

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.3200
TO BE ANSWERED ON 12.03.2020**

ONGOING POWER PROJECTS

**3200. SHRI HEMANT TUKARAM GODSE:
SHRI DIPSINH SHANKARSINH RATHOD:**

**Will the Minister of POWER
be pleased to state:**

- (a) the details of the ongoing power projects along with the power produced by them within the country including Maharashtra;**
- (b) the funds sanctioned, allocated and utilized under these projects during the last three years and the current year across the country including Maharashtra;**
- (c) the details of the cost fixed initially for these projects along with the target set for completing the projects;**
- (d) whether some of the projects are facing huge cost/time overrun;**
- (e) if so, the details thereof and the reasons there for along with the action taken by the Government for timely completion of these projects in future without cost overrun; and**
- (f) the time by which the said projects are likely to be completed?**

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (d) : As on 29th February, 2020, the installed generation capacity in the country was about 369 GW, including installed generation capacity of 13,661 MW in the State Sector in Maharashtra. Power generation during the current year (April – February 2020) and the last three years is as under:

Year	Electricity Generation at All India Level (Billion Units)	Electricity Generation from State Sector of Maharashtra (Billion Units)
2016-17	1,241.689	49.921
2017-18	1,308.146	52.415
2018-19	1,376.095	52.029
2019-20 (Upto February)	1,281.264	47.925

As per Electricity Act 2003, generation is a de-licensed activity. Investment in setting up of power projects is made by the concerned developers. Therefore, no funds are sanctioned / allocated by the Government of India in this regard, except contribution in equity of the Central Public Sector Units for setting up of such projects on a case-to-case basis. No power is generated by the under construction power projects, the generation of power starts only after completion and commissioning of the power projects.

The details of the under construction Thermal and Hydro Power Projects, along with their original and anticipated cost as well as original and anticipated schedule of commissioning are given in Annexure-I and Annexure-II respectively.

(e) & (f) : Some of the under construction power projects are having time/cost overrun. Major reasons for time overrun in thermal and hydro projects are given as under:

Thermal

- Slow civil works, delay in Balance of Plants equipment/systems,
- Contractual issues,
- Law & order problem,
- Other customer/ project developer(s) issues,
- Delay in handing over the units by BHEL,
- Delay in finalization and subsequent changes in the scope for R&M (Renovation & Modernisation),
- Changes in layout plan,
- Non-availability of spares

Hydro

- Delay in Land Acquisition
- Environment and Forest issues
- Rehabilitation & Resettlement issues
- Natural Calamities
- Law & order problem & Local issues
- Contractual issues
- Geological uncertainties/surprises
- Difficult Terrain & Poor Accessibility
- Funds constraints with developers
- Force Majeure Risk
- Inter-state issues

The major reasons for cost overrun are; increase in interest rate, increase in general price index and changes in the scope of project.

In order to ensure timely completion of the above projects, the following monitoring mechanisms are in place in Government:

- (i) Ministry of Power/Central Electricity Authority (CEA) monitors the process of under construction power projects through frequent site visits and interaction with the developers and equipment suppliers. CEA holds review meetings periodically with the developers and other stakeholders and identify issues critical for commissioning of projects and help in resolving them.**
- (ii) In case of Central Power Sector Undertakings (CPSUs) projects, the project implementation parameters/ milestones are incorporated in the annual MoU signed between respective CPSU's and MoP and the same are monitored during the quarterly performance review meeting of CPSU's and other meetings held in MoP/CEA.**
- (iii) Project Monitoring Group (PMG) under Department for Promotion of Industry and Internal Trade (DPIIT) resolves issues / bottlenecks faced by developers by taking up with Central / State Government authorities.**
- (iv) Matters are taken up with State Government/District Administration for extending help to the project implementing agencies in resolving Right of Way (ROW) issues.**
- (v) As and when required, issues are also reviewed in the PRAGATI portal of PMO for proactive governance and timely implementation.**

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3200 TO BE ANSWERED IN THE LOK SABHA ON 12.03.2020.

Details of under construction Thermal Power Projects along with their original and anticipated cost as well as original and anticipated schedule of commissioning

Sl. No.	Project Name	Unit No.	Capacity (MW)	Original Commissioning Schedule	Anticipated Commissioning Schedule	Original Cost (in Rs. crore)	Latest Cost (in Rs. crore)
CENTRAL SECTOR							
1	Barh STPP-I	U-1	660	Aug-09	Apr-20	8693	21312.1
		U-2	660	Jun-10	Apr-21		
		U-3	660	Apr-11	May-22		
2	Nabi Nagar TPP	U-4	250	Nov-13	Apr-20	5352.51	9996.59
3	New Nabi Nagar TPP	U-2	660	Jul-17	Apr-20	13624.02	17304.3
		U-3	660	Jan-18	Mar-22		
4	North Karanpura STPP	U-1	660	Feb-18	Oct-20	14367	15164.05
		U-2	660	Aug-18	Oct-21		
		U-3	660	Feb-19	Mar-22		
5	Gadarwara STPP	U-2	800	Sep-17	Jan-20	11638.55	12865.92
6	Khargone STPP	U-2	660	Sep-19	Mar-20	9870.51	11148.86
7	Darlipalli STPP					12532.44	13740.53
		U-2	800	Jun-18	Jun-20		
8	Neyveli New TPP					5907.11	5907.11
		U-2	500	Mar-18	Mar-20		
9	Telangana STPP St- I	U-1	800	Jan-20	Jul-20	10599	11811
		U-2	800	Jul-20	Jul-21		
10	Lara STPP	U-2	800	May-17	Jan-20	11846	12739.82
11	Meja STPP	U-2	660	Dec-16	Jun-20	10821	12176.28
12	Tanda TPP St II	U-6	660	Feb-20	Apr-20	9188.98	10016.1
13	Ghatampur TPP	U-1	660	Apr-20	Feb-22	17237.8	17237.8
		U-2	660	Oct-20	Feb-23		
		U-3	660	Oct-20	Aug-23		
14	Barsingar TPP ext	U-1	250	May-20	Apr-23	2112.59	2112.59
15	Bithnok TPP	U-1	250	May-20	Sep-23	2196.3	2196.3
16	Patratu STPP	U-1	800	Jan-22	May-22	17112	17113
		U-2	800	Sep-22	Sep-22		
		U-3	800	Dec-22	Dec-22		
17	Rourkela PP-II Expansion	U-1	250	Dec-18	Apr-22	1885.13	1885.13
18	Khurja SCTPP	U-1	660	Mar-23	Apr-23	11089.42	11089.42
		U-2	660	Sep-23	Sep-23		
19	Buxar TPP	U-1	660	Jul-23	Jul-23	10439.09	10439.09
		U-2	660	Jan-24	Jan-24		
STATE SECTOR							
1	Namrup CCGT	ST	36.15	Jan-12	Jan-20	411	693.73
2	Dr.Narla Tata Rao TPS St-V	U-1	800	Jun-19	Feb-20	5286.54	5286.54
3	Sri Damodaran Sanjeevaiah TPP St-II	U-1	800	Mar-19	Sep-20	4276.04	6034
4	Suratgarh SCTPP	U-7	660	Sep-16	Jan-20	7920	9161.35
		U-8	660	Dec-16	Sep-20		
5	Bhadradi TPP	U-1	270	Mar-17	Mar-20	5044	8536.98
		U-2	270	May-17	Sep-20		
		U-3	270	Jul-17	Mar-21		
		U-4	270	Sep-17	Mar-22		
6	Ennore exp. SCTPP (Lanco)	U-1	660	Jan-18	Jun-23	4956	5421.38
7	Ennore SCTPP	U-1	660	Jan-18	May-22	9800	9800
		U-2	660	Mar-18	Jul-22		

8	North Chennai TPP St-III	U-1	800	Mar-19	Sep-20	6376	6376
9	Uppur Super Critical TPP	U-1	800	Mar-19	Apr-22	12778	12778
		U-2	800	Oct-19	Aug-22		
10	Harduaganj TPS Exp-II	U-1	660	Jun-19	Apr-20	4826.49	5500.98
11	Yelahanka CCPP BY KPCL	GT+ST	370	Mar-18	Jan-20	1571.18	1571.18
12	Jawaharpur STPP	U-1	660	Sep-20	Dec-21	10566.27	10566.27
		U-2	660	Jan-21	Apr-22		
13	Obra-C STPP	U-1	660	Sep-20	Mar-22	10416	10416
		U-2	660	Dec-20	Apr-22		
14	Yadadri TPS	U-1	800	Sep-20	Sep-22	29965	29965
		U-2	800	Sep-20	Oct-22		
		U-3	800	Mar-21	Mar-23		
		U-4	800	Mar-21	Mar-23		
		U-5	800	Sep-21	Sep-23		
15	Panki TPS Extn.	U-1	660		Sep-23	-	-
16	Udangudi STPP Stage I	U-1	660	Feb-21	Apr-22	13076.705	-
		U-2	660	Feb-21	Jul-22		-
17	Bhusawal TPS	U-6	660	Nov-21	Nov-22	-	-
PRIVATE SECTOR							
1	Bhavanapadu TPP Ph-I	U-1	660	Oct-13	Uncertain	6571.94	9343.15
		U-2	660	Mar-14	Uncertain		
2	Thamminapatnam TPP stage -II	U-3	350	May-12	Dec-20	5005	5005
		U-4	350	Aug-12	Mar-21		
3	Akaltara TPP (Naiyara)	U-4	600	Apr-13	Apr-23	16190	27080
		U-5	600	Aug-13	Uncertain		
		U-6	600	Dec-13	Uncertain		
4	Siriya TPP (Jas Infra. TPP)	U-1	660	Aug-14	Uncertain	11120	11120
		U-2	660	Dec-14	Uncertain		
		U-3	660	Apr-15	Uncertain		
		U-4	660	Aug-15	Uncertain		
5	Binjkote TPP	U-3	300	Mar-14	Uncertain	5058	7940
		U-4	300	Jun-14	Uncertain		
6	Lanco Amarkantak TPP-II	U-3	660	Jan-12	Uncertain	6886	10815.24
		U-4	660	Mar-12	Uncertain		
7	Singhitarai TPP	U-1	600	Nov-14	Uncertain	6200	8443.79
		U-2	600	Feb-15	Uncertain		
8	Salora TPP	U-2	135	Sep-11	Uncertain	1458.44	1458.44
9	Deveri (Visa) TPP	U-1	600	Aug-13	Uncertain	2618.7	3930
10	Matrishri Usha TPP Ph-I	U-1	270	Apr-12	Uncertain	2900	2900
		U-2	270	May-12	Uncertain		
11	Matrishri Usha TPP Ph-II	U-3	270	Oct-12	Uncertain	3182	3182
		U-4	270	Jan-13	Uncertain		
12	Tori TPP Ph-I	U-1	600	Jul-12	Uncertain	5700	5700
		U-2	600	Sep-12	Uncertain		
13	Tori TPP Ph-II	U-3	600	Dec-15	Uncertain	2500	2500
14	Amravati TPP Ph-II	U-1	270	Jul-14	Uncertain	6646	6646
		U-2	270	Sep-14	Uncertain		
		U-3	270	Nov-14	Uncertain		
		U-4	270	Jan-15	Uncertain		
		U-5	270	Mar-15	Uncertain		
15	Lanco Vidarbha TPP	U-1	660	Jul-14	Uncertain	6936	10433
		U-2	660	Nov-14	Uncertain		

16	Nasik TPP Ph-II	U-1	270	Apr-13	Uncertain	6789	6789
		U-2	270	Jun-13	Uncertain		
		U-3	270	Aug-13	Uncertain		
		U-4	270	Oct-13	Uncertain		
		U-5	270	Dec-13	Uncertain		
17	Bijora Ghanmukh TPP	U-1	300	Dec-16	Uncertain	3189	3450
		U-2	300	Mar-17	Uncertain		
18	Shirpur TPP	U-2	150	Apr-15	Jul-23	2413	2413
19	Gorgi TPP	U-1	660	Jun-13	Uncertain	3941	3941
20	Ind Barath TPP (Odisha)	U-2	350	Dec-11	Jun-23	3150	4001
21	KVK Nilanchal TPP	U-1	350	Dec-11	Uncertain	4990	6000
		U-2	350	Feb-12	Uncertain		
		U-3	350	Feb-12	Uncertain		
22	Lanco Babandh TPP	U-1	660	Apr-13	Uncertain	6930	10430
		U-2	660	Aug-13	Uncertain		
23	Malibrahmani TPP	U-1	525	Dec-12	Uncertain	5093	6330
		U-2	525	Feb-13	Uncertain		
24	Tuticorin TPP (Ind-Barath)	U-1	660	May-12	Uncertain	3595	3595
25	Tuticorin TPP St-IV	U-1	525	Sep-18	Sep-21	3514	3514
26	Hiranmaye Energy Ltd (India Power corporation (Haldia) TPP	U-3	150	May-16	Sep-23	2656	3307

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Details of under construction Hydro Power Projects along with their original and anticipated cost as well as original and anticipated schedule of commissioning

Sl. No	Project Name	State/ UT	Unit No.	Capacity (MW)	Original Commissioning Schedule	Anticipated Commissioning Schedule	Time over run (months)	Original Cost (in Rs. crore)	Latest/Anticipated Cost (in Rs. crore)
1	2	3	4	5	6	7	8	9	10
CENTRAL SECTOR									
1	Tapovan Vishnughad (4x130 = 520 MW)	Uttarakhand	1	130	2012-13	2021-22	105	2978.48	5867.38
			2	130	2012-13	2021-22			
			3	130	2012-13	2021-22			
			4	130	2012-13	2021-22			
2	Lata Tapovan (3x57 = 171 MW)	Uttarakhand	1	57	2017-18	2023-24	79	1527	1801.07
			2	57	2017-18	2023-24			
			3	57	2017-18	2023-24 (subject to re-start of works(4 years))			
3	Rammam-III (3x40= 120 MW)	West Bengal	1	40	2019-20	2022-23	38	1381.84	1592.34
			2	40	2019-20	2022-23			
			3	40	2019-20	2022-23			
4	Kameng (4x150 = 600 MW) 2 units taken in operation	Central	3	150	2009-10	2020-21	127	2496.9	6179.96
			4	150	2009-10 (Dec'09)	2020-21 (July'20)			
5	Naitwar Mori (2x30=60 MW)	Central	1	30	Oct.,21	2021-22 (Dec-2021)	14	648.33	648.33
			2	30	-				
6	Tehri PSS (4x250 = 1000 MW)	Uttarakhand	1	250	2010-11	2021-22	137	1657.6	5024.35
			2	250	2010-11	2021-22	139		
			3	250	2010-11	2022-23	141		
			4	250	2010-11	2022-23	143		
7	Parbati - II (4x200 = 800 MW)	Himachal Pradesh	1	200	2009-10	2021-22	147	3919.59	9394.8
			2	200	2009-10	2021-22			
			3	200	2009-10	2021-22			
			4	200	2009-10 (Sept'09)	2021-22 (Dec,21)			
8	Subansiri Lower (8x250 = 2000 MW)	Arunachal Pradesh/ Assam	1	250	2009-11	2023-24	162	6285.33	19496.34
			2	250	2009-11	2023-24			
			3	250	2009-11	2023-24			
			4	250	2009-11	2023-24			
			5	250	2009-11	2023-24			
			6	250	2009-11	2023-24			
			7	250	2009-11	2023-24			
			8	250	2009-11	2023-24			
9	Teesta Stage VI (4x125 = 500 MW)	Sikkim	1	125	<u>Under</u> 2012-13	<u>Sector</u> Till 08.03.2019	72	3283.08	7542
			2	125	2012-13				
			3	125	2012-13				
			4	125	2012-13 (Jul'12)				
			1	125	<u>Under</u> 2023-24	<u>Sector</u> 2023-24		5748.04	5748.04
			2	125	2023-24	2023-24			
			3	125	2023-24	2023-24			
			4	125	2023-24	2023-24 (subject to re-start of works (5 years))			

10	Vishnugad Pipalkoti (4x111 = 444 MW)	Uttarakhand	1	111	2013-14	2022-23	114	2491.58	4397.8
			2	111	2013-14	2022-23			
			3	111	2013-14	2022-23			
			4	111	2013-14	2022-23			
11	Pakal Dul (4x250= 1000 MW) CVPP	Jammu & Kashmir	1	250	2020-21	2024-25	56	8112.12	8112.12
			2	250	2020-21	2024-25			
			3	250	2020-21	2024-25			
			4	250	2020-21 (Apr'20)	2024-25 (Dec'24)			
12	Ratle (4x205+1x30) = 850 MW	Jammu & Kashmir	1	205	2017-18	2023-24	72	5517.02	6275
			2	205	2017-18	2023-24			
			3	205	2017-18	2023-24			
			4	205	2017-18	2023-24			
			5	30	2017-18	2023-24 (subject to re-start of works(5 years))			
13	Kiru (4x156)=624 MW	Jammu & Kashmir	1 to 4	324	Sep-23	2023-24 (Aug-2024)	11	4287.59	4620.34
STATE SECTOR									
14	Parnai 3x12.5= 37.5 MW	Jammu & Kashmir	1	12.5	2017-18	2021-22	49	640.86 (Completion cost)	640.86 (Completion cost)
			2	12.5	2017-18	2021-22			
			3	12.5	2017-18 (Jan'18)	2021-22 (Feb,22)			
15	Lower Kalnai 2x24= 48 MW	Jammu & Kashmir	1	24	2017-18	2023-24	78	576.87 (Completion cost)	576.87 (Completion cost)
			2	24	2017-18 (Sep'17)	2023-24 (subject to re-start of works (4 years))			
16	Uhl-III (3x33.33 = 100 MW)	Himachal Pradesh	1	33.33	2006-07	2019-20	154	431.56	1281.52
			2	33.33	2006-07	2019-20	155		
			3	33.33	2006-07	2019-20	156		
17	Sawra Kuddu (3x37 =111MW)	Himachal Pradesh	1	37	2011-12	2020-21	101	558.53	1181.9
			2	37	2011-12	2020-21	102		
			3	37	2011-12	2020-21	103		
18	Shongtom Karcham (3x150 = 450 MW)	Himachal Pradesh	1	150	2016-17	2023-24	81	2807.83	2807.83
			2	150	2016-17	2023-24	83		
			3	150	2016-17	2024-25	85		
19	Pallivasal 2x30 = 60 MW	Kerala	1	30	2010-11	2021-22	129	222	550
			2	30	2010-11	2021-22			
20	Thottiyar (1x30+1x10)= 40MW	Kerala	1	30	2012-13	2020-21	104	136.79	280
			2	10	2012-13	2020-21			
21	Shahpurkandi 3x33+3x33+1x8 206 MW	Punjab	1	33	2015-16	2022-23	74	1835.5 (Power Component)	1938.74 (Power Component)
			2	33	2015-16	2022-23 2022-23			
			3	33	2015-16	2022-23			
			4	33	2015-16	2022-23			
			5	33	2015-16	2022-23			
			6	33	2015-16	2022-23			
			7	8	2015-16	2022-23 (May, 22)			
22	Koyna Left Bank PSS 2x40 = 80 MW	Maharashtra	1	40	2014-15	2022-23	101	245.02	1494.94
			2	40	2014-15	(subject to re-start of works (4 years))			
23	Vyasi 2x60=120 MW, UJVNL	Uttarakhand	1	60	2014-15	2020-21	75	936.23	936.23
			2	60	2014-15	2020-21			
24	Polavaram (12x80 = 960 MW)	Andhra Pradesh	1	80	2016-17	2021-22	60	3013.68 (Power Component)	5338.95 (Power Component)
			2	80	2016-17	2021-22			
			3	80	2016-17	2021-22			
			4	80	2016-17	2021-22			
			5	80	2016-17	2021-22			
			6	80	2016-17	2022-23			
			7	80	2017-18	2022-23			
			8	80	2017-18	2022-23			
			9	80	2017-18	2022-23			
			10	80	2017-18	2022-23			
			11	80	2017-18	2022-23			
			12	80	2017-18	2022-23			

25	Kundah PSP (Phase-I, Phase-II & Phase-III) (4x125=500 MW)	Tamil Nadu	1	125	2021-22	2022-23	9	1216.59	
			2	125	2021-22	2022-23			
			3	125	2021-22	2022-23			
			4	125	2021-22	2022-23			
PRIVATE SECTOR									
26	Tidong-I 2x50 =100 MW	Himachal Pradesh	1	50	Under 2013-14	Developer Till 04.09.2018	94	543.15	1286.27
			2	50	2013-14 (Dec'13)	56			
27	Tangnu Romai-I (2x22 = 44 MW)	Himachal Pradesh	1	22	Under 2021-22	Developer 2021-22	Nil	940	940
			2	50	2021-22	(Oct. 21)			
28	Sorang (2x50 = 100 MW),	Himachal Pradesh	1	22	2014-15	2022-23	105	255	641.89
			2	22	2014-15 (Jun'14)	2022-23 (subject to re-start of works(4 years))			
29	Singoli Bhatwari (3x33 = 99 MW)	Uttarakhand	1	33	2011-12	2020-21	119	586	-
			2	50	2011-12	2020-21			
30	Phata Byung (2x38 = 76 MW), LANCO	Uttara khand	1	33	2012-13	2020-21	89	666.47	1694
			2	33	2012-13	2020-21			
31	Maheshwar (10x40 = 400 MW)	Madhya Pradesh	1	38	2012-13	2021-22	117	520	1132
			2	38	2012-13	2021-22 (subject to re-start of works(3 years))			
32	Maheshwar (10x40 = 400 MW)	Madhya Pradesh	1	40	2001-02	2020-22	240	1569.27	8121
			2	40	2001-02	(subject to re-start of works(1-½ years))			
			3	40	2001-02				
			4	40	2001-02				
			5	40	2001-02				
			6	40	2001-02				
			7	40	2001-02				
			8	40	2001-02				
			9	40	2001-02				
			10	40	2001-02				
33	Rangit-IV HE Project (3X40 = 120 MW)	Sikkim	1	40	2011-12	2022-23	134	726.17	1692.6
			2	40	2011-12	2022-23			
			3	40	2011-12 (Jan'12)	2022-23 (subject to re-start of works(3-½ year))			
34	Bhasmey (2x25.5 =51 MW)	Sikkim	1	25.5	2012-13	2022-23	129	408.5	746.01
			2	25.5	2012-13	2022-23 (subject to re-start of works(3 years))			
35	Rongnichu (2x48 =96 MW)	Sikkim	1	48	2014-15	2020-21	74	491.32	1187.45
			2	48	2014-15	2020-21			
36	Bajoli Holi 3x60= 180 MW	Himachal Pradesh	1	60	2018-19	2020-21	29	1696.93	2525
			2	60	2018-19	2020-21			
			3	60	2018-19	2020-21			
37	Rangit-II 2x33= 66 MW	Sikkim	1	33	2015-16	2022-23	95	496.44	496.44
			2	33	2015-16	2022-23 (subject to re-start of works(2-½ years))			
38	Panan 4x75= 300 MW	Sikkim	1	75	2018-19	2023-24	60	1833.05	2615
			2	75	2018-19	2023-24			
			3	75	2018-19	2023-24			
			4	75	2018-19	2023-24 (subject to re-start of works(4-½ years))			
39	Kutehr 3x80=240 MW	Himachal Pradesh	1 to 3	240		2024-25	-	-	-
