# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 125/MP/2012

# <u>Alongwith</u>

# I.A. Nos.25/2012, 35/2012, 38/2012 & 45/2012

#### Coram:

Dr. Pramod Deo, Chairperson Shri S. Jayaraman, Member Shri M. Deena Dayalan, Member Shri A.S. Bakshi, Member (EO)

Date of Hearing: 14.8.2012
Date of Order : 17.8.2012

#### In the matter of

Effecting proper load management by Northern Region constituents and curbing overdrawl in terms of the Indian Electricity Grid Code and Unscheduled Interchange charges Regulations.

#### And

#### In the matter of

Northern Regional Load Despatch Center, New Delhi ...Petitioner

- Vs
- 1. Punjab State Transmission Corporation Ltd., Patiala
- 2. Haryana Vidyut Prasaran Nigam Ltd., Panchkula
- 3. Rajasthan Rajya Vidyut Prasaran Nigam Ltd. Jaipur
- 4. Delhi Transco Ltd., New Delhi
- 5. Uttar Pradesh Power Transmission Corporation Ltd., Lucknow
- 6. Himachal Pradesh State Electricity Board, Shimla
- 7. Power Transmission Corporation of Uttarakhand Ltd., Dehradun
- 8. Power Development Department, Government of J & K, Jammu
- 9. Electricity Department, Chandigarh
- 10. North Central Railway, New Delhi
- 11. State Load Despatch Centre, Ablowal (Patiala), Punjab
- 12. State Load Despatch Centre, Panchkula
- 13. State Load Despatch Centre, Heerapura, Rajasthan
- 14. State Load Despatch Centre, Delhi
- 15. State Load Despatch Centre, Lucknow
- 16. State Load Despatch Centre, Uttarakhand
- 17. State Load Despatch Centre, Himachal Pradesh
- 18. State Load Despatch Centre, Jammu and Kashmir . Respondents

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

# Following were present:

Shri V.V.Sharma, NRLDC

Ms Joyti Prasad, NRLDC

Shri Vivek Pandey, NRLDC

Shri Rajiv Porwal, NRLDC

Shri S.B. Moudgil, HVPNL

Shri Ashok Kumar Singh, UPPTCL

Shri Akhilesh Kumar Singh, UPPTCL

Shri R.K. Sharma, PSTCL

Shri Rahul Srivastava, Advocate, UPSLDC

Shri Satish Chandra, UPSLDC

Shri R.K. Gupta, UPSLDC

Shri M.K. Gupta, UPSLDC

Shri Pradeep Mishra, Advocate, RRVPNL

Shri S.K. Jain, RRVPNL

Shri V.K. Gupta, RRVPNL

Shri A.K. Arya, RRVPNL

Shri Darshan Singh, SLDC, Delhi

Shri Deepak Sharma, SLDC, Delhi

Shri Rajiv Gupta, PTCUL

# ORDER

The petitioner Northern Regional Load Despatch Centre (NRLDC) has filed the present petition and three Interlocutory Applications (IAs) bringing on record the continued over-drawl by the constituents of the Northern Region during the period as mentioned against each:

Ser No.	Petition/Application	Period of overdrawal
1	Pet No.125/MP/2012	1.1.2012 to 25.3.2012
1	IA No. 25/2012	1.5.2012 to 14.5.2012
2	IA No. 35/2012	1.6.2012 to 30.6.2012
3	IA No. 38/2012	10.7.2012 to 16.7.2012

The petitioner has sought appropriate directions to the constituents of the Northern Region to curb over-drawl and to maintain safety and security of the grid.

- 2. The main petition and IA 25/2012 were heard on 3.5.2012. The Commission had issued the following directions in order dated 10.7.2012:
  - "22. Considering the seriousness of the situation, notice is issued to Head of State Load Despatch Centers, State Transmission Utilities and State Electricity Boards/the Distribution licensees in the Northern Region as to why they will not be held personally liable for the penalty for non-compliance with the directions of the Commission and provisions of the Grid Code with regard to maintenance of required grid frequency demand estimate and installation of automatic demand management schemes.
  - 23. The petitioner has sought 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:
  - (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 compliance of these directions are 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.
  - (d) The respondents shall submit the status of compliance of Regulations 5.4.2 (d) and 6.4.8 as well as Commission's directions contained in order dated 15.12.2009.
  - 24. 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 22 and 23 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."

- 3. Subsequently, the petition was heard on 26.7.2012 alongwith IA Nos. 35/2012 and 38/2012 on 26.7.2012. The following directions were issued to the petitioner and the respondents in our order dated 30.7.2012:
  - "13. In our view, there are provisions in the Act, Grid Code and the Operating Procedure of NRLDC by which the petitioner would be able to ensure demand disconnections in case of over-drawal from the grid. For this, NRLDC is required to pre-identify the feeders in consultation with the concerned STUs/SLDCs which can be opened when the grid is subjected to danger on account of over-drawal. We direct the petitioner to undertake an exercise on time bound basis and identify the feeders in each of the State Control Areas which can be opened in case of any danger to the grid. The petitioner is directed to submit the details of identified feeders with a contingency plan by 13.8.2012. In the event, the constituents do not comply with the directions of NRLDC with regard to overdrawal issued under section 29 of the Act, the petitioner shall take necessary steps to open the identified feeder(s) to the constituent States in order to reduce the over-drawl and restore the grid to the safe operating frequency band.
  - 14. In our order dated 10.7.2012, we had directed that it would be the personal responsibility of the officers in over all charge of the State Utilities/State Load Despatch Centres to ensure compliance of our directions in Para 22 and 23 of the said order. Since, the situation has not improved despite our directions, we direct the Officers-incharge of the STUs/SLDCs of the States of Uttar Pradesh, Haryana, Punjab, Uttarakhand and Jammu & Kashmir to personally appear before the Commission on 14.8.2012."
- 4. The petitioner has filed IA No.45/2012 on 3.8.2012 seeking indulgence of the Commission in view of the grid disturbance that took place on 30.7.2012 and 31.7.2012. The petitioner has placed on record the messages issued to the constituents regarding overdrawal and loading of the transmission lines which were issued from 0000 hrs to 2400 hrs of 1.8.2012 and has submitted that the respondents have continued to overdraw from the grid. The information submitted by the petitioner has been taken on record.
- 5. Replies to the petition and the IAs have been filed by UP SLDC, Uttarakhand SLDC, Haryana Vidyut Prasaran Nigam Limited, Rajasthan Rajya Vidyut Prasaran Page 4 of 22

Nigan Limited, Jodhpur Vidyut Vitaran Nigam Limited, Jaipur Vidyut Vitaran Nigam Limited, Ajmer Vidyut Vitaran Nigam Limited, Delhi Transco Limited. The petitioner has further filed a compliance report on 14.8.2012 in response to our order dated 30.7.2012.

- 6. The gist of the replies received from the constituents of Northern Region has been discussed as under:-
  - (a) UP SLDC in its reply has submitted that the main reason for overdrawal during the period from May 2012 to July 2012 is on account of huge difference in the demand and availability which has increased during the summer season. As against the average requirement of 11000 MW in the month of May and June 2012, availability has been reduced to 7000 MW which has resulted in power shortage and overdrawal. The reasons for the overdrawal have been ascribed to outage of generation units, shortage of coal, maintenance of machine etc. It has been further submitted that UP SLDC has its own microwave communication system to convey the messages, however, such connectivity is limited to substations of 220 kV and thereafter the messages are conveyed to 132 kV substations by telephone which takes time and as a result the messages received from NRLDC could not give the desired result in required time frame. As regards the implementation of the scheme, the same is in progress and further work shall be performed by STU in coordination with NRLDC.

- (b) Haryana Vidyut Prasaran Nigam Limited (HVPNL) has submitted that the automatic demand management scheme in the form of Rotational Load Shedding Scheme, under frequency relay, df/dt scheme are already operational in Haryana and the reports regarding their operation are being regularly sent to Northern Regional Power Committee. Further, the 220 kV BBMB Samaypur Palwal D/Ckt, 220 kV BBMD Dadri Riwari and 220 kV Dadri Mohindergarh Transmission Lines are opened by NRLDC as per the already agreed system protection contingency scheme.
- (c) Rajasthan Rajya Vidyut Prasaran Nigam Limited (RRVPNL) has submitted that as the load management is primarily the responsibility of the distribution companies, they should be made parties to the petitions filed by NRLDC. The three distribution companies of Rajasthan, namely, Jaipur Vidyut Vitran Nigam Limited, Jodhpur Vidyut Vitran Nigam Limited, Ajmer Vidyut Vitran Nigam Limited, have submitted that wind is a very fluctuating factor and on same day it may vary from 1500 MW to 400 MW and therefore, the distribution companies have no option than to either go for heavy load shedding or overdrawal. However, the distribution companies are making full arrangement to fill up the gap and avoid overdrawal. As regards the implementation of automatic demand management scheme, a committee has been formed which has been studying the scheme and the works done by other utilities in this regard and on the basis of the committee's report, further action will be taken.

- (d) Uttarakhand SLDC has submitted that has per the prevailing manual load disconnection strategy to restrict overdrawal during low frequencies, it is very time consuming and takes 45-60 minutes to pass on the messages of load restriction to approximately to 30-40 sub-stations. In the absence of automatic load disconnection scheme, they are unable to take immediate action on messages given by NRLDC to restrict overdrawal for maintaining proper gird discipline. Uttarakhand SLDC has already prepared and proposed quick action contingency plan for smooth operation of the grid.
- (e) Delhi Transco Limited which is operating the Delhi SLDC has submitted that Delhi SLDC in coordination with the distribution companies draws out the demand-availability position on seasonal basis and based on the scenario, the licensees make necessary arrangement to meet the demand. However, in case of the multiple outages of the generating sources, occasional overdrawal occurs, which is corrected. As regards the automatic demand management scheme, since the responsibility has been assigned to the distribution companies as per the Grid Code, the SLDC has been pursuing the matter with the distribution companies vigorously. It has been submitted that as on date, the state of art Load Management Scheme have been implemented by the distribution companies namely, BSES Rajdhani Power Limited, BSES Yamuna Power Limited and Tata Power Delhi Distribution Limited. The commissioning and testing of the scheme by NDMC is under progress.

- 7. As directed in our order dated 30.7.2012, the Officers in charge of the STUs/SLDCs of the States of Uttar Pradesh, Uttarakhand, Punjab, Haryana and Rajasthan appeared before the Commission on 14.8.2012. However, none appeared from Jammu and Kashmir despite notice.
- 8. During the course of the hearing, the representative of the petitioner submitted that in compliance with the directions of the Commission in the order dated 30.7.2012, consultations were held with the STUs and SLDCs of Northern Region on 8.8.2012 and the minutes of the meeting has been placed on record vide affidavit dated 13.8.2012. He further submitted that it was agreed in the said meeting that all SLDCs would implement state of the art automatic demand disconnection schemes through their distribution licensees at the earliest as per the provisions of Regulation 5.4.2(d) of the Grid Code. The other constituent states could take the help of SLDC, Delhi as the distribution licensees in Delhi have implemented the scheme. He submitted that in the Southern Region, a scheme has been implemented under which identified feeders can be automatically disconnected and restored through SCADA system. This has been shared with the constituents of the Northern Region. He further explained that under the provisions of Regulation 5.4.2(c) of the Grid Code and the directions of the Commission, a plan would be put in place with certain additional requirements so that under continued overdrawal/contingency conditions, specific instructions to open the feeders could be issued. He further submitted that the following method/plan for opening of the feeders was agreed:

#### "(a) Under overdrawal at low frequency

- (i) Procedure in line with IEGC and CERC order for issuing A, B and C messages would continue.
- (ii) If even after 10 minutes of issuance of C message, overdrawal is not reduced as desired, the instructions for opening of the named feeders would be issued to concerned SLDC by NRLDC.
- (iii) SLDC concerned would give instructions to concerned sub-station for opening of the identified named feeder and would give compliance report about opening of feeder within 5 minutes to NRLDC alongwith the antecedent load with the feeder and load relief obtained.

### (b) Under other contingency.

- (i) Normal instructions would be issued and SLDCs would need to take appropriate action for the load management as being done presently.
- (ii) NRLDC can also issue instructions for opening identified feeders under these schemes.
- (iii) SLDC concerned would give instructions to the concerned substation for opening of the identified named feeder within 5 minutes to NRLDC alongwith the antecedent load on the feeder and load relief obtained."
- 9. We pointed out during the hearing that the reaction time of ten minutes/five minutes would not meet the emergency situations which have to be reacted to and handled in seconds. The representative of the petitioner submitted that Central Transmission Utility is exploring what automatic actions could be taken to prevent such situations and would bring out a comprehensive national level proposal containing contingency plan for low frequency and high frequency, low and high line loadings, overdrawal and underdrawal, low voltage, violation of TTC, identification of feeders, and automatic disconnections through opening of feeders. He submitted that CTU would submit a proposal to the Commission in this regard within three months. In response to our query as to how much time would it take to implement the proposal, he submitted

that this could be done only after having communication systems through optical fibers which would take at least two years. He submitted that 132 kV and 66 kV feeders have been identified which will be executed through the SLDCs. As regards the identification of 220 kV and 400 kV feeders, he submitted that these feeders cannot be opened without affecting essential services. He further submitted that RLDCs cannot open the feeders and it has to be implemented through SLDCs only as per the provisions of section 29 of the Act. Learned counsel for the petitioner after referring to the definition of inter-State transmission system under section 2(36) and the functions and directions of RLDCs under sections 28 and 29 submitted that even after the feeders have been identified, the directions of RLDCs could be implemented only through SLDCs under section 29(3) of the Act. When pointed out that the 400 kV and 220 kV lines of the State networks have been included under the Point of Connection charge since they are incidental to inter-State transmission of electricity, the representative of the petitioner agreed that these lines need to be examined for identification of feeders for the purpose of opening during emergency situations to obviate the possibility of grid collapse.

- 10. During the hearing, the Officers in charge of the State Transmission Utilities/State Load Despatch Centres made the following submissions:
  - (a) Shri S.B. Moudgil, Chief Engineer (Power System) Haryana Vidyut Prasaran Nigam Limited (HVPNL) submitted that HVPNL has reduced overdrawal from the grid for the past 15 to 20 days and in fact, is under-drawing from the grid. However, he admitted that HVPNL was over-drawing during the last 3 months on

account of the failure of monsoon, teething problems of the newly established thermal plants and non-availability of coal. He further submitted that whenever frequency touched 49.5 Hz, action had been taken by the SLDC to open the 132 and 66 kV feeders in order to bring down load. He also admitted that automatic load management scheme has not been installed in the State.

- (b) Shri Ashok Kumar Singh, Director (Operation) Uttar Pradesh Power Transmission Corporation Limited (UPPTCL) and Shri Satish Chandra, Chief Engineer (Power System), SLDC, UP agreed that during the crisis, the only solution is to go for automatic demand management scheme and assured that whatever procedure will be envisaged by NLRLDC, NLDC and CTU, the same shall be implemented by the STU. The representative of the NRLDC clarified that as per the Grid Code, it is the responsibility of the State Transmission Utility to go for the automatic load management scheme. Shri Singh further submitted that the SCADA has been developed as a unified scheme in the region and similarly, the automatic load management scheme should be introduced as a unified scheme in the region.
- (c) Shri R.K. Sharma, Chief Engineer, SLDC, Punjab State Transmission Company Limited (PSTCL) submitted that whenever A, B & C Messages were received from NRLDC, they had been quickly acted upon and instructions were issued to the distribution companies to reduce the load. If the instructions are not complied with, the SLDC than cut the lines to snap supply to the distribution companies.

He further submitted that since the distribution companies are not complying with the directions, they should be made parties before the Commission. The representative of the NRLDC clarified that Punjab has also been over-drawing from the gird prior to the gird disturbance on 30th and 31st July, 2012.

- (d) Shri Rajiv Gupta, Chief Engineer, Power Transmission Corporation of Uttarakhand Limited (PTCUL) admitted that Uttarakhand was over-drawing during the period covered under the present petition but submitted that it was due to the unpredictable supply from the hydro generating stations. He further submitted that Uttarakhand has complied with the messages issued by NRLDC, though it has taken time to comply with the messages.
- (e) Shri VK Gupta, Rajasthan Rajya Vidyut Prasharan Nigam Limited(RRVPNL) submitted that situation has improved in Rajasthan on account of load management and purchase of power from the market. However, due to the variation in wind power, the State is forced to sometimes overdraw from the grid. He submitted that whenever messages from NRLDC are received, immediate actions have been taken and the distribution companies are advised to reduce their load and on a few occasions, the feeders have been opened.
- 11. We have considered the submissions of the petitioner and the respondents. From the forgoing discussion, it has emerged that though NRLDC has been issuing A, B and C messages to the constituents to curb overdrawal from the grid, the desired Page 12 of 22

results have not been achieved. Some of the reasons advanced by the constituent States are mismatch between load and availability, unexpected rise in demand for power due to summer, poor monsoon, time taken to convey the messages to 132 kV and 66 kV substations to reduce overdrawal, reluctance/inaction on the part of the distribution companies to reduce the load and absence of automatic load disconnection schemes. In our view, these reasons do not justify continued overdrawal from the grid. It is a common knowledge that overdrawal from the grid leads to load generation imbalance and continued overdrawal by all or most constituents of the region has the portent to result in grid disturbance or grid failure. The grid failure that have taken place on 30th and 31st July, 2012 are grim reminders of the adverse consequences on the essential services, economy of the country and life of the common man. Therefore, the grid security assumes the highest importance which needs to be maintained at any cost and for this, all concerned such as CTU, RLDCs, SLDCs, STUs and distribution companies have important roles to play.

12. Keeping in view the various factors affecting the grid safety and security, particularly the less than encouraging responses from the STUs and SLDCs to the messages of NRLDC, we had directed NRLDC in our order dated 30.7.2012 to pre-identify the feeders in consultation with the concerned STUs/SLDCs which can be opened when the grid is subjected to danger on account of overdrawal and any other reason. The petitioner has submitted that it convened a meeting of the constituents of the Northern Region on 8.8.2012 to identify the feeders and the constituents have agreed to identify the feeders of 132 kV and 66 kV lines and also demand disconnection

protocol requiring the reaction time of 10/5 minutes. Further during the hearing, it has been argued by the representative of NRLDC and the learned senior counsel appearing on behalf of NRLDC that the powers of RLDC are limited to issuing the messages under Section 29 of the Act and the SLDCs are responsible for getting the messages implemented and therefore, NRLDC cannot open the feeders on its own in case the STUs/SLDCs fail to act on its directions.

- 13. In our view, the role of NRLDC cannot be confined to issuing the messages to the STUs/SLDCs alone, and in case of non-compliance, to file petitions before the Commission. These are all post event remedial actions. What is required is the real time action plan to obviate the imminent danger of grid failure when the normal mechanism of maintaining the grid safety and security fails. Section 2(36) of the Act defines "inter-State transmission system" as under:
  - "(36) "inter-State transmission system" includes-
  - (i) any system for the conveyance of electricity by means of main transmission line from the territory of one State to another State;
  - (ii) the conveyance of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-State transmission of electricity;
  - (iii) the transmission of electricity within the territory of a State on a system built, owned, operated, maintained or controlled by a Central Transmission Utility."

Thus inter-State transmission system includes any system for conveyance of electricity by means of main transmission line from the territory one State to the territory of another State by means of main transmission lines. As per section 2 (36) (ii) of the Act as quoted above, inter-State transmission of electricity includes any conveyance of

electricity within the State which is incidental to such inter-State transmission of electricity. According to Stroud's Judicial Dictionary, a thing is said to be incidental to another when it appertains to the principal thing. In the case of Royal Talkies versus Employees State Insurance Corporation [(1978) 4SCC 204], the Supreme Court has held that "a thing is incidental to another if it merely appertains to something else as primary. Surely, such work should not be extraneous or contrary to the purpose of the establishment but need not be integral to it either." Considered in the light of the above legal provision, the term "which is incidental to such inter-State transmission of electricity" in Section 2 (36) (ii) would mean any system used for conveyance of electricity within the territory of a State which appertains to the inter-State transmission system and is used for inter-State transmission of electricity. The ownership or the geographical location of the transmission lines is immaterial to determine whether a system for conveyance of electricity is a part of the inter-State transmission system or not. What is of primary importance is that such system of conveyance must be supplementary to the inter-State transmission of electricity from one State to another State or within a State. In a meshed network of inter-State transmission lines, the 400 kV and 220 kV transmission lines of the State network which are connected to the inter-State transmission lines and carry inter-State power are incidental to inter-State transmission of electricity and therefore, form part of the inter-State transmission system.

14. Section 28 of the Act deals with the functions of the Regional Load Despatch Centre. Sub-section (1) to (3) of section 28 of the Act provides as under:

"Section 28. (Functions of Regional Load Despatch Centre): ---

- (1) The Regional Load Despatch Centre shall be the apex body to ensure integrated operation of the power system in the concerned region.
- (2) The Regional Load Despatch Centre shall comply with such principles, guidelines and methodologies in respect of the wheeling and optimum scheduling and despatch of electricity as the Central Commission may specify in the Grid Code.
- (3) The Regional Load Despatch Centre shall -
  - (a) be responsible for optimum scheduling and despatch of electricity within the region, in accordance with the contracts entered into with the licensees or the generating companies operating in the region;
  - (b) monitor grid operations;
  - (c) keep accounts of quantity of electricity transmitted through the regional grid;
  - (d) exercise supervision and control over the inter-State transmission system; and
  - (e) be responsible for carrying out real time operations for grid control and despatch of electricity within the region through secure and economic operation of the regional grid in accordance with the Grid Standards and the Grid Code."
- 15. Regional Load Despatch Centres has been vested with the function of the apex body to ensure integrated operation of the power system in the concerned region. Moreover, it is responsible to exercise supervision and control over the inter-State transmission system. We have come to the view in para 13 of this order that the transmission lines of the State network which are incidental to the inter-State transmission lines and carry inter-State power are part of the inter-State transmission system. Therefore, by virtue of the statutory authority assigned to the RLDCs to exercise control and supervision over the inter-State transmission system under section 28(3) (d) of the Act, the RLDCs have the necessary authority to control the State network which is incidental to the inter-State transmission of electricity.

- 16. The counsel for NRLDC has argued that in view of the provision of Section 29 (3) of the Act, RLDC cannot directly issue directions to open the feeders in the State network. Section 29 (3) of the Act is extracted as under:-
  - "(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 Centres shall ensure that such directions are duly complied with by the licensee or generating company or sub-station."

As per the above provisions, the directions of the RLDC are to be implemented through SLDC and it is mandatory for SLDC to ensure compliance with the directions by the licensee or generating company or sub-station. This is a normal protocol to be followed for regulation of inter-State transmission of electricity. However, in a case where the SLDC fails to implement and ensure compliance with the directions of RLDC, the provisions of Section 29 (3) becomes in-operative. In such a situation, the RLDCs have to act under Section 28 (3) (d) of the Act in exercise of its statutory obligations to supervise and control the inter-State transmission system and issue necessary directions to the licensees of the State transmission line or any other licensee of the State or generating company or sub-station in the State to ensure compliance with its orders or to even open the pre-identified feeders. Such power can be exercised in extreme exceptional circumstances to save the grid from collapse. It is also pertinent to mention that some of the 400 kV and 220 kV lines of the State network have been included under the point of connection charge since they are incidental to inter-State transmission of electricity. The States do not have any objection to such arrangement. The representative of NRLDC during the course of the hearing has admitted that this aspect has not been taken into consideration at the time of identifying the feeders and needs to be examined.

- 17. NRLDC is directed to identify in consultation with the CTU, CEA,STUs and SLDCs the feeders in the State network which are incidental to the inter-State transmission of electricity which can be opened in case of sustained overdrawal from the grid or any other imminent danger to the grid. It also emerged during the hearing that the identified feeders can be disconnected and restored centrally through the SCADA network. NRLDC is directed to examine this aspect and submit a concrete proposal along with the identified feeders for approval of the Commission by 30.9.2012.
- 18. Some of the SLDCs have expressed their inability to get the directions of RLDC implemented through the distribution licensees of the State. This has apparently arisen due to two reasons. Firstly, the SLDC in the State are not independent and are being controlled by the electricity board or the State Transmission Utility which is a Government Company controlled by the State Government. Secondly, the SLDCs do not pursue the matter against the non-compliant distribution licensees in accordance with the provisions of the Act. Some of the SLDCs have even suggested that the distribution companies should be made parties before the Commission. As regards the status of SLDCs, Section 32 of the Act provides that the State Load Despatch Centre shall be the apex body to ensure integrated operation of the grid in the State. The SLDCs can operate as the apex body and discharge their obligations under the Act efficiently only when they are made financially and functionally independent. Since, the

grid security is a paramount consideration, we expect the State Governments of the Constituents State of the Northern Region to take appropriate steps to make the SLDCs functionally and financially independent for the purpose of discharge of their functions and duties efficiently. As regards the non-compliance of the directions of SLDC by the distribution companies, attention of all concerned is drawn to sub-sections (2) to (4) of Section 33 of the Act which are extracted as under:

- "(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 directions issued by the State Load Despatch Centre under sub-section (1).
- (3) The State Load Despatch Centre shall comply with the directions of the Regional Load Despatch Centre.
- (4) If any dispute arises with reference to the quality of electricity or safe, secure and integrated operation of the State grid or in relation to any direction given under subsection (1), it shall be referred to the State Commission for decision:

Provided that pending the decision of the State Commission, the directions of the State Load Despatch Centre shall be complied with by the licensee or generating company."

It is apparent from the above provisions that in case of non-compliance of the directions of SLDCs and RLDC, by any of the licensees or generating company or any person connected with operation of the power system within the State, the SLDCs have the option to approach the concerned State Commission for appropriate directions. Unless the SLDCs take appropriate steps against the defaulting entities to ensure compliance of their directions through the available legal options, grid discipline cannot be achieved. Moreover, the SLDCs in consultation with the STUs and distribution companies should also take steps to separate feeders for different category of users depending on the criticality of the services and lay down a proper load management protocols which can

be operated in case of contingencies. The SLDCs should also introduce islanding schemes for the essential services so that in case of grid disturbance, essential services are not affected.

19. Director System Operations, UPPTCL raised the issue that the automatic load management scheme should be introduced as a unified scheme in the region as was done in case of introduction of EMS/SCADA. We have considered the submission. Regulation 5.4.2 of the Grid Code deals with Demand Disconnection. Regulation 5.4.2 (d) provides as under:-

"5.4.2 (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 1.1.2011, 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."

Under the Grid Code, it is the responsibility of the SLDCs to prepare the automatic demand disconnection scheme through the distribution companies. Delhi SLDC as well as NRLDC have submitted that three private discoms of Delhi have implemented the automatic load management scheme and the commissioning and testing of the scheme by NDMC is under progress. The other States of the Northern Region should ensure introduction of the automatic demand management scheme in a time bound manner. The progress of the implementation of the scheme should be monitored by the NRLDC and apprised to the Commission from time to time. As regards unified introduction of the automatic demand management scheme as suggested by UPPTCL, we are of the

view that the constituents of the Northern Region are at liberty to discuss the issue in NRPC forum and evolve a consensus in this regard.

20. The overdrawal by the constituents of the Northern Region have been extracted in paras 2, 3 and 7 of our order dated 10.7.2012 and in para 4 and 5 of our order dated 30.7.2012. The details of the messages issued by NRLDC have been extracted in para 4 of our order dated 10.7.2012 and para 4 of our order dated 30.7.2012 which are not repeated in this order for the sake of brevity. We had indicated in our order dated 10.7.2012 that it would be the personal liability of the officers in charge of the STUs and SLDCs to ensure compliance with our directions to curtail overdrawal from the grid and comply with the messages of NRLDC. During the hearing, the officers of UPPTCL, PTCUL, HVPNL, RRVPNL and PSTCL have not denied overdrawal from the grid or non-compliance with the directions of the RLDCs. The officer in charge of PDD, Jammu and Kashmir did not appear despite notice. We deprecate the attitude of the concerned officer towards the order of the Commission in the serious matter like grid discipline. We are of the view that these officers have not only failed to comply with our directions but have also failed to discharge their responsibility under the Act and the Grid Code. We direct the staff of the Commission to process the case for initiation of action under Section 142 of the Act against the officers in charge of STUs/SLDCs of the States of Uttar Pradesh, Uttarakhand, Haryana, Rajasthan, Punjab and Jammu and Kashmir for imposition of penalty for non-compliance with our directions and the provisions of the Act and the Grid Code.

21. The Petition No. 125/MP/2012 along with I.A. Nos.25/2012, 35/2012, 38/2012 and 45/2012 are disposed of in terms of the above.

sd/- sd/- sd/- sd/- sd/- (A.S. Bakshi) (M. Deena Dayalan) (S. Jayaraman) (Dr. Pramod Deo) Member Member Chairperson