

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO: 3386**  
TO BE ANSWERED ON 12.07.2019

**Environmental Guidelines for Thermal Power Plants**

3386. SHRI L.S. TEJASVI SURYA:

Will the MINISTER OF ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- a) whether the Environmental guidelines for Thermal Power Plants, 1987 does not consider the aspect of water stress;
- b) if so, whether the Government has ascertained the loss caused by water scarcity/drought to the coal based thermal power plants across the country and the consequent environmental degradation;
- c) if so, the details thereof;
- d) whether a number of upcoming, or almost ready-to-commission plants are also likely to be affected by water shortages;
- e) if so, the details thereof; and
- f) whether there is any proposal to amend the guidelines and prohibit the establishment of such plants in water scarce areas and if so, the details thereof?

**ANSWER**

**MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**  
**(SHRI BABUL SUPRIYO)**

- (a) Presently, the Environmental Clearance process for Thermal Power Projects is governed by the Environmental Impact Assessment (EIA) Notification, 2006 and its amendments. While prescribing the Terms of Reference for conducting EIA studies for Thermal Power Plants, studies related to water source sustainability, details of competing downstream users and impacts of withdrawal on availability of water to all other users are stipulated. During the final appraisal, source sustainability study is examined thoroughly and the Environmental Clearance is accorded only after confirming the availability of sufficient water without compromising the needs of other competent users including e-flow and after obtaining approval for firm allocation of water to Power Plant from the State Water Resources Department.

(b)&(c) Operation of the following power plants have been affected due to shortage of raw water during FY 2018-19 and FY 2018-19 (till June).

Details of Outage due to Raw Water Shortage in FY 2018-19					
Sl No.	State	Station	Unit No	Capacity (MW)	Duration (days)
1	Rajasthan	Chhabra TPP	2	250	5.38
2	Maharashtra	ChandrapurSTPS	3	210	149.99
		Chandrapur STPS	4	210	125.06
		Chandrapur STPS	5	500	1.31
		Chandrapur STPS	6	500	7.77
		Chandrapur STPS	7	500	5.16
3	Karnataka	RaichurTPS	2	210	44.08
		Raichur TPS	8	250	25.77
4	Tamil Nadu	KovikalpalCCPP	2	38.23	5.42
Total Capacity affected in MW				2668.23	
No capacity has been affected due to water shortage till June in FY 2019-20					

(d)& (e) The following power projects are under consideration by the Expert Appraisal Committee for grant of Environmental Clearance which include the appraisal of water sustainability study.

Sl.No.	Project Details	Water requirement and source
1.	1x660 MW Sagardighi Thermal Power Project in District Murshidabad, West Bengal by M/s The West Bengal Power Development Corporation Ltd.	46,536 m <sup>3</sup> /day from Bhagirathi River
2.	1x800 MW Singareni Thermal Power Plant in District Mancherla, Telangana by M/s Singareni Collieries Company Ltd.	48,000 m <sup>3</sup> /day from Parana River
3.	12 MW Cogeneration Power Project in District Belagavi, Karnataka by M/s. RoquetteRiddhi Siddhi Pvt. Ltd.	720 m <sup>3</sup> /day from Ghataprabha River
4.	726.6 MW Gas based Power Project in Gomti District, Tripura by M/s ONGC Tripura Power Company Ltd.	20,400 m <sup>3</sup> /day from Gumti River

(f) The Ministry vide Notifications dated 7.12.2015 and 28.6.2018 mandated all existing Thermal Power Plants (except plants using sea water) to install Cooling Towers (CT) and achieve specific water consumption upto maximum of 3.5 m<sup>3</sup>/MWh within a period of two years. Further, new power plants (except plants using sea water) installed after 1<sup>st</sup> January, 2017 are mandated to achieve specific water consumption upto maximum of 3.0 m<sup>3</sup>/MWh and to achieve zero waste water discharge. Besides, several water conservation measures in Power Plants such as Ash Water Recirculation System, Dry Fly ash handling system, High Concentration Slurry Disposal System, stipulation to achieve higher Cycle of Concentration in cooling towers, recommending air cooled condensers in water scarce region, etc. are stipulated for reducing water consumption.

\*\*\*