Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005
Tel. 022 22163964/65/69 Fax 22163976
Email: mercindia@merc.gov.in
Website: www.merc.gov.in

Case No. 58 of 2020

Petition of Adani Electricity Mumbai Ltd.- Distribution seeking to remove difficulty, relaxation and/ or issue appropriate directions with respect to Regulations 4 and 10 of the MERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2019

Coram

I. M. Bohari, Member
Mukesh Khullar, Member

Adani Electricity Mumbai Ltd. – Distribution (AEML-D) .....Petitioner

V/s

Maharashtra State Load Dispatch Centre (MSLDC) ….. Respondent No. 1
Tata Power Company Ltd. – Distribution (TPC-D) …Respondent No. 2
State Transmission Utility (STU) …. Respondent No. 3
Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) …..Respondent No. 4
BEST Undertaking (BEST) ...…Respondent No. 5
Indian Railways ...Respondent No. 6
Gigaplex Estate Private Limited (GEPL) ……Respondent No. 7
Mindspace Business Parks Private Limited (MBPPL) ….Respondent No. 8

Appearance:

For the Petitioner : Smt. Deepa Chawan (Adv.)
For MSLDC : Shri Eknath Dhengale (Rep.)
For TPC-D : Shri Peyush Tondan (Rep.)
For STU : Shri Sanjeevkumar Suradkar (Rep.)
For MSEDCL : Shri Harinder Toor (Adv.)
For BEST : Shri N.N. Chaugule (Rep.)

For Indian Railway : Shri Rajnish Goyal (Rep.)

For GEPL and MBPPL : Shri Nitin Chunarkar (Rep.)

ORDER

Dated: 9 December, 2020

1. Adani Electricity Mumbai Ltd. (Distribution) (**AEML-D**) filed a Case on 14 February 2020 seeking removal of difficulty, relaxation and/ or issue appropriate directions with respect of Regulations 4 and 10 of the MERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2019 (**DSM Regulations**).

2. **Petitioner's main prayers are as follows:**

   i. *this Hon'ble Commission may be pleased to expeditiously hear and dispose of the present Petition as the DSM Regulations, 2019 shall come into force w.e.f. April 1, 2020;*

   ii. *permit the Petitioner and its Power Station at Dahanu to be treated as a single State Entity for the purposes of the DSM Regulations and allow methodology for Scheduling & Energy Accounting as under:*

   Net Drawal by AEML at G<>T = (AEML-D Demand at G<>T – ADTPS generation/injection);

   iii. *allow Deviation Charges and Additional Deviation Charges as a pass-through in the ARR of the Distribution Licencees;*

   iv. *declare that the additional Deviation Charges can be made applicable only if the same are payable at regional level for the respective time blocks;*

   v. *defer the levy of additional deviation charges for a period of one (1) year and make the same applicable from April 1, 2021;*

   vi. *direct STU to make available online AMR data of all interface meters with SLDC, DISCOMs & Generators;*

   vii. *direct SLDC to amend the DSM Procedure to adjust quantum equal to the Change-Over Consumer Consumption contribution in the CPD/ NCPD data while arriving at the volume limits allowed to Distribution Licensees, in order to address the impact of difference in changeover consumers' schedule demand and actual demand on the Petitioner;*

3. AEML-D, in the present Petition has raised some issues (mainly related to the applicability of Additional Deviation Charges) in respect of DSM Regulations notified on 1 March 2019. According to AEML-D, this provision is stringent and is likely to have an adverse impact on AEML-D if not relaxed or suitably modified. AEML-D has also stated that phased implementation of the DSM Regulations is necessary in order to ensure smooth and effective transition from the prevailing Final Balancing Settlement Mechanism (**FBSM**) to the DSM. AEML-D has suggested that there should be shadow mode of operation to address the transition management issues and

operational difficulties that may arise after transition. As per AEML-D, the issue related to deviation on account of changeover consumers also needs to be resolved, else it would be treated as AEML-D's deviations impacting AEML-D. Thus, AEML-D has raised the following issues:

Issue 1 : Settlement of deviation of the Petitioner / AEML-D and AEML-G's DTPS by treating them together as a single entity

Issue 2 : Changeover consumer's deviation would affect AEML-D

Issue 3 : Deviation Charges and Additional Deviation Charges should be made a pass-through in the Annual Revenue Requirement (ARR)

Issue 4 : Additional Deviation Charges to State Entities should be levied only if Additional Charges are applicable to the State in the Regional Pool

Issue 5: Sufficient Trial Period for implementation in view of stringent commercial mechanism (i.e. defer Additional charges applicability for a period of one year)

Issue 6 : Directions to STU for implementation/sharing of online AMR data with MSLDC/DISCOMS/Generators

4. In response to the Petition, the Respondents (except Mindspace Business Parks Pvt. Ltd. (**MBPPL**) and Gigaplex Estate Pvt. Ltd. (**GEPL**)) have filed their respective submissions which have been taken on record by Commission for deciding the present Petition. These submissions are tabulated below.

Sr. No.	**Party**	**Details of submissions**
1	Maharashtra State Load Dispatch Centre (**MSLDC**)	28 April, 2020
2	Tata Power Company Ltd. (**TPC-D**)	28 April 2020
3	BEST Undertaking (**BEST**)	20 May 2020
4	State Transmission Utility (**STU**)	12 June 2020
5	Maharashtra State Electricity Distribution Co. Ltd. (**MSEDCL**)	11 August 2020
6	Rejoinder of AEML-D	1 September 2020
7	Indian Railways	12 October 2020
8	Written submissions of TPC-D	17 October 2020
9	Additional submission of AEML-D	23 November 2020

5. **At the e-hearing held on 13 October 2020:**

5.1. Advocate for AEML-D reiterated its submission as made out in the Petition and stated:

i. Through present Petition, AEML-D is seeking phased implementation of DSM Regulations. Trial run of DSM software has commenced but all modules of the DSM software are still not fully functional. Hence, AEML-D is seeking a transition phase before the commercial implementation of DSM Regulations gets underway.

ii. Meters are installed at interface locations, however, meter data is being uploaded manually in absence of Automatic Meter Reading (**AMR**).

iii. Responding to the Commission's query as to what was the cause of action of the present Petition and whether Working Group constituted by the Commission was communicated the difficulties being raised by AEML-D, advocate for AEML-D stated that it had communicated the difficulties to the Working Group. She further stated that Clause No. 11.6.4 of the "Procedure for Deviation Settlement of State Entities and Energy Accounting of the State" (**DSM Procedure**) framed by MSLDC is creating exception to the DSM Regulations which would result in a discriminatory treatment to AEML-D upon implementation of these Regulations. The DSM procedure is neither a statutory provision nor a sub-ordinate Regulation.

iv. The volume limit of 1% for AEML-D under the DSM Regulations is too low to manage the drawal within this limit. Further, the DSM procedure has diluted the uniform applicability of volume limit. The procedure cannot override the Regulations. As held by the Hon'ble Supreme Court in the matter of BSES Yamuna Power Ltd. v/s. Central Electricity Regulatory Commission (**CERC**), procedural law cannot override substantive rights given under the Act.

v. Clause 11.6.4 of the DSM Procedure alters the uniform applicability of DSM Regulations. This clause provides flexibility to TPC-D and MSEDCL for managing their drawal as no advance notice is needed for revision in case of Hydro Generating Units. However, AEML-D does not have hydro generation in its portfolio of contracted sources. Hence, both Generation and Distribution businesses of AEML would have to bear the deviation charges.

vi. Around 20% of the AEML-D's Distribution Network is connected to changeover consumers which are being supplied by TPC-D. As per Regulation 5.3 of DSM Regulations, SEM meters are the pre-requisites and hence, TPC-D has to install SEM meters for its changeover consumers. Till such meters are in place, MSLDC should treat the consumption as consumption of TPC-D.

vii. AEML-D has also requested the Commission to allow pass through of Additional Deviation Charges in ARR of Distribution Licensees as all the Distribution Licensees are also in support of AEML-D's submissions.

viii. STU should be directed to make the meter data available in real time to the Distribution Licensees which would enable them to take corrective action in real time. In absence of the same, scheduling will be based on SCADA data and billing would be based on AMR data. But, there is difference in SCADA data and AMR data measurement which would add to the Deviation Charges. AMR

installation would take time. TPC-D and MSEDCL are supporting AEML-D's request on this issue.

5.2. Representatives of MSLDC stated that they had already filed its submission and stated that:

i. AEML-D's prayer seeking treatment of Dahanu Thermal Power Station (**DTPS**) and AEML-D as a single entity under DSM Regulations is against the basic principles of these Regulations where the Generating Stations and Distribution Licensees are to be treated as separate entities. These entities have been defined differently in the DSM Regulations.

ii. The Clause No. 11.6.4 of DSM Procedure only stipulates that considering the fact that the Hydro Generating Stations play major role in responding to grid frequency changes and inflow fluctuations, these stations are not subjected to deviation and as such this clause does not create any exception to the DSM Regulations as contended by AEML-D. Hydro Generating Units are important tools available with SLDC for managing grid in real time and for maintaining the grid security as around 1000 MW of Hydro generation can be picked up within few minutes. Further, the DSM Procedure being assailed by AEML-D has been approved by the Commission as a part of DSM Regulations.

iii. AMR is needed for DSM calculations and nowhere in India, AMR data is available in real time which can be used by the Distribution Licensees for taking real time decisions.

iv. There is a difference in SCADA data and Meter data, however this issue will not be exclusive to AEML-D and will be common for all the Distribution Licensees.

v. AEML-D has prayed that the Additional Deviation Charges should be allowed as pass-through in ARR, however, already the DSM Regulations provides a six-time block's exemption for application of Additional Deviation Charges.

5.3. Representative of TPC-D stated that:

i. The deviation exemption provided to the Hydro Generating Stations under Clause No. 11.6.4 of DSM Procedure is based on their operating constraints and grid support provided by these Stations and the Distribution Licensees do not have right to change it.

ii. As regards the issue of changeover consumers raised by AEML-D, TPC-D submits that the existing practice under FBSM regime may be continued and there is no need for reallocation of volume limit. Further, as per the changeover protocol laid down by the Commission in Case No. 50 of 2009, the choice of Energy Meters was left with the consumers and not with Supply Licensee. Accordingly, AEML-D's allegation that smart meters are not installed by TPC-D for changeover consumers is incorrect.

iii. For rest of the issues raised by AEML-D, TPC-D is in support of the AEML-D's Petition.

5.4. Advocate for MSEDCL reiterated its submission as made out in the replies and further stated that:

i. DSM Procedure has been finalized after obtaining comments/objections of the stakeholders and after approval of the Commission as per DSM Regulations, thus it has attained a statutory force.

ii. The Clause No. 11.6.4 of the DSM Procedure is a facilitative provision for Hydro Generating Units and will not assist AEML-D for getting its relief.

iii. MSEDCL supports AEML-D's prayer for passthrough of Additional Deviation Charges in ARR approval. Responding to the Commission's query as to if such prayer is granted, what would be the incentive to the Distribution Licensees to maintain the grid discipline, Advocate of MSEDCL responded that MSEDCL is suggesting the pass-through in ARR of these Charges only in the interim till the SCADA is made available and the accuracy of RE injection improves.

iv. Responding to the Commission's query as to whether SCADA and AMR data is available in real time for regional power from WRLDC, MSEDCL clarified that SCADA is available. However, since ISGS stations are paid on schedule basis, actual generation data is irrelevant.

5.5. Representative of Indian Railways reiterated its submission as made out in the reply.

5.6. Representative of GEPL and MBPPL stated that MBPPL and GEPL support AEML-D's prayer regarding pass-through of Additional Deviation Charges through ARR of Distribution Licensees. GEPL and MBPPL SEZs are supplied through 22kV Feeders. In case of failure of any of these, there would be an unintentional deviation by GEPL/MBPPL. Considering various other factors beyond the control of Distribution Licensees including the SEZ Deemed Distribution Licensees, GEPL/MBPPL supports AEML-D's Petition.

5.7. Advocate for AEML-D stated that:

i. It has been contended by the Respondents that Clause 11.6.4 of DSM Procedure is aimed at maintaining the grid security. However, it needs to be ensured that the provision is not misused by the Distribution Licensees. Further, although the DSM Regulations are law in nature, the DSM Procedure does not have a statutory force though it has been issued through an Order.

ii. On account of the special dispensation given to Hydro Generating Units, there is no level playing field which the Regulations contemplate, and AEML-D is being denied the same.

iii. AEML-D is not seeking an exemption to the Regulations. Rather, it is highlighting its difficulties that AEML-D is likely to face under DSM Regime which need to be considered by the Commission. Intent of the Regulations is not to levy penalties, but to ensure grid discipline and Regulation 21 of the DSM Regulations stipulates that if any difficulty arises in giving effect to these Regulations, the Commission may on its own motion or on an application filed

by any affected party, issue such directions as may be considered necessary in furtherance of the objective and purpose of these Regulations.

iv. AEML-D is the captive user of the embedded DTPS power plant and hence, AEML-D and DTPS may be treated as a single entity for DSM purpose.

v. On the issue of availability of SCADA/AMR for data at regional level, AEML-D would like to highlight that the deviation limit of almost 4% has been allowed for the State under CERC DSM Regulations wherein for AEML-D (and for rest of the Licensees) it is just one percent (1%) under the DSM Regulations. Further, although CERC has not provided any facility for real time AMR data, MERC being a pioneer Regulatory Commission, may allow this facility to the Distribution Licensees in the State.

vi. Fresh directions may be given to address the changeover issue in view of the DSM Regulations. Thus, Changeover protocol needs to be revised.

5.8. Advocate appearing for MSEDCL further added that:

i. AEML-D has sought to address the difficulty in the DSM Regulations by way its prayer for seeking treatment of DTPS and AEML-D as a single entity. However, it needs to be seen whether there is difficulty at all in the implementation of these Regulations.

ii. The DSM Regulations have been finalized after following due public consultation procedure. Also, DSM Procedure has been issued after necessary stakeholders' consultation under DSM Regulations. If AEML-D has any challenge to the Regulations, it may approach the appropriate forum.

iii. The DSM Regulations have been notified on 1 March 2019 and thus sufficient time has already been given for commercial implementation of these Regulations.

6. After taking on record the submissions (both written and oral) made by the Parties, the Commission now deals with the issues as under:

7. **Issue 1 : Settlement of deviation of the Petitioner / AEML-D and AEML-G's DTPS by treating them together as a single entity**

AEML-D's submission

7.1 In the present FBSM Code, the generators are not considered as separate pool participants whereas under the DSM Regulations, the Generators and Distribution Licensees are accountable for their respective deviations separately. This was the premise with which the DSM Regulations were framed.

7.2 As per Clause No. 11.6.4 of DSM Procedure, Hydro Generating Units are free to deviate from the given schedule as long as they do not cause a grid constraint and actual generation from such Generating Stations will be deemed to be the schedule. This means that effectively the contracting Distribution Licensee will get benefit of flexibility of hydro generation to minimize its deviations as the generation will be scheduled by and large as per grid conditions, i.e., load requirement.

7.3 By virtue of this specific exemption for hydro projects, the Distribution Licensees such as MSEDCL, TPC-D and BEST, which historically have access to hydro generation, will get the advantage of flexibility in generation to minimize their deviations and avoid financial penalties in the form of Deviation Charges or Additional Deviation Charges. The Petitioner, which does not have any contracted hydro generation will be put to a dis-advantageous position since it will not be able to minimize the impact of variations in demand by availing generation from hydroelectric projects.

7.4 Further, the Petitioner is a single entity undertaking the Generation, Transmission and Distribution business and this enables the Petitioner to utilize the synergies between the Generation and Distribution businesses to minimize deviation from the schedule. In case of unexpected demand increase or reduction, the Petitioner through DTPS will be able to quickly ramp up and ramp down generation depending upon the demand conditions and avoid any impact on the grid frequency.

7.5 However, the DSM Regulations treat DTPS as a separate / independent entity from that of the Petitioner thereby meaning that the flexibility for the DTPS operations will not be available to the Petitioner to minimize its demand variations unlike other Distribution Licensees with contracted hydro generators. In case of unexpected demand, the Petitioner has to send the rescheduling request which will be effective from the 4th time block whereas other Distribution Licensees, with contracted hydro generation, would not be subjected to having to serve such advance notice during real-time operations as the hydro generation will be varied in tandem with the variation in demand. However, if the Petitioner and DTPS are considered as a single entity for the purposes of DSM Regulations, the Petitioner will be able to successfully and smoothly manage the demand variation at system level by using DTPS generation as a variable source ensuring grid discipline and avoidance of any deviation, which are the key objectives of the DSM Regulations.

7.6 At present, the DTPS and the Petitioner are both subjected to severe deviation limits even when the deviations may be complementary to each other and the Petitioner shall be liable to pay charges for both deviations separately. These charges on the Petitioner and the DTPS is avoidable and is also in the interest of grid stability if the Petitioner and DTPS are treated as a single State Entity since the DTPS is an embedded generation source for the Petitioner along and variations from schedule for the Petitioner and the DTPS are allowed to be merged in the same manner as permitted for hydro generating stations. This will not only advance the objectives sought to be achieved by the DSM Regulations but would also not be prejudicial to the interests of any other Distribution Licensee or State Entities and enable the Petitioner to better service its consumers.

7.7 Further, the Commission, under Section 61(b) of the Electricity Act, 2003 (**EA**) must consider the commercial principles while proposing any commercial settlement of the Distribution Licensees and the aforesaid issue goes to the root of the said principle which requires urgent attention and immediate resolution.

7.8 In order to maintain grid stability and discipline, the Petitioner will have to manage the demand deviations through supply side, i.e., primarily through the variation in the generation from DTPS. However, if DTPS is treated as a separate State Entity under

the DSM Regulations then this flexibility would be rendered nugatory. In absence of such flexibility, any revision in the generation will need a minimum four (4) time blocks' advance notice and during the said period the deviations are bound to have some impact on the Grid discipline. However, if the Petitioner and DTPS are treated as a unified entity, the Petitioner would be able to minimize the deviations and its impact on consumers by undertaking effective scheduling and despatch from DTPS resulting in a better grid discipline. Also, the Petitioner will not be constrained to have to resort to measures such as load curtailment to avoid grid indiscipline/penalties.

7.9 In view of this, the Petitioner prays for a specific relaxation by the Commission for treating the Petitioner and its Power Station at Dahanu as a single entity wherein the said Power Station will be considered as an embedded generation source for the Petitioner for the purposes of the DSM Regulations. Accordingly, the deviations will be measured at the Discom/ net levels. It is submitted that the grid discipline will improve by treating the Petitioner and DTPS at the net level under DSM Regulations. Hence, the Commission ought to intervene in order to safeguard the objectives of the DSM Regulations. This is also in line with the dispensation accorded to the hydro procurement of other Distribution Licensees such as MSEDCL, TPC-D and BEST.

7.10 It is submitted that the aforesaid will neither have any impact on any other entity nor will it call for any change in the existing methodology of sharing of Transmission Charges and losses at the InSTS level.

7.11 DTPS was set up as a power plant of the Distribution Licensee and not as a separate commercial entity. DTPS injects power directly into the Petitioner's Mumbai distribution system through dedicated transmission lines and as such it ought to be treated as an embedded generation of the Distribution Licensee. Further, the Power Station being a load center based plant, offers various benefits such as lower transmission loss, reactive power control and greater operational flexibility for grid management. Also, it is a part of the Mumbai Islanding system which is in place to cater to critical loads during grid disturbances. These benefits come at a price as a load centre based generation is generally costlier in comparison to pithead plants. Since the aforesaid benefits come with additional costs, the said costs are absorbed by the Petitioner's consumers in their Tariff. Hence, the Petitioner should be allowed to take advantage of deviation settlement as a single unified entity under the DSM Regulations. If the Petitioner and DTPS, on a net basis, need to resort to deviation against the scheduled drawal, such deviation will be subject to the parameters specified in the DSM Regulations.

7.12 Apart from Section 61(b) of the EA, Section 61(c) of the EA requires that the Commission ensures efficiency while adopting principles which affect Tariff / ARR of Distribution Licensees. Treatment of DTPS and the Petitioner as a single State Entity will ensure efficiency as the said generating station is instrumental in maintaining demand-supply curve by the Petitioner. Further, the DSM Regulations require the Petitioner to maintain its deviation limits at 17 MW. At the same time, it has to incur deviation charges for DTPS and this will be financially imprudent against the principles of efficacy. It will also impact the ARR of DTPS thereby violating the provisions of

Section 61(d) of the EA which provides that a generator ought to recover its cost of electricity and imposition of deviation charges will negatively impact the ARR.

7.13 Therefore, in view of the aforesaid, in the event, the Petitioner and DTPS are treated as a single State Entity, the Petitioner proposes the following methodology for Scheduling and Deviation Accounting for consideration of the Commission:

> Net Drawal by AEML at G<>T = AEML-D Demand at G<>T – DTPS generation/injection

7.14 Scheduling and monitoring will be done at the same level, this will be similar to energy accounting treatment given to Hydro Generation.

7.15 Allowing the present Petition on the above issue will not only be in line with Section 61(b), (c) and (d) of the EA, but will also not offend the objectives of the DSM Regulations which is to maintain grid discipline, financial penalties are only an incidental outcome of the DSM Regulations.

MSLDC's submission

7.16 MSLDC is an implementing agency of the DSM Regulations. Further, being the System Operator for the State of Maharashtra, MSLDC has to ensure adherence to Regulations and Orders issued by the Commission from time to time. In view of above, MSLDC shall act upon and follow the directives given by the Commission in implementation of the DSM Regulations.

TPC-D's submission

7.17 AEML-D, through this prayer is in effect seeking continuation of the FBSM for itself where the generator's deviations were not considered and were factored into the Distribution Licensees' deviation. The very purpose of the DSM Regulations is to bring discipline in all the State Entities by making the generators also responsible for their actions. This prayer is in direct violation of the basis of the DSM Regulations. If the prayer is allowed, it would mean that AEML-D will continue to be under FBSM mechanism whereas the other Distribution Licensees and generators are expected to follow the DSM Regulations.

7.18 The deviation exemption provided to the Hydro Generating Stations is based on their operating constraints and grid support provided by them. All Distribution Licensees will have to manage the deviations using their tied up thermal generating capacities as well. Hence, there is no merit in the point raised by AEML-D regarding absence of its Hydro tie up.

7.19 AEML-D has decided its own power procurement portfolio with due approvals of the Commission. Hence, present power procurement portfolio by AEML-D cannot be the reason for seeking relief in Regulations. The DSM Regulations are notified by the Commission to bring in discipline in all the State Pool Participants and is independent of the power purchase portfolio of any Distribution Licensee.

7.20 It is also trite law that removal of difficulty is exercisable only to ensure that the Regulation is implemented and to give effect to the provisions of the Regulations. The power to remove difficulty by a 'specific' or 'general' Order cannot be equated with

power to amend the Regulation. AEML-D is essentially seeking to expand the scope of the provision for removal of difficulty and is looking for an amendment of the DSM Regulations with respect to the above issue.

STU's submission

No submission has been made by STU on this issue.

MSEDCL's submission

7.21 Under the DSM Regulations, the Generators and Distributions Licensees are treated as separate entities to make them accountable for their respective deviations separately. Separate definitions have been provided in the DSM Regulations for the Buyer and the Seller. Accordingly, DTPS is also a separate State Pool Participant. Thus, treating Generating Station and Distribution Licensee as single entity will defeat very purpose of DSM mechanism which is on the principle of Causer to pay.

7.22 AEML-D, through this arrangement, may also violate Merit Order Despatch (**MOD**) principle, whereby in case if MSLDC asks to pick up DTPS to control overdrawal at State periphery as per centralized MOD principle due to system contingencies condition mentioned in Scheduling and Dispatch code, it may happen that, to control underdrawal of AEML-D, DTPS will not be picked up as per its ramp rate. Similarly, on backdown instructions from MSLDC, it will not be backed down to control overdrawal of AEML-D. Further, there are different methodologies of DSM, applicable for Buyers and Sellers. Such methodologies to treat Buyer and Seller as one entity will also create various commercial complications.

7.23 As per Scheduling and Dispatch Code, some capacity under Hydro Generation needs to be kept as a spinning reserve and which will be used by MSLDC in system contingencies in consultation with the respective Distribution Licensees, who have entered into contract with respective Generating Company for such Hydro Units. If AEML-D wants such flexibility in managing deviation, it may do so by entering into contract with Hydro Generating Station. Purchase of Hydro power is becoming mandatory to Distribution Licensees (though not finalized yet) through the bill for proposed amendment in EA.

7.24 However, instead of contracting generating stations under Long/ Medium term basis to manage its own real time deviation, the Petitioner has relied on purchase of power through Short Term Open Access (**STOA**) for its own commercial interest, as at present, power under STOA has some advantages like less Transmission Charges, no fixed charge liability etc.

7.25 Hence, the Commission is requested not to allow such unjustified request of the Petitioner which is the result of its own decision based on its own commercial interest.

7.26 Further, implementation of Real Time Market (**RTM**) has commenced from 1 June 2020. Therefore, for controlling deviation in real time, AEML-D may explore the possibility of purchasing power from market during real time and thereby control its under drawal or overdrawal deviation by selling or purchasing the power respectively.

BEST's submission

7.27 BEST has not made any specific submission on this issue.

Indian Railways' submission

7.28 As per the Clause No. 11.6.4 of the DSM Procedure, the contracting Distribution Licensees (like MSEDCL, BEST and TPC-D) will get benefit of flexibility of Hydro Generation to minimize its deviations as the generation will be scheduled by and large as per grid conditions.

7.29 AEML-D, in this Petition has sought similar treatment for its power station at Dahanu. However, for smaller Deemed Licensees like Railways who do not have their own generation within Maharashtra (like MSEDCL, BEST, TPC-D (Hydro) and AEML(Thermal)), will not have such facility to minimises their DSM charges.

7.30 Further, both the generators of Railway i.e. Ratnagiri Gas and Power Pvt. Ltd. (**RGPPL**) and Bhartiya Rail Bijlee Company Ltd. (**BRBCL**) being Inter-State Generating Stations (**ISGS**), the revision in schedule is effective from 7th or 8th time block which will result in overdrawal of power by Indian Railway even if forecasting is revised on time, however other Distribution Licensees, with contracted Hydro Generation, would not be subjected to having to serve such advance notice during real-time operations.

7.31 BRBCL is also the captive plant of Indian Railway and RGPPL (physically connected Maharashtra network) is also supplying power exclusively to Railways, therefore similar real time adjustment in their generation would need to be allowed as per Railway's demand.

AEML-D's rejoinder

7.32 The Commission ought to consider the peculiar case of AEML qua the fact that DTPS is an embedded generating station which serves as a load center-based plant. Other licensees have advantage of flexibility of Hydro which AEML-D does not have. Hence, AEML-D is proposing the aforesaid dispensation considering geographical and historical perspective.

7.33 There is no hydro capacity which is available in the State of Maharashtra that can be tied up by AEML-D. Further, in the event, AEML-D ties up hydro power from outside the State, then the same will not benefit AEML-D as the said power will be scheduled under right to recall with 7/8th -time blocks advance notice, as provided under Clause 18 of Regulation 6.5 of CERC (Indian Electricity Grid Code) (6th amendment) Regulations 2019. AEML-D seeks a level playing field, which would minimize the deviations in the event the deviations of DTPS are considered along with AEML-D.

7.34 If AEML-D and DTPS are treated as single entity, then AEML-D will have lower deviations and better grid discipline, which is consistent with the objective of the DSM Regulations.

7.35 DTPS was contracted by AEML-D much prior to the enactment of the EA and is an embedded generation source, therefore, in the light of the operational constraints such as any request for rescheduling can only be made after 4 time blocks, which would subject AEML-D to suffer deviation when its allowed volume limit is merely 17 MW.

7.36 MSEDCL has raised an issue with respect to lesser tie up of AEML-D from Long Term. It is stated that the same are irrelevant submissions as AEML-D is arranging power supply in a prudent manner as required under various provisions of Multi Year Tariff (**MYT**) Regulations of Commission, read with the Tariff Orders.

7.37 In the event relief is granted to AEML-D qua the above issue, then it cannot cause any prejudice to TPC-D and MSEDCL, and hence TPC-D and MSEDCL have no locus to object to the same.

Commission's Analysis and Ruling

7.38 AEML-D has requested that its thermal Generating Station at Dahanu i.e. DTPS and the Distribution Business may be treated as a single entity for the purpose of DSM Regulations. The sole basis of this prayer is that the other Distribution Licensees such as TPC-D, BEST and MSEDCL have Hydro Generating Units as one of their contracted sources which are free to deviate from the schedule as laid down under Clause No. 11.6.4 of DSM Procedure as a part of DSM Regulations. AEML-D does not have this deviation-free source under its portfolio for contracted sources. Accordingly, in case of unexpected demand, the Petitioner has to send the rescheduling request which will be effective from the 4th time block whereas other Distribution Licensees, with contracted hydro generation, would not be subjected to having to serve such advance notice during real-time operations as the hydro generation will be varied in tandem with the variation in demand. According to AEML-D, if the Petitioner and DTPS are considered as a single entity for the purposes of DSM Regulations, the Petitioner will be able to smoothly manage the demand variation at system level by using DTPS generation as a variable source ensuring grid discipline and avoid any deviation, which are the key objectives of the DSM Regulations. At the hearing, AEML-D contended that since Clause 11.6.4 of the DSM Procedure alters the uniform applicability of volume limit and DSM Regulations, it needs to be granted the aforesaid relief as sought.

7.39 The Commission notes that (also highlighted by the Respondents), the prayer of AEML-D to treat DTPS and AEML-D, a single entity is against the basic premise of the DSM Regulations wherein the Generating Companies and the Distribution Licensees are to be treated as separate entities, accountable for their respective deviations. Further, if the prayer as sought by AEML-D is allowed, it would mean that AEML-D and DTPS would be operating as per FBSM principles wherein the difference between the loss adjusted drawal by the Distribution Licensee and aggregate of the actual injection of the Generating Stations contracted by the Distribution Licensee would be considered as deviation from schedule.

7.40 AEML-D has stated that if the Petitioner and DTPS are treated as a unified entity, the Petitioner would be able to minimize the deviations and its impact on consumers by undertaking effective scheduling and despatch from the Power Station resulting in a better grid discipline. However, the Commission notes that the Generating Units have their own ramp rates based on which ramp up/down operation can take place while responding to the demand /load. Thus, although the requirement of 4 time-block notice is omitted, load generation balance is going to mismatch till the time-block in which

the Generating Unit achieves the revised schedule. Hence, the Commission is not convinced with the aforesaid argument of AEML-D.

7.41 Also, if the Generating Unit and the Distribution Licensee are treated as a single entity, the Generating Units may escape any accountability for their inefficiencies / indiscipline. Thus, the whole objective of treating the Generating Stations as State Entities under the DSM Regulations and principle of "causer pays" would get defeated. The Commission also notes that under FBSM regime, the Generators were not included in the deviation framework as Generator's deviations were included as a part of Discom deviations. However, to make the Generators responsible for their own deviations in line with principle of "causer pays", the Commission introduced DSM framework similar to mechanism of CERC's DSM Framework.

7.42 The Commission further notes that the entire ground of AEML-D's relief is the stipulation in Clause No. 11.6.4 of the DSM Procedure, which is framed under DSM Regulations. Hence, it is imperative to examine the said clause. The clause reads as under:

> *" 11.6.4 The Intra-State hydroelectric generating stations are expected to respond to grid frequency changes and inflow fluctuations. They would, therefore,* ***be free to deviate from the given schedule*** *as long as they do not cause a grid constraint.* ***While computing the deviation of intra-state hydro generating stations, the schedule of hydro generating stations shall be replaced with actual generation****. "*

7.43 Thus, this clause recognizes the peculiarity of the Hydro Generating Stations due to higher ramp up rate which is expected to respond to grid changes quickly. Also, the criticality of Hydro Generating Units for responding to grid frequency is highlighted based on which it is stated that for Hydro Generation, no deviation is computed unless it causes a grid constraint.

7.44 The Commission notes that the DSM Procedure has been prepared by MSLDC under Regulation 12 and 13 of the DSM Regulations and the same has been finalized after undertaking stakeholders' consultation as required under the DSM Regulations. Further, this procedure has been approved by the Commission based on input/recommendations of the DSM Working Group.

7.45 The Commission further notes that identical provision exists in the MERC (State Grid Code) Regulations, 2020 which has come into force from 2 September 2020. The relevant extract is reproduced below:

> *" **52. General Principles of Scheduling and Despatch Code***
>
> *…….*
>
> *52.1General Principles:*
>
> *……*
>
> ***Day Ahead Scheduling of Intra-State hydro Generating Stations***

"52.2.19. The Intra-State hydroelectric generating stations are expected to respond to grid frequency changes and inflow fluctuations. They would, therefore, be free to deviate from the given schedule as long as they do not cause a grid constraint. While computing the deviation of intra-state hydro generating stations, the schedule of hydro generating stations shall be replaced with actual generation…. "

7.46 Thus, this clause is also part of MERC (State Grid Code) Regulations, 2020 and therefore there is no merit in AEML-D's submission that it is not a sub-ordinate legislation.

7.47 The Commission also notes that the aforesaid treatment for Hydro Generating Station has also been specified under the "Operating Procedure for Western Regional Grid" issued by Western Regional Load Despatch Centre (**WRLDC**) under clause 5.1 (f) of Indian Electricity Grid Code (**IEGC**). The Relevant para. of the WRLDC Procedure is as under:

" 8.4 Scheduling and Despatch Procedure

...

e) The ISGS hydroelectric generating stations are expected to respond to grid frequency changes and inflow fluctuations. They would, therefore, be free to deviate from the given schedule as long as they do not cause a grid constraint. "

7.48 Considering the consistency of the treatment for Hydro Generations with that prevailing at regional/national level, it is inappropriate contention of AEML-D that such a treatment is creating an exception under the DSM Regulations, which would require any special dispensation to AEML-D as prayed by it.

7.49 AEML-D's case is that the other Distribution Licensees have a source in their portfolio for which deviation is not computed whereas in absence of such deviation-free Hydro source available with AEML-D, AEML-D will have to give a 4 time block notice for revising its schedule and both DTPS and AEML-D would be subjected to deviation till the schedule gets revised/effected. The Commission is of the view that the thermal Generating Stations (owned by the Distribution Licensee itself or otherwise also) contracted by the other Distribution Licensees also (such as BEST, AEML-D and MSEDCL) would be subjected to Deviation Charges and to the requirement of serving a 4 time-block notice which is similar to the case of DTPS stand-alone unit.

7.50 **In light of the above, the Commission does not fit it appropriate to allow the prayer of AEML-D to treat AEML-D and DTPS a single entity for the purpose of the DSM Regulations as it would not be in line with the basic principle of the DSM Regulations.**

8. Issue 2 : Changeover consumer's deviation would affect AEML-D

AEML-D's submission

8.1 Changeover of consumers is allowed in common licence areas of AEML-D and TPC-D in Mumbai where consumers can change the supply licensee without changing the distribution network licensee. For changeover consumers, the power is arranged by supply licensee, i.e., TPC-D, whereas the consumer remains embedded in the distribution network of network licensee i.e. AEML-D.

8.2 Changeover consumers are predominantly the load end /residential consumers and there are no SEM meters installed for these consumers. Hence, their actual consumption/demand cannot be separated from T&D Interface meter. Changeover consumers' consumption is not recorded at a 15 minute time block basis, and hence MSLDC cannot compute the exact deviation attributable to such changeover consumers.

8.3 The demand deviation on account of changeover consumers may get accounted in AEML-D's system when it is the responsibility of TPC-D to schedule and supply power to the changeover consumers. Roughly 20% of AEML-D's consumers are changeover consumers.

8.4 The peak demand of AEML-D recorded at T&D interface (i.e. inclusive of TPC-D's supplied changeover consumers) and thereby, the deviation on volume limits of 17 MW (roughly 1% of peak demand) is linked to the power demand for AEML-D's consumers only and not the demand of the changeover consumers supplied by TPC-D on distribution wires of AEML-D.

8.5 AEML-D has proposed as under:

a. for variation in changeover consumers' consumption, the settlement will be done between TPC-D and AEML-D and MSLDC need not issue revised bills (as per prevalent practice) under the DSM Regulations.

b. The scheduled demand of changeover consumers and their actual demand for the DSM settlement, will remain same and no change will be done for DSM settlement.

c. Variation in the power requirement to be settled between AEML-D and TPC-D directly at the 15 minute base DSM rate as finalized by MSLDC in the weekly bill, in terms of the following:

If Schedule > actual: TPC-D has purchased, hence AEML-D will pay to TPC-D for differential units;

If Schedule < Actual: AEML-D has purchased, hence TPC-D will pay to AEML-D for differential units.

d. The impact of deviation on the Petitioner can be addressed through one of the following options:

Option 1: MSLDC to provide additional volume limit to the Petitioner at 15 minute time-block (additional volume limit = changeover consumers Actual – changeover consumers Scheduled);

Option 2: For TPC-D, the impact of the changeover consumers variation is NIL as DSM settlement is undertaken without any revision in the changeover

consumers' Schedule. Hence, the variation margin allowed to supply licensee (TPC-D) on account of changeover consumers is to be given to network licensee (AEML-D). The average Non-coincident Peak Demand (**NCPD**) of changeover consumers is ~ 250 MW. Hence, the proportionate volume limit should be reduced from TPC-D and should be added to AEML-D's volume limits under DSM Regulations.

e. Option 2 is easier to implement as MSLDC need not be required to re-run the DSM bills once actual data is submitted. MSLDC may be directed to revise the DSM procedure.

MSLDC's submission

8.6 DSM Procedure is prepared by MSLDC as per the provisions of the DSM Regulations. The procedure was duly published for stakeholders' information and comments. After detailed discussion with stakeholders and wherever possible, the suggestions given by the utilities have been considered. Further, the procedure along with comments received from stakeholders submitted to the Commission and the same has been approved by the Commission.

TPC-D's submission

8.7 For all purposes, the demand of the changeover consumers is included in the demand of the TPC-D and TPC-D, being a supply licensee, is fully responsible for arrangement of the power and associated charges for the changeover consumers.

8.8 The settlement of the changeover consumers' demand is a practice being followed between TPC-D and AEML-D since the inception of the changeover concept and was being followed in the FBSM mechanism as well. There is no new mechanism required for settlement of changeover consumers' demand and TPC-D is obligated and will take the responsibility associated with deviation settlement of changeover consumers.

8.9 AEML-D's suggestion is against the principle set by the Commission for determining the deviation limits and is not in line with the Regulations. Further, ultimately, even with the proposed solution of AEML-D, the entire settlement of changeover demand will have to continue to be carried out. Hence, apart from increasing its own deviation limit, there seems to be no other purpose for this suggestion.

8.10 Already, the deviation volume limit is very stringent for all the Mumbai Distribution Licensees. If part of the deviation limit of TPC-D is handed over to AEML-D, TPC-D may end up perpetually paying Additional Deviation Charges as the measurement errors itself may be more than the balance deviation limit.

8.11 With respect to changeover consumers' demand settlement, it is proposed that the present method followed for settlement of the changeover consumers shall be followed. Accordingly, post monthly settlement of changeover consumers' consumption, MSLDC shall run the revised Deviation Settlement Bills for TPC-D and AEML-D. TPC-D would extend all support required if any to MSLDC for revising the weekly Deviation Settlement Bills of TPC-D and AEML-D. Alternatively, the deviation

charges applicable to changeover consumers may be settled on periodic basis after final demand of changeover consumers is arrived at.

8.12 In case of the Regional Energy Accounting settlement process as well, the deviation settlement bills are revised as a practice on account of various operations issues. Hence, revision of Deviation Settlement Bills of TPC-D and AEML-D by MSLDC post settlement of changeover consumers' energy accounting would be in line with the current industry practice.

8.13 AEML-D's contention that smart meters are not installed by TPC-D for changeover consumers is incorrect as choice of Energy Meter was left with the consumers and not with supply licensee as per the Commission's Order in Case No. 50 of 2009.

STU's submission

8.14 STU has not made any submission on this issue.

MSEDCL's submission

8.15 MSEDCL has not made any submission on this issue.

BEST's submission

8.16 BEST has not made any submission on this issue.

Indian Railways' submission

8.17 Indian Railways has not made any submission on this issue.

AEML-D's rejoinder

8.18 MSLDC has to undertake scheduling and settlement of the changeover consumers. Therefore, it is necessary that TPC-D installs smart meters to these consumers such that load profile of these consumers is available for scheduling and billing.

8.19 As the changeover consumers' consumption is not recorded at 15 minute time block basis, MSLDC will not be able to compute the exact deviation attributable to such changeover consumers, and as such, the impact of deviation settlement will not be passed on to TPC-D as there are no SEMs and AEML-D will be required to bear it unless TPC-D installs appropriate meters for change-over consumers or some regulatory mechanism is worked out for settlement between AEML-D and TPC-D.

8.20 TPC-D ought to provide AMR so that the consumption and deviation of changeover consumers can be appropriately factored.

8.21 TPC-D has contended that if deviation limit is increased for AEML-D then it would be inconsistent with the Regulations. However, it is conveniently overlooking non-compliance of Regulation 2(b) and 2(i) and proposing settlement of the changeover consumption based on estimated scheduled profiles instead of actual meter reading as defined under these Regulations.

8.22 TPC-D has proposed that as per present methodology, the estimated profiles, prorated to actual monthly meter reading, will be used for DSM settlement and MSLDC will re-run the bill. AEML-D has objection to this very basic methodology as AEML-D is getting impacted for the variations in demand of TPC-D consumers for which TPC-D

is solely responsible. Therefore, the Commission is requested to direct TPC-D to implement AMR at the earliest and till such time, the methodology proposed by AEML-D may be implemented. In case TPC-D does not agree to AEML-D's proposed methodology, they should propose a methodology where AEML-D would be fully insulated from such implications.

TPC-D's additional submission

8.23 During the course of the hearing dated 13 October 2020, TPC-D had submitted that mechanism for settlement of deviations in the scheduled and actual demand of changeover consumers under DSM Regulations would be submitted for consideration of the Commission wherein there shall be no need for the following:

i. Shift of proportionate volume limit of TPC-D to AEML-D equivalent to the average demand of changeover consumers

ii. Revision in bills raised by MSLDC as per the DSM Regulations

8.24 Following mechanism is suggested by TPC-D:

i. The deviations in the changeover consumers' schedule gets adjusted between TPC-D and AEML-D, hence it has no impact on the State's deviation settlement.

ii. AEML-D and TPC-D will continue to schedule the changeover consumers demand as per the current practice based on Monthly Energy consumption (MU) estimate and 15 minute load profile. The load profile of the consumers shall be reviewed periodically to reflect realistic category wise consumption for the purpose of forecast and settlement.

iii. MSLDC will undertake the settlement under the DSM Regulations as per the changeover demand scheduled by TPC-D and AEML-D and there will be no revision in the DSM bills based on the actual meter reading data of changeover finalized for that month.

iv. Based on the actual meter reading and monthly energy consumption jointly agreed by AEML-D and TPC-D, the difference of energy consumption would be calculated and agreed upon.

v. The 15 minute schedule will not be changed post facto and the real time deviation actions would remain as it is.

vi. The difference thus arrived upon in the energy figures would be paid /received as per any of the method as given below:

a. Settling the same at daily marginal price for the utility by dividing the energy difference on daily basis.

b. Settling the same at monthly variable power purchase cost used by the utility for FAC purpose.

AEML-D's Additional submission

8.25 At the hearing held on 13 October 2020, the counsel of AEML-D sought permission to file written submissions, whereby the Commission opined that no such submissions are required to be filed. However, subsequently AEML-D received the written submissions filed by TPC-D on 17 October 2020.

8.26 It is observed that TPC-D has not made any efforts to address the issue of changeover consumption deviation settlement. AEML-D cannot be made to bear deviations caused by TPC-D consumers which are connected to the AEML-D's network. TPC-D was required to come up with a holistic and a rational solution to the above issue. However, TPC-D has only made submissions for the sake of protecting its own interests, with an intention that the impact of deviation of its changeover consumers is passed on to AEML-D.

8.27 AEML-D had already made detailed submission on the issue and the proposed solutions. For ready reference, the issues with changeover consumers' settlement are listed below:

i. Settlement of the deviation between scheduled and actual energy;

ii. Impact of the above deviations on the network licensee deviation limit, and effectively additional liability towards Additional Deviation Charges.

8.28 In its additional submissions, TPC-D addressed the first part, and it completely ignored the second part which is the main issue for resolution before the Commission, qua the issue of deviation settlement of changeover consumers.

8.29 At the hearing, TPC-D submitted that the MSLDC will undertake the revision of the DSM bills to give effect to the deviation of the changeover consumers. However, in the written submissions, TPC-D agreed partially to AEML-D submission to settle the deviations outside DSM bills. However, the mechanism proposed by TPC-D does not address the concerns of AEML-D and, in fact, is proposed to insulate TPC-D of all risk of deviation of changeover consumers, while passing on the entire risk to AEML-D. The key issues with the mechanism proposed by TPC-D are highlighted below:

a. Under the mechanism proposed by TPC-D, AEML-D will be subjected to the Additional Deviation Charges for the deviation of changeover consumers of TPC-D.

b. TPC-D assumed that the deviation reflected in the T<>D interface meter will be zero for changeover consumers. However, this is not the case and AEML-D will have to bear these deviations.

c. TPC-D did not address the impact of changeover consumers' deviations on AEML-D, but by partially accepting mechanism suggested by AEML-D, it has ensured that there will be NIL impact on TPC-D by fully insulating itself from changeover consumers' deviations.

d. TPC-D has proposed 'Schedule = Actual' for changeover consumption in DSM settlement. Effectively, TPC-D wishes that the deviation of changeover consumers is to be accounted as zero, and the deviation limit ~ 3 MW allocated to it through CPD/ NCPD mechanism to be retained by them, which will provide

additional benefit over to TPC-D, at the cost of AEML-D. This is explained by an example herein below:

i. Assume TPC-D's own network demand is 500 MW and changeover consumers' Demand is 300 MW. Hence effective demand of TPC-D is 800 MW;

ii. As per DSM Regulations, TPC-D is availing a Deviation Limit of ~ 6 MW for own Network demand, and ~ 3 MW for changeover demand, and hence, total deviation limit of TPC-D is ~ 9 MW;

iii. Under the mechanism proposed by TPC-D, it will be subjected to deviation of only own network demand of 500 MW, and it will continue to enjoy/ avail deviation limit of 9 MW.

e. Any deviation in the changeover will get reflected in DSM settlement, and AEML-D will be subjected to DSM rates. Hence, the changeover consumers' deviation needs to be settled at base DSM rate only, and not at any other reference rate as suggested by TPC-D;

f. In the proposed mechanism submitted by TPC-D, it has assumed only one scenario of Schedule > Actual (i.e. Underdrawal), which is unrealistic as both scenarios, underdrawal and overdrawal, are equally probable, which is also seen from past settlement numbers. If AEML-D operates under this scenario, then it will only benefit TPC-D by under drawing and supplying power to AEML-D at marginal rates.

g. Through the proposed mechanism, TPC-D is ensuring all the cost as pass through, as power purchase even when deviations > limit, however, AEML-D will be forced to bear Additional Deviation Charges from its own RoE (Return on Equity).

8.30 For all practical purposes, the Additional Deviation Charges will be applicable on account of deviations of changeover consumers which will be accounted in the name of AEML-D by MSLDC under the DSM settlement at T<>D interface, however these charges also need to be borne by TPC-D being supply licensee of changeover consumers. These charges cannot be worked out separately unless TPC-D installs 15-min AMR for changeover consumers. However, till that time, AEML-D cannot be asked to bear the aforesaid charges and that the same is not acceptable to AEML-D. Therefore, AEML-D requests the Commission to direct TPC-D to share the Additional Deviation Charges payable by AEML-D in the proportion of the changeover sales, with respect to AEML-D network share so that no party is burdened unnecessarily. This will be billed bilaterally by AEML-D to TPC-D based on the weekly DSM bills issued by MSLDC. Summary of proposed mechanism by AEML is as below:

a. Deviation limit equivalent to changeover consumers to be allowed to AEML-D for representing changeover sale in DSM Pool settlement (this will benefit both AEML-D and TPC-D as Additional deviation charges will be lower);

b. Additional Deviation Charges applicable to AEML-D to be shared by TPC-D in the proportion of changeover consumers' sale in total network sale of AEML-D, to be billed weekly;

c. Base energy deviations (schedule- actual) to be billed at the base DSM charges by AEML-D/ TPC-D based on who has supplied the energy. This is required to be billed monthly once the actual changeover consumers' energy is jointly finalized by TPC-D and AEML-D.

8.31 AEML-D requests the Commission to take above submissions into consideration, while finalizing a mechanism for changeover consumers' deviation settlement under DSM Regulations. The Commission ought to ensure that the mitigation tool for risk of deviation posed by changeover consumers is being retained by TPC-D, and not passed on to AEML-D consumers. In fact, the DSM Regulations do not contemplate that a distribution licensee can be burdened for deviation on account of any other licensee's consumers. The changeover consumers are consumers of TPC-D, for whom it is TPC-D only which arranges power and hence, TPC-D must necessarily bear the risk of deviation arising from these consumers.

Commission's Analysis and Ruling

8.32 In suburban Mumbai, there exists a Parallel Licensing scenario wherein TPC-D and AEML-D are the parallel distribution licensees operating in the area. Changeover consumers are the consumers connected to one Distribution Licensee but getting supply from the other Distribution Licensee. In Mumbai suburban area, there are around 5.7 Lakh changeover consumers (mainly low end and residential category) which are being supplied by TPC-D through AEML-D's distribution network. Thus, their demand (and therefore deviation) is getting recorded in T<>D interface meters of AEML-D. Under present FBSM mechanism, the demand variation on account of these changeover consumers is being settled among the licensees at WASPM (Weighted Average System Marginal Price) rate based on agreed 15-minute profile of these consumers.

8.33 Under FBSM, there is no limit for deviation and also the entire power purchase expenses are allowed as pass through in ARR for the Distribution Licensees. However, in DSM Regime, there is a volume limit for deviations beyond which the Additional Deviation Charges are applicable which are not allowed as pass through in the ARR. Thus, the demand variations of the changeover consumers would affect the AEML-D's deviations and the associated liability of AEML-D towards DSM pool. Thus, there is an issue which needs to be addressed.

8.34 As per AEML-D's suggestion, variation in the power requirement may be settled between AEML-D and TPC-D directly at the 15 minute base DSM rate as finalized by MSLDC in the weekly bill. AEML-D has also suggested that to mitigate impact of deviation, MSLDC may either provide additional volume limit to AEML-D at 15 minute time-block or the deviation volume limit allowed to supply Licensee (TPC-D) on account of changeover consumers is to be given to network licensee (AEML-D). The average NCPD of changeover consumers is ~ 250 MW, hence, proportionate

volume limit may be reduced from TPC-D and to be added to AEML-D's volume limits under DSM Regulations.

8.35 As per TPC-D's proposal submitted in its additional submission, there is no need to revise the volume limit of AEML-D and TPC-D. The difference in energy may be paid /received by AEML-D/TPC-D, by settling the same at either daily marginal price for the utility by dividing the energy difference on daily basis or at monthly variable power purchase cost used by the utility for FAC purpose.

8.36 The Commission is of the view that TPC-D's proposal only deals with the settlement of differential energy on a monthly basis. However, the variation in demand by these changeover consumers would in fact limit the deviation available to AEML-D. Hence, the Commission finds that the proposal of TPC-D does not adequately address the issue. The proposed methodology of AEML-D is addressing both the aspects, the settlement of energy as well as the impact due to variation of these consumers on deviation of AEML-D.

8.37 TPC-D has contended that AEML-D's suggestion is against the principle set by the Commission for determining the deviation limits and is not in line with the Regulations. TPC-D has further contended that the deviation limit, as it is, is extremely low for all the Mumbai Distribution Licensees and if further revised, would impact TPC-D. In this context, the Commission notes that as these consumers are connected to AEML-D network, their demand and variation in demand vis-à-vis the schedule will get reflected in AEML-D's T<>D interface meters. Therefore, the volume limit determined presently for AEML-D based on AEML-D's NCPD would not be adequate as it does not include changeover consumers' demand. Thus, inspite of being the supply licensee for these consumers, TPC-D would get insulated from demand variations of these consumers, AEML-D will have to absorb these demand variations. Hence, the Commission does not find any merit in TPC-D's aforesaid contention and the Commission accepts the methodology proposed by AEML-D with the following principles:

i. The deviations in the changeover consumers' schedule should be settled between TPC-D and AEML-D, hence there should not be any impact on the State-level deviation settlement.

ii. AEML-D and TPC-D will continue to schedule the changeover consumers demand as per the current practice based on Monthly Energy consumption (MU) estimate and 15-minute load profile. The load profile of the consumers shall be reviewed periodically to reflect realistic category wise consumption for the purpose of forecast and settlement.

iii. MSLDC will undertake the settlement under the DSM Regulations as per the changeover demand scheduled by TPC-D and AEML-D. The DSM accounts for AEML-D and TPCL-D shall be prepared by deducting the changeover consumers schedule quantum from AEML-D network drawal and by adding the

same in TPCL-D drawal. There will be no revision in the DSM bills based on the actual meter reading data of changeover consumers finalized for that month. For DSM settlement,

iv. Based on the actual meter reading and monthly energy consumption jointly agreed by AEML-D and TPC-D, the difference of energy consumption should be calculated and agreed upon by both the Licensees.

v. The 15 minute schedule will not be changed post facto and the real time deviation actions would remain as it is.

vi. Variation in the energy requirement to be settled between AEML-D and TPC-D at the 15 minute block applicable DSM rate (excluding Additional Deviation Charges) as finalized by MSLDC in the weekly bill, in terms of the following:

a. If scheduled energy of changeover consumers > actual energy of changeover consumers: excess in schedule energy towards changeover consumers and hence AEML-D will pay to TPC-D for differential units;

b. If scheduled energy of changeover consumers < actual energy of changeover consumers: shortfall in schedule energy of changeover consumers and hence TPC-D will pay to AEML-D for differential units.

vii. For TPC-D, the impact of the changeover consumers variation would be NIL as DSM settlement would be undertaken without any revision in the changeover consumers' schedule. Hence, the deviation volume allowed to supply licensee (TPC-D) on account of changeover consumers' demand would require to be given to network licensee (AEML-D). **However, the proposed volume limits for different buyers for FY 2020-21 have already been submitted by MSLDC for approval of the Commission. The decision about the volume limit revision for AEML-D and TPC-D on account of changeover consumers' consumption would be taken at the time of approval of volume limit of buyers.**

9. **Issue 3 : Deviation Charges and Additional Deviation Charges should be made a pass-through in the ARR**

AEML-D's submission

9.1 The Deviation Charges and Additional Deviation Charges are not allowed as pass-through in ARR of the Distribution Licensees. It is practically not possible to ensure zero deviation due to the unpredictable nature of consumers' demand and deviation volume limits of 17 MW allowed for the Petitioner is so small (in context of its consumer base and overall demand) that even a mere 2% variation from the forecast demand would require the Petitioner to pay Deviation Charges without being able to recover the same from the consumers. If the Distribution Licensees overdraw power

from the grid, the same gets consumed by the consumers and therefore, not allowing the Deviation Charges as a pass-through in the ARR is unfair and unreasonable.

9.2 If the concern of the Commission is that certain participants may be intentionally indulging in over-drawal or under-drawal from the system, then the same may be misplaced since there is no commercial advantage in doing so (on account of cost of power drawn under DSM being relatively high). Further, in order to prevent misuse of DSM, the DSM Regulations already incorporate a provision for "Gaming". The Deviation Charges paid by a Distribution Licensee is part of its electricity cost and / or service to the consumers and ought to be allowed as a pass-through in the ARR.

MSLDC's submission

9.3 MSLDC shall act upon and follow the directives given by the Commission in implementation of DSM Regulation.

TPC-D's submission

9.4 AEML-D's submission on this issue is supported as the deviations occur for reasons beyond the reasonable control of the Distribution Licensees.

STU's submission

9.5 STU has not made any submission on this issue.

MSEDCL's submission

9.6 MSEDCL agrees with the Petitioner that Additional Deviation Charges due to uncontrollable factors shall be allowed to be recovered through ARR. MSEDCL, like the Petitioner, is also facing issues due to weather parameters while forecasting the day ahead demand required for scheduling.

9.7 Accurate demand forecasting is primarily dependent on the accuracy of uncontrollable factors like weather parameters, consumer behavior, etc. In addition to weather, there are other parameters such as effect of mass agitations, effect of special day on demand etc. Assessment of impact due to Distributed Generation on demand forecasting is also a big challenge.

9.8 It is necessary that actual demand which is being shown in SCADA is close to actual demand that will be measured post facto based on reading of interface point meters which STU has recently installed but its reading are not made available even to MSLDC after a month.

9.9 As and when AMR will be installed, in order to monitor deviation in real time operations, it would be necessary that suitable provision to fetch real time data of all drawal points shall be provided to compute actual demand.

9.10 Presently, there is no alternative to SCADA for fetching real time data. But currently, SCADA/RTUs are not installed on almost 80% of MSEDCL's drawal points. In absence of this, actual demand/drawal of MSEDCL is not being measured in real time operations and MSEDCL's demand is being derived using SCADA data of state Generation, drawal from central sector grid and drawal of Mumbai DISCOMs. This derived demand of MSEDCL in SCADA has large error mainly on account of

intermittent SCADA visibility of RE generation, which is part of state generation being used for deriving MSEDCL demand.

9.11 On account of above-mentioned issue, MSEDCL would not be able to manage the deviation correctly and would not be able to take correct decision, as actual demand of MSEDCL would not be available in real time. Hence, there are probabilities that MSEDCL will end up paying more DSM charges under additional DSM charges than payable as per demand computed in real time in SCADA.

9.12 Even if in real time it maintains deviation within its volume limit as per demand in SCADA, during actual settlement, MSEDCL may be required to pay charges on account of violating its deviation volume limit, as actual demand measured by meter will be certainly different from that derived in real time based on methodology adopted by MSLDC at present.

9.13 In view of the above, MSEDCL agrees with the views of the Petitioner and submits that until SCADA is installed at all interface points by STU and higher accuracy level in RE Wind and Solar forecasting is achieved, Additional DSM Charges shall be allowed to recover through ARR.

BEST's submission

9.14 The consumption pattern of consumers on 15-minute basis is very difficult to predict and ensuring zero deviation by the Distribution Licensees is technically not possible in practice. Further, the DSM Regulations allow only 1% deviation for Distribution Licensees during its peak demand. For BEST, deviation volume limit is 11 MW, which is too small for its higher demand base. It is technically not practicable to ensure deviation upto 1% level due to various uncontrollable factors in predicting demand forecast and real time variations in the system. The accuracy of demand forecast depends on weather forecast accuracy, major breakdown in distribution network, SCADA error, infirm nature of RE sources etc. Due to global climatic changes, the weather forecast by weather service providers is observed to be erratic, particularly during monsoon period and seasonal transition phase. All these factors are beyond control of any Distribution Licensees. Therefore, inherent limitations in demand forecasting would make it extremely difficult for the Distribution Licensees to adhere to 1% deviation limit even at the best case scenario and therefore, Additional Deviation Charges will be made applicable to Distribution Licensees for crossing specified deviation volume limit. As these Additional Deviation Charges are not pass-through in ARR of the Distribution Licensees, it will result in significant financial impact to Distribution Licensees for the reasons beyond its control.

9.15 Due to spread of Covid 19 and lock-down thereof, the demand of the Distribution Licensees including BEST is considerably reduced. Demand pattern has also significantly undergone changes. This is drastically impacting the revenue of the Distribution Licensees including BEST through electricity bill collection. It may likely to take considerable period to normalize the demand scenario. Distribution Licensees will likely face difficulties in forecasting demand with accuracy in ensuing period due to evolving demand scenario in its distribution area arising out of likely policy changes

by statutory authorities and picking up of demand based on economic development thereof. Therefore, any additional financial burden due to application of Additional Deviation Charges will have further financial impact to the Distribution Licensees, which are already undergoing financial hardship.

9.16 Further, MSLDC has proposed to carry out actual DSM commercial settlement based on existing interface meters till new meters are installed alongwith commissioning of its AMR system. Since existing interface meters are installed a decade ago, the accuracy of these meters at this stage needs to be ascertained as Distribution Licensees will pay for deviations due to any drift in accuracy of these meters.

9.17 The Commission is requested to allow Additional DSM charges paid by the Distribution Licensees as a pass-through in their ARRs. The Commission should also consider deferring the application of Additional DSM charges till commissioning of AMR-based new interface meters and make available this real time AMR data to the Distribution Licensees by STU or any other suitable period. Till this period, the Additional charges liability towards Regional pool, if any, can be shared by those participants on account of whom the charges become applicable in the proportion of deviations in respective time blocks.

Indian Railways' submission

9.18 There would be an adverse financial impact of Indian Railways too, if the DSM Regulations are implemented in its current form.

9.19 Deviation volume limit assigned to Indian Railway is linked to the State Volume limit of 250 MW. Therefore, maximum DSM volume limit of about 207 MW has been allotted to MSEDCL whereas small Deemed Licensee will get lesser DSM volume limits. Volume limit of Indian Railway is only around 5 MW and it will be very difficult for Indian Railway to adhere to considering nature of operations of Railways.

9.20 Accuracy of demand forecast depends upon uncontrollable factor like weather, breakdowns, public agitation causing disruption of Rail traffic etc. Some of the uncontrollable factors in case of Indian Railway are as under:

i. Railway breakdown situation caused by various reasons such as bolder falling, foggy weather during winter, heavy rainfall, public agitation etc. Depending on duration of taken to restore breakdown, route on which breakdown took place, traffic on the route affected etc. the power requirement varies and it will be very difficult for Indian Railway to maintain the DSM within 5 MW volume limit

ii. Movement of freight trains which does not take place as per any predefined schedule timing also causes the Indian Railway requirement to vary a lot.

iii. Central Railway (CR) is procuring power from Ratnagiri Gas Power Pvt Ltd (**RGPPL**), Bhartiya Rail Bijlee Company Ltd. (**BRBCL**) and NTPC Vidyut Vyapar Nigam (**NVVN**) (Wind power). Both the thermal generators of India Railway i.e. RGPPL and BRBCL being ISGS, comes under jurisdiction of CERC. Therefore Central Railway is facing difficulties while scheduling this blended power in real time because of conflict between the MERC (Forecasting, Scheduling and

Deviation Settlement for Solar and Wind Generation) Regulations 2018 and Sixth amendment to CERC Regulation of Grid code, 2010 effective from 1 June 2020.

iv. As per the clause 5.19 of the MERC (Forecasting, Scheduling and Deviation Settlement for Solar and Wind Generation) Regulations, 2018, Wind and Solar generators can revise their generation forecasting in every one and half hour time slot subject to maximum of 16 revisions during a day, such revisions shall be effective from 4th time block.

v. As per above clause, Railway's contracted wind generator sends revision in generation forecast in every one and a half hour which is effective from 4th time block.

vi. As per clause 2.4 of Sixth amendment to IEGC, 2010 (effective from 1 June 2020), CERC amended the schedule revision effective time for Thermal Generating Units to 7 or 8 time blocks from present 4 time blocks.

vii. As per the above clause, RGPPL and BRBCL revision in scheduled generation gets effective from 7th or 8th time bock after intimation of the revision in scheduled demand by Indian Railway.

viii. Assume that Railway's forecasting matches to its actual drawal (100% accurate forecast) and it is constant throughout the day as 300 MW. Wind power as per previous revision received was 20 MW. Railways had scheduled 200 MW from RGPPL and 80 MW from BRBCL. Suppose the Wind generator sends a revised forecasting in generation from 20 MW to 10 MW. This revision of wind generation will be effective from 4th time block after intimation. Now to avoid the overdrawl of power, Railway needs to increase its thermal generation from RGPPL and/or BRBCL by 10 MW, however as per above amendment to IEGC Regulations, Railways can revise schedule generation from RGPPL or BRBCL only after 7th or 8th time block, causing over drawl of power for 3 or 4 time blocks merely due to conflict between two Regulations.

9.21 Railways agrees with AEML-D's submission that the real time monitoring and grid operation is based on SCADA data which has an inherent error due to accuracy class of Multifunction Energy Meter.

9.22 In view of the above, forecasting and scheduling of power within volume limit of 5 MW is extremely difficult for Indian Railway and may result in significant financial implication on Indian Railway as well. Thus, volume limit of 12% of the schedule needs to be provided in line with CERC's DSM Regulations.

AEML-D's rejoinder

9.23 Both TPC-D and MSEDCL have supported AEML-D's submission on this issue.

Commission's Analysis and Ruling

9.24 The Commission notes that identical prayer had been made by TPC-D in its Petition in Case No. 114 of 2020. Also, the grounds raised by all the Distribution Licensees in present proceeding are identical to those raised in Case No. 114 of 2020. The Commission, in its Order dated 29 November 2020 in Case No. 114 of 2020, has duly

considered all the grounds/submissions on this issue and rejected the prayer of TPC-D seeking pass-through of Additional Deviation Charges in ARR approvals. The relevant extract of the Order is given below:

“

7.49. On this issue, TPC-D is also seeking relaxation/modification in Regulation 55.1 of MYT Regulations, 2019 which reads as under :

“ 55.1 ……

Provided also that the Additional Charges for Deviation paid or earned by the Distribution Licensees in accordance with Regulation 10 of the Maharashtra Electricity Regulatory Commission (Deviation Settlement Mechanism and Related matters) Regulations, 2019, shall not be recoverable from the Beneficiary/ies through Tariff.”

7.50. It is observed that the above Regulation was part of the draft MYT Regulations which were published seeking comments from the stakeholders. TPC-D had raised similar objection on the Additional Deviation Charges as is raised in the present Petition and had suggested that the Additional Deviation Charges should be allowed to be recovered from the beneficiaries. However, the Commission has addressed the objection in the Statement of Reasons (SOR) as under:

…….

7.51. Thus, the Commission did not consider any need to revise the draft Regulation as same would have been against the intent of DSM Regulations. In light of the above, the Commission is of the view that there is no need to take a different view on this Regulation which has been finalized for a balanced dispensation of all the stake holders and which was finalized after following a due public consultation process which includes a considered view on TPC-D’s objection on this issue.

7.52. Further, if the Additional Deviation Charges are allowed as pass through in ARR for the Distribution Licensees under the MYT Regulations as sought by the all the Distribution Licensees in view of difficulties in estimating correct schedule and sudden drop/variations of loads for issues beyond their control, the whole purpose of grid discipline to be followed by the Distribution Licensees as envisaged in DSM Regulations will get defeated as there would not be any dis-incentive for Distribution Licensees to breach their respective drawal schedules. As a result of this, the Regulation related to volume limit for the Distribution Licensees specified under the DSM Regulations would become redundant as the volume limits may not be practically maintained by the State Entities in absence of Additional Deviation Charges. These Charges are necessary, to follow the volume limits by Intra-State Entities.

7.53. Volume limit for the Buyers/Sellers is crucial for secured grid operations as in the absence of volume limit under DSM Regulations, the price signal with deviation price vector within the operating frequency range would not be sufficient to address over-drawal/under-injections. Further, without the volume limit, there would be a perverse signal for over-drawal/under-drawal or under-

injection/over-injection without any regard to other grid parameters like transfer capability, voltage level, fault levels, etc. Large quantum of unscheduled over-drawal/under-drawal even when the frequency is within the normal band can give rise to transmission constraints and jeopardize grid security. Frequency is not the only consideration in reliable operation as there can be instances where system frequency is within range and large unscheduled power flows on certain elements can result in catastrophic grid failure.

7.54. Thus, the Commission is of the view that while the Distribution Licensees are looking at this issue of applicability of Additional Deviation Charges from a commercial angle, the important aspect of the secured and reliable grid operation cannot be ignored. The objective of the DSM Regulations is to maintain grid discipline and grid security as envisaged under the Grid Code through commercial mechanism for Deviation Settlement through drawal and injection of electricity by the users of the grid and the Additional Deviation Charge is an effective mechanism to ensure the grid security and grid discipline envisaged under the DSM Regulations.

7.55. It is also likely that with only Deviation Charges in place without any Additional Deviation Charges, the DSM mechanism (particularly at better frequencies) may be treated as source of procuring power considering the lower rate of Deviation Charges and considering that the Deviation Charges are allowed as pass through in ARR.

7.56. Further, the deviation of individual State Entities may lead to such a level that State deviation may exceed the stipulated limit of 250 MW. Increased occasions of the State exceeding the stipulated deviation limit of 250 MW may result in State paying the additional charges to regional pool. Thus, the liability of State would go up which would be recoverable from the consumers of various Distribution Licensees resulting into double impact on the consumers if Additional Deviation Charges are allowed as pass through in Tariff as prayed.

7.57. The Commission further notes that a condition has been stipulated in the DSM Regulations according to which, for deviations exceeding its volume limits upto 6 time-block during the day, Additional Deviation Charges shall not be applicable if the deviation at state periphery does not exceed the state volume limit of 250 MW, beyond which, the Additional Deviation Charges shall continue to be applicable, even if deviation at state periphery does not exceed state volume limit. Thus, during initial stages of introduction of the volume limit, the DSM Regulations has already provided a safeguard to the Distribution Licensees to ensure that impact of Additional Deviation Charges is not be too onerous on them..

7.58. On the various arguments made by the Distribution Licensees about their uncontrollability over demand and its variation, the Commission is of the opinion that the Distribution Licensees may have limited controllability over the demand catered by them, however with proper forecasting, the Distribution Licensees can revise their schedule and/or take steps through appropriate demand side

measures including demand response to minimize the deviation in either of the direction. .

7.59. *The Distribution Licensees have also highlighted the impact of the Wind and Solar generators' deviation on the liability of Distribution Licensees towards Additional Deviation Charges. On this issue, the Commission notes that MERC (Forecasting, Scheduling and Deviation Settlement for Solar and Wind Generation) Regulations, 2018 have been notified on 20 July 2018 and its commercial implementation has been commenced from January 2020. These Regulations for variable RE generation shall also bring discipline in forecasting of RE generation. The Distribution Licensees may use this data while forecasting their demand and preparing their schedule.*

7.60. *Further, as per the RE F & S Regulations, deviation impact at state periphery on account of RE deviation shall not be passed on to the Distribution Licensee or other stakeholders. The impact of deviation on account of variable RE (wind and solar) generation on aggregate basis at state periphery shall be passed on to the RE generators responsible for deviation, as per the conditions stipulated under F&S Regulations. Though presently the state periphery charges under F & S Regulations are kept in abeyance and are being analyzed for its correct levy/collections, the Commission is of the view that with these charges, the Distribution Licensees would be protected to that extent. .*

7.61. *TPC-D has contended that the non-firm generation will be credited at actuals and not scheduled and therefore this may result in deviation for the Distribution Licensee. In this context, the Commission notes that, though RE generators are paid on basis of actual generation as per the provision of existing Energy Purchase Agreements (EPAs), these generators are made to pay in both directions (i.e. over-injection as well as under-injection) for their deviation beyond stipulated limit of 15% absolute error, thus there is deterrent provision for RE Generators for violating their schedules. With these Wind and Solar generators gaining experience under RE F & S Regulations, it is expected that their forecasting would improve, and their deviation would go down from the present level..*

7.62. *MSEDCL has submitted that presently, there is no alternative to SCADA for fetching real time data for monitoring of their actual drawal. But currently, SCADA/RTUs are not installed by MSETCL at their EHV Substations and hence there is no visibility on almost 80% of MSEDCL's drawal points (i.e. mainly at MSETCL 220/33kV or 132/33kV Substations). In absence of this, actual demand/drawal of MSEDCL is not being measured in real time operations and MSEDCL's demand is being derived using SCADA data of State Generation, drawal from Central sector grid and drawal of Mumbai DISCOMs. This derived demand of MSEDCL in SCADA has large error mainly on account of intermittent SCADA visibility of RE generation, which is part of State generation being used for deriving MSEDCL demand. According to MSEDCL, absence of SCADA may result MSEDCL to pay higher deviation charges.*

7.63. The Commission acknowledges the fact that the availability of SCADA will provide MSEDCL the visibility of its real time drawal. The Commission notes that MSEDCL has been raising this issue time and again.

7.64. The Commission in its Statement of Reasons (SOR) to DSM Regulations has dealt with the issue of SCADA visibility and preparedness for DSM implementation. Further, Metering and Communication Coordination Committee to be constituted under the MERC (State Grid Code) Regulations 2020, inter alia, would be required to undertake a periodic review of SCADA visibility of all Drawal and injection points. For establishing connectivity and communication link at T<>D interface for drawal point of Distribution Licensee to ensure visibility to MSLDC is responsibility of STU. Hence, STU should come up with a concrete and cost-effective and timely implementable plan within 3 months in consultation with the Grid Co-ordination Committee for implementation of SCADA to ensure required real time visibility at MSLDC.

7.65. However, absence of SCADA should not come in way of commencement of commercial implementation of the DSM Regulations which is essential to bring grid discipline among the State Entities. The Commission further notes the issues raised by TPC-D and BEST. These Licensees have raised the issue of difference in real time SCADA data and Meter data while requesting the Additional Deviation Charges to be allowed as pass through in ARR. Thus, even if SCADA is in place, there would be further issues related to accuracy of its measured data for DSM purpose. Further, presently, in absence of SCADA, MSEDCL has been taking appropriate decisions on revising its drawal schedule in real time. Same can be continued by MSEDCL till SCADA gets commissioned by STU.

7.66. MBPPL and GEPL have also raised the issue of demand uncertainties due to Covid 19 pandemic and its aftermath. On this issue, the Commission notes that significant industrial and commercial activities have already been commenced due to various unlock orders of the State Government and the demand would get stabilized as the time progresses. It is also pertinent to note that vide its Order dated 28 October 2020, the Commission has already deferred the commercial implementation of DSM Regulations till 28 December 2020. The trial run of DSM Software modules had already been commenced from 24 June 2020 and now a fresh trail run of the updated software has been commenced on 14 October, 2020 wherein all the Parties in the present proceeding are participating..

7.67. In light of the above discussion, the Commission is not inclined to grant the prayer of TPC-D (also supported by rest of the Distribution Licensees) for allowing Additional Deviation Charges as a pass-through in the ARR of the Distribution Licensee and providing a relief in Regulation 55.1 of MYT Regulations.

7.68. On the claims of the Distribution Licensees regarding volume limits being too stringent for them to meet, the Commission notes that it has already been clarified in the SOR for DSM Regulations that the implementation of DSM framework shall be initiated with the proposed volume limits in the DSM Regulations and based

on the actual data generated during initial phase of implementation, the Commission may revise the volume limits for Intra-State entities. As mentioned at Para. 7.63 above, the trial run of DSM Software modules had already been commenced from 24 June 2020 and now a fresh trial run of the updated software has commenced on 14 October, 2020. The Commission also understands that the day-ahead as well as Intra-day scheduling is now being undertaken in accordance with the de-centralized scheduling under the DSM Regulations. Hence, it is expected that the trial run results and also the commercial operations thereafter, would indicate the actual impact of volume limit and the Additional Deviations Charges on the Distribution Licensees, which can be considered (if necessary) for revision in the volume limit for Intra-State Entities in future."

9.25 **The Commission is of the opinion that the aforesaid ruling is squarely applicable to the present Case. Hence, the Commission does not find any justified reason to allow the prayer of AEML-D on this issue**.

10. **Issue 4 : Additional Deviation Charges to State Entities should be levied only if Additional Charges are applicable to the State in the Regional Pool**

AEML-D's submission

10.1 Under the DSM Regulations, the price of energy overdrawn from the pool is linked to the Area Clearing Price (**ACP**) when frequency is 50 Hz. If frequency is lower, the charges go up by Rs 8/kWh. Therefore, there is no advantage for the users to intentionally draw power from the DSM pool and the deviations in the pool will be natural / uncontrollable deviations.

10.2 Most of the deviations of the State Entities will get cancelled out within the State itself due to simultaneous over-drawal and under-drawal by different entities and it will only be the net imbalance which will be seen at the State level in Regional Pool. Situations where all State Entities over-draw or under-draw simultaneously will be rare. Therefore, the Additional Deviation Charges ought to be collected from the State Entities only in the event the same is payable to the Regional Pool. The purpose of the DSM Regulations is not to collect financial penalties from State Entities but to improve and maintain grid discipline at the State level. Alternatively, the under/over-drawal should be charged only at the base DSM price as the presently proposed mechanism is unduly stringent and penal in nature.

MSLDC's submission

10.3 MSLDC shall act upon and follow the directives given by the Commission in implementation of DSM Regulation.

TPC-D's submission

10.4 The main objective of the implementation of the DSM Regulations is not to collect financial penalties from State Entities but to improve and maintain grid discipline at the State level. Hence, AEML-D's submissions is supported on this issue that the

Additional Deviation Charges should be collected only if the deviation of the concerned Distribution Licensee results into regional pool liability.

STU's submission

STU has not made any submission on this issue.

MSEDCL's submission

10.5 If additional DSM Charges are waived as proposed by the Petitioner, there are chances that sufficient efforts may not be taken by all drawee State Pool participants to improve demand forecasting accuracy and thereby managing deviation within volume limit so as to avoid additional DSM Charges . This will have adverse cumulative impact on managing deviations at state periphery by MSLDC and may result in State ultimately paying more charges into central DSM pool.

10.6 Further, in case of CERC (DSM) Regulations, there is provision for penalty for violation of sign reversal of deviation. Presently, sign reversal of deviation must be achieved after each 12-time block but from 1 December 2020, the said sign reversal penalty will be imposed, if the State fails to reverse the sign of deviation after each six-time block. With change in provision for revision of ISGS schedule from earlier 4th time block to 8th time block (from 1 June 2020 as a part of RTM commencement), it has become major challenge of sign reversal within 6-time block; mainly on account of invariable nature of RE generation and large error in forecasted and actual generation. Presently, there is no provision to recover sign change penalty in the DSM Regulations. Hence, on one hand, the State will be required to pay penalty for sign violation as per CERC (DSM) Regulation, on the other hand, there is no provision for recovery of such penalty from Intra-State Pool Participant. This may cause DSM pool to become imbalanced, if additional DSM charges is made applicable only when State liable for such payment at regional level. Hence, it is necessary to recover additional DSM charges as mentioned in the DSM Regulations and therefore, AEML-D's prayer on this issue may be disallowed.

BEST's submission

10.7 Additional Deviation Charges can be made applicable only if the same are payable at regional level for the respective time blocks.

Indian Railways' submission

10.8 Railways agrees with AEML-D's submissions on this issue.

AEML-D's rejoinder

10.9 TPC-D has supported the issue. However, MSEDCL has opposed the aforesaid issue stating that if same is allowed, it may result in creating an unbalanced DSM Pool, wherein the State would be liable to pay penalty for sign violation as per the CERC (DSM) Regulations, whereas no recovery of such penalty can be made from the Intra-State Pool Participants. AEML-D submits that the entire charges (Additional Deviation Charge, Sign Reversal etc.) will be recovered on cause-effect basis from respective entity, therefore, it is unlikely that the pool will be under shortfall.

Commission's Analysis and Ruling

10.10 The Commission agrees with the submissions of MSEDCL that if additional DSM charges are waived as proposed by the Petitioner, there are chances that sufficient efforts may not be taken by all drawee State Pool participants to improve demand forecasting accuracy and thereby managing deviation within volume limit so as to avoid additional DSM charges and this will have adverse cumulative impact on managing deviations at state periphery by MSLDC and may result in the State ultimately paying more charges into central DSM pool.

10.11 Further as mentioned at **Para 9.24 above**, the Commission is of the view that while the Distribution Licensees are looking at this issue of applicability of Additional Deviation Charges from a commercial angle, the important aspect of the secured and reliable grid operation cannot be ignored. The objective of the DSM Regulations is to maintain grid discipline and grid security as envisaged under the Grid Code through commercial mechanism for Deviation Settlement through drawal and injection of electricity by the users of the grid and the Additional Deviation Charge is an effective mechanism to ensure the grid security and grid discipline envisage under the DSM Regulations. Thus, the submissions of AEML-D that the State's liability will be recovered on cause-effect basis from respective entity, eliminating the possibility of the pool becoming shortfall, does not have any merit.

10.12 **In light of the above, the Commission holds that AEML-D's prayer seeking applicability of Additional Deviation Charges to State Entities only in case of State's liability towards Additional Charges to the Regional Pool cannot be considered**.

11. Issue 5: Sufficient Trial Period for implementation in view of stringent commercial mechanism (i.e. Defer Additional Deviation Charges applicability for a period of one year)

AEML-D's submission

11.1 There are no limits on the deviations under FBSM mechanism. However, post the implementation of DSM Regulations, the deviation between the scheduled and actual drawal would be limited to 1% of peak demand for the Petitioner.

11.2 As per DSM Regulations, a utility wise MOD will be implemented whereas currently the MOD is centralized and is operated by MSLDC. In order to manage this major shift/change, Distribution Licensees will need certain lead time to get acquainted with the new system and undertake capacity building of systems and operating personnel. FBSM Code will be in place till 31 March 2020 and the DSM Regulations shall come into force from 1 April 2020.

11.3 The deviations are not controllable within the prescribed narrow limit (for e.g. 1% for the Petitioner). In addition to the difficulty in forecasting demand to the accuracy of 1%, Distribution Licensees are also subjected to deviations on account of the deviations

by the RE generators as the energy credit is provided on actual basis under the MERC (F & S) Regulations, 2018.

11.4 Since consumer demand is uncontrollable and deviations can only be managed from the supply side, in case of a drop in demand, the contracted generation can be revised downward to some extent, but with the limitation that any such revision shall be effective from the 4th time block. Further, in case of increase in demand, the Distribution Licensees will need to immediately arrange intra-day power from the market which, as per the current market framework, can only be scheduled with a minimum 3 hours lead time.. Therefore, a Distribution Licensee has very little room to take any corrective action without ending up being penalized for deviation in excess of the prescribed thresholds.

11.5 Therefore, there is an urgent need to introduce proposed deviation limits in a phased manner so that the Distribution Licensees get sufficient time to prepare themselves and deploy more accurate demand forecasting tools. At the regional level, CERC has progressively tightened the frequency band. Also, in the DSM at Regional levels, graded penalty for volume limits was introduced in 2014 so as to allow sufficient time to the regional entities to undertake preparatory steps,

11.6 CERC had introduced the 4th Amendment to the CERC DSM Regulations which came in from 1 January 2019 wherein the following provisions were introduced:

a. Sign reversal after every 6 time block – failing which 20% of DSM charges payable for the day;

b. Sign reversal mandatory, no range allowed;

c. Penalty applicable for under-drawal if frequency is > 50.05 at the rate of ACP.

11.7 However, based on the representations and issues faced by all the stakeholders, the CERC subsequently allowed the implementation of these changes in a phased manner. CERC, acknowledging the issues faced by the participants, took a considered view and provided sufficient time to the stakeholders for preparedness.

11.8 The Additional Charge applicability for deviations ought to be deferred by at-least one year. The lead time in implementation will provide learning opportunity to the Distribution Licensees in managing deviations and implications of the same.

11.9 Further, during this period of one year, the Additional charges liability towards Regional Pool, if any, can be shared by those participants on account of whom the charges become applicable in the proportion of deviations in respective time blocks.

MSLDC's submission

11.10 MSLDC shall act upon and follow the directives given by the Commission in implementation of DSM Regulation.

TPC-D's submission

11.11 AEML-D's request on this subject is supported with an additional request that while the deviation charges may be calculated, the same should not be applicable during the trial period.

STU's submission

STU has not made any submission on this issue.

MSEDCL's submission

11.12 The Commission has already extended the date for commercial settlement as 5 October 2020, wherein sufficient time is given for trial run, so that any practical difficulty can be identified and action for same can be taken by the concerned. Hence, the Commission can take an appropriate decision on waiver of additional DSM charges till 1 April 2021 after due consideration of trial run results.

BEST's submission

11.13 The changeover from FBSM to DSM should be graded one. Under present FBSM mechanism, there is limited role for the deviations. However, post implementation of the DSM Regulations, deviation charges will play primary role in the commercial settlement. The DSM regime envisages switchover from centralized scheduling and despatch under MOD principle by MSLDC to decentralized mode of activities by the Distribution Licensees. Trial run of new system as envisaged in the DSM Regulations is yet to begin. State Entities including the Distribution Licensees will require transition time to get familiarized with intricacy of new mechanism and to act accordingly to marginalize the deviation. This transition period will allow the Distribution Licensees to fine tune their demand forecasting tools. It would be proper for application of Additional DSM charges for commercial settlement only after getting experience of new mechanism by stakeholders for certain period.

Indian Railways' submission

11.14 Railways agrees with the Petitioner's prayer seeking phased implementation of the DSM Regulations in order to ensure smooth and effective transition from the earlier FBSM as various provisions of the DSM Regulations in respect of deviation limit and penal provisions, if not remedied and/ or relaxed, are likely to have an adverse financial impact on Indian Railway too. Sufficient trial period needs to be given for implementation of the DSM Regulations in view of stringent commercial mechanism i.e. Additional Deviation Charges applicability.

AEML-D's rejoinder

11.15 Both TPC-D and MSEDCL have supported AEML-D's submission on this issue.

11.16 The trial run has started however, entire system is not live and only scheduling module is available online that too all features are not live, and the State Entities are facing many issues even in scheduling/revisions etc. So even though trial period has been announced by MSLDC, the State Entities are not getting conversant with the mechanism as the entire system is not in place. Further even under trial run, scheduling is being undertaken as per FBSM mechanism, whereas trial bill will be as per the principles of DSM Regulations, hence for the State Entities, it will be difficult to understand actual commercial implications of DSM Regulations. So, in a sense, they will be subjected to DSM without any actual trial run.

11.17 The trial period should at least be of one year and should include all modules of the DSM Regulations, as per the principles laid down therein. If this is not done, the Licensees will not be able to fathom the commercial implications of DSM. The purpose of the trial run should be to make the participants understand the commercial implications of various actions and scenarios, so that adequate preparedness is built in before the Regulations are formally implemented.

Commission's Analysis and Ruling

11.18 The Commission notes that the DSM Regulations have been notified on 1 March 2019 and the commercial implementation of these Regulations were to be commenced from a date not before 1 April, 2020. As per the original notified Regulations, such date was not to be later than 1 April 2020 and at the time of filing of present Petition, this was the date stipulated for commercial implementation of the Regulations.

11.19 Subsequently, on two occasions (on 24 March and 5 June 2020), MSLDC, which is the implementing agency of the DSM regulations, conveyed the difficulties in commencement of commercial implementation of DSM Regulations citing mainly non-readiness of DSM software modules and other issues. Accordingly, considering the request of MSLDC and also the prevailing situation of outbreak of COVID 19 and related difficulties, the Commission, through its Orders dated 28 March and 5 June 2020, deferred the commercial implementation of DSM Regulations till 1 June 2020 and 5 October 2020 respectively.

11.20 In the meantime, on 22 June 2020, integrated testing of software (including shifting of application from development server to production server) was completed and trial run was commenced from 00.00 Hrs. of 24 June 2020.

11.21 Subsequently, vide its letter dated 25 September 2020, MSLDC conveyed the status of development of DSM software wherein it was informed that scheduling module was incomplete with many activities pending. Other non-core modules were also partially completed. MSLDC had requested a further extension till 31 December 2020 for resolving the pending issues in DSM Software modules, further testing and additional trial run period after resolution of all pending issues. Based on MSLDC's request, the Commission vide its Order dated 28 October 2020, extended the date of commercial implementation of the DSM Regulations till 28 December 2020. Thus, already a sufficient time has been given to all the State Entities to understand the principle and philosophy of these Regulations. Further, vide its letter dated 4 November 2020, it has been informed by MSLDC that the issues pertaining to Scheduling module have been resolved by the Software Developer, tested by MSLDC and the upgraded scheduling module has been deployed on production server on 13 October 2020. Fresh Trial run with upgraded scheduling module has commenced from 2 November, 2020. Feedbacks of stakeholders are being incorporated by the Software Developer after due discussion with MSLDC. Hence, the Commission is of the opinion that the State Entities would get another opportunity (first trial run had commenced on 24 June 2020) for participating in trial run of DSM Software wherein the State Entities would be providing their feedbacks/comments on the trial implementation of DSM Regulations. However, the phased implementation of the DSM Regulations by way of deferment of Additional

Deviation Charges for a period of one year after commencement of commercial implementation of the DSM Regulations will not be desirable as same would be against the objective of the DSM Regulations to maintain grid discipline and grid security as envisaged under the Grid Code through commercial mechanism for Deviation Settlement through drawal and injection of electricity by the users of the grid and the Additional Deviation Charge is an effective mechanism to ensure the grid security and grid discipline envisaged under the DSM Regulations. If additional DSM charges are deferred for a period of one year as proposed by AEML-D, there are chances that sufficient efforts may not be taken by all drawee State Pool participants to improve demand forecasting accuracy and thereby managing deviation within volume limit so as to avoid additional DSM charges and this will have adverse cumulative impact on managing deviations at state periphery by MSLDC and may result in the State ultimately paying more charges into central DSM pool. Further, there might be a shortfall in the State Deviation Pool Account vis-à-vis the State's liability to pay the regional charges. The Commission has given its detailed reasoning for necessity of application of Additional Deviation Charges under Issue 3 above. In light of the aforesaid discussions, the Commission does not deem it appropriate to allow the prayer of AEML-D (which has been backed by majority of the Distribution Licensees) to do away with Additional Deviation Charges for a period of one year.

11.22 On the claims of the Distribution Licensees regarding volume limits being too stringent for them to meet, the Commission notes that it has already been clarified in the SOR for DSM Regulations that the implementation of DSM framework shall be initiated with the proposed volume limits in the DSM Regulations and based on the actual data generated during initial phase of implementation, the Commission may revise the volume limits for Intra-State entities. The trial run of DSM Software modules had already been commenced from 24 June 2020 and now a fresh trial run of the updated software has commenced on 2 November, 2020. The Commission also understands that the day-ahead as well as Intra-day scheduling is now being undertaken in accordance with the de-centralized scheduling under the DSM Regulations. Hence, it is expected that the trial run results and also the commercial operations thereafter, would indicate the actual impact of volume limit and the Additional Deviations Charges on the Distribution Licensees, which can be considered (if necessary) for revision in the volume limit for Intra-State Entities in future.

11.23 The Commission notes that in order to facilitate, guide the implementation, address difficulties, if any, and to monitor progress of several implementation activities, the Commission has constituted Working Group for DSM implementation on 7 January, 2019. This Working Group is monitoring the preparatory work of the implementation of the DSM Regulations. It would be necessary that Working Group looks into the concerns raised by the Distribution Licensees on the Additional Deviation Charges during the trail run operation. **Accordingly, the Working Group is directed to monitor the trial run operations of the DSM Regulations closely, evaluate its results, address the difficulties being faced by the State Entities and also by MSLDC. The Working Group should also analyze the Additional Deviation Charges vis-a-vis the State's liability towards the Regional charges and apprise**

the Commission of the outcome of the analysis and recommendations/inputs which would then be duly considered by the Commission while approving the volume limit of the buyers. The Working Group shall provide its recommendations/input within fifteen days of the Order.

12. **Issue 6 : Directions to STU for implementation/sharing of online AMR data with MSLDC/DISCOMS/Generators**

AEML-D's submission

12.1 Presently, the grid operation and monitoring are done based on SCADA data. However, billing / DSM settlement will be undertaken based on SEM data. It has been observed that there is a large variation in these two data points which are liable to create large variations / errors (> 2% in most of the time blocks).

12.2 The AMR based online data of T<>D interface would be must for Distribution Licensees for effective operations under the DSM regime. As Distribution Licensees do not have any direct access to T<>D interface meters, the Commission may direct STU to make available online AMR data of all interface meters to MSLDC, Distribution Licensees and Generators for effective implementation of the DSM Regulations.

MSLDC's submission

12.3 In order to issue DSM bills in time, it is necessary to expedite the work of installation of AMR so as to receive the meter data at MSLDC in timely manner. Web portal has been developed in DSM software to receive data of existing meters downloaded through MRI instrument. But presently, MSLDC is also passing through the crisis of Covid-19 and facing difficulties in getting the meter data through MRI due to various security, availability of personnel, social distance norms and police permission issues for transport etc.

TPC-D's submission

12.4 Large variations have been noticed between the SCADA data and the SEM data at various points of time which may add to deviation as the settlement takes place on SEM data. Hence, AEML-D's submissions on this issue is supported and the Commission is requested to issue direction to STU to make appropriate arrangements to share the AMR data of all interface meters with MSLDC, Distribution Utilities and Generators.

STU's submission

12.5 IEMs have provision of 15-minutes block data. The data of IEMs will be pooled by Meter Data Acquisition System (**MDAS**) every 8 hours. This raw data from IEMs received at MDAS will be validated. The validation of such data received at MDAS will be carried out in DSM at MSLDC. Sharing of validated data to stakeholders can be done in coordination with MSLDC by forming necessary procedure only after completion of ongoing AMR and DSM implementation project related works.

MSEDCL's submission

12.6 AMR data of all interface meters on which DSM bills will be prepared needs to be shared online with Distribution Licensees as well as with generators in addition to MSLDC. The Commission is requested to direct STU to develop communication system to provide such data in real time basis to MSLDC and also to direct MSLDC to provide access to this AMR data to the Distribution Licensee and generators on their request. This will enable the Distribution Licensees to improve demand forecasting and also to initiate appropriate action to reduce deviation between actual demand and forecasted /schedule demand.

BEST's submission

12.7 Currently, there is no visibility of online metered demand data to the Distribution Licensees under existing FBSM mechanism. STU has been assigned the activity of installation of new interface meters alongwith commissioning of AMR system. As commercial settlement under DSM Regulations will be done based on metering data at interface meters and considering stringent deviation limits, access of real-time online data of T<>D interface with consolidated demand data from Meter Data Management (MDM) system, is essential for the Distribution Licensees. This data will enable the Distribution Licensees to take effective steps for its load-supply balance on real-time basis and to minimize deviations rather than entirely depend on real-time SCADA monitoring data which has its inherent accuracy issues. The Commission may direct STU to make available online AMR data of respective interface meters to individual State Entities.

Indian Railways' submission

12.8 Indian Railways agrees with AEML-D's submission on this issue.

AEML-D's rejoinder

12.9 Both TPC-D and MSEDCL have supported AEML-D's submission on this issue.

Commission's Analysis and Ruling

12.10 At the hearing, it was stated by MSLDC that nowhere in India (i.e. at regional level), AMR data is available in real time which can be used by the Distribution Licensees for taking real time decisions. It was also confirmed by MSEDCL that for regional data, it is not getting on-line AMR data. STU, in its submissions has stated that the data of Interface Energy Meters (**IEMs**) will be pooled by MDAS every 8 hours post completion of AMR Project.

12.11 The Commission notes that in AMR Project, the energy data/profile from each Interface Location would be automatically collected from IEMs for onwards transfer of the same to Meter Data Acquisition System (MDAS) at MSLDC through a GPRS communication system. This data received at MDAS would be further processed through Meter Data Processor (MDP) for validation and further processing in DSM Modules for DSM Accounting and DSM Bill generation. A Data Collecting Unit (DCU) installed alongwith the inbuilt modem at each Interface Location will act as interface between MDAS at MSLDC and IEMs installed at that field location. DCU would collect data/profile from energy meters and send the same to MDAS through

communication system at MSLDC at either a defined time interval or in response to a command for that purpose. The Commission notes that the AMR Project presently under execution by MSETCL as a part of DSM implementation, covers more than 3000 Interface Points and more than 6000 meters (main and check). Making the meter data available to all State Entities from all these Interface Points (i.e.IEMs) in real time for each 15 minute time block may require a dedicated communication channel such as OFC with a very high bandwidth which is not presently planned by STU/MSETCL. STU/MSETCL has planned a GPRS based communication system.

12.12 Accordingly, at present due to the limitation of the communication system, the Data from AMR will be available on the servers in packets at predefined time intervals which is around eight hours at present in the State. There is a basic difference between SCADA availability which is available online and the AMR data availability which is available at predefined time intervals for the purpose of energy accounting and weekly billing. Thus, it is seen that the real time AMR data will not be available to MSLDC also. Even if the additional investment is made in the dedicated OFC communication infrastructure to make the meter data available to all State Entities from all these locations in real time for each 15-minute time block or the data is made available locally without needing a communication infrastructure, such meter data would be a raw data without any validation, which will only be undertaken at MDAS installed at MSLDC. Therefore, there is a possibility of discrepancies/inconsistencies vis-à-vis the validated data which would be used by MSLDC for DSM accounting. **Hence, the Commission is of the view that availability of real-time AMR data as sought by AEML-D and rest of the Distribution Licensees is not feasible at this point in time**. **It would also not be helpful to the State Entities due to possibilities of inaccuracies in the data.** However, STU should aggressively complete the Capex work pertaining to the AMR as planned (i.e. 31st March 2021). Also, after completion of installation and commissioning of all the AMR's, STU needs to ensure that the data flows seamlessly into the servers so that the accurate data is available for analysis and planning to all the stake holders for continuous improvement in their projections. As per the plan for completion of preparatory activities for commercial implementation of the DSM Regulations, the AMR Project with new meters and MDAS system under ongoing tender of MSETCL is envisaged to be completed by 31 March 2021. The Commission understands that as on 30 November 2020, out of total scope of 6046 meters, 100% material have been received. Around 80% of the meters have been installed and around 58% of the meters have been commissioned at various locations. It is also understood that MDAS at MSLDC has been installed and more than 2000 meters have been integrated with data being available to MDAS at MSLDC for these meters. STU is directed to expedite the pending activities, complete the AMR Project alongwith installation of new meters at all Interface Locations and ensure operationalization of 100% AMR by 31 March 2021. All the State entities and EHV consumers are directed to extend necessary co-operation (outages and other support) to STU to achieve the above timelines.

12.13 STU has indicated its readiness to share the validated metered data (which would be pooled every eight hours to MDAS at MSDLC through GPRS communication) to

stakeholders in coordination with MSLDC by forming necessary procedure. However, the Commission is of the view that since the Petitioner is seeking online AMR data, the data proposed to be shared by STU with eight hours' lag may not address the prayer of the Petitioner. Nevertheless, as per Clause No. 5.15 of the DSM Procedure, validated/processed metered data would be made available on the Web based DSM application along with DSM Bill and it would be accessible to the State Entities.

13. In view of the issue-wise discussions in preceding part of the Order, the Commission does not find it necessary to grant the prayers of AEML-D except for the issue related to changeover consumers.

14. Hence the following Order:

ORDER

1. **Case No. 58 of 2020 is partly allowed.**

2. **On the issue of impact of changeover consumers' deviation, the Commission accepts the methodology proposed by Adani Electricity Mumbai Ltd.-Distribution with the principles as mentioned in para. 8.37 of this Order. The decision about the volume limit revision for Adani Electricity Mumbai Ltd.-Distribution and Tata Power Company-Distribution on account of changeover consumers' consumption would be taken at the time of approval of volume limit of buyers.**

3. **The Working Group constituted by the Commission on 7 January 2019, is directed to monitor the trial run operations of the MERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2019 closely, evaluate its results, address the difficulties being faced by the State Entities and also by the Maharashtra State Load Despatch Centre. The Working Group should also analyze the Additional Deviation Charges vis-a-vis the State's liability towards the Regional charges and appraise the Commission of the outcome of the analysis suggesting its recommendations/inputs which would be considered by the Commission while approving the volume limit of the buyers. The Working Group shall provide its recommendations/input within fifteen days of the Order.**

4. **The State Transmission Utility is directed to expedite the pending activities, complete the Automatic Meter Reading Project alongwith installation of new meters at all Interface Locations and ensure operationalization of 100% AMR by 31 March 2021. All the State entities and EHV consumers are directed to extend necessary co-operation (outages and other support) to the State Transmission Utility to achieve the above timelines.**

Sd/-
(Mukesh Khullar)
Member

Sd/-
(I. M. Bohari)
Member

(Abhijit Deshpande)
Secretary