

SOURCE				
	Company Name:		Composite	Solar Coalition
	Applicable Utility Service Area (if any)		Statewide	
	Energy Resource: (Individual Type)		Solar DHW	Small Commercial
	Energy Resource Type: (Category)		Renewable	Solar Hot Water
	Resource Scale (Unit or Aggregate)		Unit	Unit
	Unit Status (Existing or Planning)		Planning	Existing
COMMERCIAL AVAILABILITY				
	Typical Unit Annual Capacity Rating (MW)		0.003	0.003/80 sq ft
	Earliest Commercial In-Service Date (Year)		2009	2008
	Typical Construction & Permitting Time (Years)		0.1	0.1
	Useful Life of Unit (Years)		30	25
	Fuel Type		Solar Energy	Solar Energy
PERFORMANCE CHARACTERISTICS				
	Contribution to Summer Peak Demand (MW)		0.003	0.0008
	Contribution to Winter Peak Demand (MW)		0.0042	0.0014
	Average Annual Heat Rate (BTU/kWh)		n/a	n/a
	Equivalent Availability Factor (%)		100	n/a
	Average Annual Generation (MWH)		4.34	5.6/80 sq ft
	Resulting Capacity Factor (%)		17	21
ENVIRONMENTAL CHARACTERISTICS				
	Carbon Dioxide (CO ₂) (lb/kWh)		0	0
	Sulfur Dioxide (SO ₂) (lb/kWh)		0	0
	Nitrogen Oxide (NO _x) (lb/kWh)		0	0
	Mercury (Hg) (lb/kWh)		0	0
	Water Usage (gal/kWh)		0	0
ESTIMATED COST DATA				
	First Year of Commercial Operation (Year)		2009	2008
	Cost ⁽¹⁾ (\$/kw)		2000	2134
	Escalation Rate (%)		3	n/a
	Cost ⁽¹⁾ (\$/kw-year)		16	n/a
	Escalation Rate (%)		3	n/a
	Cost ⁽¹⁾ (\$/kWh)		n/a	0.014
	Escalation Rate (%)		n/a	n/a
	Cost ⁽¹⁾ (\$/kWh)		0	n/a
	Escalation Rate (%)		n/a	n/a
	Discount Rate (%)		6	n/a
	Levelized Cost ⁽²⁾ - Life of Unit (cents/kWh)		5.6	6

FOOTNOTES / ADDITIONAL NOTES

Projected costs are based on the following assumptions:

SOLAR COALITION SPECIAL FOOTNOTES

The residential retrofit solar systems are sold to a homeowner to replace the existing electric water heater.

They are either an "active" or "passive" solar water heating system with collector installed on the roof at an angle and facing south for maximum sun exposure. The hot water storage capacity is typically 80 gallons with a collector area of 40 ft².

The residential new construction systems are the same as the residential retrofit except they are sold to a home builder to be installed on their new homes.

The small commercial systems are sold to commercial enterprises such as a laundry, a restaurant or any small commercial enterprise that uses a significant amount of hot water. They are either an "active" or "passive" system with the collectors installed on the building roof, with the collectors tilted at an angle equal to the latitude of the business and facing south for maximum sun exposure. The hot water storage capacity is 120 gallons or greater with a collector area of

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The emissions offset by Solar Hot Water are significant, and the consumption of water avoided as a result of distributed generation is substantial:

Carbon Dioxide	lb/kwh	1.42
Sulfur Dioxide	lb/kwh	0.00644
Nitrous Oxide	lb/kwh	0.003389
Mercury	lb/kwh	1.01E-08
Water	gal/kwh	0.5 - 1.5

These numbers are from:- Emission Factors and Energy Prices for the Cleaner and Greener Environmental Program
 Leonardo Academy Inc. April 2004 Edition
 Table 3 Level average all (total) Generation Electricity Emission Factors