

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No.181/SM/2012

Coram:

Dr. Pramod Deo, Chairperson

Shri S.Jayaraman, Member

Shri V.S.Verma, Member

Shri M.Deena Dayalan, Member

Date of Hearing: 27.09.2012

Date of order :14.03.2013

In the matter of

Non-compliance of Commission`s directions and the provisions of the Electricity Act, 2003 and Central Electricity Regulatory Commission (Indian Grid Code) Regulations, 2010.

And

In the matter of

Shri Sudhansu Pandey, Principal Secretary, Power Development Department, Government of Jammu and Kashmir.

Shri M.A.Salroo, Chief Engineer and DCP, State Load Despatch Center, Jammu and Kashmir

Respondents

Following were present:

Shri Shashank K.Lal, Advocate for the respondents

Shri Vinod Khajuria, PDD, J & K

Shri Vikas Sharma, PDD, J & K

Shri Alok Kumar, NRLDC

Miss Jyoti Prasad, NRLDC

ORDER

The Commission vide its order dated 17.8.2012 in Petition No. 125/MP/2012 had observed as under:

" 20.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."

2. The Commission vide its order dated 3.9.2012 has further observed as under:

"4. The respondents neither have filed any reply nor have entered appearance in person or through advocate despite notice. We deprecate the attitude of the respondents towards the order of the Commission in the matter like grid discipline. Despite clear cut directions to curb overdrawal and to comply with the directions of NRLDC, the situation has not improved. Under the grid Code, it is the responsibility of the SLDCs to prepare the automatic demand disconnection scheme through the distribution companies. We are of the view that SLDC is under a statutory obligation to comply with the Grid Code specified by the Commission and ensure compliance with the directions of NRLDC. The respondents have failed to discharge their responsibility under the Electricity Act, 2003, Grid Code and to comply with the directions of the Commission.

5. In view of the above, the respondents are directed to show cause by 17.9.2012, as to why penalty should not be imposed on them under Section 142 of the Electricity Act, 2003 and the penalty amount should not be recovered from their salary for contravention of the provisions of the Act, Grid Code, directions of NRLDC and orders of the Commission."

3. In response to show cause notice dated 3.9.2012, the respondents have filed a joint reply vide affidavit dated 21.9.2012. The respondents have submitted that the State of J & K has consistently endeavored to comply with the statutory rules and regulations under the Grid Code in letter and spirit. However, overdrawal took place during the period under consideration due to the following reasons:

(a) The power allocations from Central Generating Stations for the State of J & K are mainly from the hydro generating stations and the self generation of the State of J & K is also totally dependent on hydro resources only. During winter, the schedule gets reduced to almost 50% due to low water discharge, whereas the power consumption increases due to extreme winter conditions in the State. The hydro generating power stations at Baglihar, Salal and Dulhasti

had discharged low water and as a result, power generation dropped down to 1/3rd of its capacity and consequently, low supply of power was available to the state.

(b) The State of J & K has witnessed unprecedented rush of tourists during January to March of 2012. On account of expansion of tourism, the private sector in the State has expanded the infrastructure facilities. With less than normal production of power by the power plants of the State coupled with the huge influx of tourists increased the power demand significantly which forced the State to overdraw from the Grid. Therefore, overdrawal from the grid was on account of the reasons and factors beyond the control of the State.

(c) All efforts were made by the Jammu & Kashmir Power Development Department to stick to the schedule. However, during the peak hours when the situation was uncontrollable, small amount of overdrawal could not be avoided for brief periods. In absolute terms, the overdrawal was not of the magnitude which could cause any grid disturbance as power handled by J&K was in small proportion compared to other States of the Northern Region.

(d) The State purchased additional power from the market to meet its demand. It can be made out from the chart provided by the Northern Regional Load Despatch Centre that even at the time of failure of the Northern Grid on 30.7.2012, the State of J & K was consuming less than the scheduled supply given to the state. This is also corroborated by the chart downloaded from the website of Northern Regional Power Committee.

(e) The holy month of Ramzan started during the fourth week of July and accordingly, to fulfill its commitment to the people of the State as well as to refrain from overdrawing from the grid, the State made advance planning and purchased power from the market. In view of the unreliability of the hydro power and to meet the increased demand, the State had taken following measures:

- (i) Power budget has been increased and additional power from the market has been procured.
- (ii) The feeders alongwith their respective loads have been pre-identified which can be opened in case of overdrawal.
- (iii) Load shedding plans have been enforced vide Office order No. :PDD/II/AC/34/2010 dated 13.06.2012 issued by the Principal Secretary to Govt. Power Development Department.
- (iv) Efforts are being made on Demand Side Management front to handle peak loads.
- (f) That the State of J&K had pre-identified the loads Blocks of 20-30 MW on 33 KV and 132 KV lines to counter the effect of immediate load shedding when urgent messages are received from the Grid control. However, in the absence of automatic load disconnection scheme, it is being managed manually which at times requires about 15-20 minutes to take effect. In order to improve the communication between the GRID and State panels, Optical Fibre Ground Wire contract has been awarded to PGCIL. The State has also taken steps to commission Automatic Demand Management Scheme in compliance with Regulation 6.4.7 of the Grid Code and the directions issued by this Commission in November, 2011.
- (g) The report of Northern Region Load Dispatch Centre (NRLDC) proves that the State of J&K is not violating any of the provisions. It is evident from the order of this Commission dated 17.05.2012 as the State does not figure in the defaulters list. In comparison to other states of the Northern Region, J&K has the least share of

overdrawing. The State has always maintained its consistency and therefore, overdrawing to a little extent in an event where it was beyond the State's control like sudden backing out of a generating station and the magnitude of overdrawal if any was so small as would not have caused Grid instability.

(h) It has been prayed that considering the above submissions, the Commission may consider not to impose any penalty and recall the order dated 3.9.2012 issuing the show cause notice.

4. During the course of hearing, Ld. Counsel for the respondents submitted that the quantum of overdrawal was very low during the period and corrective actions are being taken to reduce the overdrawal and to comply with the Grid Code and directions of NRLDC. Learned counsel further submitted that 132 kV feeder line were opened at 10 times during the period to contain overdrawal. Ld. Counsel confirmed that Automatic Load Management has not been installed.

5. We have considered the submissions of the respondents. First of all, the statutory provisions for maintenance of secure operation of the regional grid need to be noticed. Section 29 of the Electricity Act, 2003 provides that the directions of Regional Load Despatch Centre for ensuring stability of the grid operation shall be carried out by all concerned including the State Load Despatch Centre who shall ensure compliance of the directions by the licensees and generating companies within its jurisdiction. Section 29 of the Act provides as under:

"29. Compliance of directions- (1) The Regional Despatch Centre may give such directions and exercise such supervision and control as may be required for ensuring stability of grid operations and 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, substation 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 Centres shall ensure that such directions are duly complied with the licensee or generating company or sub-station.

....."

Further the Grid Code enjoins the following responsibilities on the State Load Despatch Centres:

"5.4.2 Manual Demand Disconnection

(a) As mentioned elsewhere, the constituents shall endeavour to restrict their net drawal from the grid to within their respective drawal schedules whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.2 Hz, requisite load shedding (manual) shall be carried out in the concerned State to curtail the over-drawal.

(b) Further, in case of certain contingencies and/or threat to system security, the RLDC may direct an SLDC to decrease its drawal by a certain quantum. Such directions shall immediately be acted upon.

(c) Each Regional constituent shall make arrangements that will enable manual demand disconnection to take place, as instructed by the RLDC/SLDC, under normal and/or contingent conditions.

(d) The measures taken to reduce the constituents' drawal from the grid shall not be withdrawn as long as the frequency/voltage remains at a low level, unless specifically permitted by the RLDC."

"6.4.7 . Provided that the States, through their SLDCs, shall always endeavour to restrict their net drawal from the grid to within their respective drawal schedules, whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.2 Hz, requisite load shedding shall be carried out in the concerned State(s) to curtail the over-drawal."

6. From the above provisions, it is clearly evident that it is the responsibility of the respondents as SLDC to comply with the directions of RLDC and take all measures necessary to maintain grid security. In case of J&K, Power Development Department

(PDD) is still continuing as a vertically integrated entity discharging the functions of transmission, distribution and load despatch in the State. Therefore, it is the responsibility of PDD to make advance planning for meeting consumer load through long term, medium term and short term open access or through increasing internal generation of power and to provide for the contingency measures to reduce the load in real time to maintain load generation balance. Admittedly, the State has been encouraging private sector expansion in the tourism industry. It is therefore the responsibility of the respondents to arrange for adequate supply of power to meet the consumer load keeping in view the variation in seasonal requirements. It has been further submitted that during January to March 2012, there was heavy influx of tourists to the State resulting in enhanced consumption of power. It is pointed out that in order to meet such short term requirements, there is provision for bilateral arrangement of power through short term open access and purchase from the power exchanges. The respondents could have taken recourse to these scheduled sources of power rather than falling back on the unscheduled overdrawal from the grid to meet consumer load. PDD while discharging the responsibility of the load despatch centre in the State is required to take measures as per the directions of NRLDC to reduce the load whenever required to do so in the interest of grid security. It was submitted during the hearing that the 132 kV lines were opened 10 times during the period to reduce overdrawal from the grid. In our view, opening of the feeders should be commensurate with the objective of achieving desired load generation balance so that the grid frequency is maintained within the permissible frequency band. Moreover, the respondents have submitted that after getting messages from NRLDC, it takes about 15-20 minutes for effecting load shedding in the absence of automatic load

disconnection scheme. In this regard, it must be noted that Grid Code contains provisions for automatic load shedding schemes to manage load properly and in an efficient way and this Commission has been emphasising time and again in various orders that the constituent States should introduce automatic load management scheme for ensuring safe and secure operation of the grid. We once again, emphasize that the automatic demand management scheme, as stipulated in the Grid Code should be implemented by the respondents without any further delay.

7. In our order dated 10.7.2012, we had directed that it would be the personal responsibility of the Officers in Charge of the STUs/SLDCs of the concerned State to ensure compliance with para 22 and 23 of the said order. Para 23 of the said order contain a direction for compliance of the following:

(a) Not to overdraw from the grid when the frequency is below 49.5 Hz and to comply with Grid Code.

(b) The directions of NRLDC under section 29 of the Act are complied with and compliance is reported to NRLDC immediately.

(c) Under Frequency Relays are kept in service at all times and feeders for load shedding through UFRs are kept separate from feeders for load shedding through manual disconnection.

(d) Status of compliance of Regulation 5.4.2(d) and 6.4.8 of the Grid Code.

8. The respondents in their reply have admitted to have resorted to overdrawal to meet the shortfall in load but have submitted that compared to the other constituents of

Northern Region, the overdrawal by J&K is comparatively less and could not be the reason for grid instability. At this stage, we need to point out that each constituent of the Northern Region has a bounden responsibility to ensure that its drawal from the grid is confined to its schedule. Then only, the safe and secure operation of the regional grid in accordance with the provisions of the Grid Code can be achieved. In accordance with the Regulation 5.4.2 (b) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulation:

"The SLDC/SEB/distribution licensee and bulk consumer shall ensure that requisite load shedding is carried out in its control area so that there is no overdrawl when frequency is 49.5 Hz or belo."

We have examined the drawal position of State of J&K during the period 11.7.2012 to 31.7.2012 i.e after issuance of Commission's specific direction on 10.7.2012 instructing that there shall be no overdrawl below 49.5 Hz ,. It is noticed that J&K was issued five C messages during the period which means that it was drawing power from the grid when the grid frequency was below 49.5 Hz. On 20.7.2012, J&K was overdrawing by 392 MW when the frequency was at 49.05 Hz. Similarly on 26.7.2012, the State was overdrawing by 187 MW when the frequency was 48.86 Hz. During the period J&K was overdrawing in 286 time blocks when the frequency was below 49.5 Hz with maximum overdrawal of 400 MW. Behavioural analysis of J&K during the period shows that even after receipt of the C messages, the response is very sluggish. For example on 21.7.2012, J&K was overdrawing 257 MW in the time block 59 when the C message was received and even after receiving the message, the overdrawal remained above 200 MW for the next 10 time blocks. It only indicates that there was lukewarm response to the directions of the NRLDC and the directions of the Commission have not been complied with by the respondents.

9. Admittedly, the respondents have not introduced automatic load management scheme. The second respondent has introduced the load shedding plan vide Office Order dated 13.6.2012. However, the relief gained on account of load shedding has not been indicated. The respondents are stated to have pre-identified the load blocks of 20-30 MW on 33 kV and 132 kV feeders though the details of the same have not been furnished. NLDC in its report dated 13.8.2012 has submitted that in consultation with SLDC, PDD, J&K, it has identified 11 Nos. of 132 KV feeders in Jammu Region for a load relief of 371 MW and 14 Nos. of 132 kV feeders in Kashmir Region for load relief of 775 MW.

10. In view of the above analysis, it emerges that there is minimal compliance with the directions contained in our order dated 10.7.2012. Considering the fact that the State has not confined its drawal to the schedule despite our directions to the respondents to stop overdrawal, we impose a penalty of Rs. 50000 each on the First and Second Respondents for their failure to comply with the directions of the Commission. The respondents are further directed to introduce Automatic Load Management Scheme in a time bound manner and identify the feeders which can be opened in case of danger to the grid commensurate with the requirement of load relief and share the same with NRLDC. We direct NRLDC to monitor compliance with our directions and submit monthly report to the Commission.

11. The petition is disposed of in terms of the above.

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(M.Deena Dayalan)
Member

sd/-
(V.S.Verma)
Member

sd/-
(S.Jayaraman)
Member

sd/-
(Dr. Pramod Deo)
Chairperson