

Geothermal Systems GLO1730
Principles and Case Histories
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97TH CONGRESS
1ST SESSION

S. 669

To amend the existing geothermal leasing and permitting laws, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 10 (legislative day, FEBRUARY 16), 1981

Mr. JACKSON introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To amend the existing geothermal leasing and permitting laws,
and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That this Act may be cited as the "Geothermal Steam Act
4 Amendments of 1981".

5 **PURPOSE**

6 SEC. 101. It is the purpose of this Act to—

7 (1) effect a major overhaul of Federal geothermal
8 leasing procedures to support a significant acceleration

1 in the development of geothermal resources on Federal
2 lands;

3 (2) modify the Geothermal Steam Act of 1970 to
4 facilitate and require diligent exploration and develop-
5 ment of geothermal resource leaseholds;

6 (3) assure competition in the geothermal industry;
7 and

8 (4) protect nationally significant thermal features
9 in national parks and monuments.

10 SEC. 102. As used in this title, "Act" means the Geo-
11 thermal Steam Act of 1970 (Public Law 91-581).

12 SEC. 103. Subsection 2(c) of the Act is amended by
13 deleting therefrom the words "steam and associated geother-
14 mal", and adding thereto after the word "brines" in the first
15 instance in which it appears, the phrase "geopressured
16 water, magma, and hot rock formations".

17 SEC. 104. Subsection 2(d) of the Act is amended by
18 deleting therefrom the word "steam" in both instances in
19 which it appears, and substituting therefor the word "re-
20 sources" in each instance.

21 SEC. 105. Section 2 of the Act is amended by deleting
22 subsection (e) and inserting the following:

23 "(e) 'known geothermal resources area' means an
24 area designated by the Secretary as known geothermal
25 resources area prior to October 1, 1979, under this

1 Act, or an area for which there is substantial physical
2 evidence including but not limited to the geology of or
3 a discovery on such lands, which would, in the opinion
4 of the Secretary, engender a belief in persons who are
5 experienced in the subject matter that the prospects for
6 extraction of geothermal resources for the primary pur-
7 pose of generating electricity in commercial quantities
8 warrant substantial expenditures for that purpose.

9 "Any known geothermal resources area which re-
10 ceives no bids when offered for sale shall be declassi-
11 fied and leased to the first noncompetitive applicant:
12 *Provided, That the Secretary's authority to reclassify*
13 *such lands as known geothermal resources areas at a*
14 *later date on the basis of new information shall not be*
15 *affected."*

16 SEC. 106. Section 3 of the Act is amended by deleting
17 therefrom the words "steam and associated geothermal", by
18 deleting the words "and (3)", and by adding in their place the
19 following: "(3) in any lands withdrawn or acquired in aid of
20 the functions of any department or agency of the Federal
21 Government, including the Department of Defense, and (4)".

22 SEC. 107. (a) Section 4 of the Act is amended by delet-
23 ing the first two sentences thereof and replacing them with
24 the following: "Lands subject to leasing under this Act shall

1 be leased or offered for lease in the manner described in this
2 section.

3 “(a) If the Secretary determines that lands within a
4 known geothermal resources area are to be leased, the Secre-
5 tary shall seek to offer them for lease to the highest qualified
6 bidder by competitive sale within eighteen months after
7 nomination in writing from any qualified bidder. No person
8 may submit in any calendar year such nominations for lands
9 exceeding fifty-one thousand two hundred acres in any State:
10 *Provided*, That the Secretary may permit a person to nomi-
11 nate more than fifty-one thousand two hundred acres in a
12 given year if he determines, based on ecological, technical, or
13 geologic evidence, that this is justified. The Secretary shall
14 attempt to offer 10 per centum of all lands offered for sale in
15 any year on a basis other than cash bonus bidding, employing
16 those bidding systems set forth in section 8(a)(1) of the Outer
17 Continental Shelf Lands Act, as amended (43 U.S.C. 1335).

18 “(b)(1) Any qualified person may apply for a lease on
19 lands not within a known geothermal resources area. If the
20 Secretary determines that the lands are to be leased, the Sec-
21 retary shall seek to offer them for lease to the applicant
22 within eighteen months of initial application except as pro-
23 vided below.

24 “(2) The Secretary may deny issuance of a lease. A
25 statement of the reasons for any decision not to lease shall be

1 made public within eighteen months of nomination or applica-
2 tion in the event the requested or nominated tract is not of-
3 fered.

4 “(3) The Secretary shall provide for expedited process-
5 ing of lease applications for which the applicant provides sig-
6 nificant evidence of readiness to commence exploration or de-
7 velopment operations.

8 “(c) Subsections (a) and (b) of this section shall take
9 effect with respect to all applications filed with the Secretary
10 on or after the date of the enactment of the Geothermal
11 Steam Act Amendments of 1980. In the case of applications
12 for geothermal leases for lands which were not or are not
13 designated by the Secretary as known geothermal resources
14 areas within eighteen months after the application, the origi-
15 nal first qualified applicant shall be entitled to a lease on a
16 noncompetitive basis if a lease is issued, regardless of any
17 subsequent known geothermal resources area designation. If
18 an applicant conducts exploration activities which result in
19 geothermal resource discoveries sufficient to require known
20 geothermal resources area designation also covering lands for
21 which his lease application was made prior to such discover-
22 ies, he shall be entitled to the lease on a noncompetitive basis
23 of lands covered by any application in the known geothermal
24 resources area, if a lease is issued, regardless of such discov-

1 ery or an expression of competitive interest made after the
2 discovery.

3 “(d) Notwithstanding the first sentence of section 4(a),
4 any qualified person first making application for a geothermal
5 lease of lands under this Act (which are designated by the
6 Secretary as known geothermal resources areas on the date
7 of such application, but which are so designated within eight-
8 een months after the date of such application) shall be enti-
9 tled to a noncompetitive lease of such lands, if a lease is
10 issued, under this subsection at a rate determined on the
11 basis of competitive bidding. No person otherwise entitled to
12 a lease of such lands under such competitive bidding (herein-
13 after in this section referred to as the competitive bidding
14 applicant) shall be entitled to a lease covering such lands if
15 the noncompetitive applicant referred to in this subsection
16 agrees to enter into a lease of such lands within such reason-
17 able period following the competitive bidding as the Secre-
18 tary deems appropriate and at a rate which is equal on a per
19 acre basis, to the rate at which such lands would have been
20 leased to the competitive bidding applicant.

21 “(e) In the case of applications for geothermal leases
22 under this Act of any lands which were not designated by the
23 Secretary as a known geothermal resources area before the
24 date of enactment of this section, if such applications were
25 filed with the Secretary before such date of enactment but

1 were not approved or rejected by the Secretary before such
2 date, the qualified person first making application for such a
3 lease shall be entitled to a lease of such lands, if a lease is so
4 issued, without competitive bidding notwithstanding the first
5 sentence of section 4(a) unless such lands are so designated
6 within eighteen months after the date of enactment of this
7 Act. If such lands are so designated within such eighteen-
8 month period, such applicant shall be entitled to a noncom-
9 petitive lease of such lands under this subsection at a rate
10 determined on the basis of competitive bidding. No competi-
11 tive bidding applicant shall be entitled to a lease covering
12 such lands if the noncompetitive applicant referred to in this
13 subsection agrees to enter into a lease of such lands within
14 such reasonable period following the competitive bidding as
15 the Secretary deems appropriate and at a rate which is pro-
16 portionate, on a per acre basis, to the rate at which such
17 lands would have been leased to the competitive bidding ap-
18 plicant.

19 “(f) The Secretary may allow exploration and testing
20 activities on lands subject to wilderness study under section
21 603 of the Federal Land Policy and Management Act of
22 1976 (43 U.S.C. 1782) and on lands within the National
23 Forest System which have been identified in Executive Com-
24 munication Numbered 1504, Ninety-sixth Congress for fur-
25 ther planning. Such exploration and testing activities shall be

1 deemed not to impair the suitability of the lands involved for
2 inclusion in the National Wilderness Preservation System.
3 The Secretary shall include in the lease stipulations to assure
4 that exploration and testing activities do not permanently
5 impair the wilderness values of the lands subject to such ac-
6 tivities.

7 “(g)(1) The Secretary shall to the maximum extent
8 practicable, develop within one year after enactment of this
9 section uniform national, State, and regional standards and
10 criteria to employ in deciding whether to approve or deny
11 permits for exploration and testing of geothermal resources
12 under this Act. Such standards shall be incorporated in and
13 coordinated with land use management plans.

14 “(2) To the maximum extent possible, any requirements
15 of section 102(2)(C) of the National Environmental Policy
16 Act applicable to any such exploration and testing activities
17 shall be deemed to be satisfied by any action by the Secretary
18 pursuant to such section 102(2)(C) during the establishment
19 of the procedures required by this subsection and application
20 of these standards and criteria to such exploration and testing
21 activities on a case-by-case basis.”.

22 SEC. 108. Subsection 5(d) of the Act is amended by
23 deleting therefrom the words “steam and byproduct” and
24 substituting therefor the word “resources”.

1 SEC. 109. Subsection 6(a) of the Act is amended by
2 deleting therefrom the words "steam is" in both instances
3 and by substituting therefor in both instances "resources
4 are".

5 SEC. 110. Subsection 6(b) of the Act is amended by
6 deleting therefrom the words "steam is" and substituting
7 therefor the words "geothermal resources are".

8 SEC. 111. Subsection 6(c) of the Act is amended by
9 deleting the words "steam is" in both instances in which they
10 appear, substituting therefor the words "resources are" in
11 the first instance, and substituting therefor the words "geo-
12 thermal resources are" in the second instance.

13 SEC. 112. Subsection 6(d) of the Act is amended by
14 adding, after the words "delivery to or utilization by" the
15 following: ", or in the case of utilization facilities to be owned
16 by the lessee, proof of commitment to construct".

17 SEC. 113. Subsections 6(d) and 6(e) of the Act are
18 amended by deleting the word "steam" wherever it appears
19 and substituting the word "resources" in each instance.

20 SEC. 114. Section 6(f) of the Act is amended by deleting
21 therefrom the words "steam and associated geothermal".

22 SEC. 115. (a) Section 7 of the Act is amended by strik-
23 ing out "twenty thousand four hundred and eighty" and in-
24 serting in lieu thereof "fifty-one thousand two hundred".

1 (b) Section 7 of the Act is further amended by striking
2 out the second paragraph and by adding in lieu thereof the
3 following: "Any lease which contains a well shown to be
4 capable of being commercially productive as determined by
5 the United States Geological Survey shall be exempted from
6 the acreage limitation contained in the preceding sentence."

7 SEC. 116. Section 8 of the Act is amended by deleting
8 therefrom the words "steam is" in both instances in which
9 they appear, and substituting therefor the words "resources
10 are" in both instances; and by deleting the word "ten" in
11 both instances in which it appears and inserting in lieu
12 thereof the word "twenty" in both instances.

13 SEC. 117. Section 9 of the Act is amended by deleting
14 therefrom the word "steam" and substituting therefor the
15 word "resources".

16 SEC. 118. (a) Section 15(b) of the Act is amended by
17 adding at the end thereof the following: "Geothermal leases
18 for lands withdrawn or acquired in aid of functions of the
19 Department of Defense may be issued only with the consent
20 of, and subject to such terms and conditions as may be pre-
21 scribed by, the head of that Department to insure adequate
22 utilization of the lands for the purpose for which they were
23 withdrawn or acquired. The Secretary shall consult with the
24 head of any other Federal agency or department for whose
25 purposes lands have been withdrawn or acquired to deter-

1 mine appropriate terms or conditions prior to issuing leases
2 for such lands.”.

3 (b) Section 15 of the Act is amended by adding new
4 subsections (d) and (e) as follows:

5 “(d) The head of the Federal agency or department
6 which administers land leased or subject to leasing shall, in
7 making decisions affecting the purchase, exchange, leasing,
8 protection, and use of said or adjacent lands, take account of
9 their potential for geothermal resources development.”.

10 SEC. 119. Section 19 of the Act is amended by deleting
11 therefrom the word “steam” and substituting therefor the
12 word “resources”.

13 SEC. 120. Section 23 of the Act is amended by deleting
14 the words “steam and associated geothermal” in both in-
15 stances in which they appear, and by adding after subsection
16 23(b) the following paragraphs:

17 “(c) Notwithstanding any other provision of this Act,
18 the Secretary is authorized, and directed, pursuant to such
19 regulations as he shall promulgate, to grant at no cost a
20 permit for use of a geothermal resource to the surface owner
21 or lawful occupant of lands subject to this Act, if the use of
22 the geothermal resource is direct by such person in a resi-
23 dence, farm, or small business property, does not involve any
24 generation of electricity, does not involve sale of the resource
25 in commerce, does not involve commercial development of

1 the resource, and involves only relatively small quantities of
2 such resource. The use of the geothermal resource pursuant
3 to such a permit shall not be inconsistent with any lease
4 issued pursuant to this Act prior to the grant of the permit.
5 Any lease issued subsequent to the grant of such permit
6 shall, to the maximum extent practicable, not be inconsistent
7 with such permit. The granting of a permit pursuant to this
8 section shall not be subject to the requirements of section
9 102(2)(C) of the National Environmental Policy Act.

10 “(d) The head of each agency may develop for the use
11 or benefit of his respective agency any geothermal energy
12 resource within lands under his jurisdiction: *Provided*, That
13 the head of such agency shall determine in writing, after con-
14 sultation with the Department of the Interior and the De-
15 partment of Energy and after opportunity for public comment
16 (after publication in the Federal Register and a newspaper of
17 general publication in the vicinity), that such utilization is in
18 the public interest, and will not deter commercial develop-
19 ment (except commercial development solely or primarily
20 based on the sale of the geothermal resource to such agency)
21 which might otherwise be conducted for such resource if it
22 were offered for lease under this Act. Such Federal agency
23 shall be authorized to sell or transfer at a reasonable rate
24 incidental quantities of the geothermal resource to the sur-
25 rounding community. If no further development by commer-

1 cial interests occurs after a reasonable period of time, such
2 Federal agency may sell or transfer at reasonable rates to the
3 surrounding community such quantities of the geothermal re-
4 source as may be available from the production and are in
5 excess of the requirements of the agency.”.

6 SEC. 121. Section 24 is amended by designating the
7 present provisions as subsection (a) redesignating (a), (b), (c),
8 (d), (e), (f), (g), (h), and (i), as (i), (ii), (iii), (iv), (v), (vi), (vii),
9 (viii), and (ix), and by adding the following:

10 “(b) The Secretary shall seek to make a decision on any
11 permit to conduct drilling of exploratory or development
12 wells, within one hundred and fifty days after the filing of
13 such application: The Secretary shall seek to make a decision
14 on a complete application to conduct development activities
15 within nine months of application. The Secretary may for
16 good cause extend the period for a decision on any permit or
17 application for an additional period determined to be reason-
18 able in specific cases, not to exceed ninety days.

19 In the event of any such extension—

20 (i) the payment of rental shall be suspended for
21 the period of the extension; and

22 (ii) the running time of the lease shall be
23 suspended for the nine months or one hundred and fifty
24 days, as the case may be, plus the period of the exten-
25 sion.

1 Such suspensions shall not include any delay resulting from a
2 failure on the part of the applicant to satisfy the requirements
3 for an application.

4 “(c) A lease application shall be reviewed and an initial
5 report prepared within sixty days of filing, indicating the re-
6 sults of the initial review, what disposition is proposed, and
7 the projected time to complete action on the application.

8 “(d) A permit application, pursuant to a lease, shall be
9 reviewed and an initial report prepared within sixty days of
10 filing, indicating the results of the initial review, what dispo-
11 sition is proposed, and the projected time to complete action
12 on the application.

13 “(e) The Secretary shall establish requirements for dili-
14 gent operations which shall require that a plan of operations
15 for exploration shall be filed within three years of the issu-
16 ance of a lease. The diligence requirements shall also provide
17 that drilling shall commence no later than two years after
18 approval of such plan or two years after a drilling permit has
19 been approved, whichever is later. The Secretary may pro-
20 vide for the aggregation of diligence requirements on lease
21 tracts within a geothermal prospect. The running time of the
22 diligence requirements established in this subsection shall be
23 suspended for periods of unreasonable delay caused by a les-
24 see's inability to obtain State or Federal permits (with the

1 exception of permits issued by the Department of the Interi-
2 or) through no fault of his own.”.

3 SEC. 122. Sections 25, 26, and 27 of the Act are
4 amended by deleting therefrom the words “steam and associ-
5 ated geothermal” in each instance in which they appear.

6 SEC. 123. Section 5(a) of the Act is amended by—

7 (i) adding after the words “per centum” the first
8 time they appear the following: “(or, in the case of
9 nonelectric uses, 5 per centum)”; and

10 (ii) adding at the end thereof the following: “The
11 Secretary may defer royalty payments for nonelectric
12 geothermal developments when it is deemed to be in
13 the public interest, for municipal, cooperative, or other
14 political subdivision lessees where legal limitations on
15 front-end financing otherwise would prohibit or signifi-
16 cantly deter development.”.

17 SEC. 124. Section 15 of the Act is amended by adding a
18 new subsection (f) to read as follows:

19 “(f)(1) With respect to lands within national parks or
20 monuments, the Secretary shall identify within one hundred
21 and eighty days after enactment of the Geothermal Steam
22 Act Amendments of 1980, and publish in the Federal Regis-
23 ter, a list of nationally significant thermal features located on
24 such lands, and shall periodically update such list to include
25 newly emergent or newly discovered nationally significant

1 thermal features, thermal features which gain national sig-
2 nificance through changes in patterns of their use or of their
3 perceived scientific importance, and nationally significant
4 thermal features of new national parks or monuments. The
5 Secretary's determination shall be by formal rulemaking with
6 a complete description of such feature and a full justification
7 for its designation. The Secretary shall submit his determina-
8 tions to the Congress. The Secretary will in such publication
9 describe geographic zones outside the boundaries of national
10 parks and monuments where development of geothermal re-
11 sources may affect nationally significant thermal features,
12 based on review of presently available data or reasonable in-
13 ferences therefrom, and may, from time to time, amend the
14 boundaries of such zones in conformity to newly available
15 data. Any designation pursuant to this section may be re-
16 viewed, modified, and revoked upon the determination that
17 new information or circumstances support such action. For
18 the purpose of this subsection, the term "nationally signifi-
19 cant thermal feature" means a natural surface manifestation
20 of geothermal activity or a complex of such manifestations,
21 which is a feature the park unit involved was intended in its
22 establishment to protect, or which has since been recognized
23 as a park resource of national significance.

24 “(2) The Secretary may issue geothermal leases on Fed-
25 eral lands within geographic zones described pursuant to

1 paragraph (1) only upon review of the best geological, hydro-
2 logical, and other relevant evidence reasonably obtainable
3 and only upon his determination that exploration activities
4 pursuant to a geothermal lease on such Federal lands will not
5 have a foreseeably significant adverse effect on nationally
6 significant geothermal features. The Secretary may further
7 impose conditions and stipulations in such leases necessary to
8 limit activities to those which will not so affect nationally
9 significant thermal features. Any lease in effect within the
10 geographic zone established pursuant to a designation of a
11 nationally significant thermal feature pursuant to (1) above as
12 of the date of the determination by the Secretary of such
13 designation shall be exempt from the application of this
14 subsection.

15 “(3) Subject to valid existing loans, grants, and licenses,
16 a department or agency of the United States shall not grant
17 or issue a loan, grant, or license required for the exploration
18 or development of geothermal resources within the
19 geographic zones identified, or on non-Federal lands within
20 national park or monument boundaries, unless the depart-
21 ment or agency, following consultation with the Secretary of
22 the Interior, determines, in accordance with the standards,
23 provisions, limitations, and authorities applied above to geo-
24 thermal leases on Federal lands, that activities so assisted

1 would not have a foreseeably significant adverse effect on
2 nationally significant thermal features.

3 “(4) Prior to the issuance of any geothermal leases in a
4 zone defined in this subsection adjacent to Yellowstone Na-
5 tional Park, Mount Rainier National Park, or Lassen Volcan-
6 ic National Park, the Secretary of the Interior shall
7 determine that (1) a valuable geothermal resource exists and
8 (2) development of the potential geothermal resource will
9 not adversely affect the unique thermal features of these
10 parks.”.

11 SEC. 125. The Act is further amended by addition of
12 new section 28, as follows:

13 “SEC. 28. The Secretary shall immediately implement
14 the following new leasing and operating procedures, which
15 shall be effective upon enactment of the Geothermal Steam
16 Act Amendments of 1980.

17 “(a) Lease application information shall indicate
18 clearly and concisely all requirements for information and
19 action by the applicant necessary for timely processing of the
20 application, the responsible officials with their respective re-
21 sponsibilities and contact information, the specific steps in the
22 process, the time frames for such steps, and any options or
23 appeals available to the applicant, among any other relevant
24 information. To the maximum extent feasible, all require-
25 ments for information and action by the applicant, such as

1 the geothermal resources exploration bond form and such
2 bonding, shall be uniform among the several departments.

3 “(b) Any lease application or permit application already
4 filed and pending on the date of enactment of the Geothermal
5 Steam Act Amendments of 1980 shall be subject to the time
6 frames established in this Act, as if the filing date of such
7 applications occurred on the date of enactment of the Geo-
8 thermal Steam Act Amendments of 1980: *Provided, however,*
9 That this subsection shall not be used to delay any earlier
10 processing of such applications, and all such pending applica-
11 tions shall receive the highest priority in the implementation
12 of this section.

13 “(c) The Secretary shall, in the preparation of any envi-
14 ronmental assessment or environmental impact statement re-
15 quired by the National Environmental Policy Act for any
16 action under this Act, to the maximum extent feasible, utilize
17 any relevant information contained in an applicable and avail-
18 able land management plan developed pursuant to the Fed-
19 eral Land Policy and Management Act or in an applicable
20 and available forest management plan pursuant to the Na-
21 tional Forest Management Act. This subsection shall not be
22 construed as a requirement to delay any environmental as-
23 sessment, or consideration of such an assessment, otherwise
24 complete in the opinion of the Secretary, to include or
25 consider additional information contained in any such land

1 management plan or such forest management plan, or under
2 development of such a plan.”.

3 SEC. 126. Section 4 of the Act is amended by inserting
4 the following before the word “Notwithstanding”:

5 “(h) A reasonable number of leasing tracts, not to
6 exceed 10 per centum of the acreage leased in any year, shall
7 be offered on the basis of a specific application for such tract
8 in accordance with this section to public bodies, including
9 rural electric cooperatives, or nonprofit corporations con-
10 trolled by and predominantly made up of any of such entities:
11 *Provided*, That the geothermal resource so offered for lease
12 shall be predominantly for use by such entity or entities in
13 implementing a definite plan to produce energy for their own
14 use or for sale to their members or customers (except for
15 short-term sales to others). In carrying out the provisions of
16 this subsection, the Secretary shall not consider expressions
17 of interest by public bodies in lands after (i) in the case of
18 lands not within a known geothermal resources area, the
19 thirty-day filing period for a tract has expired and there is a
20 valid pending noncompetitive lease application, or (ii) in the
21 case of lands within a known geothermal resources area,
22 thirty days prior to the offering of a tract for lease.”.

23 SEC. 127. The Act is amended by inserting after section
24 10 the following new section:

1 “SEC. 10A. (a) Notwithstanding any provision of the
2 Department of Energy Organization Act (42 U.S.C. 7101 et
3 seq.), the Secretary, immediately upon the enactment of the
4 Geothermal Resources Act Amendments of 1980, shall pro-
5 mulgate regulations that will ensure prompt reoffering of all
6 relinquished, abandoned, and expired geothermal leaseholds.

7 “(b) Upon a determination by the Secretary that a geo-
8 thermal leasehold or any part thereof is abandoned, relin-
9 quished, or expired, such lands as are described in the lease,
10 or the part thereof subject to such a determination, shall
11 become lands subject to geothermal leasing as described in
12 section 4.

13 “(c) The provisions of this section are in addition to and
14 not in lieu of the provisions of sections 10 and 24.”.

15 SEC. 128. The Secretary shall prescribe such rules and
16 regulations, or amendments to existing rules and regulations,
17 as may be necessary to reflect the amendments made by the
18 Geothermal Steam Act Amendments of 1980 within one
19 hundred and eighty days after the date of enactment of the
20 Geothermal Steam Act Amendments of 1980.

21 SEC. 129. Section 18 of the Act is amended by adding
22 at the end thereof the following: “Once a lease enters a unit,
23 the diligence requirements of this Act for that lease shall be
24 satisfied by compliance with diligence requirements on any
25 lease within the unit as long as the lease remains within the

1 unit. This does not affect the Secretary's authority to require
2 compliance with an approved exploration or development
3 plan for a unit.".

○

97TH CONGRESS
1ST SESSION

H. R. 4067

To amend the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) to expedite exploration and development of geothermal resources.

IN THE HOUSE OF REPRESENTATIVES

JUNE 26, 1981

NY
Mr. SANTINI (for himself and Mr. MARRIOTT) introduced the following bill; which was referred to the Committee on Interior and Insular Affairs

A BILL

To amend the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) to expedite exploration and development of geothermal resources.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et
4 seq.) is amended as follows:

5 SECTION 1. This Act may be cited as the "Geothermal
6 Steam Act of 1981".

7 SEC. 2. Whenever an amendment or repeal contained in
8 this Act is expressed in terms of amendment to, or repeal of,

1 a section or other provision of "the Act," such reference shall
2 be considered a reference to an amendment to, or repeal of, a
3 section or other provision of the Geothermal Steam Act of
4 1970 (30 U.S.C. 1001 et seq.; Public Law 91-581).

5 SEC. 3. Section 3(2) of the Act is amended to read as
6 follows: "(2) in any lands administered by another Federal
7 agency or department, including public, withdrawn, or ac-
8 quired lands."

9 SEC. 4. Section 2(e) of the Act is amended to read as
10 follows:

11 "(e) 'known geothermal resource area' means an
12 area in which there is substantial physical evidence in-
13 cluding but not limited to the geology or a discovery
14 on such lands, which would, in the opinion of the Sec-
15 retary, engender a belief in persons experienced in the
16 subject matter that the prospects for extraction of geo-
17 thermal resources for the primary purpose of generat-
18 ing electricity in commercial quantities warrant sub-
19 stantial expenditures for that purpose."

20 SEC. 5. Section 4 of the Act is amended—

21 (a) by deleting the first two sentences, and insert-
22 ing in lieu thereof the following:

23 "SEC. 4. (a) If lands to be leased under this Act are
24 within any known geothermal resource area, they shall be
25 leased to the highest responsible qualified bidder by competi-

1 tive bidding. Any lands so offered and receiving no bids shall
2 be declassified and leased to the first qualified applicant: *Pro-*
3 *vided*, That the Secretary's authority to reclassify such lands
4 as a known geothermal resource area at a later date on the
5 basis of new evidence shall not be affected.

6 “(b) If the lands to be leased are not within any known
7 geothermal resource area, the qualified person first making
8 application for the lease shall be entitled to a lease of such
9 lands without competitive bidding, provided the lands applied
10 for are not designated a known geothermal resource area
11 within one year of the application being filed and before a
12 lease is issued. If an application is rejected due to a known
13 geothermal resource area designation of the lands within one
14 year of the application being filed, the applicant shall have
15 the opportunity to match the highest competitive bid for the
16 parcel when offered, provided the applicant submits a bona
17 fide bid at the sale. However, the applicant or lessee respon-
18 sible for the exploration resulting in the designation of lands
19 as a known geothermal resource area shall be entitled to non-
20 competitive leases for all lands in the known geothermal re-
21 source area for which the applicant or lessee had first filing
22 applications on file prior to the approval of any plan of explo-
23 ration or notice of intent to conduct geophysical explora-
24 tion.”;

1 (b) by inserting "(c)" before the word "Notwith-
2 standing" at the beginning of the next sentence; and

3 (c) by redesignating subsections "(a)" through
4 "(f)" as paragraphs "(1)" through "(6)".

5 SEC. 6. Section 5(a) of the Act is amended to read as
6 follows:

7 "(a) a royalty of not less than 10 per centum or
8 more than 15 per centum in the case of electrical gen-
9 eration, or of not less than 5 per centum or more than
10 10 per centum in the case of nonelectrical utilization,
11 of the amount or value, as utilized, of steam, heat, or
12 other form of energy derived from production under the
13 lease and sold or utilized by the lessee or reasonably
14 susceptible to sale or utilization by the lessee."

15 SEC. 7. Section 6(d) of the Act is amended to read as
16 follows:

17 "(d) For purposes of subsection (a) of this section, pro-
18 duction or utilization of geothermal resources in commercial
19 quantities shall be deemed to include the completion of one or
20 more producing or producible wells and either a bona fide
21 sale for delivery to a facility or facilities installed or to be
22 installed not later than fifteen years from the commencement
23 date of the lease, or in the case of utilization by the lessee,
24 proof of commitment to construct such utilization facilities.
25 However, in the event construction of the facility or facilities

1 has not been possible due to administrative delays beyond the
2 control of the lessee or due to the demonstrated marginal
3 economics of such a facility or facilities, and substantial in-
4 vestment in development of the lease has been made, the
5 Secretary will consider an additional extension of the ex-
6 tended primary lease term of up to 10 years: *Provided*, That
7 the lessee be required to submit annual reports detailing bona
8 fide efforts to resolve the administrative delays or to bring
9 the facility or facilities into economic production.”

10 SEC. 8. Section 7 of the Act is amended to read as
11 follows:

12 “SEC. 7. (a) A geothermal lease shall embrace a reason-
13 ably compact area of not more than two thousand five hun-
14 dred and sixty acres, except where a departure therefrom is
15 occasioned by an irregular subdivision or subdivisions. No
16 person, association, or corporation, except as otherwise pro-
17 vided in this Act, shall take, hold, own, or control at any one
18 time, any direct or indirect interest in Federal geothermal
19 leases in any one State exceeding fifty-one thousand two
20 hundred acres.

21 “(b) At any time after fifteen years from the effective
22 date of the Geothermal Steam Act of 1970, the Secretary,
23 after public hearings, may increase this maximum holding in
24 any one State by regulation, not to exceed one hundred fif-
25 teen thousand two hundred acres.

1 “(c) Any leases which contain a well shown to be capa-
2 ble of commercial production and any lease operated under
3 an approved operating, drilling, or development contract as
4 authorized under section 18 of this Act shall be excepted in
5 determining holdings or control under this section.”.

6 SEC. 9. Section 8(a) of the Act is amended to read as
7 follows:

8 “SEC. 8. (a) The Secretary may adjust the terms and
9 conditions, except as otherwise provided herein, of any geo-
10 thermal lease issued under this Act at not less than twenty-
11 year intervals beginning twenty years after the date produc-
12 tion is commenced, as determined by the Secretary. Each
13 geothermal lease issued under this Act shall provide for such
14 readjustment. The Secretary shall give notification of any
15 proposed readjustment of terms and conditions, and, unless
16 the lessee files with the Secretary objection to the proposed
17 terms or relinquishes the lease within thirty days after receipt
18 of such notice, the lessee shall conclusively be deemed to
19 have agreed with such terms and conditions. If the lessee
20 files objections, and no agreement can be reached between
21 the Secretary and the lessee within a period of not less than
22 sixty days, the lease may be relinquished by the lessee, or
23 following appropriate judicial proceedings, canceled by the
24 Secretary.”.

1 SEC. 10. Section 15(b) of the Act is amended to read as
2 follows:

3 “(b) The Secretary shall consult with the head of any
4 other Federal agency or department with respect to lands
5 under its jurisdiction to determine appropriate terms or condi-
6 tions prior to issuing leases for such lands. However, as to
7 acquired lands of other Federal agencies or departments, the
8 Secretary shall not issue leases on those lands without the
9 consent of the head of that agency or department. The head
10 of the Federal agency or department which administers any
11 land which is subject to a geothermal lease or which is avail-
12 able for geothermal leasing, shall, in making land use deci-
13 sions regarding such land or adjacent lands, consider their
14 potential for geothermal resource development.”.

15 SEC. 11. The Act is further amended by adding the fol-
16 lowing subsection after 15(c):

17 “(d)(1)(A) The Secretary shall establish and maintain a
18 fifteen-mile-wide buffer zone around Yellowstone National
19 Park, subject to modification under subparagraph (C), in
20 which no leases shall be issued on Federal lands: *Provided,*
21 *however,* That the Secretary may issue geothermal leases
22 within an area within the Island Park caldera described as
23 follows:

1 "BOISE MERIDIAN, IDAHO

2 "Township 10 North, Range 43 East

3 "Section 2, lot 4;

4 "Section 3, lots 1 through 4, and southwest quarter
5 northwest quarter;

6 "Section 4, lots 1 through 4, south half north half, north
7 half southwest quarter, and northwest quarter southeast
8 quarter;

9 "Section 5, All.

10 "Township 11 North, Range 43 East

11 "Sections 1 through 5;

12 "Sections 8 through 17;

13 "Sections 20 through 29;

14 "Sections 32 through 35;

15 "Section 36, north half north half, southwest quarter
16 northeast quarter, south half northwest quarter, north half
17 southwest quarter, and northwest quarter southeast quarter.

18 Township 11 North, Range 44 East

19 "Section 5, west half;

20 "Sections 6 and 7;

21 "Section 8, west half west half, and northeast quarter
22 northwest quarter;

23 "Section 18, lots 1 through 4, east half west half, west
24 half east half, and east half northeast quarter;

25 "Section 19, west half northeast quarter, and west half;

1 "Section 30, west half northwest quarter, and north-
2 west quarter southwest quarter.

3 "Township 12 North, Range 43 East

4 "Sections 1 through 5;

5 "Sections 8 through 17;

6 "Sections 20 through 29;

7 "Sections 32 through 36.

8 Township 12 North, Range 44 East

9 "Section 6, lots 4 through 7, east half southwest quar-
10 ter, and south half southeast quarter;

11 "Section 7, All;

12 "Section 8, west half northeast quarter, southeast quar-
13 ter northeast quarter, west half, and southeast quarter;

14 "Section 9, west half southwest quarter;

15 "Section 16, northwest quarter, and west half south-
16 west quarter;

17 "Sections 17 through 19;

18 "Section 20, north half, southwest quarter, and west
19 half southeast quarter;

20 "Section 29, northwest quarter northeast quarter,
21 northwest quarter, north half southwest quarter, and south-
22 west quarter southwest quarter;

23 "Sections 30 and 31;

24 "Section 32, west half west half.

1 "Township 13 North, Range 43 East

2 "Section 25, southwest quarter southwest quarter;

3 "Section 26, south half south half;

4 "Section 27, south half south half;

5 "Section 28, lot 8;

6 "Section 32, lots 1 through 5, southwest quarter north-
7 east quarter, south half northwest quarter, southwest quar-
8 ter, and west half southeast quarter;

9 "Sections 33 through 35;

10 "Section 36, southwest quarter northeast quarter,
11 northwest quarter, and south half.

12 "Township 13 North, Range 44 East

13 "Section 31, lot 4.

14 "Aggregating approximately 51,415.272 acres.

15 The Secretary shall require lessees within that area to (i)
16 implement monitoring programs to detect any significant ad-
17 verse effects on the nationally significant thermal features of
18 Yellowstone National Park, and (ii) take such other actions
19 as may be necessary to protect those nationally significant
20 thermal features.

21 "(B) The Secretary shall establish and maintain a one-
22 mile-wide buffer zone along the southern border of Lassen
23 Volcanic National Park, subject to modification under sub-
24 paragraph (C), in which no leases shall be issued on Federal
25 lands.

1 “(C) The Secretary may issue geothermal leases outside
2 of the buffer zones established in subparagraphs (A) and (B),
3 and may require lessees to implement monitoring programs
4 to detect any significant adverse effects on the nationally sig-
5 nificant thermal features of Yellowstone and Lassen Volcanic
6 National Parks. The Secretary may use information obtained
7 through operation of such monitoring programs to modify the
8 buffer zone established in subparagraph (A) around Yellow-
9 stone National Park and the buffer zone established in sub-
10 paragraph (B) around Lassen Volcanic National Park. If at
11 any time it is determined that exploration, development, or
12 production activities on a lease are likely causing significant
13 adverse effects on any nationally significant thermal features
14 within these parks, and mitigating actions are not possible,
15 the Secretary shall immediately order a cessation of the ac-
16 tivities causing the effects.

17 “(2) Any action seeking judicial review of a decision of
18 the Secretary pursuant to this subsection may only be
19 brought within sixty days following the date the decision of
20 the Secretary is announced and made public. Any action shall
21 be barred unless a petition is filed within the time specified.
22 Any such petition shall be filed in the appropriate United
23 States district court. Notwithstanding the amount in contro-
24 versy, such court shall have jurisdiction to determine such
25 proceedings in accordance with the procedures hereinafter

1 provided, and to provide appropriate relief. Any such pro-
2 ceeding shall be assigned for hearing at the earliest possible
3 date, and shall be expedited in every way by such court. No
4 court shall have jurisdiction to grant any injunctive relief
5 against the issuance of any permit, lease, or other authority
6 pursuant to this Act, except as a part of a final judgment
7 entered in a case involving a claim filed regarding this
8 section.”.

9 SEC. 12. Section 23 of the Act is amended by adding
10 after subsection (b) the following:

11 “(c) Where the Secretary finds it in the public interest,
12 the Secretary is authorized, subject to section 15(c), to issue
13 permits for the use of geothermal resources in lands adminis-
14 tered by him for any noncommercial application without re-
15 quiring a lease or compensation therefor. No such free use
16 permit may be issued for the purpose of generating electricity
17 in any amount.

18 “(d) In any case in which the Federal interest in any
19 geothermal energy research and development facility, pilot
20 plant, or demonstration facility which utilizes geothermal re-
21 sources from lands subject to the provisions of this Act is
22 transferred to any person, corporation, municipality, or
23 agency, the Secretary is authorized, notwithstanding any
24 other provision of this Act, to issue at no cost, a permit al-
25 lowing necessary surface use and utilization of geothermal

1 resources sufficient, in the Secretary's opinion, for the contin-
2 ued operation of such plant or facility for the operating life of
3 the project.

4 “(e) The head of each Federal agency may develop for
5 the use or benefit of such agency any geothermal energy re-
6 source within lands under its jurisdiction. The head of such
7 agency shall determine in writing, with the concurrence of
8 the Department of the Interior, that such utilization is in the
9 public interest, and will not deter commercial development
10 which might otherwise be more beneficial to the public if the
11 lands were offered for leasing under this Act.”

12 SEC. 13. The Act is further amended by making the
13 following technical changes:

14 (a) Section 2(c) of the Act is amended by striking out
15 “steam and associated geothermal” and by inserting after
16 “brines” in the first place it appears, the following: “geopres-
17 sured water, magma, and hot rock formations”.

18 (b) Section 2(d) of the Act is amended by striking out
19 “steam” in both places it appears and inserting in lieu there-
20 of “resources”.

21 (c) Section 3 of the Act is amended by striking out
22 “steam and associated geothermal” in both places it appears.

23 (d) Section 5(d) of the Act is amended by striking out
24 “steam and byproduct” and inserting in lieu thereof “re-
25 sources”.

1 (c) Section 6(a) of the Act is amended by striking out
2 "steam is" in both places it appears and inserting in lieu
3 thereof "resources are".

4 (f) Section 6(b) of the Act is amended by striking out
5 "steam is" and inserting in lieu thereof "geothermal re-
6 sources are".

7 (g) Section 6(c) of the Act is amended by striking out
8 "steam is" in the first place it appears and inserting in lieu
9 thereof "resources are," and by striking out "steam is" in
10 the second place it appears and inserting in lieu thereof "geo-
11 thermal resources are".

12 (h) Sections 6 (d) and (e) of the Act are amended by
13 striking out "steam" in each place it appears and inserting in
14 lieu thereof "resources".

15 (i) Section 6(f) of the Act is amended by striking out
16 "steam and associated goethermal".

17 (j) Section 8 of the Act is amended by striking out
18 "steam is" in both places it appears and inserting in lieu
19 thereof "resources are".

20 (k) Section 9 of the Act is amended by striking out
21 "steam" and inserting in lieu thereof "resources".

22 (l) Section 19 of the Act is amended by striking out
23 "steam" and inserting in lieu thereof "resources".

24 (m) Section 23 of the Act is amended by striking out
25 "steam and associated geothermal" in both places it appears.

1 (n) Section 25 of the Act is amended by striking out
2 "steam and associated geothermal".

3 (o) Section 26 of the Act is amended by striking out
4 "steam and associated geothermal".

5 (p) Section 27 of the Act is amended by striking out
6 "steam and associated geothermal" in the three places it ap-
7 pears.

8 SEC. 14. A new section is added to the Act as follows:

9 "(a) The Secretary may issue leases and allow explora-
10 tion and testing activities on lands subject to wilderness
11 study under section 603 of the Federal Land Policy and Man-
12 agement Act of 1976 (43 U.S.C. 1782), and on lands within
13 the national forest system which have been identified by the
14 President for further land use planning. Such exploration and
15 testing activities shall be deemed not to impair the suitability
16 of the lands involved for inclusion in the National Wilderness
17 Preservation System. The Secretary shall include in any
18 lease issued, stipulations to ensure that exploration and test-
19 ing activities will not permanently impair the wilderness
20 values of the lands subject to such activities.

21 "(b) For purposes of section 4(d)(3) of the Wilderness
22 Act of 1964 (16 U.S.C. 1131 et seq.), this Act, as amended,
23 shall be deemed a law pertaining to mineral leasing."

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