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<th>Project Name</th>
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<td>Author Company</td>
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<td>Title of document</td>
<td>Solar Scheduling &amp; MRTU</td>
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Solar Scheduling and MRTU

Solar Symposium
California Independent System Operator
Ali Amirali, OCD
January 29, 2009
Solar Generation Facilities

• Characteristics of solar generating facilities
  • Solar Photovoltaic
    • Output impacted by ambient temperature
    • Magnitude of impact depends upon technology
    • Cloud cover (fluffy clouds not always
  • Solar Thermal (trough, tower, etc.)
    • Generally not impacted by ambient temperature
    • Impacted by available sunlight/radiant heat
    • Lower impact of cloud cover due to residual head of the heat conveying material
  • Storage and facility design can impact variability!!!
Scheduling Under Market Redesign and Technology Update

- **MRTU – It is all about Scheduling!!!**
- Scheduling Rules under MRTU
  - Scheduling Steps
  - Flow of cash
- Impacts of scheduling rules on Solar Resource
  - Imbalances due to factors other than forced outages
    - Located within CAISO
    - Located outside CAISO
    - Settlement process
- Impacts of Type of PPAs (Settlement Process)
- Available Option
  - Dynamic Scheduling
  - Pseudo Tie
  - Generation Only Control Areas
  - Changing of schedule modification rule
- **How can CAISO Help???

*Bringing Energy Forward*
Questions???