

Emission level from power projects

1673. SHRI N.K. SINGH: Will the Minister of POWER be pleased to state:

- (a) whether Government is aware that Indian companies show a lower revenue earning per unit of carbon emitted due to subsidies which distorts their emission intensity profiles and lowers their position in the global green index;
- (b) whether this is despite the fact that India's largest power producer had reduced its emission intensity by over 21 per cent during the last three years;
- (c) if so, the steps Government proposes to rectify the same; and
- (d) if not, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI K.C. VENUGOPAL): (a) to (d) No, Sir. Emission intensity of NTPC, India's largest power producer, has remained approximately same due to increasing share of coal based generation compared to gas based generation.

The emission intensity ($\text{Kg CO}_2 / \text{Kwfy}(\text{net})$) of grid connected power stations in India has reduced from 0.81 $\text{KgCO}_2 / \text{Kwh}(\text{net})$ in 2008-09 to 0.79 ($\text{Kg CO}_2 / \text{Kwh}(\text{net})$) in the year 2010-11.

The Government of India has taken several initiatives to reduce the emission intensity of the power sector:

- (i) Thrust on Hydro, Nuclear & Renewable Power Capacity Addition.
- (ii) Adoption of more efficient super critical technology for thermal power generation.
- (iii) Renovation, Modernization & Life Extension of old power generating units.
- (iv) Retirement of inefficient thermal generation units.
- (v) Promoting energy efficiency in existing thermal power plants through Perform, Achieve & Trade scheme under National Mission on Enhanced Energy Efficiency (NMEEE).

Action against overdrawal of electricity from grids

1674. SHRI M. VENKAIAH NAIDU: Will the Minister of POWER be pleased to state:

- (a) the details of reasons for the recent massive collapse of grid(s) resulting in complete blackouts in the North, North West and North Eastern India;

(b) whether any action has been initiated against the State/States responsible for overdrawing power from the grid(s) and if so, the details thereof;

(c) the details of penal provisions in dealing with the States who violate grid discipline by overdrawing more power than their allocated quota; and

(d) whether the paltry financial penalties imposed on the erring States have served as efficient deterrents for the States to adhere to the allocated quota of power?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI K.C. VENUGOPAL): (a) The Enquiry Committee constituted to enquire into the grid disturbances has come to the conclusion that no single factor was responsible for the grid disturbances on 30th and 31st July, 2012. The Committee has concluded that the disturbances were caused by a combination of factors, inter-alia, weak inter-regional corridors due to multiple outages, high loading on 400 kV Bina-Gwalior-Agra link, inadequate response by State Load Despatch Centres (SLDCs) to the instructions of Regional Load Despatch Centres (RLDCs) to reduce overdrawal, loss of 400 kV Bina-Gwalior link. On 31st July, 2012, apart from the aforementioned reasons, the system was weakened by outages of transmission lines in the Eastern Region network near the Eastern Region - Western Region interface.

(b) Irrespective of the recent grid collapse, Central Electricity Regulatory Commission (CERC) has been initiating action under Sections 142 and 143 of the Electricity Act, 2003, against the States for violating the grid discipline by overdrawing more power and not adhering to the drawal of power as per their schedule. The details of the cases where action has been initiated by CERC under Sections 142 and 143 for overdrawing power from the grid are given in Statement-I and II respectively (*See below*).

(c) There is provision of penalty for overdrawing power from the grid in violation of the provisions of the IEGC and/or directions issued by RLDCs under Sections 29, 142 & 143 of the Electricity Act, 2003, which includes violation on account of frequency/voltage levels beyond normal operating limit, thermal overloads, *etc.* The details in this regard are given in the Statement-III (*See below*).

(d) The financial penalties provided in Section 142 and 143 and 29 of the Electricity Act, 2003 have not proved to be as effective deterrent for the States to curb overdrawal from the Grid, which is evident from the fact that the States continue to overdraw power from the grid despite issuance of directions/messages by the RLDCs from time to time not to over draw.

Statement-I*Details of proceedings under Section 142 of the Electricity Act, 2003*

Sl. No.	Petition No.	Date of order	Respondents	Purpose	Penalty Amount (in Rs.)	Remarks
1	2	3	4	5	6	7
1.	25/2006	9.5.2006	UPPCL	Over-drawal from the grid	100000	Penalty deposited
2.	145/2006	03.07.2007	APTRANSCO, KTPCL, TNEB, KSEB, Pondicherry, Goa, NLC, NTPC	Ensuring secure of reliable operation of Regional Grid by maintaining the grid frequency above 49.0 HZ	Nil	Proceedings dropped
3.	14/2007	13.02.2007	UPPCL, HVPNL, PDD, J&K, PSEB, RRVPN, DTL, GUVNL, MSEDCL, CSEB, MPSEB, APTRANSCO, KPTCL	Ensuring secure of reliable operation of Regional Grid by maintaining the grid frequency above 49.0 HZ	Nil	Proceedings dropped

1	2	3	4	5	6	7
4.	89/2008	22.09.2008	APTRANSCO, KTPCL, TNEB, KSEB, Pondicherry, Goa, NLC, NTPC	Ensuring secure of reliable operation of Southern Regional Grid by maintaining the grid frequency above 49.0 HZ	400000	Penalty deposited
5.	137/2008	31.12.2008 & 16.03.2009	TNEB	Maintenance of grid discipline-compliance of IEGC	105000	Penalty paid
6.	152/2008	9.01.2009 & 05.02.2009	UPPCL	Maintenance of grid discipline-compliance of IEGC	101000	Penalty paid
7.	52/2009	6.5.2009	Karnataka Power Transmission Corporation Limited	Over-drawal from the grid	1700000	Penalty was subsequently set aside by Appellate Tribunal for Electricity.
8.	59/2009	5.5.2009	Rajasthan Rajya Vidyut Prasaran Nigam Limited	Over-drawal from the grid	500000	Penalty was subsequently set aside by Appellate Tribunal for Electricity.

9.	80/2009	11.5.2009	Transmission Corporation of Andhra Pradesh Limited	Over-drawal from the grid	12200000	Proceedings have been stayed by High Court of Andhra Pradesh.
10.	81/2009	8.5.2009	Tamil Nadu Electricity Board	Over-drawal from the grid	15000000	Proceedings have been stayed by High Court of Madras.
11.	105/2009	21.8.2009	Uttar Pradesh Power Corporation Limited	Over-drawal from the grid	25700000	As per direction of the Hon'ble High Court of Allahabad, UPPCL has deposited' 64,25,000/- (25% of the total amount) on 15.9.2009.
12.	106/2009 and 130/2009	21.8.2009	Tamil Nadu Electricity Board, Chennai	Over-drawal from the grid	43700000	Madras High Court by its order dated 1.9.2009 stayed the proceeding.
13.	137/2009	30.10.2009	Uttar Pradesh Power Corporation Limited	Over-drawal from the grid	46200000	Order challenged before the High Court of Allahabad. (2,31,00,000/- received on 14.09.2010)
14.	246/2009	28.4.2010	Gujarat Electricity Transmission Corporation Limited, Vadodara	Maintenance of Grid Discipline - Non-compliance of statutory provisions	--	Matter under consideration

Written Answers to

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1	2	3	4	5	6	7
15.	107/2010	30.3.2010	Tamil Nadu Electricity Board, Chennai	Over-drawal from the grid	Nil	Proceedings dropped
16.	133/2010	3.2.2010	Tamil Nadu Electricity Board, Chennai	Over-drawal from the Grid in Violation of the Statutory Provisions	Nil	Proceedings dropped
17.	125/MP/2012	Under consideration	Punjab, Haryana, Rajasthan, Delhi, Uttar Pradesh, Himachal Pradesh, Uttarakhand, J & K, Chandigarh and North Central Railway	Over-drawal from the grid	-	Proceedings pending

Statement-II*Proceedings under Section 143 of the Act*

Sl. No.	Petition No.	Date of Order	Respondent	Purpose	Penalty Amount	Remarks
1	2	3	4	5	6	7
1.	Adj Case No. 1/2006	23.10.2006	Uttar Pradesh Power Corporation Limited	Over-drawal from the grid during 1.4.2006 to 30.4.2006 (Non compliance of RLDC directions)	1.0 lakh	Penalty deposited

2.	Adj Case No. 1/2008	31.3.2009	SLDC, UP	Over-drawal from the grid during 1.10.2008 to 26.10.2008 (Non compliance of RLDC directions)	Nil	Proceedings dropped
3.	Adj Case No. 1/2009	8.5.2009	SLDC, Delhi	Over-drawal from the grid during 1,3,14th October of 2008	2.5 lakh	Penalty deposited
4.	Adj Case No. 2/2009	8.5.2009	SLDC, Punjab	Over-drawal from the grid during 1,4,14th October of 2008	3.0 lakh	Penalty deposited
5.	Adj Case No. 3/2009	8.5.2009	SLDC, J&K	Over-drawal from the grid during 3.9.2008 & 1,4, 10th October of 2008	2.0 lakh	Penalty deposited
6.	Adj Case No. 4/2009	8.5.2009	SLDC, Rajasthan	Over-drawal from the grid during 3.10.2008	1.0 lakh	Penalty deposited

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1	2	3	4	5	6	7
7.	Adj Case No. 5/2009	14.10.2009	UPPCL	Over-drawal from the grid during 13.5.2008 to 26.10.2008	1.75 crore	As per direction of the Hon'ble High Court of Allahabad dated 9.11.2009 in writ Petition No. 10174 (MB) of 2009, UPPCL has deposited 60 lakh (1/3 of the total amount) on 24.11.2009
8.	Adj Case No. 6/2009	27.4.2010	TNEB	Over-drawal from the grid during 9.10.2009 to 15.10.2009	24.0 lakh	Penalty deposited
9.	Adj. Case No. 1/2010	21.9.2010	Tamil Nadu Electricity Board, Chennai	Over-drawal from the grid during 24.2.2010 to 24.3.2010	Nil	Proceedings dropped
10.	Adj. Case No. 2/2010	11.10.2011	Uttar Pradesh Power Corporation Limited	Over-drawal from the grid during 1.4.2010 to 9.4.2010	16.0 lakh	Penalty deposited
11.	Adj. Case No. 3/2010	27.9.2011	HVPNL	Over-drawal from the grid during 1.4.2010 to 9.4.2010	8.00 lakh	Penalty deposited

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12.	Adj. Case No. 4/2010	23.09.2011	RRVPNL	Over-drawal from the grid during 1.4.2010 to 9.4.2010	4.00 lakh	Penalty deposited
13.	Adj. Case No. 5/2010	27.9.2011	PTL,Uttarakhand	Over-drawal from the grid during 1.4.2010 to 9.4.2010	9.00 lakh	Penalty deposited
14.	Adj. Case No. 6/2010	8.12.2011	PSEB	Over-drawal from the grid during 1.4.2010 to 9.4.2010	11.00 lakh	Penalty deposited
15.	Adj. Case No. 7/2010	22.09.2011	Power Department Govt, of J&K.	Over-drawal from the grid during 1.4.2010 to 9.4.2010	6.00 lakh	Proceedings initiated against Principal Secretary, Power Development Department, J&K. Principal Secretary, PDD has assured to deposit penalty shortly

Statement-III*Details of Penal provisions in dealing with the States*

Section 29: (1) The Regional Load Despatch Centre may give such directions and exercise such supervision and control as may be required for ensuring stability of grid operations and for achieving the maximum economy and efficiency in the operation of the power system in the region under its control.

- (2) Every licensee, generating company, generating station, sub-station and any other person connected with the operation of the power system shall comply with the direction issued by the Regional Load Despatch Centres under sub-section (1).
- (3) All directions issued by the Regional Load Despatch Centres to any transmission licensee of State transmission lines or any other licensee of the State or generating company (other than those connected to inter-State transmission system) or sub-station in the State shall be issued through the State Load Despatch Centre and the State Load Despatch shall ensure that such directions are duly complied with the licensee or generating company or sub-station.

Section: 142 - Punishment for non-compliance of directions by Appropriate

Commission: In case any complaint is filed before the Appropriate Commission by any person or if that Commission is satisfied that any person has contravened any of the provisions of this Act or the rules or regulations made thereunder, or any direction issued by the Commission, the Appropriate Commission may after giving such person an opportunity of being heard in the matter, by order in writing, direct that, without prejudice to any other penalty to which he may be liable under this Act, such person shall pay, by way of penalty, which shall not exceed one lakh rupees for each contravention and in case of a continuing failure with an additional penalty which may extend to six thousand rupees for every day during which the failure continues after contravention of the first such direction.

Section 143. Power to adjudicate.- (1) For the purpose of adjudging under this Act, the Appropriate Commission shall appoint any of its Members to be an adjudicating officer for holding an inquiry in such manner as may be prescribed by the Appropriate Government, after giving any person concerned a reasonable opportunity of being heard for the purpose of imposing any penalty.

- (2) While holding an inquiry, the adjudicating officer shall have power to summon and enforce the attendance of any person acquainted with the facts and circumstances of the case to give evidence or produce any document which in the opinion of the adjudicating officer, may be useful for or relevant to the subject-matter of the inquiry, and if, on such inquiry, he is satisfied that the person has failed to comply with the provisions of section 29 or section 33 or section 43, he may impose such penalty as he thinks fit in accordance with the provisions of any of those sections."

Prevention of grid failure

1675. SHRI M.P. ACHUTHAN: Will the Minister of POWER be pleased to state:

- (a) whether it is a fact that on 30 and 31 July, the country experienced grid failures of Northern, Eastern and North-Eastern grids plunging half of the country into darkness;
- (b) if so, the details thereof;
- (c) whether Government has tried to find out the causes of grid failures;
- (d) if so, the details thereof;
- (e) whether Government is considering to put such mechanisms in supply points to prevent grid failure due to overdrawal by any State;
- (f) if so, the details thereof; and
- (g) by when such a mechanism would be installed?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI K.C. VENUGOPAL): (a) and (b) Yes, Sir, there were two major grid disturbances on the 30th and 31st July, 2012. The Grid disturbance on 30th July, 2012, affected supply of power to the Northern Region constituent states and the disturbance on 31st July, 2012 affected power supply to States in the Northern, Eastern and North-Eastern Region.

(c) and (d) The Committee studied in detail technical data inter-alia concerning analysis of data from Disturbance Recorders (DR), Event Loggers (EL), relay indications, Phasor Measurement Units (PMU), Wide Area Frequency Measurement System (WAFMS), SCADA (Supervisory Control and Data