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MINUTES OF THE 17TH STATE ADVISORY COMMITTEE (SAC) MEETING OF THE JOINT ELECTRICITY REGULATORY COMMISSION (FOR THE STATE OF GOA AND UNION TERRITORIES) HELD THROUGH VIDEO CONFERENCING ON 14TH JULY, 2021 AT 11:30 HRS

The 17th Meeting of the SAC of the JERC was held through Video Conferencing on 14th July, 2021 at 11:30 hrs. under the Chairmanship of Shri M.K. Goel, Hon'ble Chairperson, JERC.

The following SAC Members were presented:

I.	Shri M.K. Goel, Hon'ble Chairperson, JERC	:	Chairperson
II.	Shri Rakesh Kumar, Secretary, JERC	:	Secretary
III.	Shri. H.L Bajaj	:	Member
IV.	Shri M.G. Durairaj	:	Member
V.	Shri C.K. Parekh	:	Member
VI.	Shri Uma Shankar	:	Member
VII.	Shri Rajesh Mediratta	:	Member
VIII.	Shri Ramesh Kumar	:	Member
IX.	Shri D. Ravi	:	Member
X.	Shri Uttam Kumar Paul	:	Member

2. Leave of Absence was granted to those Members who could not attend the Meeting.
3. The Meeting commenced with Director (Finance and Law) extending a warm welcome to all the Members of the State Advisory Committee.
4. The Hon'ble Chairperson welcomed all the esteemed members and further mentioned that in the past (except the 16th SAC Meeting) SAC meetings have been conducted in physical mode but unfortunately since last time, because of the prevailing pandemic due to COVID-19 conditions, the meeting is being conducted in the virtual mode.

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5. The Hon'ble Chairperson further discussed the agenda for the meeting point wise as shared earlier with the SAC members.
6. Going ahead the Hon'ble Chairperson proposed confirmation of the minutes of the 16th SAC meeting which were confirmed with the consent of the SAC members.

7. Following Presentations were made in the meeting:

- i. Salient Features of Regulations formulated/amended by JERC along with the Salient Features of Tariff Orders issued in the Financial Year 2021-22 including important achievement of the Commission during the year - By Shri Rajesh Dangi, Director (Engineering) and Ms. Shikha Garg, Sr. Consultant, JERC
- ii. Presentation on "Recent Development in Power Market" discussing New Market Segments (Green Term Ahead Markets and Real Time Market) and Market based Economic Dispatch (MBED) and revision in the Renewable Energy Certificate (REC) Mechanism issued by Ministry of Power - By Sh. Rajesh Mediratta, Director, IEX Ltd.

Brief of the above presentations is attached in Annexure I and Annexure II respectively.

8. Discussion on Technical Issues as per suggestions of SAC Member Shri Maria Durairaj

Following points were discussed:

- (i) That the gap in power purchase and power sale in case of Electricity Department, Goa is growing each year even though they have the lowest Average Power Purchase Cost (APPC). This gap if not controlled will eventually lead to a tariff shock in the consumers. The peak demand of Goa is high and hence Goa may be considered obtaining additional allocation from MoP.
- (ii) That The upcoming Business Plan should have a region wise (substation wise) load forecast. Connected intra-state transmission network is required to be included in the plan as currently without any plan few substations are under loaded (less than 30% loading) and few substations are overloaded. Hence a comprehensive Business Plan is required which shall include review of existing network, proposed network at 33kV level and works for improving reliability and loss reduction.

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- (iii) That Renewable Energy promotion should take place in the State of Goa as the demand is high and presence of renewable energy (solar) is poor.
 - (iv) That With the ongoing pandemic the second wave of COVID-19 has been severe for the Goa Commerce and Industry. Suspension of travel has halted the tourism industry and hence the Goa economy has suffered from a huge demand deficit and therefore it is suggested to provide for incentives for post pandemic recovery by way of practice of suspending minimum charges, average billing.
 - (v) The Hon'ble Chairperson appreciated the concerns and submissions of Sh. Durairaj and assured the Members that these will be considered by the Commission and appropriate action will be taken.
- 9.** Thereafter, Hon'ble Chairperson enquired from the esteemed SAC Members if they had any other suggestions/points to put forward for discussion. SAC Members appreciated the commendable efforts made by JERC particularly during pandemic conditions by way of timely issuance of Tariff orders and other orders and also taking various consumer friendly measures while balancing the interest of Licensees by way of amendments/updation in Regulation.
- 10.** Observing that the Members did not have any more points to discuss, Hon'ble Chairperson declared the meeting closed adding that the deliberations in the SAC meeting will go a long way in providing guidance for discharging the regulatory functions of JERC and that he looks forward to the active participation of all the SAC Members in future.
- 11.** The Meeting ended with a Vote of Thanks to the Chair.


Secretary, JERC

Presentation by Shri. Rajesh Dangi, Director (Engg.), JERC on Salient Features of Regulations formulated/amended by JERC along with the Salient Features of Tariff Orders issued in the Financial Year 2021-22 including important achievement of the Commission

- (i) A detailed presentation was given by Shri. Rajesh Dangi mentioning the Commissions' updates on the formulation of new regulations and amendment in the existing regulations, Salient Features of Tariff Orders issued in the Financial Year 2021-22 and the achievements of the Commission.
- (ii) He mentioned that the Commission has issued the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 which will be applicable from FY 2022- FY 2025. Dir (Engg.) further explained that Commission while issuing this regulation has continued with the three-year control period since the privatization of the Utilities is in process. Under this regulation, the Multi Year Tariff Petition will be filed by the Utilities by November 30, 2021 providing forecast of ARR for each year of the control period and Tariff Proposal for the first year of the control period.
- (iii) Further, he also mentioned the issuance of the JERC (Transmission and Distribution Licensing) Regulations, 2020 in view of recent privatization being done in all the Union Territories and hence requirement of change of license or issuance of new license will take place. A detailed procedure for Grant of Distribution/Transmission Licensee is provided in the regulations along with general and technical conditions of Transmission and Distribution Licensee.
- (iv) Dir (Engg.) further mentioned that the Commission has also amended its JERC (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017. This was the first amendment done in the above-mentioned regulations in order to encourage the Renewable energy generating plants capacity in the UTs by way of providing the facility of banking. Banking facility has been provided for RE based captive generating stations and RE generating stations supplying power to third party consumers through Open Access.

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- (v) He also informed the members that amendment has also been issued to the JERC (Electricity Supply Code) Regulations, 2018 in order to make it even more consumer friendly and addressing all the issues that the consumer has been concerned with in the past for example: the process of name change in case of transfer of property or change in ownership due to legal heir; review of security deposit for each new year and rationalization of security deposit; introduction of no security deposit for consumers with pre-paid meters.
- (vi) Dir (Engg.) further discussed about the tariff orders issued by the Commission. He informed that all the orders were issued well in time except Puducherry due to Model code of conduct due to elections and Andaman & Nicobar as the petition was received late however the Commission was swift enough to issue the order in a record time of less than 45 days.
- (vii) Ms. Shikha Garg, Senior Consultant discussed the Salient Features of the Tariff Orders.
- (viii) She informed that though this time the tariff petitions were received late but the Commission was able to issue tariff orders on time except for Puducherry and Andaman & Nicobar for the reasons as mentioned by Dir (Engg.).
- (ix) Ms. Shikha further highlighted the key parameters of tariff orders in the Financial Year 2021-22 in terms of Energy Sales, the number of consumers, the connected load, peak demand and T&D Loss Target.
- (x) She further discussed at length about each territory and the State of Goa about the tariff related parameters namely the Net Average Revenue Requirement (ARR), Revenue, Average cost of supply (ACoS), Budgetary Support.
- (xi) In case of Dadra & Nagar Haveli Power Distribution Ltd. (DNHPDCL), it was mentioned that there has been a tariff revision of 5.53 % for the FY 2021-22 with decrease in energy charges for all consumer categories. The fixed charges have also been kept the same for all consumer categories. She further explained that for LT industrial categories the Energy charges are modified from kWh basis to kVAh basis. Dir (Engg.) added that the reduction in tariff has been done by around 30 paise per unit for industrial consumers.
- (xii) Talking about Goa Electricity Department, it was mentioned by Ms. Shikha that the entire gap has been set off by Budgetary support by the Govt. of Goa. The tariff was revised to around 3.18% for all categories. The Commission has considered

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the kVAh tariff for HT/EHT consumers in case of Goa. Hon'ble Chairperson informed that in case of Goa, the department has proposed the non-telescopic tariff which currently is nowhere in the country i.e. if a consumer exceeds its highest slab then the total units consumed to be charged at a tariff of that exceeded slab. The Commission has not considered the request of the department and has continued with telescopic tariff.

- (xiii) Ms. Shikha while discussing about Electricity Department of Puducherry mentioned that the department has not proposed any tariff hike in the petition however the Commission has approved a tariff hike of 2.25% since they already have regulatory asset. The Commission has approved the kVAh based tariff for the HT/EHT, Industrial and Commercial categories and a regulatory surcharge of 5% has been approved for the FY 2021-22.
- (xiv) Discussing about the Electricity Department of Daman & Diu it was mentioned that there was no change in the existing tariff and the tariff structure is also the same as specified in the last financial year.
- (xv) Explaining about Chandigarh, Ms. Shikha explained that there has been a reduction in tariff by 9.58% for the FY 2021-22. Also, the Commission, on account of revenue surplus in FY 2021-22, has directed to not recover any FPPCA from all consumer categories starting 1st April 2021 till further directions of the Commission.
- (xvi) Further discussing about the ED Lakshadweep, Ms. Shikha explained that the Average Cost of Supply (ACoS) is high in case of Lakshadweep due to Diesel generation. The entire gap in case of Lakshadweep is supported by budgetary support. It was informed that the consumption in number of units for Low Income group has been increased to 100 units/month. It was mentioned that in Lakshadweep the energy sales were predominantly by Domestic consumers and then by Govt. connections.
- (xvii) In case of Andaman & Nicobar, it was informed that the entire gap, if any in case of Andaman & Nicobar is supported by budgetary support. A tariff hike of 3.36% was approved as against the proposed hike of 17.01%.
- (xviii) The Generic Tariff for Solar PV Projects for FY 2021-22 was also discussed, the tariff for Andaman & Nicobar and Lakshadweep is high as compared to other UTs.
- (xix) Similarly, the Generic Tariff for Wind and Small Hydro projects for FY 2021-22 was discussed as determined by the Commission.

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- (xx) Lastly, Sh. Rajesh Dangi highlighted the achievements of the Commission mentioning that the Commission has timely determined the retail supply tariff for FY 2021-22 (except for Puducherry and Andaman & Nicobar for reasons already discussed). Also, RE Tariff for FY 2021-22 was determined on time for all the projects being commissioned in the FY 2021-22.
- (xxi) Sh. Rajesh Dangi informed that the Commission has taken various consumer friendly measures which includes amendment to the Electricity Supply Code Regulations. It was informed to the SAC members that as present no true-up/Tariff petitions are pending with the Commission.
- (xxii) The SAC Members applauded the Commission for timely completion of Tariff Orders for FY 2021-22.

ANNEXURE II**Presentation by Shri Rajesh K. Mediratta, Director, IEX Ltd. on Developments in Power Market (Green Term Ahead Markets and Real Time Market)**

- (i) A detailed presentation was delivered by Sh. Rajesh Mediratta on Developments in Power Market mentioning the Green Term Ahead Markets and Real Time Market and also detailed information on the new products coming in the market and discussing the MoP proposals on Market Development.
- (ii) He started the presentation with explaining the overall trend in the market including Day Ahead Market (DAM), Real Time Market(RTM) and Green Term Ahead Market (GTAM).
- (iii) He also explained about the DAM volume which has been growing, however the price trend have come down due to lower demand. The month on month trend was also discussed for the FY 2020-21 and the Quarter 1 of FY 2021-22. He explained that due to COVID in April-21 and May-21 the prices have reduced and again in June the prices have increased.
- (iv) In the last year, the states like Maharashtra, Gujarat, Punjab, Haryana, Himachal Pradesh, Dadra & Nagar Haveli and Daman & Diu and J&K have moved to energy exchanges and are buying from these markets due to significant savings.
- (v) Sh. Mediratta further explained about the leading participation in DAM in FY 2021, explaining that overall in the market today, the buyer side is dominated by DISCOMs which constitutes 76% of the total buyers and only 24% of the buy are from Open Access. He informed that out of the 76% of the DISCOM share, the major states are Maharashtra, Andhra Pradesh, Gujarat, Telangana. On the seller side, out of the total sells in the market, Dadra and Nagar Haveli sells but not Daman and Diu as Daman & Diu most of the times have shortage of power. Also, out of the total share of sell 42% comes from the DISCOMs and 60% from the Generators.
- (vi) He further explained the share of Power exchanges in Short Term Segment, informing that the Power exchanges in Short Term Segment has increased from 7% to 54% in FY 2021. He mentioned that out of India's total consumption, almost 88% is long term segment and 12% is short term segment and out of this 12% in

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FY 2021, 80 billion units is through exchange and 44 billion units is through bilateral.

- (vii) The overall trend is that people are moving from bilateral to exchange because of the various benefits like transparent pricing, ease of transaction, flexibility of buying only when required. For example, DNH has no/low demand at night as most of the industries operate during the day hence the difference between peak and off-peak is growing and therefore they only want to buy power when needed, unlike in case of PPA where they are obligated to buy power even during peak.
- (viii) A detailed explanation in the developments of RTM and GTAM was elaborated by Sh. Mediratta. He mentioned that RTM is consistently growing as it helps meet intermittency and trues up forecasting errors. GTAM, on the other hand is seasonal and growing which also helps in RPO compliance and hence DISCOMs have shown interest in GTAM market.
- (ix) Hon'ble Chairperson enquired about the price trend of GTAM and RTM. Sh. Mediratta explained that generally all the three markets are synchronised and therefore when the prices in DAM goes up, generally RTM also goes up. However, it is worthwhile to mention that the RTM prices are mostly lower than the DAM prices.
- (x) He further explained that the Non-Solar prices(which is mostly wind) is the highest and Solar prices are generally higher than RTM.
- (xi) Sh. Mediratta further shared the Market Segment Share for all the four markets, namely DAM, RTM, TAM and GTAM. In FY 2020-21, out of the total share 66.7% was dominated by the Day Ahead Market (DAM) followed by 23.8% Real Time Market (RTM) and TAM and GTAM had a 5.6% and 5.3% respectively. He also explained the Average million units (MUs) per day for each month of FY 2020-21, wherein it was showed that the mix in the segment has changed during the year where initially there were only two market segments DAM and TAM.
- (xii) Cross Border Electricity Trading (CBET) was also discussed by Sh. Mediratta, explaining that the regulatory framework for cross border trading through power exchanges was set in Feb'21 with CEA issuing the procedure for getting approvals to trade through exchanges. Nepal in April'21 started purchasing power, the other countries set to trade are Bangladesh and Bhutan.

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- (xiii) Mentioning about the products in pipelines, Sh. Mediratta mentioned that Long Duration Contracts, Electricity Derivates, Green Day Ahead Market and Market Based Ancillary Services are planned. He explained about each one of them, highlighting that the Long Duration Contracts are to get fortnightly, monthly, quarterly standardized contract with efficient price discovery and counter guarantee mechanism. These contracts are helpful for DISCOMs as they can utilize these contracts to procure from the market with a slightly longer term visibility.
- (xiv) He also explained the Electricity Derivates i.e financial products will be provided in the Commodity exchanges under the SEBI regulations wherein DISCOMs can participate in these contracts to hedge against uncertainty in the power procurement cost. The next product explained was Green Day Ahead Market wherein integrated DAM with separate price formation of RE and Conventional power is done and this helps in RPO fulfilment through G-DAM and REC through DAM. The final product explained was Market Based Ancillary services, wherein NLDC shall procure Tertiary Reserve Ancillary Services (TRAS) through DAM & RTM Ancillary market and bids will be collected through the Power Exchanges.
- (xv) The Discussion Paper on Market Based Economic Dispatch (MBED) by Ministry of Power (MoP) was also discussed by Sh. Mediratta. He explained that the paper imposed a mandate for DISCOMs and Generators to participate in the DAM and suggested that the participation in the scheme should be voluntary and not a mandate for DISCOMs and Generators.
- (xvi) He further mentioned that under MBED, the DISCOMs will continue to pay the fixed charges to the Generator under existing PPA. Any difference in the MCP and the contracted price shall be refunded by the generator through BCS mechanism. Even the generators can sell their URS power in the market and revenue earned will be shared with the beneficiaries in the ratio 50:50 subject to a ceiling of 7 p/kWh to the Generator. The MBED is proposed to be implemented in a phased manner with NTPC generators in the I phase.
- (xvii) Sh. Mediratta explained about the Key challenges under MBED, mentioning that the DISCOMs will not be able to exercise RTR and depends on the market to meet their load variations during the day and DISCOMs liquidity & settlement will be

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through BCS mechanism. Also it will be difficult to move from a decentralized to a centralized model.

- (xviii) An alternate Mechanism as suggested by Sh. Mediratta was to allow generators and DISCOMs having PPA to schedule their transactions through the market on a voluntary basis (Gross Bidding).
- (xix) Sh. Mediratta also discussed on the MoP paper on re-designing the REC mechanism. He highlighted that the key objective for the paper is to integrate more renewable energy in the electricity grid as there is a target to achieve 175 GW by 2022 and 450 GW by 2030 and to promote the new technology like offshore wind, hydrogen, pumped storage hydro plant (PSP) etc.
- (xx) The MoP paper suggested that the validity period be removed for RECs and also the Floor/forbearance price be removed. The period of issuance of RECs be for 15 years from commissioning of the project. Sh. Mediratta explained that the technology multiplier is from More RECs to less matured technology and there is a provision of negative list or sunset clause for matured RE technologies. The paper also discusses about incentivizing the obligated entities to procure beyond RPO with Option 1 being only DISCOMs be issued REC for quantum beyond RPO or Option 2 being all obligated entities be issued REC. He also highlighted that the paper enhances the role of trader.
- (xxi) Explaining the salient features of the REC paper Sh. Mediratta explained that REC as an instrument should be there since today though we have option to buy green power but many industries may not like to buy power from the market because lot of Open Access charges have to be paid and hence they can meet their requirement or sustainability goals by buying REC from the market.