

Geothermal Program Factsheet

Updated June-2015

Objectives

- Manage orderly and efficient development of geothermal resources on State-owned lands.
- Maximize revenue, ensure public safety, and protect environment.

Statutory Authority

- Public Resources Code, Division 6 (Public Lands), Part 2 (Leasing of Public Lands), Chapter 2 (Oil and Gas and Mineral Leases), Article 5.5 (Geothermal Resources), § 6901-6925, added to code in 1967, and amended by Statutes of 1971, 1978, 1983, 1985, 1989, and 2001.
- Other provisions in California Code of Regulations (CCR), Title 2 (Administration), Division 3 (State Property Operations), Chapter 1 (State Lands Commission), Article 4.1 (Leases for Exploration and Development of Geothermal Resources), § 2249-2250.

MRMD Staff Functions

- Process applications for permits and leases on State-owned lands.
- Evaluate all proposed drilling, reservoir development, and engineering projects on leases.
- On-site inspection to assure production and lease compliance.
- Monitor production volumes and verify all royalty calculations and payments.
- Conduct geothermal permitting/leasing on proprietary lands owned by other State agencies.

Environmental Review

- No permit/lease approved until requirements of Calif. Environmental Quality Act (CEQA) met.
- CEQA issues handled by Division of Environmental Planning and Management staff.

Permit and Lease Types

- Non-exclusive, data-gathering *Exploration Permit for Geothermal Resources* (PRC § 6909).
- *Geothermal Resources Prospecting Permit* (PRC § 6910) for exploration, pref. right to lease.
- *Geothermal Resources Lease*, by competitive bid (PRC § 6911) or negotiation (PRC § 6919).

The Geysers Field (Sonoma, Lake and Mendocino Counties)

- Seven leases totaling 7,247 acres of 100% reserved mineral interest lands, plus two parcels totaling 895 acres with 1/16th interest.
- Lands are *School Lands*, net revenue benefits State Teachers' Retirement System (STRS).
- Leases held by Calpine subsidiaries Geysers Power Co. and CPN Wild Horse Geothermal.
- Approx. 110 production wells and 20 injection wells on State leases, supplying 11 power plants.
- Leases currently produce about 31 billion pounds of steam per year, generating 187 megawatts of electricity, enough to supply 250,000 homes (at an average of 18 kwh/day per home).
- Royalty rates are 10% to 12.5% on value of steam, which is 30-42% of value of electricity.
- At current electrical prices, royalty revenue = \$5.3 million per year.
- Cumulative royalty since 1972 = \$206.5 million (through April 2015 production; does not include rent).

Salton Sea Area (Imperial County)

- 1,940 acres of proprietary lands owned by California Department of Fish and Wildlife along the southeast shore, in addition to 40 acres of Sovereign lands.
- 615 acres held by CalEnergy, subsidiary Magma Power Company in May of 2011 (Two Leases); 40 acres of Sovereign lands held by EnergySource LLC in September of 2012; and 1,325 acres held by Imperial Wells Power LLC in March of 2014.
- Current royalty = \$23,150 per year
- Cumulative royalty since 1992 = \$1,059,710 (through April 2015 production, does not include rent).

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- Approx. 554 acres of State fee-owned School lands and approx. 1,824 acres of RMI lands (1,101 private surface) on the west side of the Salton Sea are being considered for a negotiated lease by ORNI 5 LLC.
- Approx. 671 acres of California Department of Recreation, Ocotillo Wells State Vehicular Recreation Area lands are being considered for a negotiated lease by ORNI 5 LLC.

Other Areas (Siskiyou and Inyo Counties)

- 640 acres of school lands from one prospecting permit (Inyo).
- 520 acres of an open application for a preferential lease (Siskiyou).
- No royalties to date (through June-2015).