

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:1483

ANSWERED ON:11.12.2003

RENOVATION AND MODERNISATION PROGRAMME FOR POWER GENERATION

SURESH RAMRAO JADHAV (PATIL)

Will the Minister of POWER be pleased to state:

(a) whether the Government has identified certain existing power stations for renovation and modernization/life extension in order to achieve additional power generation capacity;

(b) if so, the details thereof, State-wise; and

(c) the time by which the proposal is likely to be implemented?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRIMATI JAYAWANTI MEHTA)

(a) :Yes, Sir.

(b) & (c) : During the 10th Plan, 106 thermal units have been identified for LifeExtension (LE) works for anticipated increase of generation in 23700 MU/year. Also 57 thermal units have been identified for Renovation & Modernization (R&M) works for improvement of their performance. Besides, 74 existing Hydro Power Stations have been identified for implementation of Renovation, Modernization, uprating and Life Extension during 10th Plan to accrue a benefit of power of 2446.87 MW. The state-wise details of power stations identified for renovation and modernization/life extension for implementation during the 10th Plan are annexed.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO. 1483 TO BE ANSWERED IN T LOK SABHA ON 11.12.2003.

THERMAL UNITS IDENTIFIED FOR LIFE EXTENSION DURING 10TH PLAN

S1 No.	Name of station/units capacity (MW)	Present rated output (MW)	Maximum Capacity after LEP (MW)	(expected Additional power generation (MW)
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DELHI

1.	Badarpur units 1-5	705	705	720	15
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HARYANA

2.	Panipat units 1, 3&4	330	300	330	30
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3.	Faridabad units 1-3	165	159	180	21
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PUNJAB

4.	Bhatinda units 1-4	440	400	440	40
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UTTAR PRADESH

5.	Obra units 1-13	1482	1335	1550	210
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6.	Panki units 3-4	210	190	220	30
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7.	Harduagunj units-1,3,4,5&7	325	235	340	105
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MAHARASHTRA

8.	Nasik units 1-2	280	250	280	30
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9.	Paras unit-2	58	58	62.5	4.5
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10	Bhusawal unit-1	58	58	62.5	4.5
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11	Koradi units 1- 4	460	440	480	40
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12	Parli units 1-2	60	60	60	0
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CHHATISGARH

13	Korba (East) units 1,4,5 & 6	320	280	340	60
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MADHYA PRADESH

14	Satpura units 1-5	310.25	300	310.25	10.25
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15	Amarkantak units 1-4	290	240	300	60
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GUJARAT

16	Gandhinagar units 1-2	240	200	240	40
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17	Dhuvaran units 1-6	534	422	534	112
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18	Ukai units 1-2	240	210	240	30
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TAMIL NADU

19	Ennore unit 1-2	120	100	120	20
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20	Tuticorin unit 1-3	630	630	630	0
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ANDHRA PRADESH

21	Vijayawada units 1-2	420	420	420	0
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22	Kothagudem units 6-8	325	300	360	60
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WEST BENGAL

23	Santalidih units 1-3	360	260	360	100
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24	Bandel units 1-4	320	260	330	70
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25	Durgapur-DVC unit-3	140	110	140	30
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JHARKHAND

26	Chandrapura-DVC units 1-6	750	570	780	210
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27	Bokaro units 1-3	135	0	172.5	172.5
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28	Patratu units 4-8	430	315	470	155
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BIHAR

29	Barauni units 4-5	100	0	100	100
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ASSAM

30	Chandrapur unit-1	30	0	30	30
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31	Namrup unit-1	23	23	23	0
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32	Bongaigaon units 1-2	120	0	120	120
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THERMAL UNITS IDENTIFIED FOR R&M DURING 10TH PLAN

S.No.	Name of Station	Unit	Capacity (MW)
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RAJASTHAN

1.	Kota	1 - 5	850
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PUNJAB

2.	Ropar	1 - 6	1260
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MAHARASHTRA

3.	Nasik	3 - 5	630
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4.	Koradi	5 - 7	630
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5.	Chadrapur	1 - 6	1840
6.	Parli	3 - 5	630

7	Khaperkheda	1-2	420
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8.	Bhusawal	2 - 3	420
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GUJARAT

9.	Kutch Lignite	1-2	140
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MADHYA PRADESH

10.	Singrauli STPS	1- 7	2000
11.	Vindhyachal	1 - 6	1260

CHHATISGARH

12.	Korba	1 - 6	2100
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ANDHRA PRADESH

13.	Ramagundem	1 - 6	2100
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10th PLAN PROGRAMME OF RENOVATION, MODERNISATION AND UPRATING OF HYDRO POWER SCHEMES

S. No	Scheme Description	Scheme category	Expected Benefit MW	MU
CENTRAL SECTOR SCHEMES				
Meghalaya				
1.	Khandong, NEEPCO 2x25 MW	R&M	-	-
ONGOING CENTRAL SECTOR SCHEMES				
Punjab				
2.	Bhakra LB, BBMB 5x90 MW (Original) 1960-61 5x108 MW (Up-rated in 1985)	RMU&LE	108 (LE) 18 (UR) (one unit)	520* + 42.54*
3.	Pong, BBMB 6x60 MW	RM&U	36 UR)	5.77
4.	Ganguwal U-1, BBMB 1x29.25 MW (Installed) 1x25.89 MW (Re-rated)	RMU&LE	25.89 (LE)+ 2.09 (UR) Being revised to 25.89 (LE)+ 2.10 (UR)	211.27 + 17.05 Being revised to 211.27 + 17.14
5.	Kotla U1, BBMB 1x29.25 MW (Installed) 1x26.61 MW (Re-rated)	RMU&LE	26.61 (LE)+ 2.35 (UR) Being revised to 26.61 (LE)+ 2.33 (UR)	217.14 + 19.17 Being revised to 217.14 + 19.01
Jharkhand				
6.	Maithon, DVC, 3x20 MW (IC) (Unit 2)	RMU&LE	20 (LE) 3.2 (UR)	66.22
Manipur				
7.	Loktak NHPC 3x35 MW	R&M + Res.	15.00 (Res.)	40.26
SCHEMES REPORTED UNDER RESIDUAL LIFE ASSESSMENT (RLA) STUDIES				
Jharkhand				
1.	Maithon, DVC 3x20 MW (IC) (U1&3)	RMU& LE	40 (LE) (UR) UR being revised to 6.0	132.44
2.	Panchet, DVC, 1x40 MW (U-1 Conv.)	RMU& LE	40 (LE) 6 (UR)	100.4
SCHEMES UNDER DETAILED PROJECT STAGE				
Jammu & Kashmir				
1.	Salal Ph-II, NHPC, 3x115 + 3x115 MW	R&M + Res.	75 (Res.)	227 Being revised to 277
Assam				

2. Kopili, NEEPCO 2x50 MW 2x50 MW	R&M (units 1&2)	-	-
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SCHEMES COMPLETED UNDER STATE SECTOR

Punjab

1. Shanan Ph-A 4x12 MW (1932) {uprated to 4x15 MW } 1x50 MW	R&M	-	-
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Karnataka

2. Nagjhari (U1&3) KPCL 2x135 MW	RM&U	30 (UR)	-
3. Supa PH, KPCL 2x50 MW	R&M	-	-
4. Mahatma Gandhi, KPCL 4x12 + 4x18 MW	RMU& LE	120 (LE) 19.2# (UR)	250
5. Munirabad Gen. Stn., 2x9 + 1x10.3 MW	RM&LE	28.3 (LE)	100
6. Mani Dam Power House, 2x4.5 MW	R&M	-	-
7. Pallivasal, KSEB 3x5 + 3x7.5 MW	RM&LE	37.5 (LE)	284
8. Sengulam, KSEB 4x12 MW	RM&LE	48 (LE)	184
9. Panniar, KSEB 2x15 MW	RM&LE	30 (LE)	148

Meghalaya

10 Umium St.I . 4x9 MW	RM&LE	36 (LE)	-
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ONGOING SCHEMES UNDER STATE SECOTR

Jammu & kashmir

1. Lower Jhelum, J&KPDC 3x35 MW	RM&U + Res.	9 (UR) 25 (Res.)	81.6
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Punjab

2. Shanan Ph.-B 4x12 MW 4x15 MW uprated 1x50 MW	RM&LE for 15 MW units and R&M for 50 MW unit	60 (LE)	-
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Rajasthan

3. Jawahar Sagar 3x33 MW	R &M	-	-
4. Rana Pratap Sagar, 4x43 MW	R &M	-	-

Uttaranchal

5. Chibro, UJVNL 4x60 MW	R&M	-	20
6. Chilla, UJVNL 4x36 MW	R&M	-	60
7. Khodri, UJVNL 4x30 MW	R&M	-	10

Karnataka

8. Bhadra Ph.II, KPCL 2x12 + 1x7.2 + 1x2 MW 1x6 MW	RM&LE	2 (LE)	6
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9.	Varahi, KPCL 2x115 MW	R&M	-	-
10	Sharavathy Ph-A . 10x103.5 MW	R&M	-	-
11	Shivasamudram, KPCL . 6x3 + 4x6 MW	RM&LE	42 (LE)	250 Being revised to 185
Kerala				
12	Sabarigiri, KSEB . 6x50 MW	RMU&LE	300 (LE) 35 (UR) (U1toU5 @5 MW U6 @10 MW)	1338 + 26.76
13	Neriamangalam, KSEB, . 1961-63 3x15 MW	RMU&LE	45 (LE) 9 (UR)	330.8
Tamil Nadu				
14	Mettur Dam PH/TNEB . 4x10 MW	RMU&LE	40 (LE) 10 (UR)	111.98
15	Papanasam, TNEB . 4x7 MW	RMU&LE	28.0 (LE) 4.0 (UR)	105
16	Pykara, TNEB . 3x6.65 + 1x11+ 2x14 MW	RM&LE	58.95 (LE)	268.16
Orissa				
17	Hirakud I, OHPC .	R&M	-	-
18	Hirakud-1 (U3 & 4) . 2x24MW	RMU&LE	48 (LE) 16 (UR)	231.04
19	Hirakud II, OHPC . 3x24 MW	RM&LE	72 (LE)	376
20	Jaldhaka St. I + II . 3x9 + 2x4 MW	RM&LE	27 (LE of St-I units)	45 (St-I) 12.6 (St-II)
Maharashtra				
21	Bhira Tail Race PS, MSEB . 2x40 MW	R&M	-	-
22	Koyna Generating . Coplex, MSEB 4x70 MW 4x80 MW 4x80 MW	R&M	-	131
23	Tillari HPS, MSEB . 1x60 MW	RM&U	8.2 (UR)	-

SCHEMES POSED FOR ACCELERATED GENERATION & SUPPLY PROGRAMME (AG&SP) /POWER FINANCE CORPORATION FUNDING.

Himachal Pradesh

1.	Bassi HPSEB 4x15 MW	RMU&LE	60 (LE) 6 (UR)	351
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Jammu & Kashmir

2.	Chenani 5x4.66 MW	RMU&LE	23.3 (LE) 2.33 (UR)	123.36
3.	Ganderbal, J&KPDC 2x3 MW+ 2x4.5 MW	RM&LE	15 (LE)	93.64
4.	Sumbal Sindh, J&KPDC 2x11.3 MW	RM&U	3 (UR)	13.28

Uttaranchal

5.	Dhakrani, UJVNL 3x11.25 MW	RM&LE	33.75 (LE)	160 Being revised to nil
6.	Dhalipur, UJVNL 3x17 MW	RM&LE	51 (LE)	20 Being revised to nil
7.	Tiloth, UJVNL 3x30 MW	R&M	-	30 Being revised to nil

Andhra Pradesh

8.	Hampi APGENCO 2x9 MW (Stage-I) & 2x9 MW (Stage-II)	RM&LE	36 (LE)	118
9.	Machkund, APGENCO St.I 1955-56 3x17 MW 3X21.25 MW	RMU & LE	114.75 (LE) + 15.25 (UR)	778.45
10.	Tungabhadra Dam, 4x9 MW	RM&LE	36 (LE)	118

Karnataka

11.	Bhadra, (2 MW) (2x12+1x7.2 MW) (6 MW) 2x12 + 1x7.2 + 1x6 + 1x2 MW	RM&LE of 12 MW units	24 (LE)	25.3
12.	Nagjhari, 3x135 MW (U-4,5 & 6)	RM&U	45 (UR)	-
13.	Sharavathy(Ph-B) 10x103.5 MW	R&M	-	-
14.	Sholayar-1, 2x35 MW	RMU&LE	70 (LE) 14 (UR)	188 Being revised to 268.0

Maharashtra

15.	Koyna, St.I 4x70 MW St.II 4x80 MW	R&M	-	-
16.	Koyna St.III, 4x80 MW	R&M	-	-
17.	Vaitarna, 1x60 MW	RM&U	6 (UR)	10

Meghalaya

18.	Umium St.II 2x9 MW	RM& LE	18 (LE)	-
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SCHEMES UNDER RESIDUAL LIFE ASSESSMENT (RLA) STUDIES

Himachal Pradesh

1.	Giri, 2x30 MW	RM&LE	60 (LE)	-
2.	Khatima, 3x13.8 MW	RM&LE	41.4 (LE)	198 Being revised to nil
3.	Pathri, 3x6.8 MW	RM&LE	20.4 (LE)	40 Being revised to nil

Maharashtra

4.	Koyna DAM PH 2x18 MW	RM&U	8 (UR)	10
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SCHEMES UNDER DETAILED PROJECT REPORT STAGE

Punjab

1.	Anand Pur Sahib 4x33.5 MW	R&M	-	-
2.	Mukerian St. I 3x15 MW	R&M	-	-

Uttranchal

3.	Kulhal, 3x10 MW	R&M	-	10 Being revised to nil
4.	Ranganga, 3x66 MW	R&M + Res	18 (Res)	-

Karnataka

5.	Linganamakki, 2x27.5 MW	R&M	-	-
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Kerala

6.	Kuttiadi 3x25 MW	RM&LE	75 (LE)	248
7.	Poringalkuthu, 4x8 MW	RM&LE	32 (LE)	171

Meghalaya

8.	Kyredemkulai 2x30 MW	RM&U	6 (UR)	-
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