March 3, 2025

RE: Geothermal Rising's Position on Nevada AB109

To Whom It May Concern:

Geothermal Rising, America's largest and longest-running geothermal trade association, representing over 100 organizations committed to advancing geothermal energy, writes today to respectfully express our concerns with Nevada Assembly Bill 109 (AB109).

Firstly, we commend the bill's intentions to clarify water rights and promote sustainable resource management—goals that align with our shared vision for a cleaner, sustainable future for Nevada. However, a strong geothermal energy industry is vital to this vision-- delivering clean, reliable, 24/7 power with minimal environmental impact. Therefore, we believe that AB109, in its current form, unintentionally risks undermining the state's leadership in geothermal energy and environmental stewardship by imposing regulatory challenges on this critical, clean industry. We urge consideration to strike or amend this proposed legislation.

Nevada's Geothermal Industry: Key to the Economy

As of 2023, Nevada has approximately 600 MW of installed geothermal capacity across 26 power plants, making it the second largest producer in the United States, following California. In 2022, the revenue for electricity sales was estimated at \$323 million¹, while land lease sales provided over \$7.8 million to the Bureau of Land Management². In addition to driving hundreds of millions in revenue, the industry directly supports an estimated 2,000-3,000 jobs, often in rural communities³. As demand for clean reliable energy rises, our industry is poised to scale-providing the promise of additional jobs and a strengthened tax base.

Geothermal Brine: A Distinct Resource

A key concern with AB109 is its treatment of geothermal brine as equivalent to potable water. Unlike water for drinking or irrigation, geothermal brine is a hot, mineral-rich fluid unsuitable for traditional uses. Geothermal brine is extracted to capture the earth's natural heat energy and then reinjected into the earth with little to no net loss—maintaining an equilibrium. Importantly, geothermal reservoirs are distinct from standard aquifers. This separation ensures that geothermal brine has no impact on potable or drinking water supplies, as the fluids are contained within isolated geological layers. Many modern facilities, like air-cooled binary plants now expanding in Nevada, operate without consuming external water at all. Adding water appropriation rules to these low-impact operations adds unnecessary complexity, and we worry it could hinder the deployment of geothermal projects that can provide Nevada with much-needed, clean, reliable, sustainable energy.

Adequate Regulatory Status-quo

Nevada's geothermal industry already navigates a robust and more-than-sufficient regulatory framework and permitting processes for geothermal energy. AB109's additional requirement for State Engineer permits—even for non-consumptive uses—could extend project timelines and



inflate costs-- inhibiting the growth of the State's world-class geothermal energy industry. We share your commitment to oversight but do not believe unintentional inhibition of clean baseload energy development is aligned with Nevada's climate goals.

Legal Uncertainties

We also note potential legal challenges or uncertainties with AB109. In our understanding, property owners are currently able to lease or sell rights to geothermal resources underlying their property (unless such rights have been severed or conveyed to another person)—a system that supports both private enterprise and public benefit. Requiring additional permitting processes for use of geothermal brine could disrupt this balance, creating uncertainty for landowners and sparking legal disputes—we seek clarity about what would happen to existing rights and titles, and we urge a cautious approach to preserve clarity around how it might affect the status-quo.

Next steps

While we respectfully oppose AB109 as drafted in its current form, we're committed to finding common ground and welcome the opportunity to discuss the issue further. We also propose the following compromises to align the bill with its sustainability goals while protecting geothermal development:

- Exempt non-consumptive geothermal operations from water appropriation requirements, recognizing their negligible impact on potable water resources.

Conclusion

Again, we thank you for your leadership and consideration of our concerns. Our industry stands ready to engage with your team, regulators, and community stakeholders to find solutions that work for everyone.

Please do not hesitate to reach out.

Sincerely,

Bryant Jones, Ph.D. Executive Director Geothermal Rising

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www.geothermal.org

¹U.S. Energy Information Administration (EIA). (2023). State Profile and Energy Estimates: Nevada. ²Las Vegas Review-Journal. (2023). BLM moves full steam ahead on geothermal energy in Nevada. ³Geothermal Energy Association. (2021). Geothermal Energy Industry Employment Survey: Results and Analysis.