

- * Setting up of 11 nos. Renewable Energy Management Centres at the renewable resource rich States,
- * Transmission planning for Renewable Energy Zones (66.5 GW) by 2022 etc.

Further, it is stated that distribution of electricity, including modernization of infrastructure to adapt to new requirements, is the responsibility of the States and their distribution to utilities. However, Government of India has been assisting States through schemes such as Integrated Power Development Scheme (IPDS) and National Smart Grid Mission (NSGM) in constructing a robust, resilient and adaptive distribution system. Assistance under these schemes includes smart metering of consumers for ascertaining near real time energy flows; Supervisory control and data acquisition system (SCADA); Information Technology (IT)/Operational technology (OT) enabled feeders; rooftop solarisation of government buildings; etc.

Besides, for achieving sustainable energy infrastructure in the country, Bureau of Energy Efficiency (BEE), a statutory body under the Ministry of Power (MoP) has been taking many steps for conserving energy through various flagship programmes in the areas of industries, appliances, buildings, transport, agriculture and demand side management etc.

Closure of old polluted coal-based power plants

2701. SHRI BHASKAR RAO NEKKANTI: Will the Minister of POWER be pleased to state:

(a) the number of old polluting coal-based power plants that have been identified to be shut down as mentioned by the Finance Minister during the budget speech on 1st February 2020, the details thereof along with dates of shut down as decided;

(b) the number of coal-based power plants that have been given environmental clearance during the last five years by MoEF&CC, along with the list with location and developer information; and

(c) the number of coal-based power plants that have been shut down during the last five years due to environmental issues in the country, the details thereof along with the reason for the shut downs?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI RAJ KUMAR SINGH): (a) and (c) Generation is a delicensed activity; and the decision to retire power generating units is taken by the concerned utilities themselves based on techno-commercial considerations. As per report received from the Central Electricity Authority (CEA), 102 units of 43 Thermal Power Stations /Plants with capacity of 10,002.88 MW have been retired from April 2014 till date (List is given in Statement-I (*See* below) based

on techno-commercial reasons such as age, efficiency and compliance with emission norms etc. by the Thermal Power Plants. CEA have formed a committee to examine the status of the remaining units of old Thermal Power Stations/Plants (as per Budget speech dated 01.02.2020) which might not be able to meet the emission norms set by Ministry of Environment, Forest and Climate Change (MoEF&CC) and Central Pollution Control Board (CPCB). As per the preliminary report, 39 units of 5489 MW which have not submitted their plan to install Flue Gas Desulphurisation (FGD) might have to be considered for retirement if they do not take corrective actions to meet emission norms as stipulated by MoEF&CC and CPCB.

(b) 39 coal-based power plants that have been given environmental clearance during the last five years, as reported by MoEF&CC. The details are given in Statement-II.

Statement-I

List of coal-based units retired from April, 2014 onwards

(As on 12.03.2020)

Sl. No.	Name of Station/ Plant	State	No. of Units	Unit No.	Retired Capacity (MW)	Retired on
1	2	3	4	5	6	7
1	Satpura Thermal Power Station	Madhya Pradesh	1	1	62.50	July, 2014
2	Amarkantak TPS	Madhya Pradesh	2	3,4	240.00	04.03.2016
3	New Cossipore TPS	West Bengal	4	1,2,3,4	160.00	04.04.2016
4	Panipat TPS	Haryana	4	1,2,3,4	440.00	12.04.2016
5	Koradi TPS	Maharashtra	4	1,2,3,4	420.00	02.08.2016
6	Chandrapur(Mah) STPS	Maharashtra	2	1,2	420.00	21.10.2016
7	Parli TPS	Maharashtra	1	3	210.00	21.10.2016
8	Durgapur TPS	West Bengal	1	3	130.00	21.10.2016
9	Patratu TPS	Jharkhand	5	1,2,3,5,8	315.00	21.12.2016
10	Santalidih TPS	West Bengal	4	1,2,3,4	480.00	21.12.2016
11	Gandhi Nagar TPS	Gujarat	2	1,2	240.00	12.01.2017
12	Ennore TPS	Tamil Nadu	1	5	110.00	12.01.2017

1	2	3	4	5	6	7
13	Chandrapura(DVC) TPS	Jharkhand	1	1	130.00	17.01.2017
14	Trombay TPS	Maharashtra	1	4	150.00	08.02.2017
15	DPL TPS	West Bengal	3	3,4,5	220.00	20.02.2017
16	Ennore TPS	Tamil Nadu	4	1,2,3,4	340.00	31.03.2017
17	Koradi TPS	Maharashtra	1	5	200.00	24.04.2017
18	Chandrapur(Assam)	Assam	2	1,2	60.00	18.08.2017
19	Ukai TPS	Gujarat	2	1,2	240.00	18.08.2017
20	Sikka REP. TPS	Gujarat	2	1,2	240.00	18.08.2017
21	Harduaganj TPS	Uttar Pradesh	1	5	60.00	18.08.2017
22	Obra TPS	Uttar Pradesh	2	1,2	90.00	18.08.2017
23	Bhusawal TPS	Maharashtra	1	2	210.00	31.08.2017
24	Chinakuri TPS	West Bengal	3	1,2,3	30.00	31.08.2017
25	Dishergarh TPS	West Bengal	4	1,3,4,5	18.00	31.08.2017
26	Seebpore TPS	West Bengal	4	1,2,3,4	8.38	31.08.2017
27	Chandrapura(DVC) TPS	Jharkhand	1	2	130.00	04.09.2017
28	Bokaro 'B' TPS	Jharkhand	2	1,2	420.00	04.09.2017
29	Patratu TPS	Jharkhand	5	4,6,7,9&10	455.00	23.11.2017
30	Panki TPS	Uttar Pradesh	2	3,4	210.00	16.03.2018
31	Obra TPS	Uttar Pradesh	1	8	94.00	03.04.2018
32	Bandel TPS	West Bengal	2	3,4	120.00	20.04.2018
33	Bhatinda TPS	Punjab	4	1,2,3,4	440.00	31.08.2018
34	Ropar TPS	Punjab	2	1,2	420.00	31.08.2018
35	Badarpur TPS	Delhi	5	1,2,3,4,5	705.00	30.10.2018
36	Kothagudem TPS	Telangana	3	3,6,8	300.00	19.03.2019
37	Korba-II	Chhattisgarh	4	1,2,3,4	200.00	13.08.2019
38	Trombay TPS	Maharashtra	1	6	500.00	12.09.2019
39	Sabarmati (C Station)	Gujarat	2	15,16	60.00	13.09.2019
40	Rajghat TPS	Delhi	2	1,2	135.00	23.09.2019
41	Parli TPS	Maharashtra	2	4,5	420.00	23.01.2020
42	D.P.L. TPS	West Bengal	1	6	110.00	28.01.2020
43	Kothagudem TPS	Telangana	1	2	60.00	03.03.2020
TOTAL				102	10002.88	

Statement-II*List of Plants given Environment Clearance from 2015
Year 2015*

Sl. No.	Name of the Project	Date of Issue
1	2	3
1.	Dr. Narla Tata Rao Thermal Power Station (Dr. NTTPS) Stage - V (1x800 MW) at Ibrahimpatnam (M), Krishna, Andhra Pradesh Company: M/s Andhra Pradesh Power Generation Corporation Ltd. (APGENCO)	26.06.2015
2.	Expansion by addition of 1x800 MW capacity (Stage II) to 2x800 MW (Stage-I) for imported coal-based Sri Damodaram Sanjeevaiah Thermal Power Station at Village Nelaturu, Tehsil Muttukuru, Sri PottiSriramulu Nellore District in Andhra Pradesh by M/s. Andhra Pradesh Power Development Company Limited (APPDCL).	02.07.2015
3.	Installation of 20 MW Captive Power Plant for recycle paper production at Survey No. 56/1, Village Morai, Tehsil Pardi, District Valsad, Gujarat Company: M/s. MWV India Paperboard Packaging Pvt. Ltd. (formerly Ruby Macons Ltd.)	22.06.2015
4.	Imported coal based Supercritical Thermal Power Plant of 3960 (6x660) MW at Village Layja Mota, Mandvi Taluk, Kutch District, Gujarat Company: M/s. Nana Layja Power Co. Ltd.	26.6.2015
5.	Expansion of existing (2x150) 300 MW TPP by installation of (165+20) 185 MW Imported coal-based TPP at Meramandali, Distt. Dhenkanal in Odisha Company: M/s. Bhushan Energy Ltd.	12.02.2015
6.	Expansion of existing 155 MW CPP by installation of (175+3x27) 256 MW Imported Coal based Thermal Power Plant at Meramandali, Distt. Dhenkanal, in Odisha Company: M/s. Bhushan Steel Ltd.	12.02.2015
7.	Chhabra Second unit of Supercritical Coal-based Thermal Power Plant Stage - II (1x660 MW - Unit-6) at Village Chowki-Motipura at Chhabra, in Baran Distt., Rajasthan Company: M/s. Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	02.02.2015
8.	2x660 MW Khargone Super Critical Thermal Power Project at Village Selda and Dalchi, Khargone District, Madhya Pradesh by M/s. NTPC Ltd.	31.03.2015

1	2	3
9.	Expansion of Supercritical Coal-based Kothagudem Thermal Power Station by Addition of 800 MW as Stage-VII at Village & Tehsil Paloncha, Distt. Khammam, Telangana by M/s. Telangana State Power Generation Corporation Ltd. (TSGENCO).	16.07.2015
10.	Expansion by addition of 6 MW Turbine to existing 60 MW CPP at Villages Govindapuram & Aminabad, Taluk & Distt. Ariyalur, Tamil Nadu by M/s. The Ramco Cements Ltd.	07.08.2015
11.	Expansion by addition of 1x660 MW coal based Super Critical Unit at Harduaganj TPP at Kasimpur, Aligarh District, Uttar Pradesh Company: M/s Uttar Pradesh Rajya Vidyut Nigam Ltd.	12.05.2015
12.	Environmental Clearance to Super Critical Imported Coal-based Ghatampur Thermal Power Station of 1980 (3x660) MW Capacity at Tehsil Ghatampur, District Kanpur Nagar, Uttar Pradesh Company: M/s. Neyveli Uttar Pradesh Power Ltd.	17.06.2015
13.	Expansion/Modernization by installation of 50 TPH FBC Boiler and 8 MW Steam Turbine Captive Power Plant at Village Mohammad Ganj, Thakurdwara Taluk, Moradabad District in Uttar Pradesh Company: M/s. Pasupati Acrylon Ltd.	22.06.2015
14.	Durgapur Captive Power Project-III (2x20 MW) at Durgapur, District Burdwan, West Bengal Company: M/s. NTPC-SAIL Power Company Private Ltd.	29.09.2015

Year 2016

Sl. No.	Name of the Project	Date of Issue
1	2	3
15.	2,000 MW Gas-based Combined Cycle Power Plant (CCPP) at Village Godhra, Kutch Distt, Gujarat by M/s. Nana Layja Power Co. Ltd.	29.09.2016
16.	4,000 MW (6x660 MW) Coal-based Ultra Mega Power Project (UMPP) near Bhedabahal Village, Sundergarh Tehsil, District Sundergarh, Odisha by M/s. Odisha Integrated Power Ltd.	17.10.2016
17.	Expansion by addition of 1x800 MW (Stage-III), North Chennai TPP at Villages Ennore & Puzhdivakkam, Taluk Ponneri, District Thiruvallur, Tamil Nadu by M/s. Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO).	20.01.2016
18.	2x660 MW Supercritical coal based Thermal Power Plant at Villages Ottapidaram & Sillanatham, in Ottapidaram Taluk,	31.03.2016

1	2	3
	in Thoothukkudi Distt., Tamil Nadu. Company: M/s. KU Thermal Power Pvt. Ltd.	
19.	2x800 MW Uppur Supercritical Thermal Power Plant at Villages Uppur, Valamavoor & Thiruppalaikudi, Tehsil Tiruvadanai, District Ramanatahapuram, Tamil Nadu Company: M/s. Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO).	18.05.2016
20.	Addition of 6 MW Turbine to existing 2x18 MW Captive Power Plant (CPP) of Alathiyur Cement Plant at Village Alathiyur, Taluk Sendurai, District Ariyalur, Tamil Nadu Company: M/s. The Ramco Cements Ltd.	04.07.2016
21.	Expansion of Ramagundam STPP by addition of 2x800 MW (Stage-IV, Telangana STPP, Phase-I) at Village & Mandal Ramagundam, District Karimnagar, Telangana by M/s. NTPC Ltd.	20.01.2016
22.	Expansion of Obra TPP by addition of 2x660 MW at Obra, Tehsil Robertsganj, District Sonbhadra, Uttar Pradesh by M/s. Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL).	21.06.2016
22.	2x660 MW Coal-based Thermal Power Project near village Malwan, District Etah, Uttar Pradesh by M/s. Jawaharpur Vidyut Utpadan Nigam Ltd. (JVUNL).	26.10.2016

Year 2017

Sl. No.	Name of the Project/ Locations/ Developers	Date of Issue of EC
1	2	3
23.	2x660 MW Coal-based Supercritical Buxar Thermal Power Project (BTPP) at near Village Chausa, District Buxar, Bihar by M/s. SJVN Thermal Pvt. Ltd.	28.2.2017
24.	4x270 MW (1080 MW) Coal-based Bhadradi Thermal Power Station (BTPS) at Villages Ramanujavaram, Eddulabayyaram & Seetharampuram, Mandals Manuguru & Pinapaka, District Bhadradi Khothagudem (Erstwhile Khammam dist.), Telangana by M/s. Telangana State Power Generation Co. Ltd.	15.3.2017
25.	5x800 Supercritical Coal-based Thermal Power Project at Veerlapalem Village, Damaracherla Mandal, District Nalgonda, Telangana by M/s. Telangana State Power Generation Co. Ltd.	29.6.2017
26.	2x660 Coal-based Khurja Super Thermal Power Project at Villages Dushhara Kherli, Jahanpur, Naiphal and Rukanpur in	30.3.2017

1	2	3
	Khurja Taluk, Bulandshahar Distt., Uttar Pradesh by M/s. THDC India Ltd..	
27.	1x660 MW Coal-based Supercritical Panki Extension Power Project at Panki, Distt. Kanpur, Uttar Pradesh M/s. Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd.	29.6.2017
28.	Expansion by addition of 2x800 MW (Phase-II) coal-based TPP at Padubidri Industrial Area in Villages Yellure and Santhru, Tehsil & District Udupi, Karnataka by M/s. Udupi Power Co. Ltd.	01.08.2107
29.	1,600 (2x800) MW Godda Thermal Power Project at Villages Motia, Gangta & Gaighat, Tehsils Godda & Poraiyahaat, District Godda, Jharkhand by M/s Adani Power (Jharkhand) Ltd.	31.8.2017
30.	Patratu Super Thermal Power Project, Phase-I (3x800 MW) at Patratu, District Ramgarh, Jharkhand by M/s. Patratu Vidyut Utpadan Nigam Ltd.	07.11.2017

Year 2018

Sl. No.	Name of the Project	Date of Issue
31.	Proposed 200 MW (1x135 MW and 1x65 MW) Coal-based Thermal Power Project at Pedaveedu Village, Mattampalli Mandal, Nalgonda District, Telangana State by the M/s. M.G Power Projects Limited.	24.04.2018
32.	Proposed 25 MW Municipal Solid Waste-based Thermal Power Plant (Waste to Energy) at Tehkhand, Okhla, South East Delhi, New Delhi by M/s. Tehkhand Waste to Electricity Project Ltd.	26.7.2018
33.	2x660 MW (Stage-III, Expansion) Coal based Ultra Supercritical Talcher Thermal Power Project, Near Talcher Town, Tehsil Talcher Sadar, Angul District, Odisha by M/s. NTPC Ltd.	12.9.2018
34.	Proposed expansion of 2x660 MW Supercritical Lignite-based Thermal Power Project at Villges Mudanai, Kunakurichi, Uthangal, Tehsil Vridhachalam, District Cuddalore, Tamil Nadu by M/s. NLC India Ltd.	29.10.2018

Year 2019

Sl. No.	Name of the Project	Date of Issue
35.	Proposed 21 MW Municipal Solid Waste-based Power Plant at Villages Kolua Khurd, Adampur Chhavani, Phanda Block, Huzur Tehsil, Bhopal District by M/s. Bhopal Municipal Solid Waste Pvt. Ltd.	11.01.2019

Sl. No.	Name of the Project	Date of Issue
36.	Modernization & Expansion in Power Plant from 125.3 MW to 141 MW (15.7 MW) at Tehsil - Ladpura, District - Kota, Rajasthan by M/s. DCM Ltd.	03.01.2019
37.	1x660 MW Ennore Supercritical Thermal Power Project (Expansion), Village Ernavur, District Ennore, Tamil Nadu by M/s. Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO).	12.12.2019
38.	3x800 MW Coal-based Supercritical Thermal Power Project (Greenfield) at Village Annupurna Khamar, Taluk Kamakhyanagar, Dhenkanal District, Odisha by M/s. Odisha Thermal Power Co. Ltd.	10.12.2019
39.	1x800 MW Supercritical Coal-based Singareni Thermal Power Plant (Expansion from 2x600 MW to 2000 MW) at Pegadapalli Village, Jaipur Mandal, Mancherial District, Telangana by M/s Singareni Collieries Company Ltd.	18.12.2019

National e-mobility programme

2702. SHRI SANJAY SETH: Will the Minister of POWER be pleased to state:

(a) whether Government is implementing National e-mobility programme and if so, the achievements made so far;

(b) whether Energy Efficiency Services Limited has signed a Memorandum of Understanding with Bharat Heavy Electricals Limited to set up a network of Public Charging Infrastructure for electric mobility at various highways across the country; and

(c) if so, the details thereof and the terms and condition of the MoU?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI RAJ KUMAR SINGH): (a) As a part of the National Electric Mobility Mission Plan 2020 (NEMMP), Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises, Government of India have formulated a Scheme namely Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME India) Scheme. The Phase-I of this Scheme was initially launched for a period of 2 years, commencing from 1st April, 2015, which was subsequently extended from time to time and the last extension was allowed up to 31st March, 2019. The achievements made are as under:-

In the first phase of the scheme, about 2.8 lakh hybrid and electric vehicles were supported by way of demand incentive at a cost of about ₹359 crore, 425 electric and