

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
PLOT NO.3, MADHYA MARG, SECTOR 18-A, CHANDIGARH
ORDER

DATE: 09.09.2020

In the matter of

**Punjab State Electricity Regulatory Commission (Intra-State Deviation
Settlement Mechanism and Related Matters) Regulations, 2019**

1. INTRODUCTION

The Commission issued the draft Punjab State Electricity Regulatory Commission (Intra-State Deviation Settlement Mechanism and related matters) Regulations, 2019 (Annexure A) along with Explanatory Memorandum (Annexure B) seeking comments/objections/suggestions from the stakeholders by 16.12.2019.

Comments/suggestions from six stakeholders i.e Talwandi Sabo Power Limited (TSPL), GVK Power Limited (GVK), Nabha Power Limited (NPL), Punjab State Power Corporation Limited (PSPCL), Saini Power Transactors and Punjab State Load despatch Centre (PSLDC)/PSTCL were received. Thereafter, the Commission conducted a public hearing on 17.12.2019, which was attended by representatives of NPL, PSPCL and PSLDC. Some stakeholders re-submitted the written comments/suggestions and also made oral submissions. The comments received from the stakeholders on the draft regulations, the analysis and decisions of the Commission on these comments/suggestions along with reasons for the same are as under:-

2. Regulation 2: Definitions and Interpretation

Comments Received

(i) Clause (J) ‘Deviation’

TSPL suggested that the words "shall form part of the State Energy Accounts to be prepared by the State Load Despatch Centre" may be deleted since State Energy Account is a separate document and thus needs to be treated separately than the DSM account.

(ii) Clause (l) ‘Full Open Access Consumer’

Clause (t) ‘Partial Open Access Consumer’

PSLDC proposed that the word “or” appearing between the words “transmission system” and “distribution system” in both these definitions may be replaced with “and/or”.

(iii) Clause (r) ‘MoD Guidelines’

TSPL pointed out that there are no documents/MOD Guidelines as of now in the State of Punjab. Both Punjab State Grid Code and Draft DSM regulations are silent on the same.

Analysis and Decisions

(i) The Commission agrees that Deviation Account is a separate document from the State Energy Account. The Commission observes that as per CERC DSM Regulations and PSERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019, “**Deviation**” in a time-block for a Seller means its total actual injection minus its total scheduled generation and for a Buyer means its total actual drawal minus its total scheduled drawal”. The Commission decides to retain the same definition as in the CERC regulations in these regulations also.

(ii) The Commission notes that in both the definitions, the word used is “connected to”. The connectivity of a partial or full open access consumer shall be either to a distribution system or to the transmission system. The connectivity of an open access consumer is governed by Regulation 4 of the PSERC (Terms and Conditions for Intra-state Open Access) Regulations, 2011, as amended from time to time, which provides that the connectivity shall be at voltage level specified in the Supply Code. Thus there is no need to change the definitions of ‘partial open access consumer’ or ‘full open access consumer’.

(iii) Reference may be made to clause (B) under the caption ‘Definitions’ of the State Grid Code which defines Merit order despatch on the basis of variable cost of energy. However, to bring clarity, the Commission decides to amend the definition as under:

'MoD Guidelines' means the Guidelines for operation of Merit Order Despatch and amendments thereof, as may be approved by the Commission separately, if required, in accordance with State Grid Code.

3. Regulation 4: Applicability

Comments Received

The following comments/suggestions on this regulation have been received:

- (i) *TSPL suggested that Deviation Settlement Mechanism under these Regulations shall be applicable for all Seller(s) and Buyer(s) in the Control area of Punjab SLDC.*
- (ii) *NPL submitted that Separate accounting of State-owned Distribution licensees and state-owned Generating entities should be done in compliance to the DSM regulations.*
- (iii) *PSLDC suggested that the words "using intra-state transmission system (InSTS) or distribution system" may be replaced with "using intra-state transmission system (InSTS) and/or distribution system". PSLDC also proposed that the words "including Inter-State Wheeling of power" may be replaced with "and when such intra-state system is used in conjunction with Inter-State Transmission System".*
- (iv) *PSPCL submitted that it is a distribution company owning generation assets. PSPCL shall be treated as a single entity and Intra-state DSM should not be made applicable to both of them. In case these regulations are implemented, PSPCL will be subjected to pay DSM charges both for generating plants and Distribution Company. PSPCL as an entity has to otherwise bear the DSM charges on account of deviations caused by its own generating stations. Accordingly, PSPCL's generating stations should also be exempted from opening of LC on account of DSM.*

Analysis and Decisions

- (i) Every State has a different mix of conventional and renewable generation. The proposed limit of above 5 MW has been fixed keeping in view the capacity of PSLDC to handle deviation settlements, the investment required to be made by generators for telemetry etc and the minimal effect of the

deviation from schedule by small generators on the grid stability. The capacity of eligible State entities to be covered under DSM regulations needs to be specified in order to ensure operational control of PSLDC on such entities. As provided in the first proviso to clause 4(A), the threshold capacity limit shall be separately notified by the Commission in stages considering all implementation aspects

- (ii) The State-owned distribution licensee and State-owned Generating entities are covered separately/individually under these DSM regulations. These regulations shall be applicable to all sellers with installed capacity above 5 MW connected to InSTS and accounting shall be carried out as per Regulation 15 of these Regulations.
- (iii) The Commission agrees to amend the wording as suggested by PSLDC to cover supply of power to State entities using the distribution system in conjunction with the transmission system of the State. Further, the words "including Inter-State Wheeling of power" will be replaced with "and when such intra-state system is used in conjunction with Inter-State Transmission System" to further clarify that the Intra-State DSM Regulations cover transactions where the State Entity uses the Intra-State system in addition to the Inter-state network.
- (iv) As per the provisions of the State Grid Code read with clause (B) of regulation (6) these regulations, all state generating plants are required to provide availability and all buyers their drawal schedule for the next day to PSLDC. Based on availability and load requirements, PSLDC draws up the least cost despatch schedule on day ahead basis in accordance with the merit order principles. Thus it is the function of PSLDC and not of the distribution licensee or buyer to draw up the despatch schedule on day ahead basis. Accordingly, PSPCL cannot be treated as a single entity for scheduling and deviation mechanism. Grid discipline and security is of paramount importance. Each State entity is responsible for its own deviation. As a distribution licensee, as long as PSPCL draws power as per schedule it will not be liable for any deviation charges. As a generator it will be responsible for any deviation from its schedule.

The payments to be made to the State Deviation Pool will be made against the schedule submitted by the PSPCL for despatch and drawal separately and thus, a separate payment security mechanism is required to ensure timely payment to the pool by the generation plants as well by the distribution company.

- (v) The Commission further observes that must run generators as defined in the IEGC have been proposed to be exempted from the applicability of these regulations in the draft clause (A) of regulation (4), which is not in accordance with the provisions of CERC regulations. The renewable energy generators and run of the river projects without pondage have been exempted only from Sustained Deviation Charges. In view of the above the clause (A) of regulation 4 has been amended.

4. Regulation 5: Duties of State Load Despatch Centre and State Entities

Comments Received

- (i) **Clause (2):** *TSPL suggested that since Punjab has its own State Grid Code as notified on 14th February, 2013 so reference of IEGC in this clause would create confusion for the entities and may be removed.*
- (ii) **Clause(3):** *Separate detailed Guidelines to be prepared by the SLDC for Meter Synchronization including the interval of meter Synchronization.*
- (iii) *PSLDC proposed that a new clause may be added in line with PSERC (Forecasting, Scheduling and Deviation Settlement and related matters of Solar & Wind Generation Sources) regulations, 2019 for Telemetry/Communication System and the Data Acquisition System.*

Analysis and Decisions

- (i) The State Grid Code is consistent with the IEGC, however to remove any possible confusion, the suggestion is accepted.
- (ii) The interface meters proposed under SAMAST scheme shall have the feature of auto-time synchronization through GPS, thus, with the implementation of SAMSAT, the issue will be resolved.

- (iii) Regarding a new clause for Telemetry/Communication System and the Data Acquisition System, the Commission notes that clause (2) of Regulation 5 of the draft Regulations specify that “*The State entities shall operate their equipment and loads in a manner that is consistent with the provisions of the Indian Electricity Grid Code and the Punjab State Grid Code*’.

Further, Regulation 4.9 of the State Grid Code provides that

“Reliable and efficient speech and data communication systems shall be provided to facilitate necessary communication and data exchange, and supervision/control of the grid by the SLDC, under normal and abnormal conditions. All Users shall provide Systems to telemeter power system parameters such as power flow, voltage and status of switches/transformer taps etc. in line with interface requirements and other guidelines made available by SLDC. The associated communication system to facilitate data flow up to appropriate data collection point on STU’s system shall also be established by the concerned User as specified by STU in the Connection Agreement. All Users in coordination with STU shall provide the required facilities at their respective ends as specified in the Connection Agreement.”

In view of the above, there is no need to insert a separate clause for Telemetry/Communication System and the Data Acquisition System

5. Regulation 6: Principles for Operationalising Deviation Settlement Mechanism

Comments Received

- (i) **Clause B(i):** TSPL pointed out that Merit Order is not published by Punjab SLDC and PSPCL on its website. Publication and timely updating of the same would ensure strict compliance of MOD. It has been proposed that additional clause regarding Publication of Merit Order on the website of Punjab SLDC and PSPCL should be added.

- (ii) **Clause (B)(iii):** TSPL pointed out availability and Declared capacity are one and same thing. Generators have to declare their availability in the form of Declared Capacity so the clause may be amended.
- (iii) TSPL and NPL suggested that Real time online data of scheduling and despatch should be made available on SLDC website for better load control and transparent process.
- (iv) TSPL suggested that all Generators including IPPs are to be treated at par with BBMB. Thus, clause iv should either be removed or extended to all Generators including IPPs
- (v) **Clause (G):** PSLDC proposed that as sustained deviation violation charges have been defined under regulation 10 (K) in line with the provisions of CERC DSM Regulations so in clause 6(G), only reference to relevant clause may be made in the first proviso to clause 6(G).

Analysis and Decisions

- (i) PSLDC has confirmed that the Merit Order, as available with it, is being published on its website.
- (ii) The Commission agrees with the objector that Availability and Declared capacity are interchangeable terms and therefore decides to use the wording in clause B(iii) of this regulation as contained in the State Grid Code.
- (iii) PSLDC has confirmed that SCADA data is available on PSLDC website. After the implementation of SAMSAT, Real time data shall be available.
- (iv) As BBMB is scheduling power to more than one state, the schedule has to be finalized with beneficiary states and communicated to NRLDC. In case of generating stations supplying power within the state, the requirement of co-ordination with NRDLC does not arise.
- (v) The Commission agrees with the suggestion and decides to amend the clause 6(G).

6. Regulation 7: Declaration of Capacity and Scheduling

Comments Received

- (i) *TSPL submitted that the deviation from Schedule in compliance with the DSM regulations be allowed to generators.*
- (ii) *Saini Power Transactors suggested that provision regarding "Telemetry/Communication System and the Data Acquisition System may be added under clause 7 since telemetry is a necessary tool for SLDC. The real-time visibility of the generating stations and the sub-stations to the SLDC is necessary for the reliable grid operation and security of the electrical power system. Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 and Punjab State Grid Code Regulations, 2013 mandates the provision of telemetry system.*

Analysis and Decisions

- (i) The objection is not sustainable. The inadvertent deviation (and not intentional) from schedule has been well recognized in clause 11.3.6 A & 11.3.6 C of State Grid Code and in these DSM regulations. The mechanism has been devised on the lines of CERC DSM Regulations for secure operation of the grid.
- (ii) The issue has already been discussed at para no. 4(iii) above

7. Regulation 8: Treatment for Gaming

Comments Received

TSPL submitted that on certain occasions penalties are levied/recommended by SLDC and deducted by the Discoms without giving proper opportunity to the affected party. TSPL proposed that additional Clauses that the Seller or any Buyer who has been charged of gaming, should be given equal opportunity before the Commission/ enquiry officer to place his case and no penal deductions be allowed till the matter is finally decided.

Analysis and Decision

During an enquiry, all the affected parties are required to be provided adequate opportunity to present their case along with supporting documents. The Commission therefore decides to suitably amend Regulation 8(1) to address the concern of the objector.

8. Regulation 9: Charges for Deviations

Comments Received

- (i) *TSPL submitted that the Cap rate for the charges for the Deviation for the generating stations regulated by CERC has been used for capping in Punjab. The Cap rate of 303.04 Paise/kWh for the charges for the Deviation for the generating stations has been derived by CERC based on costing of power across the country. Since, the landed cost of fuel in Punjab is higher because of Punjab being distant from fuel sources, the Cap Rate for Punjab should be re-determined by the Commission.*
- (ii) *On the other hand PSPCL submitted that the cap needs to be removed. In case of under injection by the IPPs/ generators, the implication of overdrawning will be passed on to sole discom PSPCL. In case of overdrawal, PSPCL will be paying DSM charges at the rates which are based on day ahead market and are much higher than the proposed cap of 303.04 paise/kWh. Under injection by the Seller for grid frequency below 49.85 Hz has been stipulated to be equivalent to 100% of Cap rate for deviation of 303.04 P/ kWh whereas for a buyer overdrawal below grid frequency of 49.85 Hz. has been stated to be equivalent of 100% of charges of deviation of 800 P/ kWh as per Regulation 10 (F). Due to this price differential, Buyer shall get penalized heavily on account of under injection by the Seller and hence there should be no price difference in the favour of the Seller.*

Analysis and Decisions

- (i) Keeping in view the market conditions, CERC through the 5th amendment to DSM regulations, has specified a cap rate of 303.04 paise/kWh [rate of imported coal determined by CERC] for all plants irrespective of the fuel

type and whether tariff of such generating station is regulated by the Commission or not. The cap rate is necessary to discourage deliberate over-injection and resultant increase in frequency. The basic principle is to ensure grid safety. The Commission agrees that the landed cost of fuel of some of the generating plants in Punjab is on higher side and also that the cap rate has to be determined keeping in view the variable cost of different plants operating in the State. As per the ARR petition submitted by PSPCL for FY 2020-21, the variable cost of IPPs reported are as under:

IPP	Variable Cost FY 2018-19(actual) Paise/kWh	Variable Cost FY 2019-20 (H1 + H2) Paise/kWh
NPL	297.16	303.93
TSPL	320.49	357.65
GVK	344.24	363.10

In view of the above, the Commission decides to fix the cap rate based on variable cost of the SGS.

- (ii) Regarding PSPCL's comment that under-injection by generators will force the DISCOM to overdraw from the grid, it is reiterated that each State entity is responsible for its own deviation. The generating stations will be responsible for their own deviations. As a distribution licensee, as long as PSPCL draws power as per schedule it will not be liable for any deviation charges.. However, the distribution licensee should not lean on the grid to meet its demand. Attention is invited to para 3.1(D)(a) of the SoR to 4th amendment in DSM Regulations issued by CERC wherein it has been emphasized that Grid does not generate electricity and DISCOMs should refrain from leaning onto the grid to meet their demand-supply gap. The proposed price vector seeks to drive the State entities to plan day ahead and invest in improving their load forecasting techniques. The proposed DSM Price Vector is a measure towards ensuring grid security and seeks to induce the generating stations to improve upon their generation planning and the Discoms to improve their power procurement planning. Now with

the introduction of Real Time market, DISCOMs should use RTM to buy additional power instead of resorting to over-drawal from grid. With strict provisions of additional deviation charges for crossing Volume limits and sign change provisions, the generator will face heavy penalty for under-injection.

Keeping in view the principles laid down in CERC DSM Regulations, the variable cost of IPPs operating in Punjab and security of grid, the Commission decides to specify the cap rate of 363.10 Paise/kWh instead of 303.04 Paise/kWh.

9. Regulation 9(4) and Reg. 10: Volume limit

Comments Received

- (i) *TSPL submitted that Limiting of Deviation to 10 MW is contrary to the provision of Sign Change of Generation which allows for deviation ± 20% of the installed capacity of the seller or +/- 20 MW. Further, CERC has allowed for deviation up to 12% of Schedule or 150 MW in a time block. Limiting on Deviation volume should be in line with CERC Deviation Settlement Mechanism Regulations i.e. 12% of Schedule or 150 MW. Large IPPs should be treated at par with Discoms, hence the capping at 10 MW should not be done. Also, by having separate limits for buyers (Discom) and Sellers, the original objective of grid discipline and grid security shall be lost as it would commercially incentivize one party against another.*
- (ii) *GVK submitted that Volume limit of “12% of the schedule or 10 MW, whichever is lower” is very low for a 540 MW plant for the following reasons:*
 - a. *If Restricted Governor Mode Operation (RGMO) is initiated during that time block, the deviation can be as high as 5% of schedule i.e. 27 MW. If the 10 MW is limited for charges and additional charges as per regulations 9(4) and 10, then the generator will be penalized for no fault of his.*
 - b. *Load ramp up and ramp down needs to be followed as per SLDC instructions (subject to technical limits).*

c. In case of forced outages, the additional charges levied would be higher, if the limit is set at 10 MW.

d. CERC regulations allow 12% of the schedule or 150 MW whichever is lower

(iii) NPL also submitted its comments/objections on similar grounds

Analysis and Decisions

(i) The Commission examined the issue in detail and observes that the charges for failing to meet the sign change requirement are separate charges which are applicable in addition to the normal deviation charges and additional deviation charges (if applicable). As regards the deviation limit of 12% of schedule or 150 MW, whichever is lower, specified by CERC, it is to be noted that the limit of 150 MW has been fixed by CERC for the State as a whole and not for any individual intra-state entity (as stated in the explanation under second proviso to clause (1) of Regulation 7 of CERC DSM Regulations which provides that "*The limits specified in this clause shall apply to the sum total of over-drawal/under-drawal by all the intra-State entities in the State including the distribution companies and other intra-State buyers, and shall be applicable at the inter-State boundary of the respective State*"). Providing similar limits to each generator would result in breach of the cap of 150 MW specified for the State as a whole in case even one generator deviates from his schedule in such a large quantum. Therefore, the overall limit of 150 MW is allocated across the beneficiaries in the states such that the State Volume Limit is not breached. The proposal is in line with the Model Regulations approved by Forum of Regulators. However keeping in view the technical constraints expressed by the stakeholders, the Commission decides to review the volume limit for sellers and accordingly amend Regulations 9,10 & Annexure-II.

Regarding different limits for seller and buyers, refer Clause 4.4(c) of SOR to 4th amendment to CERC DSM Regulations wherein it has been held by CERC that generators have significant control over generation so can't be equated with distribution licensee, the relevant portion of the clause is reproduced below for ready reference:

Clause 4.4 (c) “-----Further, the limitations of a load serving entity cannot be equated with that of a generator. The generator has significant control over generation and therefore, the generator cannot be provided with the same deviation limit, as that of the distribution utilities.”

- (ii) The Scheduling and Despatch Code under Punjab State Grid Code read with IEGC covers all aspects of revision in schedule during various scenarios such as ramp-up/ramp-down, forced outage of units, constraints due to evacuations etc. and deviations thereof are considered accordingly. The proposed DSM mechanism is a measure towards ensuring grid security and seeks to induce the generating stations to improve upon their generation planning and the Discoms to improve their power procurement planning. The generator has significant control over generation, and therefore, Commission reiterates that appropriate measures be taken in strict adherence to provisions contained in the State Grid Code read with IEGC.

In case of initiation of RGMO or ramping up/down by a generator on the directions of PSLDC, the schedules will be revised by PSLDC and deviation charges shall be applicable if the generator deviates from the revised schedule. In case of forced outage, deviation charges and additional charges for deviation, as the case may be, are applicable. However, the generators under long term contract have the right to revise their schedule effective from 7th/8th time blocks, as the case may be, to take care of contingencies. The CERC Volume limit of 150 MW, as already explained above, is for the State as a whole and the volume limit for intra-State entities has to be fixed to ensure that the limit for the State as a whole is not breached. The State entities must adhere to schedule and shall be accountable for their deviation from schedule in the overall interest of efficient grid operation.

Although the volume limit of “12% of schedule or 10 MW, whichever is lower” is as per the provisions of Model Regulations approved by Forum of Regulators but the Commission after taking in to account some technical constraints highlighted by the generators decides to

specify volume limit of “12% of schedule or 20 MW, whichever is lower” instead of “12% of schedule or 10 MW, whichever is lower”. Penalty bands for additional deviation charges have also been revised accordingly. To safeguard very small buyers, the Commission decides to specify a minimum volume limit of 1 MW for buyers. The relevant clauses under Regulations 9, 10 along with Annexure-II have been amended accordingly.

10. Regulation 9(6)

Comments Received

TSPL submitted that the Charges of deviation should be published on Punjab State Load Despatch Center website on daily basis.

Analysis and Decision

There is merit in the suggestion being made by the objector as timely publication of deviation charges will ensure more frequent reconciliation and review of the charges by the concerned parties. Though the DSM rates are already being provided on the website of the National Load Despatch Centre (NLDC) but the PSLDC shall also make necessary arrangements to upload the DSM charges.

11. Regulation 9(7)

Comments Received

NPL pointed out that it has been provided that the linkage of Deviation Charges to frequency may be reviewed by the State Commission as and when revised by the Central Commission. In this case, re-notification of PSERC may be implemented from the date of revision in CERC's regulation. This will avoid any mismatch in the regional and pool account.

Analysis and Decision

The price vector in Annexure -1 is as per CERC DSM regulations and the same will change as soon as it is amended by CERC. Re-notification will create an issue regarding the date of implementation. So the Commission decides to delete clause 7 of Regulation 9.

12. Regulation 9(8)

It has come to the notice of the Commission that in clause (8) of Regulation 9 of the draft Regulations, a uniform cap rate of 303.04 Paise/kWh has been proposed as cap rate corresponding to all types of fuel for infirm power injected into the grid during testing, prior to COD, which is not in line with CERC DSM Regulations (amended upto 5th amendment).

Clause (5) of Regulation 5 of CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014 provides that the infirm power injected into the grid during testing, prior to COD shall be paid at charges for deviation subject to ceiling of cap rates corresponding to the main fuel used for such injection as under:

Domestic coal/ Lignite/Hydro	Rs. 1.78/kWh sent out
APM gas as fuel	Rs. 2.82/kWh sent out up to the date of revision of price of APM gas by the Government of India and thereafter, at the rate to be notified by the Commission separately
Imported Coal	Rs. 3.03/kWh sent out
RLNG	Rs.8.24/kWh sent out

Further, as per clause (3) of Regulation 5 of CERC DSM regulations, 2014, the cap rate for deviation charges w.r.t generating stations regulated by CERC using coal/lignite or gas supplied under APM was fixed corresponding to energy charges on imported coal. No such cap rate was specified for other plants.

CERC vide 4th amendment to the DSM Regulations, amended clause 5 of Regulation (5) and specified Rs.8.00/kWh for RLNG fuel. Further, CERC amended proviso (ii) of clause (1) of Regulation 5 to provide a cap rate of 303.04 Paise/kWh for all plants not regulated by CERC and irrespective of fuel.

Through the 5th amendment to the DSM Regulations, CERC specified a uniform cap rate of 303.04 Paise/kWh for all plants irrespective of fuel type and whether the tariff of such plant is regulated by CERC or not. This cap rate has been

specified w.r.t charges for the deviation from schedule and cannot be applied to infirm power. CERC has also made no amendment in clause (5) of Regulation 5 dealing with infirm power through 5th amendment.

In view of the above, the Commission decides to follow the provisions of CERC DSM Regulations, as amended from time to time, to specify cap rates corresponding to main fuel used for infirm power and to amend clause 8 of Regulation 9 accordingly.

13. Regulation 10(k): Sustained Deviation Charges:

Comments Received

- (i) *PSLDC proposed that the limit "± 20% of the installed capacity of the seller" may be amended to "± 20 % of quantum approved for Injection/drawal (for both buyer and seller).*
- (ii) *PSPCL submitted that the sustained deviation charges from 01.04.2020 are extremely stringent. PSPCL has paid heavy sustained deviation charges after the implementation of 4th amendment (effective 01.01.19) to DSM regulation on account of SCADA/ SEM data mismatch. CERC had subsequently amended the provision through 5th amendment in DSM Regulations (effective 03.06.19). In view of the difficulties experienced by PSPCL, the sustained deviation charges as applicable on date i.e. as per Regulation 10 (K) (a) need to be retained for the period from 01.04.2020 onwards.*
- (iii) *NPL/TSPL submitted that the Sustained deviation charges and additional charges may be waived off for the following additional cases:
 - i. Ramp-up of the load after forced and planned shutdown.
 - ii. RGMO intervention in 7th / 13th time block, as the case may be.
 - iii. Incase revision of the schedule from 7th/13th time block, as the case may be, till stabilization of the load.
 - iv. Forced outage of any generating station having 100% capacity tied up with the state & supplying power to the state under Long Term PPA.*

Analysis and Decisions

- (i) The Commission notes that stipulation of +/- 20% of installed capacity is not in line with CERC DSM Regulations wherein only tolerance band of +/- 20 MW has been specified. Stipulating the lower of +/- 20% of installed capacity or +/- 20 MW with reference to its schedule may impose very stringent limits on small generators, whose deviations may not cause significant disturbances in the grid. Accordingly the Commission decides to delete the provision of \pm 20% of installed capacity in this regulation while retaining the provision of +/- 20 MW with reference to its schedule.
- (ii) The objective of the DSM Regulations is to enforce grid discipline through a commercial mechanism of deviation settlement. Accordingly, the regulations stipulate the applicability of deviation charges and exemptions thereof. The practical aspects of operationalizing the arrangements outlined in the regulations will be covered as part of the Operating Procedures and Procedure for Energy Accounting. Concerns regarding any data errors should therefore be addressed as part of these procedures when they are put in the public domain.

On the issue of mismatch between SCADA and SEM meter data, CERC in its comments against issue number (c) under para 1.3 of the SoR to 5th amendment, held that SCADA-SEM mismatch etc are operational issues and this matter should be resolved by coordinating with the entity responsible for maintaining such infrastructure. Grid security cannot be compromised on account of inaction on such issues.

The Sustained Deviation Charges consistent with CERC DSM regulations needs to be levied to all intra-state entities (including PSPCL) in order to avoid any mismatch in State Deviation Pool Account due to difference in PSERC notified Sustained Deviation Charges from the CERC notified sustained charges applicable for the State as a Whole.

- (ii) The clause is strictly as per CERC DSM Regulations, as amended from time to time. CERC through 4th amendment of DSM Regulations issued vide notification dated 20.11.2018 introduced condition of sign change after every 6 time blocks and a penalty in the shape of additional charge

of 20% on the daily base DSM charges. In view of the technical and operational difficulties raised by the stakeholders (as has been highlighted by the objector), CERC through its 5th amendment to the DSM Regulations issued vide notification dated 28.5.2019, introduced a tolerance band of \pm 20 MW from schedule to subsume various inadvertent deviations. CERC has also allowed the provision of sign change after every 12th time block to continue upto 30.11.2020 vide order dated 29.5.2020. CERC in its Statement of Reasons [Sr.No. 1.3, Issue-2 (e)] to 5th amendment to DSM Regulations, has mentioned that the allowable range of +/- 20 MW from schedule has been introduced considering the technical and operational constraints and this tolerance band should be sufficient to subsume the reported constraints on account of RGMO/ FGMO instructions. In case of a planned shutdown, the generator is expected to provide the schedule considering the time required for ramp up of load. Since CERC had considered all the technical and operational constraints highlighted by the generators before finalizing the 5th amendment to the DSM Regulations therefore the Commission decides to retain the sign change provision as specified in CERC DSM Regulations.

14. Regulation 13: State Energy Account

Comments Received

Clause (iii): NPL submitted that after issuance of the statement of charges for Deviation including additional charges, at least 20 days' time to be given to the entities before the payment, for checking the calculations and reporting to SLDC in case any dispute. NPL further submitted that the source of the frequency data for the calculations of deviations should be clearly defined and third Party audit report to be provided by SLDC to all entities.

Analysis and Decision

Clause 4 of Regulation 13 states that:

"A detailed energy accounting procedure shall be prepared by the SLDC within 3 months and submitted to the Commission for approval.

Provided that, SLDC shall undertake stakeholder consultation by uploading the draft procedure on SLDC's website before submission of procedure to the Commission for approval."

The suggested provisions may be appropriately addressed in the aforementioned procedure which shall be developed by the PSLDC. However, all the timelines shall have to be consistent with the provisions of State Grid Code and CERC regulations (IEGC/ DSM regulations).

PSLDC shall specify the source of frequency data along with other relevant details in the detailed procedure to be submitted to the Commission for approval under these DSM regulations. Third party audit, whenever made applicable, report thereof shall be provided to all entities/ uploaded on PSLDC website.

15. Regulation 15: Accounting of Charges for Deviation

Comments Received

(i) *NPL submitted that DSM accounts of all the State entities along with the export energy data considered for the calculation should be made available publicly on SLDC's website.*

(ii) **Clause (C)**

TSPL proposed that firstly, the outstandings to be paid to the State Entities must be released from the State Deviation Pool Account. The Sequence of payments from the State Deviation Pool Account needs to be reorganized.

(iii) **Clause (D)**

TSPL suggested that the recovery of shortfall in funds in the State Deviation Pool Account by levy of additional charge from the State Entities should not be allowed. If, recovery of additional amounts is to be done as mentioned in clause 15 (D) then whatever surplus is available in the State

Deviation Pool Account, should also be distributed on proportionate basis amongst the state entities after end of a financial year.

Analysis and Decisions

- (i) PSLDC should upload all the relevant data regarding deviation account on its website. .
- (ii) The accounting procedure for Deviation is in line with CERC DSM Regulations.
- (iii) As per the design of the deviation pool account, ideally, there should not be any shortfall if all pool participants pay their dues. If the surplus (if any) in the pool account is also to be distributed amongst the State entities then it shall be Zero balance Pool Account, which is not desirable because it would not be fair and equitable to all the State entities . The accounting procedure in these regulations is in line with CERC DSM Regulations, Model Regulations approved by FoR and are being followed by most of the States.

16. Regulation 16 : Schedule of Payment of Charges for Deviation

Comments Received

- (i) Clause (D): *PSLDC proposed that the words "within a fortnight from the date these Regulations come into force" may be replaced with "before the date of commercial mechanism under these regulations come into force". Further, for defaulting entities failure to pay outstanding dues/ not maintaining required Letter of Credit/RBI Letter of Mandate, following clause may be added at the end of regulation (16): -*

"In case of default in payment/ failure to maintain required Letter of Credit or any other agreed Payment Security Mechanism, action may be initiated by SLDC against the defaulting entities on the same pattern as specified by Hon'ble CERC under CERC (Regulations of Power Supply) Regulations, 2010".

- (ii) Clause (E): *NPL submitted that the amount pending for payment to the seller / buyer against earlier claims may be adjusted first from the DSM pool account and settled, then only the recovery process be initiated.*

Analysis and Decisions

- (i) Since the date of notification of these regulations and the date of commercial arrangements will be different therefore the clause have been amended as under:

"All the State entities shall be required to open a Letter of Credit (LC)/RBI letter of mandate equal to 110% of its average payable weekly liability for deviations in the previous financial year, in favour of the SLDC within a fortnight from the date of notification regarding operationalisation of commercial arrangements as per first proviso to clause (2) of regulation (1) of these regulations."

Regarding inserting penal provision in case of default, it will not be appropriate to introduce such provision without inviting public objections. An enabling provision has been inserted under clause (D) of Regulation 16.

- (ii) Each entity is provided sufficient time to make payment against its dues in the State Deviation Pool Account. The encashment of LC would act as a deterrent to delay in making payment to the pool.
- (iii) To cover cases where the average payable weekly liability for deviations in the previous financial year of any State Entity is not available, the Commission decides to insert a proviso that in such case, the average payable weekly liability for deviations of a completed month during the current year shall be considered to calculate the value of Letter of Credit (LC)/RBI letter of mandate to be opened.

17. Regulation 17:Governance Structure

Comments Received

Clause (C): *TSPL submitted that the meetings of State Grid Code Review Committee (SGCRC) and Commercial & Metering Committee (CMC) should be done mandatorily as per the timelines specified under the Grid Code.*

Analysis and Decision

Meetings of the State Grid Code Review Committee and Commercial & Metering Committee do not come under the ambit of Deviation Settlement Mechanism.

18. Annexure II

Comments Received

- (i) *TSPL submitted that IPPs should be treated at par with DISCOMs and Limit on Deviation volume should be in line with CERC Deviation Settlement Mechanism Regulations i.e. 12% of Schedule of 150 MW.*
- (ii) *Both PSLDC and PSPCL suggested that as Deviation limit is different for both Buyer and Seller, the table of Additional Deviation Charges (Annexure-II) may be substituted by dividing the table for buyer and seller separately.*

Further, limit for additional deviation charges in case of buyer corresponding to [X] limit may be amended by substituting 10 MW with fraction of X {i.e. X to (4/3) X MW and (4/3) X MW to (5/3) X MW & more than (5/3) X MW}, so that the slabs considering X =150 MW remains same, as applicable in CERC DSM regulations for the State as a whole (e.g. 150-200 MW, 200-250 MW, >250 MW).

Analysis and Decisions

- (i) Regarding different limits for seller and buyers, reference is made to para (c) of the comments against clause 4.4 in the SOR to 4th CERC amendment issued by CERC wherein it has been clarified that generators have significant control over generation so can't be equated with distribution licensee. The issue of volume limit has already been discussed in para 9 of this order.
- (ii) Keeping in view the load profile of the State entities (buyers) it will be reasonable to specify different bands for buyers in terms of [X] as determined under clause (B) of Regulation 10 of these regulations. The Commission agrees with the proposal of PSLDC and decides to amend Table under Annexure –II accordingly.

19. Additional/Miscellaneous comments

(i) TSPL submitted the following additional comments

- a) *If any entity disputes the UI/DSM account uploaded by SLDC, the dispute should be raised within 10 days period. If SLDC accepts the dispute raised by state entity, in the UI/DSM account, then SLDC should revise the UI/DSM account within the next 7 days.*
- b) *If SLDC does not accept the dispute, then SLDC should respond to the entity within 7 days of raising of the dispute with the reasons.*
- c) *If SLDC and entity does not come to resolution within 7 days of the SLDC response, then the matter should be referred to the Commercial and Metering Committee (CMC) by SLDC/state entity within 10 days for resolution, and CMC to close the issue within 30 days of raising of the issue by the state entity/SLDC.*
- d) *If even then the dispute is not resolved in CMC, then the entity can approach the appropriate Commission for the resolution of the same.*

(ii) NPL submitted the following additional points

- a) *If the entity does not dispute the statement of charges for deviation within certain defined period after issuance of such statement, then this statement of charges for deviation will be considered as conclusive.*
- b) *If the entity disputes the charges for deviation / calculations, then entity should issue a notice to the SLDC within certain defined period with followings:*
 - i. *the details of the dispute*
 - ii. *details of estimate of correct charges for the deviation*
 - iii. *all supporting data and documents in support of the corrected claim*
- c) *If the SLDC agrees on the dispute after receiving such notice, then SLDC shall revise the statement of charges for deviation within a certain defined period and inform the entity.*

d) If SLDC does not agree to the claim raised by the entity, then within certain defined period of receiving the dispute notice, furnish a notice to the entity providing:

- i. reasons for its disagreement;
- ii. its estimate of what the correct amount should be; and
- iii. all written material in support of its counter claim.

e) After issuance of such notice, the matter shall be referred by SLDC to the Commercial and Metering Committee (CMC) for resolution. CMC after receiving of the information shall resolve the issue amicably within certain defined period.

If the CMC fails to resolve the issue, then entity can approach the appropriate Commission for resolution of such dispute.

(iii) SLDC pointed out that as per regulation 10 (K) (b) (ii), sustained deviation charges are not applicable for Run-of river projects without pondage, it needs to be clarified that whether Scheduling and Deviation accounting (excluding sustained deviation charges) shall be applicable for Run of river plants/ Micro Hydel Plants/ Mini Hydel Plants or not.

Further, it may be clarified that the billing/ accounting agency for deviation accounting/ settlement of deviation charges in case of Partial Open Access Consumers connected to the InSTS and all open access consumers connected to the distribution network shall be the concerned distribution licensee.

Analysis and Decisions

(i) & (ii)

The operating procedure will be formulated by the PSLDC and this will include a detailed mechanism for dispute resolution with respect to the deviation account. The accounting procedure in these regulations is in line with CERC DSM Regulations, Model Regulations approved by FoR and followed by most of the States.

(iii) It is clarified that Scheduling and Deviation accounting (excluding sustained deviation charges) shall be applicable for Run of the river plants/ Micro Hyde Plants/ Mini Hydel Plants with an installed capacity of greater than 5 MW or such threshold limit as may be decided by the Commission. The deviation account of the state entities covered under these regulations shall be prepared and operated by PSLDC.

The Commission approves the Punjab State Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2020 with modifications as discussed above. With the implementation of Deviation Settlement Mechanism in the State, some amendments in PSERC (Terms and conditions for Intra-State Open Access) Regulations and State Grid Code may be required for which the staff of the Commission should initiate the process as per the provisions of the Act.

Sd/-

(Anjuli Chandra)
Member

Chandigarh

Dated: **09.09.2020**

Sd/-

(S.S. Sarna)
Member

Sd/-

(Kusumjit Sidhu)
Chairperson