

LFC Requester:	Helen Gaussoin
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**AGENCY BILL ANALYSIS
2024 REGULAR SESSION**

WITHIN 24 HOURS OF BILL POSTING, UPLOAD ANALYSIS TO:

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{Analysis must be uploaded as a PDF}

SECTION I: GENERAL INFORMATION

{Indicate if analysis is on an original bill, amendment, substitute or a correction of a previous bill}

Check all that apply:
Original **Amendment**
Correction **Substitute**

Date 1/19/24
Bill No: SB 59

Sponsor: Sen. Gerald y Pino & Rep. Patricia Roybal Caballero
Short Title: Geothermal Project Funding and Management

Agency Name and Code Number: Office of the State Engineer 550
Person Writing: Jerri Pohl
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SECTION II: FISCAL IMPACT

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Nonrecurring	Fund Affected
FY24	FY25		
\$600		Nonrecurring	General
	\$25,000	Nonrecurring	General

(Parenthesis () Indicate Expenditure Decreases)

REVENUE (dollars in thousands)

Estimated Revenue			Recurring or Nonrecurring	Fund Affected
FY24	FY25	FY26		
\$0	\$0	\$0	NA	NA

(Parenthesis () Indicate Expenditure Decreases)

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY24	FY25	FY26	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
Total	\$75	\$75	\$75	\$225	Recurring	General

(Parenthesis () Indicate Expenditure Decreases)

Duplicates/Conflicts with/Companion to/Relates to: HB 91
Duplicates/Relates to Appropriation in the General Appropriation Act: None

SECTION III: NARRATIVE

BILL SUMMARY

Synopsis:

This bill would amend the duties of the energy conservation and management division of energy, minerals and natural resources department (referred to hereafter as the “department”); create a geothermal projects development fund; authorize grants; create the geothermal projects revolving loan fund; authorize loans; and make appropriations to realize these requests.

Section 2 of this bill would add a new definition to “geothermal development project” to include a project using the heat of the earth above one hundred degrees Fahrenheit to generate or otherwise support industrial, commercial, or residential uses.

Section 3 of this bill would add additional duties to the department related to geothermal resources, excluding those laws administered by another authority, such as the office of the state engineer.

New material in Section 4 would create the geothermal projects development fund to issue grants of up to \$250,000 to study the costs and benefits of a proposed geothermal projects, and to finance the projects This Section clarifies that a grant does not exempt the recipient from any other state or United States laws and yearly reporting by the secretary to the governor, LFC and library of the legislative council services.

New material in Section 5 would create a “geothermal projects revolving loan fund” with the lowest legally permissible interest rates, and the funds would not revert back if unused and reporting requirements.

New material in Section 6 requests \$600,000 for the department expenditures for fiscal year 2025 staffing and operational expenses, the unexpended or unencumbered balance at the end of 2025 will revert funds back to the general fund. It also requests \$10,000,000 to fund the geothermal projects development fund for 2025 and subsequent funding years. It additionally requests \$15,000,000 from general fund for geothermal projects revolving loan fund for fiscal year 2025 and subsequent years. Neither of the last two requests will revert unexpended funds back to the general fund.

FISCAL IMPLICATIONS

The bill seeks to establish and fund a program to explore and develop and incentivize geothermal resources of New Mexico. If enacted, it would have a significant impact upon the Office of the State Engineer (OSE) Water Rights Division (WRD) and Hydrology Bureau. As most of the state's thermal resources lie between the temperatures of 100 and 250 degrees Fahrenheit and those waters are under the jurisdiction of the OSE pursuant to Chapter 72 NMSA, they are subject to prior appropriation system of groundwater and injection and/or recovery wells constructed for geothermal exploration and development of any found thermal resource are subject to the jurisdiction, review, and analysis of the OSE. See also Section 71-9-4.

Based upon estimates obtained from internet searches, construction for an exploratory geothermal well costs can run between \$1-6M per well, which implies that the OSE may be expected to review and approve up to 25 exploratory well designs and potentially the related water rights impairment associated with each project. This is expected to impact the OSE with an increase of an estimated half of an FTE (estimated at \$75,000 per FY).

SIGNIFICANT ISSUES

Section 4 subsection F states, "Geothermal development projects approved for a grant by the secretary of energy, minerals and natural resources under this section shall not be exempt from any required permits or permissions under New Mexico or United States law." Projects involving water below 250 degrees may require permitting with the State Engineer. See NMSA 1978, Section 71-9-4. In order to make clear that projects seeking grants are appropriately permitted, This section could include language used in Chapter 72-5A-4 regarding Ground Water Storage and Recovery projects:

- (a) shows that the project will not cause harm to users of land and water within the area of hydrologic effect;
- (b) demonstrates that the project is hydrologically feasible;
- (c) demonstrates that the project will not impair existing water rights or the state's interstate obligations;
- (d) demonstrates that the project will not be contrary to the conservation of water within the state; and
- (e) demonstrates that the project will not be detrimental to the public welfare of the state;

PERFORMANCE IMPLICATIONS

None.

ADMINISTRATIVE IMPLICATIONS

None.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

HB 91

TECHNICAL ISSUES

In Section 2, there is disagreement between the new definition in paragraph C: “‘geothermal development project’ means a project using the heat of the earth above one hundred degrees Fahrenheit...” and Paragraph E: “‘geothermal resources’ means the natural heat of the earth in excess of two hundred fifty degrees Fahrenheit...”

OTHER SUBSTANTIVE ISSUES

More data is needed to monitor the groundwater temperature as well as depth and quality. Groundwater monitoring is needed to inform the Bureau of Geology Aquifer Mapping Program. Monitoring this resource can alert officials to temperature degradation issues related to our geothermal resources.

The bill should consider having the water rights issues dealt with prior to the issuance of a monetary grant.

ALTERNATIVES

An option to remove the conflict in defining water that measures between 100 and 250 degrees Fahrenheit would be to define them as “low-temperature thermal resources”.

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

Missed opportunities to encourage private sector development of this green technology that is available to heat buildings and provide greenhouse opportunities for growing food.

AMENDMENTS

None.