ORMAT TECHNOLOGIES, INC. Form 10-K February 26, 2015

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, 2014 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)

DELAWARE88-0326081(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:

Title of Each ClassName of Each Exchange on Which RegisteredCommon Stock \$0.001 Par ValueNew York Stock ExchangeSecurities 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.

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, 2014, 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 \$527,942,658 based on the closing price as reported on the New York Stock Exchange. As described herein, the aggregate market value of common stock held by non-affiliates of the registrant increased significantly on February 12, 2015, which is the date on which the share exchange contemplated by the Share Exchange Agreement (as described herein) was completed.

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, 2015, the number of outstanding shares of common stock, par value \$0.001 per share was 48,552,560.

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, 2014.

ORMAT TECHNOLOGIES, INC.

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2014

TABLE OF CONTENTS

		Page No
PART	ľ	
	1.BUSINESS	6
ITEM 1A.	RISK FACTORS	65
ITEM 1B.	UNRESOLVED STAFF COMMENTS	81
ITEM	2. PROPERTIES	81
ITEM	3. LEGAL PROCEEDINGS	81
ITEM	4. MINE SAFETY DISCLOSURES	82
PART		
ITEM	5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS 5. AND ISSUER PURCHASES OF EQUITY SECURITIES	83
ITEM	6. SELECTED FINANCIAL DATA	85
ITEM	7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	87
ITEM 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	118
ITEM	8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	119
ITEM	9. FINANCIAL DISCLOSURE	180
ITEM 9A.	CONTROLS AND PROCEDURES	180
ITEM 9B.	OTHER INFORMATION	180
PART		
ITEM 10.	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	181
ITEM 11.	EXECUTIVE COMPENSATION	184
ITEM	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND	101
12.	RELATED STOCKHOLDER MATTERS	184
ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	184
ITEM 14.	PRINCIPAL ACCOUNTANT FEES AND SERVICES	184
PART	` IV	
ITEM 15.	EXHIBITS, FINANCIAL STATEMENT SCHEDULES	185

SIGNATURES

i

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>	Definition						
AER	Alternative Earth Resources Inc.						
American Leon	\$42,000,000 in initial aggregate principal amount borrowed by our subsidiary Ortitlan from TCW						
Amatitlan Loan	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						
ruxinary rower	cooling towers						
	The ratio of the time a power plant is ready to be in service, or is in service, to the total time interval						
Availability	under consideration, expressed as a percentage, independent of fuel supply (heat or geothermal) or						
	transmission accessibility						
	Power plant equipment other than the generating units including items such as transformers, valves,						
equipment	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						
Capacity Pactor	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						
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						
	The total energy content of a fluid; the heat plus the mechanical energy content of a fluid (such as a						
Enthalpy	geothermal brine), which, for example, can be partially converted to mechanical energy in an						
	Organic Rankine Cycle.						

<u>Term</u>	Definition						
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	The power generation facility and the geothermal field						
Plant	The power generation facility and the geothermal field						
Geothermal Steam Ac	ctU.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						
11C Cash Orant	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 energy produced						

<u>Term</u>	Definition						
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 \$190,000,000 8.25% Senior Secured Notes, due 2020 issued by OFC							
Secured Notes	S						
OFC 2 OFC 2 LLC, a wholly owned subsidiary of the Company							
OFC 2 Senior Secured Notes	Un to \$350,000,000 Senior Secured Notes, due 2034 issued by OHC 22						
OMPC	Ormat Momotombo Power Company, a wholly owned subsidiary of the Company						
OPC	OPC LLC, a consolidated subsidiary of the Company						
OPC	Financing transaction involving four of our Nevada power plants in which institutional equity investors						
Transaction	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	$_{\rm s}$ \$165,000,000 6.21% Senior Secured Notes, due 2020 issued by OrCal						
Organic Rankine Cycl	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 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	Financing transaction involving power plants in Nevada and California in which an institutional equity
Transaction	investor purchased an interest in our special purpose subsidiary that owns such plants.

<u>Term</u>	Definition
Orzunil	Orzunil I de Electricidad, Limitada, a wholly owned subsidiary of the Company
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	Interconnection equipment, cooling towers for water cooled power plant, etc., including the
equipment PPA	generating units
	Power purchase agreement
ppm PTC	Part per million Production tax credit
PUA PUCH	Israeli Public Utility Authority Public Utilities Commission of Hawaii
PUCH	Public Utilities Commission of Nevada
PUEN PUHCA	
PUHCA 2005	U.S. Public Utility Holding Company Act of 1935
	U.S. Public Utility Holding Company Act of 2005
PURPA	U.S. Public Utility Regulatory Policies Act of 1978
Ovelifying	Certain small power production facilities are eligible to be "Qualifying Facilities" under PURPA,
Qualifying	provided that they meet certain power and thermal energy production requirements and efficiency
Facility(ies)	standards. Qualifying Facility status provides an exemption from PUHCA 2005 and grants certain
DAM	other benefits to the Qualifying Facility Renewable Auction Mechanism
RAM	
REC	Renewable Energy Credit
REG	Recovered Energy Generation
RGGI	Regional Greenhouse Gas Initiative Revolutions Per Minute
RPM	
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	70 Series Uses and Dends Due 2017 issued by the Company
Unsecured	7% Senior Unsecured Bonds Due 2017 issued by the Company
Bonds	Standard Offan Contract No. 4
SO#4	Standard Offer Contract No. 4
Solar PV SOX Act	Solar photovoltaic
	Sarbanes-Oxley Act of 2002
Southern	Southarn California Edison Company
California	Southern California Edison Company
Edison	Cracial numara antitu(iaa)
SPE(s)	Special purpose entity(ies) Short Run Avoided Costs
SRAC	
TASG	Tel Aviv Stock Exchange
TGL	Tikitere Geothermal Power Limited
Union Bank	Union Bank, N.A. United States of America
U.S.	United States of America
U.S. Treasury	U.S. Department of the Treasury Waste Heat Oil Heaters
WHOH	wasie near Oil nealers

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", "plans", "anticipates", "believes", "believes", "believes", "plans", "anticipates", "believes", "believes", "plans", "believes", "believes, "believes", "believes, believes, "believes, "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, volcanic eruption, 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, including risks arising in connection with our acquisition of our former parent company, Ormat Industries Ltd. (also referred to in this annual report as "Ormat Industries");

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 including the threat or occurrence of war, 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, if any, 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; and

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 charts below show the relative contributions of the Electricity Segment and the Product Segment to our consolidated revenues and the geographical breakdown of our segment revenues for our fiscal year ended December 31, 2014. 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".

The following chart sets forth a breakdown of our revenues for each of the years ended December 31, 2014 and 2013:

Segment Contribution to Revenues

The following chart sets forth the geographical breakdown of the revenues attributable to our Electricity and Product Segments for each of the years ended December 31, 2014 and 2013:

Geographical Breakdown of the Electricity Segment Revenues

Geographical Breakdown of the

Product Segment 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. In addition, compared to other renewable energy sources, geothermal energy is base load and is generally available all the time. 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 recent years, we have expanded our activity to the Solar PV industry. We are monitoring market drivers with potential for developing Solar PV power plants in locations where we can offer competitively priced power generation. In early 2014, we completed the work on the Solar PV project, which is located near our Heber complex in

California, and sold the project in March 2014 as a turnkey project.

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, 2015. 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:

Туре	Region	Plant	Ownership ⁽¹⁾		Generating capacity (MW) ⁽²⁾		Region 2014 Capacity Factor	
Geotherma	alCalifornia	Ormesa complex	100	%	54			
		Heber Complex	100	%	92			
		Mammoth Complex	100	%	29			
		North Brawley	100	%	18	(5)		
							78	%
	West Nevada	Steamboat complex	100	%	73	(4)		
		Brady Complex	100	%	18			
							86	%
	East Nevada	Tuscarora	100	%	18			
		Jersey Valley	100	%	10	(6)		

		Edgar Filing: ORMAT TECHNOLOGIES, INC Form TO-K						
		McGinness Hills	100	%	72	(7)		
		Don A. Campbell	100	%	19	(8) (3)		
							93	%
Hawaii		Puna	100	%	38	(3)		
							77	%
Interna	tional	Amatitlan	100	%	20			
		Zunil	97	%	23	(9) (2)		
		Olkaria III Complex	100	%	110			
							97	%
Total Geothermal					594		86	%
REG		OREG 1	100	%	22	(3)		
		OREG 2	100	%	22	(3)		
		OREG 3	100	%	5.5	(3)		
		OREG 4	100	%	3.5	(10)		
Total REG					53		53	%
Total					647			

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

Edgar Filing: ORMAT TECHNIOLOGIES INC - Form 10-K

⁽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 capacity revenues are calculated based on 24 MW capacity unrelated to the actual performance of the reservoir until 2019. 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.

In February 2015, we signed a definitive agreement with infrastructure funds managed by Northleaf Capital Partners under which we established a new company, ORPD LLC, that will own Puna Complex, Don A. Campbell, OREG 1, OREG 2, OREG 3 power plants and Northleaf will acquire an approximately 40% equity interest in ORPD LLC. The closing of the transaction, which is subject to customary closing conditions, is expected in the first quarter of 2015. See also in Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the heading "ORPD transaction".

⁽⁴⁾ 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.

⁽⁵⁾ Following recent developments, detailed under "Description of Our Power Plants" below, we have decided to operate the North Brawley power plant at a capacity level of approximately 18 MW.

(6) The generating capacity of the Jersey Valley power plant stabilized during 2014.

⁽⁷⁾The McGinness phase 2 power plant reached commercial operation on February 1, 2015 and increased the McGinness complex to 72 MW.

(8) The Don A. Campbell power plant generating capacity is higher than our original expectations of 16MW.

⁽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.

(10) 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.

All of the revenues that we currently derive from the sale of electricity are pursuant to long-term PPAs. In addition, approximately 44.3% of our total revenues in the year ended December 31, 2014 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 85 MW in generating capacity from geothermal power plants in the United States, Kenya and Indonesia that we fully released for construction and are in different stages of construction. In addition, we have several projects worldwide that are either under initial stages of construction or under different stages of development with an aggregate capacity of up to approximately 180 MW.

We have a substantial land position across 32 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.

11

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 quality and 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 and off-shore platforms operators and contractors. 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, our former parent company. 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. On February 12, 2015, we successfully completed the acquisition of Ormat Industries, eliminating its majority ownership and control of us. Our acquisition of Ormat Industries is described in greater detail below under "Recent Developments."

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 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 (either directly or after passing through a binary plant to produce additional power from the residual heat remaining in the brine) 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 69 U.S. patents that are still in force (and have approximately 34 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 and industrial waste heat, disposal of non-condensable gases present in geothermal fluids, power plants for very high pressure geothermal resources, 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 18 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 cost and 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 Brady Complex 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 technology offering product 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 may be opportunities for development in other states such as Arizona, New Mexico, Washington and Oregon due to the potential of geothermal resources.

In a report issued in April 2014, the GEA identified 124 confirmed and unconfirmed geothermal projects under various phases of consideration or development in 12 U.S. states. The domestic geothermal market experienced modest growth mainly, according to the GEA, due to the uncertainty surrounding federal production tax credit for new projects combined with as lowered demand across the market.

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, 25 states have enacted RPS, Clean Energy Standards, 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 see the impact of the RPS legislation 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 22.27% of their 2013 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 an additional market of potential off-takers for us even though these utilities do not have interim targets. In addition, a new bill was introduced in California to increase the RPS to 50% by 2030. The bill would require the California Public Utilities Commission to evaluate the cost-effectiveness of renewable energy sources not only in regards to their up-front costs but also for their ability to benefit the grid by supplementing intermittent solar and wind, or by providing base-load electricity generation. The bill, together with the California Governor's call for a clean energy standard that includes 50% of the state's electricity from renewable resource by 2030, could benefit geothermal energy, which has the advantage of generating flexible base-load power, and helping California diversify its mix of renewable resource.

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 2014, the CARB released the results of its ninth auction (which was the first joint auction for California and Québec allowances) reporting that the vintage 2014 auction clearing price was \$12.10 per allowance and the future vintage auction clearing price was \$11.86 per allowance. All of the available 2014 and future vintage allowances offered were sold.

In 2014, Assembly Bill No. 2363 (AB-2363), became effective. AB-2363, which requires the California Public Utilities Commission to adopt, by rulemaking, by December 31, 2015, a methodology for determining the costs of integrating eligible renewable energy resources.

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 each of 2013 and 2014, that not less than 18% of electricity sold to Nevada retail customers be met with renewable energy resources and credits, and that not less than 5% of that amount be met with solar resources. According to NV Energy's RPS Annual Report, in 2013, Nevada Power exceeded both the 2013 RPS requirement and the 2013 solar RPS requirement, achieving 20.4% and 18.2%, respectively. Sierra exceeded both the 2013 RPS requirement and the 2013 solar RPS requirement, with 34.7% and 16.1% respectively.

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 2014 filing made with the Hawaii PUC, in 2013, Hawaiian Electric Company and its subsidiaries exceeded the 2013 RPS requirement, achieving a consolidated RPS of 34.4% of retail electricity sales from eligible renewable energy resources, including electrical energy savings from energy efficiency and solar water hearing technologies. Excluding electrical energy savings from energy efficient and solar water hearing technologies, the 2013 renewable generation percentage for the Hawaiian Electric Companies was 18.2%.

In addition, the Hawaii Electric Light Company submitted a long term energy plan to the HPUC that includes the target goal of generating 92% of its electricity from renewable energy sources by the year 2030.

Other States

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, other states have also established the Midwestern Regional Greenhouse Gas Reduction Accord (Midwest Accord) and the Western Climate Initiative (WCI). The RGGI, the WCI and the Midwest Accord have formed the North America 2050, a Partnership for Progress (NA2050) that facilitates state and provincial efforts to design, promote and implement cost-effective policies that reduce greenhouse gas emissions and create economic opportunities.

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. The EPA released proposed rules for new fossil fuel fired power plants in September 2013 and for existing fossil fuel-fired power plants in June 2014. In the Clean Power Plan proposal, states identify a path forward using either current or new electricity production and pollution control policies to meet the goals of the proposed program including cutting carbon emission from the power sector by 30% below 2005 levels nationwide by 2030.

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, 2014, we are permitted to claim an investment 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% investment tax credit (if the 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 2014 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% investment 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 an investment 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.

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 in the future we claim 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.

18

Global

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

According to the last GEA, there are approximately 12,800 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. The Kyoto Protocol was adopted in Kyoto, Japan, in 1997 and entered into force in 2005. In the Bali Action Plan in 2007 and at Copenhagen in 2009 a long-term vision to limit global warming to two degrees Celsius was advanced, and agreed upon in 2010 at the Cancun Conference. The determination to keep within the two degrees Celsius limit led to the creation of the Durban Platform (ADP), in which developed and developing countries will work on a protocol, legal instrument or agreed outcome with legal force, applicable to all parties to the UN Framework Agreement on Climate Change. The new instrument will need to be adopted in 2015 and implemented from 2020. This will be the goal of the 21st U.N. Climate Change Conference that is scheduled to take place in Paris in late 2015.

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 2013, 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, will 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 2038.

In **Chile**, where we have three 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. On October 14, 2013, the President of Chile signed into law, a bill which mandates that utilities source 20% of their electricity from "non-conventional" renewable energy (ERNC), including solar photovoltaic (PV) and concentrating solar power (CSP), by 2025.

Mexico is the world's fourth largest producer of geothermal energy. Recent studies suggest an over 9,000 MW geothermal potential, of which only 12% is already developed. In December 2013, the Mexican Congress passed a constitutional reform (Energy Reform) in an attempt to increase the participation of private investors in the generation and commercialization of electric energy. According to the Mexico Country Report 2012, there is a large amount of unexploited geothermal potential in Mexico. This reform affects the electricity market by opening the generation and commercialization of electricity to private companies, the transformation of the Federal Electricity Commission to a for-profit public company, and the redefinition of functions and attributions of the Ministry of Energy. The secondary legislation that establishes the attributions of the public entities, procurement regulation, and normative framework for the productive companies of the State was finalized in 2014.

Many islands nations depend almost entirely on petroleum to supply their electricity demands. With electricity prices average at US\$0.35/kWh in 2014, the lack of diversified power generation leaves Caribbean nations vulnerable to commodity market volatility, while the lack of new development leaves them reliant on what is believed to be outdated and often unreliable power plants. The larger issue hindering large-scale renewable energy deployments, however, is scale. While Caribbean nations have quite significant renewable energy potential yet most have small demand. The majority of the Caribbean grids are relatively old, with the average diesel generators more than 20 years old. Furthermore, the power supply is relatively inefficient with high system losses. Due to their sizes, each of the Caribbean countries is generally dominated by one local utility and simple market structures where electricity is regulated directly by local governments. Other than Guadeloupe, where a geothermal power plant has been operating since 1985, currently there are no other geothermal operating projects in the Caribbean region. Recently, some deep well drilling exploration was performed in a few islands.

Oceania

In **New Zealand**, where we 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

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 new 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 ceiling tariffs which may exceed 13.8 c/kWh. 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.

East Africa

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. Ormat has as a 51% interest in a consortium that signed a PPA for a 35 MW geothermal power plant in the Menengai area.

The governments of **Djibouti, Ethiopia, Eretria, Tanzania, Uganda, Rwanda** and **Zambia** are exploring ways to develop geothermal in their countries, mostly through the help of international development organizations such as the World Bank.

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.

20

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 2012, the Governor of Utah signed into law Senate Bill 12 (SB12) that enables the sale of electricity directly to large energy users. The direct purchasing, while still in early implementation, could create a market opportunity for our REG units in Utah.

In addition, in Colorado the state PUC ruled that Xcel Energy, the largest utility in Colorado, will begin offering a \$500/kW incentive for recycled energy projects. The incentive will be paid out over 10 years to developers and manufacturers who convert waste heat from stacks and processes into electricity.

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.

Technological Innovation. We have 69 U.S. patents in force (and have approximately 34 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;

• *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;

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; and

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 12, 2015, we announced the completion of the share exchange, which is the first and primary step of a series of transactions contemplated by the Share Exchange Agreement and Plan of Merger (the "Share Exchange Agreement"), dated as of November 10, 2014, by and among us, Ormat Industries, our then-parent company, and Ormat Systems. One of the key consequences of this transaction was that the number of shares of our common stock held by non-affiliated, "public" shareholders was increased from approximately 40% to approximately 76% of total shares outstanding, which we believe would help elevate trading volume and may increase equity coverage.

Pursuant to the Share Exchange Agreement, we agreed to acquire Ormat Industries through a share exchange in which we issued 30,203,186 new shares of our common stock to Ormat Industries' shareholders in exchange for all of the outstanding ordinary shares of Ormat Industries, reflecting an exchange ratio of 0.2592 shares of our common stock for each ordinary share of Ormat Industries. Following the satisfaction of the various conditions precedent to closing of the share exchange, including (i) the receipt of approval from the District Court of Tel Aviv – Jaffa of the scheme of arrangement under Israeli law represented by the share exchange; (ii) the approval by the controlling shareholder of the issuance of our shares of common stock to the shareholders of Ormat Industries in connection with the share exchange; (iii) the approval of the Share Exchange Agreement by the shareholders of Ormat Industries; and (iv) the maintenance in full force and effect of a ruling that has been obtained from the Israel Tax Authority confirming the Israeli income tax treatment of the transactions contemplated by the Share Exchange Agreement (the "Israeli Tax Ruling"); the share exchange was completed on February 12, 2015.

As previously disclosed, we entered into several agreements in connection with the Share Exchange Agreement, including the following:

voting agreements with the then principal shareholders of Ormat Industries, FIMI ENRG, Limited Partnership and FIMI ENRG, L.P. (together "FIMI") and Bronicki Investments Ltd. ("Bronicki"), which, following the share oexchange, beneficially own approximately 15.06% and 8.84% of our outstanding shares, respectively. Under these voting agreements, FIMI and Bronicki agreed, among other things, to comply in all respects with the Israeli Tax Ruling applicable to the Ormat Industries shareholders.

voting neutralization agreements with FIMI and Bronicki, whereby FIMI and Bronicki agreed, among other othings, to certain restrictions on their shares of our common stock. Among other things, these voting neutralization agreements:

require these shareholders to vote all voting securities owned by FIMI and Bronicki and their respective affiliates in excess of 16% and 9%, respectively, of the combined voting power of our shares in proportion to votes cast by the other holders of our voting securities at any time any action is to be taken by our stockholders;

prohibit the acquisition of our voting securities by FIMI and Bronicki and their respective affiliates if after giving effect to any such acquisition FIMI and Bronicki and their respective affiliates would beneficially own voting securities representing in the aggregate more than 20% and 12%, respectively, of the combined voting power of our shares;

prohibit, prior to January 1, 2017, the sale of more than 10% of our voting securities owned in the aggregate by FIMI and Bronicki; and

allow, following January 1, 2017, the sale of our voting securities owned by FIMI and Bronicki only if they are not acting in concert to sell or, if they are, only with 20 days' prior written notice to us, subject to certain exceptions for

public sales and mergers and acquisitions transactions.

prohibit FIMI and Bronicki from renewing their shareholder rights agreement beyond its expiration date, May 22, 2017.

a registration rights agreement whereby FIMI and Bronicki may, subject to certain limitations, require us to prepare oand file with the SEC a registration statement to register a public offering of the shares of our common stock held by them, on customary terms and conditions set forth in the agreement.

On February 5, 2015, we announced that our wholly-owned subsidiary has entered into a binding agreement with infrastructure funds managed by Northleaf Capital Partners (Northleaf) under which Ormat will contribute certain geothermal and recovered energy generation power plants into a newly established holding company subsidiary, ORPD LLC (ORPD), and Northleaf will acquire an approximately 40% equity interest in the ORPD. We will raise approximately \$175 million from the transaction. The transaction is expected to close in March 2015, subject to customary closing conditions.

The power plants that will be contributed to ORPD as part of the transaction include our Puna geothermal power plant in Hawaii, the Don A. Campbell geothermal power plant in Nevada, and nine power plant units across three recovered energy generation assets known as OREG 1, OREG 2, and OREG 3. We will continue to consolidate the ORPD and its assets, and will continue to provide day-to-day management control, operations and maintenance control over the projects.

On February 5, 2015, the TASE approved the listing of our common stock on the TASE beginning on February 10, 2015 and our common stock is now listed on both the NYSE and the TASE. We are still subject to the rules and regulations of the NYSE and of the SEC. Under the local regime for dual listing, U.S.-listed companies, such as us, may dual-list on the TASE without additional regulatory requirements, using the same periodic reports, financial and other relevant disclosure information that they submit to the SEC and NYSE. However, as a result of the local regime requirements, we have undertaken, as part of the TASE listing, not to issue preferred stock for as long as our shares of common stock are listed on the TASE.

On February 4, 2015, we announced that the second phase of our McGinness Hills geothermal power plant located in Lander County, Nevada has begun commercial operation. Since February 1, 2015, the complex sells electricity under the amended PPA with NV Energy at a new energy rate of \$85.58/MWh with one percent annual escalator through December 2032. Following resource confirmation and excellent performance of the first phase of McGinness Hills, which had been operational since June 2012, the second phase initiated construction in March 2014. The McGinness Hills Phase 2 plant that came on line on February 1, 2015, brought the complex's total capacity to approximately 72MW. We have a contract with NV Energy to sell energy produced at McGinness Hills through December 2032.

On December 4, 2014, we announced the signing of an amended and restated PPA with KPLC, paving the way for the expansion of the Olkaria complex. Under the terms of the PPA, we expect to increase the generating capacity of the complex by 24 MW, bringing the complex's total capacity to 134 MW. The fourth plant is expected to come on line in the second half of 2016 and to sell electricity under a 20 year PPA with KPLC.

On November 3, 2014, we, through a majority owned subsidiary (the Project Company), signed a 25-year PPA with KPLC and a project implementation and steam supply agreement (PISSA) with Geothermal Development Company (GDC) for the 35MW Menengai geothermal project in Kenya. Under the PISSA agreement, the Project Company will finance, design, construct, install, operate and maintain the Menengai steam plant on a build-own-operate (BOO) basis for 25 years. GDC, which is wholly owned by the Government of Kenya, will develop the geothermal resource, supply the steam for conversion to electricity and maintain the geothermal field through the term of the agreement. The Project Company expects to start construction upon financial closing.

On November 3, 2014, we, through a wholly owned subsidiary, signed a \$22.3 million engineering, procurement and construction (EPC) agreement with the Utah Associated Municipal Power System (UAMPS). We will install an air-cooled Ormat Energy Converter (OEC) at the Kern River Transmission Company's Veyo natural gas compressor station in Southern Utah. This new recovered energy generation (REG) project will generate power using heat that would otherwise have not have been utilized.

On September 30, 2014, we repaid in full the outstanding amount of approximately \$30.0 million from our \$42.0 million loan with EIG Global Project Fund II, Ltd. (formerly TCW). The \$42.0 million loan was signed in 2009 to refinance Ormat's investment in the 20 MW Amatitlan geothermal power plant located in Guatemala. The loan was scheduled to mature on June 15, 2016 and bears interest at a rate of 9.83%. This repayment resulted in a one-time charge to interest expense of approximately \$1.1 million. We are currently negotiating a new financing agreement that we believe will contain improved terms.

On August 29, 2014, we announced the signing of a \$140.0 million loan under the OFC 2 senior secured notes to finance the construction of the McGinness Hills Phase 2 plant in Nevada. This drawdown is the last tranche under the Note Purchase Agreement with John Hancock Life Insurance Company (USA) and guaranteed by the U.S. Department of Energy's Loan Programs Office in accordance with and subject to the Department's Loan Guarantee Program under Section 1705 of Title XVII of the Energy Policy Act of 2005. The \$140.0 million loan, which matures in December 2032, carries a 4.61% coupon with principal to be repaid on a quarterly basis. The OFC 2 Notes, which include loans for the Tuscarora, Jersey Valley and McGinness Hills complexes, are rated "BBB" by Standard & Poor's.

On August 5, 2014, we signed a definitive Purchase and Sale Agreement with Alternative Earth Resources Inc. (AER), pursuant to which we paid \$1.5 million in cash in consideration for (i) AER's 50% interest in Crump Geyser and North Valley geothermal project assets and (ii) an option, exercisable over a four-year period, to purchase certain of AER's New Truckhaven geothermal asset.

On July 1, 2014, Mr. Isaac Angel assumed the position of CEO of our company. He succeeded Mrs. Yehudit (Dita) Bronicki, who announced her retirement in November 2013. Mrs. Bronicki continues to serve as director of Ormat in a non-executive capacity. In addition, effective June 30, 2014, Mr. Gillon Beck stepped down from his position of Chairman of the Board of Directors of the Company and Mr. Yoram Bronicki assumed the position of Chairman of the Board of Director of the Company. Upon assuming the position of the Chairman of the Board, Mr. Yoram Bronicki relinquished his position as President and Chief Operating Officer of the Company.

On May 23, 2014, we announced the closing of the \$1.17 billion financing agreements entered into by the Sarulla consortium for the 330-megawatt (MW) project in North Sumatra in Indonesia. The Japan Bank for International Cooperation (JBIC), the Asian Development Bank and six commercial banks provided the Sarulla project construction and term loans under a limited recourse financing package backed by political risk guarantees from JBIC. The consortium expects the first phase of operations to commence in 2016. The remaining two phases of operations are scheduled to commence within 18 months thereafter. We will supply our Ormat Energy Converters to the power plants and we added the \$254.0 million supply contract to our Product Segment backlog. According to the current project plan, we started to recognize revenue from the project during the third quarter of 2014 and will continue to recognize revenues over the course of the next three to four years.

On March 26, 2014, we signed an agreement with RET Holdings, LLC to sell the Heber Solar project in Imperial County, California for \$35.25 million. We received the first payment of \$15.0 million in the first quarter of 2014 and the second payment for the remaining \$20.25 million in the second quarter of 2014. We recognized pre-tax gain of \$7.6 million in the second quarter of 2014.

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 in Kenya. 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 \$45.0 million comprising Tranche III of the previously announced \$310.0 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 Pacific, Gas and Electric (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 one of our wholly owned subsidiaries 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 therein.

On January 6, 2014, we announced that we completed the construction of the 16 MW Don A. Campbell geothermal power plant in Mineral County, Nevada. 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 Southern California Public Power Authority (SCPPA). SCPPA resells the power from the Don A. Campbell geothermal power plant to the Los Angeles Department of Water and Power (LADWP) and Burbank Water and Power through NV Energy Inc.'s transmission system.

Operations of our Electricity Segment

<u>How We Own Our Power Plants</u>. 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 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 above 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.

Availability of transmission capacity.

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, electrical interconnection and transmission agreements.

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, 2014, in the Electricity Segment we focused on the completion of the Olkaria III plant 3 and the construction of the McGinness Hills phase 2 power plant and began construction in the Don A. Campbell phase 2. We began construction in the Olkaria III plant 3 and McGinness Hills phase 2 during the year ended December 31, 2013, and the Olkaria III Plant 2 during the year ended December 31, 2012.

During the year ended December 31, 2014, we discontinued exploration and development activities at seven exploration sites and one development project, including Huu Dumpo in Indonesia, Mount Spurr in Alaska, San Pablo, San Jose II, and Aroma in Chile, Silver Lake, Summer Lake and Foley Hot Springs in Oregon and Wister in California. During the year ended December 31, 2013, we discontinued exploration and development activities at three sites, including Magic Reservoir in Idaho, Wildhorse (Mustang) in Nevada and Drum Mountain in Utah. During the year ended December 31, 2012, we discontinued exploration and development activities at five sites, including Leach Hot springs, Hyder Hot Springs, Seven Devil, Smith Creek and Walker River in Nevada.

After conducting exploratory studies and drilling 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 (see "Write-off of Unsuccessful Exploration Activities" under Item 7 — "Management Discussion and Analysis of Financial Condition and Results of Operations").

We added to our exploration activities four, two and five sites during the years ended December 31, 2014, 2013 and 2012, respectively.

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.

30

How We Finance Our Power Plants. Historically we have funded our power plants with a combination of non-recourse or limited recourse debt, including lease financing, 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.

<u>How We Mitigate International Political Risk</u>. 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.

Description of Our Leases and Lands

We have domestic leases on approximately 374,176 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;

15% are leases with private landowners and/or leaseholders;

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

2% 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 174,000 acres, most of which are geothermal exploration licenses in three 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 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 geothermal fluid 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 had 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 could 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. We have waived three of the six concessions we held. As of the date of this annual report we have the exclusive right to apply for an exploitation license for the remaining three sites. Our exclusive rights will expire on March 7, 2016, and obtaining such license is subject to an approval by the Ministry of Energy.

Description of Our Power Plants

Domestic Operating Power Plants

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

Brady Complex

Location

Churchill County, Nevada

18**M**W

Generating Capacity

72

Number of Power Plants	Two (Brady and Desert Peak 2 power plants).
Technology	The Brady complex utilizes binary and flash systems. The complex uses air and water cooled systems.
Subsurface Improvements	12 production wells and eight injection wells are connected to the plants through a gathering system.
Major Equipment	Three OEC units and three steam turbines along with the Balance of Plant equipment.
Age	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.
Land and Mineral Rights	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".