

ORMAT TECHNOLOGIES, INC.
Form 10-K
February 28, 2014

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2013

Or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number: 001-32347

ORMAT TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

DELAWARE **88-0326081**
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification Number)

6225 Neil Road, Reno, Nevada 89511-1136
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code:

(775) 356-9029

(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock \$0.001 Par Value	New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of June 30, 2013, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$389,817,905 based on the closing price as reported on the New York Stock Exchange.

Indicate the number of shares outstanding of each of the registrant's classes of common stock as of the latest practicable date: As of February 26, 2014, the number of outstanding shares of common stock, par value \$0.001 per share was 45,460,653.

Documents incorporated by reference: Part III (Items 10, 11, 12, 13 and 14) incorporates by reference portions of the Registrant's Proxy Statement for its Annual Meeting of Stockholders, which will be filed not later than 120 days after December 31, 2013.

ORMAT TECHNOLOGIES, INC.

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2013

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Glossary of Terms

When the following terms and abbreviations appear in the text of this report, they have the meanings indicated below:

<u>Term</u>	<u>Definition</u>
AER	Alternative Earth Resources Inc.
Amatitlan Loan	\$42,000,000 in initial aggregate principal amount borrowed by our subsidiary Ortitlan from TCW Global Project Fund II, Ltd.
AMM	Administrador del Mercado Mayorista (administrator of the wholesale market — Guatemala)
ARRA	American Recovery and Reinvestment Act of 2009
Auxiliary Power	The power needed to operate a geothermal power plant's auxiliary equipment such as pumps and cooling towers
Availability	The ratio of the time a power plant is ready to be in service, or is in service, to the total time interval under consideration, expressed as a percentage, independent of fuel supply (heat or geothermal) or transmission accessibility
Balance of Plant equipment	Power plant equipment other than the generating units including items such as transformers, valves, interconnection equipment, cooling towers for water cooled power plants, etc.
BLM	Bureau of Land Management of the U.S. Department of the Interior
BOT	Build, operate and transfer
Capacity	The maximum load that a power plant can carry under existing conditions, less auxiliary power
Capacity Factor	The ratio of the average load on a generating resource to its generating capacity during a specified period of time, expressed as a percentage
CARB	California Air Resources Board
CDC	Commonwealth Development Corporation
CGC	Crump Geothermal Company LLC
CNE	National Energy Commission of Nicaragua
CNEE	National Electric Energy Commission of Guatemala
COD	Commercial Operation Date
Company	Ormat Technologies, Inc., a Delaware corporation, and its consolidated subsidiaries
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CPI	Consumer Price Index
CPUC	California Public Utilities Commission
DEG	Deutsche Investitions-und Entwicklungsgesellschaft mbH
DFIs	Development Finance Institutions
DISNORTE	Empresa Distribudora de Electricidad del Norte (a Nicaragua distribution company)
DISSUR	Empresa Distribudora de Electricidad del Sur (a Nicaragua distribution company)
DOE	U.S. Department of Energy
DOGGR	California Division of Oil, Gas, and Geothermal Resources
DSCR	Debt Service Coverage Ratio
EBITDA	Earnings before interest, taxes, depreciation and amortization
EGS	Enhanced Geothermal Systems
EIS	Environmental Impact Statement
ENATREL	Empresa Nicaragüense de Transmision
ENEE	Empresa Nacional de Energía Eléctrica

ENEL Empresa Nicaragüense de Electricidad
Enthalpy The total energy content of a fluid; the heat plus the mechanical energy content of a fluid (such as a geothermal brine), which, for example, can be partially converted to mechanical energy in an Organic Rankine Cycle.

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<u>Term</u>	<u>Definition</u>
EPA	U.S. Environmental Protection Agency
EPC	Engineering, procurement and construction
EPS	Earnings per share
ERC	Kenyan Energy Regulatory Commission
ESC	Energy Sales Contract
Exchange Act	U.S. Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
FERC	U.S. Federal Energy Regulatory Commission
FPA	U.S. Federal Power Act, as amended
GAAP	Generally accepted accounting principles
GCCU	Geothermal Combined Cycle Unit
GDC	Geothermal Development Company
GDL	Geothermal Development Limited
GEA	Geothermal Energy Association
Geothermal Power Plant	The power generation facility and the geothermal field
Geothermal Steam Act	U.S. Geothermal Steam Act of 1970, as amended
GHG	Greenhouse gas
GNP	Gross National Product
HELCO	Hawaii Electric Light Company
IFC	International Finance Corporation
IID	Imperial Irrigation District
ILA	Israel Land Administration
INDE	Instituto Nacional de Electrification
INE	Nicaragua Institute of Energy
IPPs	Independent Power Producers
ISO	International Organization for Standardization
ITC	Investment tax credit
ITC Cash Grant	Payment for Specified Renewable Energy property in lieu of Tax Credits under Section 1603 of the ARRA
John Hancock	John Hancock Life Insurance Company (U.S.A.)
JPM	JPM Capital Corporation
KenGen	Kenya Electricity Generating Company Ltd.
Kenyan Energy Act	Kenyan Energy Act, 2006
KETRACO	Kenya Electricity Transmission Company Limited
KLP	Kapoho Land Partnership
KPLC	Kenya Power and Lighting Co. Ltd.
kVa	Kilovolt-ampere
kW	Kilowatt - A unit of electrical power that is equal to 1,000 watts
kWh	Kilowatt hour(s), a measure of power produced
LNG	Liquefied natural gas
Mammoth Pacific	Mammoth-Pacific, L.P.
MACRS	Modified Accelerated Cost Recovery System
MIGA	Multilateral Investment Guaranty Agency, a member of the World Bank Group
MW	Megawatt - One MW is equal to 1,000 kW or one million watts

MWh

Megawatt hour(s), a measure of power produced

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<u>Term</u>	<u>Definition</u>
NBPL	Northern Border Pipe Line Company
NIS	New Israeli Shekel
NGI	Natural Gas-California SoCal-NGI Natural Gas price index
NGP	Nevada Geothermal Power
NV Energy	NV Energy, Inc.
NYSE	New York Stock Exchange
OEC	Ormat Energy Converter
OFC	Ormat Funding Corp., a wholly owned subsidiary of the Company
OFC Senior Secured Notes	\$190,000,000 8.25% Senior Secured Notes, due 2020 issued by OFC
OFC 2	OFC 2 LLC, a wholly owned subsidiary of the Company
OFC 2 Senior Secured Notes	Up to \$350,000,000 Senior Secured Notes, due 2034 issued by OFC 2
OMPC	Ormat Momotombo Power Company, a wholly owned subsidiary of the Company
OPC	OPC LLC, a consolidated subsidiary of the Company
OPC Transaction	Financing transaction involving four of our Nevada power plants in which institutional equity investors purchased an interest in our special purpose subsidiary that owns such plants.
OPIC	Overseas Private Investment Corporation
OrCal	OrCal Geothermal Inc., a wholly owned subsidiary of the Company
OrCal Senior Secured Notes	\$165,000,000 6.21% Senior Secured Notes, due 2020 issued by OrCal
Organic Rankine Cycle	A process in which an organic fluid such as a hydrocarbon or fluorocarbon (but not water) is boiled in an evaporator to generate high pressure vapor. The vapor powers a turbine to generate mechanical power. After the expansion in the turbine, the low pressure vapor is cooled and condensed back to liquid in a condenser. A cycle pump is then used to pump the liquid back to the vaporizer to complete the cycle. The cycle is illustrated in the figure below:

Ormat International	Ormat International Inc., a wholly owned subsidiary of the Company
Ormat Nevada	Ormat Nevada Inc., a wholly owned subsidiary of the Company
Ormat Systems	Ormat Systems Ltd., a wholly owned subsidiary of the Company
OrPower 4	OrPower 4 Inc., a wholly owned subsidiary of the Company
Ortitlan	Ortitlan Limitada, a wholly owned subsidiary of the Company
ORTP	ORTP, LLC, a consolidated subsidiary of the Company
ORTP Transaction	Financing transaction involving power plants in Nevada and California in which an institutional equity investor purchased an interest in our special purpose subsidiary that owns such plants.

<u>Term</u>	<u>Definition</u>
Orzunil	Orzunil I de Electricidad, Limitada, a wholly owned subsidiary of the Company
Parent	Ormat Industries Ltd.
PG&E	Pacific Gas and Electric Company
PGV	Puna Geothermal Venture, a wholly owned subsidiary of the Company
PLN	PT Perusahaan Listrik Negara
Power plant equipment	Interconnection equipment, cooling towers for water cooled power plant, etc., including the generating units
PPA	Power purchase agreement
ppm	Part per million
PTC	Production tax credit
PUA	Israeli Public Utility Authority
PUCH	Public Utilities Commission of Hawaii
PUCN	Public Utilities Commission of Nevada
PUHCA	U.S. Public Utility Holding Company Act of 1935
PUHCA 2005	U.S. Public Utility Holding Company Act of 2005
PURPA	U.S. Public Utility Regulatory Policies Act of 1978
Qualifying Facility(ies)	Certain small power production facilities are eligible to be “Qualifying Facilities” under PURPA, provided that they meet certain power and thermal energy production requirements and efficiency standards. Qualifying Facility status provides an exemption from PUHCA 2005 and grants certain other benefits to the Qualifying Facility
RAM	Renewable Auction Mechanism
REC	Renewable Energy Credit
REG	Recovered Energy Generation
RGGI	Regional Greenhouse Gas Initiative
RPM	Revolutions Per Minute
RPS	Renewable Portfolio Standards
SCPPA	Southern California Public Power Authority
SEC	U.S. Securities and Exchange Commission
Securities Act	U.S. Securities Act of 1933, as amended
Senior Unsecured Bonds	7% Senior Unsecured Bonds Due 2017 issued by the Company
SO#4	Standard Offer Contract No. 4
Solar PV	Solar photovoltaic
SOX Act	Sarbanes-Oxley Act of 2002
Southern California Edison	Southern California Edison Company
SPE(s)	Special purpose entity(ies)
SRAC	Short Run Avoided Costs
TGL	Tikitere Geothermal Power Limited
Union Bank	Union Bank, N.A.
U.S.	United States of America
U.S. Treasury	U.S. Department of the Treasury
WHOH	Waste Heat Oil Heaters

Cautionary Note Regarding Forward-Looking Statements

This annual report includes “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this report that address activities, events or developments that we expect or anticipate will or may occur in the future, including such matters as our projections of annual revenues, expenses and debt service coverage with respect to our debt securities, future capital expenditures, business strategy, competitive strengths, goals, development or operation of generation assets, market and industry developments and the growth of our business and operations, are forward-looking statements. When used in this annual report, the words “may”, “will”, “could”, “should”, “expects”, “plans”, “anticipates”, “believes”, “estimates”, “projects”, “potential”, or “contemplate” or the negative of these terms or other comparable terminology are intended to identify forward-looking statements, although not all forward-looking statements contain such words or expressions. The forward-looking statements in this annual report are primarily located in the material set forth under the headings Item 1A — “Risk Factors” contained in Part I of this annual report, Item 7 — “Management’s Discussion and Analysis of Financial Condition and Results of Operations” contained in Part II of this annual report, and “Notes to Financial Statements” contained in Item 8 — “Financial Statements and Supplementary Data” contained in Part II of this annual report, but are found in other locations as well. These forward-looking statements generally relate to our plans, objectives and expectations for future operations and are based upon management’s current estimates and projections of future results or trends. Although we believe that our plans and objectives reflected in or suggested by these forward-looking statements are reasonable, we may not achieve these plans or objectives. You should read this annual report completely and with the understanding that actual future results and developments may be materially different from what we expect due to a number of risks and uncertainties, many of which are beyond our control. Other than as required by law, we will not update forward-looking statements even though our situation may change in the future.

Specific factors that might cause actual results to differ from our expectations include, but are not limited to:

significant considerations, risks and uncertainties discussed in this annual report;

geothermal resource risk (such as the heat content, useful life and geological formation of the reservoir);

operating risks, including equipment failures and the amounts and timing of revenues and expenses;

financial market conditions and the results of financing efforts;

the impact of fluctuations in oil and natural gas prices on the energy price component under certain of our PPAs;

environmental constraints on operations and environmental liabilities arising out of past or present operations, including the risk that we may not have, and in the future may be unable to procure, any necessary permits or other

environmental authorizations;

construction or other project delays or cancellations;

political, legal, regulatory, governmental, administrative and economic conditions and developments in the United States and other countries in which we operate;

the enforceability of the long-term PPAs for our power plants;

contract counterparty risk;

weather and other natural phenomena including earthquakes, drought and other nature disasters;

the impact of recent and future federal, state and local regulatory proceedings and changes, including legislative and regulatory initiatives regarding deregulation and restructuring of the electric utility industry, public policies and government incentives that support renewable energy and enhance the economic feasibility of our projects at the federal and state level in the United States and elsewhere, and carbon-related legislation;

changes in environmental and other laws and regulations to which our company is subject, as well as changes in the application of existing laws and regulations;

current and future litigation;

our ability to successfully identify, integrate and complete acquisitions;

competition from other existing geothermal energy projects and new geothermal energy projects developed in the future, and from alternative electricity producing technologies;

market or business conditions and fluctuations in demand for energy or capacity in the markets in which we operate;

the direct or indirect impact on our company's business resulting from various forms of hostilities such as the threat or occurrence of terrorist incidents or cyber-attacks or responses to such threatened or actual incidents or attacks, including the effect on the availability of and premiums on insurance;

development and construction of the Solar PV projects may not materialize as planned;

the effect of and changes in current and future land use and zoning regulations, residential, commercial and industrial development and urbanization in the areas in which we operate; and

other uncertainties which are difficult to predict or beyond our control and the risk that we may incorrectly analyze these risks and forces or that the strategies we develop to address them may be unsuccessful.

PART I

ITEM 1. BUSINESS

Certain Definitions

Unless the context otherwise requires, all references in this annual report to "Ormat", "the Company", "we", "us", "our company", "Ormat Technologies", or "our" refer to Ormat Technologies, Inc. and its consolidated subsidiaries. A glossary of certain terms and abbreviations used in this annual report appears at the beginning of this report.

Overview

We are a leading vertically integrated company primarily engaged in the geothermal and recovered energy power business. We design, develop, build, own, and operate clean, environmentally friendly geothermal and recovered energy-based power plants, usually using equipment that we design and manufacture.

Our geothermal power plants include both power plants that we have built and power plants that we have acquired, while all of our recovered energy-based plants have been constructed by us. We conduct our business activities in the following two business segments:

The Electricity Segment — in this segment we develop, build, own and operate geothermal and recovered energy-based power plants in the United States and geothermal power plants in other countries around the world and sell the electricity they generate. We have expanded our activities in the Electricity Segment to include the ownership and operation of power plants that produce electricity generated by Solar PV systems that we do not manufacture;

The Product Segment — in this segment we design, manufacture and sell equipment for geothermal and recovered energy-based electricity generation, remote power units and other power generating units and provide services relating to the engineering, procurement, construction, operation and maintenance of geothermal and recovered energy-based power plants.

The map below shows our current worldwide portfolio of operating geothermal and recovered energy power plants.

The chart below sets forth a breakdown of our revenues for each of the years ended December 31, 2013 and 2012: Additional information concerning our segment operations, including year-to-year comparisons of revenues, the geographical breakdown of revenues, cost of revenues, results of operations, and trends and uncertainties is provided below in Item 7 — “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Item 8 — “Financial Statements and Supplementary Data”.

Segment Contribution to Revenues

Most of the power plants that we currently own or operate produce electricity from geothermal energy sources. Geothermal energy is a clean, renewable and generally sustainable form of energy derived from the natural heat of the earth. Unlike electricity produced by burning fossil fuels, electricity produced from geothermal energy sources is produced without emissions of certain pollutants such as nitrogen oxide, and with far lower emissions of other pollutants such as carbon dioxide. As a result, electricity produced from geothermal energy sources contributes significantly less to global warming and local and regional incidences of acid rain than energy produced by burning fossil fuels. Geothermal energy is also an attractive alternative to other sources of energy as part of a national diversification strategy to avoid dependence on any one energy source or politically sensitive supply sources.

In addition to our geothermal energy business, we manufacture products that produce electricity from recovered energy or so-called “waste heat”. We also construct, own, and operate recovered energy-based power plants. Recovered energy represents residual heat that is generated as a by-product of gas turbine-driven compressor stations, solar thermal units and a variety of industrial processes, such as cement manufacturing. Such residual heat, which would otherwise be wasted, may be captured in the recovery process and used by recovered energy power plants to generate electricity without burning additional fuel and without additional emissions.

During the recent years, we have expanded our activity to the Solar PV industry. We are monitoring market drivers with to the potential for developing Solar PV power plants in locations where we can offer competitively priced power generation. We recently completed most of the work on the Solar PV project, which is located near our Heber complex in California and we are awaiting the completion of the interconnection to the grid by the utility. We are considering the option of selling the project prior to completion.

Company Contact and Sources of Information

We file annual, quarterly and periodic reports, proxy statements and other information with the SEC. You may obtain and copy any document we file with the SEC at the SEC’s Public Reference Room at 100 F Street, N.E., Room 1580, Washington D.C. 20549. You may obtain information on the operation of the SEC’s Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an internet website at <http://www.sec.gov> that contains reports, proxy and other information statements, and other information regarding issuers that file electronically with the SEC. Our SEC filings are accessible via the internet at that website.

Our reports on Form 10-K, 10-Q and 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available through our website at www.ormat.com for downloading, free of charge, as soon as reasonably practicable after these reports are filed with the SEC. Our Code of Business Conduct and Ethics, Code of Ethics Applicable to Senior Executives, Audit Committee Charter, Corporate Governance Guidelines, Nominating and Corporate Governance Committee Charter, Compensation Committee Charter, and Insider Trading Policy, as amended, are also available at our website address mentioned above. If we make any amendments to our Code of Business Conduct and Ethics or Code of Ethics Applicable to Senior Executives or grant

any waiver, including any implicit waiver, from a provision of either code applicable to our Chief Executive Officer, Chief Financial Officer or principal accounting officer requiring disclosure under applicable SEC rules, we intend to disclose the nature of such amendment or waiver on our website. The content of our website, however, is not part of this annual report.

You may request a copy of our SEC filings, as well as the foregoing corporate documents, at no cost to you, by writing to the Company address appearing in this annual report or by calling us at (775) 356-9029.

Our Power Generation Business (Electricity Segment)***Power Plants in Operation***

The table below summarizes certain key non-financial information relating to our power plants as of February 15, 2014. The generating capacity of certain of our power plants listed below has been updated to reflect changes in the resource temperature and other factors that impact resource capabilities:

Power Plant	Location	Ownership⁽¹⁾	Generating Capacity in MW⁽²⁾
Domestic			
<u>Geothermal</u>			
Brady Complex ⁽³⁾	Nevada	100	% 18.0
Heber Complex ⁽⁴⁾	California	100	% 92.0
Jersey Valley ⁽⁵⁾	Nevada	100	% 12.0
Mammoth Complex	California	100	% 29.0
McGinness Hills	Nevada	100	% 38.0
North Brawley ⁽⁶⁾	California	100	% 27.0
Ormesa Complex	California	100	% 54.0
Puna Complex	Hawaii	100	% 38.0
Steamboat Complex ⁽³⁾	Nevada	100	% 78.0
Tuscarora	Nevada	100	% 18.0
Don A. Campbell ⁽⁷⁾	Nevada	100	% 16.0
<u>REG</u>			
OREG 1	North and South Dakota	100	% 22.0
OREG 2	Montana, North Dakota and Minnesota	100	% 22.0
OREG 3	Minnesota	100	% 5.5
OREG 4 ⁽⁸⁾	Colorado	100	% 3.5
Total for domestic power plants			473.0
Foreign			
<u>Geothermal</u>			
Amatitlan	Guatemala	100	% 20.0
Olkaria III Complex	Kenya	100	% 110.0
Zunil ⁽⁹⁾	Guatemala	97	% 23.0
Total for foreign power plants			153.0
Total for all power plants			626.0

We own and operate all of our power plants. Financial institutions hold equity interests in two of our consolidated subsidiaries: (i) OPC, which owns the Desert Peak 2 power plant in our Brady complex and the Steamboat Hills, Galena 2 and Galena 3 power plants in our Steamboat complex, and (ii) ORTP, which owns the Heber complex, the Ormesa complex, the Mammoth complex, the Steamboat 2 and 3 and Burdette (Galena 1) power plants both in our (1) Steamboat complex, and Brady power plant in our Brady complex. In the above table, we show these power plants as being 100% owned because all of the generating capacity is owned by either OPC or ORTP and we control the operation of the power plants. The nature of the equity interests held by the financial institutions is described below in Item 7 — “Management’s Discussion and Analysis of Financial Condition and Results of Operations” under the heading “OPC Transaction” and “ORTP Transaction.”

References to generating capacity generally refer to the gross capacity less auxiliary power in the case of all of our existing domestic and foreign power plants, except for the Zunil power plant. We determine the generating capacity (2) figures in these power plants by taking into account resource capabilities. In the case of the Zunil power plant, the revenues are calculated based on 24 MW capacity unrelated to the actual performance of the reservoir. This column represents our net ownership in such generating capacity.

In any given year, the actual power generation of a particular power plant may differ from that power plant’s generating capacity due to variations in ambient temperature, the availability of the resource, and operational issues affecting performance during that year. The Capacity Factor of our geothermal operating power plants in 2013 excluding the Heber complex, Mammoth complex and Jersey Valley power plant, where we intentionally conducted work that resulted in lower generation than the respective complex’ or plant’s generating capacity, was approximately 90%. The Capacity Factor of our REG power plants in 2013 was approximately 82%.

(3) The generating capacity of the Brady and Steamboat complexes was reduced in 2013 due to a decline in the resource temperature in each of these complexes. See “Description of Our Power Plants” below.

The Heber complex generating capacity is based on our expectations for the upgrade project for Heber 1 which is (4) expected to be completed in 2014. That work will require a total plant outage projected to occur during the first six months of 2014 See “Description of Our Power Plants” below.

- (5) Well field and power plant enhancement work was conducted in Jersey Valley through 2013 and we expect to meet this generating capacity during 2014.
- (6) Following recent developments, detailed under “Description of Our Power Plants” below, we have decided to operate the North Brawley power plant at its current capacity level of approximately 27 MW.
- (7) The Don A. Campbell power plant commenced operation on December 6, 2013
- (8) The OREG 4 power plant is not operating at full capacity as a result of continued low run time of the compressor station that serves as the plant’s heat source, which is resulting in low power generation.
- (9) In January 2014, INDE exercised its right under the PPA to become a partner in the Zunil power plant with three percent (3%) equity interest. Detailed information is provided under “Description of Our Power Plants” below.

All of the revenues that we currently derive from the sale of electricity are pursuant to long-term PPAs. Approximately 44.0% of our total revenues in the year ended December 31, 2013 from the sale of electricity by our domestic power plants were derived from power purchasers that currently have investment grade credit ratings. The purchasers of electricity from our foreign power plants are either state-owned or private entities.

New Power Plants

We are currently in various stages of construction and development of new power plants and expansion of existing power plants. Our expansion plan includes 40 MW in generating capacity from geothermal power plants in the United States that we fully released for construction and are in different stages of construction. In addition, we have several projects that are either under initial stages of construction or under different stages of development with an aggregate capacity of up to approximately 172 MW.

We have a substantial land position across 37 sites, mostly in the U.S., that are expected to support future geothermal development, on which we have started or plan to start exploration activity. This land position is comprised of various leases, exploration concessions for geothermal resources and an option to enter into geothermal leases.

Our Product Business (Product Segment)

We design, manufacture and sell products for electricity generation and provide the related services described below. Generally, we manufacture products only against customer orders and do not manufacture products for our own inventory.

Power Units for Geothermal Power Plants. We design, manufacture and sell power units for geothermal electricity generation, which we refer to as OECs. Our customers include contractors and geothermal power plant owners and operators.

Power Units for Recovered Energy-Based Power Generation. We design, manufacture and sell power units used to generate electricity from recovered energy, or so-called “waste heat”. This heat is generated as a residual by-product of gas turbine-driven compressor stations, solar thermal units and a variety of industrial processes, such as cement manufacturing, and is not otherwise used for any purpose. Our existing and target customers include interstate natural gas pipeline owners and operators, gas processing plant owners and operators, cement plant owners and operators, and other companies engaged in other energy-intensive industrial processes.

EPC of Power Plants. We engineer, procure, and construct, as an EPC contractor, geothermal and recovered energy power plants on a turnkey basis, using power units we design and manufacture. Our customers are geothermal power plant owners as well as the same customers described above that we target for the sale of our power units for recovered energy-based power generation. Unlike many other companies that provide EPC services, we believe we have an advantage in that we are using our own manufactured equipment and thus have better control over the timing and delivery of required equipment and its related costs.

Remote Power Units and Other Generators. We design, manufacture and sell fossil fuel powered turbo-generators with a capacity ranging between 200 watts and 5,000 watts, which operate unattended in extreme hot or cold climate conditions. Our customers include contractors installing gas pipelines in remote areas. In addition, we design, manufacture, and sell generators for various other uses, including heavy duty direct-current generators.

History

We were formed as a Delaware corporation in 1994 by Ormat Industries Ltd. (also referred to in this annual report as the “Parent”, “Ormat Industries”, “the parent company”, or “our parent”). Ormat Industries was one of the first companies to focus on the development of equipment for the production of clean, renewable and generally sustainable forms of energy. Ormat Industries owns approximately 60% of our outstanding common stock.

Industry Background

Geothermal Energy

Most of our power plants in operation produce electricity from geothermal energy. There are several different sources or methods to obtain geothermal energy, which are described below.

Hydrothermal geothermal-electricity generation — Hydrothermal geothermal energy is derived from naturally occurring hydrothermal reservoirs that are formed when water comes sufficiently close to hot rock to heat the water to temperatures of 300 degrees Fahrenheit or more. The heated water then ascends toward the surface of the earth where, if geological conditions are suitable for its commercial extraction, it can be extracted by drilling geothermal wells. Geothermal production wells are normally located within several miles of the power plant, as it is not economically viable to transport geothermal fluids over longer distances due to heat and pressure loss. The geothermal reservoir is a renewable source of energy if natural ground water sources and reinjection of extracted geothermal fluids are adequate over the long-term to replenish the geothermal reservoir following the withdrawal of geothermal fluids and if the well field is properly operated. Geothermal energy power plants typically have higher capital costs (primarily as a result of the costs attributable to well field development) but tend to have significantly lower variable operating costs (principally consisting of maintenance expenditures) than fossil fuel-fired power plants that require ongoing fuel expenses. In addition, because geothermal energy power plants produce weather-independent power 24 hours a day, the variable operating costs are lower.

EGS — An EGS is a subsurface system that may be artificially created to extract heat from hot rock where the permeability and aquifers required for a hydrothermal system are insufficient or non-existent. A geothermal power plant that uses EGS techniques recovers the thermal energy from the subsurface rocks by creating or accessing a system of open fractures in the rock through which water can be injected, heated through contact with the hot rock, returned to the surface in production wells and transferred to a power unit.

Co-produced geothermal from oil and gas fields, geo-pressurized resources — Another source of geothermal energy is hot water produced from oil and gas production. In some oil and gas fields, water is produced as a by-product of the oil and gas extraction. When the wells are deep, the fluids are often at high temperatures and if the water volume is significant, the hot water can be used for power generation in equipment similar to a geothermal power plant.

Geothermal Power Plant Technologies

Geothermal power plants generally employ either binary systems or conventional flash design systems, as briefly described below. In our geothermal power plants, we also employ our proprietary technology of combined geothermal cycle systems.

Binary System

In a geothermal power plant using a binary system, geothermal fluid (either hot water (also called brine) or steam or both) is extracted from the underground reservoir and flows from the wellhead through a gathering system of insulated steel pipelines to a vaporizer that also heats a secondary working fluid. This is typically an organic fluid, such as pentane or butane, which is vaporized and is used to drive the turbine. The organic fluid is then condensed in a condenser which may be cooled directly by air or by water from a cooling tower and sent back to the vaporizer. The cooled geothermal fluid is then reinjected back into the reservoir. Ormat's air-cooled binary geothermal power plant is depicted in the diagram below.

Flash Design System

In a geothermal power plant using flash design, geothermal fluid is extracted from the underground reservoir and flows from the wellhead through a gathering system of insulated steel pipelines to flash tanks and/or separators. There, the steam is separated from the brine and is sent to a demister, where any remaining water droplets are removed. This produces a stream of dry saturated steam, which drives a steam turbine generator to produce electricity. In some cases, the brine at the outlet of the separator is flashed a second time (dual flash), providing additional steam at lower pressure used in the low pressure section of the steam turbine to produce additional electricity. Steam exhausted from the steam turbine is condensed in a surface or direct contact condenser cooled by cold water from a cooling tower. The non-condensable gases (such as carbon dioxide) are removed through the removal system in order to optimize the performance of the steam turbines. The resulting condensate is used to provide make-up water for the cooling tower. The hot brine remaining after separation of steam is injected back into the geothermal resource through a series of injection wells. The flash technology is depicted in the diagram below.

In some instances, the wells directly produce dry steam and the steam is fed directly to the steam turbine with the rest of the system similar to the flash power plant described above.

Our Proprietary Technology

Our proprietary technology may be used in power plants operating according to the Organic Rankine Cycle, either alone or in combination with various other commonly used thermodynamic technologies that convert heat to mechanical power, such as gas and steam turbines. It can be used with a variety of thermal energy sources, such as geothermal, recovered energy, biomass, solar energy and fossil fuels. Specifically, our technology involves original designs of turbines, pumps, and heat exchangers, as well as formulation of organic motive fluids (all of which are non-ozone-depleting substances). Using advanced computerized fluid dynamics and other computer aided design software as well as our test facilities, we continuously seek to improve power plant components, reduce operations and maintenance costs, and increase the range of our equipment and applications. We are always examining ways to increase the output of our plants by utilizing evaporative cooling, cold reinjection, performance simulation programs, and topping turbines. In the geothermal as well as the recovered energy (waste heat) areas, we are examining two-level and three-level energy systems and new motive fluids.

We also developed, patented and constructed GCCU power plants in which the steam first produces power in a backpressure steam turbine and is subsequently condensed in a vaporizer of a binary plant, which produces additional power. Ormat Geothermal Combined Cycle technology is depicted in the diagram below.

In the conversion of geothermal energy into electricity, our technology has a number of advantages compared with conventional geothermal steam turbine plants. A conventional geothermal steam turbine plant consumes significant quantities of water, causing depletion of the aquifer, and also requires cooling water treatment with chemicals and thus a need for the disposal of such chemicals. A conventional geothermal steam turbine plant also creates a significant visual impact in the form of an emitted plume from the cooling towers, especially during cold weather. By contrast, our binary and combined cycle geothermal power plants have a low profile with minimum visual impact and do not emit a plume when they use air cooled condensers. Our binary and combined cycle geothermal power plants reinject all of the geothermal fluids utilized in the respective processes into the geothermal reservoir. Consequently, such processes generally have no emissions.

Other advantages of our technology include simplicity of operation and easy maintenance. For instance, the OEC employs low RPM and a high efficiency organic vapor turbine directly coupled to the generator eliminating the need for reduction gear. In addition, with our binary design, there is no contact between the turbine blade and geothermal fluids, which can often be very corrosive. Instead, the geothermal fluids pass through a heat exchanger, which is less susceptible to erosion and can adapt much better to corrosive fluids. In addition, with the organic vapor condensed above atmospheric pressure, no vacuum system is required.

We use the same elements of our technology in our recovered energy products. The heat source may be exhaust gases from a simple cycle gas turbine, low pressure steam, or medium temperature liquid found in the process industries such as refineries and cement plants. In most cases, we attach an additional heat exchanger in which we circulate thermal oil to transfer the heat into the OEC's own vaporizer in order to provide greater operational flexibility and control. Once this stage of each recovery is completed, the rest of the operation is identical to the OEC used in our geothermal power plants and enjoys the same advantages of using the Organic Rankine Cycle. In addition, our technology allows for better load following than conventional steam turbines exhibit, requires no water treatment (since it is air cooled), and does not require the continuous presence of a licensed steam boiler operator on site.

Ormat's REG technology is depicted in the diagram below.

Patents

We have 77 U.S. patents that are still in force (and have approximately 33 U.S. patents pending). These patents and patents applications cover our products (mainly power units based on the Organic Rankine Cycle) and systems (mainly geothermal power plants and industrial waste heat recovery plants for electricity production). The products-related patents cover components that include turbines, heat exchangers, seals and controls. The system-related patents cover not only a particular component but also the overall energy conversion system from the "fuel supply" (e.g., geothermal fluid, waste heat, biomass or solar) to electricity production.

The system-related patents cover subjects such as waste heat recovery related to gas pipelines compressors, disposal of non-condensable gases present in geothermal fluids, power plants for very high pressure geothermal resources, and two-phase fluids as well as processes related to EGS. A number of patents cover combined cycle geothermal power

plants, in which the steam first produces power in a backpressure steam turbine and is subsequently condensed in a vaporizer of a binary plant, which produces additional power. The terms of our patents range from one year to 17 years. The loss of any single patent would not have a material effect on our business or results of operations.

Research and Development

We are conducting research and development activities intended to improve plant performance, reduce costs, and increase the breadth of product offerings. The primary focus of our research and development efforts includes continued improvements to our condensing equipment with improved performance and lower land usage and developing new turbines and specialized remote power units.

We are also continuing with development of new EGS technologies and their application to increase the fluid supply at our existing plants by enhancing the performance of existing wells without additional drilling. We are undertaking this development effort at our Desert Peak 2 and Brady power plants in Nevada in cooperation with national laboratories, with funding support from the DOE. Other research and development activity co-funded by the DOE includes testing of new exploration and drilling technologies and practices.

Additionally, we are continuing to evaluate investment opportunities in new companies with product offerings for renewable energy markets.

Market Opportunity

Domestic

Interest in geothermal energy in the United States remains strong for numerous reasons, including legislative support of renewable portfolio standards, coal and nuclear baseload energy retirement and increasing awareness of the positive value of geothermal characteristics as compared to intermittent renewable technology.

Although electricity generation from geothermal resources is currently concentrated mainly in California, Nevada, Hawaii, Idaho and Utah, we believe there are opportunities for development in other states such as Alaska, Arizona, New Mexico, Washington and Oregon due to the potential of geothermal resources.

In a report issued in April 2013, the GEA identified 175 confirmed and unconfirmed geothermal projects under various phases of consideration or development in 13 U.S. states. These projects have between 5,150 MW and 5,523 MW geothermal resource potential.

The successful implementation of the various confirmed and unconfirmed geothermal projects identified by the GEA is depended on the respective project sponsor's ability to fully identify the resource, conduct exploration, and carry out development and construction. Accordingly, the GEA's estimates may not be realized, and differences between the actual number of projects completed and those initially estimated may be material. We refer to the GEA assessment as a possible reference point, but we do not necessarily concur with its estimate.

State level legislation

An additional factor supporting recent growth in the renewable energy industry is the global concern about the environment. In response to an increasing demand for "green" energy, many countries have adopted legislation requiring, and providing incentives for, electric utilities to sell electricity generated from renewable energy sources. In the U.S., approximately 40 states and four territories have enacted an RPS, renewable portfolio goals, or similar laws requiring or encouraging utilities in such states to generate or buy a certain percentage of their electricity from renewable energy or recovered heat sources.

According to the Database of State Incentives for Renewables and Efficiency (DSIRE), 30 states and two territories (including California, Nevada, and Hawaii, where we have been the most active in our geothermal energy development and in which all of our U.S. geothermal power plants in operation are located) and the District of Columbia define geothermal resources as “renewable”. In addition, according to the EPA, 23 states have enacted RPS, Energy Efficiency Resource Standards or Alternative Portfolio Standards program guidelines that include some form of combined heat and power and/or waste heat recovery.

We expect that the additional demand for renewable energy from utilities in states with RPS will outpace a possible reduction in general demand for energy (if any) due to the effect of general economic conditions. We see this increased demand and, in particular, the impact of the RPS legislation and the increase in California’s RPS to 33% by 2020, as the most significant driver for us to expand existing power plants and to build new projects.

California

According to information posted on the California Public Utilities Commission website, California’s three large investor-owned utilities collectively served 19.96% of their 2012 retail electricity sales with renewable power. These utilities have interim targets each year, with a requirement to attain RPS of 25% by 2016 increasing by two percent every year to 33% by the end of 2020. Publicly-owned utilities in California are also required to procure 33% of retail electricity sales from eligible renewable energy resources by 2020, opening up a new market of potential off-takers for us. These utilities do not have interim targets.

In 2006, California passed a state climate change law, AB 32, to reduce GHG emissions to 1990 levels by the end of 2020, and in December 2010, the CARB approved cap-and-trade regulations to reduce California’s GHG emissions under AB 32. The regulations set a limit on emissions from sources responsible for emitting 80% of California’s GHGs. On November 19, 2013, the CARB released the results of its fifth auction, reporting that the vintage 2013 auction clearing price was \$11.48 per allowance and the 2016 vintage auction clearing price was \$11.10 per allowance. All of the available 2013 and 2016 vintage allowances were sold.

Nevada

Nevada's RPS requires NV Energy to supply at least 25% of the total electricity it sells from eligible renewable energy resources by 2025. Nevada's RPS required, for 2012, not less than 15% of electricity sold to Nevada retail customers must have been met with renewable energy resources and credits, and that not less than 5% of that amount must be met with solar resources. According to NV Energy's RPS Annual Report, in 2012, Nevada Power exceeded both the 2012 RPS requirement and the 2012 solar RPS requirement, achieving 9.7% and 19.3%, respectively. Sierra exceeded both the 2012 RPS requirement and the 2012 solar RPS requirement, with 29.2% and 14.4% respectively. Nevada's RPS compliance requirement has increased to 18% for 2013 and 2014.

In June 2013, the Nevada state legislature passed three bills that were signed into law and expected to support renewable energy development. Senate Bill (SB) No. 123 requires an electric utility to submit a plan for the retirement or elimination of not less than 800 MW of coal-fired electric generating capacity on or before December 31, 2019 and the construction or acquisition of, or contracting for, 350 MW of electric generating capacity from renewable energy facilities. Senate bill (SB) No. 252 revises provisions relating to the renewable portfolio standard by removing energy efficiency, solar multipliers, and station usage from generating portfolio energy credits (PECs). Finally, Assembly Bill (AB) No. 239 Revised Statutes 701A.340 defines geothermal energy as renewable energy for purposes of tax abatements and makes geothermal projects eligible to apply for partial sales and property tax abatements, with property tax abatements for 20 years and local sales and use tax abatements for three years.

Hawaii

Hawaii's RPS require each electric utility that sells electricity for consumption in Hawaii to obtain 15% of its net electricity sales from renewable energy sources by December 31, 2015, 20% by December 31, 2020, and 40% by 2030. According to a 2013 filing made with the Hawaii PUC, in 2012, Hawaiian Electric Company and its subsidiaries exceeded the 2012 RPS requirement, achieving a consolidated RPS of 28.7% of retail electricity sales from eligible renewable energy resources, including electrical energy savings from energy efficiency and solar water heating technologies. Excluding electrical energy savings from energy efficient and solar water heating technologies, the 2012 renewable generation percentage for the Hawaiian Electric Companies was 13.9%.

Other state-wide and regional initiatives are also being developed to reduce GHG emissions and to develop trading systems for renewable energy credits. For example, nine Northeast and Mid-Atlantic States are part of the RGGI, a regional cap-and-trade system to limit carbon dioxide. The RGGI is the first mandatory, market-based carbon dioxide emissions reduction program in the United States. Under RGGI, the participating adopted a new 2014 RGGI cap of 91 million short tons and plan to reduce carbon emissions from power plants at a rate of 2.5% per year between 2015 and 2020.

In addition to RGGI and NA2050, other states have also established the Midwestern Regional Greenhouse Gas Reduction Accord, the Western Climate Initiative. Although individual and regional programs will take some time to develop, their requirements, particularly the creation of any market-based trading mechanism to achieve compliance with emissions caps, should be advantageous to in-state and in-region (and, in some cases, such as RGGI and the State of California, inter-regional) energy generating sources that have low carbon emissions such as geothermal energy. Although it is currently difficult to quantify the direct economic benefit of these efforts to reduce GHG emissions, we believe they will prove advantageous to us.

Federal level legislation

At the federal level, in 2011 the EPA's Tailoring Rule sets thresholds for when permitting requirements under the Clean Air Act's Prevention of Significant Deterioration and Title V programs apply to certain major sources of GHG emissions. In 2013, President Obama outlined an agenda to help reduce carbon emissions, directing the EPA to complete new pollution standards for both new and existing power plants, an initiative that will help support continued renewable energy developments in the U.S.

The federal government also encourages production of electricity from geothermal resources or solar energy through certain tax subsidies. For a new geothermal power plant in the U.S. that started construction by December 31, 2013, we are permitted to claim a tax credit against our U.S. federal income taxes equal to 30% of certain eligible costs when the project is placed in service. If we failed to meet the start of construction deadline for such a project, then the 30% credit is reduced to 10%. In lieu of the 30% tax credit (if a geothermal project qualifies), we are permitted to claim a tax credit based on the power

produced from a geothermal power plant. These production-based credits, which in 2013 were 2.3 cents per kWh, are adjusted annually for inflation and may be claimed for ten years on the electricity produced by the project and sold to third parties after the project is placed in service. The owner of the power plant may not claim both the 30% tax credit and the production-based tax credit. For a new solar plant in the U.S. that is placed in service by December 31, 2016, we are permitted to claim a tax credit against our U.S. federal income taxes equal to 30% of certain eligible costs when the project is placed in service. The credit is reduced to 10% for solar projects placed in service after December 31, 2016.

Under current tax rules, any unused tax credit has a one-year carry back and a twenty-year carry forward.

For certain geothermal and solar projects, we can elect to receive a cash payment from the U.S. Treasury Department in lieu of these tax credits. To qualify, the project must have been under construction by December 31, 2011, the project company must have filed a preliminary application by September 30, 2012, and the project must be placed in service by December 31, 2016. A final application must be filed shortly after placing the project into service. No portion of the project may be owned by certain disqualified persons (or indirectly through a pass-through entity by such a person). The cash payment would be 30% of certain eligible costs, with two exceptions. First, for geothermal projects placed in service after December 31, 2013 and before January 1, 2017, the payment is reduced to 10%. Second, in all cases, the payments are subject to reduction for sequestration under the Balanced Budget and Emergency Deficit Control Act of 1985, as amended. The sequestration reduction for these payments for the 2014 fiscal year is 7.2%.

We are also permitted to depreciate, or write off, most of the cost of the plant. In those cases where we claimed the one-time 30% (or 10%) tax credit or received the Treasury cash grant, our tax basis in the plant that we can recover through depreciation is reduced by one-half of the tax credit or cash grant; if we claim in the future other tax credits, there is no reduction in the tax basis for depreciation. For projects that we placed into service after September 8, 2010 and before January 1, 2012, a depreciation “bonus” will permit us to write off 100% of the cost of certain equipment that is part of the geothermal power plant in the year the plant is placed into service, if certain requirements are met. For projects that are placed into service after December 31, 2011 and before January 1, 2014, a similar “bonus” will permit us to write off 50% of the cost of that equipment in the year the power plant is placed into service. After applying any depreciation bonus that is available, we can write off the remainder of our tax basis in the plant, if any, over five years on an accelerated basis, meaning that more of the cost may be deducted in the first few years than during the remainder of the depreciation period.

Collectively, these benefits (to the extent they are fully utilized) have a present value equivalent to approximately 30% to 40% of the capital cost of a new power plant.

Global

We believe the global markets continue to present growth and expansion opportunities in both established and emerging markets.

According to the GEA, there are 11,766 MW of new capacity in early stages of development or under construction in 70 countries and territories around the world (excluding the U.S.). Additionally, developers are actively engaged with and exploring 27 gigawatts (GW) of geothermal resource globally that could potentially develop into power plants over the next decade. The GEA estimates that there are over 674 developing geothermal power projects globally, ranging from prospects to projects in the late stages of development.

The assessment conducted by the GEA is only an estimate that is based on projects and resource reporting by the geothermal industry. Developer ability to fully develop the resource is dependent upon on its capabilities to identify the resource, conduct exploration, development and construction; therefore, this estimate may not be accurate. We refer to it only as a possible reference point, but we do not necessarily concur with this estimate.

Operations outside of the U.S. may be subject to and/or benefit from requirements under the Kyoto Protocol. In November 2013, the United Nations Climate Change Conference was held in Warsaw, Poland. The conference encompassed the 19th Conference of the Parties to the United Nations Framework Convention on Climate Change and the ninth meeting of the Parties to the Kyoto Protocol. Countries decided to initiate or intensify domestic preparation for their intended national contributions towards an agreement to be reached in 2015, which will come into effect in 2020. Parties are required to submit clear and transparent plans to curb greenhouse gas emissions by the first quarter of 2015. The next Conference of the Parties is scheduled to take place in Lima, Peru, at the end of 2014.

In September 2014, the United Nations will hold a Climate Summit in New York City aiming to catalyze action by governments, business, finance, industry, and civil society toward a low-carbon economy.

We believe that these developments and governmental plans will create opportunities for us to acquire and develop geothermal power generation facilities internationally, as well as create additional opportunities for our Product Segment

Outside of the U.S., the majority of power generating capacity has historically been owned and controlled by governments. Since the early 1990s, however, many foreign governments have privatized their power generation industries through sales to third parties encouraging new capacity development and/or refurbishment of existing assets by independent power developers. These foreign governments have taken a variety of approaches to encourage the development of competitive power markets, including awarding long-term contracts for energy and capacity to independent power generators and creating competitive wholesale markets for selling and trading energy, capacity, and related products. Some foreign regions and countries have also adopted active government programs designed to encourage clean renewable energy power generation such as the following countries in which we operate and/or are conducting business development activities:

Latin America

Several Latin American countries have renewable energy programs. In November 2003, the national government of **Guatemala**, where our Zunil and Amatitlan power plants are located, approved a law creating incentives for power generation from renewable energy sources. These incentives include, among other things, providing economic and fiscal incentives such as exemptions from taxes on the importation of relevant equipment and various tax exemptions for companies implementing renewable energy projects.

In **Honduras**, where we are planning to build the first geothermal power plant under a BOT agreement, the national government approved the Incentives Act (Decree No.70-2007) providing incentives related to tax exemption for equipment, materials and services related to power generation development based on renewable resources. At the same time, ENEE, the national integrated utility, has been instructed to buy energy from such projects and offer to pay rates that are above the marginal cost approved by the CNE. Honduras also defined a target to reach at least 80% renewable energy production by 2034.

In **Chile**, where we have six exploration concessions, the Chilean Renewable Energy Act of 2008 required five percent of electricity sold, to come from renewable sources, increasing gradually to 10% by 2024. In 2013, Chile set a new target doubling the nation's renewable energy aimed to produce 20% of the country's power by renewable sources by 2025, replacing the previous requirement.

Oceania

In **New Zealand**, where we and our parent company have been actively providing geothermal power plant solutions since 1988, the New Zealand government's policies to fight climate change include an unconditional GHG emissions reduction target of between 10% and 20% below 1990 levels by 2020 and the target of increasing renewable electricity generation to 90% of New Zealand's total electricity generation by 2025.

South East Asia and East Africa

In **Indonesia**, where we participate in the Sarulla project that is currently under development, the government intends to increase the role of renewable energy sources and aims to have them fulfill 25% of the domestic energy demand by 2025. The government has also implemented policies and regulations intended to accelerate the development of renewable energy and geothermal projects in particular. Those regulations included designating approximately 4,000 MW of geothermal projects in its second phase of power acceleration projects to be implemented by 2014, of which the majority are IPP projects and the remaining state utility PLN projects. These targets were not met and the Indonesian government is in the process of issuing new directives for accelerating the geothermal market, including higher tariffs which are also based on the expected size of the power plant and quality of the resource. For the IPP sector, certain regulations for geothermal projects have been implemented, providing incentives such as investment tax credits and accelerated depreciation, and pricing guidelines to allow preferential power prices for generators; other regulations are being discussed including those that will ease the allocation of forestry permits. On a macro level, the Government of Indonesia committed at the United Nations Climate Change Conference 2009 in Copenhagen to reduce its CO² emissions by 26% by 2020,

which is intended to be achieved mainly through prevention of deforestation and accelerated renewable energy development.

In East Africa the geothermal potential along the Rift Valley is estimated at several thousand MW. The different countries along the Rift Valley are at different stages of development of their respective geothermal potential.

In **Kenya**, there are already several geothermal power plants, including the only geothermal IPP in Africa, our Olkaria III complex. The Government of Kenya has identified the country's untapped geothermal potential as the most suitable indigenous source of electricity and it aspires to reach 5,000 MW of geothermal power by 2030. To attain such number, GDC was formed to fast track the development of geothermal resources in Kenya.

The **Rwanda** government has commenced drilling as part of the country's efforts to boost electricity capacity through exploration of renewable energy sources. The governments of **Djibouti, Ethiopia, Eretria, Tanzania, Uganda and Zambia** are also exploring ways to develop geothermal in their countries.

In January 2014, energy ministers and delegates from 19 countries committed to the creation of the Africa Clean Energy Corridor Initiative, at a meeting in Abu Dhabi, convened by the International Renewable Energy Agency (IRENA). The Corridor will boost the deployment of renewable energy and aim to help meet Africa's rising energy demand with clean, indigenous, cost-effective power from sources including hydro, geothermal, biomass, wind and solar.

East Africa and South East Asia may benefit from two initiatives announced by President Obama. In June 2013, the Power Africa initiative was announced, pursuant to which the U.S. will invest up to \$7.0 billion in sub-Saharan Africa over the next five years with the aim of doubling access to power. The program will partner the U.S. Government with the government of six sub-Saharan countries, among them Kenya, Ethiopia and Tanzania, that have a potential for geothermal energy development. In 2012, President Obama proposed the U.S. Asia Pacific Comprehensive Energy Partnership (USACEP) that encourages U.S. companies to develop renewable energy in South East Asian countries, including Indonesia. The United States will provide up to \$6.0 billion to support the Partnership.

Other opportunities

Recovered Energy Generation

In addition to our geothermal power generation activities, we are pursuing recovered energy-based power generation opportunities in North America and the rest of the world. We believe recovered energy-based power generation will ultimately benefit from the efforts to reduce greenhouse gas generation. For example, in the U.S., the FERC has expressed its position that one of the goals of new natural gas pipeline design should be to facilitate the efficient, low-cost transportation of fuel through the use of waste heat (recovered energy) from combustion turbines or reciprocating engines that drive station compressors to generate electricity for use at compressor stations or for commercial sale. FERC has, as a matter of policy, requested natural gas pipeline operators filing for a certificate of approval for new pipeline construction or expansion projects to examine “opportunities to enhance efficiencies for any energy consumption processes in the development and operation” of the new pipeline. We have initially targeted the North American market, where we have built over 21 power plants which generate electricity from “waste heat” from gas turbine-driven compressor stations along interstate natural gas pipelines, from midstream gas processing facilities, and from processing industries in general.

Several states, and to a certain extent, the federal government, have recognized the environmental benefits of recovered energy-based power generation. For example, 15 states currently allow electric utilities to include recovered energy-based power generation in calculating such utilities' compliance with their mandatory or voluntary RPS. In addition, California modified the Self Generation Incentive Program (SGIP), which allows recovered energy-based generation to qualify for a per watt incentive. North Dakota, South Dakota, and the U.S. Department of Agriculture (through the Rural Utilities Service) have approved recovered energy-based power generation units as renewable energy resources, which qualifies recovered energy-based power generators for federally funded, low interest loans, as a priority for our efforts in this regards.

Recovery of waste heat is also considered “environmentally friendly” in the western Canadian provinces. We believe that Europe and other markets worldwide may offer similar opportunities in recovered energy-based power generation.

In summary, the market for the recovery of waste heat into electricity exists either when the available electricity is expensive or where the regulatory environment facilitates construction and marketing of the power. However, such projects tend to be relatively small (up to 6MW) and we expect the growth to be relatively slow and geographically scattered.

Solar PV

The market for Solar PV power grew significantly in recent years, driven by a combination of favorable government policies and a decline in equipment prices. We are monitoring market drivers with the potential to develop Solar PV power plants in locations where we can offer competitively priced power generation.

Competitive Strengths

Competitive Assets. We believe our assets are competitive for the following reasons:

Contracted Generation. All of the electricity generated by our geothermal power plants is currently sold pursuant to long-term PPAs with an average remaining life of approximately 15 years.

Baseload Generation. All of our geothermal power plants supply all or a part of the baseload capacity of the electric system in their respective markets. This means they supply electric power on an around-the-clock basis. This provides us with a competitive advantage over other renewable energy sources, such as wind power, solar power or hydro-electric power (to the extent they depend on precipitation), which cannot serve baseload capacity because of their intermittent nature.

Ancillary Services. Geothermal power plants positively impact electrical grid stability and provide valuable ancillary services. Because of the baseload nature of their output, they have high transmission utilization efficiency, provide capacity, provide grid inertia and reduce the need for ancillary services such as voltage regulation, reserves and flexible capacity. Other intermittent renewables create integration costs, creating a significant competitive advantage for geothermal energy.

Competitive Pricing. Geothermal power plants, while site specific, are economically feasible in many locations, and the electricity they generate is generally price competitive under existing economic conditions and existing tax and regulatory regimes compared to electricity generated from fossil fuels or other renewable sources.

Ability to Finance Our Activities from Internally Generated Cash Flow. The cash flow generated by our portfolio of operating geothermal and REG power plants provides us with a robust and predictable base for certain exploration, development, and construction activities.

Growing Legislative Demand for Environmentally-Friendly Renewable Resource Assets. Most of our currently operating power plants produce electricity from geothermal energy sources. The clean and sustainable characteristics of geothermal energy give us a competitive advantage over fossil fuel-based electricity generation as countries increasingly seek to balance environmental concerns with demands for reliable sources of electricity.

High Efficiency from Vertical Integration. Unlike our competitors in the geothermal industry, we are a fully-integrated geothermal equipment, services, and power provider. We design, develop, and manufacture equipment that we use in our geothermal and REG power plants. Our intimate knowledge of the equipment that we use in our operations allows us to operate and maintain our power plants efficiently and to respond to operational issues in a timely and cost-efficient manner. Moreover, given the efficient communications among our subsidiary that designs and manufactures the products we use in our operations and our subsidiaries that own and operate our power plants, we are able to quickly and cost effectively identify and repair mechanical issues and to have technical assistance and replacement parts available to us as and when needed.

Exploration and Drilling Capabilities. We have in-house capabilities to explore and develop geothermal resources and have established a drilling operation that currently owns nine drilling rigs. We employ an experienced resource group that includes engineers, geologists, and drillers, which executes our exploration and drilling plans for projects that we develop.

Highly Experienced Management Team. We have a highly qualified senior management team with extensive experience in the geothermal power sector. Key members of our senior management team have worked in the power industry for most of their careers and average over 25 years of industry experience.

Technological Innovation. We have 77 U.S. patents in force (and have approximately 33 U.S. patents pending) relating to various processes and renewable resource technologies. All of our patents are internally developed. Our ability to draw upon internal resources from various disciplines related to the geothermal power sector, such as geological expertise relating to reservoir management, and equipment engineering relating to power units, allows us to be innovative in creating new technologies and technological solutions.

Limited Exposure to Fuel Price Risk. A geothermal power plant does not need to purchase fuel (such as coal, natural gas, or fuel oil) in order to generate electricity. Thus, once the geothermal reservoir has been identified and estimated to be sufficient for use in a geothermal power plant, the drilling of wells is complete and the plant has a PPA, the plant is not exposed to fuel price or fuel delivery risk apart from the impact fuel prices may have on the price at which we sell power under PPAs that are based on the relevant power purchaser's avoided costs.

Although we are confident in our competitive position in light of the strengths described above, we face various challenges in the course of our business operations, including as a result of the risks described in Item 1A — “Risk Factors” below, the trends and uncertainties discussed in “Trends and Uncertainties” under Item 7 — “Management’s Discussion and Analysis of Financial Condition and Results of Operations” below, and the competition we face in our different business segments described under “Competition” below.

Business Strategy

Our strategy is to continue building a geographically balanced portfolio of geothermal and recovered energy assets, and to continue to be a leading manufacturer and provider of products and services related to renewable energy. We intend to implement this strategy through:

Development and Construction of New Geothermal Power Plants — continuously seeking out commercially exploitable geothermal resources, developing and constructing new geothermal power plants and entering into long-term PPAs providing stable cash flows in jurisdictions where the regulatory, tax and business environments encourage or provide incentives for such development and which meet our investment criteria;

Expanding operation into global markets – increasing our business development activities in an effort to grow our business in the global markets in both business segments.

Acquisition of New Assets — acquiring from third parties additional geothermal and other renewable assets that meet our investment criteria;

Manufacturing and Providing Products and Services Related to Renewable Energy — designing, manufacturing and contracting power plants for our own use and selling to third parties power units and other generation equipment for geothermal and recovered energy-based electricity generation;

Increasing Output from Our Existing Power Plants — increasing output from our existing geothermal power plants by adding additional generating capacity, upgrading plant technology, and improving geothermal reservoir operations, including improving methods of heat source supply and delivery;

Development and Construction of Recovered Energy Power Plants — since we utilize the same infrastructure to develop, supply or operate Geothermal and REG projects, we can capitalize on opportunities in the REG markets and continue to add successful projects to both our electricity and product segments in this sector;

Technological Expertise — investing in research and development of renewable energy technologies and leveraging our technological expertise to continuously improve power plant components, reduce operations and maintenance costs, develop competitive and environmentally friendly products for electricity generation and target new service opportunities.

Recent Developments

The most significant recent developments in our company and business are described below.

On February 11, 2014, our Board of Directors appointed Mr. Isaac Angel as CEO. Mr. Angel will join Ormat on April 1, 2014 and assume the CEO position effective July 1, 2014. He will succeed Mrs. Yehudit (Dita) Bronicki, who announced her retirement in November 2013. Mrs. Bronicki will continue to serve as a Director of Ormat in a non-executive capacity. We further announced that Mr. Gillon Beck will step down from his position of chairman of the board of directors of the company effective June 30, 2014 and the board of directors has elected and appointed Mr. Yoram Bronicki as the succeeding chairman, with such appointment being also effective June 30, 2014. Mr. Beck will continue to serve as a director of the company after he steps down from his position as chairman. Upon assuming the position of the chairman of the board Mr. Yoram Bronicki will relinquish his position as president and chief operating officer of the company.

On February 4, 2014, we announced that we successfully completed construction and reached commercial operation of Plant 3 in the Olkaria III geothermal power plant complex almost three months ahead of schedule. With Plant 3 online, the complex's total generation capacity has increased to 110 MW. The power generated by the Olkaria III complex is sold under a 20-year PPA with KPLC. On November 25, 2013, we announced that we drew down the remaining \$45 million comprising Tranche III of the previously announced \$310 million project finance facility with OPIC.

On January 23, 2014, we announced that we successfully completed the scope of work needed to bring the Mammoth G1 geothermal power plant in Mono County, California to full capacity. The 6 MW plant reached commercial operation under the new PPA with PG&E that allows for hourly energy deliveries of up to 7.5 MW and, as of December 26, 2013, it received the full commercial rate defined in the PPA.

On January 22, 2014, we announced that our wholly owned subsidiary signed an amendment to the PPA with INDE for the Zunil geothermal power plant in Guatemala, which extends the term of the PPA from 2019 to 2034. The amendment also transfers operation and management responsibilities of the Zunil geothermal field from INDE to Ormat for the term of the amended PPA in exchange for a tariff increase. Additionally, INDE exercised its right under the PPA to become a partner in the Zunil power plant and to acquire a three percent equity interest.

On January 6, 2014, we announced that we completed the construction of the Don A. Campbell geothermal power plant in Mineral County, Nevada. The plant is currently producing at full generating capacity of 16 MW and performing as expected. The Don A. Campbell facility, formerly Wild Rose, receives a full rate of \$99.0 per MWh with no annual escalation under the terms of the PPA, signed in April 2013 with SCPPA. SCPPA resells the power from the Don A. Campbell geothermal power plant to the LADWP and Burbank Water and Power through NV Energy Inc.'s transmission system.

On December 2, 2013, we announced that we completed the acquisition of Geotérmica Platanares, a late-stage development geothermal project in Honduras, from ELCOSA, a privately owned Honduran energy company, upon satisfaction of the required conditions precedent. We will hold the assets, including the project's wells, land, permits and a PPA for up to 35 megawatt with ENEE, the national utility of Honduras, under a BOT structure for approximately 15 years. We plan to begin phased development at the project and start drilling wells in the first half of 2014. Once the well field is appraised, we will determine the expected capacity and begin construction on the first phase anticipated to be approximately 18 MW with an expectation to reach commercial operation in about three years.

On November 14, 2013, we announced that a key milestone was reached in the 30 MW (MW) expansion of the McGinness Hills geothermal power plant complex located in Lander County, Nevada. NV Energy and Ormat signed an amendment to the existing McGinness Hills PPA allowing us to sell 63.7 MW (net average annual capacity) from the complex. Under the amendment, a new energy rate of \$85.58/MWh with a one percent annual escalator will be set for the entire complex once McGinness Hill Phase II enters commercial operation, expected in mid-2015. The amendment was approved by the Nevada PUC.

On October 8, 2013, we announced that we entered into an agreement for the development of the Hu'u Dompu greenfield geothermal project in Indonesia. Subject to availability of sufficient geothermal resource, we will develop the project through Pacific Geo Energy (PAGE), a project company, in which Ormat will hold 90% and

the remaining 10% will be held by the current owner of the company. The Hu'u Dompu project is located in West Nusa Tenggara Province on Indonesia's Sumbawa Island, and may be developed for up to 60 MW in three phases over the next six years.

On September 26, 2013, we entered into a Joint Development Agreement with eBay Inc. for the development of a 5 MW REG power plant to be constructed in Utah. The Joint Development Agreement allows eBay and us to begin preliminary development work to supply cleaner electricity to eBay's new Salt Lake City-based data center while entering into negotiations for a 20-year term contract.

On September 6, 2013, we announced that we entered into a 10-year PPA with SCPPA to deliver electricity from our Heber 1 geothermal power plant at the Heber complex in Imperial Valley, California beginning December 16, 2015. The current PPA with Southern California Edison will expire December 15, 2015. With an expected net generating capacity of 46 MW, we expect to sell the power to SCPPA at an average price of approximately \$85.62 per MWh over the lifetime of the agreement. The new pricing is expected to increase Heber 1 revenues in 2016 by more than \$7.0 million compared to our 2013 revenues. SCPPA members that will receive power from Heber 1 are LADWP and IID.

On July 15, 2013, we converted \$263.0 million in principal amount outstanding under our debt facility with OPIC from a floating interest rate to a fixed interest rate. The conversion applies to both tranches of the facility, which is being used to finance the Olkaria III complex in Naivasha, Kenya. The average fixed interest rate for Tranche I, which has an outstanding balance of \$82.6 million and matures on December 15, 2030 and Tranche II, which has an outstanding balance of \$180.0 million and matures on June 15, 2030, is 6.31%.

On June 3, 2013, we announced that our wholly owned subsidiary, Ormat Holding Corp., sold its stake in Momotombo Power Company (MPC), the operator of the Momotombo geothermal power plant in Nicaragua, to a private company for \$7.8 million, approximately one year before the scheduled termination of the concession arrangement with the Nicaraguan owner. This amount represents a prepayment of the expected EBITDA of the plant through the scheduled expiration of the contract. As a result of the sale, we recorded an after-tax gain of approximately \$3.6 million in the second quarter of 2013.

On May 2, 2013, we announced that we reached commercial operation of Plant 2 in the Olkaria III complex in Naivasha, Kenya, increasing our then total worldwide generating capacity by 36 MW. The power generated in the Olkaria III complex is sold under a 20-year PPA with KPLC.

On April 4, 2013, Sarulla Operations Ltd. (SOL) signed amendments to the Joint Operating Contract (JOC) and the Energy Sales Contract (ESC) for the 330 MW Sarulla geothermal power project in Tapanuli Utara, North Sumatra in Indonesia. We designed the plant and will supply our OEC to the power plant, as a result of which we expect to recognize revenues of approximately \$254.0 million related to the equipment sales over the construction period. In addition, through our wholly owned subsidiary, we hold a 12.75% in a consortium which owns and operates the Sarulla project. Other members of the consortium include Medco Energi Internasional Tbk (Medco); Itochu Corporation (Itochu); and Kyushu Electric Power Co. Inc (Kyushu).

The consortium has started preliminary testing and development activities at the site, and some basic infrastructure work. The third party contracts for EPC and drilling as well as the supply contract for equipment with us have all been signed. Construction is expected to begin after the consortium obtains financing, which is expected to occur in the first half of 2014, but a limited notice to proceed has already been issued by the consortium members to the EPC contractor. The first phase is scheduled to commence operation in 2016, with the remaining two phases scheduled to be completed in stages within 18 months thereafter.

The project is expected to obtain construction and term loans under a non-recourse or limited-recourse financing package of direct loans from JBIC and ADB, as well as loans to be provided by five commercial banks (the MLAs). The MLAs are expected to be backed by political risk guarantees from JBIC.

On April 1, 2013, we began to sell geothermal power from the G3 plant in the Mammoth Complex in California to PG&E under a new 20 year PPA for up to 14 MW. On March 15, 2013, we finalized the agreement with Southern California Edison, by which the G1 and G3 SO#4 PPAs were terminated and, in connection therewith, we paid a termination fee of approximately \$9.0 million in the first quarter of 2013. Under the agreement, we will continue to sell power from G2, the third plant of the Mammoth complex, under its existing PPA with Southern California

Edison, with the term of the contract extended by an additional six years until early 2027.

On January 24, 2013, Ormat Nevada, our wholly owned subsidiary, and JPM entered into a tax equity partnership transaction involving certain geothermal power plants in California and Nevada. As part of the transaction, Ormat Nevada transferred the plants into ORTP, a new wholly owned subsidiary, and sold an interest in ORTP to JPM. In connection with the closing, JPM paid to Ormat Nevada approximately \$35.7 million and will make additional payments to Ormat Nevada based on the value of PTCs generated by the portfolio over time that are expected to be made until December 31, 2016 and up to a maximum amount of \$11.0 million.

Operations of our Electricity Segment

How We Own Our Power Plants. We customarily establish a separate subsidiary to own interests in each power plant. Our purpose in establishing a separate subsidiary for each plant is to ensure that the plant, and the revenues generated by it, will be the only source for repaying indebtedness, if any, incurred to finance the construction or the acquisition (or to refinance the construction or acquisition) of the relevant plant. If we do not own all of the interest in a power plant, we enter into a shareholders agreement or a partnership agreement that governs the management of the specific subsidiary and our relationship with our partner in connection with the specific power plant. Our ability to transfer or sell our interest in certain power plants may be restricted by certain purchase options or rights of first refusal in favor of our power plant partners or the power plant's power purchasers and/or certain change of control and assignment restrictions in the underlying power plant and financing documents. All of our domestic geothermal and REG power plants, with the exception of the Puna complex, which is an Exempt Wholesale Generator, are Qualifying Facilities under the PURPA, and are eligible for regulatory exemptions from most provisions of the FPA and certain state laws and regulations.

How We Explore and Evaluate Geothermal Resources. Since 2006, we have expanded our exploration activities, initially in the U.S. and more recently with an increasing focus internationally. It normally takes two to three years from the time we start active exploration of a particular geothermal resource to the time we have an operating production well, assuming we conclude the resource is commercially viable and determine to pursue its development. Exploration activities generally involve the phases described below.

Initial Evaluation. Identifying and evaluating potential geothermal resources by sampling and studying new areas combined with information available from public and private sources. We generally adhere to the following process, although our process can vary from site to site depending on geological circumstances and prior evaluation:

• We evaluate historic, geologic and geothermal information available from public and private databases, including geothermal, mining, petroleum and academic sources.

• We visit sites, sampling fluids for chemistry if necessary, to evaluate geologic conditions.

We evaluate available data, and rank prospects in a database according to estimated size and perceived risk. For example, pre-drilled sites with extensive data are considered lower risk than “green field” sites. Both prospect types are considered critical for Ormat’s continued growth.

We generally create a digital, spatial geographic information systems (GIS) database and 3D geologic model containing all pertinent information, including thermal water temperature gradients derived from historic drilling, geologic mapping information (e.g., formations, structure, alteration, and topography), and any available archival information about the geophysical properties of the potential resource.

• We assess other relevant information, such as infrastructure (e.g., roads and electric transmission lines), natural features (e.g., springs and lakes), and man-made features (e.g., old mines and wells).

Our initial evaluation is usually conducted by our own staff, although we might engage outside service providers for some tasks from time to time. The costs associated with an initial evaluation vary from site to site, based on various factors, including the acreage involved and the costs, if any, of obtaining information from private databases or other sources. On average, our expenses for an initial evaluation range from approximately \$10,000 to \$50,000 including travel, chemical analyses, and data acquisition.

If we conclude, based on the information considered in the initial evaluation, that the geothermal resource could support a commercially viable power plant, taking into account various factors described below, we proceed to land rights acquisition.

Land Acquisition. Acquisition of land rights to any geothermal resources our initial evaluation indicates could potentially support a commercially viable power plant, taking into account various factors. For domestic power plants, we either lease or own the sites on which our power plants are located. For our foreign power plants, our lease rights for the plant site are generally contained in the terms of a concession agreement or other contract with the host government or an agency thereof. In certain cases, we also enter into one or more geothermal resource leases (or subleases) or a concession or an option agreement or other agreement granting us the exclusive right to extract geothermal resources from specified areas of land, with the owners (or sublessors) of such land. In some cases we obtain first the exploration license and once certain investment requirements are met, we can obtain the exploitation rights. This usually gives us the right to explore, develop, operate, and maintain the geothermal field, including, among other things, the right to drill wells (and if there are existing wells in the area, to alter them) and build pipelines for transmitting geothermal fluid. In certain cases, the holder of rights in the geothermal resource is a governmental entity and in other cases a private entity. Usually the duration of the lease (or sublease) and concession agreement corresponds to the duration of the relevant PPA, if any. In certain other cases, we own the land where the geothermal resource is located, in which case there are no restrictions on its utilization. Leasehold interests in federal land in the United States are regulated by the BLM and the Minerals Management Service. These agencies have rules governing the geothermal leasing process as discussed below under “Description of Our Leases and Lands”.

For most of our current exploration sites in the U.S., we acquire rights to use geothermal resource through land leases with the BLM, with various states, or through private leases. Under these leases, we typically pay an up-front non-refundable bonus payment, which is a component of the competitive lease process. In addition, we undertake to pay nominal, fixed annual rent payments for the period from the commencement of the lease through the completion of construction. Upon the commencement of power generation, we begin to pay to the lessors long-term royalty payments based on the use of the geothermal resources as defined in the respective agreements. These payments are contingent on the power plant’s revenues. A summary of our typical lease terms is provided below under “Description of our Leases and Lands”.

The up-front bonus and royalty payments vary from site to site and are based, among other things, on current market conditions.

Surveys. Conducting geological, geochemical, and/or geophysical surveys on the sites acquired. Following the acquisition of land rights for a potential geothermal resource, we conduct additional surface water analyses, soil surveys, and geologic mapping to determine proximity to possible heat flow anomalies and up-flow/permeable zones. We augment our digital database with the results of those analyses and create conceptual and digital geologic models to describe geothermal system controls. We then initiate a suite of geophysical surveys (e.g., gravity, magnetics, resistivity, magnetotellurics, reflection seismic, LiDAR, and spectral surveys) to assess surface and sub-surface structure (e.g., faults and fractures) and improve the geologic model of fluid-flow conduits and permeability controls.

All pertinent geological and geophysical data are used to create three-dimensional geologic models to identify drill locations. These surveys are conducted incrementally considering relative impact and cost, and the geologic model is updated continuously.

We make a further determination of the commercial viability of the geothermal resource based on the results of this process, particularly the results of the geochemical surveys estimating temperature and the overall geologic model, including potential resource size. If the results from the geochemical surveys are poor (i.e., low derived resource temperatures or poor permeability) or the geologic model indicates small or deep resource, we re-evaluate the commercial viability of the geothermal resource and may not proceed to exploratory drilling. We generally only move forward with those sites that we believe have a high probability for development.

Exploratory Drilling. Drilling one or more exploratory wells on the high priority, relatively low risk sites to confirm and/or define the geothermal resource. If we proceed to exploratory drilling, we generally use outside contractors to create access roads to drilling sites and related activities. We have continued efforts to reduce exploration costs and therefore, after obtaining drilling permits, we generally drill temperature gradient holes and/or core holes that are lower cost than slim holes (used in the past) using either our own drilling equipment, whenever possible, or outside contractors. If the obtained data supports a conclusion that the geothermal resource can support a commercially viable power plant, it will be used as an observation well to monitor and define the geothermal resource. If the core hole

indicates low temperatures or does not support the geologic model of anticipated permeability, it may be plugged and the area reclaimed. In undrilled sites, we typically step up from shallow (500-1000 ft) to deeper (2000-4000 ft) wells as confidence improves. Following proven temperature in core wells, we typically move to slim and/or full-size wells to quantify permeability.

Each year we determine and approve an exploration budget for the entire exploration activity in such year. We prioritize budget allocation between the various geothermal sites based on commercial and geological factors. The costs we incur for exploratory drilling vary from site to site based on various factors, including the accessibility of the drill site, the geology of the site, and the depth of the resource. However, on average, exploration costs, prior to drilling of a full-size well are approximately \$1.0 to \$3.0 million for each site, not including land acquisition. However, we only reach such spending levels for sites that proved to be successful in the early stages of the exploration.

At various points during our exploration activities, we re-assess whether the geothermal resource involved will support a commercially viable power plant based on information available at that time. Among other things, we consider the following factors:

New data and interpretations obtained concerning the geothermal resource as our exploration activities proceed, and particularly the expected MW capacity power plant the resource can be expected to support. The MW capacity can be estimated using analogous systems and/or quantitative heat in place estimates until results from drilling and flow tests quantify temperature, permeability, and resulting resource size.

• Current and expected market conditions and rates for contracted and merchant electric power in the market(s) to be serviced.

• Anticipated costs associated with further exploration activities and the relative risk of failure.

• Anticipated costs for design and construction of a power plant at the site.

Anticipated costs for operation of a power plant at the site, particularly taking into account the ability to share certain types of costs (such as control rooms) with one or more other power plants that are, or are expected to be, operating near the site.

If we conclude that the geothermal resource involved will support a commercially viable power plant, we proceed to constructing a power plant at the site.

How We Construct Our Power Plants. The principal phases involved in constructing one of our geothermal power plants are as follows:

•Drilling production wells.

•Designing the well field, power plant, equipment, controls, and transmission facilities.

•Obtaining any required permits.

•Manufacturing (or in the case of equipment we do not manufacture ourselves, purchasing) the equipment required for the power plant.

•Assembling and constructing the well field, power plant, transmission facilities, and related facilities.

It generally takes approximately two years from the time we drill a production well, until the power plant becomes operational.

Drilling Production Wells. We consider completing the drilling of first production well as the beginning of our construction phase for a power plant. However, it is not always sufficient for a full release for construction. The number of production wells varies from plant to plant depending, among other things, on the geothermal resource, the projected capacity of the power plant, the power generation equipment to be used and the way geothermal fluids will be re-injected to maintain the geothermal resource and surface conditions. We generally drill the production wells ourselves although in some cases we use outside contractors.

The cost for each production well varies depending, among other things, on the depth and size of the well and market conditions affecting the supply and demand for drilling equipment, labor and operators. Our typical cost for each production well is approximately \$4.0 million with a range of \$1.0 million to \$10.0 million.

Design. We use our own employees to design the well field and the power plant, including equipment that we manufacture and that will be needed for the power plant. The designs vary based on various factors, including local laws, required permits, the geothermal resource, the expected capacity of the power plant and the way geothermal fluids will be re-injected to maintain the geothermal resource and surface conditions.

Permits. We use our own employees and outside consultants to obtain any required permits and licenses for our power plants that are not already covered by the terms of our site leases. The permits and licenses required vary from site to site, and are described below under “Environmental Permits”.

Manufacturing. Generally, we manufacture most of the power generating unit equipment we use at our power plants. Multiple sources of supply are generally available for all other equipment we do not manufacture.

Construction. We use our own employees to manage the construction work. For site grading, civil, mechanical, and electrical work we use subcontractors.

During the year ended December 31, 2013, in the Electricity Segment we focused on the construction of the Don A. Campbell power plant (formerly Wild Rose), Olkaria III Plant 2 and Plant 3 geothermal projects in order to meet the respective completion deadlines. During the year ended December 31, 2013, 2012 and 2011 two sites (Olkaria III plant 3 and McGinness Hills phase 2), no sites and one site (Olkaria III Plant 2) moved to construction, respectively.

We discontinued exploration activities at four sites in Idaho, Nevada, Oregon and Utah during the year ended December 31, 2013 and at five sites in Nevada during the year ended December 31, 2012. Those sites were Magic Reservoir, Wildhorse (Mustang), Mahogany and Drum Mountain in 2013, and Leach Hot springs, Hyder Hot Springs, Seven Devil, Smith Creek and Walker River in 2012. After conducting exploratory studies in those sites, we concluded that the geothermal resource would not support commercial operations at that time. Costs associated with exploration activities at these sites were expensed accordingly. No exploration activities were discontinued in 2011 (see “Write-off of Unsuccessful Exploration Activities” under Item 7 — “Management Discussion and Analysis of Financial Condition and Results of Operations”).

Three new sites were added to our exploration and development activities in the year ended December 31, 2013, compared with five sites in the year ended December 31, 2012 and with thirteen sites in the year ended December 31, 2011.

How We Operate and Maintain Our Power Plants. In the U.S. we usually employ our subsidiary, Ormat Nevada, to act as operator of our power plants pursuant to the terms of an operation and maintenance agreement. Operation and maintenance of our foreign projects are generally provided by our subsidiary that owns the relevant project. Our operations and maintenance practices are designed to minimize operating costs without compromising safety or environmental standards while maximizing plant flexibility and maintaining high reliability. Our operations and maintenance practices for geothermal power plants seek to preserve the sustainable characteristics of the geothermal resources we use to produce electricity and maintain steady-state operations within the constraints of those resources reflected in our relevant geologic and hydrologic studies. Our approach to plant management emphasizes the operational autonomy of our individual plant or complex managers and staff to identify and resolve operations and maintenance issues at their respective power plants; however each power plant or complex draws upon our available collective resources and experience, and that of our subsidiaries. We have organized our operations such that inventories, maintenance, backup, and other operational functions are pooled within each power plant complex and provided by one operation and maintenance provider. This approach enables us to realize cost savings and enhances our ability to meet our power plant availability goals.

Safety is a key area of concern to us. We believe that the most efficient and profitable performance of our power plants can only be accomplished within a safe working environment for our employees. Our compensation and incentive program includes safety as a factor in evaluating our employees, and we have a well-developed reporting system to track safety and environmental incidents, if any, at our power plants.

How We Sell Electricity. In the U.S., the purchasers of power from our power plants are typically investor-owned electric utility companies. Outside of the United States, the purchaser is either a state-owned utility or a privately-owned entity and we typically operate our facilities pursuant to rights granted to us by a governmental agency pursuant to a concession agreement. In each case, we enter into long-term contracts (typically called PPAs) for the sale of electricity or the conversion of geothermal resources into electricity. Although a power plant's revenues under a PPA previously generally consisted of two payments — energy payments and capacity payments, our recent PPAs provide for energy payments only. Energy payments are normally based on a power plant's electrical output actually delivered to the purchaser measured in kilowatt hours, with payment rates either fixed or indexed to the power purchaser's "avoided" power costs (i.e., the costs the power purchaser would have incurred itself had it produced the power it is purchasing from third parties) or rates that escalate at a predetermined percentage each year. Capacity payments are normally calculated based on the generating capacity or the declared capacity of a power plant available for delivery to the purchaser, regardless of the amount of electrical output actually produced or delivered. In addition, most of our domestic power plants located in California are eligible for capacity bonus payments under the respective PPAs upon reaching certain levels of generation.

How We Finance Our Power Plants. Historically we have funded our power plants with a combination of non-recourse or limited recourse debt, lease financing, parent company loans, and internally generated cash, which includes funds from operation, as well as proceeds from loans under corporate credit facilities, sale of securities, and other sources of liquidity. Such leveraged financing permits the development of power plants with a limited amount of equity contributions, but also increases the risk that a reduction in revenues could adversely affect a particular power plant's ability to meet its debt obligations. Leveraged financing also means that distributions of dividends or other distributions by plant subsidiaries to us are contingent on compliance with financial and other covenants contained in the financing documents.

Non-recourse debt or lease financing refers to debt or lease arrangements involving debt repayments or lease payments that are made solely from the power plant's revenues (rather than our revenues or revenues of any other power plant) and generally are secured by the power plant's physical assets, major contracts and agreements, cash accounts and, in many cases, our ownership interest in our affiliate that owns that power plant. These forms of financing are referred to as "project financing". Project financing transactions generally are structured so that all revenues of a power plant are deposited directly with a bank or other financial institution acting as escrow or security deposit agent. These funds are then payable in a specified order of priority set forth in the financing documents to ensure that, to the extent available, they are used to first pay operating expenses, senior debt service (including lease payments) and taxes, and to fund reserve accounts. Thereafter, subject to satisfying debt service coverage ratios and certain other conditions, available funds may be disbursed for management fees or dividends or, where there are subordinated lenders, to the payment of subordinated debt service.

In the event of a foreclosure after a default, our affiliate that owns the power plant would only retain an interest in the assets, if any, remaining after all debts and obligations have been paid in full. In addition, incurrence of debt by a power plant may reduce the liquidity of our equity interest in that power plant because the interest is typically subject both to a pledge in favor of the power plant's lenders securing the power plant's debt and to transfer and change of control restrictions set forth in the relevant financing agreements.

Limited recourse debt refers to project financing as described above with the addition of our agreement to undertake limited financial support for our affiliate that owns the power plant in the form of certain limited obligations and contingent liabilities. These obligations and contingent liabilities may take the form of guarantees of certain specified obligations, indemnities, capital infusions and agreements to pay certain debt service deficiencies. To the extent we become liable under such guarantees and other agreements in respect of a particular power plant, distributions received by us from other power plants and other sources of cash available to us may be required to be used to satisfy these obligations. To the extent of these limited recourse obligations, creditors of a project financing of a particular power plant may have direct recourse to us.

We have also used financing structures to monetize PTCs and other favorable tax benefits derived from the financed power plants and an operating lease arrangement for one of our power plants.

How We Mitigate International Political Risk. We generally purchase insurance policies to cover our exposure to certain political risks involved in operating in developing countries, as described below under "Insurance". To date, our political risk insurance contracts are with the Multilateral Investment Guaranty Agency (MIGA), a member of the World Bank Group, and Zurich Re, a private insurance and re-insurance company. Such insurance policies generally cover, subject to the limitations and restrictions contained therein, 80-90% of our revenue loss resulting from a specified governmental act such as confiscation, expropriation, riots, the inability to convert local currency into hard currency, and, in certain cases, the breach of agreements. We have obtained such insurance for all of our foreign power plants in operation. However, insurance policy for the Amatitlan Geothermal Project in Guatemala was discontinued following the financing of the project in 2009 due to our reduced equity exposure.

Description of Our Leases and Lands

We have domestic leases on approximately 369,330 acres of federal, state, and private land in Alaska, California, Hawaii, Idaho, Nevada, New Mexico, Oregon and Utah. The approximate breakdown between federal, state, private leases and owned land is as follows:

72% are leases with the U.S. government, acting through the BLM;

• 44% are leases with private landowners and/or leaseholders;

• 11% are leases with various states, none of which is currently material; and

• 3% are owned by us.

Each of the leases within each of the categories has standard terms and requirements, as summarized below. Internationally, our land position includes approximately 413,430 acres, most of which are geothermal exploration licenses in six prospects in Chile.

Bureau of Land Management (BLM) Geothermal Leases

Certain of our domestic project subsidiaries have entered into geothermal resources leases with the U.S. government, pursuant to which they have obtained the right to conduct their geothermal development and operations on federally-owned land. These leases are made pursuant to the Geothermal Steam Act and the lessor under such leases is the U.S. government, acting through the BLM.

BLM geothermal leases grant the geothermal lessee the right and privilege to drill for, extract, produce, remove, utilize, sell, and dispose of geothermal resources on certain lands, together with the right to build and maintain necessary improvements thereon. The actual ownership of the geothermal resources and other minerals beneath the land is retained in the federal mineral estate. The geothermal lease does not grant to the geothermal lessee the exclusive right to develop the lands, although the geothermal lessee does hold the exclusive right to develop geothermal resources within the lands. The

geothermal lessee does not have the right to develop minerals unassociated with geothermal production and cannot prohibit others from developing the minerals present in the lands. The BLM may grant multiple leases for the same lands and, when this occurs, each lessee is under a duty to not unreasonably interfere with the development rights of the other. Because BLM leases do not grant to the geothermal lessee the exclusive right to use the surface of the land, BLM may grant rights to others for activities that do not unreasonably interfere with the geothermal lessee's uses of the same land; such other activities may include recreational use, off-road vehicles, and/or wind or solar energy developments.

Certain BLM leases issued before August 8, 2005 include covenants that require the projects to conduct their operations under the lease in a workmanlike manner and in accordance with all applicable laws and BLM directives and to take all mitigating actions required by the BLM to protect the surface of and the environment surrounding the land. Additionally, certain leases contain additional requirements, some of which concern the mitigation or avoidance of disturbance of any antiquities, cultural values or threatened or endangered plants or animals, the payment of royalties for timber, and the imposition of certain restrictions on residential development on the leased land.

BLM leases entered into after August 8, 2005 require the geothermal lessee to conduct operations in a manner that minimizes impacts to the land, air, water, to cultural, biological, visual, and other resources, and to other land uses or users. The BLM may require the geothermal lessee to perform special studies or inventories under guidelines prepared by the BLM. The BLM reserves the right to continue existing leases and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Prior to disturbing the surface of the leased lands, the geothermal lessee must contact the BLM to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Subject to BLM approval, geothermal lessees may enter into unit agreements to cooperatively develop a geothermal resource. The BLM reserves the right to specify rates of development and to require the geothermal lessee to commit to a communalization or unitization agreement if a common geothermal resource is at risk of being overdeveloped.

Typical BLM leases issued to geothermal lessees before August 8, 2005 have a primary term of ten years and will renew so long as geothermal resources are being produced or utilized in commercial quantities, but cannot exceed a period of forty years after the end of the primary term. If at the end of the forty-year period geothermal steam is still being produced or utilized in commercial quantities and the lands are not needed for other purposes, the geothermal lessee will have a preferential right to renew the lease for a second forty-year term, under terms and conditions as the BLM deems appropriate.

BLM leases issued after August 8, 2005 have a primary term of ten years. If the geothermal lessee does not reach commercial production within the primary term, the BLM may grant two five-year extensions if the geothermal lessee: (i) satisfies certain minimum annual work requirements prescribed by the BLM for that lease, or (ii) makes minimum annual payments. Additionally, if the geothermal lessee is drilling a well for the purposes of commercial production, the primary term (as it may have been extended) may be extended for five years and as long thereafter as steam is being produced and used in commercial quantities (meaning the geothermal lessee either begins producing geothermal resources in commercial quantities or has a well capable of producing geothermal resources in commercial

quantities and is making diligent efforts to utilize the resource) for thirty-five years. If, at the end of the extended thirty-five year term, geothermal steam is still being produced or utilized in commercial quantities and the lands are not needed for other purposes, the geothermal lessee will have a preferential right to renew the lease for fifty-five years, under terms and conditions as the BLM deems appropriate.

For BLM leases issued before August 8, 2005, the geothermal lessee is required to pay an annual rental fee (on a per acre basis), which escalates according to a schedule described therein, until production of geothermal steam in commercial quantities has commenced. After such production has commenced, the geothermal lessee is required to pay royalties (on a monthly basis) on the amount or value of (i) steam, (ii) by-products derived from production, and (iii) commercially de-mineralized water sold or utilized by the project (or reasonably susceptible to such sale or use).

For BLM leases issued after August 8, 2005, (i) a geothermal lessee who has obtained a lease through a non-competitive bidding process will pay an annual rental fee equal to \$1.00 per acre for the first ten years and \$5.00 per acre each year thereafter; and (ii) a geothermal lessee who has obtained a lease through a competitive process will pay a rental equal to \$2.00 per acre for the first year, \$3.00 per acre for the second through tenth year and \$5.00 per acre each year thereafter. Rental fees paid before the first day of the year for which the rental is owed will be credited towards royalty payments for that year. For BLM leases issued, effective, or pending on August 5, 2005 or thereafter, royalty rates are fixed between 1.0-2.5% of the gross proceeds from the sale of electricity during the first ten years of production under the lease. The royalty rate set by the BLM for geothermal resources produced for the commercial generation of electricity but not sold in an arm's length transaction is 1.75% for the first ten years of production and 3.5% thereafter. The royalty rate for

geothermal resources sold by the geothermal lessee or an affiliate in an arm's length transaction is 10.0% of the gross proceeds from the arm's length sale. The BLM may readjust the rental or royalty rates at not less than twenty year intervals beginning thirty-five years after the date geothermal steam is produced.

In the event of a default under any BLM lease, or the failure to comply with any of the provisions of the Geothermal Steam Act or regulations issued under the Geothermal Steam Act or the terms or stipulations of the lease, the BLM may, 30 days after notice of default is provided to the relevant project, (i) suspend operations until the requested action is taken, or (ii) cancel the lease.

Private Geothermal Leases

Certain of our domestic project subsidiaries have entered into geothermal resources leases with private parties, pursuant to which they have obtained the right to conduct their geothermal development and operations on privately owned land. In many cases, the lessor under these private geothermal leases owns only the geothermal resource and not the surface of the land.

Typically, the leases grant our project subsidiaries the exclusive right and privilege to drill for, produce, extract, take and remove from the leased land water, brine, steam, steam power, minerals (other than oil), salts, chemicals, gases (other than gases associated with oil), and other products produced or extracted by such project subsidiary. The project subsidiaries are also granted certain non-exclusive rights pertaining to the construction and operation of plants, structures, and facilities on the leased land. Additionally, the project subsidiaries are granted the right to dispose of waste brine and other waste products as well as the right to re-inject into the leased land water, brine, steam, and gases in a well or wells for the purpose of maintaining or restoring pressure in the productive zones beneath the leased land or other land in the vicinity. Because the private geothermal leases do not grant to the lessee the exclusive right to use the surface of the land, the lessor reserves the right to conduct other activities on the leased land in a manner that does not unreasonably interfere with the geothermal lessee's uses of the same land, which other activities may include agricultural use (farming or grazing), recreational use and hunting, and/or wind or solar energy developments.

The leases provide for a term consisting of a primary term in the range of five to 30 years, depending on the lease, and so long thereafter as lease products are being produced or the project subsidiary is engaged in drilling, extraction, processing, or reworking operations on the leased land.

As consideration under most of our project subsidiaries' private leases, the project subsidiary must pay to the lessor a certain specified percentage of the value "at the well" (which is not attributable to the enhanced value of electricity generation), gross proceeds, or gross revenues of all lease products produced, saved, and sold on a monthly basis. In certain of our project subsidiaries' private leases, royalties payable to the lessor by the project subsidiary are based on

the gross revenues received by the lessee from the sale or use of the geothermal substances, either from electricity production or the value of the geothermal resource “at the well”.

In addition, pursuant to the leases, the project subsidiary typically agrees to commence drilling, extraction or processing operations on the leased land within the primary term, and to conduct such operations with reasonable diligence until lease products have been found, extracted and processed in quantities deemed “paying quantities” by the project subsidiary, or until further operations would, in such project subsidiary’s judgment, be unprofitable or impracticable. The project subsidiary has the right at any time within the primary term to terminate the lease and surrender the relevant land. If the project subsidiary has not commenced any such operations on said land (or on the unit area, if the lease has been unitized), or terminated the lease within the primary term, the project subsidiary must pay to the lessor, in order to maintain its lease position, annually in advance, a rental fee until operations are commenced on the leased land.

If the project subsidiary fails to pay any installment of royalty or rental when due and if such default continues for a period of fifteen days specified in the lease, for example, after its receipt of written notice thereof from the lessor, then at the option of the lessor, the lease will terminate as to the portion or portions thereof as to which the project subsidiary is in default. If the project subsidiary defaults in the performance of any obligations under the lease, other than a payment default, and if, for a period of 90 days after written notice is given to it by the lessor of such default, the project subsidiary fails to commence and thereafter diligently and in good faith take remedial measures to remedy such default, the lessor may terminate the lease.

We do not regard any property that we lease as material unless and until we begin construction of a power plant on the property, that is, until we drill a production well on the property.

Exploration Concessions in Chile

We have been awarded six exploration concessions in Chile, under which we have the rights to start exploration work with an original term of two years. Prior to the last six months of the original term of each exploration concession, we can request its extension for an additional period of two years. According to applicable regulations, the extension of the exploration concession is subject to the receipt by the Ministry of Energy of evidence that at least 25% of the planned investments for the execution of the project, as reflected in the relevant proposal submitted during the tender process, has been invested. Following submission of the request, the Ministry of Energy has three months in which it may grant or deny the extension. As of the date of this report we have received an extension for one of the six concessions. We are considering submitting applications for exploitation licenses that would last longer than current exploration licenses for selected concessions where the results of previous exploration support conducting further surveys.

Description of Our Power Plants

Domestic Operating Power Plants

The following descriptions summarize certain industry metrics for our domestic operating power plants:

Brady Complex

<i>Location</i>	Churchill County, Nevada
<i>Generating Capacity</i>	18MW
<i>Number of Power Plants</i>	Two (Brady and Desert Peak 2 power plants).
<i>Technology</i>	The Brady complex utilizes binary and flash systems. The complex uses air and water cooled systems.
<i>Subsurface Improvements</i>	12 production wells and 8 injection wells are connected to the plants through a gathering system.
<i>Major Equipment</i>	Three OEC units and three steam turbines along with the Balance of Plant equipment.
<i>Age</i>	The Brady power plant commenced commercial operations in 1992 and a new OEC unit was added in 2004. The Desert Peak 2 power plant commenced commercial operation in 2007.
<i>Land and Mineral Rights</i>	The Brady complex area is comprised mainly of BLM leases. The leases are held by production. The scheduled expiration dates for all of these leases are after the end of the expected useful life of the power plants. The complex's rights to use the geothermal and surface rights under the leases are subject to various conditions, as described in "Description of Our Leases and Lands".
<i>Access to Property</i>	Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted pursuant to the leases, and the Brady power plant holds right of ways from the BLM and from the private owner that allows access to and from the plant.
<i>Resource Information</i>	The resource temperature at Brady is 274 degrees Fahrenheit and at Desert Peak 2 is 340 degrees Fahrenheit.
	The Brady and Desert Peak geothermal systems are located within the Hot Springs Mountains, approximately 60 miles northeast of Reno, Nevada, in northwestern Churchill County.

The dominant geological feature of the Brady area is a linear NNE-trending band of hot ground that extends for a distance of two miles.

The Desert Peak geothermal field is located within the Hot Springs Mountains, which form part of the western boundary of the Carson Sink. The structure is characterized by east-titled fault blocks and NNE-trending folds.

Geologic structure in the area is dominated by high-angle normal faults of varying displacement.

<i>Resource Cooling</i>	Approximately four degrees Fahrenheit per year was historically observed at Brady, and two degrees Fahrenheit was observed in 2013. The temperature decline at Desert Peak is approximately two degrees Fahrenheit per year.
<i>Sources of Makeup Water</i>	Condensed steam is used for makeup water.
<i>Power Purchaser</i>	Brady power plant — Sierra Pacific Power Company. Desert Peak 2 power plant — Nevada Power Company.
<i>PPA Expiration Date</i>	Brady power plant — 2022. Desert Peak 2 power plant — 2027.
<i>Financing</i>	OFC Senior Secured Notes and ORTP Transaction in the case of Brady, and OPC Transaction in the case of Desert Peak 2.

Don A. Campbell
(formerly Wild
Rose) Project

<i>Location</i>	Mineral County, Nevada
<i>Generating Capacity</i>	16 MW
<i>Number of Power Plants</i>	One
<i>Technology</i>	The Don A. Campbell power plant utilizes an air cooled binary system.
<i>Subsurface Improvements</i>	Five production wells and three injection wells are connected to the plant.
<i>Material Equipment</i>	One air cooled OEC unit with the Balance of Plant equipment.
<i>Age</i>	The power plant is in its first year of operation.
<i>Land and Mineral Rights</i>	The Don A. Campbell area is comprised of BLM leases. Since we declared commercial operation, the leases are held by production, as described above in “Description of Our Leases and Lands”. The project’s rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in “Description of Our Leases and Lands”.

*Resource
Information*

The Don A. Campbell geothermal reservoir consists of highly fractured, silicified alluvium over at least two square miles. Production and injection are very shallow with five pumped production wells (from depths of 1,350 to 1,900 feet) and three injection wells (from depths of 649 to 2,477 feet), all targeting northwest-dipping fractures. The thermal fluids are thought to be controlled by a combination of conductive heat transfer from deeper bedrock and through mixing of upwelling thermal fluids from a deeper geothermal system also contained in the bedrock. The system is considered blind with no surface expression of thermal features.

The temperature of the resource is approximately 262 degrees Fahrenheit.

Resource Cooling From the beginning of operation the temperature is stable.

Access to Property Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted in leases from BLM.

Power Purchaser SCPPA

PPA Expiration Date 2034

Financing Corporate funds and cash grant that we expect to receive from the U.S. Treasury.

Heber Complex

Location Heber, Imperial County, California

Generating Capacity 92 MW

Number of Power Plants Five (Heber 1, Heber 2, Heber South, Gould 1 and Gould 2).

Technology The Heber 1 plant is a dual flash system with a binary bottoming unit called Gould-1 and the Heber 2 group is comprised of the Heber 2, Gould 2 and Heber South plants which all utilize binary systems. The complex uses a water cooled system.

Subsurface Improvements 31 production wells and 34 injection wells connected to the plants through a gathering system.

Major Equipment 17 OEC units and one steam turbine with the Balance of Plant equipment.

Age The Heber 1 plant commenced commercial operations in 1985 and the Heber 2 plant in 1993. The Gould 1 plant commenced commercial operation in 2006 and the Gould 2 plant in 2005. The Heber South plant commenced commercial operation in 2008.

Land and Mineral Rights The total Heber area is comprised mainly of private leases. The leases are held by production. The scheduled expiration dates for all of these leases are after the end of the expected useful life of the power plants.

The complex's rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in "Description of Our Leases and Lands".

Access to Property Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted pursuant to the leases.

Resource Information The resource supplying the flash flowing Heber 1 wells averages 348 degrees Fahrenheit. The resource supplying the pumped Heber 2 wells averages 318 degrees Fahrenheit.

Heber production is from deltaic sedimentary sandstones deposited in the subsiding Salton Trough of California's Imperial Valley. Produced fluids rise from near the magmatic heated basement rocks (18,000 feet) via fault/fracture zones to the near surface. Heber 1 wells produce directly from deep (4,000 to 8,000 feet) fracture zones. Heber 2 wells produce from the nearer surface (2,000 to 4,000

feet) matrix permeability sandstones in the horizontal outflow plume fed by the fractures from below and the surrounding ground waters.

Scale deposition in the flashing Heber 1 producers is controlled by down- hole chemical inhibition supplemented with occasional mechanical cleanouts and acid treatments. There is no scale deposition in the Heber 2 production wells.

Resource Cooling One degree Fahrenheit per year was observed during the past 20 years of production.

Sources of Makeup Water Water is provided by condensate and by the IID.

Power Purchaser Two PPAs with Southern California Edison and one PPA with SCPPA.

PPA Expiration Date Heber 1 — 2015, Heber 2 — 2023, and Heber South — 2031. The output from the Gould 1 and Gould 2 power plants is sold under the PPAs of Southern California Edison and SCPPA.

Financing OrCal Senior Secured Notes and ORTP Transaction.

Supplemental Information In 2013, we entered into a new PPA with SCPPA, which will replace the current Heber 1 PPA with Southern California Edison upon the expiration of the current PPA expected at the end of 2015.

In 2012, we began an upgrade project for the Heber 1 area which is expected to make better use of the available resource and includes drilling new wells, decommissioning old wells and replacing the surface equipment.

At the end of this process, we expect the capacity of the complex to reach 92MW.

The work on the surface equipment will be done in the first half of 2014 and will require a total plant outage. However, we expect to realize the benefits of this upgrade in future years.

Jersey Valley Power Plant

Location Pershing County, Nevada

Generating Capacity 12 MW (see supplemental information below).

Number of Power Plants One

Technology The Jersey Valley power plant utilizes an air cooled binary system.

Subsurface Improvements Two production wells and four injection wells are connected to the plant through a gathering system. The third production well is not connected to the power plant and will be used in the future as required.

Major Equipment Two OEC units together with the Balance of Plant equipment.

Age Construction of the power plant was completed at the end of 2010 and the off-taker approved commercial operation status under the PPA effective on August 30, 2011.

*Land and Mineral
Rights*

The Jersey Valley area is comprised of BLM leases. The leases are held by production. The scheduled expiration dates for all of these leases are after the end of the expected useful life of the power plant.

The power plant's rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in "Description of Our Leases and Lands".

Access to Property

Direct access to public roads from leased property and access across leased property under surface rights granted in leases from BLM.

Resource Information The Jersey Valley geothermal reservoir consists of a small high-permeability area surrounded by a large low-permeability area. The high-permeability area has been defined by wells drilled along an interpreted fault trending west-northwest. Static water levels are artesian; two of the wells along the permeable zone have very high productivities, as indicated by Permeability Index (PI) values exceeding 20 gpm/psi. The average temperature of the resource is 326 degrees Fahrenheit.

Resource Cooling We expect three degree Fahrenheit per year.

Power Purchaser Nevada Power Company

PPA Expiration Date 2032

Financing Corporate funds and ITC cash grant from the U.S. Treasury.

Once the Jersey Valley power plant reaches certain operational targets and meets other conditions precedent, we have the ability to borrow additional funds under the OFC 2 Senior Secured Notes.

Supplemental Information During 2013, we made progress in increasing the injection capacity of the Jersey Valley power plant, which has been limiting generation in its early years. We expect the results of the work, which was completed in January 2014, to allow us to operate at a capacity of 12MW once completed.

Mammoth Complex

Location Mammoth Lakes, California

Generating Capacity 29 MW

Number of Power Plants Three (G-1, G-2, and G-3).

Technology The Mammoth complex utilizes air cooled binary systems.

Subsurface Improvements Ten production wells and five injection wells are connected to the plants through a gathering system.

Major Equipment Two new OECs and six Turbo-expanders together with the Balance of Plant equipment.

Age The G-1 plant commenced commercial operations in 1984 and G-2 and G-3 commenced commercial operation in 1990. We recently replaced the equipment at the G-1 plant with new OECs.

Land and Mineral Rights The total Mammoth area is comprised mainly of BLM leases. The leases are held by production. The scheduled expiration dates for all of these leases are after the end of the expected useful life of the power plants.

The complex's rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in "Description of Our Leases and Lands".

We purchased land at Mammoth that was owned by a third party. This purchase reduced royalty expenses for the Mammoth complex.

Access to Property Direct access to public roads from the leased property and access across the

leased property are provided under surface rights granted pursuant to the leases.

Resource Information

The average resource temperature is 339 degrees Fahrenheit.

The Casa Diablo/Basalt Canyon geothermal field at Mammoth lies on the southwest edge of the resurgent dome within the Long Valley Caldera. It is believed that the present heat source for the geothermal system is an active magma body underlying the Mammoth Mountain to the northwest of the field. Geothermal waters heated by the magma flow from a deep source (greater than 3,500 feet) along faults and fracture zones from northwest to southeast east into the field area.

The produced fluid has no scaling potential.

Resource Cooling

In the last year the temperature was stabilized and there is no notable decline, although one degree Fahrenheit per year was observed during the prior 20 years of production.

Power Purchaser

G1 and G3 - PG&E and G2 -Southern California Edison.

PPA Expiration Date

G-1 and G-3 — 2034, G-2 and— 2027.

Financing

OFC Senior Secured Notes and ORTP Transaction.

Supplemental Information

In 2012, we entered into two new PPAs with PG&E, which replaced the current G-1 (December 2013) and G-3 PPAs (April 2013) with Southern California Edison.

In January 2014 we announced that we completed the scope of work needed to bring the G1 geothermal power plant to full capacity. The plant reached commercial operation under the new PPA with PG&E and now receives the full commercial rate defined in the PPA. The refurbishment work required shutting down the G1 plant for most of 2013 but since its completion the complex is generating power at the expected levels. In addition, a refurbishment program for G-3 is currently in process with an expected completion in 2015.

McGinness Hills Power Plant

Location

Lander County, Nevada

Generating Capacity 38 MW

Number of Power Plants

One

Technology

The McGinness Hills power plant utilizes an air cooled binary system.

*Subsurface
Improvements*

Five production wells and three injection wells are connected to the power plant.

Material Equipment

Two air cooled OEC units with the Balance of Plant Equipment.

Age

The power plant commenced commercial operation on July 1, 2012,

*Land and Mineral
Rights*

The McGinness Hills area is comprised of private and BLM leases.

The leases are currently held by the payment of annual rental payments, as described above in “Description of Our Leases and Lands”.

The rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in “Description of Our Leases and Lands”.

Resource Information The McGinness geothermal reservoir is contained within a network of fractured rocks over an area at least three square miles. The reservoir is contained in both Tertiary intrusive and Paleozoic sedimentary (basement) rocks. The thermal fluids within the reservoir are inferred to flow upward through the basement rocks along the NNE-striking faults at several fault intersections. The thermal fluids then generally outflow laterally to the NNE and SSW along the NNE-striking faults. No modern thermal manifestations exist at McGinness, although hot spring deposits encompass an area of approximately 0.25 square miles and indicate a history of surface thermal fluid flow. The resource temperature averages 337 degrees Fahrenheit and the fluids are sourced from the reservoir at elevations between 2,000 to 5,000 feet below the surface.

The average temperature of the resource is approximately 335 degrees Fahrenheit.

Resource Cooling The temperature has been stable since the plant began operation with no notable cooling.

Access to Property Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted in leases from BLM.

Power Purchaser Nevada Power Company

PPA Expiration Date 2033

Financing OFC 2 Senior Secured Notes and ITC cash grant from the U.S. Treasury.

Supplemental Information Successful field development and equipment design implemented in the McGinness Hills enabled us to increase its generating capacity to 38MW.

North Brawley Power Plant

Location Imperial County, California

Generating Capacity 27 MW (See supplemental information below)

Number of Power Plants One

Technology The North Brawley power plant utilizes a water-cooled binary system.

Subsurface Improvements 36 wells have been drilled and are connected to the plants through its gathering system. As we improved our knowledge of the reservoir, we moved some of the wells between production and injection and left some idle. Currently, we have 13 wells connected to the production header and 23 wells, connected to the injection header.

Major Equipment Five OEC units together with the Balance of Plant equipment.

Age The power plant commenced commercial operation on March 31, 2011.

Land and Mineral Rights The total North Brawley area is comprised of private leases. The leases are held by production. The scheduled expiration date for all of these leases is after the end of the expected useful life of the power plant.

The plant's rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in "Description of Our Leases and Lands".

Access to Property Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted pursuant to the leases.

Resource Information North Brawley production is from deltaic and marine sedimentary sands and sandstones deposited in the subsiding Salton Trough of the Imperial Valley. Based on seismic refraction surveys the total thickness of these sediments in the Brawley area is over 15,000 feet. The shallow production reservoir (from depths of 1,500 to 4,500 feet) that was developed is fed by fractures and matrix permeability and is conductively heated from the underlying fractured reservoir which convectively circulates magmatically heated fluid. Produced fluid salinity ranges from 20,000 to 50,000 ppm, and the moderate scaling and corrosion potential is chemically inhibited. The temperature of the deeper fractured reservoir fluids exceed 525 degrees Fahrenheit, but the fluid is not yet developed because of severe scaling and corrosion potential. The deep reservoir is not dedicated to the North Brawley power plant.

The average produced fluid resource temperature is 335 degrees Fahrenheit.

Resource Cooling We have not observed a noticeable cooling.

Sources of Makeup Water Water is provided by the IID.

Power Purchaser Southern California Edison

PPA Expiration Date 2031

Financing Corporate funds and ITC cash grant from the U.S. Treasury.

Supplemental Information Since the North Brawley power plant was placed in service in 2010, it has been much more difficult to operate its geothermal field than other fields, and the power plant has been unable to reach its design capacity of 50 MW. Instead, it has been operating at capacities between 20 MW and 33 MW. This generation level has been achieved following significant additional capital expenditures and a higher than anticipated operating costs.

We plan to continue to sell the generated power from the North Brawley plant to Southern California Edison under the existing PPA at a capacity level of approximately 27 MW and refrain from additional capital investment to expand the capacity until further geological analysis is completed and/or a higher energy rate will be secured.

As noted above, during the fourth quarter of 2012 we recognized an impairment charge of \$229.1 million for this plant.

**OREG 1 Power
Plant**

Location Four gas compressor stations along the Northern Border natural gas pipeline in North and South Dakota.

Generating Capacity 22 MW

Number of Units Four

Technology The OREG 1 power plant utilizes our air cooled OEC units.

40

Major Equipment Four WHOH and four OEC units together with the Balance of Plant equipment.

Age The OREG 1 power plant commenced commercial operations in 2006.

Land Easement from NBPL.

Access to Property Direct access to the plant from public roads.

Power Purchaser Basin Electric Power Cooperative

PPA Expiration Date 2031

Financing Corporate funds.

OREG 2 Power Plant

Location Four gas compressor stations along the Northern Border natural gas pipeline; one in Montana, two in North Dakota, and one in Minnesota.

Generating Capacity 22 MW

Number of Units Four

Technology The OREG 2 power plant utilizes our air cooled OEC units.

Major Equipment Four WHOH and four OEC units together with the Balance of Plant equipment.

Age The OREG 2 power plant commenced commercial operations during 2009.

Land Easement from NBPL.

Access to Property Direct access to the plant from public roads.

Power Purchaser Basin Electric Power Cooperative

PPA Expiration Date 2034

Financing Corporate funds.

OREG 3 Power Plant

Location A gas compressor station along Northern Border natural gas pipeline in Martin County, Minnesota.

Generating Capacity 5.5 MW

Number of Units One

Technology The OREG 3 power plant utilizes our air cooled OEC units.

Major Equipment One WHOH and one OEC unit along with the Balance of Plant equipment.

Age The OREG 3 power plant commenced commercial operations during 2010.

Land Easement from NBPL.

Access to Property Direct access to the plant from public roads.

Power Purchaser Great River Energy

PPA Expiration Date 2029

Financing Corporate funds.

OREG 4 Power Plant

Location A gas compressor station along natural gas pipeline in Denver, Colorado.

Generating Capacity 3.5 MW

Number of Units One

Technology The OREG 4 power plant utilizes our air cooled OEC units.

Major Equipment Two WHOH and one OEC unit together with the Balance of Plant Equipment.

Age The OREG 4 power plant commenced commercial operations during 2009.

Land Easement from Trailblazer Pipeline Company.

Access to Property Direct access to the plant from public roads.

Power Purchaser Highline Electric Association

PPA Expiration Date 2029

Financing Corporate funds.

Supplemental Information The OREG 4 power plant was tested for impairment in the third quarter of 2012 due to continued low run time of the compressor station that serves as its heat source, which resulted in low power generation and revenue.

As a result, during the third quarter of 2012 we recognized an impairment charge of \$7.3 million for this plant.

Ormesa Complex

Location East Mesa, Imperial County, California

Generating Capacity 54 MW

<i>Number of Power Plants</i>	Four (OG I, OG II, GEM 2 and GEM 3)
<i>Technology</i>	The OG plants utilize a binary system and the GEM plants utilize a flash system. The complex uses a water cooling system.
<i>Subsurface Improvements</i>	31 production wells and 53 injection wells connected to the plants through a gathering system.
<i>Material Major Equipment</i>	32 OEC units and two steam turbines with the Balance of Plant equipment.
<i>Age</i>	The various OG I units commenced commercial operations between 1987 and 1989, and the OG II plant commenced commercial operation in 1988. Between 2005 and 2007 a significant portion of the old equipment in the OG plants was replaced (including turbines through repowering). The GEM plants commenced

commercial operation in 1989, and a new bottoming unit was added in 2007.

Land and Mineral Rights The total Ormesa area is comprised of BLM leases. The leases are held by production. The scheduled expiration dates for all of these leases are after the end of the expected useful life of the power plants.

The complex's rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in "Description of Our Leases and Lands".

Access to Property Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted pursuant to the leases.

Resource Information The resource temperature is an average of 305 degrees Fahrenheit. Production is from sandstones.

Productive sandstones are between 1,800 and 6,000 feet, and have only matrix permeability. The currently developed thermal anomaly was created in geologic time by conductive heating and direct outflow from an underlying convective fracture system. Produced fluid salinity ranges from 2,000 ppm to 13,000 ppm, and minor scaling and corrosion potential is chemically inhibited.

Resource Cooling One degree Fahrenheit per year was observed during the past 20 years of production.

Sources of Makeup Water Water is provided by the IID.

Power Purchaser Southern California Edison under a single PPA.

PPA Expiration Date 2018

Financing OFC Senior Secured Notes and ORTP Transaction.

Puna Complex

Location Puna district, Big Island, Hawaii

Generating Capacity 38 MW

Number of Power Plants Two

Technology The Puna plants utilize our geothermal combined cycle and binary systems. The plants use an air cooled system.

Subsurface Improvements Five production wells and four injection wells connected to the plants through a gathering system. We drilled a sixth production well, which we have not connected to the site yet.

Major Equipment

One plant consists of ten OEC units made up of ten binary turbines, ten steam turbines and two bottoming units along with the Balance of Plant equipment. The second plant consists of two OEC units along with Balance of Plant equipment.

Age The first plant commenced commercial operations in 1993. The second plant was placed in service in 2011 and commenced commercial operation in 2012.

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Land and Mineral Rights The Puna area is comprised of a private lease. The private lease is between PGV and KLP and it expires in 2046. PGV pays an annual rental payment to KLP, which is adjusted every five years based on the CPI.

The state of Hawaii owns all mineral rights (including geothermal resources) in the state. The state has issued a Geothermal Resources Mining Lease to KLP, and KLP in turn has entered into a sublease agreement with PGV, with the state's consent. Under this arrangement, the state receives royalties of approximately three percent of the gross revenues.

Access to Property Direct access to the leased property is readily available via county public roads located adjacent to the leased property. The public roads are at the north and south boundaries of the leased property.

Resource Information The geothermal reservoir at Puna is located in volcanic rock along the axis of the Kilauea Lower East Rift Zone. Permeability and productivity are controlled by rift-parallel subsurface fissures created by volcanic activity. They may also be influenced by lens-shaped bodies of pillow basalt which have been postulated to exist along the axis of the rift at depths below 7,000 feet.

The distribution of reservoir temperatures is strongly influenced by the configuration of subsurface fissures and temperatures are among the hottest of any geothermal field in the world, with maximum measured temperatures consistently above 650 degrees Fahrenheit.

Resource Cooling The resource temperature is stable.

Power Purchaser Three PPAs with HELCO (see "Supplemental Information" below).

PPA Expiration Date 2027

Financing Operating Lease and ITC cash grant from the U.S. Treasury.

Supplemental Information The pricing for the energy that is sold from the Puna complex is as follows:

- For the first on-peak 25 MW, the energy price has not changed from HELCO avoided cost.
- For the next on-peak 5 MW, the price has changed from a diesel-based price to a flat rate of 11.8 cents per kWh escalated by 1.5% per year.
- For the new on-peak 8 MW, the price is 9 cents per kWh for up to 30,000 MWh/year and 6 cents per kWh above 30,000 MWh/year, escalated by 1.5% per year.
- For the first off-peak 22 MW the energy price has not changed from avoided cost.

The off-peak energy above 22 MW is dispatchable:

- For the first off-peak 5 MW, the price has changed from diesel-based price to a flat rate of 11.8 cents per kWh escalated by 1.5% per year.
- For the energy above 27 MW (up to 38 MW) the price is 6 cents per kWh, escalated by 1.5% per year.

The capacity payment for the first 30 MW remains the same (\$160 kW/year for the first 25 MW and \$100.95 kW/year for the additional 5 MW). For the new 8MW power plant the annual capacity payment is \$2 million.

We are currently in discussions with HELCO to convert the avoided costs 25 MW contract to a fixed price contract.

**Steamboat
Complex**

Location Steamboat, Washoe County, Nevada

*Generating
Capacity* 78 MW

*Number of Power
Plants* Six (Steamboat 2 and 3, Burdette (Galena 1), Steamboat Hills, Galena 2 and Galena 3).

Technology The Steamboat complex utilizes a binary system (except for Steamboat Hills, which utilizes a single flash system). The complex uses air and water cooling systems.

*Subsurface
Improvements* 24 production wells and nine injection wells connected to the plants through a gathering system.

Major Equipment 10 individual air cooled OEC units and one steam turbine together with the Balance of Plant Equipment.

Age The power plants commenced commercial operation in 1992, 2005, 2007 and 2008. During 2008, the Rotoflow expanders at Steamboat 2 and 3 were replaced with four turbines manufactured by us.

*Land and Mineral
Rights* The total Steamboat area is comprised of 41% private leases, 41% BLM leases and 18% private land owned by us. The leases are held by production. The scheduled expiration dates for all of these leases are after the end of the expected useful life of the power plants.

The complex's rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in "Description of Our Leases and Lands".

We have easements for the transmission lines we use to deliver power to our power purchasers.

*Resource
Information* The resource temperature is an average of 285 degrees Fahrenheit.

The Steamboat geothermal field is a typical basin and range geothermal reservoir. Large and deep faults that occur in the rocks allow circulation of ground water to depths exceeding 10,000 feet below the surface. Horizontal zones of permeability permit the hot water to flow eastward in an out-flow plume.

The Steamboat Hills and Galena 2 power plants produce hot water from fractures associated with normal faults. The rest of the power plants acquire their geothermal water from the horizontal out-flow plume.

The water in the Steamboat reservoir has a low total solids concentration. Scaling potential is very low unless the fluid is allowed to flash which will result in calcium carbonate scale. Injection of cooled water for reservoir pressure maintenance prevents flashing.

<i>Resource Cooling</i>	Historically, the resource temperature declined at two degrees Fahrenheit per year, however, since the expansion of the complex, the rate of decline has been approximately five degrees Fahrenheit per year. We are looking at options to moderate the temperature decline.
<i>Access to Property</i>	Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted pursuant to the leases.
<i>Sources of Makeup Water</i>	Water is provided by condensate and the local utility.
<i>Power Purchaser</i>	Sierra Pacific Power Company (for Steamboat 2 and 3, Burdette (Galena1), Steamboat Hills, and Galena 3) and Nevada Power Company (for Galena 2).
<i>PPA Expiration Date</i>	Steamboat 2 and 3 — 2022, Burdette (Galena1) — 2026, Steamboat Hills — 2018, Galena 3 — 2028, and Galena 2 — 2027.
<i>Financing</i>	OFC Senior Secured Notes and ORTP Transaction (Steamboat 2 and 3, and Burdette (Galena1)) and OPC Transaction (Steamboat Hills, Galena 2, and Galena 3)
<i>Supplemental information</i>	In an attempt to increase the output of the plant we have acquired land adjacent to the complex and are evaluating a resource development program on that land.

Tuscarora Power Plant

<i>Location</i>	Elko County, Nevada
<i>Projected Generating Capacity</i>	18 MW
<i>Number of Power Plants</i>	One
<i>Technology</i>	The Tuscarora power plant utilizes a water cooled binary system.
<i>Subsurface Improvements</i>	Three production and six injection wells are connected to the power plant.
<i>Major Equipment</i>	Two water cooled OEC units with the Balance of Plant equipment.

Age The power plant commenced commercial operation on January 11, 2012.

Land and Mineral Rights The Tuscarora area is comprised of private and BLM leases.

The leases are currently held by payment of annual rental payments, as described above in “Description of Our Leases and Lands”.

The plant’s rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in “Description of Our Leases and Lands”.

Resource Information The Tuscarora geothermal reservoir consists of an area of approximately 2.5 square miles. The reservoir is contained in both Tertiary and Paleozoic (basement) rocks. The Paleozoic section consists primarily of sedimentary rocks, overlain by tertiary volcanic rocks. Thermal fluid in the native state of the reservoir flows upward and to the north through apparently southward-dipping, basement formations. At an elevation of roughly 2,500 feet with respect to mean sea level, the upwelling thermal fluid enters the tertiary volcanic rocks and flows directly upward, exiting to the surface at Hot Sulphur Springs.

The resource temperature averages 342 degrees Fahrenheit.

Resource Cooling We expect gradual decline in the cooling trend from two degrees Fahrenheit per year in the next two to three years, to less than one degree Fahrenheit per year over the long term.

Access to Property Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted in leases from BLM.

Sources of Makeup Water Water is provided from five water makeup wells.

Power Purchaser Nevada Power Company

PPA Expiration Date 2032

Financing OFC 2 Senior Secured Notes and ITC cash grant from the U.S. Treasury.

Foreign Operating Power Plants

The following descriptions summarize certain industry metrics for our foreign operating power plants:

Amatitlan Power Plant (Guatemala)

Location Amatitlan, Guatemala

Generating Capacity 20 MW

Number of Power Plants One

Technology The Amatitlan power plant utilizes an air cooled binary system and a small back pressure steam turbine (1 MW).

Subsurface Improvements Five production wells and two injection wells connected to the plants through a gathering system.

Major Equipment One steam turbine and two OEC units together with the Balance of Plant equipment.

Age The plant commenced commercial operation in 2007.

Land and Mineral Rights Total resource concession area (under usufruct agreement with INDE) is for a term of 25 years from April 2003. Leased and company owned property is approximately three percent of the concession area. Under the agreement with INDE, the power plant company pays royalties of 3.5% of revenues up to 20.5 MW and two percent of revenues exceeding 20.5 MW.

The generated electricity is sold at the plant fence. The transmission line is owned by INDE.

<i>Resource Information</i>	<p>The resource temperature is an average of 526 degrees Fahrenheit.</p> <p>The Amatitlan geothermal area is located on the north side of the Pacaya Volcano at approximately 5,900 feet above sea level.</p> <p>Hot fluid circulates up from a heat source beneath the volcano, through deep faults to shallower depths, and then cools as it flows horizontally to the north and northwest to hot springs on the southern shore of Lake Amatitlan and the Michatoya River Valley.</p>
<i>Resource Cooling</i>	Approximately two degrees Fahrenheit per year.
<i>Access to Property</i>	Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted pursuant to the lease agreement.
<i>Power Purchasers</i>	INDE and another local purchaser.
<i>PPA Expiration Date</i>	The PPA with INDE expires in 2028.
<i>Financing</i>	Senior secured project loan from TCW Global Project Fund II, Ltd.
<i>Supplemental Information</i>	<p>During 2013, we drilled a new well at the same location of an old plugged production well, by using new technology and larger casing diameter, which enabled us to increase the generating capacity back to 20 MW.</p> <p>The power plant was registered by the United Nations Framework Convention on Climate Change as a Clean Development Mechanism. It is expected to offset emissions of approximately 83,000 tons of CO₂ per year.</p>
<u>Olkaria III Complex (Kenya)</u>	
<i>Location</i>	Naivasha, Kenya
<i>Generating Capacity</i>	110 MW
<i>Number of Power Plants</i>	Four (Olkaria III Phase 1 and Olkaria III Phase 2, together Plant 1, Plant 2 and Plant 3).
<i>Technology</i>	The Olkaria III complex utilizes an air cooled binary system.

<i>Subsurface Improvements</i>	16 production wells and four injection wells connected to the plants through a gathering system.
<i>Major Equipment</i>	11 OEC units together with the Balance of Plant equipment.
<i>Age</i>	Plant 3 commenced commercial operation in January 2014 and plant 2 in April 2013. The first phase of Plant 1 commenced operation in 2000 and the second phase in 2009.
<i>Land and Mineral Rights</i>	<p>The total Olkaria III area is comprised of government leases. A license granted by the Kenyan government provides exclusive rights of use and possession of the relevant geothermal resources for an initial period of 30 years, expiring in 2029, which initial period may be extended for two additional five-year terms. The Kenyan Minister of Energy has the right to terminate or revoke the license in the event work in or under the license area stops during a period of six months, or there is a failure to comply with the terms of the license or the provisions of the law relating to geothermal resources. Royalties are paid to the</p>

Kenyan government monthly based on the amount of power supplied to the power purchaser and an annual rent.

The power generated is purchased at the metering point located immediately after the power transformers in the 220 kV sub-station within the power plant, before the transmission lines which belong to the utility.

Resource Information

The resource temperature is an average of 570 degrees Fahrenheit.

The Olkaria III geothermal field is on the west side of the greater Olkaria geothermal area located at approximately 6,890 feet above sea level within the Rift Valley.

Hot geothermal fluids rise up from deep in the northeastern portion of the concession area, penetrating a low permeability zone below 3,280 feet above sea level to a high productivity, two-phase zone identified between 3,280 and 4,270 feet ASL.

Resource Cooling

The resource temperature is stable.

Access to Property

Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted pursuant to the lease agreement.

Power Purchaser

KPLC

PPA Expiration Date 2033

Financing Senior secured project finance loan from OPIC and a subordinated loan from DEG.

Zunil Power Plant
(Guatemala)

Location

Zunil, Guatemala

Generating Capacity

24 MW

Number of Power Plants

One

Technology

The Zunil power plant utilizes an air cooled binary system.

Major Equipment

Seven OEC units together with the Balance of Plant equipment.

Age

The plant commenced commercial operation in 1999.

Land and Mineral Rights

The land owned by the plant includes the power plant, workshop and open yards for equipment and pipes storage.

Pipelines for the gathering system transit through a local agricultural area's right of way acquired by us.

The geothermal wells and resource are owned by INDE.

Our produced power is sold at our property line; power transmission lines are owned and operated by INDE.

Resource Information The Zunil geothermal reservoir is hosted in Tertiary volcanic rocks which include overly fractured granodiorite. Production wells produce a reservoir from 536-572 degrees Fahrenheit to a depth of approximately 2,860-4,300 feet. A shallow steam cap exists in the production area of the field, and most of the wells produce high enthalpy fluid due to the presence of two-phase conditions in their feed zones. The wells target northwest- and northeast-trending fractures for permeability. These fractures are also thought to control upwelling from the volcanically-heated source. The upwelling fluids form a steam cap, and fluids and steam reach the surface along fractures, forming springs and fumaroles throughout the geothermal field

Resource Cooling The resource temperature is stable.

Access to Property Direct access to public roads.

Power Purchaser INDE

PPA Expiration Date 2034

Financing Senior secured project loan from IFC and CDC that was repaid in full in November 2011.

Supplemental Information In January 2014, we signed an amendment with INDE to extend the term of the PPA by 15 years until 2034.

The PPA amendment also transfers operation and management responsibilities of the Zunil geothermal field from INDE to Ormat for the term of the amended PPA in exchange for an increase in tariff. Additionally, INDE exercised its right under the PPA to become a partner in the Zunil power plant and to hold a three percent equity interest.

Currently, the power plant generates approximately 13 MW due to lack of sufficient geothermal resource supply. We plan to improve the heat supply to gradually increase generation, subject to monitoring and assessment of the geothermal reservoir. We expect that this improvement and the increase in tariff will increase the energy portion of revenues.

According to the PPA amendment, payments for the Zunil plant will be made as follows:

- Capacity payment:

o Until 2019, the capacity payment will be calculated based on 24 MW capacity regardless of the actual performance of the power plant.

From 2019 and onwards, the capacity payment will be based on actual delivered capacity and the capacity rate will be reduced.

•Energy payment:

From January 2014 until 2034, the energy payment will include a geothermal field O&M rate based on actual delivered energy in addition to the energy rate on actual delivered energy.

From 2019 and onwards, the energy rate on delivered energy will increase and will compensate the reduction in capacity price.

Projects under Construction

We are in varying stages of construction of domestic projects, some of them we fully released and are in different stages of construction and two projects are each in an initial stage of construction.

The following is a description of projects in California and Nevada with an expected total generating capacity of 40MW that were released and are in different stages of construction.

Heber Solar PV Project (U.S.)

<i>Location</i>	Imperial County, California
<i>Projected Generating Capacity</i>	10 MW (24,500 MWh per year)
<i>Projected Technology</i>	Solar PV
<i>Condition</i>	Completed most of the work and awaiting the completion of the interconnection facilities.
<i>Land</i>	The Heber Solar area is comprised of land that we own.
<i>Access to Property</i>	Direct access to public roads from the leased property and access across the leased property.
<i>Power Purchaser</i>	IID
<i>PPA Expiration Date</i>	20 years after date of COD.
<i>Financing</i>	Corporate funds.
<i>Projected Operation</i>	2014
<i>Supplemental Information</i>	We expect interconnection work to be completed by the end of the first quarter of 2014. We are considering the option of selling the project prior to completion.

McGinness Hills Phase 2 (U.S.)

<i>Location</i>	Lander County, Nevada
<i>Projected Generating Capacity</i>	30 MW

<i>Projected Technology</i>	The McGinness Hills Phase 2 power plant will utilize a binary system.
<i>Material Equipment</i>	Power plant equipment and the Balance of Plant.
<i>Condition</i>	Field development is in process.
<i>Subsurface Improvement</i>	We completed the drilling of the first production well.

<i>Land and Mineral Rights</i>	The McGinness Hills phase 2 area is comprised of private and BLM leases. The leases of the McGinness Hills area are production of the McGinness Hills plant, as described above in “Description of Our Leases and Lands”. The rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in “Description of Our Leases and Lands”.
<i>Resource Information</i>	The expected average temperature of the resource is approximately 335 degrees Fahrenheit.
<i>Access to Property</i>	Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted in leases from BLM.
<i>Power Purchaser</i>	Nevada Power Company.
<i>Financing</i>	Corporate funds. We expect to finance this project under the OFC 2 Senior Secured Notes.
<i>Projected Operation</i>	Mid-2015

The following is a description of projects in California and Nevada with an expected total generating capacity of 50 MW that are each in an initial stage of construction:

Carson Lake Project
(U.S.)

<i>Location</i>	Churchill County, Nevada
<i>Projected Generating Capacity</i>	20 MW
<i>Projected Technology</i>	The Carson Lake power plant will utilize a binary system.
<i>Condition</i>	Initial stage of construction; currently on hold.
<i>Subsurface Improvements</i>	On hold.
<i>Land and Mineral Rights</i>	The Carson Lake area is comprised of BLM leases. The leases are currently held by the payment of annual rental payments, as described above in “Description of Our Leases and Lands.”

Unless steam is produced in commercial quantities, the primary term for these leases will expire commencing August 31, 2016.

The project's rights to use the geothermal and surface rights under the leases are subject to various conditions, as described above in "Description of Our Leases and Lands".

<i>Access to Property</i>	Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted in leases from BLM.
<i>Resource Information</i>	The expected average temperature of the resource cannot be estimated as field development has not been completed yet.
<i>Power Purchaser</i>	We have not executed a PPA.
<i>Financing</i>	Corporate funds.

Projected Operation To be determined.

Supplemental Information Permitting documentation for the power plant was completed.

CD4 Project
(Mammoth
Complex) (U.S.)

Location Mammoth Lakes, California

*Projected
Generating
Capacity* 30 MW

*Projected
Technology* The CD4 power plant will utilize an air cooled binary system.

Condition Initial stage of construction.

*Subsurface
Improvements* We have completed one production well and one injection well. Continued drilling is subject to receipt of additional permits.

*Land and Mineral
Rights* The total Mammoth area is comprised mainly of BLM leases, which are held by production and are the subject of a unitization agreement.

Access to Property Direct access to public roads from the leased property and access across the leased property are provided under surface rights granted pursuant to the leases.

*Resource
Information* The expected average temperature of the resource cannot be estimated as field development has not been completed yet.

Power Purchaser We have not executed a PPA.

Financing Corporate funds.

*Projected
Operation* To be determined.

*Supplemental
Information* As part of the process to secure a transmission line, we are participating in the Southern California Edison Wholesale Distribution Access Tariff Transition Cluster Generator Interconnection Process (WDAT LGIA) to deliver energy into the Southern California Edison system at the Casa Diablo Substation. Southern California Edison completed phase I and phase II cluster studies and the WDAT LGIA is being reviewed while re-evaluation of the system upgrades is being completed due to changes in the participants in the cluster study.

Future Projects

Projects under Various Stages of Development

We also have projects under various stages of development in the United States, Honduras, and Indonesia. We expect to continue to explore these and other opportunities for expansion so long as they continue to meet our business objectives and investment criteria.

The following is a description of the projects currently under various stages of development and for which we are able to estimate their expected generating capacity. Upon completion of these projects, the generating capacity of the geothermal projects would be up to approximately 122 MW (representing our interest). However, we prioritize our investments based on their readiness for continued construction and expected economics and therefore we are not planning to invest in all of such projects in 2014.

Crump Geysler Project (U.S.)

In October 2010, we and AER (formerly NGP) agreed to jointly develop, construct, own and operate one or more geothermal power plants in the Crump Geysler Area located in Lake County, Oregon. All activities will be carried out through CGC, a limited liability company that is owned equally by our wholly owned subsidiary, Ormat Nevada, and AER.

We will be the EPC contractor for the project, which is expected to be up to 20MW and be placed in service gradually. The project will utilize our proprietary generating equipment and other Balance of Plant equipment. We will also be the Operator and provide operating and maintenance services to CGC.

According to the original agreement, we have to meet certain conditions by June 30, 2014.

e-Bay REG Project (U.S.)

In September 2013, we entered a Joint Development Agreement with eBay Inc. for the development of a five-megawatt REG power plant to be constructed in Utah. The Joint Development Agreement allows Ormat and eBay Inc. to advance negotiations on a 20-year term contract and begin preliminary development work to supply cleaner electricity to eBay Inc.'s new Salt Lake City-based data center.

Platanares Project (Honduras)

In December 2013, we completed the asset acquisition of the Geotérmica Platanares geothermal project in Honduras from ELCOSA, a privately owned Honduran energy company, upon satisfaction of the required conditions precedent. We will hold the assets, including the project's wells, land, permits and a Power Purchase Agreement for up to 35 MW with ENEE, the national utility of Honduras, under a BOT structure for 15 years from commercial operation of the first phase. Under certain circumstances the agreement can be extended by up to one year.

Platanares is a late-stage development geothermal project whose previous owners conducted exploration work. We plan to begin phased development of the project and start drilling wells early this year. Once the well field is appraised, we will determine the expected capacity and begin construction on the first phase anticipated to be approximately 18 MW and to reach commercial operation in late 2016 or the beginning of 2017.

Sarulla Project (Indonesia)

We are a member of a consortium which is in the process of developing the Sarulla geothermal power project in Indonesia, of approximately 330 MW. We own 12.75% of the project directly through our 100% owned special purpose entity and through 12.75% ownership in an Indonesian special purpose entity that will develop and operate the project.

The Sarulla project is located in Tapanuli Utara, North Sumatra, Indonesia and will be owned and operated by the consortium members under the framework of a JOC and ESC, amendments to both of which were signed on April 4, 2013. Under the JOC, PT Pertamina Geothermal Energy (PGE), the concession holder for the project, has provided the consortium with the right to use the geothermal field, and under the ESC, PT PLN, the state electric utility, will be the off-taker at Sarulla for a period of 30 years. In addition to our equity holdings in the consortium, we designed the Sarulla plant and will supply our OECs to the power plant. As a supplier, we expect to recognize revenues of \$254 million related to the equipment sale over the construction period. The supply contract was signed in October 2013.

The consortium has started preliminary testing and development activities at the site and signed an EPC and a drilling contract with an unrelated third party. The project will be constructed in three phases of 110 MW each, utilizing both steam and brine extracted from the geothermal field to increase the power plant's efficiency. Construction is expected to begin after the consortium obtains financing, which is expected to occur in the first half of 2014, but a limited notice to proceed has already been issued by the consortium members to the EPC contractor. The first phase is scheduled to commence operations in 2016, and the remaining two phases are scheduled to be completed in stages within 18 months thereafter.

The project is expected to obtain construction and term loans under a limited or non-recourse financing package of direct loans from the Japan Bank for International Cooperation (JBIC) and the Asian Development Bank (which obtained board approval in December 2013), as well as loans to be provided by five commercial banks (the MLAs). The MLAs are expected to be backed by political risk guarantees from JBIC.

Wister Project (U.S.)

We plan to develop the Wister project on private leases located in Imperial County, California. We expect the first phase of the project to be 30 MW. Exploration activity under this program has started.

Since it became clear that Wister will not be able to meet the PPA milestones and the transmission line (which is not under our responsibility) will not be ready on time, the PPA was recently terminated with no penalty.

Exploration Prospects

We have a substantial land position that is expected to support future development on which we have started or plan to start exploration activity. Our land position is comprised of various leases and private land for geothermal resources of approximately 284,678 acres in 27 prospects including the following:

Nevada [12]

- | | |
|------------------------------|---|
| 1. Argenta | Under exploration studies; |
| 2. Aqua Quieta | Completed exploration studies; |
| 3. Baltazar | Completed exploration studies; |
| 4. Beowawe | Under exploration studies; |
| 5. Dixie Hope | Under exploratory drilling (includes Dixie Meadows- Comstock, which we presented as a separate prospect in the past); |
| 6. Don A. Campbell expansion | Under resevoir evaluation studies; |
| 7. Edwards Creek | Under exploratory drilling; |
| 8. Hycroft | Under exploration studies; |

9. Tungsten Mountain