

COST COMPARISON OF SEFA NIGER PROJECTS WITH CSP PLANTS GREATER THAN 10 MW AND AVAILABLE COST DATA

Country	Name of the plant	Power (MW)	Storage (hour)	Cost (USD)	Storage coefficient	Cost for plant with no storage	\$/kW (1)	Cost for plant with 16 h storage	\$/kW (2)
Algeria	Hassi-R'mel ISCC	25		422,400,000	1	422,400,000	16,896	1,267,200,000	50,688
Australia	Cloncurry Solar Power Station	10		29,884,000	1	29,884,000	2,988	89,652,000	8,965
Egypt	Kuraymat ISCC (Field only)	40		328,000,000	0.65	504,615,385	12,615	1,513,846,154	37,846
India	Acme Rajasthan Solar Power	10		31,400,000	1	31,400,000	3,140	94,200,000	9,420
Mexico	Agua Prieta II Project (Field only)	12		49,300,000	0.65	75,846,154	6,321	227,538,462	18,962
Spain	PS10	11	0.5	55,704,000	1.06	52,427,294	4,766	157,281,882	14,298
Spain	Andasol 1 - 2	50	7.5	402,336,000	1.94	207,657,290	4,153	622,971,871	12,459
Spain	PS20	20	1	107,606,400	1.13	95,650,133	4,783	286,950,400	14,348
Spain	Extresol 1 - 2	50	7.5	403,524,000	1.94	208,270,452	4,165	624,811,355	12,496
Spain	Puertollano Ibersol	50		269,016,000	1	269,016,000	5,380	807,048,000	16,141
Spain	Arcosol 50, Termesol 50 (Valle 1 - 2)	50	7.5	422,400,000	1.94	218,012,903	4,360	654,038,710	13,081
Spain	Gemasolar	17	15	303,600,000	2.88	105,600,000	6212	316,800,000	18635
USA	SEGS I	13.8		130,410,000	1	130,410,000	9,450	391,230,000	28,350
USA	SEGS II	30		268,110,000	1	268,110,000	8,937	804,330,000	26,811
USA	SEGS III - IV	30		196,350,000	1	196,350,000	6,545	589,050,000	19,635
USA	SEGS VI	30		188,598,000	1	188,598,000	6,287	565,794,000	18,860
USA	SEGS V - VII	30		179,928,000	1	179,928,000	5,998	539,784,000	17,993
USA	SEGS VIII	80		384,790,000	1	384,790,000	4,810	1,154,370,000	14,430
USA	SEGS IX	80		369,380,000	1	369,380,000	4,617	1,108,140,000	13,852
USA	Nevada Solar One	64	0.5	263,750,000	1.06	248,235,294	3,879	744,705,882	11,636
USA	Martin Next Generation (Field only)	75		485,044,000	0.65	746,221,538	9,950	2,238,664,615	29,849
USA	Blythe Solar Power	968		6,000,000,000	1	6,000,000,000	6,198	18,000,000,000	18,595

USA	Solana Generating Station	280	6	2,000,000,000	1.75	1,142,857,143	4,082	3,428,571,429	12,245
USA	Kingman project	200		1,000,000,000	1	1,000,000,000	5,000	3,000,000,000	15,000
UAE	Shams 1	100		600,000,000	1	600,000,000	6,000	1,800,000,000	18,000
NIGER	SEFA 100 MW	100	16	772,988,040	3	257,662,680	2,577	772,988,040	7,730

Duration of sunlight is averaged as 8 hours for comparison. All cost figures are converted to 2010 USD. CPI data of US Dept. of Labor are used for inflation.

INCREASE IN PER CAPITA INSTALLED ELECTRIC POWER

Country	Name of the plant	Power (MW)	Cost (2010 USD)	Population (2005)	Per capita installed power (Watts)	Percent Increase	
					Available	Added	
Algeria	Hassi-R'mel ISCC	25	422,400,000	32,854,000	96	0.76	0.01
Australia	Cloncurry Solar Power Station	10	29,884,000	20,155,000	1244	0.50	0.00
Egypt	Kuraymat ISCC (Field only)	40	328,000,000	74,033,000	130	0.54	0.00
India	Acme Rajasthan Solar Power	10	31,400,000	1,103,371,000	51	0.01	0.00
Mexico	Agua Prieta II Project (Field only)	12	49,300,000	107,029,000	195	0.11	0.00
Spain	PS10	11	55,704,000	43,064,000	644	0.26	0.00
Spain	Andasol 1 - 2	50	402,336,000	43,064,000	644	1.16	0.00
Spain	Extresol 1 - 2	50	403,524,000	43,064,000	644	1.16	0.00
Spain	PS20	20	107,606,400	43,064,000	644	0.46	0.00
Spain	Puertollano Ibersol	50	269,016,000	43,064,000	644	1.16	0.00
Spain	Arcosol 50, Termesol 50 (Valle 1 - 2)	50	422,400,000	43,064,000	644	1.16	0.00
Spain	Gemasolar (CTS Solar Tres)	17	303,600,000	43,064,000	644	1.16	0.00
USA	SEGS I	13.8	130,410,000	298,213,000	1460	0.05	0.00
USA	SEGS II	30	268,110,000	298,213,000	1460	0.10	0.00
USA	SEGS III - IV	30	196,350,000	298,213,000	1460	0.10	0.00
USA	SEGS VI	30	188,598,000	298,213,000	1460	0.10	0.00
USA	SEGS V -VII	30	179,928,000	298,213,000	1460	0.10	0.00
USA	SEGS VIII	80	384,790,000	298,213,000	1460	0.27	0.00

USA	SEGS IX	80	369,380,000	298,213,000	1460	0.27	0.00
USA	Nevada Solar One	64	263,750,000	298,213,000	1460	0.21	0.00
USA	Martin Next Generation (Field only)	75	485,044,000	298,213,000	1460	0.25	0.00
USA	Blythe Solar Power	968	6,000,000,000	298,213,000	1460	3.25	0.00
USA	Solana Generating Station	280	2,000,000,000	298,213,000	1460	0.94	0.00
USA	Kingman project	200	1,000,000,000	298,213,000	1460	0.67	0.00
UAE	Shams 1	100	600,000,000	4,496,000	1335	22.24	0.02
NIGER	SEFA 100 MW	100	772,988,040	13,957,000	3.58	7.16	2.00