

DECARBONIZING THE ELECTRIC GRID W/ FLEXIBLE GEOTHERMAL 2.0 RESOURCES

CALIFORNIA STATE LEGISLATURE JOINT COMMITTEE ON CLIMATE
CHANGE POLICIES



SAFE HARBOR STATEMENT

Information provided during this presentation may contain statements relating to current expectations, estimates, forecasts and projections about future events that are forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995.

These forward-looking statements generally relate to the company's plans, objectives and expectations for future operations, and are based on management's current estimates and projections of future results or trends. Actual future results may differ materially from those projected as a result of certain risks and uncertainties.

For a discussion of such risks and uncertainties, please see risk factors as described in Ormat Technologies, Inc.'s Form 10-K/A filed with the SEC on June 19, 2018 and Form 10-Q for the period ended March 31, 2018 filed with the SEC on June 19, 2018.

In addition, during this presentation, statements may be made that include a financial measure defined as non-GAAP financial measures by the Securities and Exchange Commission, such as EBITDA and adjusted EBITDA. These measures may be different from non-GAAP financial measures used by other companies. The presentation of this financial information is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with GAAP.

Management of Ormat Technologies believes that EBITDA and adjusted EBITDA may provide meaningful supplemental information regarding liquidity measurement that both management and investors benefit from referring to this

non-GAAP financial measures in assessing Ormat Technologies' liquidity, and when planning and forecasting future periods. This non-GAAP financial measures may also facilitate management's internal comparison to the company's historical liquidity.

EBITDA and Adjusted EBITDA are not a measurement of financial performance or liquidity under accounting principles generally accepted in the United States of America and should not be considered as an alternative to cash flow from operating activities or as a measure of liquidity or an alternative to net earnings as indicators of our operating performance or any other measures of performance derived in accordance with accounting principles generally accepted in the United States of America. EBITDA and Adjusted EBITDA are presented because we believe they are frequently used by securities analysts, investors and other interested parties in the evaluation of a company's ability to service and/or incur debt. However, other companies in our industry may calculate EBITDA and Adjusted EBITDA differently than we do.

Copyright © 2018 Ormat Technologies, Inc. All Rights Reserved. This document contains information proprietary to Ormat Technologies, Inc. Reproduction in any form without prior written permission is strictly prohibited.



ORMAT TECHNOLOGIES

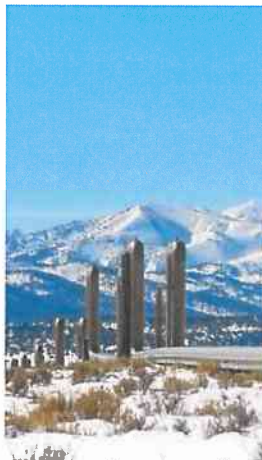


Copyright © 2018 Ormat Technologies, Inc. 3

INTRODUCTION TO ORMAT

Market leader with proven track record in the geothermal energy sector

Our mission is to become a leading global renewable energy provider

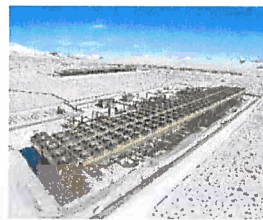


53 years Of experience

4.2 Million
Metric Tons of CO2
avoided per year



344\$M
FY 2017 adj. EBITDA



Own & Operate
approx. **860 MW**



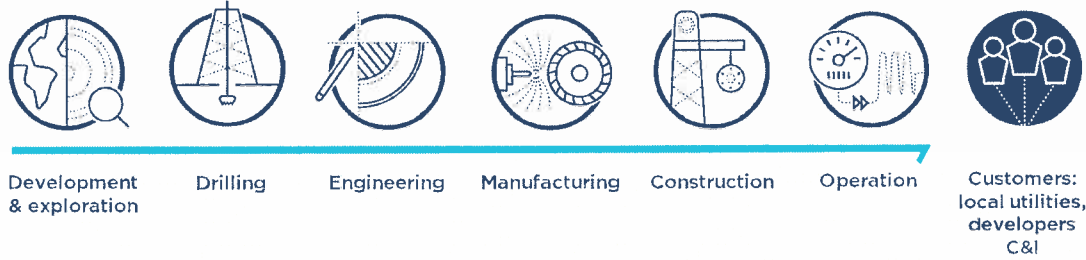
1,300 Employees



*May 8 2018

Copyright © 2018 Ormat Technologies, Inc. 4

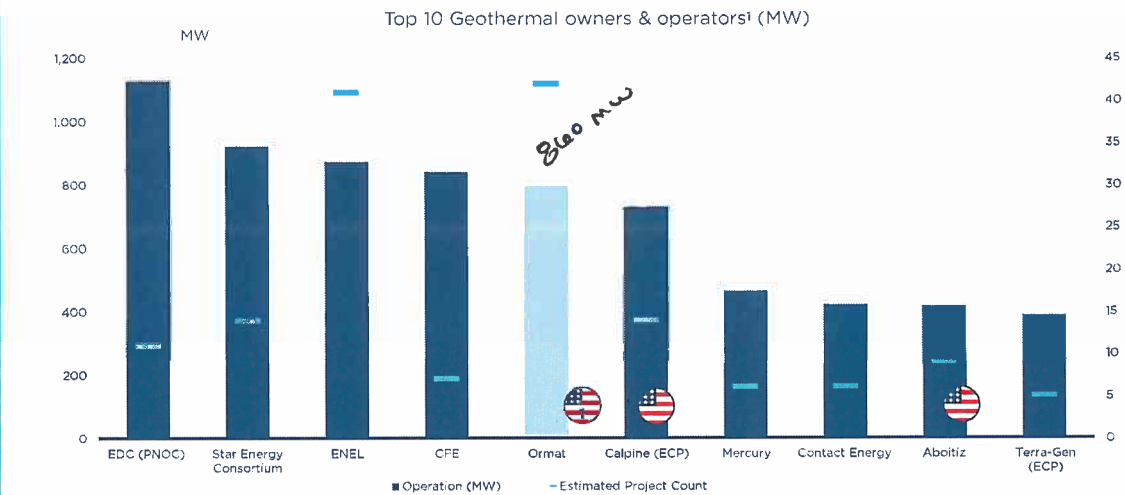
THE WORLD'S ONLY VERTICALLY INTEGRATED GEOTHERMAL COMPANY



Copyright © 2018 Ormat Technologies, Inc. 5

MARKET SHARE - ELECTRICITY SEGMENT

Most active global developer - with over 450 MW developed in the last decade



(1) Ormat study based on presented public disclosure; Ormat is the largest US-based geothermal operator.

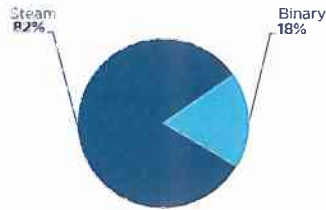


Copyright © 2018 Ormat Technologies, Inc. 6

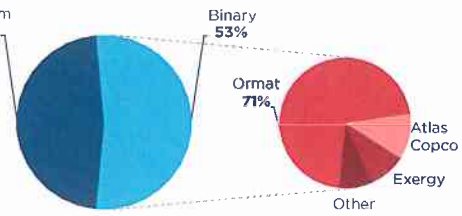
GEOTHERMAL 2.0 MARKET EXPANSION

Leading the Geothermal binary market with 82% market share

Total global installed capacity (14.5 GW) by technology type (%)



5-Year total global installed capacity (2.5 GW) by technology type (%)



Source: Annual U.S. & Global Geothermal Power Production Report GEA Feb 2016, 2016 International Development - Interim Report, GEA Report Oct. 2016 and Ormat analysis (2013-2017)



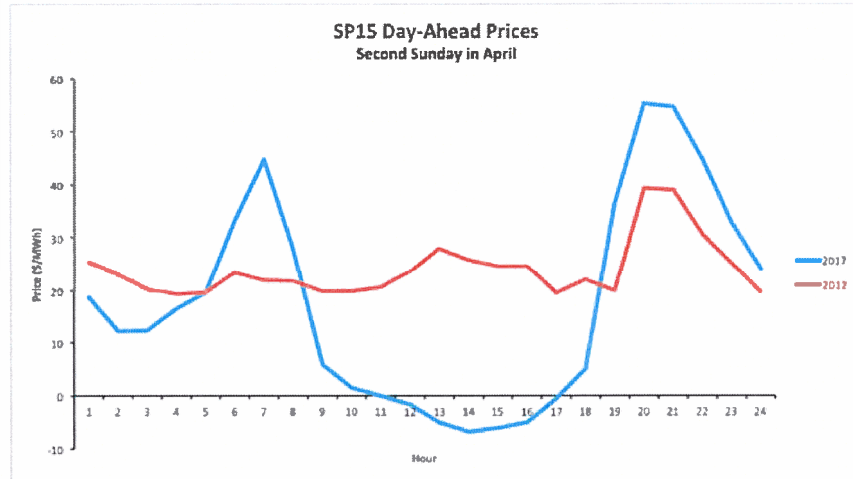
Copyright © 2018 Ormat Technologies, Inc. 7

GEOTHERMAL'S INCREASING VALUE



Copyright © 2018 Ormat Technologies, Inc. 8

MASSIVE INTERMITTENT RENEWABLE PENETRATION IMPACTS VALUES



Source: California ISO OASIS

Copyright © 2018 Ormat Technologies, Inc. 9

GEOHERMAL'S INCREASING VALUE

- Today in California geothermal is worth as much as \$32/MWh more than solar PV on a combined energy and capacity basis*
- In the next 5-10 years geothermal will have a combined energy and capacity value as high as \$37/MWh higher than solar PV
- Add in Geothermal's ancillary services and operational flexibility and you see combined values of \$40/MWh higher than solar PV
- The time is now to procure and develop flexible renewable resources such as geothermal to meet California's goal of decarbonizing the grid

*Orenstein, R., and P. Thomsen, The Increasing Comparative Value of Geothermal – New Market Findings and Research Needs, *GRC Transactions*, Vol. 41, 2017.

Copyright © 2018 Ormat Technologies, Inc. 10

FLEXIBLE GEOTHERMAL RESOURCES DECARBONIZE & STRENGTHEN THE ELECTRIC GRID

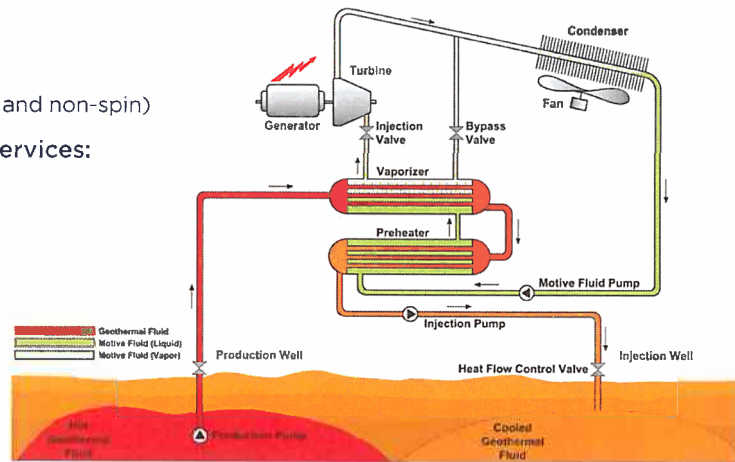


Copyright © 2018 Ormat Technologies, Inc.

GEOTHERMAL 2.0 FLEXIBILITY SOLVES HIGH RENEWABLE PENETRATION PROBLEMS

- **Traditional Services:**
 - Flexible Capacity
 - Regulation
 - Frequency Response
 - Contingency Reserves (spin and non-spin)
- **Non-Traditional Ancillary Services:**
 - Voltage control
 - Inertia

Air-Cooled Binary Geothermal Power Plant



Copyright © 2018 Ormat Technologies, Inc. 12

GEOHERMAL 2.0 FLEXIBILITY RESOLVES PROBLEMS IN INTEGRATED RESOURCE PLANNING

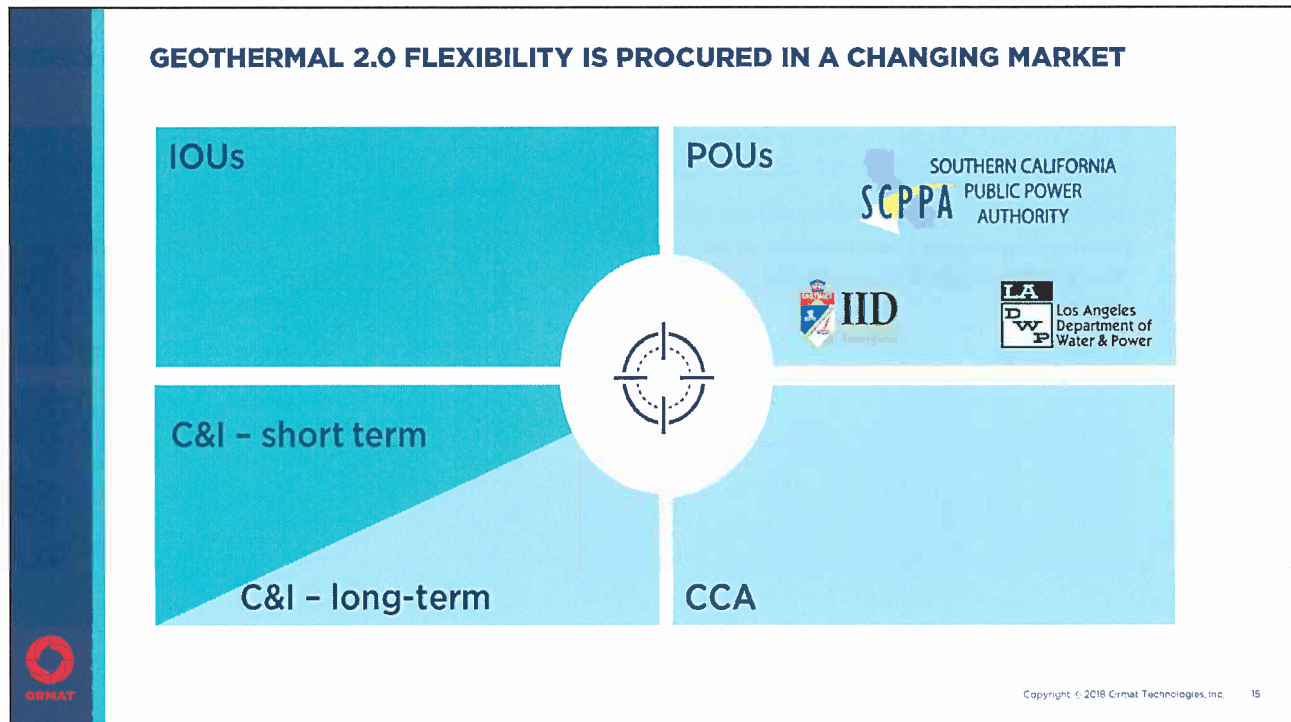
- The CPUC RESOLVE model with updated load forecasts now selects 1,700 MW of new geothermal in the 42 MMT scenario when costs are in the \$88.56 - \$91.63/MWh range.*
- Under recently executed geothermal PPA prices, the model yields 2.5 GW to 3 GW of new geothermal when the resource area is expanded to the western region making PCC1 (aka "bucket 1") eligibility - and not just in-state resources- very important.

*All model versions and supporting documentation can be found at <http://www.cpuc.ca.gov/General.aspx?id=6442451195>.



CHALLENGES AND OPPORTUNITIES





GEOTHERMAL 2.0 FLEXIBILITY IS NOT PROCURED DURING LEGISLATIVE UNCERTAINTY

- Renewables need TLC: “Transparency, Longevity, and Certainty, which drives investment.”*
- If there is an RPS increase or baseload renewable energy resources/geothermal carve out, load serving entities need confidence that projects procured today will count toward those goals.
- We are seeing load serving entities delay contracts, putting climate change mitigation on hold.
- We need to carefully consider the definition of new resources and a grace period for those forward looking load serving entities who have been procuring renewable in the last 24 months.

*https://institutional.dws.com/content/_media/1196_Paying_for_Renewable_Energy_TLC_at_the_Right_Price.pdf

Copyright © 2018 Ormat Technologies, Inc. 16