CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI** 

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri M. Deena Dayalan, Member

Shri A.K. Singhal, Member

Shri A.S. Bakshi, Member

**Date of Order: 5.1.2015** 

In the matter of

Central Electricity Regulatory Commission (Deviation Settlement Mechanism and

related matters) (First Amendment) Regulations, 2014

Statement of Reasons

The Central Electricity Regulatory Commission (Deviation Settlement Mechanism

and related matters) Regulations, 2014 ('Principal Regulations') was notified on

6.1.2014 and Corrigendum to the Principal Regulations was notified on 17.2.2014. The

Commission proposed certain amendments to the above Principal Regulations,

publishing the Draft Central Electricity Regulatory Commission (Deviation Settlement

Mechanism and related matters) (First Amendment) Regulations, 2014 along with Explanatory

Memorandum through a public notice on its website on 23.06.2014. The Comments/ Suggestions/

Objections on the draft regulations were sought from the stake holders by 07.07.2014.

2. In all 11 stake holders including system operator (POSOCO), Western Regional Power

Committee (WRPC), Generators, State Utilities, Renewable Generators etc (List enclosed as

Annexure –I) made their submissions/ comments / suggestions on the proposed amendments in

the draft regulations.

3. The proposed amendments have been deliberated in subsequent paragraphs based on

the submissions / suggestions/ comments of the stakeholders.

# 4. Amendment of Regulation 5 of the Principal Regulations

- 4.1 In the draft regulation, the following amendment to the Regulation 5 of the Principal Regulations was proposed:
  - "(1) In sub-clause (ii) of clause (1) of Regulation 5 of Principal Regulations, the figure '1.4.2014' shall be substituted by the words 'the date of revision of price of APM gas by the Government of India'
  - (2) In clause (5) of Regulation 5 of Principal Regulations, the words and figure "up to 31.3.2014 and thereafter ₹5.64/kWh sent out" appearing against APM gas as fuel shall be substituted by the words "up to the date of revision of price of APM gas by Government of India and thereafter at the rate to be notified by the Commission separately."
- 4.2 None of the stake holders have made any comments/ objections to the proposed amendment.
- 4.3 The Commission in its Explanatory Memorandum has stated as follows with regard to above proposed amendment:
  - "2. Regulation 5(1) of the Principal Regulations provides for charges for the deviations for all time blocks payable for over drawl by the buyer and under-injection by the seller and receivable for under drawl by buyer and over injection by seller which is worked out on the average frequency of a time block at the rates specified in the table there under. However, sub-clause (ii) of Regulation 5(1) of the Principal Regulations provides that no cap rate would be applicable with effect from 1.4.2014 on the charges for the deviation for the generating stations regulated by Commission using gas supplied under Administered Price Mechanism (APM) as fuel. Based on this, the cap rate for injection of infirm power during testing and commissioning period corresponding to APM as fuel was specified as ₹2.82/kWh sent out upto 31.3.2014 and as ₹5.64/kWh sent out thereafter, under Clause (5) of Regulation 5 of the Principal Regulations.
  - 3. The price of APM gas has not been revised by the Government of India with effect from 1.4.2014. In Regulation 5 (1) (ii) of the Principal Regulations, the date has been indicated as 1.4.2014. Since the price of APM gas is being revised by Government of India, it has been proposed to substitute the date '1.4.2014' in sub-clause (ii) of clause (1) of Regulation 5 of Principal Regulations with the words from the date of revision of APM gas by Government of India. Similarly, in Regulation 5 (5) of the Principal Regulations, the price of APM gas has been shown as ₹2.82/kWh sent out up to 31.3.2014 and thereafter, ₹5.64/kWh sent out has been proposed to be substituted as ₹2.82/kWh sent out up to the date of revision of APM gas by Government of India and thereafter at the rate to be notified by the Commission separately."

In view of above, the proposed amendment is in order and accordingly, Regulation 5 of the Principal Regulations is being amended.

# 5. <u>Amendment to Regulation 7 of the Principal Regulations</u>

- 5.1 The draft regulation had proposed following amendments to the Regulation 7 of the Principal Regulations:
  - (1) Proviso to clause (1) of Regulation 7 and proviso (i) to clause (2) of Regulation 7 of Principal Regulations shall be deleted.
- 5.2 In the Explanatory Memorandum, the following justifications were given in support of the above amendment:
  - "4. Clause (1) of Regulation 7of the Principal Regulations provides as under:
    - "7(1) The over-drawals / under drawals of electricity by any buyer during a time block shall not exceed 12% of its scheduled drawal or 150 MW, whichever is lower, when grid frequency is "49.70 Hz and above"

Provided that no overdrawal of electricity by any buyer shall be permissible when grid frequency is "below 49.70 Hz".

- 5. Clause (2) Regulation 7 of the Principal Regulations provides as under:
  - "7(2) The under-injection / over-injection of electricity by a seller during a timeblock shall not exceed 12% of the scheduled injection of such seller or 150 MW, whichever is lower when frequency is "49.70 Hz and above"

### Provided that -

- (i) no under injection of electricity by a seller shall be permissible when grid frequency is "below 49.70 Hz" and no over injection of electricity by a seller shall be permissible when grid frequency is "50.10 Hz and above".
- (ii) any infirm injection of power by a generating station prior to COD of a unit during testing and commissioning activities shall be exempted from the volume limit specified above for a period not exceeding 6 months or the extended time allowed by the Commission in accordance with the Connectivity Regulations.

- (iii) any drawal of power by a generating station prior to COD of a unit for the start up activities shall be exempted from the volume limit specified above when grid frequency is "49.70 Hz and above".
- 6. The volume limits on deviations from schedules and the consequences of crossing such limits have been specified by the Commission as above in order to discourage the underdrawl and over-injection above the grid frequency of 50.10 Hz. However, it is observed that in addition to the charges for deviation as specified under Regulation 5 of the Principal Regulations, additional charges for deviation due to over-injection/ under-drawal of electricity for each time block by a seller/buyer, as the case may be, when grid frequency is "50.10 Hz and above" and "below 49.70 Hz has been clearly specified under Clause 4 and clause 6 of Regulation 7 of the Principal Regulations, as under:
  - "7(4) In addition to Charges for Deviation as stipulated under Regulation 5 of these regulations, Additional Charge for Deviation shall be applicable for over-injection/under drawal of electricity for each time block by a seller/buyer as the case may be when grid frequency is "50.10 Hz and above" at the rates equivalent to charges of deviation corresponding to the grid frequency of "below 50.01 Hz but not below 50.0 Hz".
  - "7(6) In addition to Charges for Deviation as stipulated under Regulation 5 of these Regulations, Additional Charge for Deviation shall be applicable for over-drawal or under-injection of electricity when grid frequency is "below 49.70 Hz" in accordance with the methodology specified in clause (8) of this regulation and the same shall be equivalent to 100% of the Charge for Deviation of 824.04 Paise/kWh corresponding to the grid frequency of "below 49.70 Hz".

Provided further that Additional Charge for Deviation for under-injection of electricity by a seller, during the time-block when grid frequency is "below 49.70 Hz", by the generating stations regulated by CERC using coal or lignite or gas supplied under Administered Price Mechanism (APM) as the fuel in accordance with the methodology specified in clause 8 of this regulation shall be equivalent to 100% of the Cap Rate for Deviations of 303.04 Paise/kWh.

- 7. In the above background, the limits on the deviation volume in proviso to clause (1) and proviso (i) to clause (2) of Regulation 7 of the Principal Regulations are not required to be provided and accordingly the same has been proposed to be deleted."
- 5.3 In response to the draft regulation, Power System Operation Corporation Limited (POSOCO) has submitted as follows:
  - (a) The purpose of Regulation 7 (1) & 7 (2) (i) of the Principal Regulations is to specifically prohibit over drawal and under injection below 49.7 Hz. Any violation of this provision would render the defaulting utilities subject to consequences.

Deletion of the proviso to Regulation 7 (1) and proviso to Regulation 7 (2) (i)

would have the effect of legalizing over drawl and under injection in the cases as provided for in the regulations. In this connection, POSOCO has relied on the judgment of the Allahabad High Court in Narsingh Das vs Mangal Dubey in which the Hon'ble High Court observed as under:

"Courts are not to act upon the principle that every procedure is to be taken as prohibited unless it is expressly provided for in the Code, but on the converse principle that every procedure is to be understood as permissible till it is shown to be prohibited by the law. As a matter of general principle, prohibition cannot be presumed".

(b) The UI mechanism was introduced before market in electricity was developed. The objective of the regulations was to maintain grid discipline as envisaged under the Grid Code through the commercial mechanism of Unscheduled Interchange Charges by controlling the users of the grid in scheduling, despatch and drawal of electricity. The Statement of Reasons of the UI Regulations, 2009 provided as under:

### "15. Enforcement for crossing the over-drawl limit

(2)..... There cannot be two opinions that over-drawl and under-generation at low frequency will have to be treated as noncompliance of RLDC's instructions and contravention of regulations and will have to be strictly dealt with as per the relevant provisions of the Act".

## "17. Compliance with the instructions of Load Despatch Centre

(3) It may be seen that as per the scheme of things, RLDC shall administer the volume cap provisions by monitoring the real-time injection and drawl of various participants and it may issue the instructions to the concerned beneficiaries, generating stations, buyers and sellers to observe grid discipline in compliance of UI regulations and the Grid Code. The Act prescribes penalty for non-compliance of the instructions by RLDC/SLDC instructions. Further, such non-compliance shall be treated as contravention of the regulations/ Grid Code and any such non-compliance brought to the notice of the Commission may attract penalty under Section 142 and / or Section 149 of the Act."

POSOCO has submitted that the provisos in question under the Deviation Settlement Mechanism (Principal Regulations) provide for a specific restriction on any over-drawl/ under injection below 49.70 Hz and over injection "above 50.10 Hz". As per the SoR referred to above, any non-compliance in this regard would invite action under Section 142 of the Electricity Act. The removal of this proviso, however, sends a wrong signal and weakens one of the major improvements made by virtue of the Principal Regulation.

- (c) The subsequent changes carried out in the UI mechanism by the Commission over a period of time was to induce market players to move to market based instruments and move away from dependence on UI. The UI mechanism should ideally have been used for inadvertent interchange of power only. However, it was observed that gradually with the passage of time, a number of utilities had started using this mechanism as an easy way to draw power to meet load / sell power, without any prior financial commitment.
- (d) Unrestricted UI without any limits is possible only on a free-flowing (transmission constraint-free), smaller system. Over the last decade, four of the regional grids have been integrated and system size has become very large. In such a large grid, over-drawl / under-drawl by the constituents to the tune of thousands of MW based on the specified UI rate, was leading to constraints in the system, and endangering the security of the grid.
- (e) In view of the problems that arose, the Commission vide notification dated 6<sup>th</sup> January 2014, introduced the Central Electricity Regulatory Commission

(Deviation Settlement Mechanism and related matters) Regulations, 2014. With the implementation of the Deviation Settlement Mechanism, volume limit for buyer and seller depending on their schedule, range of frequency has tightened and charges for the deviation were increased.

- (f) The regulations seek to improve the grid discipline and help the States to initiate forecasting of demand and schedule in more accurate manner. One of the main reasons for the discipline has been the provisos in question which strictly prohibit deviation from the schedule when the frequency is too low or too high.
- (g) Provisions in the CERC Unscheduled Interchange charges and related matters (Amendment) Regulations, 2010 on volume limits is as under:

"Regulation 7 (1): The over-drawl of electricity by any beneficiary or a buyer during a time block shall not exceed 12% of its scheduled drawl or 150 MW whichever is lower, when frequency is "below 49.80" Hz and 3% on a daily aggregate basis for all the time blocks when the frequency is "below 49.80 Hz".

Regulation 7 (2): The under-injection of electricity by a generating or a seller during a time-block shall not exceed 12% of the scheduled injection of such generating station or seller when frequency is 'below 49.80 Hz' and 3% on daily aggregate basis for all the time 7 blocks when the frequency is "below 49.80 Hz".

It is submitted that the provisos now sought to be removed were added as an additional prohibition under the Deviation Settlement Mechanism and was a progressive measure to ensure effective frequency control. The deletion of the provisos would be a retrograde step and should be avoided."

(h) On 13<sup>th</sup> April 2012 and 16<sup>th</sup> May 2012, NRLDC had filed Petition No. 125/MP/2012 and IA No. 25/2012 before the Commission for maintaining grid security of the entire new grid by curbing over-drawls and affecting proper load management by Northern Region constituents. The Commission vide order dated 10<sup>th</sup> July 2012 had directed inter-alia as under: ".... The Respondents shall not resort to any over drawl from the New grid when the frequency is below 49.50Hz..."

Despite the specific directions of the Commission, the directions of NRLDC were not complied by some of the state constituents. It is therefore, submitted that the presence of a specific clause prohibiting over drawls in case of low frequency should appear in the Regulations itself.

The specific provision therefore was introduced by the Commission itself in the Principal Regulations. Deletion of the same however, takes us backward to the older regime. This has the potential to raise similar problems that arose on 30<sup>th</sup> and 31<sup>st</sup> July 2012, yet again.

- (i) Recommendation of the enquiry committee report on Grid Disturbance of 30<sup>th</sup> and 31<sup>st</sup> July 2012 The Enquiry Committee in its Report dated 16<sup>th</sup> August 2012, while identifying various factors responsible for grid disturbance had observed that in the interest of power quality and grid security, there is a definite need to operate the system at and very close to 50 Hz. If more and more number of utility players resort to over draw/ under drawl, it may even lead to load encroachment phenomena and grid disturbance, as has been observed in recent grid disturbance. It has therefore, recommended as under"
  - **"9.2 Frequency Control through Generation reserves / Ancillary services** 9.2.1 Frequency band needs to be further tightened and brought close to 50 Hz. POSOCO may file an urgency application in Supreme Court for early resolution of the issue in view of the recent grid disturbances.
  - 9.2.2. A review of UI mechanism should be carried out in view of its impact on recent grid disturbances. Frequency control through UI may be phased out in a time bound manner and generation reserves/ Ancillary services may be used for

frequency control. Appropriate regulatory mechanism needs to be put in place for this purpose. POSOCO should take up the matter with CERC."

(j) The Commission in its order in Petition No. 121/MP/2013 filed by Karnataka Power Transmission Corporation Limited and State Load Despatch Centre, Karnataka observed as under:

"With regard to the submission of NLDC that over-drawl irrespective of the frequency should not be allowed, we intend to clarify that at present, UI Regulations and Grid Code allow over-drawl within prescribed limits in normal situations and therefore, no such directions can be issued which would be contrary to the regulations.

However, it clarified that normal situation means that the line flows are within limit as prescribed in Revised Congestion Management Procedure in Real Time System Operation read with conjunction with CEA's manual on Transmission Planning Criteria.

24. SRLDC shall keep the above observations in view while giving any instructions to the State constituents for curtailment of over-drawl at the frequencies higher than the threshold limit specified under the UI Regulation".

From the order it can be inferred that without a specific mandate provided for in the regulations, in case RLDCs issue messages in real time, the actions for requesting curtailment of deviation can be questioned.

- (k) It is further submitted that once the deviation is allowed without limits under normal circumstances, the deviating constituent may not be in a position to come to schedules in case of a contingency. Since ADMS is yet to be implemented in most of the states, manual action shall or shall need to be resorted to, which takes time and hence put the grid to risk.
- (I) Moreover, an expert group comprising of Prof. Anjan Bose, Prof. S.A Khaparde and Prof. A.K. Sinha was formed to analyze the various aspects regarding

implementation of Deviation Settlement Mechanism and the recommendations of the group are as under:

- a. Primary control by governors is absolutely necessary to maintain frequency within strict limits.
- b. As the interconnections grow to subcontinent size and interchanges between areas increase, the primary control by governors has to be supplemented by secondary control (AGC) using tie-line bias.
- c. Limitations to deviation volume will not void the need for secondary control.
- d. Direct primary and secondary control to keep frequency and schedules within acceptable ranges for reliability.

The Deviation settlement mechanism would be beneficial in load forecasting in all time horizons, frequency control through primary control (FGMO), secondary control (AGC) and tertiary controls. As a consequence, this would minimize deviations in the grid.

Large deviation can be brought to zero within 3-4 minutes through Automatic Generation Control (AGC) in the United States of America.

It is submitted that because of the stricter controls provided in the Deviation Settlement Mechanism, the entities shall be under an obligation to

implement various frequency control measures. However, if the provisos are deleted, the mechanism becomes less stringent and the entities may get relaxed.

(m) Regulations 6.4.6 of The India Electricity Grid Code provides as under:

".....Maximum inadvertent deviation allowed during a time block shall not exceed the limits specified in the Deviation Settlement Mechanism Regulations....."

Regulation 6.4.7 of the IEGC also provides as under:

"...The SLDC, SEB/ distribution licensee shall always restrict the net drawl of the state from the grid within the drawl schedules keeping the deviations from the schedule within the limits specified in the Deviations Settlement Mechanism Regulations..."

It is submitted that while providing for restriction of over drawl/ injection and under drawl / injection in the grid code, a reference has been made to the Deviation Settlement Mechanism. The provisos in question provide strength to the said provisions of the Grid Code and deletion of the same is not appropriate.

(n) POSOCO has submitted that once the provisos to Regulation 7 are deleted as proposed, the Regulation would merely serve a commercial purpose and would cease to have a deterrent effect on the buyers/ sellers. In such a scenario, an over drawl/injection from the grid shall easily be settled through monetary payments with no further consequences to the defaulter. Thus, the purpose of the Regulation, which is to ensure security of the grid by discouraging unscheduled exchange, would stand defeated. Further, while under the principal Regulation, an over drawl / under drawl or under injection / over injection would have the effect of violation of the Regulation, subsequent to the amendment; it

shall not be considered a violation and hence, would not have a prohibitory effect on the buyer/ seller.

(o) POSOCO has suggested that the provisos to Clause (1) of Regulations 7 of the Principal Regulations may be revised as:

"Provided that no over drawl of electricity by any buyer shall be permissible when grid frequency is "below 49.70 Hz" and no under drawl of electricity by any buyer shall be permissible when grid frequency is "50.10 Hz and above".

- 5.4 National Thermal Power Corporation Ltd. (NTPC) has submitted as follows:
  - (a) Over- drawl / under drawl by a buyer and under-injection / over-injection by a seller in frequency range of 49.7 Hz, "below 49.7 Hz" above 50.1 Hz" have different deviation settlement mechanism clearly specified in succeeding clauses of Regulations 7 namely Regulation 7(4) and Regulation 7(6). To avoid ambiguity, proviso of Regulation 7(1) and proviso (i) of Regulations 7(2) has been rightly deleted making it concurrent with Regulation 7(4) Regulation 7 (6) but to provide adequate clarity to these regulation we propose that the words "and below 50.10 Hz" may be added after clause 7(1) and after clause 7(2).
  - (b) Under certain bonafide circumstances from the generator side, over injection/under injection from a particular station may take place for the reasons beyond the control of generator viz. Start-up and ramping of loads, outage/ partial outage of machine, generators being given schedule below technical minimum, variation in coal quantity etc. Such variations are inadvertent and may take place due to technical reasons beyond the control of generator.

- (c) NTPC has accordingly suggested for modification of Regulation 7(1) & 7(2) as under:
  - "7(1) The over-drawls / Under-drawal of electricity by any buyer during a time block shall not exceed 12% of its scheduled drawl or 150 MW, whichever is lower, when grid frequency is "49.70 Hz and above" and "below 50.10 Hz"
  - 7(2) The under-injection/ over-injection of electricity by a seller during a time-block shall not exceed 12% of its scheduled injection of such seller or 150 MW, whichever is lower when frequency is "49.70 Hz and above" and "below 50.10Hz".

### Provided that

i) "generating station shall be exempted from applicability of deviation charge as well as additional deviation charges in case of deviations due to start-up and ramping of loads, outage / partial outage of machine, generators being given schedule below technical minimum, variation in coal quantity beyond the control of generators"

## **Analysis and decision**

5.5 We had proposed deletion of certain provisos as detailed herein earlier keeping in mind that the Additional Deviation Charges would be a good enough deterrent to refrain from actions adversely impacting the grid security. However, there appears to be merit in the submission of the POSOCO that deletion of these provisos shall merely serve a commercial purpose and would cease to have a deterrent effect on the buyer and seller and we tend to agree with them and accordingly, would like to drop the proposed amendment. However, we are not in agreement with the NTPC to allow relaxation from levy of deviation charges and additional deviation charges for deviations due to start-up and ramping of loads, outage / partial outage of machine, generators being given schedule below technical minimum, variation in coal quantity beyond the control of generators. The generator is expected to declare its capacity adequately in accordance with the ramp rates as per the characteristic curves of the

manufacturer and generate as per schedule given by the System Operator and should keep the variation strictly within the specified limit. As far as outages are concerned, the generator has the liberty to revise the declaration effective from 4<sup>th</sup> time block.

5.6 In view of the above discussion, Regulations 7 (1) and 7 (2) shall be amended as under:-

"7(1) The over-drawals / under drawals of electricity by any buyer during a time block shall not exceed 12% of its scheduled drawal or 150 MW, whichever is lower, when grid frequency is "49.70 Hz and above" **and "below 50.10 Hz"** 

Provided that no overdrawal of electricity by any buyer shall be permissible when grid frequency is "below 49.70 Hz" and no underdrawal of electricity by any buyer shall be permissible when grid frequency is "50.10 Hz and above".

"7(2) The under-injection / over-injection of electricity by a seller during a time-block shall not exceed 12% of the scheduled injection of such seller or 150 MW, whichever is lower when frequency is "49.70 Hz and above" and "below 50.10 Hz".

### Provided that

- (i) no under injection of electricity by a seller shall be permissible when grid frequency is "below 49.70 Hz" and no over injection of electricity by a seller shall be permissible when grid frequency is "50.10 Hz and above".
- (ii) any infirm injection of power by a generating station prior to COD of a unit during testing and commissioning activities shall be exempted from the volume limit specified above for a period not exceeding 6 months or the extended time allowed by the Commission in accordance with the Connectivity Regulations.
- (iii) any drawal of power by a generating station prior to COD of a unit for the start up activities shall be exempted from the volume limit specified above when grid frequency is "49.70 Hz and above".

## **Additional Submissions**

5.7 Wind Independent Power producers Association (WIPPA), Tripura State Electricity Corporation Ltd. and GRIDCO have sought amendment of limit of 12% of schedule or 150 MW whichever is less in Regulation 7 of Principal Regulation.

### 5.7.1 WIPPA has submitted as follows:

- (a) Amended frequency band and restricted deviation of 150 MW for each time block allowed for operation of grid would seriously effect injection of wind power in states like Tamil Nadu, Maharashtra, Gujarat, Karnataka etc. with high wind penetration.
- (b) For example in Tamil Nadu state, the variation in wind power generation could be in the range of 1000 to 1500 MW and such variation cannot be predicted in advance and need to be handled with real time situation. Even if the forecasting system exists for entire state, a 30% variation during the peak season Tamil Nadu could be around 1000 MW. Hence restriction of 150 MW deviations would be counterproductive for Wind generation.
- (c) Also, with narrowing down of frequency bandwidth, such a large variation in Wind generation would not be possible to be handled as it would lead to breaching the bandwidth and deviation limit. In order to contain the deviations, states often resort to curtailment in wind generation in peak generation months which results in huge loss of wind generation.
- (d) Hence under these circumstances, the latest revision of narrowing down the frequency band and restricting the deviation limit to 12% or 150 MW, whichever is lower would be inconsistent with the provision of Electricity Act and IEGC, that confers MUST RUN status to renewable sources (such as wind) both of which have been framed with a view to promote generation form renewable sources.

- (e) Appropriate relaxation shall be made for states with high wind penetration and high wind power generation while considering in the application of Regulation 5.2
  (m) of the IEGC regulations 2010, as amended by the amendment regulations, 2014, whereby frequency bandwidth for operation has been modified from the existing 49.7Hz 50.2Hz to 49.90 Hz 50.05Hz.
- (f) Similar relaxations should be given to these states in application of regulation 7
  (1) and (2) of CERC (Deviation settlement Mechanism and related matters) regulations 2014, whereby deviation in injection / drawl shall not exceed the lower of the 12% or 150 MW or schedule for each time block. The host state shall be exempted from payment of financial charges due to any deviation from the schedule in excess of 12% or 150 MW as long as these variations are due to variation in wind generation.

# 5.7.2 Tripura State Electricity Corporation Ltd. has submitted as follows:

- (a) The limit of deviation for under drawal and injection as 12% of 150 MW if the schedule is less than 150 MW.
- (b) The liability of additional and penalty for injection of power may be excluded during contingency / force majeure such as tripping of generation / sudden outage of generation / breakdown of transmission and distribution system due to some, rainfall, cyclone etc.
- (c) Since TSECL has foreseen the difficulties from the draft stage of deviation settlement mechanism and made a reference to NERPC and Hon'ble

Commission, CERC vide letter NO. AGM/C&SO/2485-90 dated 07.01.2014 for full implementation of requisition based drawal schedule in NER before implementation of deviation settlement mechanism followed by petition before Commission on 18.01.2014 for removal of difficulties before new regulations came in to force w.e.f. 17.02.2014, therefore, the additional charges and penalty out of new regulations may be condoned.

5.7.3 GRIDCO Ltd. has submitted that the State is having ISGS share of 900 MW to 1000 MW approximately under normal condition, which is further reducing by the quantum of power export through interstate open access by different State utilities resulting reduced net ISGS drawl schedule of the State. The deviation margin of 12% or 150 MW (whichever is lower) is quite inadequate to operate the state grid where a number of distribution companies are operating in the State. Therefore, the regulation 7 (1) may be amended as follows:

"7(1) The over-drawals / under drawals of electricity by any buyer during a time block shall not exceed 20% of its scheduled drawal or 200 MW, whichever is lower, when grid frequency is "49.7 Hz and above"."

In case this is not possible then the deviation limit existing at present {12% or 150 MW (whichever is lower)] should be considered on the State's gross ISGS drawal schedule i.e. without considering open access transactions by the State utilities.

# **Analysis and Decision**

5.8 With regard to the submission of WIPPA, Tripura State Electricity Corporation Ltd. and GRIDCO, it is noted that the issues raised by them go beyond the draft proposals. The issues similar to the issues raised by them here are being heard by the

Commission in separate petitions filed by a wind generator and by the Tripura State Electricity Corporation Ltd. itself. As such we are not inclined to go into the issues raised by them at this stage.

## 6. Amendment of Annexure-II of the Principal Regulations

6.1 The Commission had also proposed to amend the illustration in Annexure–II at Para 'C' of the Principal Regulations, in order to align the same with clause 4 of Regulation 7 of the Principal Regulations. Accordingly, the letter and figure "D12/150" appearing in Para 'C' of Annexure-II of the Principal Regulations has been proposed to be substituted by the letter "Dtb".

### 6.2 The WRPC has submitted as follows:

(a) The clause 4 of Regulation 7, of Principal regulations clearly states that "Additional Charge for Deviation shall be applicable for over-injection/under drawal of electricity for each time block by a seller / buyer as the case may be when grid frequency is "50.10 Hz and above" at the rates equivalent to charges of deviation corresponding to the grid frequency of "below 50.01 Hz but not below 50.0 Hz". However, the illustration given in Para C of Annexure-II of the Principal Regulations was not in line with the clause 4 of Regulation 7. Therefore instead of amendment in Para C of Annexure – II, the above proposed amendment may be brought up in the form of corrigendum/ clarification/ errata to the Para C of Annexure – II of Principal Regulations.

- (b) WRPC is preparing the DSM statement based on clause 4 of Regulation 7, of principal regulations and other RPCs may also be preparing the DSM statement based on clause 4 of Regulations 7 of Principal Regulations.
- (c) Utilities affected due to reason mentioned at (ii) above, may seek revision in the DSM statements already issued w.e.f. 17.02.2014 till the date of effect of the amendment (which is not required due to clarity in clause 4 of Regulation 7 of Principal regulations), in case the above amendment is incorporated in the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (First Amendment) Regulations, 2014.
- (d) WRPC has requested that the above proposed amendment in the draft regulation be deleted and the same may be brought out in the form of corrigendum/ errata/ clarification to the principal regulations rather than as an amendment of the Principal Regulations.

### **Analysis and Decision**

6.3 It is noted that none of the stakeholders has objected to the proposed amendment/ correction in the illustration 'C' of Annexure –II. WRPC has however, suggested to issue the proposed amendment as corrigendum. We agree with WRPC and clarify that the correction is in the nature of corrigendum to bring it in conformity to the Principal Regulation. We accordingly, advise staff of the Commission to issue a corrigendum.

- 6.4 The Salasar Steel and Power Ltd, Vandna Global Ltd. and Rotocast India Ltd. has submitted as follows:
  - (a) There seems to be contradiction between the Methodology proposed under Annexure – II Clause (A) for Under drawal by Buyer or Over injection by Seller and the contents of the main body under Clause 5 (1). Annexure – II Clause (A) provide as follows:
    - "(A) When D to i.e. Deviation from schedule in a time block in MW is less than (+/-) 12% of the schedule in MW or 150 MW, whichever is lower in each time block, D to to be payable by the regional entity at normal Charges for Deviation"
  - (b) This clause clearly seems to indicate that when a Seller over injects power upto 12% [or 150 MW whichever is lower] of his schedule then he is liable to PAY an amount. Similarly a Buyer is liable to PAY an amount if his under drawal of power is within the 12% band.
  - (c) This is in direct contradiction to the principle laid out in Clause 5 [1] of the Notification which indicates that in the event of Underdrawal by Buyer or Over injection by Seller the Buyer or Seller is supposed to RECEIVE an amount. Clause 5(1) is reproduced below for your reference:

"5 Charges for Deviations:

The Charges for the Deviations for all the time-block shall be payable for over drawal by the buyer and under-injection by the seller and receivable for under-drawal by the buyer and over-injection by the seller and shall be worked out on the average frequency of a time-block at the rates specified in the table below as per the methodology specified in clause (2) of this regulation"

6.4 The Rotocast India Ltd. has further, submitted that due to above inconsistency in the Methodology published in the said Regulation SLDC, Chhattisgarh is billing Sellers

for Over injection at Frequency linked rates leading to huge payable amounts for over injection by sellers. Thus amounts which ideally should have been receivable in the hands of the Seller are becoming payable. This is when the said injection is within the 12% permitted band and Frequencies are below 50.10Hz.

6.5 This inconsistency seems to suggest an illogical conclusion wherein Sellers should always inject more than 12% of the schedule in order to avoid the billing of PAYABLE amounts for over injection.

## **Analysis and Decision**

6.6 Though the above, illustration 'A' of Annexure – II was not proposed to be amended but there is merit in the submission of the Salasar Steel and Power Ltd, Vandna Global Ltd. and Rotocast India Ltd. Accordingly it is decided that the word 'payable' be replaced with word 'receivable' in illustration 'A' of Annexure – II.

# 7. Additional submission

### 7.1 Tata Power has submitted as follows:

(a) TPDDL being a distribution Licensee has the responsibility to provide reliable and economic power supply to the end consumers pursuant to which, it is persistently endeavouring to optimize its power purchase cost along with providing reliable power. To achieve its objective of providing reliable and economic power to the end consumers, TPDDL has ensured adequate power tie ups for servicing the 24x7 demand of its consumers. However, TPDDL needs affirmative contribution from its stakeholders especially transmission service provider namely Delhi

Transco Limited and scheduling coordinators namely NRLDC and SLDC for delivering this power to the end consumers. The high number of breakdowns in 400/220 KV networks along with non-timely backing down of plants by NRLDC and SLDC has led TPDDL to pay huge penalties and also loose huge revenues. The same besides causing discomfort to our consumers would also lead to increase in power tariffs as power tariffs as power from long term sources was scheduled for which TPDDL will have to pay both variable as well as fixed cost along with associated transmission charges. It may be noted that besides incurring the losses, power could not be delivered to our end consumers.

- (b) Hon'ble CERC has released new Deviation Settlement Mechanism and related matters Regulations, 2014 to achieve greater reliability and security of grid by having stricter norms as regard to drawl/injection of power to the grid. TPDDL pursuant to its above objective and guidelines provided by Hon'ble CERC has been very particularly monitoring the real time scenario and taking all necessary actions to ensure that minimum loss is made through under drawl of power in UI. The entire objective gets defeated due to high number of transmission line trippings and constraints of NRLDC and SLDC to get generation backed down timely. These trippings have impacted both the reliability and economics of TPDDL services.
- (c) The estimated revenue losses due to trippings of transmission lines during the period from March, 2014 is approx ₹244 Lakhs. The loss also lead to 3.22 MU's which could not be reached to the end consumer thereby affecting the system

reliability. It may also be noted that besides revenue loss mentioned as above, TPDDL has to pay a penalty of ₹32 lakhs on account of underdrawl when the system frequency was high and every unit lost additionally incurred a penalty of ₹1.78 per unit.

- (d) Vide this letter we call for urgent intervention on your behalf to take necessary action and also fix the responsibility for the compensation of the amounts/ revenue lost by TPDDL. We also request the Hon'ble Commission to take cognizance of the above submissions and issue suitable directions to Delhi Transco/ NRLDC/Delhi SLDC (as loss suffered since imposition of DSM Regulations.
- (e) Alternatively, we request the Hon'ble Commission to consider suspension of DSM Penalty applicable on Discoms for reasons beyond their control such as transmission outages scheduling.

### **Decision**

7.2 The submissions of Tata Power are not related to the amendment proposed accordingly, the same has not been considered.

sd/- sd/- sd/- sd/- sd/- sd/- (A.S. Bakshi) (A.K. Singhal) (M. Deena Dayalan) (Gireesh B. Pradhan) Member Member Chairperson