

LFC Requester:**Laird Graeser**

**AGENCY BILL ANALYSIS
2024 REGULAR SESSION**

WITHIN 24 HOURS OF BILL POSTING, UPLOAD ANALYSIS TO:

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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 58

Sponsor: Senator Ortiz y Pino & Rep.
Roybal Caballero
Short Title: Geothermal Energy Generation
Tax Credit

Agency Name and Code EMNRD 521
Number: _____
Person Writing AnnaLinden Weller
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SECTION II: FISCAL IMPACT

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Nonrecurring	Fund Affected
FY24	FY25		

(Parenthesis () Indicate Expenditure Decreases)

REVENUE (dollars in thousands)

Estimated Revenue			Recurring or Nonrecurring	Fund Affected
FY24	FY25	FY26		
	(5,000.0)	(5,000.0)	Recurring through FY32	General Fund (Tax Liability)
	Indeterminate Decrease	Indeterminate Decrease	Recurring	General Fund (GRT & Compensating Tax Deduction)

(Parenthesis () Indicate Expenditure Decreases)

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY24	FY25	FY26	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
EMNRD		\$97.0	\$97.0	194.0	Recurring through FY32	GF

(Parenthesis () Indicate Expenditure Decreases)

Duplicates/Conflicts with/Companion to/Relates to: Relates to HB 91 and SB 59; duplicate of HB 92.

Duplicates/Relates to Appropriation in the General Appropriation Act – Unknown.

SECTION III: NARRATIVE

BILL SUMMARY

Senate Bill 58 creates several tax incentives related to geothermal electricity generation.

In Sections 2 and 3, SB 92 creates a geothermal electricity generation facility personal income tax credit and a corporate income tax credit. The bill provides a tax credit of one and one-half cents (\$0.015) per kilowatt-hour of electricity generated by a geothermal electricity generation facility in which the taxpayer holds an interest, prior to January 1st, 2032. The effective date is January 1, 2025.

This tax credit is available for geothermal electricity generation which takes place prior to January 1st, 2032, which is generated by a new facility that begins construction on or after January 1st, 2025. The credit is also available for geothermal electricity generation which takes place prior to January 1st, 2032 which is generated by an existing facility, if that existing facility increases its generation capacity by at least one hundred percent after January 1st, 2025.

Geothermal resources with temperatures that exceed 250 Fahrenheit qualify and construction costs for “drilling of wells to at least twelve thousand feet” are covered by the tax credit. Excluded are sources from oil, hydrocarbon gas and other hydrocarbon substances, and also excluded is the natural heating and cooling capacity of the earth such as used by heat pump systems.

A taxpayer, whether individual or corporate, shall apply for certification of this tax credit from EMNRD. The total available geothermal generation tax credit for any calendar year is capped at \$5 million, and EMNRD shall stop issuing certifications once the funds for any specific tax year are exhausted. Any portion of the credit that exceeds the taxpayer’s tax liability may be carried forward for up to three years. A married individual filing jointly may claim only half the credit and members of a partnership may claim the credit in proportion to their interest in the partnership. Applications will be considered in the order received. Applications for certification received after the limitation has been met in a calendar year can be considered for certification in the following year.

In Section 4, SB 58 creates a GRT and compensating tax deduction for receipts related to tangible personal property, services, personal property related to the distribution system and construction

of a geothermal electricity generation facility.

Section 1 of SB 58 proposes several tax distribution offsets for municipalities and counties related to GRT and compensating tax deductions specified in Section 4. The distribution is valued at 1.250 percent.

FISCAL IMPLICATIONS

To administer SB 58, EMNRD will require at least one additional FTE. This FTE will be necessary for EMNRD to a) establish rules; b) develop applications for the credit; c) review and certify the applications; d) conduct continuous annual monitoring and appropriate allocation of the credit at each geothermal electricity facility. The FTE would need to be technically qualified to perform these actions, placing them in pay band 75, with a total recurring cost of \$97,000 per year including benefits.

EMNRD has calculated this fiscal impact based on its experience administering the Renewable Energy Production Tax Credit, which had similar provisions to SB 58.

The impact to state budgets of the deduction in GRT and compensating tax and the tax distribution offsets for municipalities and counties will depend on the growth of the geothermal industry and is difficult to determine currently.

SIGNIFICANT ISSUES

Geothermal electricity in New Mexico is likely to be a critical component to transitioning the state to a renewable energy future which maintains (or improves) reliability and affordability. Geothermal electricity production is reliable, baseload power that is dispatchable at any time, produces near-zero carbon emissions, and has a small physical footprint. According to the SMU Geothermal Laboratory Map developed in 2011, New Mexico is in the top tier in potential for geothermal potential compared to most states in the US. Also, the 2019 GeoVision Report developed by the National Renewable Energy Lab shows that under the technical improvement scenario, by 2050 production could increase by 1000-2500 MW in New Mexico. The incentive provided by this tax credit will help reach our potential.

Currently, there is one utility-scale geothermal electricity generation facility operating in the state: Lightning Dock in Hidalgo County, which has a capacity of 15.2 MW of electricity. Many other sites in New Mexico show promising geothermal development potential, including sites in Rincon, Radium Springs, and San Diego Mountain in Dona Ana County; Hillsboro in Sierra County; McGregor in Otero County; and Lower Frisco Hot Springs in Catron County, as well as many sites along the Rio Grande.

The now-expired Renewable Energy Production tax credit program was very helpful in developing wind and solar photovoltaic energy resources in New Mexico. Geothermal resource development is more capital-intensive and riskier than either wind or solar development as it requires exploration onto a largely unknown resource, but potentially adding dramatic value to the state's grid, resiliency, and emissions reduction. EMNRD believes this tax credit would be an effective incentive.

The bill requires that EMNRD stop certification of applications once the annual cap of \$5 million is exhausted. Five million dollars would have the potential to provide tax credits for a little over

300 GWh of annual geothermal electricity generation. The current generation potential of New Mexico is estimated at 40 GWhs.

PERFORMANCE IMPLICATIONS

Adding new tax credit certification obligations to EMNRD without providing for staff to administer them will slow down processing for *all* tax credits, especially the very popular and recently reinstated New Solar Market Development tax credit and the reinstated Sustainable Buildings tax credit. In addition, bills have been filled to reinstate the geothermal ground-coupled heat pump tax credit and for energy storage, which, if passed, will also demand significant EMNRD staff time to implement.

ADMINISTRATIVE IMPLICATIONS

EMNRD will be required to create rules for administering this tax credit and for continuous monitoring of the electricity generated by these facilities. Historically, since this is an emerging industrial sector, ownership of geothermal facilities changes frequently, and so a process will be required to certify energy production for new owners or new partial owners.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

N/A

TECHNICAL ISSUES

Typically, the deeper the well, the hotter the rocks, and thus the more energy a site can produce. SB 58 does not specify if the 12,000 feet drilling requirement includes any horizontally drilled portion of a well. EMNRD is aware of at least one project that has drilled an exploratory well deeper than 12,000 ft. (The project is also in the Lightning Dock site in Hidalgo County.) This exploratory well is under construction by Eavor-Lite of Canada and is a closed loop sealed system with some horizontal drilling for a heat exchanger system at a depth of 18,000 feet.

SB 58 is unclear on the question of wells which drill both horizontally and vertically – i.e., will a well that drills to a depth of 6,000 feet and then drills horizontally more than 6000 feet be eligible for the tax credit? Clarification on this point from the bill sponsor would be appreciated.

OTHER SUBSTANTIVE ISSUES

None

ALTERNATIVES

N/A

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

Tax incentives for geothermal electricity production would not be available to encourage geothermal resource development.

AMENDMENTS

None.