# DOE Solar Program Review

## Advanced Parabolic Trough Development

November 9, 2005

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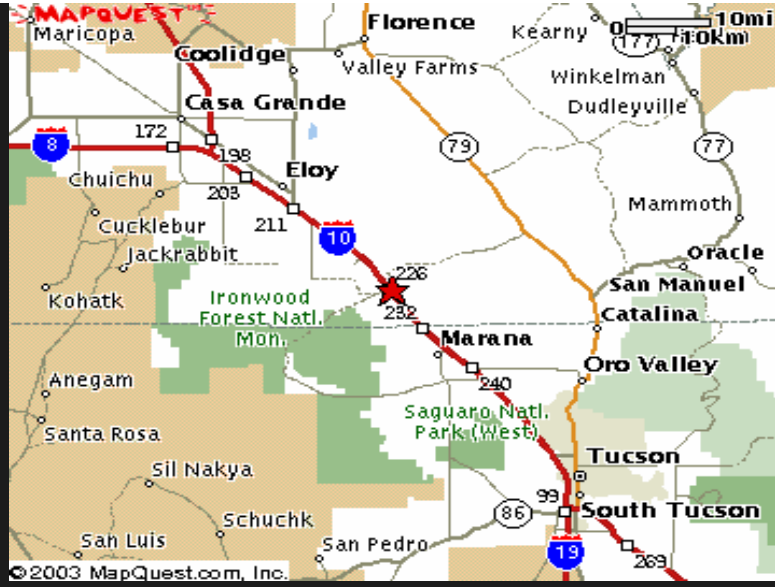
Mary Jane Hale, NREL

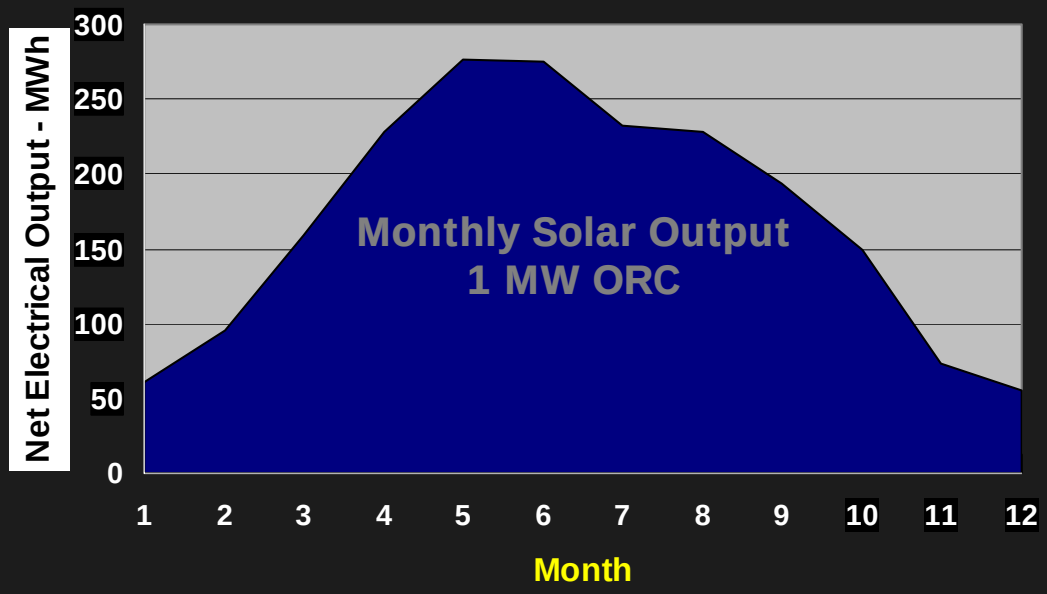
SOLARGENIX ENERGY

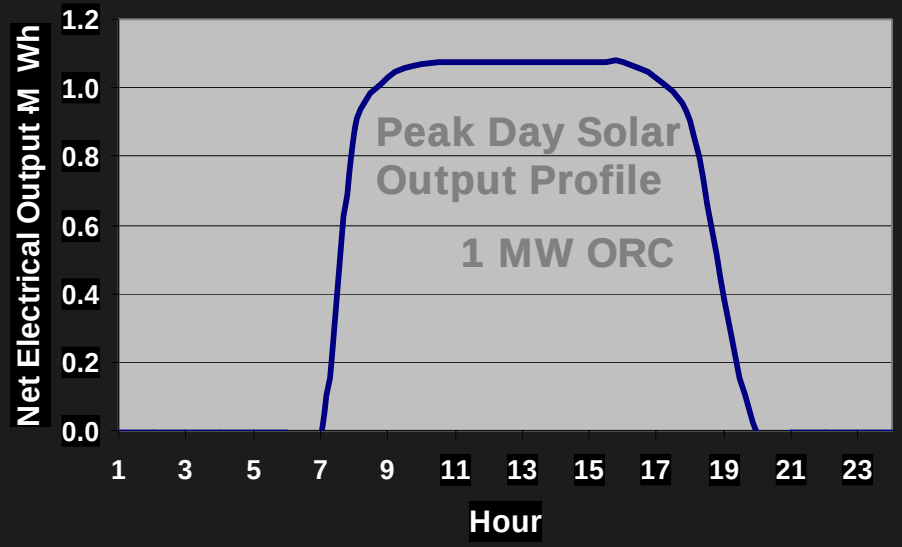
# APS 1 MWe ORC Plant

2000 MWhr Generated Annually

Design SF temperatures: Cold 250F; Hot 580F



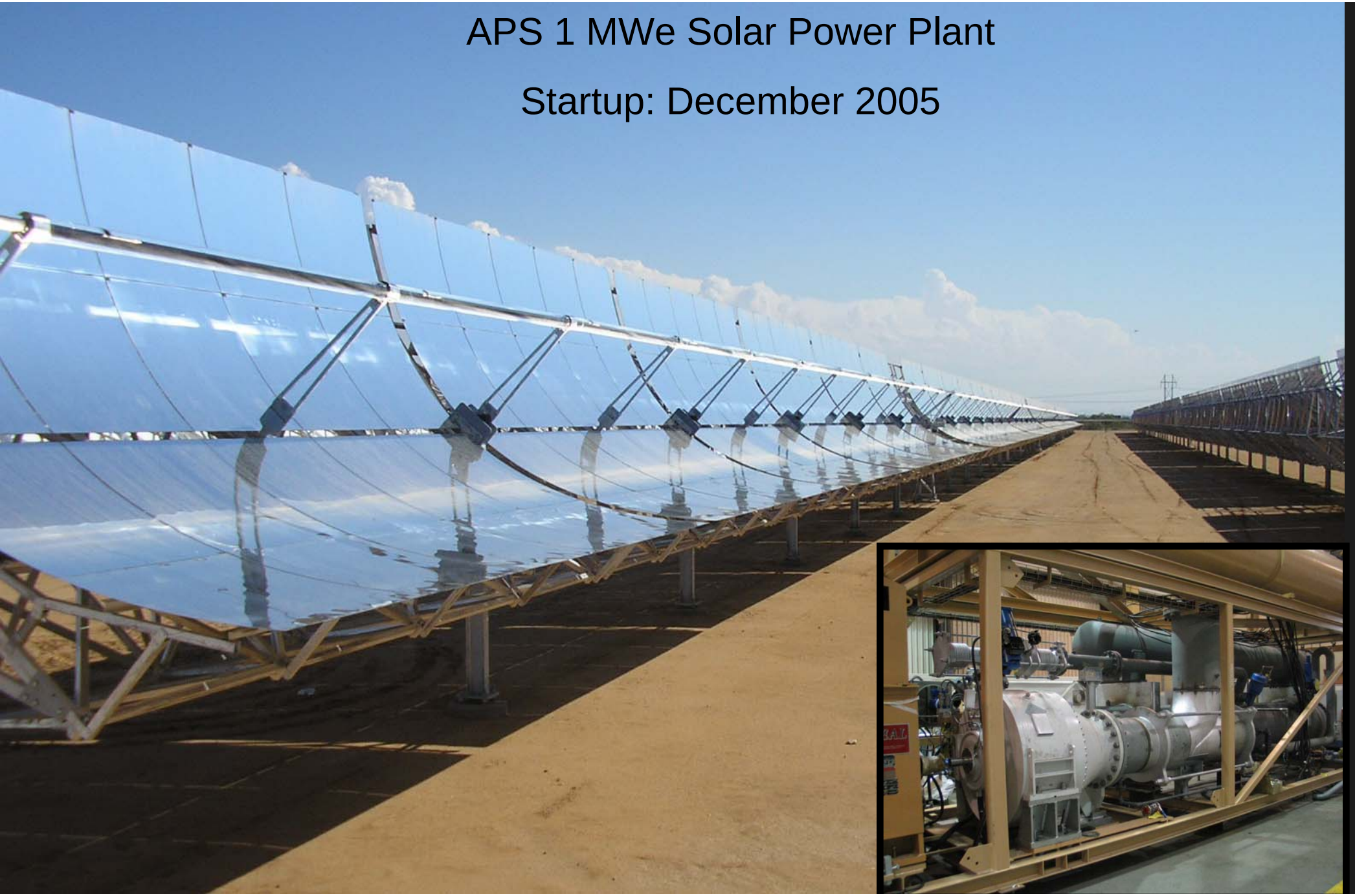



# 1 MW Plant Construction

# Solargenix Deployment
# 1 MW Saguaro Solar Trough Project

# APS 1 MWe Solar Power Plant

Startup: December 2005



# 64 MWe Solar Electric Plant: Boulder City NV

**Long-Term PPA Signed**

**Amendment for Expansion to 64 MW Signed in June 2005**

**Land Lease & Development Agreement Finalized with Boulder City NV**

**Interconnection Study Completed and Transmission Engineering/Construction Underway**

**Financial Team Selected**

**Site Survey and Soils Tests Completed**

**Permitting Process Underway**

**Purchase of Major Components Underway**

**Ground Breaking: 11 February 2006**

**Commercial Operation: Early 2007**

| | APS | Nevada |
|---|---|---|
| Electric Capacity (net) | 1 MWe | 64 MWe |
| Solar Field Size | 10,340 $m^2$ | 357,200 $m^2$ |
| Number of SCAs | 24 DS-1 | 760 SGX-1 |
| SF Operating Temperature | 300ºC | 391ºC |
| Receiver | Schott | Schott/Solel |
| Power Cycle | Ormat (ORC) | Siemens (Steam) |