

# SALT PALACE SOLAR FACT SHEET

## Facts About the 1.65 MW Solar PV Project on the Calvin Rampton Salt Palace Convention Center



Currently the largest PV array installed in Utah representing nearly 19% of all installed PV in the state. This is the largest grid tied PV System on Rocky Mountain Power's entire electrical grid.

### **6,006 Suntech Power PV modules of 275 watts each totaling 1.65165 MW array**

- The total array covers 3.85 Acres, with 2.88 acres of PV module surface area
- 546 strings of 11 modules operating at near 440 volts & 8 amps DC, with 37 combiner boxes
- If you laid the PV modules end to end, they would stretch 7.3 miles
- If you laid the PV cells end to end they would stretch 41.9 miles

### **Two 500 kW, and one 300 kW Solectria SMARTGRID Inverters**

- Two interconnection points with Rocky Mountain Power
- One 500kW inverter and one 300 kW inverter are connected to the utility vault at north end of the loading dock. One 500 kW Inverter is connected to the utility vault at the south end.

### **Unirac ISYS 10° tilt self ballasted racking**

- More than 720 Fast Feet attachment points to the roof primarily for seismic mitigation

### **There is approximately 445,000 feet of wire in the system**

- If you melted down all of that copper into a cube, each side of the cube would measure 3.7 ft, the volume would be 50.5 cubic feet, and the cube would weigh over 28,000 lbs.

### **PV system is projected to produce 2,347 MWh per year, with expected life of 30 to 40 years**

- PV production will offset about 17% of the Salt Palace's annual consumption (13,849 MWh in 2010)
- All of the PV power produced will be consumed within the Salt Palace, not put back on the grid
- Although the utility meters are programmed for net metering, a net meter will not be used.
- Equivalent to the consumption of approximately 250 average Utah homes
- Production will decline slightly over time at ½ of 1% per year
- kW Demand in the building will also be reduced by PV energy and lower air conditioning load

### **4 months Installation time from start of construction to the first production of solar electricity**

- Installation required nearly 14,000 man hours of local Salt Lake City sourced manpower
- Constructed on schedule, on budget, with no change orders, no injuries, no OSHA violations

Project is constructed with Made in America materials, ARRA and Buy American Act compliant



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Project funded through a New Markets Tax Credit financing package supported by:

- Salt Lake County
- JP Morgan Chase Bank - NMTC Equity Partner
- National Development Council - NMTC Allocation
- CarbonFree Technology and Bella Energy, Inc. - PV Development Partners
- Bella Energy, Inc. - Engineering and Construction
- Ballard Spahr LLP and Zion's Bank Public Finance - Financing Advisors

### Major Funding Sources:

- \$1.03 MM in net funding from JP Morgan Chase Bank
- \$1.9 MM Qualified Energy Conservation Bonds
- \$1.2 MM in Federal ARRA Grant funds
- \$0.618 MM in DOE Grant funds
- Approximately \$1.94 MM: Treasury 1603 Grant-in-Lieu of Federal Solar Tax Credit

