

Date of Hearing: April 12, 2023

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

AB 1569 (Garcia) – As Introduced February 17, 2023

SUBJECT: Salton Sea geothermal resource area: Lithium Valley Office of Development

SUMMARY: Establishes the Lithium Valley Office of Development within the California Energy Commission (CEC) and requires the office to, in consultation with relevant state and local agencies, coordinate activities related to funding, economic development, construction, manufacturing, technical development, and reclamation of lithium located in the Salton Sea geothermal resource area.

EXISTING LAW:

- 1) Requires the CEC to establish the Blue Ribbon Commission on Lithium Extraction in California to review, investigate and analyze specified issues relating to lithium extraction and use in California including market opportunities for lithium, methods of overcoming technical and economic challenges, potential economic and environmental impacts, and opportunities for incentives and investments. (Public Resources Code § 25232)

FISCAL EFFECT: Unknown. This bill is keyed fiscal and will be referred to the Committee on Appropriations for its review.

BACKGROUND:

Lithium Value – The U.S. government considers lithium to be one of 35 critical minerals vital to the nation’s security and economic prosperity.¹ Global lithium demand is expected to grow substantially over the next decade, driven largely by increasing demand for lithium-ion batteries in electric vehicles and stationary energy storage for the electricity sector.² These technologies are key to California’s clean energy and transportation goals as the state works to phase out gasoline-powered vehicles and fossil fuel-based electricity.

California’s transportation sector is currently the largest source of Greenhouse Gas (GHG) emissions in the state and, in the interest of meeting the state’s emissions reduction targets, California has set a goal that 100% of new passenger vehicles sales will be Zero-emission Vehicles (ZEVs) by 2035.³ To meet the state’s ZEV goals will require a significant increase in the number of light-, medium-, and heavy-duty ZEVs on the road and a drastic increase in the infrastructure to support these vehicles. Cumulative sales of ZEVs, which include electric vehicles (EVs), in California reached 1.1 million in the first quarter of 2022, with ZEVs accounting for 16% of new car sales. The rapid growth of the ZEV market to date, as well as the projected proliferation of ZEVs to meet California’s climate goals, is expected to drive substantial increases in lithium demand going forward.

¹ CEC; Lithium Valley Fact Sheet; February 2022; <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241854>

² NPR; “High demand and prices for lithium send mines into overdrive”; November 2022;

<https://www.npr.org/2022/11/23/1135952359/lithium-mines-batteries-electric-vehicles-climate-change-carbon>

³ Executive Order N-79-20

Lithium is produced primarily from mining or the use of evaporation ponds. Most lithium mining occurs in Australia, Chile, China, and Argentina, together accounting for 96% of global production in 2021. The United States produced approximately 900 metric tons of Lithium in 2021, accounting for 1% of global production. Surging EV demand has seen lithium prices skyrocket by around 550% in a year. By the beginning of March 2022, the lithium carbonate price had passed \$75,000 per metric ton, and lithium hydroxide prices had exceeded \$65,000 per metric ton (compared with a five-year average of around \$14,500 per metric ton).⁴

Lithium in California – California has a substantial lithium resource contained in mineral rich saline water that lies deep underground the Salton Sea area. Direct lithium extraction from geothermal brines is expected to create economic benefits for the state and region. Lithium recovery from geothermal brines can increase investments and tax revenues to benefit local communities. In-state lithium recovery and production may also lead to new manufacturing facilities across the battery supply chain. The direct extraction of lithium from geothermal brines is expected to have much lower environmental impacts compared with traditional methods of sourcing lithium.⁵ There are currently three companies developing Lithium extraction operations near the Salton Sea: EnergySource Minerals, Controlled Thermal Resources and BHE Renewables, a branch of Berkshire Hathaway.⁶ As part of state efforts to incorporate these geothermal brine resources into a new domestic lithium supply chain, the Lithium Valley Commission (LVC) was convened in 2021 as a result of AB 1657 (E. Garcia, Chapter 271, Statutes of 2020). The LVC worked to identify ways to resolve barriers to development, support opportunities for lithium recovery from geothermal brine within California, and ensure that the profits from lithium extraction were reinvested in local communities. The LVC issued a comprehensive final report in December 2022 which recommended accelerating transmission planning, improving permitting processes, and securing funding for infrastructure investments and economic development incentives to support industry growth and job training in the Lithium Valley.⁷ Following the release of the final report, the LVC disbanded in February 2023.⁸

COMMENTS:

- 1) *Author's Statement.* According to the author, “California’s “Lithium Valley,” located in the Imperial Valley, contains one of the largest and most environmentally sustainable lithium reserves in the world. “Lithium Valley” development is a great opportunity to boost the economy in Imperial County and fence line communities. AB 1569 would establish a Lithium Valley Office of Development and would require the office, in

⁴ McKinsey & Company; “Lithium mining: How new production technologies could fuel the global EV revolution”; April 2022; <https://www.mckinsey.com/industries/metals-and-mining/our-insights/lithium-mining-how-new-production-technologies-could-fuel-the-global-ev-revolution>

⁵ CEC; Lithium Valley Fact Sheet; February 2022; <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241854>

⁶ dot.LA; “The Lithium Race Takes Shape in the Salton Sea”; November 2022; <https://dot.la/salton-sea-lithium-2658577206.html>

⁷ Lithium Valley Commission; “Report of the Blue Ribbon Commission on Lithium Extraction in California”; December 2022; <https://efiling.energy.ca.gov/GetDocument.aspx?tn=247861>

⁸ Imperial Valley Press; “Blue-Ribbon Commission on lithium extraction completes its mission”; February 2023; https://www.ivpressonline.com/news/blue-ribbon-commission-on-lithium-extraction-completes-its-mission/article_4b9bc55e-b555-11ed-94ac-4f09c0e36667.html#:~:text=IMPERIAL%20COUNTY%20E%20%80%93%20The%20Blue%20Ribbon,an%20equitably%20written%20final%20report.

consultation with relevant state agencies, to coordinate initiatives related to funding, economic development, construction, manufacturing, technical development, and reclamation of lithium in the Salton Sea Geothermal Resource Area for the benefit of all Lithium Valley residents.”

- 2) *Importance of coordination.* Multiple state and local agencies, as well as private businesses and community stakeholders, are actively engaging in funding, economic development, construction, manufacturing, technical development, and reclamation of lithium in the Salton Sea geothermal resource area. In addition to the LVC, the CEC itself has held workshops, tours, and funded projects to advance lithium recovery efforts. The Governor’s Office of Business and Economic Development (GO-Biz) manages a variety of investments, grants, and tax benefits to financially support projects that advance California’s climate and sustainability goals. The Imperial County Board of Supervisors authorized the County CEO to begin implementing the Lithium Valley Economic Opportunity Investment Plan (LVIP) in February of 2022. With myriad state agencies, local governments, private companies, and groups of local stakeholders actively participating in the development of Lithium Valley, it is prudent to create an office specifically tasked with coordinating these entities to ensure the success and positive community impact of lithium extraction near the Salton Sea.

- 3) *Related Legislation.*

AB 1562 (Garcia) requires Governor’s Office of Business and Economic Development (GO-Biz) to collaborate with local and regional entities to designate economic development zones, and require the director of GO-Biz to designate an economic development liaison to assist entities in the Eastern Coachella Valley and the Imperial Valley to establish a Southeast California Desert Valleys Economic Zone. Status: *referred* to the Assembly Committee on Jobs, Economic Development, and the Economy.

AB 1579 (Garcia) requires the state, beginning in 2035, in establishing bid specifications for the acquisition of motor vehicles and determining the lowest responsible bidder, to consider whether the vehicles are equipped with lithium-ion batteries that contain lithium produced with the least environmental impact. Status: *referred* to the Assembly Committee Accountability and Administrative Review.

AB 1593 (Garcia) establish the Equitable Access Program to be administered by the California Workforce Development Board to prioritize employment opportunities in construction, manufacturing, technical, maintenance, operations, or reclamation activities for local residents in the Salton Sea geothermal resources area. Status: *referred* to the Assembly Committee on Labor and Employment.

SB 797 (Padilla) creates the Lithium Extraction Tax Citizens Oversight Committee for the purposes of ensuring that revenues from the lithium extraction excise tax are

appropriately allocated and providing recommendations on how to improve community engagement and maximize community benefits from the revenues. Status: *referred* to the Senate Committee on Appropriations.

4) *Prior Legislation.*

SB 125 (Senate Committee on Budget and Fiscal Review) created a tax on lithium extraction on a per metric ton basis and makes other related statutory changes to implement the Lithium Valley proposals adopted in the budget. Status: Chapter 63, Statutes of 2022.

AB 2851 (E. Garcia, 2022) establishes the Lithium Valley Office of Development within the Natural Resources Agency and requires the office to coordinate activities related to funding, economic development, construction, manufacturing, technical development, and reclamation of lithium located in the Salton Sea geothermal resource area. AB 1569 is largely a reintroduction of this bill. Status: *held* in the Assembly Committee on Appropriations.

AB 2929 (E. Garcia, 2022) requires the Legislative Analyst's Office (LAO) to annually submit a report to the legislature on the health, environmental, and economic impacts and benefits of producing lithium from geothermal brines located in Imperial County in the area commonly referred to as Lithium Valley. Status: *held* in the Assembly Committee on Appropriations.

AB 1657 (E. Garcia) established the Lithium Valley Commission to review, investigate and analyze specified issues relating to lithium extraction and use in California and to submit a report to the legislature documenting its findings and recommendations, as specified. Status: Chapter 271, Statutes of 2020.

REGISTERED SUPPORT / OPPOSITION:

Support

City of Calipatria
City of El Centro
County of Imperial
County of Riverside Supervisor V. Manuel Perez
State Building and Construction Trades Council of Ca

Opposition

None on file

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