CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Coram:
Shri P.K. Pujari, Chairperson
Dr. M.K. Iyer, Member

File No. L-1/132/2013-CERC **Date: 20th November, 2018**

In the matter of

Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (Fourth Amendment) Regulations, 2018.

STATEMENT OF REASONS

1. Introduction:

1.1. The Commission vide notification dated 29.6.2018 issued the Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (Fourth Amendment) Regulations, 2018 along with Explanatory Memorandum seeking comments/ suggestions/ observations from the stakeholders/public.

1.2. Comments were received from 42 stakeholders, organizations, and individuals, etc., which included State Power utilities, State Load Dispatch Centres, Power System Operation Corporation (POSOCO), generating companies in central sector including associations. Thereafter, the Commission conducted public hearing on 21.8.2018. Eight (8) organizations/individuals made oral submissions or presentations during the public hearing. List of stakeholders/individuals who submitted written comments and who made oral submissions/power point presentation during the public hearing is given at Appendix-I and Appendix-II respectively. The detailed comments are available on www.cercind.gov.in. After due consideration of the comments / suggestions / objections received, the Commission has finalized the Fourth Amendment to the Regulations on Deviation Settlement Mechanism and Related Matters.

1.3. The amendments proposed in the draft regulations, deliberation on the comments / suggestions offered by the stakeholders, statutory bodies and individuals, etc., on the proposed amendments and the reasons for decisions of the Commission are given in the succeeding paragraphs.

2. Issue-1: ***Linking of DSM price vector to the daily average clearing price discovered in Day Ahead Market on Power Exchanges***

2.1 Comments / Observations:

a. ***Some stakeholders (PPCL, Adhunik Power, UPPCL, GUVN, MSEDCL, PXIL) have observed that it may not be proper to index DSM rate to the daily average clearing price of DAM as share of DAM is just 3 – 4% of the total power generated in a year in the country. Price discovered in day ahead market does not reflect the***

entire spectrum of generation as regulated generators do not participate in day ahead market.

The Commission would like to clarify that the proposal is to link the prices in the DAM segment of Power Exchange with the DSM segment. Both these are of a comparable size - the DAM segment being larger in size (3 – 4%) as compared to the DSM segment (1.5 – 2%). As such, the argument that DAM price is not representative for indexation purpose, does not sustain. Further, it should be noted that the objective behind the proposal to link the two prices (DAM and DSM prices), as already highlighted in the Explanatory Memorandum, is to obviate the tendency/possibility of arbitrage between these two segments (viz. DSM and DAM).

b. It has been argued by some stakeholders (MSEDCL etc.) that merchant power generators may hike price to take undue advantage of discoms' distress to avoid DSM charges.

It may be noted that in a competitive market, it is generally difficult for any single supplier to influence the Market Clearing Price (MCP). Further, high price bids also run the risk of not getting cleared. It need to be appreciated at the same time that grid does not generate electricity, and the stakeholders have to resort to organized market for meeting their energy needs. As buyers and sellers move to organized markets, the depth of the market will further increase and in turn allay the concerns of market manipulation and resultant induced price hike. Further, the perverse tendency on the part of generators, if any, of influencing DAM price for gains in DSM, is sought to be addressed through the provisions of DSM volume limits, sign change requirement, and price cap for generators. It would also be pertinent to mention in this context that despite safeguards, if there are instances of market abuse, the Commission can always intervene under provisions (including Section 60) of the Electricity Act, 2003 to prevent market distortion.

c. Some stakeholders (Tata Power Trading, JITPL, PPCL, GUVNL, Dhariwal Infrastructure, PXIL etc.) submitted that arbitrage between the DAM price and the variable cost of a generator might lead to over-injection by such generator and under-drawl by the buyer, leading to increase in frequency.

This concern is addressed in the amendment through provisions of volume limit and mandatory zero crossing / sign change after every 6 time blocks, failing which there are provisions for commercial dis-incentives.

There are also provisions for price cap for regulated generators. The suggestion received is that the price cap should be applicable for all generators to obviate deliberate over-injection and resultant increase in frequency. This suggestion is appreciated, but, in case of the non-regulated generators, the variable costs are not known. Hence, it is difficult to peg the price cap equivalent to the variable cost of the generators as has been proposed for the regulated generators. However, the Commission has taken note of the suggestion and has decided, in the interest of grid security, to provide for a fixed price cap for the non-regulated generators. The current Regulations provide for a fixed price cap of 303.04 Paise/kWh for the regulated generating stations (using coal / lignite / gas). Accordingly, the

Commission has determined in the final Regulations the cap rate of 303.04 Paise/kWh for the generators (irrespective of fuel source) not regulated by the CERC.

d. ***PPCL and MSEDCL submitted that determination of different DSM rates for same grid conditions stand against the principles of natural justice.***

DSM rates would vary in situations when the market/grid conditions are different. Such variation in market conditions is reflected through market splitting, representing the difference in value of electricity according to location and time. In fact, this is one of the basic objectives behind the proposed amendments – that is, to bring in the locational and temporal elements in DSM prices.

e. ***While appreciating the proposed amendments to the DSM Regulations, some of the stakeholders (SRPC, Prayas, APP ERPC etc.) argued that DSM price may be linked to the time-block-wise area clearing price instead of the proposed daily average area clearing price.***

It is true that the block-wise prices reflect the diurnal variation in supply and demand. However, the block-wise prices are volatile and this volatility will reflect in the DSM prices. As such, to start with, use of daily average price as reference for DSM price vector is primarily meant to avoid price shocks in the system.

However, while appreciating the suggestion, the Commission has provided in the final regulation that - based on a review, if the Commission is satisfied about the market conditions, the basis for market linked DSM price shall be substituted, by the time-block-wise ACP in the day ahead market or as and when the real time market is introduced, by the hourly ACP or the ACP of such periodicity as considered appropriate by the Commission.

f. ***While appreciating the proposed amendments to the DSM Regulations, some of the stakeholders sought further clarification regarding operationalization of the amended framework. GUVNL, DIL, Dr. Anoop Singh, IIT, Kanpur sought to understand how DSM bills will be settled between two regions having different DSM rates. POSOCO observed that in case of market splitting rates of payee region and the recipient region would be different. Inter-regional scheduling on net-basis and the National DSM Pool may be implemented to resolve this problem.***

The idea of "National Pool Account" is appreciated. This assumes significance in view of one grid, one frequency and national level market in the electricity sector in the country. The Commission directs the POSOCO to submit a detailed proposal in this regard and the staff to examine and submit for consideration of the Commission.

g. ***Some stakeholders (PSTCL and UPSLDC) sought to understand what would be the DSM rate, in case of non-availability of ACP due to no trade on a given day or due to any other reason. UPSLDC sought clarification regarding the DSM price in case of zero schedule by an inter-State drawee entity.***

In case of non-availability of ACP due to no-trade on a given day, average ACP of the last available day will be considered for determining the DSM charge.

Accordingly appropriate provision has been made in final amendment. Further, it may be noted that, DSM charges will be levied on entities only if there is any deviation from the schedule. Zero drawl against zero schedule does not attract any DSM charge.

h. Some stakeholders (PSTCL and POSOCO) requested that regulations may provide for NLDC to display daily DSM price/charges, exchange-wise break-up of OA market share on its website, while some other stakeholders (GETCO etc.) submitted that NLDC be designated as the nodal agency to declare daily DSM rates.

The Commission agrees with the suggestion and has made suitable provisions in the final amendment.

i. Some stakeholders (Prayas) sought to know if transmission charges and losses will be factored into ACP?

It is clarified that as per the present practice DSM charges will be linked to the ACP without transmission charges and losses.

j. Some stakeholders (MSEDCL, Dr. Anoop Singh, UPPCL etc.) submitted that currently Discoms are not equipped with load forecasting infrastructure etc., and they lack on preparatory work to effectively handle the proposed DSM price mechanism. PXIL submitted that transmission congestion leaves little scope for buyers to plan in advance.

The proposed DSM Price Vector links it with the Average Clearing Price (ACP) discovered in the Day Ahead Market (DAM) and this will necessitate the States to plan day ahead and invest in improving their load forecasting techniques. Therefore, there is an urgent need for utilities to deploy improved forecasting and planning mechanism for procurement. Further, the Commission reiterates that appropriate measures be taken in strict adherence to provisions contained in the Clause 5.3 (on "Demand Estimation for Operational Purposes") and Clause 5.4 (on "Demand Management") as specified in the Indian Electricity Grid Code, 2010 (as amended from time to time). It should be appreciated that grid does not generate electricity, as such, the discoms need to maintain reserves to meet their contingent requirement in real time.

k. Some stakeholders (SRPC, APSLDC, TERI, DIL, Haldia, MSDCL etc.) submitted that currently generators respond to the frequency dip by over injecting. Therefore, the proposed mechanism should provide for incentivizing the generators for over injecting in case of frequency dips.

The Commission would like to clarify that the responsibility to maintain grid frequency and grid discipline lies with the system operator. The system operator is expected to utilize RRAS to maintain grid frequency and the generators and the Discoms are required to adhere to the schedule. DSM not being a trading mechanism, its design cannot be built around the concept of incentivizing any entity.

3. Clause 3.1 – DSM rate vector to have a dynamic slope determined by identified price points at 50 Hz

3.1 Comments / Observations:

a. Some stakeholders (Prayas) have requested to explain the rationale behind keeping DSM ceiling price at Rs 8/kWh

The ceiling price has been suggested keeping in view the variable charges of the generating stations under the current RRAS framework. The highest variable charge of RRAS providers on daily basis during April, 2016 to October, 2017, exceeded Rs. 8/kWh on multiple occasions. Further, variable cost of some of the RRAS providers exceeded Rs. 8/kWh from the period from October, 2017 to September, 2018. However, the upper limit of Rs. 8/kWh is primarily meant to avoid price shock to the stakeholders.

b. Some stakeholders (DVC, MB Power etc.) have submitted that frequency range be expanded by extending the lower upto 49.7.Narrow frequency band may pose operational challenges.

The operating frequency band as permitted in the IEGC is 49.95 – 50.05, whereas the proposed frequency band for DSM framework is 49.85 – 50.05, (which is wider than the operating band of IEGC). Therefore, the proposed DSM frequency band cannot be termed narrow. .

c. Some stakeholders (Shri Shanti Prasad, Ex-Chairman, RERC) have suggested that 'charges for deviation' may be indicated in terms of formula.

The Commission agrees with the suggestion and has made suitable provisions in the final amendment.

A. Clause 3.2: Proposed Linking the cap rates for generators using coal/lignite/APM gas to the energy charges as billed for previous month

a. Some stakeholders (POSOCO) requested for specifying timeline for billing and settlement of DSM accounts by RPC. It has also been suggested that any retrospective revision of DSM accounts should be avoided on lines of Ancillary Services framework in this regard.

The suggestion is appreciated. The existing timeline for billing and settlement of RRAS will be followed for billing and settlement of DSM accounts. Further, the Commission has made specific provision in the final Regulations disallowing any retrospective revision of DSM accounts on account of change in the energy charges at a later date

b. Some stakeholders (MPPGCL) sought Uniform Cap rate for all generators

There are provisions for price cap for regulated generators and the suggestion received is that the price cap should be applicable for all generators to obviate deliberate over-injection and resultant increase in frequency. This suggestion is appreciated, but, in case of the non-regulated generators, the variable costs are not known. Hence, it is difficult to peg the price cap equivalent to the variable cost of the generators as has been proposed for the regulated generators. However, the Commission has taken note of the suggestion and has decided, in the interest of grid security, to provide for a fixed price cap for the non-regulated generators as well. The current Regulations provide for a fixed price cap of 303.04 Paise/kWh for the regulated generating stations (using coal / lignite / gas). Accordingly, the Commission has determined in the final Regulations the cap rate of 303.04 Paise/kWh for the generators (irrespective of fuel source) not regulated by the CERC.

c. ***Some stakeholders (GUVNL) submitted that there could be a scenario where these would be no penalty on generator for non-adherence to the schedule as the DSM rate is same as the fuel cost. Therefore, there should be a predefined cap rate based on the present fuel cost under APM***

The objective is to discourage over-injection as well as under-injection by a generator, which will be achieved by restricting its pay-in and pay-out, to the variable cost.

B. ***Clause 3.3: DAM price of PEx having market share of 80% or more in energy terms on a daily basis***

a. ***Some stakeholders (UPPCL, Prayas, GRIDCO) have suggested that Only one PX not to be considered and Weighted average of DAM on both PXs be used***

Power exchange with a market share less than 20%will not have any significant impact on the weighted average DAM.

C. ***Clause 3.7: Linking of Deviation charges to DAM to be reviewed by the Commission after 6 months from the date of notification of the proposed amendments***

a. ***Some stakeholders (POSOCO) suggested that the period of review may be one year to capture seasonal variations***

The Commission decided that the linkage of deviation charges to frequency shall be reviewed by the Commission, keeping in view the changing power market conditions. Accordingly, suitable provisions have been made in the final amendment.

D. ***Clause: 4.4 – Proposed total deviation from schedule during a day should not be in excess of 3% for the drawee and 1% for generating entity***

a. ***Some stakeholders (Telangana SLDC, MB Power, WBSEDCL, Tata Power Trading, Monnet Ispat, WBSEDCL, UPPCL, DVC, SRPC, MPPGCL Dr. Anoop Singh, ERPC, JITPL, DIL & Haldia Energy, UPPCL, TPDDL, UPPGCL, MSEDCL, TPDDL) have argued that the deviation limits should be relaxed in the absence of RTM, hourly gate closure, demand response schemes, high vintage of plants, generation unit tripping, transmission congestion, transmission tripping-restoration constraints, non-availability of SCADA data at state level etc.***

It should be appreciated that grid does not generate electricity and the load serving entities should ideally refrain from leaning onto the grid to meet their demand-supply gap. The proposed DSM Price Vector seeks to drive the States to plan day ahead and invest in improving their load forecasting techniques. Hence, there is an urgent need for utilities to deploy improved forecasting and planning mechanism for procurement. Commission reiterates that appropriate measures be taken in strict adherence to provisions contained in the Clause 5.3 (on "Demand Estimation for Operational Purposes") and Clause 5.4 (on "Demand Management") as specified in the Indian Electricity Grid Code, 2010 (as amended from time to time).

Further, the Commission would like to reiterate that 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. The generator has significant control over generation, and therefore, Commission reiterates that appropriate measures be taken in strict adherence to provisions contained in the IEGC (as amended from time to time). Further, the generators under long term contract have the right to revise their schedule 4 time blocks ahead to take care of contingencies like tripping. In so far as short term market is concerned, demand for any special dispensation does not go with market philosophy. Participants are expected to take part in the market by duly factoring in the risks and rewards.

Further, the States are expected to maintain sufficient reserves to meet contingency as guided by the CERC Order on roadmap for reserves.

b. ***Some stakeholders (UPSLDC) suggested that SERCs may be advised to notify their state DSM Regulations in line with CERC DSM Regulations***

The Commission will make efforts to take it up with the Forum of Regulators.

c. ***Some stakeholders (DVC) suggested that additional deviation charge for daily deviation may be made applicable on actual daily deviation over and above 3% for both drawee entity and generator. Some stakeholders (Prayas) sought the Rationale / basis for the proposed 3% and 1% norm***

The erstwhile CERC (Unscheduled Interchange charges and related matters) Regulations, 2009 had a provision restricting the total deviations in daily aggregate basis to 3%. 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.

d. ***Other comments in the context of daily deviation limit of 3% for the drawee and 1% for the generation entity:***

Some stakeholders (Tata Power Trading, Sandhya Hydro Power Balargha Pvt. Ltd, Govt. of Puduchery, GETCO, Prayas, KPTCL, APSLDC, Monnet Ispat)have suggested that the Run-of the river hydro (RoR) projects, States with low energy *volume, States totally depend on CGS (having no State generation), STOA customers (be allowed revision in schedule like LTA / MTOA customers), RE rich states be exempted (or higher deviation limit) / given relaxation from these limits (Tata Power Trading, Sandhya Hydro Power Balargha Pvt. Ltd, Govt. of Puduchery, GETCO, Prayas, KPTCL, APSLDC, Monnet Ispat).*

Some other stakeholders have submitted that deviation limit should be fixed with due regard to the peak demand of the State. For states with large demand, even a 1% error in demand forecasting will have significant deviation. It was also suggested that for IPPs, in case of outage or substantial loss of availability, it is not possible to reschedule the power already offered to exchange and hence maintaining the deviation within the 1% limit, is difficult.

The Commission would like to reiterate that 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. The generator has significant control over generation, and therefore, the Commission reiterates that appropriate measures be taken in strict adherence to provisions contained in the IEGC (as amended from time to time). As regards, special dispensation for RE rich States, the existing regulations already provide for relaxed norms for such States. It should be noted that grid security is of paramount importance and it is in the interest of all stakeholders that they adhere to norms of grid operation. Demand for relaxation in grid operation norms is a recipe for grid disturbance / failure, which will harm the generators, the discoms and the consumers at large, the most.

In the proposed amendment, the Commission has introduced a number of significant measures, viz. linkage of DSM Price Vector to average day ahead market price, mandatory sign change after every six time blocks and imposition of additional charge for failure to adhere to sign change requirement etc. All these are essential ingredients for secure grid operation. While these provisions would be implemented with immediate effect, the Commission has decided that the provision regarding daily deviation limit of 3% for the drawee and 1% for the generation entity shall be implemented, from a date (not earlier than one year) to be notified by the Commission separately.

E. Clause 4.19 : Reduction in number of time blocks (from 12 to 6) for change of sign in case of sustained deviation in one direction

a. Some stakeholders (Telangana SLDC) submitted that the entities will be pushed to utilise the limited resource viz. hydel generation, which eventually will stretch the available limited resources and create deficit of reserves for the discoms to meet the event of contingency.

The proposed DSM Price Vector seeks to drive the States to plan day ahead and invest in improving their load forecasting techniques. Grid does not generate electricity, and therefore, there is an urgent need for utilities to deploy improved forecasting and planning mechanism for procurement. The Commission reiterates that appropriate measures be taken in strict adherence to provisions contained in the

Clause 5.3 (on "Demand Estimation for Operational Purposes") and Clause 5.4 (on "Demand Management") as specified in the Indian Electricity Grid Code, 2010 (as amended from time to time).

Further, the States are expected to maintain sufficient reserves to meet contingency as guided by the CERC Order on roadmap for reserves.

b. ***Some stakeholders (WBSEDCL, PSTCL, Adhunik Power, ERPC) submitted that It is not clear whether the 20% additional surcharge is applicable for each violation or it would be charged for each violation within a day***

The additional change for violation of sign change stipulation will be leviable for each such violation during a day. Suitable provision has been made in the final regulations.

Illustration:
As, change of sign should take place at least once after every six time blocks, the entity, starting from time block t_1, should change the sign after time block t_6. In case, sign change does not take place immediately after time block t_6, but takes place from time block t_7 upto time block t_{12}, additional surcharge shall be levied equivalent to one violation. In case, sign change does not take place immediately after time block t_{12}, but takes place from time block t_{13} upto time block t_{18}, additional surcharge shall be levied equivalent to two violations.

c. ***Some stakeholders (WBSEDCL, GETCO, MSEDCL) submitted that for distribution utility sign change cannot be possible without imposing load shedding (due to gap of more than 3 hours between bidding and scheduling in contingency market). Some stakeholders (WBSEDCL, UP Load Despatch Centre) submitted that contingency market product is hourly basis, therefore for change of sign in one single block, power for additional 45 minutes to be procured.***

Grid does not generate electricity and the load serving entities should ideally refrain from leaning onto the grid to meet their demand-supply gap. The proposed DSM Price Vector seeks to drive the States to plan day ahead and invest in improving their load forecasting techniques. Hence, there is an urgent need for utilities to deploy improved forecasting and planning mechanism for procurement. Commission reiterates that appropriate measures be taken in strict adherence to provisions contained in the Clause 5.3 (on "Demand Estimation for Operational Purposes") and Clause 5.4 (on "Demand Management") as specified in the Indian Electricity Grid Code, 2010 (as amended from time to time).

Further, the States are expected to maintain sufficient reserves to meet contingency as guided by the CERC Order on roadmap for reserves.

d. ***Some stakeholders (Tata Power Trading Company, Sandhya Hydro Power Balargha Pvt. Ltd.) submitted that in the absence of provision of revising the schedule for Hydro power plants under the STOA, the proposed amendment of sign change would not be fair for the generators which do not have pondage and generation is dependent on rainfall.***

The proposed amendment underscores the importance of generation planning. Therefore, the generating stations are expected to plan their generation by using appropriate techniques. However, the Commission has noted the special case of run of rive projects without pondage and with due recognition of the fact their generation is dependent on water flow/rainfall which cannot be predicted with certainty, the Commission has in the final regulation, exempted such projects from payment of additional charge for failure to adhere to sign change requirement. Such generators would, however, be required to follow the sign change requirement and report to POSOCO the reasons for non-adherence to the requirement.

e. Some stakeholders (Sandhya Hydro, Balargha Pvt. Ltd.) sought clarification as to whether the additional change for non-adherence to sign change is applicable to the generators connected to the STU/Distribution system.

The DSM Regulations of CERC are applicable to the regional entities. The entities connected to STU / Distribution system are governed by the regulations notified by the appropriate SERC / JERC, as the case may be.

f. Some stakeholders (JITPL, UPSLDC) submitted that considering the problem owing to sudden tripping of plant or auxiliary, 6 time blocks limit may kindly be raised to 9 time blocks.

The proposed amendment underscores the importance of generation planning. Therefore, the generating stations are expected to plan their generation by using appropriate techniques.

g. Some stakeholders (GETCO, DVC, MPPGCL, ERPC) submitted that the violation to sign change should be charged on incremental basis.

The proposed amendment provides for a uniform rate, for the sake of ease of accounting/billing.

h. Some stakeholders (Haldia Energy) submitted that if the generators have to modulate the output every 7th block irrespective of the frequency then this will unnecessarily lead to grid instability in that block.

The need is for the generators to adhere to their schedule and refrain from deviating, in which case the generators need not carry out any modulation.

i. Some stakeholders (SRPC) submitted that Sign change is contradictory to frequency & ACP linked DSM mechanism. As entities are expected to act according to frequency also, then sign change may hamper the desired objective. If it is to be implemented the sub proviso could be reworded as 'Provided that violation of the requirement under this clause shall attract an additional surcharge of 20% on the block DSM payable/receivable as the case may be from 7th block onwards till the sign is reversed.'

The suggestion is based on the assumption that the grid entities will be deviating at regular intervals. The basic objective is to discourage them from habitual deviation.

j. ***Some stakeholders (MPPGCL, KPTCL, POSOCO, Govt. of Puducherry) submitted that Restriction on number of time blocks for sign change may be reviewed considering variability in RE rich states / generation due to RGMO/FGMO, AGC / non-availability of State owned generation etc.***

Special dispensation has already been provided for RE rich States in the existing DSM Regulations. Further, complementary market mechanism, like Real Time Market (RTM), next level of Ancillary Services etc. are being contemplated to address the issue of variability of RE.

k. ***Some stakeholders (APSLDC, MSEDCL) submitted that there is an error/difference between Real time SCADA data and SEMs data is exceeding three percent. In such case STU/CTU should be penalized as they are responsible for SCADA data***

In order to facilitate accuracy in real time SCADA data and minimize the errors, the SLDCs are required to deploy and monitor telemetry in close coordination with STU / CTU.

l. ***Some stakeholders (TPDDL) submitted that STU/CTU and RLDC/SLDC should be held responsible for any deviation caused due to tripping of transmission or IT infrastructure.***

The above issue does not fall within the scope of the proposed amendment to the Regulations.

F. Additional Points

a. ***Some stakeholders (CSPTCL) submitted that absolute error should be calculated on the basis of schedule instead of available capacity of solar cells/wind mills. And if needed the deviation need may be increased from 15% to 20%.***

The above issue does not fall within the scope of the proposed amendment to the Regulations.

b. ***Some stakeholders (GRIDCO) submitted that pilot project study should be carried out to know the operations and financial implications.***

The proposed amendments to the Regulations are based on the experience gained over the period with respect to implementation of DSM Regulations (as amended from time to time). The regulations already provide for periodic review based on the experience gained.

c. ***Some stakeholders (Adhunik Power & natural Resources Ltd.) submitted that it appears that with new mode of calculation, there will be mismatch in gross receivables and gross payables in Pool's account which needs revisit.***

Mismatch in gross receivables and payables is found in the present framework as well and the same is met out of the pool account. The same mechanism will continue in future.

d. ***Some stakeholders (GETCO) submitted that rescheduling of ISGS may be carried out within two time blocks.***

The above issue does not fall within the scope of the proposed amendment to the Regulations.

e. ***Some stakeholders (GETCO) submitted that Provision of incentive (from the weekly pool) for optimum grid operation i.e. non-violation of sign change, operation within DSM limits.***

Adherence to grid operation norms is the statutory requirement and does not call for incentives. Non-adherence or violation of norms calls for deterrents.

f. ***Some stakeholders (Dr. Anoop Singh) submitted that a steeper price vector for deviations applicable for non-RE generation, would accentuate direct (socialised) burden of deviations on account of RE generation. As such, the current regulatory framework for addressing the RE imbalances should also be strengthened.***

The Commission is conscious of consequences of variability of RE generation. In this direction, the Commission has taken a number of regulatory interventions which inter alia include, framework for forecasting, scheduling and deviation settlement mechanism for solar / wind generation, ancillary services mechanism, technical minimum for thermal generation, relaxation in deviation settlement mechanism for RE generation, roadmap for reserves etc. The Commission has also brought out discussion papers on real time market and market linked ancillary services framework.

g. ***Some stakeholders (Dr. Anoop Singh) submitted that a consistent and reliable framework for short-term demand forecasting, RE generation forecasting, demand-side management (including time of day tariff and curtailable tariff) and scheduling through institutional strengthening of SLDCs as well as state-owned distribution utilities is required.***

The above issue does not fall within the scope of the proposed amendment to the Regulations.

h. ***Some stakeholders (Dr. Anoop Singh) submitted that there may be a need to incentivise flexible generation and storage including that from Electric Vehicles (V2G).***

The above issues do not fall within the scope of the proposed amendment to the Regulations.

i. ***Some stakeholders (MSEDCL) submitted that as there is no provision of monitory incentive for RGMO, many generators are under non-compliance for RGMO. Hence, monetary penalty need to be introduce so that primary reserve of 4000 MW can be obtained from RGMO.***

The above issues do not fall within the scope of the proposed amendment to the Regulations.

j. ***Some stakeholders (MESDCL) submitted that DSM for RE generators has to be based on frequency. The formula for deviation calculation for RE generators should be based on scheduled generation & not available capacity.***

This issue does not fall within the scope of the proposed amendment to the Regulations.

k. ***Some stakeholders (APP) submitted that along with tightening of DSM framework, CERC and SERCs should ensure/monitor strict compliance of SAIFI, SAIDI, CAIDI norms for the Discoms and subsequent firm/plan tie up to meet the actual load.***

The above issue does not fall within the scope of the proposed amendment to the Regulations.

Sd/-	***Sd/-***
(Dr. M.K. Iyer)	(P.K. Pujari)
Member	Chairperson

Appendix-I

List of Stakeholders who provided written comments

1. Adhunik Power and Natural Resources Ltd.
2. Association of Power Producers
3. Transmission Corporation of Andhra Pradesh Limited
4. BSES Rajdhani Power Limited.
5. Chhattisgarh State Power Transmission Company Limited
6. DhariwalInfrastructure Limited
7. Dr. Anoop Singh, Indian Institute of Technology Kanpur
8. Damodar Valley Corporation
9. Eastern Regional Power Committee
10. Gujarat Energy Transmission Corporation Limited
11. Electricity Department, Government of Puducherry
12. GRIDCO Limited
13. Gujarat UrjaVikas Nigam Limited
14. Haldia Energy Limited
15. JITPL
16. Karnataka Power Transmission Corporation Limited
17. MB Power (Madhya Pradesh) Limited
18. Monnet Ispat& Energy Limited
19. Madhya Pradesh Power Generating Company Limited
20. SudheerDwivedi, Manager (PM), MPPMCL
21. Maharashtra State Electricity Distribution Co. Ltd.
22. NTPC Limited
23. Power Grid Corporation of India Limited
24. Power System Operation Corporation Limited
25. Pragati Power Corporation Limited
26. Prayas (Energy Group)
27. Punjab State Power Corporation Limited
28. Punjab State Transmission Corporation Limited
29. Power Exchange India Limited
30. Sandhya Hydro Power Projects
31. Southern Regional Power Committee
32. Transmission Corporation of Telangana Limited
33. The Energy and Resources Institute
34. TATA Power Delhi Distribution Limited
35. Tata Power Trading Company Ltd.
36. TeestaUrja Limited
37. U.P. Power Corporation Limited
38. U.P. RajyaVidyutUtpadan Nigam Limited
39. U.P. State Load Despatch Centre
40. West Bengal State Electricity Distribution Company Limited

Appendix-II

I. List of Stakeholders who provided Oral Submissions

1. Power System Operation Corporation Limited
2. 50 Hertz Limited
3. Power Grid Corporation of India Limited
4. NTPC Limited

II. List of Stakeholders who gave Presentations

1. Indian Wind Power Association
2. West Bengal State Electricity Distribution Company Limited
3. Tata Power Trading Company Limited