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Docket Number:	15-RETI-02
Project Title:	Renewable Energy Transmission Initiative 2.0
TN #:	210743
Document Title:	Salton Sea Geothermal: Capabilities, Benefits, and Limitations
Description:	Presentation - Benson
Filer:	clare Laufenberg
Organization:	Energy Source
Submitter Role:	Public
Submission Date:	3/15/2016 3:24:44 PM
Docketed Date:	3/15/2016

Salton Sea Geothermal: Capabilities, Benefits, and Limitations

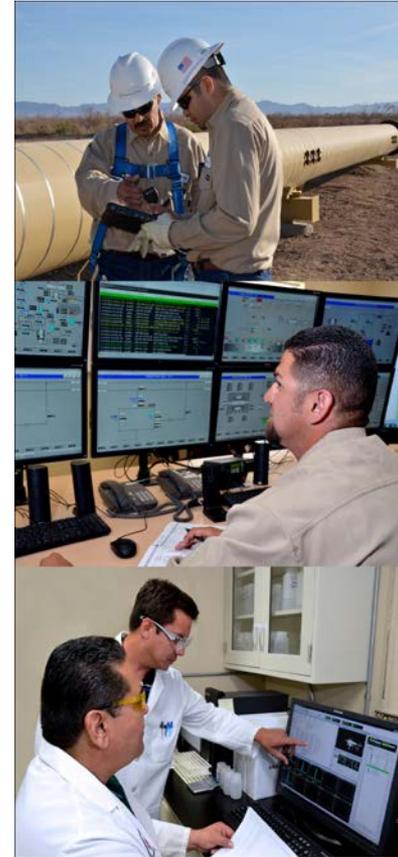
March 2016



EnergySource – Investing in California

EnergySource specializes in the development and operation of geothermal power facilities in the hottest and most prolific resource in the western hemisphere, the Salton Sea, which has over 1,000 MW of unrealized potential.

- Developed and constructed the 49 MW Featherstone Plant at Hudson Ranch. Commissioned in 2012; the first new geothermal plant in America's best field in 22 years.
- EnergySource team is comprised of industry veterans from Unocal and Magma Energy that developed all the projects on the Salton Sea resource.
- First major renewable project to be financed after the 2008 financial crisis shows a resilient and resourceful development team.



Salton Sea Geothermal – Cost Drivers

Geothermal power at the Salton Sea is robust, reliable, and stymied by policy issues, not just competitive headwind.

- Energy only renewable RFPs have never recognized the value of capacity, ancillary services, GHG reductions, and local economic benefits.
- Inequity in California property tax policy and Federal tax policy.
- Long standing TOD factors despite emerging duckling.
- Long standing \$0 integration cost for intermittent renewables.
- Transmission from IID to CAISO adds costs and challenges.
- Salton Sea geothermal has high capital costs owing to materials of construction: high nickel alloys / titanium vs. carbon steel.
- 50 year assets can't competitively recover capital in 10-15yr PPAs.

Salton Sea Geo – A Future In The Duck Pond?

Geothermal power at the Salton Sea is a viable and vital element in California mandated by 50% RPS and 80% GHG reductions.

- A true mix of renewable technologies is required to meet carbon reduction goals economically in a 50% RPS regime as revealed in the “California 2030 Low Carbon Grid Study” recently released.
- Geothermal employs synchronous machines that provide system benefits without compensation.
- New geothermal facilities in California and the Salton Sea will reduce the need for flexibility on the California grid.

