

POWER'S GEOTHERMAL PROJECTS



64 MW Olkaria II during construction – Kenya, 20904.



100 MW Cerro Prieto IV, Mexico – 2001.



Work camp for construction of 52 MW Mindanao I in 1996. Mt. Apo, the highest point in the Philippines, can be seen in the background to the left.

MORE THAN TWO DECADES OF GEOTHERMAL EXPERIENCE AROUND THE WORLD: FLASH PLANTS, BINARY PLANTS, STUDIES, AND SPECTACULAR PROJECT SUPPORT

Plant Engineering & Design, New Plants & Additions:

| Project | Size & Cycle | POWER's Role |
|---------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Zorlu, New Geothermal Plant Feasibility Study, Kizildere, Turkey | 60 MW Flash Resource Study | Now providing engineering for Zorlu's integrated feasibility study for the Kizildere geothermal resource expansion. |
| KenGen and Mitsubishi, Olkaria II, Unit 3 35 MW Project | 35 MW Single Flash | Design and procurement for the third flash unit at Olkaria II. POWER was the engineer for the first two units, completed in 2004. |
| Guriş, Complete Engineering for the new Germancik Geothermal Plant, Turkey | 40 MW Dual Flash Plant | Project definition and complete design, including equipment procurement, for a new 40 MW plant in Turkey. |
| PacifiCorp, OE Engineering for New Bottoming Cycle, Blundell Plant, Utah | 10 MW ORC Bottoming Cycle | EPC Documentation, Owner Engineering and Construction Observation for installation of a new ORC binary plant at an existing flash plant. |
| Chevron Amoseas and Thiess, Darajat II 110 MW Dry Steam Plant Engineering, Indonesia | 110 MW Dry Steam Plant | Complete project definition, plant engineering and equipment procurement for a 110 MW single-unit dry steam plant operated by Chevron. |
| SOGEO, Pico Vermelho EPC and Ribeira Grande Expansion Work, Açores, Portugal | 15 MW Flash Plant, and 25 MW Binary Plant | Technical support for an EPC bid for the Pico Vermelho repowering, and system review and consultation for a wellfield expansion at Ribeira Grande, Açores. |
| CalEnergy, OE Services for Bottoming Cycle Units, California | 3 x 10 MW ORC Binary Plants | Conceptual design, EPC package prep and bid evaluation for 30 MW of binary bottoming cycle capacity. |

...ate covers the typical EPC scope for a geothermal power p...
 ... a single flash unit, and a two-unit bin...
 ... include any assessment by POWER of ICE's internal costs for pr...
 ... oversight, EPC contract administration, or capital facilities that would b...
 ... development or ongoing administration and operation of the plant.

Capital Cost & Net Output Comparison – Draft

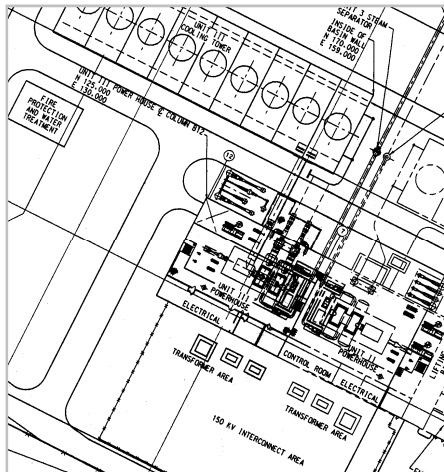
| Cost Component | Flash Plant | ORC Plant |
|-----------------------------------------------|----------------|----------------|
| Power Plant (with contingency) | \$39,514,895 | \$4,960,465 |
| Power Plant (without contingency) | \$34,360,778 | \$3,758,572 |
| Gathering System* | \$11,623,879 | \$3,758,572 |
| Substation/Switch Station** | \$4,960,465 | \$3,758,572 |
| Transmission Line*** | \$59,857,811 | \$3,758,572 |
| Project (with contingency) | \$112,857,520 | \$17,232,186 |
| Net Output | 32,074 kW | 32,849 kW |
| Cost per kW (with contingency) | \$3,518 per kW | \$522 per kW |
| Cost per kW (without contingency) | \$3,410 per kW | \$522 per kW |
| Cost for Entire Project (with contingency) | \$1,071 per kW | \$1,513 per kW |
| Cost for Entire Project (without contingency) | \$1,066 per kW | \$2,360 per kW |

* Price assumes non-pumped system to injection wells at lower elevation; addition of pumped system to new pad at uphill location in addition to the non-pumped injection system.
 ** Price estimate for additional requirements for pumped injection system, supplied by ICE.
 *** Price estimate for additional requirements for pumped injection system, supplied by ICE.

From the Las Pailas estimate, 2004



Mindanao 1 and Mindanao 2 (104 MW) – Philippines, 1999.



POWER's GA the 110 MW Darajat II plant – Indonesia, 2005.

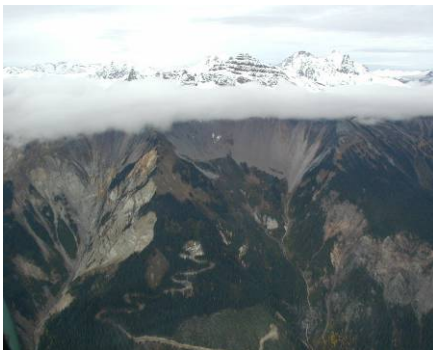
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| Calpine, Geysers Plant Upgrade Projects, California | Various plant upgrades, dry steam plants | Plant evaluation and detailed engineering for a multi-year program of plant upgrades for numerous dry steam plants at Calpine's Geysers complex, the largest geothermal plant complex in the world. |
| BRGM, Bouillante II Project Consultation and Design, Guadeloupe, France | 10 MW Flash Plant with Seawater Cooling | Project development consultation, process review and overall plant design and field construction support for the new Bouillante II project in the French West Indies. |
| Mitsubishi and KenGen, Engineering for the Olkaria II Project, Kenya | 64 MW Flash Plant€ | MHI's engineer for the new Olkaria II two-unit flash plant, responsible for plant design and start-up, equipment procurement, and wellfield controls and communication. |
| CFE and Mitsubishi, Cerro Prieto IV, Mexico | 100 MW 4-Unit Flash Plant | MHI's engineer for a new four-unit flash plant, responsible for plant design, field engineering and commissioning, equipment procurement and switchyard design. |
| NCPA Geysers Injection Plant Electrical Design, California | Wastewater injection system for Geysers | Switchgear and relaying design for NCPA's new injection pump system, part of the Geysers project for injection of Lake County and Santa Rosa wastewater into the Geysers steam reservoir. |
| Orkuvieta Husavikur, Husavik Kalina Cycle Plant, Iceland | 1.7 MW Kalina Cycle Plant | Mechanical, controls engineering and start-up assistance for the innovative Husavik Kalina Cycle geothermal plant. The Husavik Plant is the first Kalina plant in Europe and the first geothermal Kalina plant anywhere. |
| Mitsubishi and ICE, Miravalles III Geothermal Plant, Costa Rica | 28 MW Flash Plant | MHI's engineer for a new single-unit flash plant, responsible for plant design, field engineering and commissioning, equipment procurement and switchyard design. |
| Puna Geothermal Venture, Puna Plant Expansion, Hawaii | 25 MW ORC Combined Cycle | Study work and engineering for a capacity expansion involving new wells, new separation and process improvements. |
| TIC Heber Binary Geothermal Plant, California | 33 MW ORC | Engineer for the turnkey team installing the seven-unit ORC plant. Extreme fast-track design and construction. |
| Mitsubishi and Oxbow/Marubeni, Mindanao 2 Project, Philippines | 52 MW Dual Flash Plant | MHI's and Oxbow's engineer for a new dual flash plant, responsible for plant design, field engineering and commissioning, equipment procurement. |
| Mitsubishi and Oxbow/Marubeni, Mindanao 1 Project, Philippines | 52 MW Single Flash | MHI's and Oxbow's engineer for a new dual flash plant, responsible for overall project site management, plant design, field engineering and commissioning, equipment procurement, and switchyard. |
| Calpine, Geysers Sulfur | Numerous dry | Evaluation, engineering and field |



"Main Street" at 100 MW Cerro Prieto, 2001



POWER's Tom McAuliffe at Bouillante II, French West Indies, 2004



View from a helicopter of the Meager Creek prospect and well site in the Coast Range of British Columbia, 2004

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| Abatement Systems, California | steam plants | construction assistance for upgrade sulfur abatement systems at several Geysers plants. |
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Plant Studies & Concept Designs:

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| CalEnergy Salton Sea 6 Project Conceptual Design, California | 180 MW Double Flash | EPC Technical Support and Conceptual Design for Salton Sea 6, the largest single-unit geothermal plant ever proposed. |
| U.S. Geothermal Raft River 10 MW Binary Plant, Idaho | 10 MW Binary | Conceptual design and plant optimization consultation for a 10 MW plant being developed in southern Idaho. |
| ICE, Las Pailas 100 MW Conceptual Project, Costa Rica | ~100 MW Flash Complex | Performance of geothermal plant cycle study, plant and wellfield conceptual design, and project cost estimating for a prospective new field. |
| Empire Energy and U.S. DOE, Mixed Fluid Binary Study, Nevada | 2 MW Mixed Fluid ORC Binary | Feasibility study, cycle selection, plant design and estimating for a 2 MW mixed-fluid ORC binary plant at an existing geothermal plant site. |
| Calpine, Fourmile Hill Conceptual Design and Estimates, California | 49 MW Single Flash | Conceptual design for plant and wellfield, process optimization study, and full capital cost estimate for a prospective new plant. |
| ENAP, Geotermia del Norte, Conceptual Design, Chile | ~20 MW High-Altitude Flash | Cycle review, conceptual design and innovative system designs for a prospective new flash plant in the high desert of Chile. |
| PacifiCorp and DOE, Blundell Cycle and Plant Expansion Study, Utah | 15 MW Binary or LP Flash | Feasibility study, conceptual design, pilot scale testing and reservoir model update for a bottoming cycle expansion of the Harry Blundell geothermal plant. |
| Oxbow Power, Dixie Valley Troubleshooting, Nevada | Wellhead, pump and separator consultation | Responsibility for several system improvement projects at Dixie Valley including addition of a new well and separator, and piping/pump mods. |
| California Energy Company, Newberry Crater Design Study, Oregon | ~50 MW Flash | Responsible for process evaluation, wellfield conceptual layout, conceptual plant design for a prospective new geothermal complex in Oregon. |
| PGV, Puna Plant Design Review, Hawaii and Israel | 25 MW ORC combined cycle review | Initial consultation to owner to confirm design basis and cycle feasibility before contracting with the EPC. |
| California Energy Company, Glass Mountain, California | 50 MW flash | Process selection, plant and wellfield layout and conceptual design, and cost estimating for a prospective new plant. |

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| Far West, Steamboat Kalina Prospect, Nevada | 12.5 MW Kalina cycle | Responsible for process consultation, plant conceptual design and capital cost estimate for a Kalina binary cycle plant. |
| Anadarko Petroleum, Pueblo Valley | ORC Binary | Process cycle review and plant preliminary design for an innovative binary plant. |
| Caithness, Steamboat Plant Expansion, Nevada | 12 MW Flash | Equipment definition and budgetary cost estimating for an expansion at the Yankee Caithness plant. |
| San Emidio Resources, Interconnect, Nevada | 20 MW Plant | Responsible for a transmission interconnection study for a prospective new plant. |
| Calpine, Dixie Valley Plant Conceptual Design, Nevada | 50 MW Flash | Process and cycle study, plant and wellfield conceptual design, and cost estimate. |
| Commonwealth, Meager Creek Prelim Design, B.C. | 66 MW Binary Study | Design study, cycle review and selection, preliminary design and budgetary cost estimating for a prospective new plant. |
| M-K, Zunil Project Study, Guatemala | Comparative design study | Design review, conceptual design and estimating for several flash and binary plant scenarios. |

Owner/Banker Consultation for Geothermal Projects:

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| BCIE and Polaris Geothermal, San Jacinto-Tizate, Nicaragua | 26 MW Flash Plant and Gathering/ Injection System | Due diligence review, on behalf of the owner and banker, of plant and gathering system EPC proposal submitted by a candidate EPC team. Review covered confirmation of design, comments on design, evaluation of the proposed project structure and schedule, and review of proposed supply and performance contracts. |
| Daimler/Chrysler Bank and Standard Bank of London, San Jacinto, Nicaragua | 10 MW Wellhead Flash, 25 MW Flash | Due diligence, plant design and equipment selection and cost review of San Jacinto-Tizate project proposal |
| Ormat/U.S. DOE, Test Witness, California | 30 MW ORC | Independent test witness and owner consultation, 30 MW Ormesa No. 1 plant. |
| MCNIC Power, Bid Due Diligence Review, California | Flash plants | Due diligence review of bids and bid assumptions for Salton Sea generation plant equity bid. |
| Alaska Energy Authority, Unalaska Cost Estimate, Alaska | Binary plant cost estimating | Independent cost estimate review, alternate plant concept review, and conceptual design for optimal alternative for an Aleutian Island ORC plant. |



Cerro Prieto, 2000



The new wellhead at Puna, 2003.

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| Oxbow Power, Scale Test Pilot Plant, Nevada | Dual-flash scale test module | Design, furnish and installation of a dual-flash scale test skid to support design and development of the Dixie Valley plant. |
| Mitsubishi Heavy Industries, Wayang Windu Proposal, Indonesia | 220 MW Flash Plant | EPC Bid Document Development for Mitsubishi's bid for the Wayang Windu project in Indonesia. |

Geothermal Piping System Design:

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| Coso Navy 1, Unit 1, California | Two-phase resource piping design review. |
| PGV, Puna, Hawaii | New well and separator piping |
| GEO Operator Corp., Separator Replacement, California | Engineering for replacement of an existing steam separator at the Geysers |
| Yankee Caithness, Steamboat Resource Piping, Nevada | Fast-track two-phase cross-country piping for the new Yankee Caithness flash plant in Nevada |
| Colorado TBC, Stillwater Plant, Nevada | Production well 12a-6 fast track piping design. |
| GEMLP, East Mesa Buildout, California | East Mesa Buildout two-phase piping design |
| Colorado TBC, Steamboat Well Design, Nevada | Engineering for new Hot Air #4 production well and well interconnection. |
| Coso Navy 1, California | Gathering and injection system design for Coso Navy 1 Power Plant, Units 2 and 3. |
| East Mesa, California | Gathering and injection system design for the 36 MW East Mesa geothermal plant complex. |
| Covanta, Heber New Well, California | New production well interconnection and vapor recover system engineering for the 33 MW Heber binary plant. |
| Caithness, Coso New Well, California | Engineering for the new 33-7 Coso New Production Well and interconnection. |