# GOVERNMENT OF INDIA MINISTRY OF POWER

# LOK SABHA STARRED QUESTION NO.164 TO BE ANSWERED ON 05.05.2016

### SHORTAGE OF WATER IN THERMAL PLANTS

# \*164. SHRIMATI SUPRIYA SULE: SHRI SATAV RAJEEV:

Will the Minister of POWER be pleased to state:

(a) whether thermal power plants are facing difficulties due to nonavailability of water particularly in coal bearing States, if so, the details thereof;

(b) the number of thermal power plants closed down due to non-availability of water during the last two years, State/UT-wise;

(c) whether the Government has asked all the existing power plants to reduce their water usage and also the proposed/future power plants to use less water as compared to the existing power plants, if so, the details thereof; and

(d) the other corrective measures being taken/proposed to be taken to overcome this situation?

### ANSWER

## THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, COAL AND NEW & RENEWABLE ENERGY

(SHRI PIYUSH GOYAL)

(a) to (d) : A Statement is laid on the Table of the House.

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. 164 TO BE ANSWERED IN THE LOK SABHA ON 05.05.2016 REGARDING SHORTAGE OF WATER IN THERMAL PLANTS.

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(a) & (b) : Maharashtra State Power Generation Co. Ltd. (MAHAGENCO) has informed that all units at Parli Thermal Power Station (1130 MW), in district Beed of Maharashtra, are under outage due to water shortage since June-July 2015. The details of units under outage are as under :

- 1. Unit No. 03 (210 MW) 27.06.2015
- 2. Unit No. 04 (210 MW) 05.07.2015
- 3. Unit No. 05 (210 MW) 06.07.2015
- 4. Unit No. 06 (250 MW) 25.06.2015
- 5. Unit No. 07 (250 MW) 08.07.2015

Details of other thermal power generating units which were temporarily under shut down due to non availability of water are given in the Annexure.

(c): Yes, Madam. Limits for water consumption for coal based plants have been notified on 07.12.2015, vide S O 3305 (E) as detailed below:

- i. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption max. 4m<sup>3</sup>/MWh within 2 years period from the date of notification.
- ii. All existing CT-based plants shall reduce specific water consumption upto maximum of 3.5m<sup>3</sup>/MWh within 2 years period from the date of notification.
- iii. New plants to be installed after January 01, 2017 shall meet specific water consumption maximum of 2.5m<sup>3</sup>/MWh and achieve zero liquid discharge.

(d): Following measures have also been adopted to overcome shortage of water in Thermal Power Plants:

- i. Installation of Dry ash handling system.
- ii. Installation of Ash water recirculation system (AWRS).
- iii. Installation of Zero water discharge system.
- iv. Installation of High concentration slurry system (HCSS)
- v. Use of closed cycle cooling water system and high level of cycle of concentration (COC) to recirculate the water in operation for reducing the water requirement.
- vi. Govt. Of India has notified new Tariff policy on 28.01.2016 wherein it is mandated that the thermal power plant(s) including the existing plants located within 50 km radius of sewage treatment plant of Municipality/ local bodies/ similar organisation shall, in the order of their closeness to sewage treatment plant, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as pass through in the tariff.

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#### ANNEXURE

# ANNEXURE REFERRED TO IN PARTS (a) & (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 164 TO BE ANSWERED IN THE LOK SABHA ON 05.05.2016 REGARDING SHORTAGE OF WATER IN THERMAL PLANTS.

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REGION	STATE	SECTOR	ORGANIZATION	STATION	UNIT	CAPACITY	TRIP DATE	SY
		ТҮРЕ			NO	(MW)		
ER	BIHAR	CENTRAL	NTPC Ltd.	BARH II	4	660	11-Jul-15	11
ER	BIHAR	CENTRAL	NTPC Ltd.	BARH II	5	660	4-0ct-15	5-0
ER	WEST BENGAL	CENTRAL	NTPC Ltd.	FARAKKA STPS	1	200	1-Apr-16	6-A
ER	WEST BENGAL	CENTRAL	NTPC Ltd.	FARAKKA STPS	2	200	1-Apr-16	<b>4-</b> A
ER	WEST BENGAL	CENTRAL	NTPC Ltd.	FARAKKA STPS	3	200	1-Apr-16	11-
ER	WEST BENGAL	CENTRAL	NTPC Ltd.	FARAKKA STPS	4	500	15-Feb-16	18-
ER	WEST BENGAL	CENTRAL	NTPC Ltd.	FARAKKA STPS	4	500	1-Apr-16	11-
ER	WEST BENGAL	CENTRAL	NTPC Ltd.	FARAKKA STPS	5	500	1-Apr-16	
SR	KARNATAKA	STATE	KPCL	RAICHUR TPS	1	210	1-Sep-15	2-5
SR	KARNATAKA	STATE	KPCL	RAICHUR TPS	1	210	17-Mar-16	21.
SR	KARNATAKA	STATE	KPCL	RAICHUR TPS	2	210	15-Mar-16	21-
SR	KARNATAKA	STATE	KPCL	RAICHUR TPS	5	210	11-Feb-16	13-
SR	KARNATAKA	STATE	KPCL	RAICHUR TPS	6	210	14-Mar-16	20-
SR	KARNATAKA	STATE	KPCL	RAICHUR TPS	7	210	17-Feb-16	19-
SR	KARNATAKA	STATE	KPCL	RAICHUR TPS	7	210	15-Mar-16	21-
SR	TAMIL NADU	CENTRAL	NTPL	TUTICORIN (JV) TPP	2	500	5-0ct-15	5-0
SR	KARNATAKA	PVT	UPCL	UDUPI TPP	1	600	10-Aug-15	10-
SR	KARNATAKA	PVT	UPCL	UDUPI TPP	2	600	11-Aug-15	27-
SR	KARNATAKA	PVT	UPCL	UDUPI TPP	2	600	19-Apr-16	
SR	ANDHRA PRADESH	PVT	HNPC	VIZAG TPP	1	520	2-Feb-16	2-F
WR	MAHARASHTRA	РVТ	EEL	EMCO WARORA	1	300	20-May-15	26-

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WR	MAHARASHTRA	PVT	EEL	EMCO WARORA TPS	1	300	15-Apr-16	
WR	MAHARASHTRA	PVT	EEL	EMCO WARORA TPS	2	300	19-Apr-16	
WR	CHHATTISGARH	PVT	ACB	KASAIPALLI TPP	2	135	21-Aug-15	23-
WR	GUJARAT	PVT	EPGL	SALAYA TPP	2	600	30-Mar-15	7-A
WR	GUJARAT	PVT	EPGL	SALAYA TPP	2	600	9-Apr-15	9-N
WR	GUJARAT	PVT	EPGL	SALAYA TPP	2	600	12-Jul-15	24-
WR	GUJARAT	PVT	EPGL	SALAYA TPP	2	600	1-Sep-15	14-
WR	MADHYA PRADESH	PVT	SPL	SASAN UMTPP	3	660	26-Jul-15	27-
WR	GUJARAT	STATE	GSECL	SIKKA REP. TPS	3	250	27-Oct-15	31-

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