermal formations; and (iv) any byproduct derived from them;
- (d) “byproduct” means any mineral or minerals (exclusive of oil, hydrocarbon gas, and helium) which are found in solution or in association with geothermal steam and which have a value of less than 75 per centum of the value of the geothermal steam or are not, because of quantity, quality, or technical difficulties in extraction and production, of sufficient value to warrant extraction and production by themselves;

(e) “known geothermal resources area” means an area in which the geology, nearby discoveries, competitive interests, or other indicia would, in the opinion of the Secretary, engender a belief in men who are experienced in the subject matter that the prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose.

(f) “Significant¹ thermal features within units of the National Park System” shall include, but not be limited to, the following:

(1) Thermal features within units of the National Park System listed in Section¹ 1026(a)(1) of this title and designated as significant in the Federal Register notice of August 3, 1987 (Vol. 52, No. 148 Fed. Reg. 28790).

(2) Crater Lake National Park.

(3) Thermal features within Big Bend National Park and Lake Mead National Recreation Area proposed as significant in the Federal Register notice of February 13, 1987 (Vol. 52, No. 30 Fed. Reg. 4700).

(4) Thermal features within units of the National Park System added to the significant thermal features list pursuant to section 1026(a)(2) of this title.

(Pub. L. 91-581, §2, Dec. 24, 1970, 84 Stat. 1566; Pub. L. 100-443, §2(a), Sept. 22, 1988, 102 Stat. 1766.)

AMENDMENTS

1988—Par. (f). Pub. L. 100-443 added par. (f).

SHORT TITLE OF 1988 AMENDMENT

Section 1 of Pub. L. 100-443 provided that: “This Act [enacting sections 1026 and 1027 of this title, amending this section and sections 191, 226-3, 1005, 1017, and 1019 of this title, and enacting provisions set out as notes under sections 1005 and 1026 of this title] may be known as the ‘Geothermal Steam Act Amendments of 1988.’”

SHORT TITLE

Section 1 of Pub. L. 91-581 provided: “That this Act [enacting this chapter and amending section 530 of this title] may be cited as the ‘Geothermal Steam Act of 1970.’”

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 1005, 1026 of this title.

§ 1002. Lands subject to geothermal leasing

Subject to the provisions of section 1014 of this title, the Secretary of the Interior may issue leases for the development and utilization of geothermal steam and associated geothermal resources (1) in lands administered by him, including public, withdrawn, and acquired lands, (2) in any national forest or other lands administered by the Department of Agriculture through the Forest Service, including public, withdrawn, and acquired lands, and (3) in lands which have been conveyed by the United States subject to a reservation to the United States of the geothermal steam and associated geothermal resources therein.

(Pub. L. 91-581, §3, Dec. 24, 1970, 84 Stat. 1566.)

¹ So in original. Probably should not be capitalized.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 1024 of this title.

§ 1002a. Repealed. Pub. L. 97-214, § 7(16), July 12, 1982, 96 Stat. 174

Section, Pub. L. 95-356, title VIII, § 803(a), (b), Sept. 8, 1978, 92 Stat. 585; Pub. L. 96-125, title VIII, § 802(2), Nov. 26, 1979, 93 Stat. 948; Pub. L. 97-99, title IX, § 908, Dec. 23, 1981, 95 Stat. 1385, related to development of geothermal energy sources on military lands, contracts for provision and operation of production facilities and energy purchases, and terms, conditions and prerequisites of such contracts. See sections 2689 and 2394 of Title 10, Armed Forces.

Section 803(c) of Pub. L. 95-356, which provided that this section take effect Oct. 1, 1978, was repealed by Pub. L. 97-214, § 7(16), July 12, 1982, 96 Stat. 174.

EFFECTIVE DATE OF REPEAL

Repeal effective Oct. 1, 1982, and applicable to military construction projects, and to construction and acquisition of military family housing before, on, or after such date, see section 12(a) of Pub. L. 97-214, set out as an Effective Date note under section 2801 of Title 10, Armed Forces.

§ 1003. Bids; competitive bidding; first application of qualified person without competitive bidding

If lands to be leased under this chapter are within any known geothermal resources area, they shall be leased to the highest responsible qualified bidder by competitive bidding under regulations formulated by the Secretary. If the lands to be leased are not within any known geothermal resources area, the qualified person first making application for the lease shall be entitled to a lease of such lands without competitive bidding. Notwithstanding the foregoing, at any time within one hundred and eighty days following December 24, 1970:

(a) Conversion to geothermal lease

with respect to all lands which were on September 7, 1965, subject to valid leases or permits issued under the Mineral Leasing Act of February 25, 1920, as amended (30 U.S.C. 181 et seq.), or under the Mineral Leasing Act of Acquired Lands, as amended (30 U.S.C. 351, 358), or to existing mining claims located on or prior to September 7, 1965, the lessees or permittees or claimants or their successors in interest who are qualified to hold geothermal leases shall have the right to convert such leases or permits or claims to geothermal leases covering the same lands;

(b) Consideration of first person in conflicting land interests

where there are conflicting claims, leases, or permits therefor embracing the same land, the person who first was issued a lease or permit, or who first recorded the mining claim shall be entitled to first consideration;

(c) Conversion to application for geothermal lease

with respect to all lands which were on September 7, 1965, the subject of applications for leases or permits under the above Acts, the applicants may convert their applications to applications for geothermal leases having priorities dating from the time of filing of such applications under such Acts;

(d) Acreage limitation

no person shall be permitted to convert mineral leases, permits, applications therefor, or mining claims for more than 10,240 acres; and

(e) Regulations; substantial expenditures for exploration, development, or production of geothermal steam requisite for conversion

the conversion of leases, permits, and mining claims and applications for leases and permits shall be accomplished in accordance with regulations prescribed by the Secretary. No right to conversion to a geothermal lease shall accrue to any person under this section unless such person shows to the reasonable satisfaction of the Secretary that substantial expenditures for the exploration, development, or production of geothermal steam have been made by the applicant who is seeking conversion, on the lands for which a lease is sought or on adjoining, adjacent, or nearby Federal or non-Federal lands.

(f) Competitive geothermal lease; time for payment of highest bid and first year rental

with respect to lands within any known geothermal resources area and which are subject to a right to conversion to a geothermal lease, such lands shall be leased by competitive bidding: *Provided*, That, the competitive geothermal lease shall be issued to the person owning the right to conversion to a geothermal lease if he makes payment of an amount equal to the highest bona fide bid for the competitive geothermal lease, plus the rental for the first year, within thirty days after he receives written notice from the Secretary of the amount of the highest bid.

(Pub. L. 91-581, § 4, Dec. 24, 1970, 84 Stat. 1566.)

REFERENCES IN TEXT

The Mineral Leasing Act of February 25, 1920, referred to in subsecs. (a) and (c), is act Feb. 25, 1920, ch. 85, 41 Stat. 437, as amended, known as the Mineral Leasing Act, which is classified generally to chapter 3A (§181 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 181 of this title and Tables.

The Mineral Leasing Act of Acquired Lands, referred to in subsecs. (a) and (c), probably means the Mineral Leasing Act for Acquired Lands, act Aug. 7, 1947, ch. 513, 61 Stat. 913, as amended, which is classified generally to chapter 7 (§351 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 351 of this title and Tables.

TRANSFER OF FUNCTIONS

Functions of Secretary of the Interior to promulgate regulations under this chapter relating to fostering of competition for Federal leases, implementation of alternative bidding systems authorized for award of Federal leases, establishment of diligence requirements for operations conducted on Federal leases, setting of rates for production of Federal leases, and specifying of procedures, terms, and conditions for acquisition and disposition of Federal royalty interests taken in kind, transferred to Secretary of Energy by section 7152(b) of Title 42, The Public Health and Welfare. Section 7152(b) of Title 42 was repealed by Pub. L. 97-100, title II, § 201, Dec. 23, 1981, 95 Stat. 1407, and functions of Secretary of Energy returned to Secretary of the Interior. See House Report No. 97-315, pp. 25, 26, Nov. 5, 1981.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 1006 of this title.

§ 1004. Rents and royalties

Geothermal leases shall provide for—

(a) Royalty provision for percentage of amount or value of steam or other form of heat or energy

a royalty of not less than 10 per centum or more than 15 per centum of the amount or value of steam, or any other form of heat or energy derived from production under the lease and sold or utilized by the lessee or reasonably susceptible to sale or utilization by the lessee;

(b) Royalty provision for percentage of value of byproduct; rate for certain mineral byproducts

a royalty of not more than 5 per centum of the value of any byproduct derived from production under the lease and sold or utilized or reasonably susceptible of sale or utilization by the lessee, except that as to any byproduct which is a mineral named in section 1 of the Mineral Leasing Act of February 25, 1920, as amended (30 U.S.C. 181), the rate of royalty for such mineral shall be the same as that provided in that Act [30 U.S.C. 181 et seq.] and the maximum rate of royalty for such mineral shall not exceed the maximum royalty applicable under that Act;

(c) Annual rental; advance payment; amount; termination of lease for nonpayment; deficiency payments; notice and payment of deficiency; reinstatement of lease: reasons and conditions

payment in advance of an annual rental of not less than \$1 per acre or fraction thereof for each year of the lease. If there is no well on the leased lands capable of producing geothermal resources in commercial quantities, the failure to pay rental on or before the anniversary date shall terminate the lease by operation of law: *Provided, however,* That whenever the Secretary discovers that the rental payment due under a lease is paid timely but the amount of the payment is deficient because of an error or other reason and the deficiency is nominal, as determined by the Secretary pursuant to regulations prescribed by him, he shall notify the lessee of the deficiency and such lease shall not automatically terminate unless the lessee fails to pay the deficiency within the period prescribed in the notice: *Provided further,* That, where any lease has been terminated automatically by operation of law under this section for failure to pay rental timely and it is shown to the satisfaction of the Secretary of the Interior that the failure to pay timely the lease rental was justifiable or not due to a lack of reasonable diligence, he in his judgment may reinstate the lease if—

(1) a petition for reinstatement, together with the required rental, is filed with the Secretary of the Interior; and

(2) no valid lease has been issued affecting any of the lands in the terminated lease prior to the filing of the petition for reinstatement; and

(d) Royalties in lieu of rentals for producing leases; amount; initial payment; value of unsold geothermal steam and byproducts; consideration of exploration and production costs and use value

a minimum royalty of \$2 per acre or fraction thereof in lieu of rental payable at the expiration of each lease year for each producing lease, commencing with the lease year beginning on or after the commencement of production in commercial quantities. For the purpose of determining royalties hereunder the value of any geothermal steam and byproduct used by the lessee and not sold and reasonably susceptible of sale shall be determined by the Secretary, who shall take into consideration the cost of exploration and production and the economic value of the resource in terms of its ultimate utilization.

(Pub. L. 91-581, § 5, Dec. 24, 1970, 84 Stat. 1567.)

REFERENCES IN TEXT

That Act, referred to in subsec. (b), is the Mineral Leasing Act of February 25, 1920, act Feb. 25, 1920, ch. 85, 41 Stat. 437, as amended, known as the Mineral Leasing Act, which is classified generally to chapter 3A (§181 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 181 of this title and Tables.

§ 1005. Duration of leases

(a) Primary and continuation terms

Geothermal leases shall be for a primary term of ten years. If geothermal steam is produced or utilized in commercial quantities within this term, such lease shall continue for so long thereafter as geothermal steam is produced or utilized in commercial quantities, but such continuation shall not exceed an additional forty years.

(b) Renewal

If, at the end of such forty years, steam is produced or utilized in commercial quantities and the lands are not needed for other purposes, the lessee shall have a preferential right to a renewal of such lease for a second forty-year term in accordance with such terms and conditions as the Secretary deems appropriate.

(c) Cooperative or unit plan for drilling operations; extension of term; renewal

Any lease for land on which, or for which under an approved cooperative or unit plan of development or operation, actual drilling operations were commenced prior to the end of its primary term and are being diligently prosecuted at that time shall be extended for five years and so long thereafter, but not more than thirty-five years, as geothermal steam is produced or utilized in commercial quantities. If, at the end of such extended term, steam is being produced or utilized in commercial quantities and the lands are not needed for other purposes, the lessee shall have a preferential right to a renewal of such lease for a second term in accordance with such terms and conditions as the Secretary deems appropriate.

(d) "Produced or utilized in commercial quantities" defined

Except as otherwise provided for in this section, for purposes of this section the term "pro-

duced or utilized in commercial quantities” means the completion of a well producing geothermal steam in commercial quantities. Such term shall also include the completion of a well capable of producing geothermal steam in commercial quantities so long as the Secretary determines that diligent efforts are being made toward the utilization of the geothermal steam.

(e) Extension of term for byproduct production; conversion of geothermal lease to mineral lease: application, time for completion of location of mineral claims, and Federal agency terms and conditions when conversion affects lands withdrawn or acquired for Federal agency

Leases which have extended by reasons of production, or which have produced geothermal steam, and have been determined by the Secretary to be incapable of further commercial production and utilization of geothermal steam may be further extended for a period of not more than five years from the date of such determination but only for so long as one or more valuable byproducts are produced in commercial quantities. If such byproducts are leasable under the Mineral Leasing Act of February 25, 1920, as amended (30 U.S.C. 181, et seq.), or under the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351-358), and the leasehold is primarily valuable for the production thereof, the lessee shall be entitled to convert his geothermal lease to a mineral lease under, and subject to all the terms and conditions of, such appropriate Act upon application at any time before expiration of the lease extension by reason of byproduct production. The lessee shall be entitled to locate under the mining laws all minerals which are not leasable and which would constitute a byproduct if commercial production or utilization of geothermal steam continued. The lessee in order to acquire the rights herein granted him shall complete the location of mineral claims within ninety days after the termination of the lease for geothermal steam. Any such converted lease or the surface of any mining claim located for geothermal byproducts mineral affecting lands withdrawn or acquired in aid of a function of a Federal department or agency, including the Department of the Interior, shall be subject to such additional terms and conditions as may be prescribed by such department or agency with respect to the additional operations or effects resulting from such conversion upon adequate utilization of the lands for the purpose for which they are administered.

(f) Principles for location of minerals under mining laws when minerals are not associated with geothermal resources

Minerals locatable under the mining laws of the United States in lands subject to a geothermal lease issued under the provisions of this chapter which are not associated with the geothermal steam and associated geothermal resources of such lands as defined in section 1001(c) of this title shall be locatable under said mining laws in accordance with the principles of the Multiple Mineral Development Act (68 Stat. 708; found in 30 U.S.C. 521 et seq.).

(g) Five-year extensions; conditions

(1) Any geothermal lease issued pursuant to this chapter for land on which, or for which under an approved cooperative or unit plan of development or operation, geothermal steam has not been produced or utilized in commercial quantities by the end of its primary term, or by the end of any extension provided by subsection (c) of this section, may be extended for successive 5-year periods, but totaling not more than 10 years, if the Secretary determines that the lessee has met the bona fide effort requirement of subsection (h) of this section, and either of the following:

(A) the¹ payment in lieu of commercial quantities production requirement of subsection (i) of this section.

(B) The significant expenditure requirement of subsection (j) of this section.

(2) A lease extended pursuant to paragraph (1) shall continue so long thereafter as geothermal steam is produced or utilized in commercial quantities, but such continuation shall not exceed an additional 25 years, for a total of 50 years, if such lease was also the subject of an extension under subsection (c) of this section or an additional 30 years, for a total of 50 years, if such lease is only extended pursuant to paragraph (1).

(3) If, at the end of either 50-year term referred to in paragraph (2), geothermal steam is being produced or utilized in commercial quantities and the lands are not needed for other purposes, the lessee shall have a preferential right to a renewal of such lease for a second term in accordance with such terms and conditions as the Secretary deems appropriate. For purposes of this paragraph only, the term “produced or utilized in commercial quantities” means a bona fide sale or the use of geothermal steam by the lessee to generate electricity in marketable quantities.

(h) Bona fide effort

To meet the bona fide effort requirement referred to in subsection (g)(1) of this section the lessee must submit a report to the Secretary demonstrating bona fide efforts (as determined by the Secretary) to produce or utilize geothermal steam in commercial quantities for such lease, given the then current economic conditions.

(i) Payments in lieu of commercial quantities production

(1) To meet the payments in lieu of commercial quantities production requirement referred to in subsection (g)(1)(A) of this section the lessee must agree to the modification of the terms and conditions of the lease to require annual payments to the Secretary in accordance with this subsection.

(2) Payments under this subsection shall commence with the first year of the extension. Payments shall be equal to the following:

(A) In each of the first through the fifth payment years, at least \$3.00 per acre or fraction thereof, of lands under lease.

¹ So in original. Probably should be capitalized.

(B) In each of the sixth through the tenth payment years, at least \$6.00 per acre or fraction thereof, of lands under lease.

(3) Failure to make the payments required by this subsection shall subject the lease to cancellation.

(4) No payments made pursuant to this subsection shall be required after the earlier of the following:

(A) The date of termination of the lease.

(B) The date of relinquishment of the lease.

(C) The date geothermal steam is produced or utilized in commercial quantities from the lease.

(5) No payments made pursuant to this subsection shall be used to reduce rentals or future production royalties.

(j) Significant expenditure

(1) To meet the significant expenditure requirement referred to in subsection (g)(1)(B) of this section the lessee must demonstrate to the Secretary on an annual basis during an extension that a significant expenditure of funds is being made on the lease.

(2) The following expenditures made by the lessee shall qualify as meeting the requirement of this subsection:

(A) Expenditures to conduct actual drilling operations on the lease, such as for exploratory or development wells, or geochemical or geophysical surveys for exploratory or development wells.

(B) Expenditures for road or generating facilities construction on the lease.

(C) Architectural or engineering services procured for the design of generating facilities to be located on the lease.

(D) Environmental studies required by State or Federal law.

(3) Expenditures shall be equal to the following:

(A) In each of the first through the fifth years, at least \$15.00 per acre or fraction thereof, of lands under lease.

(B) In each of the sixth through the tenth years, at least \$18.00 per acre or fraction thereof, of lands under lease.

(4) Failure to make the expenditures required by this subsection shall subject the lease to cancellation.

(5) No expenditures made pursuant to this subsection shall be required after the date geothermal steam is produced or utilized in commercial quantities from the lease.

(6) Expenditures made pursuant to this subsection shall be in lieu of any minimum per acre diligent exploration expenditure requirement in effect for the lease at the end of its primary term, or at the end of any extension provided by subsection (c) of this section, as the case may be.

(Pub. L. 91-581, §6, Dec. 24, 1970, 84 Stat. 1568; Pub. L. 100-443, §§2(b), 3, Sept. 22, 1988, 102 Stat. 1766.)

REFERENCES IN TEXT

The Mineral Leasing Act of February 25, 1920, referred to in subsec. (e), is act Feb. 25, 1920, ch. 85, 41

Stat. 437, as amended, known as the Mineral Leasing Act, which is classified generally to chapter 3A (§181 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 181 of this title and Tables.

The Mineral Leasing Act for Acquired Lands, referred to in subsec. (e), is act Aug. 7, 1947, ch. 513, 61 Stat. 913, as amended, which is classified generally to chapter 7 (§351 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 351 of this title and Tables.

The mining laws of the United States, referred to in subsec. (f), are classified generally to this title.

The Multiple Mineral Development Act, referred to in subsec. (f), is act Aug. 13, 1954, ch. 730, 68 Stat. 708, as amended, which is classified principally to chapter 12 (§521 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 521 of this title and Tables.

AMENDMENTS

1988—Subsec. (d). Pub. L. 100-443, §2(b), amended subsec. (d) generally. Prior to amendment, subsec. (d) read as follows: "For purposes of subsection (a) of this section, production or utilization of geothermal steam in commercial quantities shall be deemed to include the completion of one or more wells producing or capable of producing geothermal steam in commercial quantities and a bona fide sale of such geothermal steam for delivery to or utilization by a facility or facilities not yet installed but scheduled for installation not later than fifteen years from the date of commencement of the primary term of the lease."

Subsecs. (g) to (j). Pub. L. 100-443, §3, added subsecs. (g) to (j).

CONSISTENCY PROVISION

Section 9 of Pub. L. 100-443 provided that: "To the extent that any provision in this Act [see Short Title of 1988 Amendment note set out under section 1001 of this title] is inconsistent with the provisions of section 115(2) of title I of section 101(h) of Public Law 99-591 (100 Stat. 3341-264 through 100 Stat. 3341-266) [set out below], this Act shall be deemed to supersede the provisions of such section."

EXTENSION OF LEASE; LISTING, MONITORING AND PROTECTION OF SIGNIFICANT THERMAL FEATURES IN NATIONAL PARK SYSTEM; FACTORS CONSIDERED IN ISSUING OR DENYING LEASES; EFFECT ON OTHER PROVISIONS

Pub. L. 99-500, §101(h) [title I, §115], Oct. 18, 1986, 100 Stat. 1783-242, 1783-264, and Pub. L. 99-591, §101(h) [title I, §115], Oct. 30, 1986, 100 Stat. 3341-242, 3341-264, provided that:

"(1) The primary term of any geothermal lease in effect as of July 27, 1984, issued pursuant to the Geothermal [Steam] Act of 1970 (Public Law 91-581, 84 Stat. 1566, 30 U.S.C. 1001-1025) is hereby extended to December 31, 1988, if the Secretary of the Interior finds that—

"(a) a bona fide sale of the geothermal resource, from a well capable of production, for delivery to or utilization by a facility or facilities, has not been completed (1) due to administrative delays by government entities, beyond the control of the lessee, or (2) such sale would be uneconomic;

"(b) substantial investment in the development of or for the benefit of the lease has been made; and

"(c) the lease would otherwise expire prior to December 31, 1988.

"(2)(a) The Secretary of the Interior (hereinafter in this section referred to as 'the Secretary') shall publish for public comment in the Federal Register within 120 days after the date of enactment of this section [Oct. 18, 1986] a proposed list of significant thermal features within the following units of the National Park System:

"Mount Rainier National Park;

"Lassen Volcanic National Park;

“Yellowstone National Park;
 “Bering Land Bridge National Preserve;
 “Gates of the Arctic National Park and Preserve;
 “Yukon-Charley Rivers National Preserve;
 “Katmai National Park;
 “Aniakchak National Monument and Preserve;
 “Wrangell-St. Elias National Park and Preserve;
 “Glacier Bay National Park and Preserve;
 “Denali National Park and Preserve;
 “Lake Clark National Park and Preserve;
 “Hot Springs National Park;
 “Sequoia National Park;
 “Hawaii Volcanoes National Park;
 “Lake Mead National Recreation Area;
 “Big Bend National Park;
 “Olympic National Park;
 “Grand Teton National Park;
 “John D. Rockefeller, Jr. Memorial Parkway;
 “Haleakala National Park; and
 “Crater Lake National Park.

The Secretary shall include with such list the basis for his determination with respect to each thermal feature on the list. Based on public comment on such list, the Secretary is authorized to make additions to or deletions from the list. Not later than the 60th day from the date on which the proposed list was published in the Federal Register, the Secretary shall transmit the list to the Committee on Energy and Natural Resources of the Senate and the Committee on Interior and Insular Affairs of the House of Representatives together with copies of all public comments which he has received and indicating any additions to or deletions from the list with a statement of the reasons therefor and the basis for inclusion of each thermal feature on the list. The Secretary shall consider the following criteria in determining the significance of thermal features:

- “(1) size, extent, and uniqueness;
- “(2) scientific and geologic significance;
- “(3) the extent to which such features remain in a natural, undisturbed condition; and
- “(4) significance of thermal features to the authorized purposes for which the National Park System unit was created.

The Secretary shall not issue any geothermal lease pursuant to the Geothermal Steam Act of 1970 (Public Law 91-581, 84 Stat. 1566), as amended [30 U.S.C. 1001 et seq.], until such time as the Secretary has transmitted the list to the Committees of Congress as provided in this section.

“(b) The Secretary shall maintain a monitoring program for those significant thermal features listed pursuant to subsection (a) of this section.

“(c) Upon receipt of an application for a geothermal lease the Secretary shall determine on the basis of scientific evidence if exploration, development, or utilization of the lands subject to the geothermal lease application is reasonably likely to result in a significant adverse effect on a significant thermal feature listed pursuant to subsection (a) of this section. Such determination shall be subject to notice and public comment. If the Secretary determines on the basis of scientific evidence that the exploration, development, or utilization of the land subject to the geothermal lease application is reasonably likely to result in a significant adverse effect on a significant thermal feature listed pursuant to subsection (a) of this section, the Secretary shall not issue such geothermal lease. In addition, the Secretary shall withdraw from leasing under the Geothermal Steam Act of 1970, as amended, those lands, or portion thereof, subject to the application for geothermal lease, the exploration, development, or utilization of which is reasonably likely to result, based on the Secretary's determination, in a significant adverse effect on a significant thermal feature listed pursuant to subsection (a) of this section.

“(d) With respect to all geothermal leases issued after the date of enactment of this section [Oct. 18, 1986] the Secretary shall include stipulations in leases necessary to protect significant thermal features listed

pursuant to subsection (a) of this section where a determination is made based on scientific evidence that the exploration, development, or utilization of the lands subject to the lease is reasonably likely to adversely affect such significant features. Such stipulations shall include, but are not limited to:

“(1) requiring the lessee to reinject geothermal fluids into the rock formations from which they originate;

“(2) requiring the lessee to report annually to the Secretary on its activities;

“(3) requiring the lessee to continuously monitor geothermal production and injection wells; and

“(4) requiring the lessee to suspend activity, temporarily or permanently, on the lease if the Secretary determines that ongoing exploration, development, or utilization activities are having a significant adverse effect on significant thermal features listed pursuant to subsection (a) of this section until such time as the significant adverse effect is eliminated.

“(e) The Secretary of Agriculture shall consider the effects on significant thermal features of those units of the National Park System identified in subsection (a) of this section in determining whether to consent to leasing under the Geothermal Steam Act of 1970, as amended, on national forest or other lands administered by the Department of Agriculture available for leasing under the Geothermal Steam Act of 1970, as amended, including public, withdrawn, and acquired lands.

“(f) Nothing contained in this section shall affect the ban on leasing under the Geothermal Steam Act of 1970, as amended, with respect to the Island Park Known Geothermal Resources Area, as provided for in Public Law 98-473 (98 Stat. 1837) [see Tables for classification] and Public Law 99-190 (99 Stat. 1267) [see Tables for classification].

“(g) Except as provided herein, nothing contained in this section shall affect or modify the authorities or responsibilities of the Secretary under the Geothermal Steam Act of 1970, as amended, or any other provision of law.

“(h) The provisions of this section shall remain in effect until Congress determines otherwise.”

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 1017, 1019 of this title.

§ 1006. Acreage of geothermal lease; irregular subdivisions; State limitation; increase

A geothermal lease shall embrace a reasonably compact area of not more than two thousand five hundred and sixty acres, except where a departure therefrom is occasioned by an irregular subdivision or subdivisions. No person, association, or corporation, except as otherwise provided in this chapter, shall take, hold, own, or control at one time, whether acquired directly from the Secretary under this chapter or otherwise, any direct or indirect interest in Federal geothermal leases in any one State exceeding twenty thousand four hundred and eighty acres, including leases acquired under the provisions of section 1003 of this title.

At any time after fifteen years from December 24, 1970, the Secretary, after public hearings, may increase this maximum holding in any one State by regulation, not to exceed fifty-one thousand two hundred acres.

(Pub. L. 91-581, § 7, Dec. 24, 1970, 84 Stat. 1569.)

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 1017 of this title.

§ 1007. Readjustment of lease terms and conditions

(a) Initial readjustment; periodic intervals; notice; objections, relinquishment, and termination

The Secretary may readjust the terms and conditions, except as otherwise provided herein, of any geothermal lease issued under this chapter at not less than ten-year intervals beginning ten years after the date the geothermal steam is produced, as determined by the Secretary. Each geothermal lease issued under this chapter shall provide for such readjustment. The Secretary shall give notice of any proposed readjustment of terms and conditions, and, unless the lessee files with the Secretary objection to the proposed terms or relinquishes the lease within thirty days after receipt of such notice, the lessee shall conclusively be deemed to have agreed with such terms and conditions. If the lessee files objections, and no agreement can be reached between the Secretary and the lessee within a period of not less than sixty days, the lease may be terminated by either party.

(b) Rentals and royalties; initial readjustment; periodic intervals; limitation on increases and on royalties; notice; objections, relinquishment, and termination

The Secretary may readjust the rentals and royalties of any geothermal lease issued under this chapter at not less than twenty-year intervals beginning thirty-five years after the date geothermal steam is produced, as determined by the Secretary. In the event of any such readjustment neither the rental nor royalty may be increased by more than 50 per centum over the rental or royalty paid during the preceding period, and in no event shall the royalty payable exceed 22½ per centum. Each geothermal lease issued under this chapter shall provide for such readjustment. The Secretary shall give notice of any proposed readjustment of rentals and royalties, and, unless the lessee files with the Secretary objections to the proposed rentals and royalties or relinquishes the lease within thirty days after receipt of such notice, the lessee shall conclusively be deemed to have agreed with such terms and conditions. If the lessee files objections, and no agreement can be reached between the Secretary and the lessee within a period of not less than sixty days, the lease may be terminated by either party.

(c) Surface use, protection, or restoration of lands withdrawn or acquired for Federal agency; notice; approval of agency

Any readjustment of the terms and conditions as to use, protection, or restoration of the surface of any lease of lands withdrawn or acquired in aid of a function of a Federal department or agency other than the Department of the Interior may be made only upon notice to, and with the approval of, such department or agency.

(Pub. L. 91-581, § 8, Dec. 24, 1970, 84 Stat. 1569.)

§ 1008. Byproducts: production or use; water for beneficial uses under State water laws; substantial beneficial production or use; modification or waiver; preexisting rights of lease, claim, or permit holders

If the production, use, or conversion of geothermal steam is susceptible of producing a valuable byproduct or byproducts, including commercially demineralized water for beneficial uses in accordance with applicable State water laws, the Secretary shall require substantial beneficial production or use thereof unless, in individual circumstances he modifies or waives this requirement in the interest of conservation of natural resources or for other reasons satisfactory to him. However, the production or use of such byproducts shall be subject to the rights of the holders of preexisting leases, claims, or permits covering the same land or the same minerals, if any.

(Pub. L. 91-581, § 9, Dec. 24, 1970, 84 Stat. 1570.)

§ 1009. Relinquishment of geothermal rights; effective date; release of lessee or his surety or bond; exceptions

The holder of any geothermal lease at any time may make and file in the appropriate land office a written relinquishment of all rights under such lease or of any legal subdivision of the area covered by such lease. Such relinquishment shall be effective as of the date of its filing. Thereupon the lessee shall be released of all obligations thereafter accruing under said lease with respect to the lands relinquished, but no such relinquishment shall release such lessee, or his surety or bond, from any liability for breach of any obligation of the lease, other than an obligation to drill, accrued at the date of the relinquishment, or from the continued obligation, in accordance with the applicable lease terms and regulations, (1) to make payment of all accrued rentals and royalties, (2) to place all wells on the relinquished lands in condition for suspension or abandonment, and (3) to protect or restore substantially the surface and surface resources.

(Pub. L. 91-581, § 10, Dec. 24, 1970, 84 Stat. 1570.)

§ 1010. Suspension of operations and production; extension of lease term for period of suspension; waiver, suspension or reduction of rental or royalty

The Secretary, upon application by the lessee, may authorize the lessee to suspend operations and production on a producing lease and he may, on his own motion, in the interest of conservation suspend operations on any lease but in either case he may extend the lease term for the period of any suspension, and he may waive, suspend, or reduce the rental or royalty required in such lease.

(Pub. L. 91-581, § 11, Dec. 24, 1970, 84 Stat. 1570.)

§ 1011. Termination of leases; grounds; notice; correction of violations; hearing; correction period after administrative decision

Leases may be terminated by the Secretary for any violation of the regulations or lease

terms after thirty days notice provided that such violation is not corrected within the notice period, or in the event the violation is such that it cannot be corrected within the notice period then provided that lessee has not commenced in good faith within said notice period to correct such violation and thereafter to proceed diligently to correct such violation. Lessee shall be entitled to a hearing on the matter of such claimed violation or proposed termination of lease if request for a hearing is made to the Secretary within the thirty-day period after notice. The period for correction of violation or commencement to correct such violation of regulations or of lease terms, as aforesaid, shall be extended to thirty days after the Secretary's decision after such hearing if the Secretary shall find that a violation exists.

(Pub. L. 91-581, §12, Dec. 24, 1970, 84 Stat. 1570.)

§ 1012. Waiver, suspension, or reduction of rental or royalty

The Secretary may waive, suspend, or reduce the rental or royalty for any lease or portion thereof in the interests of conservation and to encourage the greatest ultimate recovery of geothermal resources, if he determines that this is necessary to promote development or that the lease cannot be successfully operated under the lease terms.

(Pub. L. 91-581, §13, Dec. 24, 1970, 84 Stat. 1570.)

§ 1013. Surface land use for production, utilization, and conservation of geothermal resources

Subject to the other provisions of this chapter, a lessee shall be entitled to use so much of the surface of the land covered by his geothermal lease as may be found by the Secretary to be necessary for the production, utilization, and conservation of geothermal resources.

(Pub. L. 91-581, §14, Dec. 24, 1970, 84 Stat. 1571.)

§ 1014. Lands subject to geothermal leasing

(a) Terms and conditions for lands withdrawn or acquired for Department of the Interior

Geothermal leases for lands withdrawn or acquired in aid of functions of the Department of the Interior may be issued only under such terms and conditions as the Secretary may prescribe to insure adequate utilization of the lands for the purposes for which they were withdrawn or acquired.

(b) Consent and terms and conditions for lands withdrawn or acquired for Department of Agriculture or for lands for power and related purposes

Geothermal leases for lands withdrawn or acquired in aid of functions of the Department of Agriculture may be issued only with the consent of, and subject to such terms and conditions as may be prescribed by, the head of that Department to insure adequate utilization of the lands for the purposes for which they were withdrawn or acquired. Geothermal leases for lands to which section 818 of title 16 is applicable, may be issued only with the consent of, and subject to, such terms and conditions as the Secretary of

Energy may prescribe to insure adequate utilization of such lands for power and related purposes.

(c) Exemption of certain Federal lands

Geothermal leases under this chapter shall not be issued for lands administered in accordance with (1) sections 1, 2, 3, and 4 of title 16, as amended or supplemented, (2) for lands within a national recreation area, (3) for lands in a fish hatchery administered by the Secretary, wildlife refuge, wildlife range, game range, wildlife management area, waterfowl production area, or for lands acquired or reserved for the protection and conservation of fish and wildlife that are threatened with extinction, (4) for tribally or individually owned Indian trust or restricted lands, within or without the boundaries of Indian reservations.

(Pub. L. 91-581, §15, Dec. 24, 1970, 84 Stat. 1571; Pub. L. 95-91, title III, §301(b), title VII, §§703, 707, Aug. 4, 1977, 91 Stat. 578, 606, 607.)

TRANSFER OF FUNCTIONS

"Secretary of Energy" substituted for "Federal Power Commission" in subsec. (b) pursuant to sections 301(b), 703, and 707 of Pub. L. 95-91, which are classified to sections 7151(b), 7293, and 7297 of Title 42, The Public Health and Welfare, and which terminated Federal Power Commission and transferred its functions (with certain exceptions) to Secretary of Energy.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 1002 of this title.

§ 1015. Citizenship requirement for lessees

Leases under this chapter may be issued only to citizens of the United States, associations of such citizens, corporations organized under the laws of the United States or of any State or the District of Columbia, or governmental units, including, without limitation, municipalities.

(Pub. L. 91-581, §16, Dec. 24, 1970, 84 Stat. 1571.)

§ 1016. Administration; multiple use of lands and resources; coexistence of other leases; reciprocal and reasonable operational interference between geothermal and other leases

Administration of this chapter shall be under the principles of multiple use of lands and resources, and geothermal leases shall, insofar as feasible, allow for coexistence of other leases of the same lands for deposits of minerals under the laws applicable to them, for the location and production of claims under the mining laws, and for other uses of the areas covered by them. Operations under such other leases or for such other uses, however, shall not unreasonably interfere with or endanger operations under any lease issued pursuant to this chapter, nor shall operations under leases so issued unreasonably interfere with or endanger operations under any lease, license, claim, or permit issued pursuant to the provisions of any other Act.

(Pub. L. 91-581, §17, Dec. 24, 1970, 84 Stat. 1571.)

REFERENCES IN TEXT

The mining laws, referred to in text, are classified generally to this title.

§ 1017. Cooperative or unit plan of development or operation of geothermal pool, field, or like area; public interest; determination and certification; regulations; protection of parties in interest; authority respecting rate of prospecting, development, and production; five year review; leases excepted from control for purposes of State acreage limitation

For the purpose of properly conserving the natural resources of any geothermal pool, field, or like area, or any part thereof, lessees thereof and their representatives may unite with each other, or jointly or separately with others, in collectively adopting and operating under a cooperative or unit plan of development or operation of such pool, field, or like area, or any part thereof, whenever this is determined and certified by the Secretary to be necessary or advisable in the public interest. The Secretary may in his discretion and with the consent of the holders of leases involved, establish, alter, change, revoke, and make such regulations with reference to such leases in connection with the institution and operation of any such cooperative or unit plan as he may deem necessary or proper to secure reasonable protection of the public interest. He may include in geothermal leases a provision requiring the lessee to operate under such a reasonable cooperative or unit plan, and he may prescribe such a plan under which such lessee shall operate, which shall adequately protect the rights of all parties in interest, including the United States. Any such plan may, in the discretion of the Secretary, provide for vesting in the Secretary or any other person, committee, or Federal or State agency designated therein, authority to alter or modify from time to time the rate of prospecting and development and the quantity and rate of production under such plan. All leases operated under any such plan approved or prescribed by the Secretary shall be excepted in determining holdings or control for the purposes of section 1006 of this title.

No more than five years after approval of any cooperative or unit plan of development or operation, and at least every five years thereafter, the Secretary shall review each such plan and, after notice and opportunity for comment, eliminate from inclusion in such plan any lease or part of a lease not regarded as reasonably necessary to cooperative or unit operations under the plan. In the case of a cooperative or unit plan approved before September 22, 1988, the Secretary shall complete such review and elimination within 5 years after September 22, 1988. Such elimination shall be based on scientific evidence, and shall occur only when it is determined by the Secretary to be for the purpose of conserving and properly managing the geothermal resource. Any lease or part of a lease so eliminated shall be eligible for an extension under subsection (c) or (g) of section 1005 of this title if it separately meets the requirements for such an extension.

When separate tracts cannot be independently developed and operated in conformity with an established well-spacing or development program, any lease, or a portion thereof, may be pooled with other lands, whether or not owned

by the United States, under a communitization or drilling agreement providing for an apportionment of production or royalties among the separate tracts of land comprising the drilling or spacing unit when determined by the Secretary to be in the public interest, and operations or production pursuant to such an agreement shall be deemed to be operations or production as to each lease committed thereto.

The Secretary is hereby authorized, on such conditions as he may prescribe, to approve operating, drilling, or development contracts made by one or more lessees of geothermal leases, with one or more persons, associations, or corporations whenever, in his discretion, the conservation of natural products or the public convenience or necessity may require or the interests of the United States may be best served thereby. All leases operated under such approved operating, drilling, or development contracts, and interests thereunder, shall be excepted in determining holdings or control under section 1006 of this title.

(Pub. L. 91-581, §18, Dec. 24, 1970, 84 Stat. 1571; Pub. L. 100-443, §4, Sept. 22, 1988, 102 Stat. 1768.)

AMENDMENTS

1988—Pub. L. 100-443, §4, inserted provisions relating to five year review of plans and elimination of leases from plans.

§ 1018. Data from Federal agencies concerning conversion charges; confidential information

Upon request of the Secretary, other Federal departments and agencies shall furnish him with any relevant data then in their possession or knowledge concerning or having bearing upon fair and adequate charges to be made for geothermal steam produced or to be produced for conversion to electric power or other purposes. Data given to any department or agency as confidential under law shall not be furnished in any fashion which identifies or tends to identify the business entity whose activities are the subject of such data or the person or persons who furnished such information.

(Pub. L. 91-581, §19, Dec. 24, 1970, 84 Stat. 1572.)

§ 1019. Disposal of moneys from sales, bonuses, royalties and rentals

Subject to the provisions of section 191(b) of this title, all moneys received from the sales, bonuses, royalties and rentals under the provisions of this chapter, including the payments referred to in section 1005(i) of this title, shall be disposed of in the same manner as such moneys received pursuant to section 191 of this title or pursuant to section 355 of this title, as the case may be.

(Pub. L. 91-581, §20, Dec. 24, 1970, 84 Stat. 1572; Pub. L. 100-443, §5(a), Sept. 22, 1988, 102 Stat. 1768; Pub. L. 103-66, title X, §10202(b), Aug. 10, 1993, 107 Stat. 408.)

AMENDMENTS

1993—Pub. L. 103-66 substituted “Subject to the provisions of section 191(b) of this title, all moneys” for “All moneys”.

1988—Pub. L. 100-443 amended section generally. Prior to amendment, section read as follows: “All moneys re-

ceived under this chapter from public lands under the jurisdiction of the Secretary shall be disposed of in the same manner as moneys received from the sale of public lands. Moneys received under this chapter from other lands shall be disposed of in the same manner as other receipts from such lands."

§ 1020. Publication in Federal Register of known geothermal resource area lands; necessity of geothermal leases for development or production of geothermal resources in lands which the United States transferred with reservation of mineral rights

(a) Within one hundred and twenty days after December 24, 1970, the Secretary shall cause to be published in the Federal Register a determination of all lands which were included within any known geothermal resources area on December 24, 1970. He shall likewise publish in the Federal Register from time to time his determination of other known geothermal resources areas specifying in each case the date the lands were included in such area; and

(b) Geothermal resources in lands the surface of which has passed from Federal ownership but in which the minerals have been reserved to the United States shall not be developed or produced except under geothermal leases made pursuant to this chapter. If the Secretary of the Interior finds that such development is imminent, or that production from a well heretofore drilled on such lands is imminent, he shall so report to the Attorney General, and the Attorney General is authorized and directed to institute an appropriate proceeding in the United States district court of the district in which such lands are located, to quiet the title of the United States in such resources, and if the court determines that the reservation of minerals to the United States in the lands involved included the geothermal resources, to enjoin their production otherwise than under the terms of this chapter: *Provided*, That upon an authoritative judicial determination that Federal mineral reservation does not include geothermal steam and associated geothermal resources the duties of the Secretary of the Interior to report and of the Attorney General to institute proceedings, as hereinbefore set forth, shall cease.

(Pub. L. 91-581, §21, Dec. 24, 1970, 84 Stat. 1572.)

§ 1021. Federal exemption from State water laws

Nothing in this chapter shall constitute an express or implied claim or denial on the part of the Federal Government as to its exemption from State water laws.

(Pub. L. 91-581, §22, Dec. 24, 1970, 84 Stat. 1573.)

§ 1022. Waste, prevention; exclusiveness of provisions for acquisition of geothermal rights

(a) All leases under this chapter shall be subject to the condition that the lessee will, in conducting his exploration, development, and producing operations, use all reasonable precautions to prevent waste of geothermal steam and associated geothermal resources development in the lands leased.

(b) Rights to develop and utilize geothermal steam and associated geothermal resources underlying lands owned by the United States may

be acquired solely in accordance with the provisions of this chapter.

(Pub. L. 91-581, §23, Dec. 24, 1970, 84 Stat. 1573.)

§ 1023. Rules and regulations; scope of provisions

The Secretary shall prescribe such rules and regulations as he may deem appropriate to carry out the provisions of this chapter. Such regulations may include, without limitation, provisions for (a) the prevention of waste, (b) development and conservation of geothermal and other natural resources, (c) the protection of the public interest, (d) assignment, segregation, extension of terms, relinquishment of leases, development contracts, unitization, pooling, and drilling agreements, (e) compensatory royalty agreements, suspension of operations or production, and suspension or reduction of rentals or royalties, (f) the filing of surety bonds to assure compliance with the terms of the lease and to protect surface use and resources, (g) use of the surface by a lessee of the lands embraced in his lease, (h) the maintenance by the lessee of an active development program, and (i) protection of water quality and other environmental qualities.

(Pub. L. 91-581, §24, Dec. 24, 1970, 84 Stat. 1573.)

TRANSFER OF FUNCTIONS

Functions of Secretary of the Interior to promulgate regulations under this chapter relating to fostering of competition for Federal leases, implementation of alternative bidding systems authorized for award of Federal leases, establishment of diligence requirements for operations conducted on Federal leases, setting of rates for production of Federal leases, and specifying of procedures, terms, and conditions for acquisition and disposition of Federal royalty interests taken in kind, transferred to Secretary of Energy by section 7152(b) of Title 42, The Public Health and Welfare. Section 7152(b) of Title 42 was repealed by Pub. L. 97-100, title II, §201, Dec. 23, 1981, 95 Stat. 1407, and functions of Secretary of Energy returned to Secretary of the Interior. See House Report No. 97-315, pp. 25, 26, Nov. 5, 1981.

§ 1024. Disposal of land laws; reservation of geothermal resources and restriction on disposal of lands with geothermal resources; conveyances prior to December 24, 1970, unaffected

As to any land subject to geothermal leasing under section 1002 of this title, all laws which either (a) provide for the disposal of land by patent or other form of conveyance or by grant or by operation of law subject to a reservation of any mineral or (b) prevent or restrict the disposal of such land because of the mineral character of the land, shall hereafter be deemed to embrace geothermal steam and associated geothermal resources as a substance which either must be reserved or must prevent or restrict the disposal of such land, as the case may be. This section shall not be construed to affect grants, patents, or other forms of conveyances made prior to December 24, 1970.

(Pub. L. 91-581, §25, Dec. 24, 1970, 84 Stat. 1573.)

§ 1025. Federal reservation of certain mineral rights; extraction of minerals without substantial interference with geothermal production

The United States reserves the ownership of and the right to extract under such rules and regulations as the Secretary may prescribe oil, hydrocarbon gas, and helium from all geothermal steam and associated geothermal resources produced from lands leased under this chapter in accordance with presently applicable laws: *Provided*, That whenever the right to extract oil, hydrocarbon gas, and helium from geothermal steam and associated geothermal resources produced from such lands is exercised pursuant to this section, it shall be exercised so as to cause no substantial interference with the production of geothermal steam and associated geothermal resources from such lands.

(Pub. L. 91-581, §27, Dec. 24, 1970, 84 Stat. 1574.)

§ 1026. Significant thermal features

(a) Units of National Park System

(1) The Secretary shall maintain a list of significant thermal features, as defined in section 1001(f) of this title, within units of the National Park System, including but not limited to the following units:

- (A) Mount Rainier National Park.
- (B) Crater Lake National Park.
- (C) Yellowstone National Park.
- (D) John D. Rockefeller, Jr. Memorial Parkway.
- (E) Bering Land Bridge National Preserve.
- (F) Gates of the Arctic National Park and Preserve.
- (G) Katmai National Park.
- (H) Aniakchak National Monument and Preserve.
- (I) Wrangell-St. Elias National Park and Preserve.
- (J) Lake Clark National Park and Preserve.
- (K) Hot Springs National Park.
- (L) Big Bend National Park (including that portion of the Rio Grande National Wild Scenic River within the boundaries of Big Bend National Park).
- (M) Lassen Volcanic National Park.
- (N) Hawaii Volcanoes National Park.
- (O) Haleakala National Park.
- (P) Lake Mead National Recreation Area.

(2) The Secretary may, after notice and public comment, add significant thermal features within units of the National Park System to the significant thermal features list.

(3) The Secretary shall consider the following criteria in determining the significance of thermal features:

- (A) Size, extent and uniqueness.
- (B) Scientific and geologic significance.
- (C) The extent to which such features remain in a natural, undisturbed condition.
- (D) Significance of thermal features to the authorized purposes for which the National Park System unit was established.

(b) Monitoring program

(1) The Secretary shall maintain a monitoring program for significant thermal features within units of the National Park System.

(2) As part of the monitoring program required by paragraph (1), the Secretary shall establish a research program to collect and assess data on the geothermal resources within units of the National Park System with significant thermal features. Such program shall be carried out by the National Park Service in cooperation with the U.S. Geological Survey and shall begin with the collection and assessment of data for significant thermal features near current or proposed geothermal development and shall also include such features near areas of potential geothermal development.

(c) Lease application; adverse effect

(1) Upon receipt of an application for a lease under this chapter, the Secretary shall determine on the basis of scientific evidence if exploration, development or utilization of the lands subject to the lease application is reasonably likely to result in a significant adverse effect on a significant thermal feature within a unit of the National Park System. Such determination shall be subject to notice and public comment.

(2) If the Secretary determines that the exploration, development or utilization of the land subject to the lease application is reasonably likely to result in a significant adverse effect on a significant thermal feature within a unit of the National Park System, the Secretary shall not issue such lease.

(3) The Secretary shall not issue any lease under this chapter for those lands, or portions thereof, which are the subject of a determination made pursuant to subparagraph (2).

(d) Lease stipulations

With respect to all leases or drilling permits issued, extended, renewed or modified under this chapter, the Secretary shall include stipulations in such leases and permits necessary to protect significant thermal features within units of the National Park System where the Secretary determines that, based on scientific evidence, the exploration, development or utilization of the land subject to the lease or drilling permit is reasonably likely to adversely affect any such significant thermal feature. Stipulations shall include, but not be limited to—

- (1) requiring the lessee to reinject geothermal fluids into the rock formations from which they originate;
- (2) requiring the lessee to report annually to the Secretary on activities taken on the lease;
- (3) requiring the lessee to continuously monitor geothermal steam and associated geothermal resources production and injection wells; and
- (4) requiring the lessee to suspend activity on the lease if the Secretary determines that ongoing exploration, development or utilization activities are having a significant adverse effect on a significant thermal feature within a unit of the National Park System until such time as the significant adverse effect is eliminated. The stipulation shall provide for the termination of the lease by the Secretary if the significant adverse effect cannot be eliminated within a reasonable period of time.

(e) Lands administered by Department of Agriculture

The Secretary of Agriculture shall consider the effects on significant thermal features with-

in units of the National Park System in determining whether to consent to leasing under this chapter on national forest lands or other lands administered by the Department of Agriculture available for leasing under this chapter, including public, withdrawn, and acquired lands.

(f) Prohibition

Nothing in this chapter shall affect the ban on leasing under this chapter with respect to the Island Park Geothermal Area, as designated by the map in the "Final Environmental Impact Statement of the Island Park Geothermal Area" (January 15, 1980, p. XI), and provided for in Public Law 98-473.

(Pub. L. 91-581, §28, as added Pub. L. 100-443, §6, Sept. 22, 1988, 102 Stat. 1769.)

REFERENCES IN TEXT

Public Law 98-473, referred to in subsec. (f), is Pub. L. 98-473, Oct. 12, 1984, 98 Stat. 1837, as amended. For complete classification of this Act to the Code, see Tables.

CORWIN SPRINGS KNOWN GEOTHERMAL RESOURCE AREA STUDY

Section 8 of Pub. L. 100-443 provided that:

"(a) The United States Geological Survey, in consultation with the National Park Service, shall conduct a study on the impact of present and potential geothermal development in the vicinity of Yellowstone National Park on the thermal features within the park. The area to be studied shall be the lands within the Corwin Springs Known Geothermal Resource Area as designated in the July 22, 1975, Federal Register (Fed. Reg. Vol. 40, No. 141). The study shall be transmitted to Congress no later than December 1, 1990.

"(b) Any production from existing geothermal wells or any development of new geothermal wells or other facilities related to geothermal production is prohibited in the Corwin Springs Known Geothermal Resource Area until 180 days after the receipt by Congress of the study provided for in subsection (a) of this section.

"(c) The Secretary may not issue, extend, renew or modify any geothermal lease or drilling permit pursuant to the Geothermal Steam Act of 1970 (30 U.S.C. 1001-1025) in the Corwin Springs Known Geothermal Resource Area until 180 days after the receipt by Congress of the study provided for in section 8(a) of this Act. This section shall not be construed as requiring such leasing activities subsequent to the 180 days after study submittal.

"(d) If the Secretary determines that geothermal drilling and related activities within the area studied pursuant to subsection (a) of this section may adversely affect the thermal features of Yellowstone National Park, the Secretary shall include in the study required under subsection (a) of this section recommendations regarding the acquisition of the geothermal rights necessary to protect such thermal resources and features."

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 1001 of this title.

§ 1027. Lands subject to prohibition on leasing

The Secretary shall not issue any lease under this chapter on those lands subject to the prohibition provided under section 226-3 of this title.

(Pub. L. 91-581, §29, as added Pub. L. 100-443, §5(d), Sept. 22, 1988, 102 Stat. 1769.)

§ 1028. Hot dry rock geothermal energy

(a) USGS program

The Secretary of the Interior, acting through the United States Geological Survey, and in

consultation with the Secretary of Energy, shall establish a cooperative Government-private sector program with respect to hot dry rock geothermal energy resources on public lands (as such term is defined in section 1702(e) of title 43) and lands managed by the Department of Agriculture, other than any such public or other lands that are withdrawn from geothermal leasing. Such program shall include, but shall not be limited to, activities to identify, select, and classify those areas throughout the United States that have a high potential for hot dry rock geothermal energy production and activities to develop and disseminate information regarding the utilization of such areas for hot dry rock energy production. Such information may include information regarding field test processes and techniques for assuring that hot dry rock geothermal energy development projects are developed in an economically feasible manner without adverse environmental consequences. Utilizing the information developed by the Secretary, together with information developed in connection with other related programs carried out by other Federal agencies, the Secretary, acting through the United States Geological Survey, may also enter into contracts and cooperative agreements with any public or private entity to provide assistance to any such entity to enable such entity to carry out additional projects with respect to the utilization of hot dry rock geothermal energy resources which will further the purposes of this section.

(b) Authorization of appropriations

There are authorized to be appropriated such sums as may be necessary¹ to carry out this section.

(Pub. L. 102-486, title XXV, §2501, Oct. 24, 1992, 106 Stat. 3101.)

CODIFICATION

Section was enacted as part of the Energy Policy Act of 1992, and not as part of the Geothermal Steam Act of 1970 which comprises this chapter.

CHAPTER 24—GEOTHERMAL ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION

Sec.

- 1101. Congressional findings.
- 1102. Definitions.

SUBCHAPTER I—GEOTHERMAL ENERGY COORDINATION AND MANAGEMENT PROJECT

- 1121. Formation of Project.
 - (a) Establishment.
 - (b) Composition; members and chairman.
 - (c) Responsibility for geothermal energy research, development, and demonstration program.
 - (d) Allocation of functions to certain agencies; loaning of personnel.
 - (e) Exclusive authority of the Project.
- 1122. Program definition.
- 1123. Resource inventory and assessment program.
- 1124. Research and development.
- 1125. Geothermal demonstration plants and projects.
 - (a) Design and construction.
 - (b) Establishment of demonstration projects.

¹ So in original. Probably should be "necessary".