

CENTRAL ELECTRICITY REGULATORY COMMISSION
Record of Proceedings

- Coram** : Shri Pramod Deo, Chairman,
Shri Bhanu Bhushan, Member and
Shri R. Krishnamoorthy, Member
- Petition No.** : 89/2008
- Subject** : Ensuring secure and reliable operation of Southern
Regional Grid by maintaining the grid frequency above
49.0 Hz
- Date of Hearing** : 12.8.2008
- Petitioner** : Southern Regional Load Despatch Centre, Bangalore
- Respondents** : 1. Transmission Corporation of Andhra Pradesh Ltd.,
Hyderabad
2. Karnataka Power Transmission Corporation Ltd.,
Bangalore
3. Tamil Nadu Electricity Board, Chennai
4. Kerala State Electricity Board, Thiruvananthapuram
5. Electricity Department, Govt. of Pondicherry,
Pondicherry
6. Electricity Department, Govt. of Goa, Panaji
7. NTPC Ltd, New Delhi
8. Neyveli Lignite Corporation Ltd, Neyveli
9. Nuclear Power Corporation of India Ltd, Mumbai
10. Southern Regional Power Committee, Bangalore

The following were present:

Shri P. R. Raghavan, SRLDC
Shri V. Suresh, SRLDC
Shri S.K. Soonee, NRLDC
Shri.S. R. Bhat, SRPC
Shri S. N. Goel, NTPC
Shri R. Suresh, NLC
Shri Keshava Murthy, KPTCL
Shri K. N. Srinath, KPTCL
Shri P. Suresh Babu, APTRANSCO
Shri Y. L. Narasimha Rao, APTRANSCO
Shri A. Natarajan, TNEB
Shri Sathyanathan, KSEB

This petition has been filed seeking directions to the beneficiaries in Southern Region (respondents Nos. 1 to 6) to refrain from over-drawals at low frequencies in the interest of grid security and safety and to regularly carry out necessary exercise for short-term long-term demand estimation and to plan their demand side management to meet the consumers' load within their jurisdiction without over-drawing from the grid.

2. Representing the petitioner, GM, SRLDC, submitted that Southern Regional Grid had been experiencing low frequency since May 2008 because of extended summer peak demand and delayed monsoon in the region. He informed that frequency remained below 49 Hz for 5.36%, 14.48% and 35.19% of the total time during months of May and June and up to 20th of July 2008 respectively. He also furnished the details of maximum over-drawals and overdrawn energy when frequency was below 49 Hz, by respondents as under:

Over-drawal below 49 Hz

	APTRANSCO		KPTCL		KSEB		TNEB	
	Maximum over-drawal (MW)	Energy overdrawn (MU)						
May, 2008	1222	1.86	302	0.64	219	0.30	963	3.99
June, 2008	788	2.70	627	1.44	507	1.04	953	3.10
July, 2008 (upto 20th)	1181	6.04	909	4.72	504	2.06	985	7.18

3. He further pointed out that the desired load relief through operation of under-frequency relays could not be obtained when frequency was falling below 48.5 Hz. He informed the Commission that the matter was repeatedly taken up with all the constituents of the region and the Member-Secretary, SRPC convened a special meeting of TCC on 17.7.2008 to address the issue.

4. He pointedly invited the Commission's attention to clause 6.4.5 of Indian Electricity Grid Code (hereinafter referred to as "IEGC"), which mandated SLDC/STU to regularly carry out necessary exercise for short-term and long-term demand estimation for their respective States so as to plan in advance as to how to meet their consumers' load without over-drawing from the grid. Further, the representative of the petitioner pointed out that clause 6.4.4 of the IEGC mandated SLDCs to endeavour to restrict their drawals from the grid whenever the frequency was below 49.0 Hz and shed load manually to curtail their over-drawal. He regretted that in spite of number of messages issued to the defaulting respondents, the desired load relief could not be achieved. He observed that actions specified under clause 6.4.4 and 6.4.5 of IEGC were not forthcoming.

5. The representative of the petitioner urged that in order to discourage over-drawals at frequency below 49.5 Hz by the beneficiaries, the Commission might consider capping of the UI quantum and if required levy additional UI charges for over-drawals below frequency of 49.5 Hz. The petitioner's representative further urged for review of linking UI price ceiling to the liquid fuel cost so that during the high demand period all available generation could be harnessed.

6. The representative of APTRANSCO submitted that delayed monsoon and continued dry spell had led to huge gap between supply and demand in the State. He stated that AP had taken all possible initiatives to procure power from resources within the State and by stepping up purchases to meet the demand. He submitted that A.P. SLDC was availing forced load relief at

220/132 kV level to maintain grid frequency despite public protests and law and order problems. He informed that sufficient naphtha stocks were built up at IPP generating stations by releasing advance payments. He opposed further increase in UI price arguing that it would not improve the situation, under the prevailing temporary deficit conditions. On the contrary, he expressed the view, it could inflate power purchase cost of the utilities and thus prove burdensome for the consumers.

7. The representatives of KSEB, KPTCL and TNEB also apprised the Commission of the steps taken by them to curtail over-drawal by identifying more radial feeders which could be opened in crisis. They termed these to be adequate to overcome the prevailing difficult situation. The representative of TNEB stated that the State had staggered industrial feeders and was also making efforts to tap CPPs inside and outside the region, besides harnessing the wind power of the order of 1800-2000 MW. He also pointed out that after 21.7.2008, the State had completely stopped over-drawing from the regional grid. The representative of TNEB also said that electricity traders were exploiting the shortages and were selling electricity at prices much higher than the cost of production. He suggested lowering of UI rates as it had become benchmark for pricing the traded power.

8. While commenting upon the availability of coal, the representative of NTPC informed that in the past coal position was bad but with efforts of procuring coal from different sources, the position had improved. He stated that with the introduction of open access regulations 2008 from 1.4.2008, the flexibility of changing schedule during the day of operation did not exist.

According to him, this resulted in difficulties in tapping Unrequited Surpluses (URS) which currently is of the order of 1000 MW. To schedule this power, he informed, consent of its original beneficiary allocated power from a generating station was needed who normally did not give consent apprehending that, it might not be able to get this power back during the day, if required. The representative of NTPC proposed that 2-3 revisions of the schedules in a day could be allowed. He stated that this issue was discussed at SRPC forum and the States favoured the proposal. NTPC was given liberty to discuss the matter with the Staff of the Commission for appropriate measures, if required.

9. The representative of the petitioner stated that KSEB, after requisitioning liquid fuel generation had been selling power to the utilities outside the region and simultaneously over-drawing from the grid, thereby pulling down the frequency. To substantiate this, he presented before the Commission data collated on weekly basis. On the contrary, the representative of KSEB submitted that it had been selling costly power only during off-peak hours and now even this had been stopped completely. In view of the contradiction, the petitioner was directed to give, within seven days, 15 minute block-wise and day-wise details to establish its point with a copy to KSEB who in turn was permitted to file reply by 31.8.2008.

10. Subject to the above, the Commission's order reserved.

(K S Dhingra)
Chief (Legal)