Proceedings World Geothermal Congress 2026
Calgary, Canada, June 8 – 11, 2026

Country Update: United States of America - Power

Ann Robertson-Tait[1]*, Logan Hackett[1], and William Harvey[2]
SLB (GeothermEx)[1], Reykjavik University[2]
*ann1@slb.com

Keywords: Country update, United States of America, geothermal power, next-generation geothermal

ABSTRACT

The geothermal industry of the United States of America has a legacy of more than 60 years and continues to develop innovative geothermal power projects. This paper describes projects in the initial phases of development and characteristics of existing geothermal projects, the latter with a reported installed capacity of approximately 4 GW at year-end 2024. We describe the next significant phase of development in the United States, driven by advances in EGS and other 'Next-Generation' technologies. The forefront of EGS in the United States is the Frontier Observatory for Research in Geothermal Energy ("FORGE") project, initiated in 2015 and supported by the United States Department of Energy ("USDOE"). This initiative was formed specifically to advance EGS technologies, and completed its first phase of work in late 2024. In the same period, a start-up company with significant experience in tight shale projects was formed in 2017 and grew to become a key EGS player that will soon commission its first major EGS project. The first 120 MW (gross) tranche of Cape Station's EGS power plants in Utah is expected to be in service in 2026, with hundreds of MW of installed capacity to follow at the same location. Other EGS developers are following suit, expecting to deploy large power plants for data centers and electric utilities. With the allocation of additional funding in 2025 to continue work at the FORGE project, the presence of a capable and well-funded 'first mover' EGS operator, and additional funding from the US Department of Energy in Q2 2026 for developing EGS pilot projects, EGS is an active area for both development and research. The coming years will produce a wealth of knowledge and technology that could enable geothermal power to be deployed using EGS techniques at multi-GW scale. Other new technologies are being used and/or are in development today. Like EGS, some eliminate the need for high native permeability (*e.g.*, closed-loop solutions). Superhot and Supercritical geothermal resources both seek minimum subsurface temperatures of at least 374°C; it is a requirement for Supercritical, which also requires pressures of at least 221 atmospheres (3,248 psi). Because of their temperature and pressure requirements, wells drilled in both 'Super' types are likely to require deep wells in hostile conditions. In response, new drilling techniques are being developed to enable extraordinarily deep wells, particularly in areas of modest temperature gradients. Superhot and Supercritical resources are being assessed by the National Laboratories and the FORGE project, and researchers are starting to consider how to harness the massive amount of energy hosted at depths below the brittle-ductile transition. Others are taking a new look at approaches from the past (*e.g.*, geopressured resources and pressure management solutions). In addition, more untapped conventional hydrothermal resources exist in the United States, including 'blind' geothermal systems that lack obvious geothermal manifestations. Developers of conventional resources are using AI and state-of-the-art geoscience to develop new projects. In December 2025, it was reported that one of them found a large blind geothermal resource at a depth of 7,000 feet (2,130 meters), while indicating that they had found two other blind systems previously (Alphaxioms Geothermal News & Energy Research, 2025). Coupled with conventional plant types, creative configurations are also appearing such as geothermal-solar hybrids, extraction of geothermal fluids from deep sedimentary basins, co-production of geothermal power at oil and gas fields, and recovering brine-hosted minerals, primarily lithium. This paper summarizes the collective and individual power unit contributions to electrical production, provides an overview of recent federal and state initiatives, and discusses evolving technical and commercial trends. With a large-scale EGS plant due to start operating in 2026, industry progress should make for interesting and exciting discussions at the 2026 World Geothermal Congress in Calgary, Canada.

1 INTRODUCTION

The initial geothermal power buildout in the first several decades of the Unites States geothermal industry focused on high-temperature dry steam and flash-steam complexes, including those at The Geysers, Coso and the Salton Sea in California, initially providing large power generation capacities. A second phase of development was made possible using binary power plant technology, which vastly extended geothermal generation into lower temperature reservoirs, such as those in the Basin and Range province. The first two phases focused on developing conventional hydrothermal resources, with a handful of early-stage Enhanced

Geothermal Systems (EGS) projects that were supported with funding from USDOE. The third (current) phase focuses on next-generation strategies, particularly EGS.

Table 1 provides totals for the installed capacity (MW) and annual electrical generation (MWh) in the United States for the years ending 2018, 2021 (the bases for previous United States Country Updates) and 2024. These years were selected as the last full years for which the United States Energy Information Administration (EIA) provided data in their Electric Power Annual reporting. EIA presents generation on a net basis. The numbers presented in Table 1 are for utility-scale facilities only and do not reflect installations such as residential solar. Notably, geothermal, nuclear, and fossil fuel installed capacities and net electrical generation have been relatively flat over this period. More significant capacity growth has been seen in wind and solar, and other sources such as battery storage. Total installed capacity (MWe) from all sources has increased by 6.7%, and net generation increased by 4.8% over the 3-year period from 2021 to 2024, but there are clear signals that installed capacity and generation are now increasing relatively quickly after a long period of low growth.

Table 1. United States Electricity Production (EIA, 2024)

Energy source	Geothermal		Other Renewables (wind, utility scale solar, biomass, hydro and		Nuclear		Fossil Fuels		Other sources		Total	
	Installed Capacity (MWe)	Net Electrical generation GWh/yr	Installed Capacity (MWe)	Net Electrical generation GWh/yr	Installed Capacity (MWe)	Net Electrical generation GWh/yr	Installed Capacity (MWe)	Net Electrical generation GWh/yr	Installed Capacity (MWe)	Net Electrical generation GWh/yr	Installed Capacity (MWe)	Net Electrical generation GWh/yr
In operation in December 2018	3,806	15,967	244,555	684,944	104,270	807,084	841,288	2,660,019	2,569	12,973	**1,196,488**	**4,180,987**
In operation in December 2021	3,889	15,975	311,433	794,180	99,960	779,645	819,775	2,507,760	6,521	12,140	**1,241,578**	**4,109,700**
In operation in December 2024	4,002	15,407	392,928	955,204	103,581	781,865	795,373	2,547,998	28,856	8,170	**1,324,740**	**4,308,644**

Geothermal installed capacity increased by a mere 113 MW from 2021 to 2024 (only 2.9% in total). Given a 3.6% reduction in existing capacity over the same period, the 113 MW of new capacity is being offset by declines at existing units. The EIA predicts a modest addition of 100 MW total for the period 2025-2027, which seems understated given the demand for clean, baseload electricity by data centers and utilities.

In 2024, USDOE's 'Pathway to Commercial Liftoff: Geothermal Power' report (USDOE, 2024) outlined steps to drive geothermal deployment to multi-GW annual capacity additions: 1) cost reductions; 2) large-scale demonstration projects; 3) well-designed power purchase agreements (PPAs); 4) streamlined permitting; and 5) early and continued community engagement. The ability for the United States geothermal industry to reach such capacity additions in the next decade is an open question: will the industry continue with "business as usual" with modest net growth, or will it break through on a significantly larger scale?

2 GEOLOGY AND GEOSCIENCE BACKGROUND

As shown in Figure 1 on the following page, the epicenter of geothermal power generation in the United States is in the western part of the country, with an array of eight states hosting operating geothermal plants: Alaska, California, Hawai'i, Idaho, Nevada, New Mexico, Oregon and Utah, with the majority centered in the geologically favorable states of California and Nevada. All of the states mentioned above are favorable for geothermal development owing to their tectonic and/or volcanic activity. In an expanding radius, other states are starting to develop geothermal projects, including exploration and a few relatively small pilot projects in the states of Washington, Wyoming, North Dakota, Arizona, Colorado, Texas, Louisiana, Mississippi and West Virginia. Most of these states tend to have somewhat lower temperature gradients than the most favorable states, but all are considering their geothermal options. A mix of conventional hydrothermal, deep sedimentary basin plays, EGS and Superhot resources may enable geothermal power in some of these states. All existing and new operators have the will to develop such project, and some have funding.

3 GEOTHERMAL UTILIZATION

General information about operating geothermal fields, projects and generator units in the United States are presented using the table formats specified in IGA's template. Table 2 (in the Appendix) presents selected information about power plants and individual generation units, including field name, operator, unit name, system type (hot water, two-phase liquid-dominated and two-phase steam-dominated), year commissioned, operating status, turbine manufacturer, nameplate capacity, and generation for year-end 2024. For consistent

reporting year-on-year, generation data were taken from EIA. Their survey Form EIA-923 provides monthly and annual data on generators, lagging by three to six months. Since EIA data through year-end 2025 were not available at the time of this paper, year-end 2024 data were used. The data states overall net generation at selected geothermal complexes; however, individual unit (generator) data are often unavailable. Due to data pieced together from various sources, the values included in the tables may not be in complete alignment with each other. Where data were not available (*e.g.*, when generators do not use the Form EIA-923 survey), N/A is indicated. At year-end 2024, the total installed nameplate geothermal power capacity in the United States was approximately 4.0 GWe. This is a modest 113 MW increase for the three-year period since the previous country update, which was based on units in operation at year-end 2021 (Robertson-Tait *et al.*, 2023). Utility-scale geothermal power at the end of 2024 was produced in the states of California, Hawaii, Idaho, Nevada, New Mexico, Oregon and Utah. California contributed 68% of the 2024 USA annual generation from geothermal and Nevada contributed 25%.

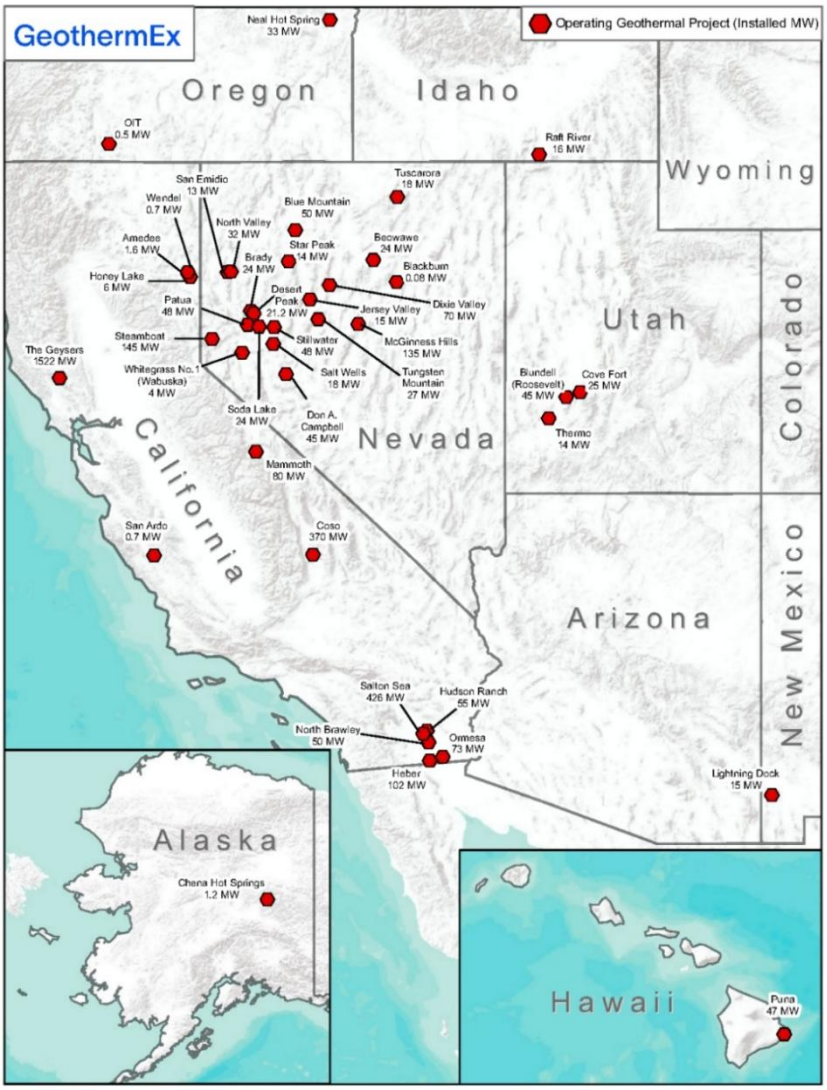


Figure 1: Locations and installed capacities at operating geothermal fields currently developed for power generation in the United States of America. Cape Station (in Utah, near the Blundell plant) is expected to begin generating EGS power in 2026.

Nameplate capacity is often stated as the 'gross' generator output at design point conditions (MW). This output is generally fixed, although it can be re-rated after a re-powering. Capacity is less commonly stated as the lower 'net' MW output after plant and gathering system parasitic loads; that value is less straightforward and can vary over time due to factors such as changing pumping loads. Thus, one cannot reliably calculate operating capacity factors using Form EIA-923 net annual MWh generation values and the nameplate gross MW ratings.

The status of units appearing in Table 2 is restricted to the following: near term Pre-construction, Construction, Operating, or Retired. Plants with the status of Announced, Shelved, Cancelled or Mothballed are not shown herein due to uncertainties regarding the nature and status of the projects.

4 PROJECTS UNDER DEVELOPMENT: STATE SUMMARIES

The intent of this section is not to provide details on all existing and developing projects, but to highlight major trends, initiatives and development activities since the last country update. In the sections below, geothermal development activities in selected states are discussed in alphabetical order. A broad multi-state geothermal initiative was launched in December 2025: the Geothermal Power Accelerator project, led by the National Association of State Energy Officials (NASEO) and funded by USDOE. The participating states are Arizona, California, Colorado, Hawai'i, Idaho, Louisiana, Montana, Nevada, New Mexico, Oregon, Pennsylvania, Utah and West Virginia. Many of these states already host geothermal power projects; they and others are considering new projects.

4.1 California

Ormat's new Casa Diablo IV plant and its re-powerings at Heber 1 and 2 were the only significant capacity additions in California in 2022-2025. California has taken an interesting route to increasing geothermal power generation in the state. The order from the California Public Utility Commission (CPUC) for 1 GW of "clean, firm (80%+capacity factor) resources" by 2026 effectively designated a requirement for more geothermal power. Recognizing the relatively long lead times for development, CPUC extended the deadline for these resources to 2031, and ordered a second 1-GW tranche of clean baseload power by 2037. The 2025 United States Geothermal Market Report by National Laboratory of the Rockies (NLR) states that the first CPUC order has resulted in "at least 616 MW of PPAs [Power Purchase Agreements] as of June 2025" (NLR, 2026).

4.2 Nevada

Ormat commissioned North Valley Unit 1 in 2023, with a second unit planned to come online in 2026. They also conducted re-powerings at their acquisitions at Beowawe, Dixie Valley, Stillwater and Salt Wells. Open Mountain Energy's Whitegrass 2 plant is still in progress. A USDOE-funded 'Wells of Opportunity' project at two Ormat plants are underway to stimulate two existing wells with long open holes as examples of how EGS stimulations can improve under-performing wells. In terms of PPAs, Fervo Energy, NV Energy and Google have created a new financial model for large geothermal data center deployments that was approved by regulators in May 2025: a 'Clean Transition Tariff' ("CTT") that enables Fervo to build an EGS power plant to supply 115 MW for a data center, with Google paying for the power, thus not impacting NV Energy's rate base, *i.e.*, the power costs will not be paid for by NV Energy's other customers (Latitude Media, 2025).

4.3 Utah

In their pilot EGS doublet (Project Red in Nevada) and in subsequent larger projects in Utah, Fervo has undertaken successful campaigns to significantly reduce drilling and completion times, and has publicly shared much of their progress and findings. Their learnings will be essential for expanding the EGS sector and realizing a scalable geothermal future. Fervo's Cape Station in Utah is the largest geothermal development being constructed today. Data in the public domain (*e.g.*, Bonafin, 2025) indicate that the development plan is for a first stage consisting of two phases. Phase 1 consists of three 40 MW-gross Turboden units. As of year-end 2025, this first project is well under construction and slated for commercial operation in late 2026. Phase 2, slated for commissioning in 2028 to 2029, has orders for 400 to 500 MW using two power plant providers (Turboden and Baker Hughes). Fervo is using a 'bench' approach in Utah that maximizes the use of their lease area by separating power plant units and the wells within them (Schill *et al.*, 2026). Each subsequent bench has 1) deeper vertical wells (down to the point where the laterals are initiated) to reach higher temperatures, and 2) longer laterals to improve production rates. Additional stages of development at Cape Station are planned by Fervo, potentially increasing the Utah site's field development size to at least 1 GW of power delivery in the 2030 to 2035 time range.

While Fervo may be in the limelight, they and others have reaped the benefits of work undertaken by USDOE's FORGE project starting in 2015. FORGE was instrumental in the development of tools and techniques that have advanced EGS technology. Seven production and injection wells were drilled at FORGE, and successful circulation tests in 2024 produced geothermal fluids at 370°F (188°C). Massive amounts of FORGE data are available to the public through USDOE's data repository at: https://gdr.openei.org/forge.

With a recent USD80 million extension from 2025 to 2028, the FORGE project will continue to serve as a test bed for EGS tools, techniques and reservoir characterization. The new phase of work will focus on: 1) undertaking long-term, high-flow, and efficient circulation tests to prove commercial viability; 2) refining hydraulic stimulation methods in granitic rocks at depths of 11,000 feet (3,353 m) to create efficient, sustainable, and interconnected fracture networks; 3) using the latest fiber-optic systems to gather and evaluate subsurface data in real time, enabling refinements of models for fracture network growth; 4) minimizing seismicity and ground shaking; and 5) describing a replicable commercial pathway for EGS development by testing tools in high-temperature environments and optimizing well spacing.



Figure 3: Fervo Energy's first 120 MW (gross) EGS power plant in Utah under construction (foreground) and the second and third plant locations in the background (photo courtesy of Fervo Energy)

5 DISCUSSION

There appear to be at least four major development thrusts that may result in significant additional capacity by 2030: EGS, Superhot/Supercritical, closed loop and conventional hydrothermal. The various technology providers and developers in the United States can be grouped into these general categories. The categories are not exhaustive, but herein we illustrate some organizations involved in new geothermal power prospect and projects.

In 2025, the United States Geological Survey ("USGS") estimated that 135 GW is available from EGS resources in the Great Basin alone (USGS, 2025). EGS developments are underway and/or planned by firms such as Fervo, Ormat with SLB, Chevron New Energies and AlterG Resources and 400C; other firms are advancing nascent projects while staying in 'stealth mode'. Fervo's Project Red (their EGS pilot well doublet drilled in 2023 at Blue Mountain in Nevada) provided an initial long-term test bed that helped inform the Cape Station project design. As mentioned, the first unit at Cape Station is under construction and expected to be operating in 2026. Long-term operational data from EGS installations such as these will help to assess key parameters such as well quantities and spacing, reservoir temperature decline, geochemistry-related operating issues, well lifetimes, water loss, and overall sustainability, which are critical parameters that developers must manage to increase the overall cost-effectiveness of EGS.

Superhot geothermal has the goal to harness geothermal power from resources with temperatures in the mid-300s°C and higher (close to 400°C). Recognizing the massive heat reserves of the earth, the Clean Air Task Force (CATF) has been promoting Superhot resources since 2021. Mazama Energy is currently developing a Superhot resource at ~330°C near Newberry Crater in Oregon (Schill *et al.*, 2026). Recognizing that geothermal power potential increases with resource temperatures, Quaise Energy plans to drill extraordinarily deep wells (to depths up to 20,000 m), drilling the upper section of the well using conventional drilling methods, then using millimeter wave drilling powered by a gyrotron in the production section. Tapping into and extracting heat at such depths would be a game-changer of extraordinary proportions.

EGS and Superhot could work well together, particularly as temperature ratings of drilling equipment and tools continue to increase. However, combining EGS and Superhot to develop a reservoir presents technical challenges, since: 1) minimizing water loss will likely be a priority, which tends away from traditional high temperature dry steam or flash units using evaporative cooling towers, and towards air-cooled units; 2) high geofluid temperatures (up to 400°C) may exceed the operating regimes of conventional ORC heat exchangers or working fluid designs, or provide production fluid chemistry challenges for steam turbines; and thus 3) air-cooled binary plants using new working fluids (such as water or other less-used organic working fluids) may be proposed, resulting in novel plant designs, opportunities and challenges (Dichter, 2025). Power plant solutions for these Superhot+EGS resource constraints may introduce a step change in what until now have been steady but incremental advances in flash or binary technologies over the past several decades.

Akin to but different from Superhot resources, Supercritical water resources exist neither as a gas nor a liquid, but instead a single-phase fluid in which liquid and gas are indistinguishable. Reaching the critical point requires a temperature of at least 374°C, and pressures of at least 221 atmospheres (3,248 psi). Researchers in the United States are engaged with this concept, which touts a 5x to 10x improvement in well flow rates as the main benefit. There is considerable overlap with similar programs worldwide, such as the Iceland Deep Drilling Project (IDDP). which is drilling its third supercritical well this year (2026), research by Japan's New Energy and Industrial Technology Development Organization (NEDO), and New Zealand's nascent DeepHeat program. Deep drilling activities have a natural fit with for Superhot and Supercritical resources. The National Laboratories and members of the FORGE project are engaging in research for Supercritical resources in the United States. The risks related to the Supercritical resources are well known, including managing very high pressures, high drilling costs, well instabilities and corrosive and mineralizing fluids.

For conventional hydrothermal, USGS has estimated that 39 GW of geothermal power has already been identified, another 30 GW is as yet undiscovered, and yet another 30 GW is available from hidden (blind) geothermal resources (USGS, 2008). These conventional resources continue to be explored and developed by established operators such as Ormat and Open Mountain Energy. In addition, newer developments leveraging improvements in exploration tools and development strategies are planned or underway by operators such as Baseload Capital with Chevron New Energies, Ignis, and Zanskar , among others. Their planned additions may seem to be more modest in size than the aggressive multi-hundred MW developments sought by EGS developers, but conventional geothermal projects have been substantiated by decades of analogous projects. Furthermore, large blind systems and significant additional power generation in the Salton Sea resource have the potential to add conventional hydrothermal capacity at a significantly greater scale than in the recent past.

Closed loop projects have a variety of configurations; some of the companies active in this category in the United States include Eavor, GreenFire, Rodatherm and XGS. Information in December 2025 became available from the partial operation of Eavor's project in Germany. With a plan to supply about 64 MW thermal or 8.2 MW electrical (ThinkGeoEnergy, 2025), we can expect that learnings will inform similar development efforts worldwide.

Other technologies worth mentioning are co-located and hybrid solutions, where projects can deliver multiple revenue streams. Importantly, this includes continuing research and development for brine-hosted minerals (mainly lithium) in he Salton Sea region by firms such as Berkshire Hathaway Energy Renewables, Controlled Thermal Resources and EnergySource. Despite commenting on the potential for mineral extraction as a trend for at least the past six years in two previous United States Geothermal Power Country Updates and its continued strategic importance, progress in this area seems stubbornly slow, mainly owing to lower recent commodity pricing. Hybrid power plants such as the co-located geothermal and solar plants at Ormat's Beowawe, North Valley, Steamboat Hills and Tungsten Mountain , and their acquisition of the similar Stillwater facility highlight opportunities to combine two power sources with complementary cost and performance attributes: using solar energy for parasitic loads helps maximize the value of PPAs. Other interesting energy storage hybrid combinations include the 25 MW/100 MWh battery energy storage system added in 2024 by Calpine to the (retired) West Ford Flat plant site at the Geysers, and Sage Geosystems' combined geothermal energy, rock fracturing and reservoir energy storage at their Christine Texas facility, with plans to start operations in 2026.

Such co-located/hybrid projects illustrate how harnessing multiple energy, product and/or revenue streams at a single site can leverage existing land, scarce interconnection capacity and other 'balance of plant' facilities, offering a wider range of grid services and critical minerals needed for resilience and security.

Other market trends include a continued drive towards consolidation for established operators, and subsequent re-powerings or expansions. Considering the installed geothermal capacity and assuming a 25-30 year plant life, the implied market for regular capacity replacements is currently on the order of 150 MW per year. As examples, Ormat acquired the Cove Fort, Salt Wells and Stillwater projects from ENEL Green Power in 2024, and acquired Blue Mountain from Cyrq in 2025. As they did with their earlier US Geothermal and Terra-Gen acquisitions, the facilities were re-powered in short order. Vertically integrated OEM/operators are well positioned with flexibility to use surplus manufacturing capabilities to re-power existing units or add new units in fields with potential for expansion. Steam turbine units also provide a steady capacity upgrade market. Calpine continues their 'Super Rotor' program at The Geysers, where they have been re-powering approximately one unit per year. Units are now approaching their second generation of replacement. At large complexes at The Geysers, Coso and the Salton Sea, rehabilitation continues to require steady investment, despite there not having been an operating greenfield geothermal steam turbine project in the United States since Hudson Ranch in 2012. Due to the constant flow of retrofits, the authors apologize if the stated capacities in Table 1 do not perfectly reflect the current upgraded capacities or the manufacturers of the replacement turbines at various re-powered units, data for which is not all in the public domain; rated power for re-powerings is a constantly moving target.

Geothermal technology advancements benefit from acquisitions and collaboration. Zanskar acquired Lighting Dock from Cyrq in 2024, applying their exploration techniques to drill a highly productive well in 2025, restoring generation. Fervo successfully used the existing Blue Mountain plant as a test bed for their Project Red EGS doublet. Geothermal investors may be more receptive to new geothermal technologies when, via acquisition or collaboration with existing operators, they can gain better visibility and traction for commercialization.

Bipartisan support for geothermal continues at the federal level, with a strong focus on EGS. USDOE restructuring in late 2025 places geothermal energy in the newly created Hydrocarbons and Geothermal Energy Office ("HGEO"), with a goal to increase the visibility and understanding of geothermal energy. In early 2026, Congress allocated a USD150 million budget for the Office of Geothermal, a a significant reduction from the 2025 budget. However, USD 171.5 million (likely from unallocated funds from the Bipartisan Infrastructure Law of 2021) was allocated for EGS pilot projects and drilling to confirm new geothermal resources in February 2026, creating significant interest and much proposal activity by many interested parties. Financial support for geothermal projects has become available USDOE's Office of Energy Dominance Financing ("EDF", formerly the Loan Programs Office). USD30 million is available from the Advanced Research Projects Agency-Energy organization ("ARPA-E"), including the 'IGNIITE' initiative, which offers awards up to USD500,000 for new geothermal concepts (among other technologies).

Working together with public and private researchers, USDOE's FORGE project will continue to focus on EGS technology improvements. USDOE's Wells of Opportunity projects apply oil and gas stimulation and EGS-derived techniques to increase the productivity of existing wells. Innovative geothermal work continues to be done by the National Laboratories, including Lawrence Berkeley Lab, Sandia Labs and the National Lab of the Rockies, among others. Federal legislation has mostly retained (with some restrictions and phase-outs) the geothermal investment credit (ITC, Section 48 E) and the production tax credit (the technology-agnostic PTC, Section 45Y). Recent legislation and court decisions are paving a path towards permitting reforms that may shorten development timelines, a key enabler for efficient deployment of geothermal power projects. Annatoyn *et al*. (2025) provide an excellent summary of federal legislation impacting geothermal power in the United States.

Several reports (NREL 2021, Ussher and Brotheridge 2021, NLR 2025) list public geothermal PPA pricing in the United States over the past decade, which vary from around USD70-100/MWh. The 2024 USDOE 'Pathways to Commercial Liftoff: Next-Generation Geothermal Power' report (USDOE, 2024) stated similarly that conventional and next-generation geothermal PPAs signed recently are typically between USD70-100/MWh. Evro *et al*. (2025) observes that recent PPAs are in the range of USD75-95/MWh at conventional projects with capacities of less than 50 MW, and indicate levelized costs of energy (LCOE)in the USD80-170/MWh range for EGS developments with well depths around 2.5-4 km and produced fluid temperatures around 150-200°C. Market dynamics including data centers, inflation and restrictions on equipment and material imports are driving demand, capital costs and PPA rates beyond the values stated above, perhaps into the USD80-120/MWh range. It remains to be seen if EGS de-risking and economies of scale will result in lower PPA rates.

6 CONCLUSION

Annatoyn *et al.* (2025) stated things very well: "in sum, geothermal developers face a landscape in flux but trending favorable." That comment aptly describes the overall geothermal power industry in the United States, which faces changing technical, economic, and legislative trends. The coming years will reveal whether the geothermal buildout trajectory will continue with "business as usual" with modest growth focused on hydrothermal resources, or whether EGS megaprojects will indeed gain traction and be able to provide a breakout of new capacity at GW scales.

7 REFERENCES

Alphaxion Geothermal News & Energy Research, 2025. Zanskar's Big Blind: First Blind Geothermal Discovery in 30 Years. https://alphaxioms.blogspot.com/2025/12/zanskars-big-blind-first-blind.html (accessed January 2026).

Annatoyn, T., Grey S., Zevin, A. 2025. Federal law and geothermal power: 1966-2030. GRC Transactions, Vol. 49, 2025.

Bonafin, J. 2025. The integration of organic Rankine cycle (ORC) technology with enhanced geothermal systems (EGS) for large-scale power production: an update on the Cape Station project. GRC Transactions, Vol. 49, 2025.

California Energy Commission (CEC), 2025. California power plant listing. California Energy Commission. https://www.energy.ca.gov/proceedings/power-plant-listing (accessed December 2025).

California Public Utilities Commission (CPUC). 2024. CPUC advances clean energy with centralized procurement strategy. https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-clean-energy-with-centralized-procurement-strategy (accessed January 2026).

Dichter, D.W., 2025. Water-based geothermal binary cycles. Proceedings of the 50th Workshop on Geothermal Reservoir Engineering, February 10-12 2025, Stanford, California.

EIA. 2024. Electric Power Annual. U.S. Energy Information Administration. https://www.eia.gov/electricity/annual/ (accessed December 2025).

Evro S., Vashaghian S., Uzuegbu E., Gosnold W., and Tomomewo OS., 2025. From subsurface to success: reservoir modeling and system-level evaluation of geothermal energy projects. GRC Transactions, Vol. 49, 2025.

Hackett, L., .Ackerley, J. and Blake, K, 2025. Project Update: Analysis of Two Sequential Near-Field Well Stimulations at Two Operating Geothermal Fields in Nevada. PROCEEDINGS, 50th Workshop on Geothermal Reservoir Engineering Stanford University, Stanford, California, February 10-12.

Latitude Media, 2025. The Clean Transition Tariff won approval in Nevada. What's next for Fervo? https://www.latitudemedia.com/news/the-clean-transition-tariff-won-approval-in-nevada-whats-next-for-fervo/

National Laboratory of the Rockies, 2026. 2025 U.S. Geothermal Market Report, NLR/TP-5700-91898. https://www.nrel.gov/geothermal/2025-us-geothermal-market-report (accessed January 2026).

National Renewable Energy Laboratory (NREL). 2021. 2021 U.S. geothermal power production and district heating market report. https://docs.nrel.gov/docs/fy21osti/78291.pdf (accessed December 2025).

Robertson-Tait, A., Harvey, W., Hamm, S., and Boyd, L. 2020. The United States of America Country Update 2020 – power generation. World Geothermal Congress, 2021, October 24-27; Reykjavik, Iceland.

Robertson-Tait, A., Harvey, W., Jewett S., and Boyd, L. 2023. The United States of America country update 2023 – power generation. World Geothermal Congress, September 15-17 2023, Beijing, China.

Schill, E., Bonneville, A., Norbeck, A. and Violay, M., 2026. Unlocking larger flows and higher temperature with Enhanced Geothermal Systems innovation in 2025. Nature Reviews Clean Technology, https://doi.org/10.1038/s44359-025-00143-0 (accessed January 2026).

ThinkGeoEnergy. 2025. Eavor reports first electricity generation at pioneering geothermal project in Geretsried, Germany.. https://www.thinkgeoenergy.com/eavor-reports-first-electricity-generation-at-pioneering-geothermal-project-in-geretsried-germany/ (accessed December 2025).

United States Department of Energy (USDOE), 2024. Pathways for Commercial Liftoff: Next-Generation Geothermal Power. https://cdn.catf.us/wp-content/uploads/2025/06/09154348/doe-liftoff-nextgen-geothermal.pdf (accessed January 2026).

United States Geological Survey, 2008. Assessment of Moderate-and High-Temperature Geothermal Resources of the United States. https://pubs.usgs.gov/fs/2008/3082/ (accessed January 2026).

United States Geological Survey, 2025. Enhanced Geothermal Systems Electric-Resource Assessment for the Great Basin, Southwestern United States.. https://pubs.usgs.gov/fs/2025/3027/fs20253027.pdf (accessed January 2026).

Ussher G., Brotheridge J. 2021. Assessing the viability of geothermal projects using pumped wells. Proceedings 43rd New Zealand Geothermal Workshop, November 23-25, 2021, Wellington, New Zealand.

APPENDIX

Table 2. Unit data

Country	Prospect Area / Power Station	Unit name	Owners	Com. Year	Status	Nameplate Capacity - Op (MWe) by unit	2024 Annual Generation (MWh)	Turbine Manufacturer	Technology	System Type
USA-CA	Amedee	IMD	Amedee Geotherm Venture I	1988	Retired	0.80	-	Barber-Nichols	Binary Cycle	Hot water
USA-CA	Amedee	SYN	Amedee Geotherm Venture I	1988	Retired	0.80	-	Barber-Nichols	Binary Cycle	Hot water
USA-NV	Beowawe	1	Ormat Technology Inc. (100%)	1985	Operating	17.70	107,208	MHI	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-NV	Beowawe	2	Ormat Technology Inc. (100%)	2011	Retired		-	Barber-Nichols	Binary Cycle	Hot water
USA-NV	Beowawe	Repower	Ormat Technology Inc. (100%)	2024	Operating	6.00	w/Beowawe	Ormat	Binary Cycle	Hot water
USA-NV	Blackburn	Pilot	Grant Canyon Oil and Gas	2022	Operating	0.08	N/A	Electra Therm	Binary Cycle	Hot water
USA-NV	Blue Mountain	1	Cyrq Energy (100%)	2009	Operating	16.50	182,814	Ormat	Binary Cycle	Hot water
USA-NV	Blue Mountain	2	Cyrq Energy (100%)	2009	Operating	16.50	w/Blue Mountain	Ormat	Binary Cycle	Hot water
USA-NV	Blue Mountain	3	Cyrq Energy (100%)	2009	Operating	16.50	w/Blue Mountain	Ormat	Binary Cycle	Hot water
USA-UT	Blundell	1	PacifiCorp (100%)	1984	Operating	30.70	272,457	GE	Flash steam - single	Liquid-dominated two-phase high temperature (>160)
USA-UT	Blundell	2	PacifiCorp (100%)	2007	Operating	14.10	w/Blundell	Ormat	Binary Cycle	Hot water
USA-NV	Brady	1	Ormat Technology Inc. (100%)	1992	Retired		-	GE	Flash steam - double	Hot water
USA-NV	Brady	2	Ormat Technology Inc. (100%)	1992	Retired		-	GE	Flash steam - double	Hot water
USA-NV	Brady	3	Ormat Technology Inc. (100%)	1992	Retired		-	GE	Flash steam - double	Hot water
USA-NV	Brady	55991	Ormat Technology Inc. (100%)	2018	Operating	24.00	88,735	Ormat	Binary Cycle	Hot water
USA-UT	Cape Station	Phase 1	Fervo Energy	2026	Construction		-	Turboden	Binary Cycle	Hot water
USA-UT	Cape Station	Ph 2 (Turboden)	Fervo Energy	2028	Pre-construction		-	Turboden	Binary Cycle	Hot water
USA-UT	Cape Station	Ph 2 (Baker Hughes)	Fervo Energy	2028	Pre-construction		-	Baker Hughes	Binary Cycle	Hot water
USA-AK	Chena Hot Springs	1	Chena Hot Springs	2006	Retired		-	Pratt & Whitney	Binary Cycle	Hot water
USA-AK	Chena Hot Springs	2	Chena Hot Springs	2007	Operating	0.50	N/A	Pratt & Whitney	Binary Cycle	Hot water
USA-AK	Chena Hot Springs	3	Chena Hot Springs	N/A	Operating	0.73	N/A	Kaishan	Binary Cycle	Hot water
USA-CA	Coso	Navy I Unit 1	Coso Finance Partners	1987	Operating	102.43	384,703	MHI	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Coso	Navy I Unit 2	Coso Finance Partners	1988	Operating	33.33	w/Navy I	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Coso	Navy I Unit 3	Coso Finance Partners	1988	Operating	33.33	w/Navy I	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Coso	Navy II Unit 4	Coso Power Developers	1990	Operating	33.33	310,015	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Coso	Navy II Unit 5	Coso Power Developers	1990	Operating	33.33	w/Navy II	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Coso	Navy II Unit 6	Coso Power Developers	1990	Operating	33.33	w/Navy II	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Coso	BLM Unit 7	Coso Energy Developers	1989	Operating	33.33	244,200	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Coso	BLM Unit 8	Coso Energy Developers	1989	Operating	33.33	w/BLM	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Coso	BLM Unit 9	Coso Energy Developers	1989	Operating	33.33	w/BLM	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-UT	Cove Fort	1	Ormat Technology Inc. (100%)	1985	Retired	0.50	-	Unknown	Binary Cycle	Hot water
USA-UT	Cove Fort	2	Ormat Technology Inc. (100%)	1988	Retired	2.00	-	Unknown	Dry Steam	Hot water
USA-UT	Cove Fort	3	Ormat Technology Inc. (100%)	2013	Operating	25.00	120,793	Ormat	Binary Cycle	Hot water
USA-NV	Desert Peak	1	Ormat Technology Inc. (100%)	1985	Retired	7.00	-	Unknown	Flash steam - double	Hot water
USA-NV	Desert Peak	2	Ormat Technology Inc. (100%)	2007	Operating	14.20	72,684	Ormat	Binary Cycle	Hot water
USA-NV	Dixie Valley	1	Ormat Technology Inc. (100%)	1988	Operating	64.00	312,772	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-NV	Dixie Valley	Bottoming	Ormat Technology Inc. (100%)	2012	Retired		-	Barber-Nichols	Binary Cycle	Hot water
USA-NV	Dixie Valley	Upgrade	Ormat Technology Inc. (100%)	2023	Operating	6.00	28,505	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-NV	Don A Campbell I	1	Ormat Technology Inc. (100%)	2014	Operating	22.50	109,966	Ormat	Binary Cycle	Hot water
USA-NV	Don A Campbell II	2	Ormat Technology Inc. (100%)	2015	Operating	22.50	93,462	Ormat	Binary Cycle	Hot water
USA-NV	Fish Lake	1	Open Mountain Energy	2025	Pre-construction		-		Unknown	
USA-NV	Fish Lake	2	Open Mountain Energy	2025	Pre-construction		-		Unknown	
USA-NV	Fish Lake	3	Open Mountain Energy	2025	Pre-construction		-		Unknown	
USA-NV	Fish Lake	4	Open Mountain Energy	2025	Pre-construction		-		Unknown	
USA-NV	Florida Canyon	1	Florida Canyon	2012	Retired		-	Electra Therm	Binary Cycle	Hot water

Table 2. Unit data, continued

Country	Prospect Area / Power Station	Unit name	Owners	Com. Year	Status	Nameplate Capacity - Op (MWe) by unit	2024 Annual Generation (MWh)	Turbine Manufacturer	Technology	System Type
USA-CA	Geysers, The	5/6 McCabe - MCST5	Calpine Corp. (100%)	1971	Operating	59.40	4,367,198	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	5/6 McCabe - MCST6	Calpine Corp. (100%)	1971	Operating	59.40	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	7/8 Ridgeline - RLST7	Calpine Corp. (100%)	1972	Operating	59.40	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	7/8 Ridgeline - RLST8	Calpine Corp. (100%)	1972	Operating	59.40	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	11 Eagle Rock	Calpine Corp. (100%)	1975	Operating	118.80	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	12 Cobb Creek	Calpine Corp. (100%)	1979	Operating	79.05	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	13 Big Geysers	Calpine Corp. (100%)	1980	Operating	138.50	w/Units 5-20	GE (Toshiba repwr)	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	14 Sulfur Springs	Calpine Corp. (100%)	1980	Operating	125.50	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	16 Quicksilver	Calpine Corp. (100%)	1985	Operating	124.65	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	17 Lake View	Calpine Corp. (100%)	1982	Operating	130.91	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	18 Socrates	Calpine Corp. (100%)	1983	Operating	120.00	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	19 Calistoga - CAST1	Calpine Corp. (100%)	1984	Operating	85.99	468,760	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	19 Calistoga - CAST2	Calpine Corp. (100%)	1984	Operating	w/Calistoga	w/Calistoga	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	20 Grant	Calpine Corp. (100%)	1985	Operating	82.65	w/Units 5-20	Toshiba	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	1 Aidlin - ADST1	Calpine Corp. (100%)	1989	Operating	25.00	81,307	Fuji	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	1 Aidlin - ADST2	Calpine Corp. (100%)	1989	Operating	w/Aidlin	w/Aidlin	Fuji	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	3 Sonoma - SOST3	Calpine Corp. (100%)	1983	Operating	78.00	447,631	MHI	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	9/10 Fumarole 1	Calpine Corp. (100%)	1973	Retired		-		Dry Steam	Vapor-dominated
USA-CA	Geysers, The	9/10 Fumarole 2	Calpine Corp. (100%)	1973	Retired		-		Dry Steam	Vapor-dominated
USA-CA	Geysers, The	West Ford Flat 1&2	Calpine Corp. (100%)	1988	Retired		-	MHI	Dry Steam	Vapor-dominated
USA-CA	Geysers, The	Bear Canyon 1&2	Calpine Corp. (100%)	1988	Retired		-	MHI	Dry Steam	Vapor-dominated
USA-CA	Heber	1	Ormat Technology Inc. (100%)	1985	Retired		-	MHI	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Heber	2 (SIGC)	Ormat Technology Inc. (100%)	1993	Retired		-	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-CA	Heber	1-repower	Ormat Technology Inc. (100%)	2027	Construction		-	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-CA	Heber	Gould1	Ormat Technology Inc. (100%)	2006	Operating	3.50	687,188	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-CA	Heber	Gould2	Ormat Technology Inc. (100%)	2006	Operating	7.00	w/Gould 1	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-CA	Heber	2-repower	Ormat Technology Inc. (100%)	2022	Operating	42.50	w/Gould 1	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-CA	Heber	GEN4	Ormat Technology Inc. (100%)	2018	Operating	19.00	w/Gould 1	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-CA	Heber	GEN13	Ormat Technology Inc. (100%)	2006	Operating	16.00	w/Gould 1	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-CA	Heber	South - GEN14	Ormat Technology Inc. (100%)	2008	Operating	16.00	w/Gould 1	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-CA	Hell's Kitchen	Stage 2	Controlled Thermal Resource	TBD	Pre-construction		-	Baker Hughes	Flash steam - single	Liquid-dominated two-phase high temperature (>160)
USA-CA	Honey Lake	2	HL Power	1989	Operating	6.00	N/A		Unknown	Hot water
USA-CA	Hudson Ranch	1-John L. Featherstone	Cyrq Energy (100%)	2012	Operating	55.00	407,967	Fuji	Flash steam - triple	Liquid-dominated two-phase high temperature (>160)
USA-NV	Jersey Valley	1	Ormat Technology Inc. (100%)	2011	Operating	15.00	60,912	Ormat	Binary Cycle	Hot water
USA-NM	Lightning Dock	Units 1-4	Lightning Dock Geothermal HI-	2013	Retired		-	Kaishan	Binary Cycle	Hot water
USA-NM	Lightning Dock	1-repowering	Zanskar	2018	Operating	15.00	26,097	Turboden	Binary Cycle	Hot water
USA-CA	Mammoth G-1	U100	Ormat Technology Inc. (100%)	1984	Operating	5.00	59,620	Ormat	Binary Cycle	Hot water
USA-CA	Mammoth G-1	U200	Ormat Technology Inc. (100%)	1984	Operating	5.00	w/Mammoth G-1	Ormat	Binary Cycle	Hot water
USA-CA	Mammoth G-2	T101	Ormat Technology Inc. (100%)	1990	Operating	5.00	82,307	Ormat	Binary Cycle	Hot water
USA-CA	Mammoth G-2	T102	Ormat Technology Inc. (100%)	1990	Operating	5.00	w/Mammoth G-2	Ormat	Binary Cycle	Hot water
USA-CA	Mammoth G-2	T103	Ormat Technology Inc. (100%)	1990	Operating	5.00	w/Mammoth G-2	Ormat	Binary Cycle	Hot water
USA-CA	Mammoth G-3	T101	Ormat Technology Inc. (100%)	1990	Operating	5.00	103,119	Ormat	Binary Cycle	Hot water
USA-CA	Mammoth G-3	T102	Ormat Technology Inc. (100%)	1990	Operating	5.00	w/Mammoth G-3	Ormat	Binary Cycle	Hot water
USA-CA	Mammoth G-3	T103	Ormat Technology Inc. (100%)	1990	Operating	5.00	w/Mammoth G-3	Ormat	Binary Cycle	Hot water
USA-CA	Mammoth	Casa Diablo IV	Ormat Technology Inc. (100%)	2022	Operating	40.00	276,936	Ormat	Binary Cycle	Hot water

Table 2. Unit data, continued

Country	Prospect Area / Power Station	Unit name	Owners	Com. Year	Status	Nameplate Capacity - Op (MWe) by unit	2024 Annual Generation (MWh)	Turbine Manufacturer	Technology	System Type
USA-NV	McGinness Hills	MH-1	Ormat Technology Inc. (100%)	2012	Operating	36.00	602,822	Ormat	Binary Cycle	Hot water
USA-NV	McGinness Hills	MH-2	Ormat Technology Inc. (100%)	2015	Operating	36.00	w/McGinness MH-1	Ormat	Binary Cycle	Hot water
USA-NV	McGinness Hills	MH-3	Ormat Technology Inc. (100%)	2018	Operating	48.00	468,081	Ormat	Binary Cycle	Hot water
USA-NV	McGinness Hills	Expansion	Ormat Technology Inc. (100%)	2021	Operating	24.80	w/McGinness MH-3	Ormat	Binary Cycle	Hot water
USA-TX	Nacogdoches	Pilot	Austin Energy, Exceed Energy	2025	Construction		-	Unknown	Unknown	
USA-CA	NCPA I	1	Northern California Power	1983	Operating	55.00	278,171	Ansaldo	Dry Steam	Vapor-dominated
USA-CA	NCPA I	2	Northern California Power	1983	Operating	55.00	-	Ansaldo	Dry Steam	Vapor-dominated
USA-CA	NCPA II	3	Northern California Power	1985	Retired		363,338	Fuji	Dry Steam	Vapor-dominated
USA-CA	NCPA II	4	Northern California Power	1986	Operating	55.00	w/NCPA Unit 3	Fuji	Dry Steam	Vapor-dominated
USA-OR	Neal Hot Springs	1	Ormat Technologies Inc.	2012	Operating	11.00	168,873	ACMT (Ormat repower)	Binary Cycle	Hot water
USA-OR	Neal Hot Springs	2	Ormat Technologies Inc.	2012	Operating	11.00	w/Neal unit 1	ACMT (Ormat repower)	Binary Cycle	Hot water
USA-OR	Neal Hot Springs	3	Ormat Technologies Inc.	2012	Operating	11.00	w/Neal unit 1	ACMT (Ormat repower)	Binary Cycle	Hot water
USA-CA	North Brawley	North	Ormat Technologies Inc.	2009	Operating	50.00	16,870	Ormat	Binary Cycle	Hot water
USA-NV	North Valley	1	Ormat Technologies Inc.	2023	Operating	31.50	209,019	Ormat	Binary Cycle	Hot water
USA-NV	North Valley	2	Ormat Technologies Inc.	2026	Construction		-	Ormat	Binary Cycle	Hot water
USA-OR	OIT	1	Oregon Institute of Technology	2009	Operating	0.20	-	Pratt & Whitney	Binary Cycle	Hot water
USA-CA	Ormesa	OG I	Ormat Technologies Inc.	1986	Operating	24.60	70,228	Ormat	Binary Cycle	Hot water
USA-CA	Ormesa	OG II	Ormat Technologies Inc.	1987	Operating	24.00	131,678	Ormat	Binary Cycle	Hot water
USA-CA	Ormesa	IE	Ormat Technologies Inc.	1988	Retired		-	Ormat	Binary Cycle	Hot water
USA-CA	Ormesa	IH	Ormat Technologies Inc.	1989	Retired		-	Ormat	Binary Cycle	Hot water
USA-CA	Ormesa	GEM2	Ormat Technologies Inc.	1989	Retired		-	MHI	Flash steam - double	Hot water
USA-CA	Ormesa	GEM3	Ormat Technologies Inc.	1989	Retired		-	MHI	Flash steam - double	Hot water
USA-CA	Ormesa	GEM bottoming	Ormat Technologies Inc.	2007	Retired		-	Ormat	Binary Cycle	Hot water
USA-CA	Ormesa	OG III	Ormat Technologies Inc.	2020	Operating	24.00	44,416	Ormat	Binary Cycle	Hot water
USA-NV	Patua	1	Cyrq Energy (100%)	2013	Operating	16.00	107,460	ACMT	Binary Cycle	Hot water
USA-NV	Patua	3	Cyrq Energy (100%)	2013	Operating	16.00	w/Patua Unit 1	ACMT	Binary Cycle	Hot water
USA-NV	Patua	5	Cyrq Energy (100%)	2013	Operating	16.00	w/Patua Unit 1	ACMT	Binary Cycle	Hot water
USA-HI	Puna	PGV 1	Puna Geothermal Venture	1993	Operating	35.00	204,947	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-HI	Puna	PGV 1 expansion	Puna Geothermal Venture	2012	Operating	12.00	53,992	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-HI	Puna	Repowering	Puna Geothermal Venture	2026	Pre-construction		-	Ormat	Binary Cycle	Liquid-dominated two-phase high temperature (>160)
USA-ID	Raft River	1	Ormat Technologies Inc.	2008	Operating	16.00	92,031	Ormat	Binary Cycle	Hot water
USA-NV	Salt Wells	101 and 201	Ormat Technologies Inc.	2009	Operating	18.00	70,046	ACMT	Binary Cycle	Hot water
USA-CA	Salton Sea	1	BHER/CalEnergy Operating	1982	Operating	10.30	78,423	Fuji	Flash steam - triple	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	2-GEN1	BHER/CalEnergy Operating	1990	Operating	11.70	106,967	MHI	Flash steam - triple	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	2-GEN2	BHER/CalEnergy Operating	1990	Operating	5.20	w/Unit 2	MHI	Flash steam - triple	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	2-GEN3	BHER/CalEnergy Operating	1990	Operating	4.00	w/Unit 2	GE Rotoflow	Flash steam - triple	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	3-GEN1	BHER/CalEnergy Operating	1989	Operating	54.00	314,898	MHI	Flash steam - triple	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	4100	BHER/CalEnergy Operating Corp. (100%)	1997	Operating	54.00	179,841	MHI	Flash steam - triple	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	5100	BHER/CalEnergy Operating	2000	Operating	58.00	290,310	Fuji	Flash steam - triple	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	Vulcan GEN1	BHER/CalEnergy Operating	1985	Operating	35.00	227,159	MHI	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	Vulcan GEN2	BHER/CalEnergy Operating	1985	Operating	11.00	w/Vulcan	MHI	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	Del Ranch T0012	BHER/CalEnergy Operating	1988	Operating	53.50	326,297	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	Elmore T0015	BHER/CalEnergy Operating	1988	Operating	53.50	104,325	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	Elmore Backpressure	BHER/CalEnergy Operating	2019	Operating	10.00	w/Elmore	GE	Back Pressure	Liquid-dominated two-phase high temperature (>160)
USA-CA	Salton Sea	CE Leathers GEN1	BHER/CalEnergy Operating	1988	Operating	53.50	70,616	Fuji	Flash steam - double	Liquid-dominated two-phase high temperature (>160)
USA-CA	San Ardo	1	Chevron New Energies (100%)	2022	Operating	0.70	N/A	Orcan	Binary Cycle	Hot water
USA-NV	San Emidio	SE-U1	Ormat Technology Inc. (100%)	2012	Operating	13.00	83,844	ACMT	Binary Cycle	Hot water

Table 2. Unit data, continued

Country	Prospect Area / Power Station	Unit name	Owners	Com. Year	Status	Nameplate Capacity - Op (MWe) by unit	2024 Annual Generation (MWh)	Turbine Manufacturer	Technology	System Type
USA-NV	Soda Lake I	Units 1-4	Cyrq Energy (100%)	1987	Retired		-	Ormat	Binary Cycle	Hot water
USA-NV	Soda Lake II	Units 1-6	Cyrq Energy (100%)	1991	Retired		-	Ormat	Binary Cycle	Hot water
USA-NV	Soda Lake III	3	Cyrq Energy (100%)	2019	Operating	24.00	120,010	Ormat	Binary Cycle	Hot water
USA-NV	Star Peak		Open Mountain Energy LLC	2022	Operating	21.90	39,587	Kaishan	Binary Cycle	Hot water
USA-NV	Steamboat	Steamboat Hills	Ormat Technologies Inc.	1988	Retired		-	GE	Flash steam - single	Liquid-dominated two-phase medium temperature (90-160)
USA-NV	Steamboat	Steamboat Hills Repower	Ormat Technologies Inc.	2020	Operating	35.00	231,689	Ormat	Binary Cycle	Liquid-dominated two-phase medium temperature (90-160)
USA-NV	Steamboat	Steamboat II	Ormat Technologies Inc.	1992	Operating	18.00	62,665	Ormat	Binary Cycle	Liquid-dominated two-phase medium temperature (90-160)
USA-NV	Steamboat	Steamboat III	Ormat Technologies Inc.	1992	Operating	18.00	69,354	Ormat	Binary Cycle	Liquid-dominated two-phase medium temperature (90-160)
USA-NV	Steamboat	Galena 1	Ormat Technology Inc. (100%)	2005	Operating	30.00	97,639	Ormat	Binary Cycle	Liquid-dominated two-phase medium temperature (90-160)
USA-NV	Steamboat	Galena 2	Ormat Technology Inc. (100%)	2007	Operating	13.50	36,673	Ormat	Binary Cycle	Liquid-dominated two-phase medium temperature (90-160)
USA-NV	Steamboat	Galena 3	Ormat Technology Inc. (100%)	2008	Operating	30.00	82,620	Ormat	Binary Cycle	Liquid-dominated two-phase medium temperature (90-160)
USA-NV	Stillwater 2	50765	Ormat Technologies Inc.	2009	Operating	48.00	90,430	ACMT	Binary Cycle	Hot water
USA-UT	Thermo	Units 1-50	Cyrq Energy (100%)	2008	Retired		-	Pratt & Whitney	Binary Cycle	Hot water
USA-UT	Thermo	1 Repower	Cyrq Energy (100%)	2013	Operating	14.00	57,730	Ormat	Binary Cycle	Hot water
USA-NV	Tungsten	1	Ormat Technologies Inc.	2017	Operating	27.00	314,624	Ormat	Binary Cycle	Hot water
USA-NV	Tuscarora	1	Ormat Technology Inc. (100%)	2012	Operating	18.00	124,415	Ormat	Binary Cycle	Hot water
USA-NV	Wabuska	Wabuska 1	Open Mountain Energy LLC	1984	Retired		-	Barber-Nichols	Binary Cycle	Hot water
USA-NV	Wabuska	Wabuska 2	Open Mountain Energy LLC	1987	Retired		-	Barber-Nichols	Binary Cycle	Hot water
USA-NV	Wabuska	Whitegrass 1	Open Mountain Energy LLC	2018	Operating	4.00	17,696	Kaishan	Binary Cycle	Hot water
USA-NV	Wabuska	Whitegrass 2	Open Mountain Energy LLC	2026	Construction		-	Kaishan	Binary Cycle	Hot water