Maharashtra State Power Committee

Office – State Load Despatch Centre, Airoli, Navi Mumbai - 400 708

No. MS/MSPC/DSM/No. No 00761 Date: 29 APR 2022

To,

1. The Hon'ble MD, MSEB Holding Company,
   Third Floor, HSBC Building, Fort,
   Mumbai- 400 001.
   &
2. All Members & Invitee.

Sub: Record of Proceedings of 2nd MSPC Meeting constituted under DSM regime.

Ref: Meeting conducted on date 04.04.2022.

Please find enclosed herewith the Record of Proceedings (RoP) of 2nd MSPC Meeting under DSM regime conducted on 04th April-2022 at State Load Despatch Centre through Video Conferencing.

Member Secretary, MSPC

As per mailing list- Attached herewith

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Record of Proceedings
of
2nd MSPC Meeting

On
04th April - 2022

Through
Video Conference,
MSLDC, Airoli.

Record of Proceedings of 2nd MSPC Meeting under DSM Regime

Venue- Conference Hall, MSLDC, Airoli, Navi Mumbai (Some MSPC Members joined the meeting through Video Conferencing).

Date – 04th April- 2022

Agenda for the Meeting:

Item No.	Particulars
1	Confirmation of Record of Proceedings of 1st MSPC Meeting.
2	Presentation by Stakeholders on Comments/Suggestions on the report of Working Group dated 22.03.2022
3	Any other issue with permission of the Chair
4	Vote of Thanks

At the outset, Shri. Shrikant Jaltare, Executive Director, MSLDC welcomed of Shri Dinesh Waghmare, MD Holding Company who is also Chairman of MSPC. This was followed by welcome of Shri Kandarp Patel, MD & CEO, AEML-D and other MSPC members. For this meeting, Shri Anil Kolap Director (Operations) MSETCL, Shri Praful Varhade Director (Technical) MERC, Shri Ajit Pandit, Working Group Consultant (IDAM) was also present as Special Invitee. ED, MSLDC welcomed them also for meeting mentioning their special presence.

After welcome, Chairman MSPC made opening remarks and expressed his pleasure on commencing DSM Regulation 2019 in the state of Maharashtra. He appreciated stupendous efforts taken by Working Group to make it success.

Thereafter, Chairperson directed to take up agenda of the meeting for discussion.

Item No.1: Confirmation of Record of Proceedings of 1st MSPC Meeting:-

ED, MSLDC stated that the first meeting of MSPC under DSM regime was conducted on 15.01.2022. In this first meeting, MSPC was apprised about commencement of DSM Regulations and various activities completed. He stated that two issues regarding investment of corpus fund and introduction of ED, MSLDC as a member of MSPC were raised in 1st MSPC meeting. ED, MSLDC informed that both issues have been addressed in the Working Group Report. The Record of Proceedings of 1st MSPC meeting is circulated to all MSPC members by Member Secretary, MSPC.

Chairman MSPC asked the Stakeholders for Comments, if any, on the Record of Proceedings of 1st MSPC Meeting.

As no comments were received, MSPC confirmed the Record of Proceedings of 1st MSPC.

Item No. 2: Presentation by Stakeholders on Comments/Suggestions on the report of Working Group dated 22.03.2022:-

Hon'ble Commission vide order dated 07.10.2021 "In the matter of commencement of commercial arrangement of DSM operations" had directed the Working Group to submit a report providing recommendation on analysis of DSM bills issued during the stabilization period of six months staring from 11th October- 2021, feedback received from Stakeholders & review of their performance during stabilization period.

In view of the above, Working Group prepared a report which was submitted to Hon'ble Commission on 22.03.2022. In this regard, Hon'ble Commission directed to seek comments from MSPC on the report of Working Group.

Chairman MSPC asked about the business functions of MSPC and role of working group in DSM implementation.

Director (EE) MERC explained that, the role of MSPC in DSM activities is to monitor compliance of MERC DSM Regulations by the State Entities as well as guide, support and advice MSLDC for modification of procedures, if any, & to address the implementation difficulties. Further MSPC can provide necessary support and advice to the Commission for amendment to the provisions of Regulation as may be necessary.

Director (EE) MERC further explained that DSM Working Group was constituted by the Hon'ble Commission vide letter dated 7th January-2019 for following functions: -

- To monitor the trial run operations of the MERC DSM Regulations, 2019.
- Evaluate results, facilitate and guide with respect to smooth implementation of DSM Regulations.
- Address the difficulties being faced by the State Entities & MSLDC in implementation of these Regulations.
- To have interaction with stakeholders for gaining experience during implementation period.

The Working Group was constituted with representatives from MSLDC, MSETCL, Regulatory Experts and representatives from Hon'ble Commission.

Working Group shared the experience of their visit to MSPGCL Stations viz. Koradi and Chandrapur. The Working Group has noticed that Control Room of Generating Stations are well tuned for responding to the requirements of the Grid and to minimize deviations.

Shri Ajit Pandit made presentation on behalf of Working Group. It is stated that the report has been prepared based on the analysis of 16 nos. of DSM bills issued for the period from 11.10.2021 to 31.01.2022. The graphical representation of net payable /receivable for Buyers/Sellers as well as for WRPC was presented. The State DSM pool account was surplus by Rs 67.83 Crores during the said period. The surplus amount in the Pool Account is only on

accrual basis. However, unless concerned Buyers/Sellers settle their payments, there could be shortfall in Pool Account on cash basis. MSLDC should closely monitor and pursue early settlement of claims as per DSM procedure.

The Key Issues and Suggestions /Recommendations of DSM Working Group were discussed in detail as below:

(i) Applicability of Volume Limits to Buyers and Sellers: -

The Commission vide order dated 06.05.2021 & 07.10.2021 has relaxed the Volume Limit (VL) of 20 MW to MSEDCL, 10 MW to other Buyers and maximum of 1 MW or 2 MW (as the Case may be) to Deemed Distribution Licensees during stabilization period. Similarly for Sellers, the Commission has relaxed Volume Limits to 50 MW instead of 30MW during stabilization period. The Buyers and Sellers have requested to continue with relaxed VL for further period of six months.

MBBPL stated that NCPD and CPD of deemed distribution licensee catering SEZ load comprising of data centers, IT parks etc. were lower on account of Covid-19 restrictions imposed by Maharashtra Government. Prior to Covid-19, the actual demand catered by MBBPL was to the tune of 15MW which considerably dropped to 6 MW (approximately) during lockdown that lasted for around two years. This sudden drop in load was due to work from home practice followed by the Organizations as per Govt. of Maharashtra guidelines. Now due to removal of government restrictions and resumption of offices, MBPPL is observing gradual increase in its demand. Therefore, MBBPL has requested to consider the peak demand of MBPPL of pre COVID-19 situation which was more than 15MW consistently and allow 2MW as relaxed Volume limit for DSM bills as prescribed in the regulations.

MSEDCL raised the concern about allocation of additional volume limit of only 20MW for the distribution licensee catering a demand beyond 24,000 MW in the State. The Volume limit for MSEDCL as per regulations was 214 MW which is revised to 234 MW as relaxed Volume limit. MSEDCL highlighted that other discoms having less demand in comparison with MSEDCL is allotted 10 MW as relaxed volume limit whereas MSEDCL has been provided relaxed Volume limit of 20 MW only. MSEDCL requested to explore the possibility of allocation of relaxed volume limit on pro-rata basis of the peak demand of all distribution licensees.

AEML-D stated that it caters a demand of 1900 MW whereas Railways who caters a demand of 400MW has been given the same relaxation in Volume limit of 10MW as that of AEML. AEML is grouped with Discoms having demand lower than 1000 MW. Currently two sets of Discoms are considered i.e., MSEDCL and all other Discoms together. On account of this, Discoms having demand of 600 MW & 1800 MW are given the same Volume Limit relaxations of 10 MW. It is therefore, suggested to have three sets according to the demand range viz., upto 1000 MW,

1001 MW to 10000 MW & more than 10000 MW catered by discoms for allotting the quantum of relaxed volume limit. The provisions of relaxed volume limits have helped DISCOMs to optimize the overall DSM/ADSM charges. Therefore, the relaxed volume limit introduced for the stabilization period should be continued for future period.

TPC-D stated that provision of relaxed volume limit should be as per the requirement of grid discipline and grid security aspect. This relaxed volume limit was allotted to the entities to get the feel of DSM framework. Therefore, this relaxation may be extended for further period of six (6) months and thereafter further review needs to be taken.

AEML-D stated that variations of TPC Consumers connected to AEML network is accounted in AEML. Discom should get the deviation limits in proportion of the demand recorded at T<>D interface. Considering this & impact on AEML, Hon'ble MERC has already given directions for transfer of volume limit to AEML. Since there is no stay or reversal of the MERC order, directions contained in Case no 58 of 2020 are applicable and should be implemented with retrospective effect and SLDC should be directed to revise the bills accordingly.

Director (EE) MERC explained the rationale regarding allotment of relaxed volume limit to the Distribution licensees. The basis for relaxation of the volume limit is to reduce the burden of additional DSM charges on buyers/sellers. Further, Maharashtra State has been allotted a volume limit of 250MW by CERC whereas total of volume limits for all buyers is already 322 MW on account of relaxed volume limits.

After due deliberations and discussions, MSPC recommends to continue relaxed volume limit for State Entities for further Six (6) months.

(ii) Treatment for RE Schedule Replacement with Actual in Discom's Drawal Schedule for Weekly DSM Billing: -

Working Group stated that during initial DSM bills of about 8 weeks, DSM Pool Account was in deficit and majority Buyers and Sellers were receivables from the DSM Pool Account. This was mainly on account of relaxed volume limit, waiver of ADSM charges for sellers for first four weeks and significant deviations of RE, Co-generation and Hydro plants. Subsequent provisional DSM bills have addressed this issue with adjustments made under beneficiary schedules. However, this treatment of replacement of RE schedules with actual injection is not envisaged in DSM Regulations as well as in Procedure. This "engineered solution" adopted by MSLDC has passed deviation of RE generators to the distribution licensees even though there is a separate mechanism to deal with RE generators deviation.

Manikaran who represented as QCA, stated that there is no adequate accuracy in forecasting of schedules of each Wind turbine generator. Also, the absence of

visibility further creates hindrance in tightening the error band. As an example, Vankuswade PSS is having 300 MW installed wind capacity with 120 nos. of developers which make it more difficult for forecasting & scheduling.

AEML-D stated that the methodology of replacement of RE schedules with actual is inconsistent with MERC approved framework & DSM Procedure under DSM Regulations. The deviation of RE generator has led to inappropriate allocation ADSM charges to the discoms. RE Generation variation should not impact discom as the DSM Regulations envisages that each entity is responsible for its own deviations and has to bear charges towards the same. RE generation should be credited to DISCOM in DSM bill as per the schedules only. CERC mechanism needs be adopted in the state and not the methodology adopted by SLDC. The deviation on account of RE Generation, which is entirely uncontrollable for Discoms, is not required to be absorbed by discoms. The treatment of replacing the RE schedule with actual in the Discom's drawal schedule may result in Over-drawal of discoms ending up in paying Additional DSM Charges. If SLDC continue with current methodology, only DSM charges shall be applicable to discom. ADSM charges need not to be imposed towards the same even though it is made pass through, as opined by DSM WG, which may impact the Consumer tariff. These ADSM charges on account of RE variation are further expected to increase substantially whenever market rates are higher & especially during high wind period.

TPC-D stated that RPO fulfillment is based on the actual injection of RE generator & also the payment to these generators is done on actual generation. Therefore, schedule-based payment may be envisaged or the RE generator may be brought to this DSM pool. While computing the DSM bills, RE actual considered for Buyers on 15 min basis is not actual generation but derived a derived figure. As such, bill revisions would be required based on Generation Credit Notes (GCN) provided to MSLDC. Discom pays to RE generators on actual injection on monthly basis whereas RE Generator pay weekly RE-DSM charges to pool on 15 min basis. On account of this, discoms have to bear an additional burden of the deviation charges in DSM regime. It is suggested that the discoms should be charged only the differential amount.

MSEDCL stated that intraday activities are being carried out by LM Cell, MSEDCL as per data available on SCADA. Due to replacement of RE schedule by actual injection, it results in Over-drawl for majority of the time blocks and discom will have to pay Additional DSM Charges, without any fault on their side. Hence, the incremental ADSM charges to discom due to replacement of schedule of RE generators with actual injection should not be levied. Discom should not be held responsible for deviation of RE generators. Further, efforts need to be taken by Qualified Coordinating Agencies (QCAs) for improving forecasting techniques. The Statement of Reason (SoR) of the MERC DSM Regulations, also clearly mentions that, RE deviation impact should not be passed on to the Buyers. Also, the ADSM

charges allowed through FAC is passed on to consumers shall be avoided. Therefore, possibility of waiving off of ADSM charges due to deviation of RE generator may be explored.

TPC-D stated that provision of devising an interim method of compensating the discom on the basis of average PPA rate for deviation of RE generators may be explored.

Working Group stated that this methodology adopted is a short-term solution and incremental ADSM charges allocated may be allowed for Fuel Adjustment Cost (FAC). During analysis of past period, it is observed that 95% of RE generator have under injected in the system. MSLDC needs to monitor the deviation of those RE generator through REMC. The long-term solution for this is to shift from actual based payment to schedule-based payment by making necessary amendment in the regulations.

After due deliberations and discussions MSPC opined to continue the practice of replacing RE schedule by actual injection while computing DSM bill as a temporary measure. Meanwhile, an option of following CERC like mechanism in this regard may be undertaken through regulatory process.

Further, MSPC agrees to the view of Working group that if in case any discom is required to pay incremental ADSM charges on account of such treatment, such incremental ADSM charges may be allowed to pass through to the tariff during true up or FAC process.

(iii) Treatment for Hydel Schedule Replacement with Actual in Discom's Schedule for Weekly DSM Billing: -

Working Group stated that energy payment to hydro generator is to be done on schedule basis as per MYT Regulations, 2019. Therefore, accounting of Hydro generation deviations may be worked out for payment to hydro generator through VSE account. The VSE Rate for the same should be Variable Cost of the hydel resource or DSM plus ADSM charges at state periphery, whichever is higher.

TPC-D stated that Hydro generator schedules are revised by MSLDC during real time for operational issues. This unscheduled Hydro pick up reduces the water quota of contracted Discoms, who have to procure power at very high rate to remain within monthly water quota and their power procurement plan. Hence unless this opportunity cost is passed on to the contracted Discoms, this mechanism will not be fair. Distribution licensees are unable to plan day ahead schedule to hydro which are linked to allotted water usage per day due to change in schedules. It is observed that Hydro plant is used during contingency as per system requirement. However, due to replacement of schedule with actual injection, discoms are penalized for this over generation as Hydro plants are not subjected to deviation as well as VSE settlement. Therefore, TPC proposes to link the Rate of

VSE (Up/Down) to Marginal Rate of Discom.

MSEDCL stated that MSLDC has often utilized Koyna hydro for transmission constraints. MSEDCL makes payment to Hydel generators based on actual injection. The replacement of hydro generation in state DSM is in line with central DSM. MSEDCL has contracted with hydel generators and it is scheduled as per its requirements. Further hydel generators are used during peak season period when short term power and bilateral power exchange rates are high. If it is used as VSE, then there will be reduction in water level / TMC quota as allotted to MSEDCL. MSEDCL has been allotted 67.5 TMC of water annually from Koyna. The hydel generation is the cheapest source of power to MSEDCL. In view of above, MSEDCL's contracted hydel generation, if at all used for system / emergencies, MSEDCL should be compensated at least with the marginal cost or Average pool power purchase (APPC) cost of MSEDCL, whichever is higher. Therefore, Hydel generator shall not be made part of VSE.

AEML opined that the VSE principles applicable to Hydro generation are equally applicable to thermal generation also, as the coal quantity is fixed & limited. Therefore, AEML suggested to provide same treatment of VSE rate to thermal generators as well.

MSLDC stated that any hydro generation pick up /down on SLDC instructions during real time operation may be settled through VSE pool at par with the rate at state periphery.

After due deliberations, MSPC opined to continue the payment of hydro plant on actual generation basis. Any real time increment/decrement of Hydro as per SLDC instructions to be settled in the VSE pool at Variable Charge of such hydro or DSM +ADSM charges at state periphery, whichever is higher. Further, MSLDC to amend DSM Procedure ap propriately subject to Commission's approval. The VSE treatment to hydel power may be implemented with prospective effect.

(iv) Transmission constraints and Sharing of Costs:-

Working group stated that in case of transmission constraints or managing the Periphery demand within permissible limits, MSLDC is expected to call for VSE schedules by following the Centralized MoD principles. MSLDC uses embedded generator Up or Down under VSE for managing transmission constraints. It was observed during initials period, continued VSE operations for longer durations has resulted in significant claims on DSM Pool account which got socialized across all state entities.

The need of Virtual State Entity (VSE) operation by SLDC during real time was explained by the Working Group. Working Group further stated that it is not possible to manage the loading of Mumbai inter connected 400kV lines without

Mumbai embedded generation. Hence SLDC is directing Mumbai Generators to increase/ decrease the generation under VSE as per system conditions.

In view of the above, Working Group recommended the following options to manage transmission constraints:

a) Option-1: Scheduling Embedded Generation as per PPA for contracted Discom

SLDC issues instructions-based plan to discoms on day ahead basis for necessary embedded generation requirement which is to be absorbed by that contracted discom. It has significantly reduced the requirement of VSE during intra-day operation. This option is in use from 13.12.2021.

b) Option-2: Transmission corridor allocation amongst Mumbai Distribution Licensees in the ratio of Transmission charges paid by them.

c) Option-3: Sharing of VSE costs on Fixed Allocation Ratio (on the basis of contracted embedded generation & base TCR)

TPC-D submitted that the current VSE pool is not an effective mechanism to address Transmission Constraints. The option-1 which is presently operational for VSE treatment needs to be suspended as it has impacted the overall cost of power procurement for TPC-D. The Option 1 not to be continued & option 2 & 3 to be implemented as transmission corridor shares can be declared as per Central regulation. The quantum of power allowed may be based on LTOA / MTOA / STOA. LTOA & MTOA quantum are pre-decided and STOA may be allocated based on base TCR on pro-rata basis as per constraint. Over drawl of a Discom more than their share in transmission corridor, they need to pay to the congestion pool a penalty charge which may be either fixed or based on Marginal generation cost. Any embedded generation required to be picked up for this over drawl would be paid from the congestion pool.

AEML stated that if full Embedded Generation is available in the Mumbai system, there will be no transmission constraints. Therefore, SLDC has to schedule the embedded generation as per PPA. The decentralized MoD operations results in allowing the DISCOM to replace embedded generation under PPA through Day Ahead Purchases causing contingency in the form of Transmission Constraints requiring VSE Operation ultimately adding undue burden on DSM Pool. From 13th Dec 2021 SLDC started implementing IEGC and MEGC 2020 in Day Ahead Scheduling as envisaged in DSM Regulations after which creation of artificial Contingency in the form of Transmission Constraints have been stopped. Under DSM Regulations, Virtual State Entity (VSE) mechanism is envisaged only during contingency as an exception management. The VSE mechanism is as envisaged under the Regulation is very important tool for Grid Operation for SLDC. As the existing Mechanism of scheduling the generation without creation of Transmission constraint as implemented by SLDC is consistent with DSM Regulation, IEGC and MEGC 2020. Therefore, there is no need to explore new options for transmission constraint management. VSE Mechanism envisaged in DSM

Regulation is already addressing real time contingencies. The options 2&3 are flawed, unjust and also inconsistent with Regulatory Framework adopted for Transmission system development in Maharashtra which will create further complications and disputes. Mumbai Transmission System is developed assuming embedded generation availability & discoms absorbing power under PPA i.e. Available Transmission capacity to be used only for meeting shortfall after absorption of Embedded Generation Capacity. SLDC should continue with IEGC and MEGC 2020 provisions for Day Ahead Scheduling. All the Licensees should absorb the generation as per approved PPA. SLDC should be directed to schedule the power as per PPA. However, due to intra-day VSE operation, costly generation of one licensee gets socialized over other licensees. Allocation of available Transmission capacity shouldn't be done as per Base TCR till sufficient capacity is built. Alternatively peak demand met from embedded generation should be subtracted to arrive Base TCR.

MSEDCL stated that the issue of transmission constraint arises due to non scheduling of embedded generation by contracted Mumbai utilities and purchasing power from interstate/PX which results in crossing limit of ATC. The embedded generation to be treated as 'must absorb' to concerned discoms for managing the transmission constraint issue and honor their PPAs. Further, only concerned entity responsible for shortfall in embedded generation should bear the cost implications of VSE operations. Mumbai utilities have PPAs with embedded generations which are not honored by them. Instead, they opt to procure power from inter OA transaction / power exchange as it being cheaper. This leads to inrush of power at tie lines which is above ATC and hence ends up in creating congestion. Therefore, the root cause of transmission constraint is non scheduling of contracted embedded generation by Mumbai utilities. If this embedded generation is made "must absorb" to the concerned utilities, the problem of transmission constraint may get substantially resolved.

In the light of above discussions, MSPC is of the view that option-1 of declaring day-ahead transmission constraint be continued and if option 2 or 3 are required then necessary regulatory approval may be sought prior to implementation.

(v) DSM Software Related Issues and Market Suspension: -

a) DSM Software Issues/Failures:

During Mock Trial Period, failure issues of DSM Software and/or website related issues were reported by stakeholders on some occasions.

b) Treatment in Case of DSM Software Failure:

Scheduling Module is very critical for market operation and its failure has commercial implications on the utilities. The scheduling module operates 24*7 for generating schedules and for revision of schedules by stake holders. Any temporary failure of scheduling module disturbs the decisions of schedule revisions by state entities and may end up in paying deviation charges.

MSPC suggested that MSLDC may decide on case-to-case basis whether the

*said event qualifies for declaration under market suspension. Further, MSPC asked MSLDC to ensure 24*7 availability of scheduling module in coordination with software developer (PwC).*

MSPC further directed to form IT sub group with representatives from major stakeholders to address software related issues. Software developer (PwC) should be directed to have uptime of scheduling module to the maximum extent possible to avoid DSM process interruption.

c) Treatment under market Suspension During Grid Disturbance: -

Working group stated that DSM Regulations /Procedure does not have any specific provision for treatment of deviations during grid disturbances.

MBBPL, on behalf of Deemed Distribution Licensees, stated that many Deemed Distribution Licensees cater load from radial feeders like MBPPL, GEPL, KRCIPPL & others which are being supplied from MSETCL S/s. Any tripping of incoming source to EHV S/s, tripping of 22KV Outgoing feeder from EHV S/s, forced outage etc. should be treated as grid disturbance for that distribution licensee as these failures are beyond their reasonable control. The incoming sources to KRC are from MSETCL S/s at 22kV level. Interruption/tripping of 22kV Source power supply because of the reasons as stated above needs be construed as a grid disturbance and suitable treatment need to be considered in the DSM Billing in the events of tripping at MSETCL S/s, which is beyond reasonable control of KRC. In such cases, scheduled drawl should be made equal to actual drawl as per MERC State Grid Code Regulations, 2020, so that deviation becomes zero. MBPPL requested that in case of grid disturbance beyond control of respective distribution licensee, deviation charges and/or additional deviation charges shall not be levied for the affected time blocks in the DSM bill.

AEML stated that treatment during failure needs to be customized at State level. In case of Market suspension, the Schedule of generator may be replaced with Actual (same as regional) however there shall be no change in drawl schedule of discoms i.e. only deviation volume limits to be suspended.

MSEDCL stated that Discom is not responsible for such incidences; Hence Discom need not be penalized. Under such circumstances, the ADSM charges should not be levied to state discoms.

MSLDC stated that it shall incorporate as many contingencies envisaged while revising DSM procedure.

MSPC directs MSLDC to study various scenarios to devise methodology for the treatment to be given for market suspension during grid disturbance.

(vi) DSM Pool Account Administration and Management: -

Working group stated that MSLDC has requested guidelines on issues related to DSM Pool account management viz. use of RE DSM Pool Account for DSM Payments & investment of Corpus Fund collected for DSM as well as RE DSM Pool Account.

In the 1st MSPC meeting, Chairman MSPC had directed to explore the methodology adopted by other states regarding investment of Corpus fund. He had further directed to resolve the issue at the earliest and ensure that funds are not lying idle thereby depleting its NPV in future.

On the basis of report of MSLDC, the working group have recommended to Hon'ble Commission to link RE DSM pool to DSM pool account for payment of WRPC charges. The Working group proposed the utilization of the surplus fund/Corpus by way of investing in Government securities or Fixed Deposits of Nationalized Bank (considering liquidity requirements) through MSETCL as an interim arrangement, subject to Commission's approval. The interest accrued by such investments may be accounted by opening a separate bank account using MSETCL PAN and provide credit for accrued interest income net of tax (as applicable) to the benefit of DSM Pool Account. However, as a long-term solution, it is essential to form an Association of Person (AoP) under MSPC. Creation of separate entity through AoP or otherwise needs to be legally examined and business rules for MSPC would need amendments to constitute such separate legal entity structure.

MSPC noted the above recommendations of Working Group and partially accepted the recommendations of investing in Government Securities or Fixed Deposits of Nationalized banks (considering liquidity requirements) through MSETCL as an interim arrangement subject to Hon'ble Commission approval. Also, MSPC directed that interest accrued by such investment be accounted by opening a separate savings bank account with MSETCL PAN and provide credit for accrued interest income net of tax (as applicable) to the benefit of DSM Pool Account.

(vii) Meter/AMR Data Availability: -

Working Group stated that MSPGCL has requested to provide connectivity from RTU installed at interface point of all Thermal Power Station (TPS) for SCADA visibility.

MSEDCL stated that MSLDC needs to explore the technology for sharing of validated AMR data on real time basis. Delayed sharing of data though useful for forecasting the demand, will not be useful to take corrective actions during intraday operations.

CE (AC&I), MSETCL stated that raw data of AMR meter cannot be shared on real time basis due to inherent limitation of data flow & communication flow design

architecture of AMR to MDAS, which is not amenable for making such data available on real-time but can be made available with at least a day-lag.

After due deliberations & discussions, MSPC suggested MSPGCL & other interesting stakeholders to develop necessary infrastructure like MSEDCL so that real time SCADA data available with SLDC can be shared with them.

(viii) Key issues raised by Sellers: -

a) Variable (Zigzag) Schedule and Thermal Stresses:

Working group stated that MSPGCL and other Sellers have raised the concerns regarding difficulty in matching variable schedules received from Scheduling software which results in increase in stress on the boilers and coal mills.

MSLDC stated that decentralized MoD is operated in every 15 min. time block. In addition to this, centralized MoD is operated during intraday as per system requirements. Since, the availability of resources is changing on account of various factors such as power procurement through RTM, revisions of RE schedules, revisions of schedules of intrastate generating stations, revisions of central sector shares, etc. Further, demand schedules revisions are also carried out by buyers during intraday operations. All these changes by sellers & buyers results in zigzag schedules of intrastate generating stations which are operated under MoD.

After due deliberations & discussions, MSPC suggested MSPGCL to take necessary measures to handle such dynamic schedules. MSPC further observed that schedules will be more dynamic & changing in view of increasing RE generations in future.

b) RAMP relaxation during synchronization: -

Sellers have requested removal of ramp restrictions while scheduling during unit synchronization and partial outages of critical auxiliaries.

On this issue Working Group opined that, the relaxed Volume Limits have helped Sellers to manage their deviations on account of above ramp rates issues raised by Sellers.

After due deliberation MSPC agreed to the view expressed by Working Group on this issue.

c) Instantaneous schedule revision: -

MSPGCL highlighted that due to inherent process of every 15 minute load-generation balance, the schedules of sellers get revised for subsequent time blocks. Even after alert operator actions, it is difficult to achieve revised Schedule for each 15 minute time block.

d) Reactive Power Sharing/ grid voltage Issues: -

MSPGCL stated that Nashik TPS's Generator Rotor Temperature is increasing while maintaining the bus voltage and reactive power at the generation end. It is therefore unable to maintain its actual generation as per schedule resulting in deviations.

ADTPS stated that the reactive power sharing through the Dahanu – Viraj line is on higher side. In peak hours the sharing of reactive power by Dahanu generators goes beyond 100 MVAR. The increase in reactive power enforces ADTPS generators to reduce the active power within capability curves. This reduction in the active power generation creates the deviation in the DSM and ADTPS has to pay DSM charges in the pool as the increase in reactive power is due to the grid conditions. Therefore, it is suggested that impact of deviation, if any, should not be passed on to ADTPS for such specific period.

On this Working Group stated that as per the provisions of MERC Grid Code 2020, the generators are expected operate within their respective Capability Curve. The Generators are not expected to stress beyond Reactive power limits by its design. However, if there is any specific issue related to generation end bus voltage and limitation to deliver reactive power as per the requirement, the same may be considered on case-to-case basis.

On this MSPC suggested that matter may be pursued in GCC meetings for examining the issues on case-to-case basis for reactive power management & voltage control.

e) Mapping of Generation Units of APML in DSM Software: -

APML representative made detailed submission as regard to mapping of Generation Units of APML in DSM Software as below:

1. The declared capacities of APML were considered as per APML's declarations, without any change, for scheduling by MSEDCL up to October 2021 i.e. prior to implementation of DSM in the State of Maharashtra.

2. In such case, there is no reason for development of DSM software in a different manner, when there is no change in any of the applicable regulations stated above nor there is any change in the PPA provisions. In other words DSM Software implemented from October 2021 should have followed the same scheduling procedure, which is being followed earlier.

3. Further, even as per observation of SLDC and the DSM Working Group, DSM software ought to have a provision to enable APML to punch PPA-wise declared capacities.

5. As a statutory and technical body, SLDC is obligated to implement the Regulations of Hon'ble MERC in their true spirit. Accordingly, it is obligated to

develop the DSM software in line with the aforesaid Regulations of Hon'ble MERC by incorporating a provision for APML to punch PPA-wise declared capacities.

6. No reason was mentioned in the DSM working Group Report for developing DSM software in deviation to the aforesaid Regulations and its own observation that APML need to be allowed to punch PPA-wise declared capacities.

7. APML is of the view that, SLDC has violated Section 32 (2) (a) of Electricity Act 2003, which mandates that SLDC shall be responsible for scheduling in accordance with the PPAs.

8. Also, SLDC being a technical body, it could not have developed the DSM software to protect the commercial interest of one party. It's role is only to ensure that DSM operates in the State of Maharashtra in accordance with the MERC Regulations.

9. APML do not agree with the statements of DSM Working Group at Para 'd' of its observation that, the issue of mapping of APML units under DSM software has been undertaken in accordance with the PPA provisions. The content under Para 'd' is not supported by any evidence or material. SLDC/DSM WG has also ignored the fact that even MSEDCL has also not indicated any provisions in the PPA or Regulations for their demand of diversion of 74 to 86 MW from Units-1, 4 & 5 to 1320 MW PPA on first charge basis.

10. APML is of the view, SLDC or DSM Working Group have acted beyond their scope and power by developing the DSM software in a biased manner to suit the requirement of one party.

11. When SLDC/DSM Working Group have recognized that there is a commercial dispute, they should not have taken decision in favor of one party instead they should have developed the software in accordance with the Regulations and request the parties to approach Hon'ble MERC for adjudication of the commercial disputes between them.

12. APML requested DSM Working Group to immediately modify the DSM software to align it with the Hon'ble MERC Regulations so as to enable APML to punch PPA-wise declaration and to ensure that the software shall not allow automatic diversion of DC of 74 MW to 86 MW from Untis-1, 4 & 5 to 1320 MW PPA.

13. APML requested DSM Working Group to revise the Declared Capacity and scheduled energy for the period October 2021 to till date without allowing any such automatic diversion, as stated above.

On this MSEDCL responded and made following submission:

Provision in DSM software must be in accordance with PPA provisions, agreement by APML & orders of MERC in Case No.122 of 2015. Hence present practice is to be continued.

Further, it is stated that, APML has itself agreed and confirmed vide MoM on dated 28.07.2016 to fulfil the PPA provision of 1320MW from Unit 2 & 3, the auxiliary consumption of Units 2&3 shall be met from Unit 1, 4 and 5 and gross generation of Units 2 and 3 shall be considered as supplied against PPA for 1320 MW.

Working Group in its report on analysis of DSM operations during stabilization period has recommended that-

1. Treatment under DSM software as far as APML DC declarations is concerned; same treatment as was prevalent during mock-trial operations has been continued through stabilization period as well.
2. Mapping of APML units under DSM software has been undertaken as per MoD principles under Grid Code and in accordance with PPA provisions. Dispute under PPA provisions is outside the purview of the WG, which needs to be resolved as per provisions of PPA.
3. In the meantime, current arrangement adopted by SLDC may be continued.

In further deliberations, ED SLDC informed to MSPC that mapping of APML is not a software issue. Further, ED SLDC informed that Working Group has already suggested to resolve this issue bilaterally and the same is also reflected in the Hon'ble Commission's Order dated 07th Oct 2021.

On this MSPC decided to form a separate sub-group consisting of Member Secretary WRPC as head and Director (EE) MERC & Executive Director (MSLDC) as members to examine the above issue covering all aspects such as PPA status, recommendations of Working Group, provisions of Grid Code and various orders of the Hon'ble Commission in this regard. MSPC also directed that the said sub-group should submit their report within one month to MSPC. Also it was decided that the said subgroup shall call special invitee including those of MSEDCL & APML to appear before the sub-group.

f) Partial Zero Scheduling provision for PPA of SWPGL

MSEDCL has requested to incorporate provision to issue zero schedules for partially contracted quantum of SWPGL in DSM software as MSEDCL and BEST, both are contracting power from SWPGL. MSEDCL has requested to provide zero schedules to the extent of contracted capacity tied up by MSEDCL alone.

MSLDC stated that, there is provision for issuing unit wise zero schedules under Regulation 35 of MEGC-2020 which can be availed by discom to optimize their cost of power procurement. If zero schedules are given by one of

the beneficiary to the generating unit as per PPA, then it may create the issue of maintaining technical minimum for that unit.

MSPC acknowledged the limitations of issuing partial zero scheduling.

g) Time block wise MoD: -

AEML-D stated that DISCOMs are required to undertake contract based on the Time of the Day concept, wherein the rate for different time blocks is different based on the demand supply position and this helps DISCOMs to optimize cost. At present, the MoD rates for Long Term, Medium Term, Short Term/Bilateral etc are defined on monthly basis, limiting optimization based on Single rate instead of Time block wise rate. Therefore, necessary provisions to be created and SLDC should make changes in DSM portal for submission of time block wise MOD Rate.

MSLDC stated that at present, MoD stack is prepared for the month. Incorporation of block wise MoD is a complex concept and Scheduling and Dispatch Code may require amendment for the same.

MSPC suggested to form a study group to check benefits and complexities involved in operation of time block wise MoD rate.

h) Applicability of InSTS loss for Sale Transactions by Discoms :-

AEML-D stated that DISCOMs are already sharing entire InSTS losses & these losses are determined after factoring all net transactions. Mostly, DISCOMs buying external power on ISTS are selling part quantum on PX etc. hence there is no power flow on InSTS network. Under similar scenario on ISTS i.e. when both intrastate entity undertake bilateral sale/purchase transaction on Power exchange under Term Ahead Market (TAM) - ISTS losses are not applicable. Therefore, InSTS Loss should not be applicable to sale transaction undertaken by discoms.

MSEDCL stated that availability of power is scheduled at the state periphery and discoms T-D interface demand is grossed up by state transmission loss and settlement is done at the State periphery. Hence there will not be any state transmission loss applicable to sale of interstate power transactions done by the discoms. Further, discoms are already sharing the entire loss in proportion of demand and as such there is no need to recover InSTS loss again as it amounts to double recovery. Also, discoms are buying on ISTS network and part of it is sold on PX etc. Hence the power actually did not flow in InSTS network. Hence, the state transmission loss should not be applied while calculating the sale of power quantum at state periphery of MSEDCL transactions in DSM.

All discoms have suggested that InSTS loss should not be applied for the inter-state sale transactions of the discoms.

Working Group in its report stated that, the InSTS loss is applicable on all the scheduled transactions and MSLDC is correctly applying the InSTS loss on such sale transactions.

MSPC acknowledged the view of Working Group in this regard that the InSTS loss is applicable on all the scheduled transactions.

i) REDSM- Procedure Amendment - Alignment with DSM Software and Bills issuance:-

Working group stated that Commission may direct MSLDC to restore the RE DSM Billing cycle to weekly basis instead of monthly basis as is being currently done. DSM framework has commenced from 11th October 2021 and weekly DSM Bills are generated by MSLDC whereas RE DSM Bills are still being generated on monthly basis i.e. 4 weekly.

MSLDC informed that there are 34 PSS under MSEDCL jurisdiction where AMR installation is yet to be undertaken. This meter data needs to be provided weekly to MSLDC to generate the bills.

MSPC directed MSEDCL to install ABT meter on priority to all DISCOM connected PSS so as to make data available to MSLDC on weekly basis. On completion of this activity, RE-DSM Bills may also be issued weekly so as to be in sync with DSM.

j) Interface Metering and AMR Arrangement:

Currently MSLDC is using L&T Meter's data having AMR facility for DSM. The earlier plan B arrangement (Secure Meters/MRI with web portal) is still in operation as per the Commission's Order dated 7th October 2021.

MSLDC stated that all main and check L&T AMR Meters are mapped in DSM Software and AMR data serves the purpose of DSM Bills computation and therefore old SECURE meter data is not utilized for billing purpose.

MSPC agreed to discontinue the practice of uploading the old SECURE meter data under plan B. However, SECURE meters are to be maintained for use in emergency.

The practice of sending meter data not covered under AMR project shall be continued as it is.

k) Executive Director, MSLDC as Member Secretary in MSPC:

The issue of introduction of Executive Director, MSLDC as a member of MSPC was discussed in the meeting. On this issue, Chairman MSPC opined

that Chief Engineer MSLDC shall continue to act as a Member Secretary as per the Governance structure elaborated under clause (15) of DSM procedure. However Director (Operations) MSETCL and ED, MSLDC shall also be the member of MSPC.

MSPC consented to include Director (Operations) MSETCL and ED, MSLDC as a member of MSPC and recommendation to this effect shall be made to Hon. Commission from MSPC platform.

Item No. 3:- Any other issues with permission of Chair:-

(a) Rattan India stated that it has faced issues of software failure incidences for three different occasions. On account of this, RIPL has to bear the DSM charges for no fault on their part. RIPL requested to arrange for early correction in DSM bills.

(b) Rattan India raised the concerns about the variable/zigzag schedules received from Scheduling software which is difficult to match. It increases stresses on the boilers and coal mills.

(c) Rattan India has requested for implementation of applicable interest in case of delay in payments from the pool in line with approved DSM procedures. When Rattan India was payable, it has paid the full amount in DSM Pool. However when it was receivable, the entire amount was not received from the pool.

(d) Rattan India has requested to adjust the payable amount from receivables to RIPL. As receivables is already outstanding with MSLDC pool account for DSM bills, the payable amount if any for DSM bills can be settled being same account and same utility.

In the matter, MSPC observed that some of the issues such as variable schedules are already discussed in the meeting and other issues related to payments and interest thereupon may be dealt through DSM procedure subject to approval of Commission.

MSPC appreciated the cooperation & efforts of the Working Group, all-state entities & MSLDC for their contribution in successful implementation of DSM in state of Maharashtra despite several issues cropped up during stabilization period.

Smt. Juelee Wagh, Member Secretary expressed gratitude for the guidance and time given by Chairman MSPC, Working Group and other members of MSPC.

The meeting concluded with a vote of thanks to all.

Member Secretary
MSPC

Officials present for the meeting:

MSPC Members

1) Shri Dinesh Waghmare, Chairman & Managing Director, MSEB Holding Co. Ltd.
2) Shri Kandarp Patel, MD & CEO, AEML-D
3) Shri Anil Kolap, Director (Operations), MSETCL
4) Shri Prafulla Varhade, Director (Electrical), MERC
5) Shri Abhay Harne, Executive Director (O&M) MSPGCL
6) Shri Shrikant Jaltare, Executive Director, MSLDC
7) Smt. Juelee Wagh, Chief Engineer, MSLDC
8) Shri Dinesh Agrawal, Chief Engineer (PP) MSEDCL
9) Shri N.M. Chougule , Chief Engineer (regulatory), BEST
10) Shri Shanshak Jewalikar, Chief ACI&P, MSETCL
11) Shri Kapil Sharma, Chief Operating Officer, AEML-D
12) Shri Pallikuth Devanand, Head PSCC, Tata-D
13) Shri M.R. Krishna Rao, Head (ERCG), APML
14) Shri Akshay Mathur, Asst. Vice President, APML
15) Shri Nitin Chunarkar, Head Power Distribution, Mindspace
16) Shri Gitesh Ambasta, Vice President, RattanIndia
17) Shri Ajit Pandit, Director, Idam
18) Shri Harshal Joshi, Deputy Manager, JSW
19) Shri Jobin Abraham, Dy. Manager, Manikaran
20) Shri Amit Panchalwar, GM (Elect. O&M), Rattanndia
21) Shri Abaji Naralkar, Asst. Vice President, AEML-D
22) Shri S.N. Binge, Dy. Chief Engineer, BEST
23) Shri Vinayak Kamat, Divisional Engineer, BEST
24) Shri Nitin V. Rade, SE (Works), MSPGCL
25) Shri A.R. Naik, SE (STU), MSETCL,
26) Smt. Pushpa S., Sr. General Manager, WRLDC
27) Smt. Usha S., Sr. General Manager, WRLDC
28) Shri V.V. Rane, Head (Power Purchase), TPC-D
29) Shri D.D. Veer, Head (ABT) TPC-D
30) Shri E.T. Dhengle, SE(EA), MSLDC
31) Shri M.B. Bhagwat, SE(Op.), MSLDC

32) Shri. R.M. Kolhe, SE (SCADA/Admin), MSLDC

33) Smt. Seema Dubewar, AGM (F&A), MSLDC

34) Shri Nitin Paunikar, DGM (IT), MSLDC

35) Shri Ajay Nikale, Asst. Engineer (PP), MSEDCL

36) Shri Ajit Pujari, Asst.General Manager Mindspace

37) Shri Pramod Bhurle, Asst.General Manager Mindspace

38) Shri Rakesh Bhalerao, Manager, APML