CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Petition No. 195/MP/2012

Coram Dr. Pramod Deo, Chairperson Shri S.Jayaraman, Member Shri M.Deena Dayalan, Member

DATE OF HEARING: 1.11.2011 **DATE OF ORDER: 14.6.2012**

In the matter of

Maintaining grid security of the entire North East West (NEW) grid by curbing overdrawals and effecting proper load management by Northern Region constituents in terms of the Indian Electricity Grid Code and Electricity Act. 2003.

And In the matter of

Northern Regional Load Despatch Center, New Delhi

..Petitioner

Vs

- 1. Uttar Pradesh Power Transmission Corporation Ltd., Lucknow
- 2. Haryana Vidyut Prasaran Nigam Ltd., Panchkula
- 3. Rajasthan Rajya Vidyut Prasaran Nigam Ltd, Jaipur
- 4. Power Transmission Corporation of Uttarakhand Ltd., Dehradun
- 5. Power Development Department, Government of J & K, Jammu
- 6. Himachal Pradesh State Electricity Board, Shimla
- 7. Punjab State Transmission Corporation Ltd., Patiala
- 8. Delhi Transco Ltd., New Delhi
- 9. Electricity Department, Chandigarh

....Respondents

10. Member Secretary, Northern Regional Power Committee, New Delhi ..Proforma Respondent

Following were present:

Shri V.V.Sharma, NRLDC Shri D.K.Jain, NRLDC Shri Rajeev Porwal, NRLDC Miss Joyti Prasad, NRLDC Shri Vivek Pandey, NRLDC

Shri V.P.Trivedi, UPPTCL Shri Sunil Kumar, UPPTCL Shri B.P. Pant, UPPCL Shri Rahul Srivastava, Advocate, UPPCL Shri Sanjay Arora, HVPNL Shri S.K.Jain, RRVPNL Shri A.K.Arya, RRVPNL Shri Roop Kumar, DTL Shri Rohit, RSEB Shri Chaman Lal, BRPL

ORDER

The Petitioner, Northern Regional Load Despatch Centre (NRLDC) has filed the present petition seeking the following relief:

- (a) Direct the SLDCs/STUs of Northern Region to comply with Regulations 5.4.2, 6.4.7 and 6.4.8 of the Indian Electricity Grid Code (IEGC) and restrict the drawal of its control area from the grid within the net drawal schedule whenever the system frequency falls to 49.7 Hz and to ensure that requisite load shedding is carried out so that there is no overdrawal when the frequency is below 49.5 Hz or below;
- (b) Direct the SLDCs/STUs of Northern Region to comply with the directions of NRLDC given under Section 29(1) of the Electricity Act 2003 (the Act); and
- (c) Direct the SLDCs/STUs of Northern region to take necessary steps for proper demand management.
- 2. The petitioner has submitted the frequency profile of the entire North, North-East, East and West (NEW) grid has undergone sharp deterioration from 23.9.2011 till 6.10.2011 and on certain days i.e. 28th and

29th September, 2011, the frequency remained below 49.5 Hz more than 50% of time. The petitioner has also submitted that there had been a reduction in availability of thermal generation in the grid due to coal shortage and other related issues. It was further submitted that the regional entities were well informed about the reduced generation availability on day-ahead basis through the declared capability of the generating stations, and there were adequate margins in the transmission network for procurement through short-term open access.

3. The petitioner has submitted that the daily overdrawal by the constituents of Northern Region, particularly the States of Uttar Pradesh, Haryana and Rajasthan has been significantly high. The petitioner has summarized the maximum and average overdrawal by the constituents of Northern Region as under:

Overdrawal in MUs from 23.9.2011 to 6.10.2011			
Regional Entity	Maximum	Average	
Uttar Pradesh	35.7	24.3	
Haryana	19.8	10.0	
Rajasthan	17.9	4.0	
Uttarkhand	3.9	1.4	
Jammu and Kashmir	3.0	0.6	
Himachal Pradesh	2.6	0.3	
Delhi	3.4	-5.8	
Punjab	3.1	-0.2	
UT Chandigarh	-0.1	-0.3	

The petitioner has further submitted that in line with the provisions of Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (hereinafter the "the Grid Code"), NRLDC has been issuing messages to the defaulting State Control Areas/Regional Entities in real-time with regard to the overdrawal from the grid during low frequency period. The petitioner has summarized the type A, B and C messages issued by NRLDC to the defaulting constituents from 26.9.2011 till 6.10.2011 as under:

Message Type A,B&C issued by NRLDC from 23.9.2011 to 6.10.2011				
Regional Entity	Message-A	Message-B	Message-C	
	Message in line with	Messages	Messages	
	Regulation 6.4.7 of	intimating violation	intimating	
	Grid Code	of 5.4.2(a) and	violation of	
		6.4.7 of Grid Code	Regulations 5.4.2(b) of Grid	
			Code and Section	
			29 (2) and (3) of	
			Electricity	
			Act,2003	
Uttar Pradesh	50	48	23	
Haryana	48	39	12	
Rajasthan	17	12	6	
Punjab	19	10	2	
Jammu & Kashmir	18	20	5	
Himachal Pradesh	6	3	0	
Delhi	6	3	0	
Uttarakhand	4	1	0	
UT Chandigarh	1	0	0	

5. The petitioner has also submitted that apart from the messages issued to the Regional entities, the General Manager, NRLDC in his letter dated 29.9.2011 has brought to the notice of the drawee Regional Entities the heavy overdrawal being resorted to by the constituents and requested for curtailing the over drawal so that the grid was operated in accordance with the

provisions of the Grid Code. However, the directions given by NRLDC have also not been complied with. The petitioner has further submitted that the frequency profile leads to the inference that the automatic demand management schemes as mandated in Regulation 5.4.2 of the Grid Code are either ineffective or yet to be implemented. It has been submitted that despite all efforts made by NRLDC, some of the Regional Entities are continuing to endanger the grid security and are repeatedly violating the various provisions of the Grid Code as well as Electricity Act, 2003 (the Act).

- 6. The matter was heard on 13.10.2011. After hearing the representative of the petitioner and the learned counsel for Uttar Pradesh Power Transmission Corporation Limited, the representatives of Delhi Transco Ltd., Haryana Vidyut Prasaran Nigam Limited, Punjab Transmission Corporation Ltd., Rajasthan Rajya Vidyut Prasaran Nigam Ltd., NTPC Ltd., and Northern Regional Power Committee, the Commission issued following directions:
 - "16. Considering the seriousness of the situation, we direct to issue notices to the State Load Despatch Centres, State Transmission Utilities and State Electricity Boards/the Distribution licensees in the Northern Region to explain by 28.10.2011 the reasons for non-compliance of the provisions of the Grid Code with regard to maintenance of required grid frequency and non-compliance of the directions of NRLDC in violation of section 29 of the Act during the period 23.9.2011 to 6.10.2011 and thereafter.
 - 17. We also direct the following agencies to submit the information regarding compliance of the provisions of the Grid Code by 28.10.2011:
 - (a) The State Load Despatch Centres/ State Transmission Utilities of the Northern Region to submit the current status of the contingency procedures and arrangements required to enable demand disconnection as mandated under Regulation 5.4.2 (c) of Grid Code.
 - (b) The State Load Despatch Centres/ State Transmission Utilities of the Northern Region to submit the status of the automatic demand management schemes mandated under Regulation 5.4.2 (d) of the Grid Code indicating

date of implementation, the reasons for non-implementation within the stipulated time, if any, the maintenance and operational preparedness of the scheme.

- (c) State Load Despatch Centres/ State Transmission Utilities of the Northern Region to submit a report on installation of UFRs and their healthiness in compliance with the Regulations 5.2(n) of the Grid Code.
- (d) State Load Despatch Centres/ State Transmission Utilities of the Northern Region to submit the contingency procedures to avoid overdrawal and meet the contingency conditions of the grid.
- (e) State Load Despatch Centres/State Transmission Utilities of the Northern Region shall submit the details of efforts made by the State to bridge the demand supply gap including increasing generation in State sector generating stations and procurement of power under open access. They shall also submit information on coal stock position in State sector generating stations.
- (f) NRLDC shall submit a proposal on the possible course of actions that can be taken during contingency in the event of non-compliance of its directions.
- (g) NRPC and NRLDC shall submit a report on UFR operation and actions taken in compliance of Regulations 5.2(n) of the Grid Code.
- 18. NTPC is directed to file a status report on the coal shortage, fuel stock position and reduced generation in its generating stations during the period 23.9.2011 to 6.10.2011 and thereafter and its contingency plan regarding the generation from its generating stations supplying power to the Northern Region over the next one month. We also direct Coal India Limited to make submission on availability position of coal for the generating stations of the Northern Region.
- The petitioner has sought interim directions to the respondents for ensuring safety and security of the grid and to obviate any possibility of grid disturbance. We are convinced that urgent actions are called for to maintain the grid at the frequency specified in the Grid Code and to ensure smooth operation of the grid. Accordingly, the following directions are issued for strict compliance by the respondents till further orders:
 - (a) The respondents shall not resort to any overdrawal from the NEW grid when the frequency is below 49.5 Hz. and shall comply with the provisions of Grid Code.
 - (b) The respondents shall ensure that the directions of NRLDC issued under section 29 of the Act are faithfully complied with and reported to NRLDC immediately.

- (c) The respondents shall ensure that the Under Frequency Relays (UFR) are kept in service at all times and the feeders used for load shedding through UFRs are different from the feeders used for manual load shedding so that the security of the grid is not compromised.
- 20. We direct that it shall be the personal responsibility of the officers in overall charge of the State Transmission Utilities/ State Load Dispatch Centres to ensure compliance of the directions in Para 19 above and non-compliance of the above directions in any form will be viewed seriously and appropriate actions under provisions of the Act shall be taken."
- 7. Learned counsel of the UPSLDC submitted that UPPTCL had resorted to load shedding but due to very large load of the State, the relief was not visible. With regard to UFR, learned counsel for the SLDC, UP submitted that the State Transmission Utility is responsible agency for it and contingency procedure was in place in the State of UP.
- 8. The representative of SLDC, Delhi submitted that the required load relief was not observed from the UFR due to heavy load shedding. He further submitted that the situation aggravated on account of reduced generations from NTPC stations. The representative of Haryana Vidyut Prasaran Nigam Ltd. (Respondent No.2) submitted that though it had issued directions to its Distribution Companies to curb load shedding, the directions were not being complied with. The representatives of Punjab Transmission Corporation Ltd. (Respondent No.7) submitted that it had been complying with the provisions of the Grid Code by not overdrawing from the grid. However, he was suffering on account of overdrawal by other constituents of the Northern Region. The

representatives of Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (Respondent No.3) submitted that on account of power shortage, scheduled cuts in supply of power had been imposed in the State.

- 9. In compliance of the directions by the Commission vide order dated 14.10.2011, Uttar Pradesh Power Transmission Corporation Ltd. (UPPTCL), Punjab State Transmission Corporation Ltd. (PSTCL), Delhi Transco Ltd. (DTL), Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (RRVPNL), Haryana Vidyut Prasaran Nigam Limited (HVPNL) Union Territory of Chandigarh and NTPC Ltd. have filed their replies. Coal India Limited has not filed its submissions regarding availability position of coal for the generating stations of the Northern Region.
- 10. Uttar Pradesh Power Transmission Corporation Ltd. in its reply dated 22.10.2011 has submitted that the main reason for overdrawal was low allocation of power from Ministry of Power, Government of India to the State of U.P. though UP has the biggest population in the country. It has been further submitted that prior to 23.9.2011, UPPTCL had availability of about 9000 MW power, against the demand of about 9500 MW. However, since 23.9.2011, the power shortage situation worsened due to shortfall of about 1600 MW power from the State and Central Sector Generating Stations to UP on account of coal shortage. UPPTCL imposed extreme un-scheduled rostering

during the period in question to avoid the situation of overdrawal. The microwave connectivity in the petitioner's system is up to 220 kV sub-station and the messages for the sub-stations below the 220 kV level are sent through telephone, which takes some time. Whenever the messages A, B and C were received by the SLDC, the manual telephonic transfer of the messages of rostering could not give the desired result in reasonable time.

- 11. With regard to UFR operation in the State, UPPTCL has submitted that no UFR was by-passed and the relief obtained from UFRs at each stage was sufficient. Demand of electricity in the State far exceeded the availability from its own generation and allocation from Central Sector. To overcome the shortage, about 1700 MW capacity in private sector was planned to be commissioned within few months. UPPTCL has also submitted that as per directions contained in the interim order dated 14.10.2011, arrangements for meeting the load was made.
- 12. Punjab State Transmission Corporation Ltd in its reply dated 24.10.2011 has submitted that during the period in question, load shedding was carried out as per the operating procedures to maintain the grid discipline. With regard to UFR, PSTCL has submitted that most of the UFRs were in service and none was disconnected. It has been further submitted that the automatic demand disconnection arrangement scheme has not been operative and matter has already been taken up with the PSPCL.

- 13. Delhi Transco Ltd. (DTL) in its reply dated 28.10.2011 has accepted that in some occasions, instant violation of overdrawal occurred which was not attributable to it. DTL has explained that whenever frequency fell below 49.7 Hz. SLDC, Delhi endeavored to maintain the drawal limits through corrective actions by the respective Distribution Companies. Where Distribution Companies failed to report, SLDC advised DTL to switch off 66/33/11 kV feeders from 220 kV grid sub-stations. In this process, occasional violation occurred during the period in question. However, these violations were not willful.
- 14. With regards to contingency procedure, SLDC, Delhi has submitted that it had drawn up the procedure in the month of January, 2010. Regarding Demand Management Scheme implementation, NDPL had already implemented the scheme. BRPL and BYPL were in process of testing of the scheme. NDMC committed to implement the scheme by 31.3.2012. NDMC in its submission dated 28.10.2011 has submitted that State-of-the-Art Automatic Demand Management Scheme was being installed and was likely to be commissioned by the month of March 2012.
- 15. With regard to UFR relays, DTL has submitted that all the relays were in healthy state and the procedure to meet the contingency conditions was submitted by DTL. The generation for the State Sector Generating Station was up to its full capacity and there was no coal shortage. Regarding the future arrangements for meeting the power demand, it was stated that Delhi was to

get enough power from the existing and some new generating stations resulting in surplus of power from 2011-12 onwards.

- 16. The Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (RRVPNL) in its reply dated 28.10.2011 has not denied NRLDC's report on overdrawal during the months of September and October, 2011. RRVPNL has submitted that overdrawal was mainly due to general scarcity of power and less generation by various State Sector Generating Units. RRVPNL has further submitted that SLDC and Distribution Companies made efforts for compliance of the NRLDC messages by resorting to unscheduled load shedding.
- 17. RRVPNL has further submitted that there is a contingency procedure, in the State, for load management at low frequency and scheme of Automatic Demand Management through manual load shedding. According to the scheme, no prior instructions are required by the in-charge of the 220 kV grid service station for rotational load shedding at low frequency.
- 18. Rajasthan Rajya Vidyut Prasaran Nigam Ltd. in its further reply dated 29.12.2011 has submitted that no Under Frequency Relay (UFR) was kept by-passed in the Rajasthan system. It has been further submitted that when the frequency touched 48.8 Hz., the load relief up to 133 MW was obtained, which was more than the load relief prescribed by the NRPC/NRLDC for the State. However, on certain occasions, the load relief may be less due to different reasons. With regard to implementation of State-of-the-Art

Automatic Demand Management Scheme, RRVPNL has submitted that this scheme was to be developed and installed by the distribution companies. However, a scheme of Automatic Demand Management through manual load shedding was prepared and was implemented w.e.f 1.1.2011 and scheme was also not operational during the subject period in question.

- 19. The petitioner in its affidavit dated on 1.11.2011 has submitted as under:
 - (a) in line with the provisions in Grid Code and the Act, NRLDC issues verbal as well as written directions through various communication modes. In case of non-compliance of the directions, the matter is taken up at senior level of STUs/SLDCs and in various committees of NRPC. The instances of serious or repeated violation and incidences of persistent non-compliance of the directions of RLDCs are reported to the Commission.
 - (b) Apart from above mentioned measures, physical opening of feeders are also resorted to and physical opening of EHV feeders may have repercussions in the entire grid and it may affect the essential services like railways, hospitals etc. Besides this, the opening of few EHV feeders has little effect on the drawl of defaulting entity and may weaken the inter-connected grid. In view of these issues, at times, the physical disconnection may not be advisable.

- (C) The petitioner has submitted that in accordance with Regulation 6.4.11 of Grid Code, there should be automatic increase of generation by the generating stations without waiting for the advice from RLDC subject to security constraints. However, this should not be limited to ISGS and the generation from all the generating stations should be harnessed during low frequency condition.
- 20. NTPC in its reply dated 28.10.2011 has submitted the status report on the coal shortage, fuel stock position and reduced generation in its generation stations during the period 23.9.2011 to 6.10.2011. On perusal of the report submitted by the NTPC, it is observed that there was coal shortage in most of the NTPC generating stations during the period in question.
- 21. During the course of hearing on 1.11.2011, the representative of the petitioner submitted that consequent to issue of directions by the Commission in its order dated 14.10.2011, there had been marked improvement in the grid parameters in the NEW grid and overdrawal by the defaulting constituents had also been reduced.
- 22. The representative of the petitioner also submitted that the relief from Under Frequency Relays (UFR) was far less as compared to planned relief. On 7.10.2011 at 2117 hrs, 8.10.2011 at 1519 hrs and at 2108 hrs, the actual relief from UFR operation were 26 MW, 39 MW and 114 MW, respectively. He further

submitted that most of the States had not implemented the Automatic Demand Management Scheme in compliance with the Grid Code. He emphasized that for safe grid operation, UFRs and the Automatic Demand Management Scheme must be implemented and kept in healthy condition. petitioner The representative of the also raised the connection/dis-connection of large quantum of load at a time leading to fluctuation in frequency which needs to be avoided by the State utilities.

- 23. During the course of hearing, learned counsel for the Uttar Pradesh Power Transmission Corporation Limited submitted that in compliance with the Commission's direction dated 14.10.2011, no overdrawal was done by the UPPTCL, during subsequent period. He submitted that in the month of September, the problem was due to less availability of power to the State to the tune of 1600 MW from the Central Sector Generating Stations. He submitted that the UFRs were not deliberately by-passed. With regard to implementation of Automatic Demand Management Scheme, learned counsel submitted that he would subsequently make submission in this regard after consulting the officers of UPPTCL.
- 24. The representative of the Haryana Vidyut Prasaran Nigam Limited submitted that the UFRs are in healthy condition. However, the requisite relief was not observed during the period in question due to the load shedding already resorted through these feeders. In response, the representative of the

petitioner pointed out that as per the provisions of Grid Code, the normal load shedding should not be done through feeders in which UFRs are installed.

- 25. The representative of the Rajasthan Rajya Vidyut Prasaran Nigam Limited submitted that the relief from UFRs had been observed in the State. With regard to implementation of Automatic Demand Management Scheme, the representative of the RRVPNL submitted that it was not in working condition. The representative of the Delhi Transco Limited submitted that the Automatic Demand Management Scheme was implemented by NDPL, and it was in the testing stage in BRPL and BYPL and the scheme would be implemented by NDMC by the month of March 2012.
- 26. The Union Territory of Chandigarh, in its reply dated 30.11.2011 has submitted that the process of implementation of SCADA under part-A of R-SCADA was under process. It has been further submitted that UFR were working properly and each rely trip the feeders whenever frequency falls below 49.5 Hz.
- 27. Haryana Vidyut Prasaran Nigam Limited, in its reply dated 9.11.2011 while not denying the position reported by NRLDC in respect of the State of Haryana regarding overdrawal during the period in question has submitted that there were reduced generation from NTPC as well as State Sectors Generating Stations, mainly due to coal shortage/poor quality of coal. It has been further submitted that there was inadequate/slow response from

Distribution Companies to curtail overdrawal, and after giving opportunity to Distribution Companies to restrict drawl, the SLDC opened transmission lines. Fifty three interventions were done by HVPNL on 29.9.2011. It was also mentioned that Automatic Demand Management Scheme in form of rotational load shedding scheme was already operational in Haryana.

- 28. With regard to compliance of provisions of the Grid Code, HVPNL has submitted that in compliance with directions of NRLDC, system protection scheme was provided at various feeders to curtail drawl and UFRs as well as df/dt relays have been installed. It has been further submitted that load forecasting were carried out by Distribution Companies in consultation with M/s Price Water Cooper House Ltd. and power regulatory measures were framed and enforced according to load forecasting. HVPNL has further submitted that efforts were made to comply with the instructions of NRLDC and Grid Code. However, the response was late in some cases due to opportunity given to Distribution Companies for load regulations, as HVPNL restrained itself from taking immediate action of opening of lines keeping in view the shortage of power in the NEW Grid.
- 29. We have considered the submissions of the petitioner and the respondents. It has emerged for the submission of the parties that during the period in question, there was unusual power shortage in the NEW Grid, mainly on account of coal shortage/supply of wet coal. From the report submitted by

NTPC, it is observed that during 23.9.2011 to 6.10.2011, there was acute problem of coal supply.

- 30. From the records available, it is evident that only UPPCTL, RRVPNL, HVPNL, DTL, PSTCL, NDPL and UT, Chandigarh have submitted their replies. Respondent No's 4, 5 and 6 have not filed any response to our order dated 14.10.2011. We do not approve of the conduct of the Respondent No's 4, 5 and 6 in not filing their response to the directions of the Commission in such a grave matter as grid security. We direct these respondents to ensure that our directions are duly complied with in future.
- 31. As regards the non-compliance of the directions of NRLDC, it is pertinent to mention that UP, Rajasthan and Delhi in their submissions have not denied overdrawal and the receipt of the messages from NRLDC. They have given various reasons for overdrawal which are general in nature and do not absolve them of the obligations imposed by the Grid Code and the Act. HVVPNL has submitted that though it has issued directions to its Distribution Companies to curb load shedding, the directions are not being complied with. It is clarified that the respondent should approach the concerned State Commission if the distribution companies are not complying with its directions. SLDC is not only responsible for ensure integrated operation for the power system within the State, it is also responsible for ensuring that directions of RLDC are duly complied with by the licensees or generating stations or sub-station.

- 32. From the submissions made by the petitioner, it is observed that the intended relief from UFRs was not obtained during the period in question. In this regard, respondents RRVPNL, HVPNL, DTL, PSTCL and UPPTCL submitted that the UFR and df/dt relays were installed and they were in healthy condition. Respondents RRVPNL and HVPNL have explained the reasons, including normal load shedding through UFR feeders, for less relief. Regulation 5.2 (n) of the Grid Code provides monitoring of UFR and df/dt relays operation by RPC and RLDC. The relevant provision of the Grid Code is as under:
 - "(n) All SEBs, distribution licensees / STUs shall provide automatic under-frequency and df/dt relays for load shedding in their respective systems, arrest frequency decline that could result collapse/disintegration of the grid, as per the plan separately finalized by the concerned RPC and shall ensure its effective application to prevent cascade tripping of generating units in case of any contingency. All, SEBs, distribution licensees, CTU STUs and SLDCs shall ensure that the above under-frequency and df/dt load shedding/islanding schemes are always functional. RLDC shall inform RPC Secretariat about instances when the desired load relief is not obtained through these relays in real time operation. The provisions regarding under frequency and df/dt relays of relevant CEA Regulations shall be complied with. SLDC shall furnish monthly report of UFR and df/dt relay operation in their respective system to the respective RPC. RPC Secretariat shall carry out periodic inspection of the under frequency relays and maintain proper records of the inspection. RPC shall decide and intimate the action required by SEB, distribution licensee and STUs to get required load relief from Under Frequency and Df/Dt relays. All SEB, distribution licensee and STUs shall abide by these decisions. RLDC shall keep a comparative record of expected load relief and actual load relief obtained in Real time system operation. A monthly report on expected load relief vis-a-vis actual load relief shall be sent to the RPC and the CERC."

In view of the above, all SEBs, distribution licensees and STUs are directed to ensure that required relief from these relays are available. RPCs and RLDCs are also directed to regularly monitor the operation of these relays. RPCs shall report non-compliance of provision of Regulation 5.2 (n) of Grid Code by any utility to Commission.

- 33. In terms of Regulation 5.4.2 (d) of the Grid Code, SLDC through respective State Electricity Boards/Distribution licensees are required to formulate and implement state-of-the-art demand management schemes for automatic demand management like rotational load shedding, demand response before 1.1.2011, to reduce overdrawal. It is observed that except some utilities of Delhi, none other utility in the country has installed the state-of-the-art demand management schemes for Automatic Demand Management. The relevant provision of Regulation 5.4.2 (d) of the Grid Code is as under:
 - " (d) The SLDC through respective State Electricity Boards/Distribution Licensees shall also formulate and implement state-of-the-art demand management schemes for automatic demand management like rotational load shedding, demand response (which may include lower tariff for interruptible loads) etc. before 01.01.2011, to reduce overdrawal in order to comply para 5.4.2 (a) and (b). A Report detailing the scheme and periodic reports on progress of implementation of the schemes shall be sent to the Central Commission by the concerned SLDC."
- 34. RRVPNL has submitted that this scheme was to be installed by the Distribution Companies and they were taking up the matter with the Distribution Companies. In this regard, it is observed that SLDC has to ensure implementation of these schemes and if Distribution Companies are not taking any action, SLDCs should take legal recourse against these Distribution Companies for non-compliance with the directions. Moreover, SLDCs are to submit progress report on the Automatic Demand Management Scheme.

However, this provision has not been complied with. All the SLDCs are directed to comply the provisions of regulation 5.4.2 (d) of the Grid Code strictly.

- 35. All SEBs, Distribution Licensees, STUs and SLDCs are directed to comply with the Grid Code to ensure safe, secure and reliable operation of the NEW grid. Instances of non-compliance shall be reported by RPC/RLDC to the Commission in accordance with the provisions of the Grid Code.
- 36. Petition is disposed of with above directions.

Sd/sd/sd/-

(S.JAYARAMAN) (Dr. PRAMOD DEO) (M.DEENA DAYALAN) **MEMBER** MEMBER **CHAIRPERSON**