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**SUBSTITUTE SENATE BILL 5369**

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**State of Washington                      63rd Legislature                      2013 Regular Session**

**By Senate Energy, Environment & Telecommunications** (originally sponsored by Senators Kline, King, Honeyford, and Mullet)

READ FIRST TIME 02/22/13.

1            AN ACT Relating to the use of geothermal resources; amending RCW  
2 78.60.030, 78.60.040, and 78.60.060; adding a new chapter to Title 43  
3 RCW; and creating a new section.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5            NEW SECTION.    **Sec. 1.** The legislature finds that:

6            (1) Because related geothermal resources may be present on  
7 contiguous private, state, and federal lands within the state, there is  
8 a need to provide greater conformity with the state's geothermal  
9 resources statutes and the federal statutes defining geothermal  
10 resources and clarify that ownership of geothermal resources resides  
11 with the surface owner unless the interest is otherwise reserved or  
12 conveyed.

13            (2) It is in the public interest to encourage and foster the  
14 development of geothermal resources in the state, and the legislature  
15 intends to align the state statutes defining geothermal resources with  
16 current federal law with which developers are familiar, and clarify the  
17 respective regulatory roles of state agencies.

18            (3) Geothermal resources suitable for energy development are  
19 located at much greater depths than the aquifers relied upon for other

1 beneficial uses, but in the event that a geothermal well draws from the  
2 same source as other uses, a coordinated and streamlined permitting of  
3 geothermal development can better ensure that any interference with  
4 existing water uses will be addressed and eliminated. It is the intent  
5 of this act that no water uses associated with a geothermal well impair  
6 any water use authorized through appropriation under Title 90 RCW.

7 (4) Changes to federal law in 2005 require a distribution of a  
8 portion of geothermal energy revenues from leases on federal land  
9 directly to the county in which the lease activity occurs, and  
10 therefore it is appropriate that the additional distribution to the  
11 state be provided for statewide uses relating to geothermal energy  
12 assessment, exploration, and production.

13 **Sec. 2.** RCW 78.60.030 and 1974 ex.s. c 43 s 3 are each amended to  
14 read as follows:

15 (~~For the purposes of this chapter, unless the text otherwise~~  
16 ~~requires, the following terms shall have the following meanings:~~) The  
17 definitions in this section apply throughout this chapter unless the  
18 context clearly requires otherwise.

19 (1)(a) "Geothermal resources" (~~means only that natural heat energy~~  
20 ~~of the earth from which it is technologically practical to produce~~  
21 ~~electricity commercially and the medium by which such heat energy is~~  
22 ~~extracted from the earth, including liquids or gases, as well as any~~  
23 ~~minerals contained in any natural or injected fluids, brines and~~  
24 ~~associated gas, but excluding oil, hydrocarbon gas and other~~  
25 ~~hydrocarbon substances)) includes the natural heat of the earth, the  
26 energy, in whatever form, below the surface of the earth present in,  
27 resulting from, or created by, or that may be extracted from, the  
28 natural heat, and all minerals in solution or other products obtained  
29 from naturally heated fluids, brines, associated gases and steam, in  
30 whatever form, found below the surface of the earth, exclusive of  
31 helium or oil, hydrocarbon gas or other hydrocarbon substances, but  
32 including, specifically:~~

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

35 (ii) Steam and other bases, hot water and hot brines resulting from  
36 water, gas, or other fluids artificially introduced into geothermal  
37 formations;

1        (iii) Heat or other associated energy found in geothermal  
2 formations; and

3        (iv) Any by-product derived from them.

4        (b) "Geothermal resources" does not include heat energy used in  
5 ground source heat exchange systems for ground source heat pumps.

6        (2) "Waste", in addition to its ordinary meaning, shall mean  
7 "physical waste" as that term is generally understood and shall  
8 include:

9        (a) The inefficient, excessive, or improper use of, or unnecessary  
10 dissipation of, reservoir energy; or the locating, spacing, drilling,  
11 equipping, operating or producing of any geothermal energy well in a  
12 manner which results, or tends to result, in reducing the quantity of  
13 geothermal energy to be recovered from any geothermal area in this  
14 state;

15        (b) The inefficient above-ground transporting or storage of  
16 geothermal energy; or the locating, spacing, drilling, equipping,  
17 operating, or producing of any geothermal well in a manner causing, or  
18 tending to cause, unnecessary excessive surface loss or destruction of  
19 geothermal energy;

20        (c) The escape into the open air, from a well of steam or hot  
21 water, in excess of what is reasonably necessary in the efficient  
22 development or production of a geothermal well.

23        (3) "Geothermal area" means any land that is, or reasonably appears  
24 to be, underlain by geothermal resources.

25        (4) "Energy transfer system" means the structures and enclosed  
26 fluids which facilitate the utilization of geothermal energy. The  
27 system includes the geothermal wells, cooling towers, reinjection  
28 wells, equipment directly involved in converting the heat energy  
29 associated with geothermal resources to mechanical or electrical energy  
30 or in transferring it to another fluid, the closed piping between such  
31 equipment, wells and towers and that portion of the earth which  
32 facilitates the transfer of a fluid from reinjection wells to  
33 geothermal wells: PROVIDED, That the system shall not include any  
34 geothermal resources which have escaped into or have been released into  
35 the nongeothermal ground or surface waters from either man-made  
36 containers or through leaks in the structure of the earth caused by or  
37 to which access was made possible by any drilling, re-drilling,  
38 reworking or operating of a geothermal or reinjection well.

1 (5) "Operator" means the person supervising or in control of the  
2 operation of a geothermal resource well, whether or not such person is  
3 the owner of the well.

4 (6) "Owner" means the person who possesses the legal right to  
5 drill, convert or operate any well or other facility subject to the  
6 provisions of this chapter.

7 (7) "Person" means any individual, corporation, company,  
8 association of individuals, joint venture, partnership, receiver,  
9 trustee, guardian, executor, administrator, personal representative, or  
10 public agency that is the subject of legal rights and duties.

11 (8) "Pollution" means any damage or injury to ground or surface  
12 waters, soil or air resulting from the unauthorized loss, escape, or  
13 disposal of any substances at any well subject to the provisions of  
14 this chapter.

15 (9) "Department" means the department of natural resources.

16 (10) "Well" means any excavation made for the discovery or  
17 production of geothermal resources, or any special facility, converted  
18 producing facility, or reactivated or converted abandoned facility used  
19 for the reinjection of geothermal resources, or the residue thereof  
20 underground.

21 (11) "Core holes" are holes drilled or excavations made expressly  
22 for the acquisition of geological or geophysical data for the purpose  
23 of finding and delineating a favorable geothermal area prior to the  
24 drilling of a well.

25 (12) A "completed well" is a well that has been drilled to its  
26 total depth, has been adequately cased, and is ready to be either  
27 plugged and abandoned, shut-in, or put into production.

28 (13) "Plug and abandon" means to place permanent plugs in the well  
29 in such a way and at such intervals as are necessary to prevent future  
30 leakage of fluid from the well to the surface or from one zone in the  
31 well to the other, and to remove all drilling and production equipment  
32 from the site, and to restore the surface of the site to its natural  
33 condition or contour or to such condition as may be prescribed by the  
34 department.

35 (14) "Shut-in" means to adequately cap or seal a well to control  
36 the contained geothermal resources for an interim period.

37 (15) "By-product" means any mineral or minerals, not including oil,  
38 hydrocarbon gas, or helium, which are found in solution or in

1 association with geothermal steam and that have a value of less than  
2 seventy-five percent of the value of the geothermal resource or are  
3 not, because of quantity, quality, or technical difficulties in  
4 extraction and production, of sufficient value to warrant extraction  
5 and production by themselves.

6 **Sec. 3.** RCW 78.60.040 and 1979 ex.s. c 2 s 1 are each amended to  
7 read as follows:

8 Notwithstanding any other provision of law, geothermal resources  
9 are found and hereby determined to be sui generis, being neither a  
10 mineral resource nor a water resource and as such are (~~hereby~~)  
11 declared to be the private property of the holder of the title to the  
12 surface land above the resource, unless the geothermal resources have  
13 been otherwise reserved by or conveyed to another person or entity.  
14 Nothing in this section divests the people of the state of any rights,  
15 title, or interest in geothermal resources owned by the state.

16 **Sec. 4.** RCW 78.60.060 and 2003 c 39 s 40 are each amended to read  
17 as follows:

18 (1) This chapter is intended to preempt local regulation of the  
19 drilling and operation of wells for geothermal resources but shall not  
20 be construed to permit the locating of any well or drilling when such  
21 well or drilling is prohibited under state or local land use law or  
22 regulations promulgated thereunder. Geothermal resources, by-products  
23 (~~and/or~~), or waste products which have escaped or been released from  
24 the energy transfer system (~~and/or~~) or a mineral recovery process  
25 shall be subject to provisions of state law relating to the pollution  
26 of ground or surface waters (Title 90 RCW), provisions of the state  
27 fisheries law and the state game laws (Title 77 RCW), and any other  
28 state environmental pollution control laws.

29 (2) Authorization for (~~use of by-product water resources for all~~  
30 ~~beneficial uses~~) a consumptive or nonconsumptive use of water  
31 associated with a geothermal well, for purposes including but not  
32 limited to power production, greenhouse heating, warm water fish  
33 propagation, space heating plants, irrigation, swimming pools, and hot  
34 springs baths, shall be subject to the appropriation procedure as  
35 provided in Title 90 RCW, except for the following:

1       (a) Water that is removed from an aquifer or geothermal reservoir  
2 to develop and obtain geothermal resources if the water is returned to  
3 or reinjected into the same aquifer or reservoir; or

4       (b) The reasonable loss of water:

5       (i) During a test of a geothermal well; or

6       (ii) From the temporary failure of all or part of a system that  
7 removes water from an aquifer or geothermal reservoir, transfers the  
8 heat from that water, and reinjects that water into the same aquifer or  
9 reservoir.

10       (3) The department and the department of ecology shall cooperate to  
11 avoid duplication and to promote efficiency in issuing permits and  
12 other approvals for these uses.

13       (4) Nothing in this act shall affect or operate to impair any  
14 existing water rights.

15       NEW SECTION. Sec. 5. The purpose of this chapter is to provide  
16 for the allocation of revenues distributed to the state under section  
17 35 of the Mineral Lands Leasing Act of 1920, as amended (30 U.S.C. Sec.  
18 191), with respect to activities of the United States bureau of land  
19 management undertaken pursuant to the Geothermal Steam Act of 1970 (30  
20 U.S.C. Sec. 1001 et seq.) in order to accomplish the following general  
21 objectives:

22       (1) Reduction of dependence on nonrenewable energy and stimulation  
23 of the state's economy through development of geothermal energy.

24       (2) Mitigation of the social, economic, and environmental impacts  
25 of geothermal development.

26       (3) Maintenance of the productivity of renewable resources through  
27 the investment of proceeds from these resources.

28       NEW SECTION. Sec. 6. (1) There is created the geothermal account  
29 in the state treasury. All expenditures from this account are subject  
30 to appropriation and chapter 43.88 RCW.

31       (2) All revenues received by the state treasurer under section 35  
32 of the Mineral Lands Leasing Act of 1920, as amended (30 U.S.C. Sec.  
33 191), with respect to activities of the United States bureau of land  
34 management undertaken pursuant to the Geothermal Steam Act of 1970 (30  
35 U.S.C. Sec. 1001 et seq.) shall be deposited in the geothermal account  
36 in the state treasury immediately upon receipt.

1           (3) Expenditures from the account may only be used as provided in  
2 section 7 of this act.

3           NEW SECTION.   **Sec. 7.** Distribution of funds from the geothermal  
4 account created in section 6 of this act shall be subject to the  
5 following limitations:

6           (1) Seventy percent to the department of natural resources for  
7 geothermal exploration and assessment; and

8           (2) Thirty percent to Washington State University or its statutory  
9 successor for the purpose of encouraging the development of geothermal  
10 energy.

11           NEW SECTION.   **Sec. 8.** Sections 5 through 7 of this act constitute  
12 a new chapter in Title 43 RCW.

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