instant. During the current year the demand for electricity has varied from 118.6 GW to 174.3 GW where as the installed generation capacity is around 372 GW. Power plants are scheduled to run to meet the power demand. In doing so, the generating units which are cheaper are scheduled first and the costlier ones are put on reserves. In case of any forced outage of a unit, the power plants on reserve shutdown, based on the merit order, are put into operation to meet the power requirement. Thus, on a given day, some units of the power plants would not be generating.

As per the information available in Central Electricity Authority (CEA) collected from the various generating stations, the number of generating units/projects which did not on 31.8.2020 are given below; along with the reasons:-

(i) Not run because of malfunctions of various types: 84 units

(ii) Shut down for Planned Maintenance: 12 units

(iii) Non availability of Power Purchase Agreement (PPA): 20 units

(iv) Power cost not competitive because price of imported gas is high and less availability of domestically produced gas : 39 units

(v) Coal related issues including no linkage of coal: 15 units

(vi) Not in the merit order on that day : 153 units

(vii) Order of National Ganga Basin Authority: 1

(viii) To be scrapped : 2 units

Power plants which do not have PPA, can sell their power in the power exchanges. Coal can also be obtained from e-auction but generation would depend upon their cost per unit.

Ongoing power projects in Kerala

305. SHRI M.V. SHREYAMS KUMAR: 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 Kerala;

(b) the funds sanctioned, allocated and utilised under these projects during the last two years across the country;

(c) whether some of the projects are facing huge cost/time overrun, if so, the details thereof and the reasons therefor; and

(d) the action taken by Government for timely completion of these projects in future?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI RAJ KUMAR SINGH): (a) and (b) The details relating to thermal and hydel power projects under construction in the country are given at Statement-I and Statement-II respectively *(See* below).

As per Electricity Act 2003, generation is a de-licensed activity. Investment in setting up of power projects is made by the developers concerned. Therefore, no funds are sanctioned/allocated by the Government of India in this regard, except contribution in the form of 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 power projects under construction; generation of power starts only after completion and commissioning of the power projects.

(c) and (d) The major reasons for time overrun in respect of the thermal and hydel projects are related to availability of materials and equipment, land issues and inter-state matters. The cost overrun arises from increase in interest rate, inflation and change in scope of the project.

In order to ensure timely completion of the projects, Government of India has put in place monitoring mechanism at various levels:-

(i) Ministry of Power/Central Electricity Authority (CEA) monitors the progress of power projects under construction through frequent site visits and interaction with the developers and equipment suppliers. CEA holds review meetings periodically with the developers and other stakeholders to 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 the CPSU's and MoP and the same are monitored during the quarterly performance review meeting of CPSUs.

(iii) Ministry of Power (MoP) also holds meetings to identify issues and bottlenecks and facilitates faster resolution of inter-ministerial and other outstanding issues.

(iv) Project Monitoring Group (PMG) under Department for Promotion of Industry and Internal, Trade (DPIIT) resolves issues/bottlenecks faced by developers by taking them up with Central/State Government authorities.

(v) Important power projects are also monitored through PRAGATI portal of PMO.

Statement-I

Details of under construction Thermal Power Projects in the country

Sl. No.	Project Name	Unit No.	Capacity (MW)
	Central Sector		
1	Barh STPP-I	U-1	660
		U-2	660
		U-3	660
2	Nabi Nagar TPP	U-4	250
3	New Nabi Nagar TPP	U-2	660
		U-3	660
4	North Karanpura STPP	U-1	660
		U-2	660
		U-3	660
5	Gadarwara STPP	U-2	800
6	Darlipalli STPP	U-2	800
7	Neyveli New TPP	U-2	500
8	Telangana STPP St- I	U-1	800
		U-2	800
9	Meja STPP	U-2	660
10	Tanda TPP St II	U-6	660

Sl. No.	Project Name	Unit No.	Capacity (MW)
11	Ghatampur TPP	U-1	660
		U-2	660
		U-3	660
12	Barsingar TPP ext	U-1	250
13	Bithnok TPP	U-1	250
14	Patratu STPP	U-1	800
		U-2	800
		U-3	800
15	Rourkela PP-II Expansion	U-1	250
16	Khurja SCTPP	U-1	660
		U-2	660
17	Buxar TPP	U-1	660
		U-2	660
			18320
	State Sector		
1	Dr.Narla Tata Rao TPS St-V	U-1	800
2	Sri Damodaran Sanjeevaiah TPP St-II	U-1	800
3	Suratgarh SCTPP	U-8	660
4	Bhadradri TPP	U-2	270
		U-3	270
		U-4	270
5	Ennore exp. SCTPP	U-1	660
6	Ennore SCTPP	U-1	660
		U-2	660
7	North Chennai TPP St-III	U-1	800
8	Uppur Super Critical TPP	U-1	800
		U-2	800

Sl. No.	Project Name	Unit No.	Capacity (MW)
9	Harduaganj TPS Exp-II	U-1	660
10	Yelahanka CCPP	GT+ST	370
11	Jawaharpur STPP	U-1	660
		U-2	660
12	Obra-C STPP	U-1	660
		U-2	660
13	Yadadri TPS	U-1	800
		U-2	800
		U-3	800
		U-4	800
		U-5	800
14	Panki TPS Extn.	U-1	660
15	Udangudi STPP Stage I	U-1	660
		U-2	660
16	Bhusawal TPS	U-6	660
	Total State Sector		17760
	Private Sector		
1	Bhavanapadu TPP Ph-I	U-1	660
		U-2	660
2	Thamminapatnam TPP stage -II	U-3	350
		U-4	350
3	Akaltara TPP	U-4	600
		U-5	600
		U-6	600
4	Siriya TPP	U-1	660
		U-2	660
		U-3	660
		U-4	660

Sl. No.	Project Name	Unit No.	Capacity (MW)
5	Binjkote TPP	U-3	300
		U-4	300
6	Lanco Amarkantak TPP-II	U-3	660
		U-4	660
7	Singhitarai TPP	U-1	600
		U-2	600
8	Salora TPP	U-2	135
9	Deveri (Visa) TPP	U-1	600
10	Matrishri Usha TPP Ph-I	U-1	270
		U-2	270
11	Matrishri Usha TPP Ph-II	U-3	270
		U-4	270
12	Tori TPP Ph-I	U-1	600
		U-2	600
13	Tori TPP Ph-II	U-3	600
14	Amravati TPP Ph-II	U-1	270
		U-2	270
		U-3	270
		U-4	270
		U-5	270
15	Lanco Vidarbha TPP	U-1	660
		U-2	660
16	Nasik TPP Ph-II	U-1	270
		U-2	270
		U-3	270
		U-4	270
		U-5	270

Sl. No.	Project Name	Unit No.	Capacity (MW)
17	Bijora Ghanmukh TPP	U-1	300
		U-2	300
18	Shirpur TPP	U-2	150
19	Gorgi TPP	U-1	660
20	Ind Barath TPP	U-2	350
21	KVK Nilanchal TPP	U-1	350
		U-2	350
		U-3	350
22	Lanco Babandh TPP	U-1	660
		U-2	660
23	Malibrahmani TPP	U-1	525
		U-2	525
24	Tuticorin TPP	U-1	660
25	Tuticorin TPP St-IV	U-1	525
26	Hiranmaye Energy Ltd	U-3	150
	Total Private Sector		23730
	GRAND TOTAL		59810

Statement-II

Details of under construction Hydro Electric Projects (above 25 MW)

(As on 31.08.2020)

Sl. No.	Project Name	State/UT	Unit No.	Capacity (MW)
1	2	3	4	5
	Central Sector			
1	Tapovan Vishnughad	Uttarakhand	1	130
			2	130
			3	130
			4	130

1	2	3	4	5
2	Lata Tapovan	Uttarakhand	1	57
			2	57
			3	57
3	Rammam-III	West Bengal	1	40
			2	40
			3	40
4	Kameng	Central	3	150
			4	150
5	Tehri PSS	Uttarakhand	1	250
			2	250
			3	250
			4	250
6	Parbati - II	Himachal Pradesh	1	200
			2	200
			3	200
			4	200
7	Subansiri Lower	Arunachal Pradesh/Assam	1	250
			2	250
			3	250
			4	250
			5	250
			6	250
			7	250
			8	250
8	Teesta Stage VI	Sikkim	1	125
			2	125
			3	125

1	2	3	4	5
			4	125
			1	125
			2	125
			3	125
			4	125
9	Vishnugad Pipalkoti	Uttarakhand	1	111
			2	111
			3	111
			4	111
10	Pakal Dul	Jammu and Kashmir	1	250
			2	250
			3	250
			4	250
11	Ratle	Jammu and Kashmir	1	205
			2	205
			3	205
			4	205
			5	30
12	Naitwar Mori	Uttarakhand	1	30
			2	30
13	Kiru	Jammu and Kashmir	1	156
			2	156
			3	156
			4	156
	State Sector			
14	Parnai	Jammu and Kashmir	1	12.5
			2	12.5
			3	12.5

1	2	3	4	5
15	Lower Kalnai	Jammu and Kashmir	1	24
			2	24
16	Uhl-III	Himachal Pradesh	1	33.33
			2	33.33
			3	33.33
17	Sawra Kuddu	Himachal Pradesh	1	37
			2	37
			3	37
18	Shongtom Karcham	Himachal Pradesh	1	150
			2	150
			3	150
19	Pallivasal	Kerala	1	30
			2	30
20	Thottiyar	Kerala	1	30
			2	10
21	Shahpurkandi	Punjab	1	33
			2	33
			3	33
			4	33
			5	33
			6	33
			7	8
22	Koyna Left Bank PSS	Maharashtra	1	40
			2	40
23	Vyasi	Uttarakhand	1	60
			2	60

1	2	3	4	5
24	Polavaram	Andhra Pradesh	1	80
			2	80
			3	80
			4	80
			5	80
			6	80
			7	80
			8	80
			9	80
			10	80
			11	80
			12	80
25	Kundah PSP (Phase-I, Phase-II & Phase-III)	Tamil Nadu	1	125
			2	125
			3	125
			4	125
	Private Sector			
26	Tidong-I	Himachal Pradesh	1	50
			2	50
			1	50
			2	50
27	Tangnu Romai-I	Himachal Pradesh	1	22
			2	22
28	Sorang	Himachal Pradesh	1	50
			2	50
29	Singoli Bhatwari	Uttarakhand	1	33
			2	33
			3	33

1	2	3	4	5
30	Phata Byung	Uttarakhand	1	38
			2	38
31	Maheshwar	Madhya Pradesh	1	40
			2	40
			3	40
			4	40
			5	40
			6	40
			7	40
			8	40
			9	40
			10	40
32	Rangit-IV HE Project	Sikkim	1	40
			2	40
			3	40
33	Bhasmey	Sikkim	1	25.5
			2	25.5
34	Rongnichu	Sikkim	1	48
			2	48
35	Bajoli Holi	H.P.	1	60
			2	60
			3	60
36	Rangit-II	Sikkim	1	33
			2	33
37	Panan	Sikkim	1	75
			2	75
			3	75

1	2	3	4	5
			4	75
38	Kutehr	Himachal Pradesh	1	80
			2	80
			3	80

Total installed capacity of power

306. DR. VINAY P. SAHASRABUDDHE: Will the Minister of POWER be pleased to state:

(a) the total installed capacity of power in the last five years, the details thereof, Centre-wise and State-wise;

(b) the contribution of private and public sector in the total installed capacity, the details thereof; and

(c) the share of Renewable Energy in the total installed capacity in the last five years, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI RAJ KUMAR SINGH): (a) The State-wise and Sector-wise breakup of the installed power generation capacity at the end of the last five years and as on 31.08.2020 is given at Statement-I (*See* below).

(b) The contribution of private and public sector in the total installed power generation capacity is given at Statement-II (*See* below).

(c) The share of renewable energy in the total installed capacity at the end of the last five years and as on 31.08.2020 is given at Statement-III.