

Status of implementation of various schemes to achieve 1,00,000 MW Solar Plan

(As on 31.10.2016)

Index

S.No	Description	
1.	Cumulative capacity Commissioned as on 31/10/2016	Statement- I
2.	Expected commissioning in 2016-17	Statement- II
3.	Tendering Status of Ground mounted Solar Projects under Central Schemes & State Scheme for commissioning in 2016-17& 2017-18 as on 31/10/2016	Statement- III
4.	State Solar Policies- Capacity Declaration	Statement- IV
5.	Trend of Solar Tariff	Statement – V
6.	Solar RPO	Statement – VI

(A) Commissioning Status of Grid Connected Solar Power Projects under JNNSM
As on 31-10-2016

Sr. No.	State/UT	Total cumulative capacity till 31-03-16 (MW)	Capacity commissioned in 2016-17 till 31-10-16(MW)	Total cumulative capacity till 31-10-16 (MW)
1	Andhra Pradesh	572.97	395.08	968.05
2	Arunachal Pradesh	0.27		0.27
3	Bihar	5.10	90.00	95.10
4	Chhattisgarh	93.58	34.98	128.56
5	Gujarat	1119.17	19.01	1138.19
6	Haryana	15.39	2.00	17.39
7	Jharkhand	16.19	0.65	16.84
8	Karnataka	145.46	194.62	340.08
9	Kerala	13.05		13.05
10	Madhya Pradesh	776.37	35.01	811.38
11	Maharashtra	385.76	0.30	386.06
12	Odisha	66.92		66.92
13	Punjab	405.06	166.14	571.20
14	Rajasthan	1269.93	31.23	1301.16
15	Tamil Nadu	1061.82	493.59	1555.41
16	Telangana	527.84	435.95	963.79
17	Tripura	5.00		5.00
18	Uttar Pradesh	143.50		143.50
19	Uttarakhand	41.15		41.15
20	West Bengal	7.77	4.00	11.77
21	Andaman & Nicobar	5.10		5.10
22	Delhi	14.28	9.59	23.87
23	Lakshadweep	0.75		0.75
24	Puducherry	0.03		0.03
25	Chandigarh	6.81		6.81
26	Daman & Diu	4.00		4.00
27	J&K	1.00		1.00
28	Himachal Pradesh	0.20		0.20
29	Mizoram	0.10		0.10
30	Assam	0.00	10.00	10.00
31	Others data from rooftop division cumulative	58.31	42.61	100.92
TOTAL		6762.85	1964.77	8727.62

(B) Year wise cumulative targets of 1,00,000 MW and achievement made is given as under:-

S.No	Year	Yearly Target (in MW)	Cumulative Target (in MW)	Yearly Capacity added (in MW)	Cumulative Capacity (in MW)
1	2015-16	2,000	5,000	3018.883	6762.853
2	2016-17	12,000	17,000	1964.77	8727.62
3	2017-18	15,000	32,000		
4	2018-19	16,000	48,000		
5	2019-20	17,000	65,000		
6	2020-21	17,500	82500		
7	2021-22	17,500	1,00,000		

(C) Year wise achievement of Grid connected Solar power Project:

S.No	Year	Capacity added (MW)	Cumulative (MW)
1	Upto 2010	--	11
2	2010-11	25	36
3	2011-12	994	1030
4	1012-13	656	1686
5	2013-14	945.9	2631.9
6	2014-15	1112.07	3743.97
7	2015-16	3018.883	6762.853
8	2016-17 (upto 31/10/2016)	1964.77	8727.62

Expected commissioning in 2016-17

Sates	NTPC (NSM+EPC) (In MW)	SECI (In MW)	State scheme (In MW)	Total (In MW)
Andhra Pradesh	875	300	220	1395
Rajasthan	910	--	--	910
Telangana	400		1500	1900
Maharashtra		450		450
Karnataka	500	450	1000	1950
UP	100	125	220	445
Uttarakhand			200	200
Madhya Pradesh	250		320	570
Gujarat		250		250
Jharkhand			400	400
Punjab			550	550
Haryana			150	150
Tamil Nadu			540	540
Kerala		50		50
Odisha				--
Chhattisgarh		100	100	200
Bihar			108	108
Rooftop				1000
Total	3035	1725	5308	11068

Tendering Status of Ground mounted Solar Projects under Central Schemes & State Scheme for commissioning in 2016-17& 2017-18 as on 31/10/2016

(in MW)

SI. No.	Organization	Scheme	Tender issued	Financial bid opened/ RA	LOI issued	PPA signed	Commissioned	to be Retendered
1	SECI	VGF Scheme	4525	2803	2528	2528	6	67
2	SECI	Own/As a consultant	359.5	299	99	99	16.5	10
3	Canal Bank/Top		100	69	69	69	11	0
4	NTPC Ltd	Bundling scheme	3000	2650	2650	2650	0	0
5	NTPC Ltd	Own/EPC	1528	885	760	760	250	0
6	State Entity	State scheme	9764	7804	7804	5338	1433	1150
	Total		19276.5	14510	13910	11444	1716.5	1227
LOI issued but PPA not Signed:			2466					
Financial Bid opened but LOI not issued:			600					

Capacity addition by States under State Policy

S. No	State	Target	Policy
1.	Andhra Pradesh	5000 MW by March 2020	Andhra Pradesh Solar Power Policy- 2015
2.	Chhattisgarh	500-1000 MW by March 2017	Chhattisgarh State Solar Energy Policy 2012
3.	Haryana	1300 MW by March 2022	Haryana Solar Power Policy, 2014
4.	Jharkhand	500 MW by 2017 and 1000 MW by 2022	Jharkhand Solar Policy 2013
5.	Karnataka	2000 MW by March 2021	The Karnataka Solar Policy 2014-2021
6.	Kerala	500 MW by 2017 and 2500 MW by 2030	Kerala Solar Energy Policy 2013
7.	Madhya Pradesh	RPO target 1000 MW by March 2015	Madhya Pradesh Solar Power Policy 2012
8.	Maharashtra	Capacity addition of 7500 MW by 2019	Policy for Non-conventional sources of Energy 2008, superseded 2013, Proposed policy for 2015
9.	Manipur	Rooftop: 5 MW by March 2017	Manipur Grid Interactive Rooftop Solar SPV Power Policy, 2014
10.	Odisha	135 MW by March 2016	Policy Guidelines on Power Generation 2015
11.	Punjab	1000 MW by 2022	New and Renewable Sources of Energy (NRSE) Policy of Punjab - 2012
12.	Rajasthan	25000 MW	Rajasthan Solar Energy Policy 2014
13.	Tamil Nadu	3000 MW of Solar Energy by March 2015	Tamil Nadu Solar Energy Policy 2012
14.	Uttar Pradesh	500 MW by March 2017	Solar Power Policy Uttar Pradesh (UP) 2013
15.	Uttarakhand	500 MW by March 2017	Solar Energy Policy of Uttarakhand 2013
16.	West Bengal	100 MW by March 2017 and 500 MW by March 2022	West Bengal Policy on Co-generation and Generation of Electricity from Renewable Sources of Energy,2012
	Total	49,040 MW	

Trend of Solar Tariff

Previous bid results					
	Year	Capacity on Offer (MW)	Highest Bid (Rs./KWh)	Lowest (Rs./KWh)	Weighted Avg. Price (Rs./KWh)
NSM Batch 1	Dec'10	150	12.76	10.95	12.16
NSM Batch2	Dec'11	350	9.39	7.49	8.79
Orissa Phase 1	Mar'12	25	8.98	7.0	8.36
Orissa Phase 2	Dec'12	25	9.50	7.28	8.73
Karnataka	Apr'12	60	8.5	7.94	8.34
Madhya Pradesh	Jun'12	125	12.45	7.9	8.05
Tamil Nadu	Mar'13	150	14.5	5.97	6.48*
Rajasthan	Mar'13	75	8.25	6.45	6.45 (L1)
Andhra Pradesh	Apr'13	226	15.99	6.49	6.49 (L1)
Punjab Phase 1	June'13	270	8.75	7.2	8.41
Uttar Pradesh Phase 1	Aug'13	130	9.33	8.01	8.9
Karnataka Phase 2	Aug'13	130	8.05	5.5	6.87
Madhya Pradesh Phase 2	Jan'14	100	6.97	6.47	6.86
Andhra Pradesh Phase 2	Oct'14	500	5.99** (7.03 Level.)	5.25** (6.17 Level.)	5.75** (6.75 Level.)
Karnataka	Nov'14	500	7.12	6.71	6.94
Telangana	Nov'14	500	6.9	6.46	6.72
Punjab (Capacity 5-24 MW)	Feb'15	100	7.45	6.88	7.17
Punjab (Capacity 25-100 MW)	Feb'15	100	7.56	6.88	7.16
NTPC Anantapur	May'15	250	-	-	6.16*** (L1)
Uttar Pradesh Phase 2	June'15	215	8.6	7.02	8.04
Madhya Pradesh	June'15	300	5.641	5.051	5.36
Telangana Group 1****	August'15	500	5.8727	5.4991	5.73
Telangana Group 2****	August'15	1500	5.8877	5.1729	5.62
Punjab	Sept'15	500	5.98	5.09	5.65
Uttarakhand	Oct'2015	170	5.99	5.57	5.766
AP-500 MW Bundling scheme	Nov'2015	500	4.63	4.63	4.63
AP-350 MW Bundling scheme	Dec'2015	350	4.63	4.63	4.63
AP-150 MW Bundling scheme(DCR)	Dec'2015	150	5.13	5.12	5.123
Haryana(State scheme)	Dec'2015	150	5.00	5.00	5.00
Rajasthan-420 MW Bundling	Jan'2016	420	4.36	4.34	4.351
UP-100 MW Bundling	Jan'2016	100	4.78	4.78	4.78
Rajasthan-100 MW Bundling(DCR)	March'16	100	5.07	5.06	5.068
Telangana-50 MW	March'16	50	5.19	5.19	5.19

Bundling(DCR)					
MH-450 MW VGF*****	Jan'16	450	4.43	4.41	
UP-165 MW VGF*****	Feb'16	125	4.43	4.43	
Jharkhand-200	March'16	102	5.59	5.20	5.464
Jharkhand-1000	March'16	999	5.48	5.08	5.356
Telangana-350 MW Bundling	May'16	350	4.67	4.66	4.667
Karnataka-500 MW Bundling	May'16	500	4.80	4.78	4.79
MH-50 MW (VGF-DCR) ^{\$}	June,16	50	4.43	4.43	4.43
AP-400 MW(VGF) ^{\$\$}	June,16	400	4.43	4.43	4.43
Karnataka-920 MW(VGF) ^{\$\$\$}	June,16	920	4.43	4.43	4.43
Karnataka-50 MW(VGF-DCR) ^{\$\$\$\$}	June,16	50	4.43	4.43	4.43
CG-100(VGF) ^{\$\$\$\$\$}	June,16	50	4.43	4.43	4.43

*5% escalation for 10 years

** 3% escalation for 10 years. Separate L1 for 9 districts

*** EPC Bids with Domestic content requirement. Capital subsidy of Rs. 1 Cr/MW

****Results for the lowest bid for 500 and 1500 MW respectively.

***** Highest VGF required is 54 Lacs/MW with weighted average VGF is 47.58 Lacs

***** Highest VGF required is 80.70 Lacs/MW with weighted average VGF is 74.25 Lacs

^{\$} Highest VGF required is 130 Lacs/MW with weighted average VGF is 91.14 Lacs

^{\$\$} Highest VGF required is 74.49 Lacs/MW with weighted average VGF is 59.56 Lacs

^{\$\$\$} Highest VGF required is 73.5 Lacs/MW with weighted average VGF is 72.3 Lacs

^{\$\$\$\$} Highest VGF required is 130 Lacs/MW with weighted average VGF is 130 Lacs

^{\$\$\$\$\$} Highest VGF required is 59 Lacs/MW with weighted average VGF is 59 Lacs

Solar RPO Trajectory for the period from 2016-17 to 2018-19

State	Solar RPO (2.75%) required (2016-17) (MW)	Solar RPO (4.75%) required (2017-18) (MW)	Solar RPO (6.75%) required (2018-19) (MW)
Andhra Pradesh	867	1584	2376
Arunachal Pradesh	7	14	21
Assam	138	262	411
Bihar	447	942	1599
Chhattisgarh	458	847	1277
Delhi	478	831	1188
Goa	75	137	206
Gujarat	1803	3318	4948
Haryana	740	1332	1965
Himachal Pradesh	43	66	79
Jammu & Kashmir	168	326	504
Jharkhand	362	635	916
Karnataka	895	1579	2280
Kerala	272	475	675
Madhya Pradesh	956	1737	2582
Maharashtra	2339	4249	6401
Manipur	11	22	36
Mizoram	8	16	24
Meghalaya	11	19	25
Nagaland	9	17	26
Odisha	326	579	839
Punjab	662	1154	1651
Rajasthan	1104	1997	2963
Sikkim	2	4	5
Tamil Nadu	1635	3037	4626
Telangana	863	1576	2363
Tripura	17	30	43
Uttarakhand	114	194	269
Uttar Pradesh	1777	3363	5165
West Bengal	855	1541	2282
Chandigarh	15	25	34
Daman & Diu	40	72	105
Dadar & Nagar Haveli	107	190	276
Puducherry	56	101	148
Total	17660	32271	48308