

116TH CONGRESS  
1ST SESSION

# S. 2270

To amend the Geothermal Steam Act of 1970 to promote timely exploration for geothermal resources under geothermal leases, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

JULY 25, 2019

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

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## A BILL

To amend the Geothermal Steam Act of 1970 to promote timely exploration for geothermal resources under geothermal leases, 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 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Enhancing Geothermal  
5 Production on Federal Lands Act”.

6 **SEC. 2. GEOTHERMAL PRODUCTION ON FEDERAL LANDS.**

7 The Geothermal Steam Act of 1970 (30 U.S.C. 1001  
8 et seq.) is amended by adding at the end the following:

1 **“SEC. 30. GEOTHERMAL EXPLORATION TEST PROJECTS.**

2       “(a) DEFINITION OF GEOTHERMAL EXPLORATION  
3 TEST PROJECT.—In this section, the term ‘geothermal ex-  
4 ploration test project’ means the drilling of a well to test  
5 or explore for geothermal resources on lands for which the  
6 Secretary has issued a lease under this Act, that—

7           “(1) is carried out by the holder of the lease;

8           “(2) causes—

9               “(A) less than 5 acres of soil or vegetation  
10 disruption at the location of each geothermal  
11 exploration well; and

12               “(B) not more than an additional 5 acres  
13 of soil or vegetation disruption during access or  
14 egress to the test site;

15           “(3) is developed—

16               “(A) less than 9 inches in diameter;

17               “(B) in a manner that does not require  
18 off-road motorized access other than to and  
19 from the well site along an identified off-road  
20 route;

21               “(C) without construction of new roads  
22 other than upgrading of existing drainage cross-  
23 ings for safety purposes;

24               “(D) with the use of rubber-tired digging  
25 or drilling equipment vehicles; and

1           “(E) without the use of high-pressure well  
2           stimulation;

3           “(4) is completed in less than 90 days, includ-  
4           ing the removal of any surface infrastructure from  
5           the site; and

6           “(5) requires the restoration of the project site  
7           within 3 years of the date of first exploration drilling  
8           to approximately the condition that existed at the  
9           time the project began, unless the site is subse-  
10          quently used as part of energy development under  
11          the lease.

12          “(b) CATEGORICAL EXCLUSION.—

13           “(1) IN GENERAL.—Unless extraordinary cir-  
14           cumstances exist, a project that the Secretary deter-  
15           mines under subsection (c) is a geothermal explo-  
16           ration test project shall be categorically excluded  
17           from the requirements for an environmental assess-  
18           ment or an environmental impact statement under  
19           the National Environmental Policy Act of 1969 (42  
20           U.S.C. 4321 et seq.) or section 1508.4 of title 40,  
21           Code of Federal Regulations (or a successor regula-  
22           tion).

23           “(2) EXTRAORDINARY CIRCUMSTANCES DEFINI-  
24           TION.—In this subsection, the term ‘extraordinary  
25           circumstances’ has the same meaning given such

1 term in the Department of the Interior Depart-  
2 mental Manual, 516 DM 2.3A(3) and 516 DM 2,  
3 Appendix 2 (or successor provisions).

4 “(c) PROCESS.—

5 “(1) REQUIREMENT TO PROVIDE NOTICE.—A  
6 leaseholder shall provide notice to the Secretary of  
7 the leaseholder’s intent to carry out a geothermal ex-  
8 ploration test project at least 30 days before the  
9 start of drilling under the project.

10 “(2) REVIEW AND DETERMINATION.—Not later  
11 than 10 days after receipt of a notice of intent  
12 under paragraph (1), the Secretary shall, with re-  
13 spect to the project described in the notice of in-  
14 tent—

15 “(A) determine if the project qualifies for  
16 a categorical exclusion under subsection (b);  
17 and

18 “(B) notify the leaseholder of such deter-  
19 mination.

20 “(3) OPPORTUNITY TO REMEDY.—If the Sec-  
21 retary determines under paragraph (2)(A) that the  
22 project does not qualify for a categorical exclusion  
23 under subsection (b), the Secretary shall—

1           “(A) include in such notice clear and de-  
2           tailed findings on any deficiencies in the project  
3           that resulted in such determination; and

4           “(B) allow the leaseholder to remedy any  
5           such deficiencies and resubmit the notice of in-  
6           tent under paragraph (1).”.

7 **SEC. 3. GEOTHERMAL LEASING PRIORITY AREAS.**

8           The Geothermal Steam Act of 1970 (30 U.S.C. 1001  
9 et seq.) is further amended by adding at the end the fol-  
10 lowing:

11 **“SEC. 31. GEOTHERMAL LEASING PRIORITY AREAS.**

12           “(a) DEFINITION OF COVERED LAND.—In this sec-  
13 tion, the term ‘covered land’ means land that is—

14           “(1) Federal land; and

15           “(2) not excluded from the development of geo-  
16 thermal energy under—

17           “(A) a land use plan established under the  
18 Federal Land Policy and Management Act of  
19 1976 (43 U.S.C. 1701 et seq.); or

20           “(B) any other Federal law.

21           “(b) DESIGNATION OF GEOTHERMAL LEASING PRI-  
22 ORITY AREAS.—The Secretary, in consultation with the  
23 Secretary of Energy, shall designate portions of covered  
24 land as geothermal leasing priority areas as soon as prac-

1 ticable, but not later than 5 years, after the date of the  
2 enactment of this section.

3 “(c) CRITERIA FOR SELECTION.—In determining  
4 which covered lands to designate as geothermal leasing  
5 priority areas under subsection (b), the Secretary, in con-  
6 sultation with the Secretary of Energy, shall consider if—

7 “(1) the covered land is preferable for geo-  
8 thermal leasing;

9 “(2) production of geothermal energy on such  
10 land is economically viable, including if such land  
11 has access to methods of energy transmission; and

12 “(3) the designation would be in compliance  
13 with section 202 of the Federal Land Policy and  
14 Management Act of 1976 (43 U.S.C. 1712), includ-  
15 ing subsection (c)(9) of that section.

16 “(d) REVIEW AND MODIFICATION.—Not less fre-  
17 quently than once every 10 years, the Secretary shall—

18 “(1) review covered land and, if appropriate,  
19 make additional designations of geothermal leasing  
20 priority areas; and

21 “(2) review each area designated as a geo-  
22 thermal leasing priority area under this section, and,  
23 if appropriate, remove such designation.

24 “(e) PROGRAMMATIC ENVIRONMENTAL IMPACT  
25 STATEMENT.—

1           “(1) INITIAL DESIGNATIONS.—No later than  
2 one year after the initial designation of a geothermal  
3 leasing priority area, the Secretary shall prepare a  
4 supplement to any final programmatic environmental  
5 impact statement for geothermal leasing that is the  
6 most recently finalized such statement with respect  
7 to covered land designated as a geothermal leasing  
8 priority area under subsection (b).

9           “(2) SUBSEQUENT DESIGNATIONS.—Each des-  
10 igation of a geothermal leasing priority area under  
11 subsection (d) shall be included in a programmatic  
12 environmental impact statement for geothermal leas-  
13 ing or in a supplement to such a statement.

14           “(3) CONSULTATIONS.—In developing any pro-  
15 grammatic environmental impact statement for geo-  
16 thermal leasing or supplement to such a statement  
17 under this section, the Secretary shall consult, on an  
18 ongoing basis, with appropriate State, Tribal, and  
19 local governments, transmission infrastructure own-  
20 ers and operators, developers, and other appropriate  
21 entities.

22           “(4) PROCEDURE.—The Secretary may not  
23 delay issuing a permit or holding a lease sale under  
24 this Act because the supplement required under

1 paragraph (1) has not been finalized by the Sec-  
2 retary.

3 “(f) COMPLIANCE WITH NEPA.—If the Secretary  
4 determines that the designation of a geothermal leasing  
5 priority area has been sufficiently analyzed by a pro-  
6 grammatic environmental impact statement, the Secretary  
7 shall not prepare any additional analysis under the Na-  
8 tional Environmental Policy Act of 1969 (42 U.S.C. 4321  
9 et seq.) with respect to geothermal lease sales for such  
10 geothermal leasing priority area.”.

11 **SEC. 4. FACILITATION OF COPRODUCTION OF GEO-**  
12 **THERMAL ENERGY ON OIL AND GAS LEASES.**

13 Section 4(b) of the Geothermal Steam Act of 1970  
14 (30 U.S.C. 1003(b)) is amended by adding at the end the  
15 following:

16 “(4) LAND SUBJECT TO OIL AND GAS LEASE.—  
17 Land under an oil and gas lease issued pursuant to  
18 the Mineral Leasing Act (30 U.S.C. 181 et seq.) or  
19 the Mineral Leasing Act for Acquired Lands (30  
20 U.S.C. 351 et seq.) that is subject to an approved  
21 application for permit to drill and from which oil  
22 and gas production is occurring may be available for  
23 noncompetitive leasing under subsection (c) by the  
24 holder of the oil and gas lease—

1           “(A) on a determination that geothermal  
2 energy will be produced from a well producing  
3 or capable of producing oil and gas; and

4           “(B) in order to provide for the coproduc-  
5 tion of geothermal energy with oil and gas.”.

6 **SEC. 5. NONCOMPETITIVE LEASING OF ADJOINING AREAS**  
7 **FOR DEVELOPMENT OF GEOTHERMAL RE-**  
8 **SOURCES.**

9           Section 4(b) of the Geothermal Steam Act of 1970  
10 (30 U.S.C. 1003(b)) is further amended by adding at the  
11 end the following:

12           “(5) ADJOINING LAND.—

13           “(A) DEFINITIONS.—In this paragraph:

14           “(i) FAIR MARKET VALUE PER  
15 ACRE.—The term ‘fair market value per  
16 acre’ means a dollar amount per acre  
17 that—

18           “(I) except as provided in this  
19 clause, shall be equal to the market  
20 value per acre (taking into account  
21 the determination under subparagraph  
22 (B)(iii) regarding a valid discovery on  
23 the adjoining land) as determined by  
24 the Secretary under regulations issued  
25 under this paragraph;

1                   “(II) shall be determined by the  
2                   Secretary with respect to a lease  
3                   under this paragraph, by not later  
4                   than the end of the 180-day period  
5                   beginning on the date the Secretary  
6                   receives an application for the lease;  
7                   and

8                   “(III) shall be not less than the  
9                   greater of—

10                   “(aa) 4 times the median  
11                   amount paid per acre for all land  
12                   leased under this Act during the  
13                   preceding year; or

14                   “(bb) \$50.

15                   “(ii) INDUSTRY STANDARDS.—The  
16                   term ‘industry standards’ means the stand-  
17                   ards by which a qualified geothermal pro-  
18                   fessional assesses whether downhole or  
19                   flowing temperature measurements with  
20                   indications of permeability are sufficient to  
21                   produce energy from geothermal resources,  
22                   as determined through flow or injection  
23                   testing or measurement of lost circulation  
24                   while drilling.

1           “(iii) QUALIFIED FEDERAL LAND.—

2           The term ‘qualified Federal land’ means  
3           land that is otherwise available for leasing  
4           under this Act.

5           “(iv) QUALIFIED GEOTHERMAL PRO-

6           FESSIONAL.—The term ‘qualified geo-  
7           thermal professional’ means an individual  
8           who is an engineer or geoscientist in good  
9           professional standing with at least 5 years  
10          of experience in geothermal exploration,  
11          development, or project assessment.

12          “(v) QUALIFIED LESSEE.—The term

13          ‘qualified lessee’ means a person who may  
14          hold a geothermal lease under this Act (in-  
15          cluding applicable regulations).

16          “(vi) VALID DISCOVERY.—The term

17          ‘valid discovery’ means a discovery of a  
18          geothermal resource by a new or existing  
19          slim hole or production well, that exhibits  
20          downhole or flowing temperature measure-  
21          ments with indications of permeability that  
22          are sufficient to meet industry standards.

23          “(B) AUTHORITY.—An area of qualified

24          Federal land that adjoins other land for which  
25          a qualified lessee holds a legal right to develop

1 geothermal resources may be available for a  
2 noncompetitive lease under this section to the  
3 qualified lessee at the fair market value per  
4 acre, if—

5 “(i) the area of qualified Federal  
6 land—

7 “(I) consists of not less than 1  
8 acre and not more than 640 acres;  
9 and

10 “(II) is not already leased under  
11 this Act or nominated to be leased  
12 under subsection (a);

13 “(ii) the qualified lessee has not pre-  
14 viously received a noncompetitive lease  
15 under this paragraph in connection with  
16 the valid discovery for which data has been  
17 submitted under clause (iii)(I); and

18 “(iii) sufficient geological and other  
19 technical data prepared by a qualified geo-  
20 thermal professional has been submitted by  
21 the qualified lessee to the applicable Fed-  
22 eral land management agency that would  
23 lead individuals who are experienced in the  
24 subject matter to believe that—

1           “(I) there is a valid discovery of  
2           geothermal resources on the land for  
3           which the qualified lessee holds the  
4           legal right to develop geothermal re-  
5           sources; and

6           “(II) that geothermal feature ex-  
7           tends into the adjoining areas.

8           “(C) DETERMINATION OF FAIR MARKET  
9           VALUE.—

10           “(i) IN GENERAL.—The Secretary  
11           shall—

12           “(I) publish a notice of any re-  
13           quest to lease land under this para-  
14           graph;

15           “(II) determine fair market value  
16           for purposes of this paragraph in ac-  
17           cordance with procedures for making  
18           those determinations that are estab-  
19           lished by regulations issued by the  
20           Secretary;

21           “(III) provide to a qualified les-  
22           see and publish, with an opportunity  
23           for public comment for a period of 30  
24           days, any proposed determination  
25           under this subparagraph of the fair

1 market value of an area that the  
2 qualified lessee seeks to lease under  
3 this paragraph; and

4 “(IV) provide to the qualified les-  
5 see and any adversely affected party  
6 the opportunity to appeal the final de-  
7 termination of fair market value in an  
8 administrative proceeding before the  
9 applicable Federal land management  
10 agency, in accordance with applicable  
11 law (including regulations).

12 “(ii) LIMITATION ON NOMINATION.—  
13 After publication of a notice of request to  
14 lease land under this paragraph, the Sec-  
15 retary may not accept under subsection (a)  
16 any nomination of the land for leasing un-  
17 less the request has been denied or with-  
18 drawn.

19 “(iii) ANNUAL RENTAL.—For pur-  
20 poses of section 5(a)(3), a lease awarded  
21 under this paragraph shall be considered a  
22 lease awarded in a competitive lease sale.

23 “(D) REGULATIONS.—Not later than 270  
24 days after the date of enactment of this para-

1 graph, the Secretary shall issue regulations to  
2 carry out this paragraph.”.

○