

Ref. No. MSEDCL/Comments/RTM/ 0 2 4 7 6 5

DATE 05 SEP 2019

To,  
The Secretary,  
Central Electricity Regulatory Commission,  
3 rd & 4th Floor, Chandralok Building,  
36, Janpath, New Delhi -110 001.

**Sub:** Submission of comments / suggestions / objections on draft framework for Real-Time Market for electricity

**Ref:** Public notice CERC RA-14026(11)/2/2018/CERC Dated: 6th August, 2019

Respected Sir,

This is in reference to public notice issued by Hon'ble CERC on draft the framework for Real-Time Market for electricity with objective for creating a market platform for trade of energy closer to the delivery of power in real time. This is good initiative by commission that will facilitate and improve existing real time market concept that will ease the management of real time shortfall & surplus. However development of market on URS power of long term contracted generator is needs to be re-think. Looking into operational challenges and financial impact of proposed amendment, MSEDCL would like to make humble submission to the Hon'ble Commission to consider the following comments / suggestions on proposed amendments in different regulation so as to facilitate real time market.

**Comments on Draft 6th amendment of IEGC-2010 is as under**

**Clause 6.5.18**

*"18. Revision of declared capability by the ISGS(s) having two part tariff with capacity charge and energy charge and requisition by beneficiary (ies) for the remaining period of the day shall also be permitted with advance notice. Any revision in schedule made in odd time blocks shall become effective from 7th time block and any revision in schedule made in even time blocks shall become effective from 8th time block, counting the time block in which the request for revision has been received by the RLDCs to be the first one.*

*Note: Odd Time blocks referred in this clause, are the Time blocks 00:00 to 00:15, 00:30 to 00:45, 01:00 to 01:15 and so on. Even Time blocks referred in this clause, are the Time blocks 00:15 to 00:30, 00:45: 01:00, and 01:15 to 01:30 and so on.*

## MSEDCL's Comments & suggestions

### 1. Building RTM on capacity of merchant generator or on basis of consent from buyer by ISGS and gate closure concept thereof

The DISCOMs have entered into long term power purchase agreements with generator with view of obtaining firm power commitment to serve 24x7 power supply & also with view to provide cheaper power to its estimated consumers. In view of long term power purchase obligation, DISCOMs are paying fixed cost; even in situation of no schedule to generator in case of its availability. If existing Gate Closure criterion is amended for scheduling power from generators having long term PPA, Utility will not be able to make real time revisions before 4 time blocks even in conditions of sudden changes in system due to weather conditions/ breakdowns/shutdowns of power plants etc. Further in case of sudden tripping of units or drop in wind or solar generation that forecasted, utility will be required to buy same power from market to control overdrawal. The cost of purchase of such power will be higher than cost of power surrendered.

Recently in Maharashtra, forecasting & scheduling regulation for Wind & Solar generator implemented. As per provision of said regulation, Generators above 5MW are only required to submit schedule. Now if suppose DISCOM achieves 100% accuracy in demand forecast & accordingly schedule the powers from various generators considering MUST run RE generation. Now in real time, RE generation is less than forecasted. In such scenario, there will be shortfall in availability to meet demand resulting in overdrawal from grid. Under real time operation, DISCOM will not be able to schedule power from its long term contracted generators during gate closure period to control such overdrawal for which DISCOM is not responsible. Although RTM will provide facility to DISCOM to purchase power to control overdrawal. However in RTM, it may also possible that DISCOM may be purchasing its own contracted power from same generator with which it is having LTA. Due to gate closure concept & proposed provision of sell of power by ISGS without consent of beneficiary, on one hand, DISCOM will be required to pay fix cost to generator & on other hand it has to purchase power at higher rate either from same generator (whose its contracted URS power sold in market) or any other generator during extended gate closure period. This is clear violation of terms & condition of long term PPA. The Hon'ble commission through this gate closure concept tries to circumvent the legal provisions of PPA which are binding on both buyer & seller. The attempt of make regulation to circumvent the PPA terms is not jurisdiction of commission and same may be challenged.

The power surrendered by beneficiaries (even though unrequested power) of generator which is contracted under long term must not be used for real time market purpose. However in case any DISCOM gives its consent to generator for sale of power under real time market, then only in such case generator shall be allowed to sell the surplus power in market. . Hence it is suggested that ISGS generator with LTA, shall not be allowed to participate in RTM, unless consent from beneficiaries. The merchant generator or generation capacity not tie-up under long term shall only be used for real time market. MSEDCL is strongly opposes gate

closure concept for scheduling of power from long term contracted generator. Existing Gate closure period shall not be changed for revision in ISGS, except consent given by beneficiary to ISGS for sale of power in RTM. In SCED i.e National MOD concept also inspite of no change in existing gate closure concept, the saving of Rs.250 Crs could be achieved in period of two & half months as per reports available on NLDC website

Further it is to be noted that normally URS power is available during off-peak period. However due to severe power shortage, URS availability during peak demand period March-2018 to June 2018 as well as during Sep-2018 to Nov-2018, April 2019 to June 2019 in western region was very meager. In fact on some days, no URS was available during off-peak period as well. Hence if market is built on URS of ISGS, then main purpose of handling real time situation will not be solved particularly for power shortfall scenario and buyer will be exploited by seller like one happened in last Sep-2018 & Oct-2018 where market rate in dayahead market also touch Rs.18 per unit. . Hence capacity of real time market needs to be built mainly on surplus capacity available with merchant capacity.

## **2. Reduced capacity available for RRAS**

The another disadvantage of gate closure is that URS power which would be available for RRAS will be very less or marginal which may not be sufficient for handling system. Moreover presently RRAS system is also used by RLDC/NLDC to relive system congestion. It may please be noted that there is no congestion bill issued in Western region since Sep 2016. The system operator by virtue of RRAS has effectively handled congestion by using RRAS UP or down regulation.

## **3. Losing flexibility in Controlling system deviation by system operator :**

System operator mainly SLDCs will lose present flexibility of rescheduling of power available to them by virtue of rescheduling in 4<sup>th</sup> time block. Many SLDCs still lacks online demand forecasting tools & decision support system for optimum scheduling looking into overall availability from all sources. Hence the underdrawal in surplus condition will be difficult to control for continuous 8 time block, if SLDC fails to take correct decision before gate closure. This will create threat to system security.

### ***Proposed amendment in Clause 6.5.18(a)***

*"In case of forced outages of a unit, for those stations who have a two part tariff based on capacity charge and energy charge for long term and medium term contracts, the RLDC shall revise the schedule on the basis of revised declared capability. The revised declared capability and the revised schedules shall become effective from the time block and in the manner as specified in Regulation 6.5.18."*

### **MSEDCL's Comments & suggestions**

As mentioned earlier, ISGS generator with LTA, shall not be allowed to participate in RTM, unless consent from beneficiaries. In case of such consent from beneficiary, if ISGS sells some power in RTM, then such schedule shall be changed as per gate closure concept of RTM

***Proposed amendment in Clause 6.5 part A (c);***

*An ISGS may sell power from the share of its original beneficiaries in the day-ahead Market with the consent of such beneficiaries; and in the real-time market without the requirement of consent from the beneficiaries, before the trading for the real time market for a specified duration commences. In both the cases, the realized gains shall be shared between the ISGS and the concerned beneficiary in the ratio of 50:50 or as mutually agreed between the ISGS and concerned beneficiary in the billing of the following month. This gain shall be calculated as the difference between selling price of such power and fuel charge including incidental expenses*

*Provided that such sale of power by ISGS shall not result in any adverse impact on the original beneficiary (ies) including in the form of higher average energy charge vis-à-vis the energy charge payable without such sale:*

*Provided further that there shall be no sharing of loss between the ISGS and the beneficiary (ies):*

*Provided also that, the liability of fixed charge in such cases shall remain with original beneficiary (ies) as determined in accordance with the Tariff Regulations notified by the Commission from time to time.*

**MSEDCL's Comments & suggestions**

In RTM, ISGS shall not be allowed to sell power without consent of beneficiary as it is against terms & condition of PPA. DISCOMs have signed long term power purchase agreements with generators with certain commercial terms & conditions. The role of commission is limited to tariff of power from these generating stations. By proposing sale of URS power without consent of buyer, commission tries to circumvent the legal provision of PPA. Further DISCOMs & Generator will mutually decide the commercial arrangement for sharing of any profit between generator & buyer, in case it wants to give consent for sale of URS power in market. Defining any kind commercial arrangement for sale of own contracted power is like deviating legal terms of PPA & this is like an amendment of PPA from backdoor. Moreover in cost plus regime, generator is already benefited through Return on investment; proposing to share profit on account of sale of contracted power in Market on 50:50 basis is like undue financial gain to generator.

The purpose of RTM which commission highlighted in explanation memorandum is to obviate intentional overdrawing of DISCOM from grid. & not to use grid as source of power. It was brought to notice to commission that overdrawing from grid or over injecting into grid under DSM is not intentional from DISCOM. The commission needs to understand peculiar problem of DISCOM. The deviation by generators is controllable but same is not case in case DISCOM. Presently DISCOM has to handle all deviation in realtime operation due to change in availability of conventional generator due to tripping, forecasting error of RE generation. Any generation capacity reduction is not compensated by any generator in real time, whether it is conventional or non-conventional. The power planning of DISCOM is on basis of availability communicated by generator on dayahead and if in real time generator is not in position to fulfill its dayahead commitment, it simply revise its availability & has no any commercial loss. On the other hand, DISCOM who had made its

power planning on dayahead basis needs to make arrangement of power in real time operation to meet its demand. Similarly generation capacity which is supposed to be available on dayahead basis, if not considered in dayahead power planning, then there may be case of surplus scenario in real-time; provided generator in real time synchronize and vice versa. The reason for deviation between actual drawal from grid & schedule drawal from grid is already brought to noticed of Hon'ble commission several times. Same are highlighted below forelady reference

- Computation of impact of weather on demand of DISCOM & thereby achieving 100% accuracy in demand forecast
- Computation of impact of special events like agitation on demand of DISCOM & thereby achieving 100% accuracy in demand forecast
- Error in drawal computed by SCADA in real time against actual drawal computed by meter (on which commercial settlement done) due to SCADA data communication & visibility
- Computation of impact of special day on demand s of DISCOM & thereby achieving 100% accuracy in demand forecast
- Forecasting problem of Distributed generation
- Deviation of RE Generation against forecasted

Further in real time, in spite of many such uncertainties, DISCOMs tries to maintain its LGB & not intentionally uses DSM to meet its demand rather than purchasing from Market & also has no any kind of inertia for purchase of power from Market. Otherwise there will not be requirement of any power market to meet shortfall on dayahead as well as on real time basis. Issues of error in load forecasting may to some extent improve with measure like load forecasting software with weather forecasting on which MSEDCL is presently working. However even with software support, high accuracy load forecasting cannot be achieved particularly as desired for Maharashtra with peak demand of almost 24000 MW & required accuracy of more than 99%. Hence Hon'ble commission needs to rethink on building proposed real time market by using power surrendered by one DISCOM to meet demand of other DISCOM through power market. The real time market capacity needs to be built particularly on merchant capacity which is not cleared on dayahead power market.

MSEDCL requests the Hon'ble Commission to kindly consider MSEDCL's comments / suggestions on the Draft amendments in IEGC 2010 for framing real time market.

With Regards

Yours Faithfully

  
(Satish Chavan)

Director (Commercial)

**Copy s.w.r.to:**

The CMD, MSEDCL, Corporate office Mumbai.