The purpose of this cover sheet is to provide attribution and background information for documents posted to the California ISO website that were not authored by CAISO.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Solar Symposium</th>
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<tbody>
<tr>
<td>Author Company</td>
<td>Bright Source</td>
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<tr>
<td>Author Name</td>
<td>Bob Stuart</td>
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<tr>
<td>Author Title</td>
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<tr>
<td>Title of document</td>
<td>Bright Source solar Symposium</td>
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<td>Date submitted</td>
<td>1/28/09</td>
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<tr>
<td>Other Comments</td>
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<td>Notes</td>
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Company Overview

January 29, 2009 - Solar Symposium
BrightSource Energy Snapshot

**Mission:** BrightSource Energy’s mission is to make solar energy cost competitive with fossil fuels by developing, building, owning and operating the world’s most cost-effective and reliable large-scale solar energy projects.

- **Business:**
  - Develop and build large-scale solar power generation plants for utilities at prices that compete with fossil-fuel plants, using proprietary technology
  - Develop and build solar-to-steam plants for industrial applications
- **Financial Strength:**
  - Over $160M in corporate financing from key strategic investors including: VantagePoint Venture Partners, Morgan Stanley, Google.org, BP Alternative Energy, StatoilHydro Ventures, Chevron Technology Ventures, Black River, Draper Fisher Jurvetson, and DBL Investors (a spin-off from JP Morgan), and others
- **Team:**
  - Includes all of the key senior managers of Luz International, which designed and built more than 350 MW of solar thermal plants built in the 1980’s
  - World class project development team with over 20GW of power projects developed, constructed, and managed
- **Locations:**
  - Headquarters in Oakland, California, 30 full-time employees
  - Subsidiary BrightSource Industries (Israel) located in Jerusalem, 90 full-time employees
BrightSource Energy - Significant Accomplishments

- Raised $160 million equity
- Signed 900MW PPA with PG&E
- Launched 6MW Solar Energy Development Center in Israel
- Generated Super Heated Steam (550°C) with proprietary technology
- Developing 4.2GW in southwest U.S.
Integrated Renewables Strategy to Meet U.S. Demand

- Solar (CSP)
- Solar (PV)
- Wind
- Bio Mass
- Hydro

National Demand
Estimated Energy Growth Demand: Key Global Markets

Principal Solar Thermal Technologies

- **Luz Power Tower (LPT)**
  - 7m² heliostats
  - Stirling Solar Dish
  - Tower and Boiler
  - Stirling engine
  - Tubes w/ synthetic oil

- **Stirling Solar Tower and Boiler**
  - 7m² heliostats
Luz Power Towers (LPT 550)
BrightSource Solution – LPT 550

- Proven Technology
- Direct Solar-to-Steam
- Higher Temp. – 550°C
- Low Parasitic Load
- Higher Operating Efficiency
- Lower Capital Cost
- Uses Commodity Materials:
  - Flat Glass
  - Minimum Concrete
  - Minimum Steel
- Air Cooled Power Block
LPT Plant Components

Field of Heliostats (Mirrors)

Solar Boiler

Power Block

Air Cooling
SEDC Demonstration Facility

- Location: Negev Desert, Israel
- In operation since June 2008
- Heliostats Reflecting Area: ~ 12,000m²
- Number of Heliostats: ~1600
- Heliostat Dimensions: 2.25m x 3.2m
- Reflecting area per Heliostat: 7.2m²
- Distance between rows of Heliostats: 4.2m – 10m
- Tower Height: 60m (+ 15m Receiver)
- Thermal Energy on receiver: 6 MWth
Ivanpah Solar Power Complex – 400 MW Site

- 300MW PG&E PPA in place
- 100MW in advanced negotiations
- 123MW Siemens turbine purchased
- CEC and BLM permitting scheduled approval for Nov 2009
- Accessible Transmission
- Initial construction scheduled for late 2009
- 1st Plant COD scheduled for late 2011
- EPC and Boiler contracts under negotiations
# BrightSource’s Announced Development Sites

<table>
<thead>
<tr>
<th>SITE</th>
<th>ACRES</th>
<th>MW</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ivanpah, CA</td>
<td>3,900</td>
<td>400</td>
<td>CAISO 2\textsuperscript{nd} of 3 step process completed; Awaiting CEC Preliminary Staff Assessment; applied to BLM for Right of Way</td>
</tr>
<tr>
<td>Broadwell Lake, CA</td>
<td>10,000</td>
<td>800</td>
<td>CAISO 2\textsuperscript{nd} step completed; 3\textsuperscript{rd} step for detailed cost estimate underway; BLM SF 299 filed</td>
</tr>
<tr>
<td>Siberia, CA</td>
<td>16,000</td>
<td>400</td>
<td>CAISO – waiting for 2\textsuperscript{nd} step to be completed – expected by end of year; BLM SF 299 filed</td>
</tr>
<tr>
<td>Mormon Mesa, NV</td>
<td>15,000</td>
<td>2,000</td>
<td>Nevada Power completed feasibility studies; Next step being initiated; BLM SF2 299 filed</td>
</tr>
<tr>
<td>Mesquite Valley, CA</td>
<td>17,000</td>
<td>600</td>
<td>Studying requirements Site recommended by BLM</td>
</tr>
<tr>
<td><strong>GRAND TOTALS</strong></td>
<td><strong>61,900</strong></td>
<td><strong>4,200</strong></td>
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<tr>
<td>Confidential</td>
<td>60</td>
<td>N/A</td>
<td>Solar-to-steam Demo Plant</td>
</tr>
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BrightSource’s Environmental Commitment

- **Site Selection:**
  - Areas that have already been disturbed; close to roads, gas and existing transmission lines; and that are not critical environmental habitat

- **Plant Design:**
  - Use of dry cooling minimizes water usage by 90%
  - Mirrors on poles eliminates concrete pads and reduces grading

- **Regulatory Compliance:**
  - Working closely with CEC and BLM to ensure that our projects strictly adhere to CEQA and NEPA
BrightSource Energy Advantage

• **Superior solar technology:**
  – Based on proven power tower approach
  – Lower cost and higher efficiency than competing solar technologies

• **Strong management team:**
  – Includes all of the key senior managers of Luz International, which designed and built more than 350 MW of solar thermal plants built in the 1980’s
  – World class project development team with over 20GW of power projects developed, constructed, and managed

• **Solid financial backing:**
  – Over $160M in corporate financing from key financial and strategic investors including: VantagePoint Venture Partners, Morgan Stanley, Black River, Draper Fisher Jurvetson, DBL Investors (a spin-off from JP Morgan), Google, BP Alternative Energy, StatoilHydro Ventures, Chevron Technology Ventures, and others
  – Non-recourse credit line for funding project and site development activities

• **Advanced business activities:**
  – Solar Energy Development Center operational in Israel
  – Signed largest solar power contract ever made – 900MW with Pacific Gas & Electric
  – In detailed negotiations with other major utilities for additional PPAs
  – Actively developing sites for more than 4GW of solar thermal generating capacity
  – First project, Ivanpah 400MW Solar Power Complex, is well advanced with construction scheduled to start in 2009