



Prayas

Prayas (Energy Group)

Unit III A and B, Devgiri, Joshi Museum Lane, Kothrud Industrial Area, Kothrud, Pune - 411 038, India
Phone: +91-20-2542 0720, 6520 5726, Fax: 2543 9134; Website: www.prayaspune.org/peg

30th July, 2018

To,
Secretary, CERC,
New Delhi.

Subject: Comments on 'Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Fourth Amendment) Regulations, 2018'

Dear Sir,

Please find enclosed comments/suggestions by Prayas (Energy Group) on the above mentioned draft regulations.

We request you to take our comments on record and allow us to make further submissions if necessary.

Thanking you,

Ashwin Gambhir, Ann Josey

Prayas (Energy Group).
Athawle Corner, Karve Road, Pune – 411 004
Tel + 20 – 2542 0720
ashwin@prayaspune.org ; ann@prayaspune.org

Comments on 'Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Fourth Amendment) Regulations, 2018'

30th July, 2018

Submission by Prayas (Energy Group)

1. Linking DAM price to DSM prices

Figure 1-3 in the explanatory memorandum make is abundantly clear that DSM prices are lower than those discovered in the Day Ahead Market (DAM), Reserves Regulation Ancillary Services (RRAS) framework as well as prices in bilateral trades. Price signals for real time deviation from schedules should indeed be such that they incentivize participants to pro-actively plan and procure adequate power as needed and not rely/lean on the grid which can cause disruptions. The present deviation rate at 50 Hz is 178 paise/kWh and the existing framework is 'based on the premise that a congestion free transmission network exists and any amount of power can flow.' One proxy for getting a sense of the value of transmission is the DAM. 'The day-ahead market in the Power Exchange(s) discovers transmission congestion one-day in advance and manages this through an implicit auction and market splitting.'

The draft regulation proposes to use the 'daily average area clearing prices in the day-ahead market' as the basis for market linked DSM price.

We are broadly in agreement with this proposal. ✓

However, there are a few areas where we request the Commission to provide more clarity or slightly modify the proposed approach.

- ✓ A. The ACP as defined in the draft regulation 'means the price of 15-minute time block electricity contract established on the Exchange arrived at after considering all valid purchase and sale bids in particular area(s) determined after market splitting, i.e. dividing the market across constrained transmission corridor(s).' But the point 10 (e) (ix) (pp. 10 of the explanatory memorandum under section - Measures proposed by the Expert Group) mentions 'daily average ACP modified to include transmission charges and losses'. The Commission should clarify whether it intends to use the modified ACP or the ACP without transmission charges and losses. We suggest that the former metric of modified ACP as recommended by the Expert Group should be used.
- ✓ B. Secondly, we feel that instead of the 'daily average ACP', it might be better to use the time block wise ACP, which would really reflect the diurnal variations of this market price vector and appropriately account for peak and off-peak differences which was one of the stated limitations of the existing framework and which is sought to be overcome through this amendment. While this will no doubt increase the complexity of the mechanism, we feel that since DSM deviations and penalties are already calculated for each 15-minute block separately, this should be manageable.
- ✓ C. Additionally, instead of linking the DSM price to the DAM price discovered in one Power Exchange with share > 80%, it might be better to use the weighted (by both Power Exchanges) time block wise day-ahead price to better reflect market realities.

We also agree with the time period of 6 months which should be given to the Utilities to prepare for these changes, at the end of which the frequency band for DSM price vector would be changed to 49.90-50.05 Hz so as to align with the IEGC mandated operational frequency band.

✓ The proposal has suggested fixing the DSM price at Rs 8/kWh for low frequency of 49.85 Hz and below. It presently is set at 824 paise/kWh, linking it to the variable charges of the costliest generator (liquid fired). We request the Commission to clarify why this change is being made and in fact why this rate should not be higher considering some of the existing Liquid Fuel plants having variable cost > Rs. 10/kWh. For example, the approved variable cost for the BBGTPS by TNERC is Rs 10.76/kWh. Alternatively, the maximum price paid by DISCOMs for short-term power in the previous year could also approximate the cost of unserved load. Such rates would also be much in excess of Rs. 8/kWh. For example, as per the CERC Monthly Market Monitoring Reports the maximum price of purchase from the exchanges was higher than Rs. 11/kWh in February and October and was higher than Rs. 9/kWh in September, November and December in 2017-18. Thus, the maximum price discovered in the power exchange for the previous year could also be a possible benchmark for fixing the DSM price for low frequency. This would dissuade participants from leaning on the system during such times.

2. Higher Volume Limits for RE-Rich States

The exception for renewable rich states in terms of higher deviation volume limits, specifically 200 MWs (for states with 1-3 GW of wind and solar combined capacity) and 250 MWs (for states with >3 GW of wind and solar combined capacity) instead of 150 MWs is set to the continued under the proposed amendment.

Page 12 of the explanatory memorandum of the draft third amendment of the DSM regulations noted that,

*The limits have been arrived considering the security of the grid, the issues/concerns raised by the states and their suggestions in this regard... It must however be borne in mind that secure and reliable operation of the grid is of paramount importance and rationality pre-supposes existence. The Commission is being very liberal, and is going against international best practices, but it must be reiterated that this measure is meant as a **one-time measure for a specified period**. These limits have been relaxed only up to **April 1st, 2017**. The States must plan to have sound grid management practices as well as firm up their strategy for maintaining load-generation balance in the wake of increasing share of renewables by then. The limits shall be revised towards more stringent norms post April 2017.*

Similarly, the Statement of Reasons to the third amendment notes that,

*While the ecosystem builds this capacity to manage higher capacity of wind and solar generating stations, as a **temporary measure**, the Commission has decided to relax the deviation limits for Renewable Rich States, while retaining existing DSM limits for all other States.*

While we fully understand the need to strongly support the growth of renewables, we also feel that with the notification of the F&S regulations for regional entities and in some states, there **should be a strict sun-set clause for removing this higher volume limit for RE rich states over time**. This will also create a push towards the expected 'sound grid management practices.'

3. Section 5, proviso (i) of the existing regulations mentions that the charges for the deviation of the generation stations... shall not exceed the Cap Rate for Deviation of 303.04 Paise / kWh". The amendment proposes to change this to "Cap Rate being equivalent to the energy charges as billed for the previous month".

We feel that this is an appropriate change given the wide variation in variable costs across generators. However, given that variable charges are defined by many ERCs by 'unit' and no longer by 'station', it **might be prudent to change the wording of section 5 and replace the word station with unit.**

4. The amendment also proposes a new daily energy limit on deviations - *"Provided also that the total deviation from schedule in energy terms during a day shall not be in excess of 3% of the total schedule for the drawee entities and 1% for the generators and additional charge of 20% of the daily base DSM payable / receivable shall be applicable in case of said violation."*

Similarly, for sustained deviation in one direction, the amendment mandates that the regional entities 'shall have to make sign of their deviation from schedule changed, at least once, after every 6 time blocks.' This is much stricter than the earlier allowed time limit of 12 time blocks. Violation of this mandate would attract an 'additional surcharge of 20% on the daily base DSM payable / receivable as the case may be.'

We broadly agree with these proposed changes.

However, we request the Commission to clarify the basis for the proposed 3% and 1% norm as suggested above. We also request clarification on whether this daily energy limit would be similarly applicable for RE-rich states or whether there would be any variation in this norm.

5. The explanatory Memorandum states that, *'There is a need for introduction of **gate closure** concept in the scheduling process so that system operator has the clarity of the quantum of reserve and resources at hand at any given point of time. Such mechanism is expected to facilitate better optimization of the scheduled despatches and formulation of real time ancillary despatch.'*

We strongly support introduction of the gate closure mechanism and request the Commission to include it in the all the relevant regulations. Similarly, we also agree with the need to urgently implement the quantum of reserves mentioned in the CERC Roadmap for Reserves, 2015 and taking facilitating steps in gradually moving to real time markets.

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