



---

## WRITTEN SUBMISSION OF GEOTHERMAL RISING

**To:** House Committee on Natural Resources, Subcommittee on Energy and Mineral Resources

**Hearing:** Legislative hearing on H.R. 301, H.R. 398, H.R. 1077, H.R. 1687, H.R. 5576, H.R. 5587, H.R. 5617, H.R. 5631 and H.R. 5638

**Submitted by:** Dr. Bryant Jones, Executive Director

**Organization:** Geothermal Rising

**Date:** December 16, 2025

---

### Introduction & Summary

*Geothermal Rising* is America's largest geothermal industry association and the oldest geothermal association in the world, representing over 100 organizational members, including developers, service providers, researchers, utilities, and other stakeholders.

*Geothermal Rising* supports all nine bills presented to the Committee today. They collectively address some of the critical barriers preventing geothermal energy from reaching its full potential as America's premier baseload renewable resource. These bills represent thoughtful, bipartisan solutions to streamline permitting, enhance consistency, and provide parity with other energy sectors while maintaining environmental safeguards. Geothermal Rising and our members are in this industry because we care deeply about the environment—and about American energy dominance. Geothermal has the lowest lifecycle carbon footprint and the smallest surface footprint of any energy source.

We support maintaining robust environmental review for activities with potential for significant impact. These bills target activities repeatedly demonstrated to have minimal impact, allowing agencies to focus resources where they matter most. We seek a federal permitting system that treats geothermal rationally—not harder than fossil fuels, not easier than appropriate, and not like an intermittent renewable resource— based on actual risk, impact, and reward.

With proven technologies ready to scale, and next-generation innovations expanding our geographic reach, geothermal can provide the 24/7 clean power America desperately needs for data centers, artificial intelligence (AI) infrastructure, and grid stability. However, outdated and inconsistent permitting processes threaten to strand this vast resource underground. We urge swift passage of this package to unlock 60-90 gigawatts (GW), and potentially even more, of clean, reliable geothermal power that America needs to meet rising energy demands, strengthen grid reliability, and achieve energy independence.

Our adversaries are undoubtedly racing ahead on geothermal. The U.S. has better resources, technology, and expertise. Let's not lose our advantage to outdated permitting delays that do more harm than good. Passing this

---



# GEOTHERMAL RISING

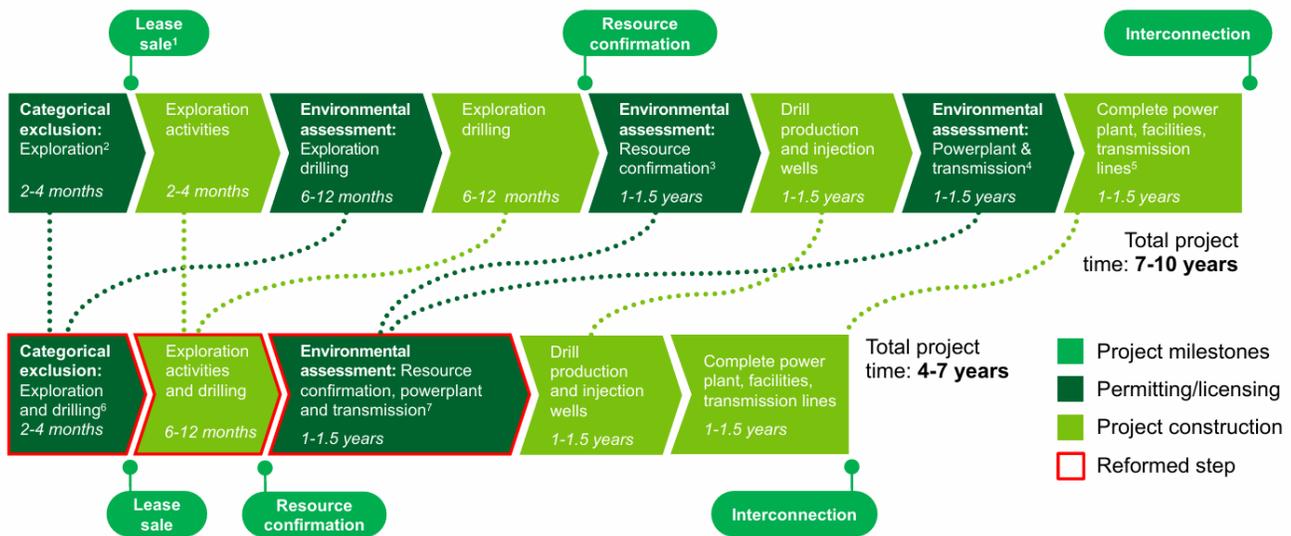
package will send a clear signal that the House is serious about geothermal as part of an all-of-the-above energy strategy. The U.S. geothermal industry needs all nine bills to achieve necessary, more comprehensive reform, and to be the energy superpower of the next generation.

## The Geothermal Opportunity

The Department of Energy's analyses project geothermal could provide 60-90 GW of baseload power by 2050—enough to power tens of millions of homes continuously.<sup>1</sup> Uniquely, Geothermal operates at 90%+ capacity factors,<sup>2</sup> providing the reliable and efficient power our grid requires, *with some of the smallest land area per kilowatt of any energy technology*. It creates high-paying jobs that can interchange directly with oil and gas, and can co-produce critical minerals essential for our national security and supply chain security.

The primary barrier to new geothermal GWs isn't technology or resource availability—it's permitting and early stage capital. Projects on federal lands face average timelines of 7-10 years, with four separate NEPA reviews currently required for exploration, exploration drilling, resource confirmation, and power plant development. Consolidating these into two reviews—as shown in DOE's Liftoff analysis—could cut timelines nearly in half (see Figure 1).

### Current process



### Potential reformed next-generation process

<sup>1</sup> DOE GeoVision (2019) projects 60 GW; DOE Pathways to Commercial Liftoff: Next-Generation Geothermal Power (2024) projects 90 GW.

<sup>2</sup> U.S. Department of Energy, Geothermal Technologies Office, "Geothermal FAQs," <https://www.energy.gov/eere/geothermal/geothermal-faqs>



**Figure 1: Illustrative depiction of permitting timelines for geothermal projects today [top row] and in a potential streamlined future scenario [bottom row]<sup>3</sup>**

This regulatory burden makes financing difficult and deters investment in the cleanest baseload resource available. A faster process will translate into increased bullishness.

Data centers, AI, and the reshoring of advanced manufacturing are driving unprecedented electricity demand. Our country needs every megawatt we can get, especially dispatchable, baseload power that is reliable, resilient, and weather independent. For AI infrastructure requiring decades of stable operation, geothermal offers no fuel cost exposure or supply chain risk—critical when a single data center's energy costs can range in the tens of millions of dollars annually.

Recent analysis estimates that behind-the-meter geothermal could economically meet 55-64 percent of projected hyperscale data center demand growth by the early 2030s under current siting patterns, or potentially 100 percent if data centers locate where geothermal resources are strongest.<sup>4</sup> This represents a clear path for the geothermal industry to rapidly scale. Behind-the-meter deployment is particularly attractive because it bypasses grid interconnection queues—where 1.7 GW of geothermal capacity, representing a potential 40 percent increase over existing U.S. capacity, currently await connection agreements.<sup>5</sup> However, even projects that sidestep interconnection face a separate bottleneck: geothermal developments on federal land can take 7-10 years to build, with much of that time spent securing permits and approvals from eight or more federal agencies.<sup>6</sup>

The scale of stranded potential is immense. Geothermal could deliver 15-17 GW of new capacity to meet data center demand alone—yet permitting delays persist.<sup>7</sup> Every year these barriers remain in place costs America gigawatts of clean, reliable power and thousands of high-paying jobs. For these reasons, we ask for your support of the following nine bills:

---

### ***H.R. 301 - Geothermal Energy Opportunity (GEO) Act***

The 60-day deadline for processing applications provides essential certainty for project financing. The provision ensuring processing continues despite pending litigation prevents frivolous lawsuits from indefinitely stalling clean energy development. This measured approach balances judicial review rights with the need for timely administrative action.

---

<sup>3</sup> U.S. Department of Energy, "Pathways to Commercial Liftoff: Next-Generation Geothermal Power" (March 2024), Figure 20.

<sup>4</sup> Ben King et al., "The Potential for Geothermal Energy to Meet Growing Data Center Electricity Demand," Rhodium Group, (March 11, 2025), 10, 12. <https://rhg.com/research/geothermal-data-center-electricity-demand/>

<sup>5</sup> Ibid., 7.

<sup>6</sup> Ibid., 16.

<sup>7</sup> Ibid., 10.

***H.R. 398 - Geothermal Cost-Recovery Authority Act of 2025***

While cost recovery might seem counterintuitive for renewable energy development, we recognize the Bureau of Land Management's (BLM) resource constraints. By allowing discretionary reimbursement of administrative costs that get recycled directly into geothermal permitting capacity, this creates a win-win that accelerates processing without burdening taxpayers. The sunset provision and reporting requirements ensure accountability.

***H.R. 1077 - STEAM Act***

This critical bill provides long-overdue parity with oil and gas by extending existing categorical exclusions to geothermal activities in previously studied areas. The bipartisan, bicameral nature of this legislation reflects broad consensus that geothermal shouldn't face stricter requirements than fossil fuels when developing in the same locations with less environmental impact.

***H.R. 1687 - CLEAN Act***

Annual lease sales are essential for maintaining project pipelines and investor confidence. The current two-year cycle creates unnecessary bottlenecks. The 30-day processing deadline for geothermal drilling permits aligns with oil and gas timelines, providing the consistency and predictability our industry needs to scale.

***H.R. 5576 - Enhancing Geothermal Production on Federal Lands Act***

This bill's provisions for geothermal exploration activities and priority area designation represent important steps forward. The exploration provisions recognize the minimal impact of temperature gradient wells—small-diameter boreholes on less than eight acres, restored within three years. These activities pose negligible environmental risk and shouldn't trigger full NEPA review.

The priority area concept, with programmatic environmental review, could significantly reduce redundant analyses. We note that the bill includes Congressional findings acknowledging BLM's recent adoption of administrative categorical exclusions, demonstrating agency recognition of these activities' minimal impacts. We support this legislation as part of a comprehensive approach that includes both administrative and legislative solutions to provide maximum certainty.

***H.R. 5587 - HEATS Act***

We support this bill and would like to clarify why we believe it to be balanced. In our view, where the federal government owns less than 50 percent of the subsurface geothermal estate, state regulation is typically sufficient to ensure responsible development. This bill eliminates duplicative federal reviews in these limited circumstances while explicitly protecting Tribal lands and maintaining royalty obligations.

We emphasize that this applies only to split estate situations where federal interest is minority—not to full federal lands. State regulatory frameworks in geothermal-producing states have proven robust and protective. This

targeted approach reduces redundancy without compromising environmental protection, where federal oversight provides the most value.

### ***H.R. 5617 - Geothermal Gold Book Development Act***

Standardized procedures across BLM field offices will address one of our industry's greatest challenges: inconsistent interpretation and application of regulations. What takes six months in one office takes two years in another—not due to environmental differences, but procedural inconsistency. A Gold Book, as successfully used in oil and gas, will provide clarity for both regulators and developers while maintaining flexibility for periodic updates.

### ***H.R. 5631 - Geothermal Ombudsman for National Deployment and Optimal Reviews Act***

The Ombudsman and Task Force will provide essential coordination and dispute resolution, addressing the institutional knowledge loss and inconsistency plaguing current processes. The cross-office personnel assignment provision is particularly innovative, allowing expertise to be deployed where most needed. This structural reform complements the procedural improvements in other bills.

We think of the Gold Book and Ombudsman bills as working together beautifully—creating the playbook and providing the quarterback to execute it.

### ***H.R. 5638 - Geothermal Royalty Reform Act***

Clarifying that royalties apply per facility rather than per lease area removes ambiguity that has deterred investment. This technical fix ensures fair revenue to taxpayers while providing the certainty developers need for project economics.

---

## **Conclusion & Recommendations**

These nine bills work synergistically. Standards without enforcement don't work. Deadlines without resources can't be met. Parity means little if implementation remains inconsistent. Standardized procedures (Gold Book) need enforcement mechanisms (Ombudsman). Faster processing times (GEO Act, CLEAN Act) require adequate resources (Cost Recovery). Categorical exclusions (STEAM Act, H.R. 5576) must be clearly defined and consistently applied.

These bills represent years of stakeholder engagement, technical analysis, and bipartisan negotiation. They offer practical solutions to real problems, maintaining environmental protection while removing unnecessary barriers to America's premier renewable baseload resource.

Recommendations:



# GEOTHERMAL RISING

---

- Pass the full package: These bills are complementary and should advance together as a complete package.
- Maintain bipartisan support: Geothermal uniquely appeals across the political spectrum, let's seize the moment.
- Provide implementation resources: Ensure agencies have funding to execute these reforms.
- Monitor and iterate: Require regular reporting to ensure reforms achieve intended outcomes.

Let's not continue to strand GWs of clean, reliable, domestic energy underground. Let's pass these common-sense reforms and unlock one of our most abundant untapped baseload energy sources. Send a clear signal that America is serious and urgent about energy security, energy dominance, grid reliability, and clean baseload power.

Thank you for your leadership on these *groundbreaking* issues.

Respectfully submitted,

**Bryant**  
Executive  
Geothermal Rising

**Jones,**

**PhD**  
Director