

# ORISSA ELECTRICITY REGULATORY COMMISSION

BIDYUT NIYAMAK BHAWAN  
UNIT-VIII, BHUBANESWAR - 751 012

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Present : Shri K.C. Badu, Member  
Shri B. K. Mishra, Member

## Case No. 01/2010

Director (Engg.), OERC ..... Petitioner

Vrs

GRIDCO & others ..... Respondents.

**In the matter of: Order (Protocol) on Power Regulation in the State under  
Section 23 of the Electricity Act, 2003.**

For the petitioner: Director (Engg.), OERC

For the Respondents: GRIDCO & others

**Date of Consultative Hearing:11.05.2010      Date of Order : 11.05.2010**

**Keeping Operation of Order (Protocol) on Power Regulation in the State  
under suspension.**

The Commission in their order dt.14.01.2010 in case No.1 of 2010 had outlined the guidelines and the stipulations of power regulations in the State in view of the growing mismatch between demand and supply of electricity in the State. In the said order, the Commission had constituted a Committee headed by CMD, OPTCL and consisting of senior officers of DISCOMs and SLDC for ensuring effective implementation of power-cut in different areas, so that large number of consumers in particular areas are not affected at a time. Vide para 24 of the said order it had also directed that the Order (Protocol) on Power Regulation will come into effect from 15<sup>th</sup> January, 2010 and will be reviewed by the Commission as and when required at appropriate time.

2. Based on the feed-back received from different consumers, industries, DISCOMs and SLDC, the Commission in their order dt.17.4.2010 had reviewed the Order (Protocol) on Power Regulation vide case No.16 of 2010. In para 28 of

the said order dt.17.4.2010, the Commission has directed that depending on the improvement in the availability of power, the quantum and/or the duration of restriction can be reduced without the approval of the Commission.

3. In the meantime, Secretary, Energy, Govt. of Orissa in his letter No.3935 dt.07.5.2010 has informed as follows:-

“Water level in the Reservoirs of all generating stations is in a very comfortable position. The introduction of new U.I. Regulation has made the power situation more stable. The power demand is stated to be remaining comparatively low. In last more than 7 days the Hydro demand is reduced to an average of about 400 MW whereas OHPC had agreed to produce 700 MW per day. All the savings need to be utilized lest there will be more water than the MDDL of the reservoir which is not desirable at all. It was agreed that the Hydro production can be enhanced to 800 MW from 8.5.2010 to 31.5.2010. SLDC is of the opinion that with 800 MW Hydro generation load restriction may not be required.

There are indications that there may be early break of monsoons during the current year. Therefore there is urgent necessity to use the water available in all the reservoir stations for generation of more power. In such a situation there may not be any justification of continuing with the order on power regulation.

In view of the above, it is requested that the matter may kindly be placed before the Hon'ble Commission to review their order of restriction on power regulation passed on 14.01.2010 and consider revocation of the order taking into account the facts stated above.”

4. The Commission held a consultative meeting with the senior officers of OPTCL, GRIDCO, SLDC, DISCOMs & OHPC on 11.5.2010 at 4.00 PM. SLDC submitted a note to the Commission indicating therein the gradual improvement in the mismatch between demand and supply of power from the month of December, 2009. SLDC indicated that since there is surplus of 100 MW peak and 150 MW average power after meeting the State's unrestricted demand during the month of

May, 2010 from 8<sup>th</sup> May onwards, the demand regulation is not required under normal conditions. Substantiating the submissions of the SLDC, the position of peak demand, average demand vis-a-vis the peak demand deficit and the average demand deficit for the month of December, 2009, March, 2010 and month of May 2010 (from 8<sup>th</sup> May onwards) have been indicated as mentioned in the table below:-

Sl No.	Source of availability	Peak (MW)			Average (MW)		
		Dec., 2009	Mar., 2010	May, 2010 (8 May onwards)	Dec., 2009	Mar., 2010	May 2010 (8 May onwards)
1.	OHPC	400	800	1200	70	550	800
2.	TTPS (NTPC)	400	400	400	400	400	400
3.	lb TPS	190	350	350	190	350	350
4.	ISGS Share	750	800	800	750	700	750
5.	CGP Support	250	200	450	250	200	450
6.	Total availability	1990	2500	3200	1660	2200	2750
7.	System Demand (Un restricted)	2900	3100	3100	2400	2600	2600
8.	Deficit/Surplus	(-)910	(-)550	100	(-)740	(-)400	150

5. Regarding generation from hydro sources, representatives of OHPC mentioned that at present about 800 MW of power is being generated from different hydro generating stations as a whole as indicated below:-

Balimela	-	250 MW
Upperkolab	-	55 MW
Indravati	-	350 MW
Rengali	-	70 MW
Hirakud	-	40 MW
Chipilima	-	<u>25 MW</u>
<b>Total</b>	-	<b>770 MW</b>
Machhkund	-	<u>30 MW</u>
<b>Total</b>	-	<b>800 MW</b>

6. Commission asked as to whether with improvement in generation there will be uninterrupted power supply to all consumers across the State. To this query, Director (Engg.), OPTCL and also representatives of distribution companies submitted that even though there may not be any mismatch between demand and supply for the State as a whole, there is constraint in transmission capacity in the line and in transformer capacity in the grid substations. It was indicated that the

following grid substations are over loaded and it will take time to upgrade the power transformers in those grid substations. Unless there are rotational power regulations particularly in peak hours there is every risk of transmission lines breaking down, leading to widespread black out in those areas. If such a situation arises due to overloading in those grid substations, it will take considerable time to restore the lines and ensure supply to those areas. In order to avoid such serious inconvenience to the consumers in those areas, it is absolutely necessary to resort to rotational load regulations to ensure safety of the transmission lines. The 132/33 kV grid substations of OPTCL which are experiencing over loading are as follows:-

- (a) Supply received by CESU
  - (1) Nuapatna (Dhenkanal district)
  - (2) Balugaon
  - (3) Salepur
  - (4) Jagatsinghpur
  - (5) Ranasinghpur
  
- (b) Supply received by SOUTHCO
  - (1) Sunabeda
  - (2) Tentulikhunti
  - (3) Bhanjanagar
  
- (c) Supply received by WESCO
  - (1) Kesinga
  - (2) Junagada
  - (3) Khariar
  - (4) Sonapur
  
- (d) Supply received by NESCO
  - (1) Soro
  - (2) Bhadrak (including Chandbali)
  - (3) Joda

7. Commission further asked Director (Engg.), OPTCL about the status of procurement of additional power transformers for up gradation of those grid substations where over loading is being experience. He pointed out that order has been placed for 26 No. of 40 MVA power transformers for 132/33 kV grid substations and 5 number of 40 MVA power transformers for 220/33 kV grid substations. Out of these power transformers ordered for procurement, 4 transformers are likely to be received by 15.6.2010 and it will take 15-20 days thereafter for installation and replacement of 40 MVA transformer in place of

existing 20 MVA transformer in those grid substations for catering to peak demand. As such, it was pointed out that the areas coming under the grid substations mentioned in para 6 may face occasional load shedding due to infrastructure deficiencies. Commission directed that OPTCL should act on a war footing to expedite the supply and installation of the power transformers and upgrade of the grid substations should be taken on priority basis so that inconvenience of the consumers of those areas is reduced to the minimum.

8. There is a revenue gap of Rs.806.15 crore left in the ARR of GRIDCO for the year 2010-11. Commission observed that GRIDCO should work out the appropriate strategy to make best use of the surplus power after meeting the State's demand so that it can earn a good amount of revenue through UI or trading as may be beneficial to the GRIDCO. But this should not be done at the cost of suffering of the consumers of the State. Only the surplus power can be utilised by GRIDCO to generate additional revenue which is being shared with the consumers by way of lower BST and consequently lower tariff approved for 2010-11.

9. After a review of the position of water level in different reservoirs, the present level of generation and prospect of increased generation from reservoirs, it is found that unless the present available water level is used effectively in time, there would be loss of revenue to the power sector, if there is spill over of water in case there is monsoon breakout in time. As per the present indication, there is prospect of early break of monsoons and therefore, all efforts are to be made to utilize the present water level for the benefit of the consumers and to avoid the wastage of water on the on set or rainy season without generation of electricity. Prior to that, OHPC should monitor the generation vis-à-vis the reservoir level of each reservoir, so that at the time of monsoon break the reservoir level shall be at MDDL or very close to MDDL.

10. Based on the feedback received from the Secretary, Energy, Govt. of Orissa and after detailed discussion held on 11.5.2010 at 4.00 P.M. in the consultative meeting with senior officers of the Utilities, the Commission directs as under:-

- (i) The operation of the order (protocol) on power regulation passed in case No.1 of 2010 in their order dated 14.1.2010 read with the order

dated 17.4.2010 in case No.16 of 2010 shall be kept in suspension until further orders in order to watch the progress in the availability of power supply in the State. All statutory restriction on HT and EHT Industries and load shedding for all the general consumers is, hereby withdrawn till further order. This will take immediate effect from 11.5.2010.

- (ii) The order (protocol) on power regulation prescribes the broad guidelines for management of supply of power under a power deficit situation. Hence, there is no need to revoke the said order (protocol) on power regulation but as stated above the operation of order (protocol) on power regulation is kept under suspension. The broad guidelines/modalities prescribed therein will be applicable mutatis mutandis as when a situation of mismatch of demand and supply arises in future. The SLDC, OPTCL and Distribution companies will take appropriate steps for equitable distribution of power as stipulated under Section 23 of Electricity Act, 2003.
- (iii) Even though there may not be any mismatch in demand and supply of power for the State as a whole there would be need for occasional load shedding due to infrastructure deficiencies mostly on account of over loading of different grid substations which are indicated below:-

CESU

- 1. Nuapatna (Dhenkanal district)
- 2. Balugaon
- 3. Salepur
- 4. Jagatsinghpur
- 5. Ranasinghpur

SOUTHCO

- 1. Sunabeda
- 2. Tentulikhunti
- 3. Bhanjanagar

WESCO

- (1) Kesinga
- (2) Junagada
- (3) Khariar
- (4) Sonapur

NESCO

- (1) Soro
- (2) Bhadrak (including Chandbali)
- (3) Joda

(iv) While OPTCL should expedite action for upgradation of power transformers and associated 220/132 kV lines, etc., in those over loading substations, the Distribution companies should keep the Rotational Load Shedding to the minimum in those areas. The time of Rotational Load Shedding should be fixed in such a manner that the difficulties of the consumers are minimized. Distribution Companies also may take strict vigilance on curbing theft of electricity to reduce the overloading in its distribution system as well as in Grid substation, so that the bonafide consumers are not deprived of reliable and quality power. OPTCL and Distribution Companies must inform the public in advance both in print and electronic media. Govt. should also extend necessary support at the local level to avoid any confusion and law and order problem.

(v) OHPC and Water Resource Dept. are required to take action as outlined in para-9.

11. This order will continue until further orders of the Commission and can be reviewed as and when required.

Sd/-  
**Member (M)**

Sd/-  
**Member (B)**