

**BEFORE MAHARASHTRA ELECTRICITY REGULATORY COMMISSION,  
MUMBAI**

**Case No. 51 of 2021**

**IN THE MATTER OF:**

Verification of compliance of Renewable Purchase Obligation targets of AEML-D for FY 2018-19 and FY 2019-20, as specified under RPO Regulations, 2016.

**AND**

**IN THE MATTER OF:**

Letter dated 27<sup>th</sup> April 2021 bearing reference no: MERC/Tech/RPO/AEML-D/118 seeking verification of compliance of Renewable Purchase Obligation targets of AEML-D for FY 2018-19 and FY 2019-20, as specified under MERC (Renewable Purchase Obligation, its compliance and Implementation of REC framework) Regulations, 2016.

**REPLY ON BEHALF OF ADANI ELECTRICITY MUMBAI LIMITED (AEML)**

AEML submits its replies/clarification/confirmation sought by this Hon'ble Commission vide its Letter dated 27.04.2021 from AEML as under:

- a. Reconciliation statement along with rationale with regards to GEC data reported by MSLDC and audited data of AEML-D.**

**AEML-D Response:**

- i. AEML-D understands that the Hon'ble Commission seeks the reconciliation between GEC data reported by MEDA and audited data of AEML-D, instead of reconciliation between GEC data reported by MSLDC and audited data of AEML-D, as stated in the letter dated 27<sup>th</sup> April 2021 bearing reference no: MERC/Tech/RPO/AEML-D/118.

- ii. MEDA had considered the GEC data for FY 2018-19 as per the submission of AEML-D vide its letter dated 20<sup>th</sup> August 2019.

Particulars	FY 2018-19 (MU)
Total Energy input at T-D	11,034.78
Less: Changeover consumption at T-D	1,727.87
Net Energy input at T-D	9,306.91
InSTS loss (%)	3.10%
Net Energy input at G-T	9,604.67
Less: OA consumption at G-T	246.16
<b>Net Energy input at G-T for own consumers</b>	<b>9,358.51</b>

- iii. It is submitted that the GEC data provided for FY 2018-19 vide the above letter was provisional at that time, since the changeover consumption and open access consumption were still to be finalised. At the time of submission of data to MEDA, the changeover consumption at T-D was considered on scheduled basis. The GCNs pertaining to all the months of FY 2018-19 for all open access consumers were not received till 20<sup>th</sup> August 2019, when the data was submitted and hence the open access consumption for FY 2018-19 was not final. Post receipt of GCNs for all consumers for FY 2018-19, the open access consumption was finalized. Also, the changeover consumption was finalized after considering the metered consumption of all changeover consumers for FY 2018-19. The Hon'ble Commission has approved the GEC for FY 2018-19 as **9,373.27 MU** in AEML-D's MYT Order dated 30.03.2020 in Case No. 325 of 2019 for the purpose of truing up of FY 2018-19 (in Table O-14 of the MYT Order), after considering the final changeover and open access consumption for FY 2018-19, as shown in table below:

Particulars	FY 2018-19 (MU)
Total Energy input at T-D	11,034.31
Changeover (HT) and OA consumption at T-D	247.51
Changeover (LT) consumption at T-D	1,705.04
Total Changeover and OA consumption at T-D	1,952.55
Net Energy input at T-D for own consumers	9,081.77
InSTS loss (%)	3.11%
<b>Net Energy input at G-T for own consumers</b>	<b>9,373.27</b>

- iv. Hence, the GEC for AEML-D for FY 2018-19 works out to **9,373.27 MU**, which may be considered for the purpose of RPO verification for FY 2018-19.
- v. MEDA had considered the GEC data for FY 2019-20 as per the submission of AEML-D vide its letter dated 26<sup>th</sup> May 2020.

Particulars	FY 2019-20 (MU)
Total Energy input at T-D	11,149.47
Changeover (HT) and OA consumption at T-D	321.85
Changeover (LT) consumption at T-D	1,692.66
Total Changeover and OA consumption at T-D	2,014.51
Net Energy input at T-D for own consumers	9,134.97
InSTS loss (%)	3.16%
<b>Net Energy input at G-T for own consumers</b>	<b>9,433.24</b>

- vi. It is submitted that the GEC data provided for FY 2019-20 vide the above letter was provisional at that time, since open access consumption had not been finalised till then, as the GCNs pertaining to all the months of FY 2019-20 for all open access consumers had not been received. Even now, AEML-D has not received GCNs for all open access consumers for all the months of FY 2019-20 and GCNs for a few open access consumers are still pending. Also, there are cases where GCNs have been received now, but their corresponding credit to consumers have not been provided yet. Hence, for the purpose of determining GEC for FY 2019-20 at this stage, AEML-D has considered the open access consumption based on the credit given to open access consumers as per the available GCNs. It is submitted that the GEC for FY 2019-20 will change slightly till the time of final truing up of FY 2019-20 during the Mid Term Review proceedings as per MYT Regulations, 2019, based on the availability on all GCNs and the corresponding credit to consumers. The revised GEC for FY 2019-20 considering the credit given to open access consumers till date is as shown in the table below:

Particulars	FY 2019-20 (MU)
Total Energy input at T-D	11,149.47
Changeover (HT) and OA consumption at T-D	324.83
Changeover (LT) consumption at T-D	1,692.66
Total Changeover and OA consumption at T-D	2,017.49
Net Energy input at T-D for own consumers	9,131.99
InSTS loss (%)	3.16%
<b>Net Energy input at G-T for own consumers</b>	<b>9,430.16</b>

The above may be considered for the limited purpose of assessing compliance to RPO under present proceedings.

- b. AEML-D should verify the RPO settlement details for FY 2018-19 and FY 2019-20, as submitted by MEDA and highlight the discrepancies, if any, along with proper justification.**

**AEML-D Response:**

- i. RPO settlement data for FY 2018-19 as submitted by MEDA (based on the data submitted by AEML-D vide letter dated 20.08.2019) is reproduced below:

Particulars	FY 2018-19 (MU)
Gross Energy Consumption	9,358.46
<b>Solar RPO</b>	
Target (2.75%)	257.36
Achievement	74.16
Shortfall/(Surplus)	183.19
<b>Non-Solar RPO</b>	
Target (11%)	1029.44
Achievement	214.08
Shortfall/(Surplus)	815.36
<b>Mini/Micro RPO</b>	
Target (0.2%)	2.06
Achievement	0
Shortfall/(Surplus)	2.06

- ii. As submitted above, the Hon'ble Commission has, based on actual data of open access and change-over consumption, already approved the GEC for FY 2018-19 as **9,373.27 MU** in AEML-D's MYT Order dated 30.03.2020 in Case No. 325 of 2019 for the purpose of truing up of FY 2018-19. Considering the GEC of **9,373.27 MU**, the RPO position for FY 2018-19 is as under:

Particulars	FY 2018-19 (MU)
Gross Energy Consumption	9,373.27
<b>Solar RPO</b>	
Target (2.75%)	257.76
Achievement	74.16
Shortfall/(Surplus)	183.60
<b>Non-Solar RPO</b>	
Target (11%)	1031.06
Achievement	214.53
Shortfall/(Surplus)	816.53
<b>Mini/Micro RPO</b>	
Target (0.2%)	2.06
Achievement	0
Shortfall/(Surplus)	2.06

- iii. It may be noted herewith that the achievement in Non-solar RPO in FY 2018-19 as considered by MEDA was 214.08 MU and, as per actuals, it is 214.53 MU. There was a correction in the energy procured from the source AAA Sons Pvt. Ltd. in FY 2018-19, as shown in table below:

Particulars / MU	As submitted to MEDA	Actuals
Reliance Innoventures	89.60	89.60
AAA Sons Pvt. Ltd.	2.38	2.83
Vector Green Energy Pvt. Ltd. - 18 MW	34.75	34.75
Vector Green Energy Pvt. Ltd. - 6 MW	12.28	12.28
Tembhu Power Pvt. Limited	5.61	5.61
Reliance Clean Power Pvt. Ltd.	69.46	69.46
<b>Total</b>	<b>214.08</b>	<b>214.53</b>

iv. The Hon'ble Commission has considered the non-solar purchase for FY 2018-19 as 214.53 MU during truing up of FY 2018-19 in AEML-D's MYT Order dated 30.03.2020 (Table O-33 of the MYT Order). Thus, for FY 2018-19, AEML-D has a standalone shortfall of 183.60 MU in Solar RPO, 816.53 MU in Non-solar RPO and 2.06 MU in Mini/Micro hydro RPO.

v. RPO settlement data for FY 2019-20 as submitted by MEDA (based on the data submitted by AEML-D vide letter dated 26.05.2020) is reproduced below:

Particulars	FY 2019-20 (MU)
Gross Energy Consumption	9,433.24
<b>Solar RPO</b>	
Target (3.50%)	330.16
Achievement	69.46
Shortfall/(Surplus)	260.70
<b>Non-Solar RPO</b>	
Target (11.5%)	1084.82
Achievement	220.56
Shortfall/(Surplus)	864.26
<b>Mini/Micro RPO</b>	
Target (0.2%)	2.17
Achievement	0
Shortfall/(Surplus)	2.17

vi. As stated above, the GEC for FY 2019-20 after considering the available GCNs for FY 2019-20 till date, works out to **9,430.16 MU**. Considering the GEC of **9,430.16 MU**, the RPO position for FY 2019-20 is as under:

Particulars	FY 2019-20 (MU)
Gross Energy Consumption	9,430.16
<b>Solar RPO</b>	
Target (3.50%)	330.06
Achievement	69.92
Shortfall/(Surplus)	260.14
<b>Non-Solar RPO</b>	
Target (11.5%)	1084.47

Particulars	FY 2019-20 (MU)
Achievement	221.28
Shortfall/(Surplus)	863.18
<b>Mini/Micro RPO</b>	
Target (0.2%)	2.17
Achievement	0
Shortfall/(Surplus)	2.17

vii. It may be noted that the achievement in solar RPO in FY 2019-20 as considered by MEDA was 69.46 MU. Solar RPO achievement now considered, based on actuals is 69.92 MU. The difference is because at the time of submission of information to MEDA for FY 2019-20, GCNs for all open access consumers were not available. Hence, the purchase from solar OA consumers in FY 2019-20, in accordance with Distribution Open Access (First Amendment) Regulations, 2019 was not final. Based on the available GCNs for FY 2019-20, AEML-D has revised the energy purchased from solar OA consumers for FY 2019-20, in accordance with Distribution Open Access (First Amendment) Regulations, 2019, as shown in table below:

Particulars / MU	As submitted to MEDA	Actuals
Dhursar Solar Power Private Limited	56.33	56.33
Consumption from RTS Generating plants	12.93	12.93
OA Solar purchase	0.20	0.66
<b>Total - Solar</b>	<b>69.46</b>	<b>69.92</b>

viii. Similarly, the achievement in non-solar RPO in FY 2019-20 as considered by MEDA was 220.56 MU. Non-solar RPO achievement now considered based on actuals is 221.28 MU. The difference is also because at the time of submission of information to MEDA for FY 2019-20, GCNs for all open access consumers were not available. Hence the purchase from non-solar OA consumers in FY 2019-20, in accordance with Distribution Open Access (First Amendment) Regulations, 2019 was not final. Based on the available GCNs for FY 2019-20, AEML-D has revised the energy purchased from non-solar OA consumers for FY 2019-20, in accordance with Distribution Open Access (First Amendment) Regulations, 2019, as shown in table below:

Particulars / MU	As submitted to MEDA	Actuals
Existing Non-Solar sources	218.84	218.84
OA Non-solar purchase	1.73	2.45
<b>Total – Non-Solar</b>	<b>220.56</b>	<b>221.28</b>

- ix. The Hon'ble Commission is requested to consider the solar and non-solar RPO achievement for FY 2019-20 as 69.92 MU and 221.28 MU respectively. Based on the above, for FY 2019-20, AEML-D has a standalone shortfall of 260.14 MU in Solar RPO, 863.18 MU in Non-solar RPO and 2.17 MU in Mini/Micro hydro RPO.
- x. Further, the Hon'ble Commission, vide its letter dated 27<sup>th</sup> April 2021, stated that AEML-D has a cumulative shortfall of 61.37 MU in Solar RPO, 997.88 MU in Non-Solar RPO and 3.76 MU in Mini/Micro hydro RPO till FY 2017-18. AEML-D submits that cumulative shortfall in Solar RPO and Non-Solar RPO figures have slightly changed after truing up of FY 2017-18 by the Hon'ble Commission in AEML-D's MYT Order dated 30.03.2020 in Case No. 325 of 2019. The cumulative shortfall till FY 2017-18, as approved by the Hon'ble Commission in AEML-D's MYT Order dated 30.03.2020 in Case No. 325 of 2019 is 61.74 MU for Solar RPO (Table 0-25 of the MYT Order) and 999.70 MU for Non-Solar RPO (Table 0-32 of the MYT Order). This is because in the Order dated 04.04.2019 in Case No. 39 of 2019 (RPO verification for FY 2017-18 for AEML-D), the GEC for FY 2017-18 was considered as 9,374.24 MU. However, GEC for FY 2017-18 was revised post receipt of all GCNs of open access consumers for FY 2017-18. The revised GEC for FY 2017-18 was 9,392.37 MU as approved by the Hon'ble Commission after truing up of FY 2017-18 in AEML-D's MYT Order dated 30.03.2020 in Case No. 325 of 2019 (Table 0-13 of the MYT Order).
- c. **AEML-D should submit the status of Solar, Non-Solar RPO compliance including Mini/Micro Hydro RPO compliance, as per the directives of the Commission vide Orders in Case No.101 of 2012, Case No.183 of 2013, Case No.193 of 2014, Case No. 19 of 2016, Case No. 172 of 2016, Case No.210 of 2017 and Case No. 39 of 2019 along with detailed statement for project wise energy procurement in MUs from all Solar & Non-Solar generating projects including Mini/Micro Hydro projects and project wise contracted Solar and Non-Solar power capacity in MW during FY 2010-11 to FY 2019-20.**



**AEML-D Response:**

i. The source wise RE procurement in FY 2018-19 are shown in table below:

Source	RE Purchase (MU)	Type of RE
<b>Solar</b>		
Dhursar Solar Power Private Limited	66.20	Solar
Consumption from RTS Generating plants	7.96	Solar
<b>Total - Solar</b>	<b>74.16</b>	
<b>Non-Solar</b>		
Reliance Innoventures	89.60	Wind
AAA Sons Pvt. Ltd.	2.83	Wind
Vector Green Energy Pvt. Ltd. - 18 MW	34.75	Wind
Vector Green Energy Pvt. Ltd. - 6 MW	12.28	Wind
Tembhu Power Pvt. Limited	5.61	Small Hydro
Reliance Clean Power Pvt. Ltd.	69.46	Wind
<b>Total - Non Solar</b>	<b>214.53</b>	

The source wise RE procurement in FY 2019-20 are shown in table below:

Source	RE Purchase (MU)	Type of RE
<b>Solar</b>		
Dhursar Solar Power Private Limited	56.33	Solar
Consumption from RTS Generating plants	12.93	Solar
OA Solar purchase	0.66	Solar
<b>Total - Solar</b>	<b>69.92</b>	
<b>Non-Solar</b>		
Reliance Innoventures	78.55	Wind
AAA Sons Pvt. Ltd.	2.21	Wind
Vector Green Energy Pvt. Ltd. - 18 MW	37.43	Wind
Vector Green Energy Pvt. Ltd. - 6 MW	11.15	Wind
Tembhu Power Pvt. Limited	3.78	Small Hydro
Reliance Clean Power Pvt. Ltd.	85.73	Wind
OA Non-Solar purchase	2.45	Wind
<b>Total - Non Solar</b>	<b>221.28</b>	

- ii. It may be noted here that the Distribution Open Access (First Amendment) Regulations, 2019 allow the Distribution Licensee to consider the surplus RE energy of OA consumers at the end of each month towards fulfilment of its RPO. These Regulations are effective from July 2019. Hence, the surplus RE energy of OA consumers purchased by AEML-D from July 2019 onwards in accordance with Distribution Open Access (First Amendment) Regulations, 2019 has been considered towards fulfilment of RPO. AEML-D has not purchased any RECs in FY 2018-19 and FY 2019-20.
  - iii. The project-wise energy procurement for all solar and non-solar RE sources for the period FY 2010-11 to FY 2017-18 was submitted in the proceedings in Case Nos. 183 of 2013, 193 of 2014, 19 of 2016, 172 of 2016, 210 of 2017 and 39 of 2019. The Hon'ble Commission, in its Order thereon, has already approved the same. It is submitted that cumulative details of RPO target for the period FY 2010-11 to FY 2017-18 as approved by Hon'ble Commission in the earlier orders along with details for FY2018-19 and FY 2019-20 is enclosed herewith and marked as **Annexure 1**. The year wise, source wise procurement of RE power and contracted capacity from FY 2010-11 to FY 2019-20 are also provided in **Annexure 1**. As seen from the table in **Annexure 1**, the cumulative shortfall till FY 2019-20 is 505.48 MU in Solar RPO, 2,679.43 MU in Non-Solar RPO and 8.00 MU in Mini/Micro hydro RPO.
  - iv. The Hon'ble Commission, in AEML-D's RPO verification Order for FY 2016-17 dated 31.07.2018 in Case No. 210 of 2017, had directed AEML-D to meet the standalone RPO shortfall for FY 2016-17 by RE procurement or REC purchase by the end of FY 2018-19. Subsequently, the Hon'ble Commission in AEML-D's RPO verification Order for FY 2017-18 dated 04.04.2019 in Case No. 39 of 2019, directed AEML-D to purchase RE Power and/or RECs by the end of March 2020 so as to fully meet these standalone and cumulative shortfall shortfalls. AEML-D has submitted its response to this direction in its reply to query 'd' in subsequent paragraphs.
- d. AEML-D should submit detailed list of action and efforts undertaken by it prior to and during FY 2018-19 and FY 2019-20 to ensure compliance of RPO targets in respect of Solar RPO, Non-Solar RPO and Mini/Micro Hydro RPO.**

**AEML-D Response:**

- i. AEML-D's existing contracts for meeting Solar and Non-Solar RPO are as under:

S. No	Name of Supplier Company	Contracted Capacity (MW)	Type of Renewable Energy Source
1	Dhursar Solar Power Private Limited	40	Solar
1	Reliance Innoventures	45	Wind
2	AAA Sons Enterprises	3.375	Wind
3	Vector Green Energy Private Ltd	18	Wind
4	Vector Green Energy Private Ltd	6	Wind
5	Tembhu Power Private Limited	4.5	Small Hydro
6	Reliance Power Ltd	45	Wind

- ii. AEML-D has made all possible efforts to comply with the RPO targets for Mini/Micro Hydro. AEML-D has issued Expressions of Interest (EoI) on 18.07.2018 and 29.07.2019 for purchase from Mini/Micro Hydro sources, but no offers were received. While AEML-D cannot comment on the reasons for such lack of interest, it is possible that the developers planning to connect to MSEDCL network prefer to sell their power to MSEDCL only, as selling to any Distribution Licensee other than the host Licensee would require Open Access permission, while the power will still be sold at the preferential tariff specified by the Hon'ble Commission. Copy of the advertisements published is attached herewith and marked as **Annexure 2**.
- iii. AEML-D had filed a Petition (Case No. 335 of 2018), wherein AEML-D had prayed for carry forward the shortfall in RPO for FY2016-17 to FY2019-20 to next control period i.e. FY2020-21 onwards. The Hon'ble Commission issued the Order in Case No. 335 of 2018 on 01.01.2019 and held that relaxation to carry forward of RPO targets to the next control period would be considered

after the detailed scrutiny carried out at the time of verification of RPO targets for FY 2017-18. Thereafter the Hon'ble Commission in AEML-D's RPO verification Order for FY 2017-18 dated 04.04.2019 in Case No. 39 of 2019, directed AEML-D to purchase RE Power and /or RECs by the end of March, 2020 so as to fully meet these standalone and cumulative shortfall shortfalls.

- iv. On 22.05.2019, AEML-D had filed a Petition (Case No. 120 of 2019) for review of the Order dated 04.04.2019 in Case No. 39 of 2019. During the pendency of the said Petition, AEML has filed another Petition i.e. Case No. 281 of 2019 for adoption of tariff for procurement of upto 350 MW grid connected Wind-Solar Hybrid Power capacity with green shoe option of additional 350 MW grid connected Wind-Solar Hybrid Power capacity on long term basis through competitive bidding process to meet the Renewable Purchase Obligation (RPO) cumulatively for past period and ensuing control period.
- v. The Order in Case No. 281 of 2019 was issued on 08.01.2020, wherein the Hon'ble Commission allowed AEML-D to procure RE power from 350 MW grid connected Wind-Solar Hybrid Power capacity with green shoe option of additional 350 MW grid connected Wind-Solar Hybrid Power capacity on long term basis through competitive bidding process. The Hon'ble Commission has recorded submissions of AEML related to (RPO) in its order in Case No. 281 of 2019 as under:

Commission's Analysis and Ruling:

*"10. While justifying such Hybrid power procurement at Rs. 3.35 per unit, AEML has made following submissions:*

*10.1 The Commission in its Draft MERC (RPO-REC) Regulations, 2019, has set the target of 13.50% for solar and 11.5% for Non-Solar RE Sources, by FY 2024-25, Besides, there is a backlog of 3,327 MUs of RPO for past period (from FY 2016-17 to FY 2019-20 (estimated)) which was allowed by the Commission to be carried forward.*

*10.2. At 50% CUF from 700 now, AEML will receive ~3,000 MUs of RE Power, which will not only be sufficient to meet the future period RPO (FY21-22 onwards) but will also fulfill the past shortfall of RPO for the Control period (FY 2016-17 to FY 2019-20)."*

Further, in para 28 of the Order in Case No. 281 of 2019, the Hon'ble Commission held as under:

***"28. In view of the above detailed analysis, the Commission is summarizing its findings as against AEML's justification for procurement of Hybrid Power at 50% CUF as under:***

***a. RPO target - Current and Past period shortfall: As contended by AEML, for 700 MW at 50% CUE it will receive ~3000 MUs of RE power every year, which is not only sufficient to meet future period (FY 20-21 onwards) RPO but will also fulfill the past shortfall of RPO for the control period FY16-17 to FY19-20. Besides that, the surplus purchase, if any after meeting RPO, will be used to replace short term power.***

***As stated in earlier part of the Order, the Commission notes that 50% CUF is causing wastage (due to clipping) of energy resulting in higher per unit rate, As explained above, AEML has option of renegotiating rate with bidder by changing the hybrid mix or by procuring Hybrid Power at lower CUF or separately sourcing Solar and Wind power to meet its RPO. Further, such power at renegotiated rate or from alternatives sources would be at lower tariff rate than that what has been proposed in the present case and hence will accrue to AEML higher saving in power purchase expenses." (Emphasis added)***

- vi. Therefore AEML-D requests the Hon'ble Commission to consider its rulings at Para 28 in the Order dated 08.01.2020 in Case No. 281 of 2019 with respect to the direction given to AEML-D in Order dated 04.04.2019 in Case No. 39 of 2019, to purchase RE Power and /or RECs by the end of March 2020 so as to fully meet these standalone and cumulative shortfalls. Based on the ruling of the Hon'ble in the Order dated 08.01.2020 in Case No. 281 of

2019, AEML-D withdrew the Petition in Case No. 120 of 2019 for review of Order dated 04.04.2019 in Case No. 39 of 2019 vide letter dated 04.03.2020.

- vii. It is therefore understood by AEML-D that vide the aforesaid Order, the Hon'ble Commission has permitted AEML-D to procure 700 MW Hybrid RE Power with a view to meeting previous shortfall in RPO, plus compliance to future RPO as well. The procurement from the said source of 700 MW will commence towards the end of the current year and, accordingly, the compliance to the total shortfall of RPO from previous MYT Control Period, plus the additional RPO of the current Control Period, shall then have to be assessed cumulatively at the end of the present MYT Control Period.
  - viii. AEML-D has also filed a petition Case No,140 of 2020 for procuring 1000 MW of Power from grid connected Renewable Energy (RE) Power Projects, complemented with Power from Coal based Thermal Power Projects, as indicated in the response to (e) below.
  - ix. Considering the Order of the Hon'ble Commission dated 08.01.2020 in Case No. 281 of 2019 and the anticipated commencement of power supply from the 700 MW hybrid RE power plant, the total shortfall in RPO till FY 2019-20 may kindly be permitted to be carried forward for compliance by the end of fourth MYT Control Period.
- e. AEML-D should submit the details for long term RE procurement plan (in MUs and corresponding MW) for meeting the future RPO targets.**

**AEML-D Response:**

AEML-D has entered into PPA with M/s Rosepetal Solar Energy Pvt. Ltd. for procuring 700 MW wind and solar hybrid RE power from FY 2021-22 onwards. In accordance with the direction of the Hon'ble Commission in the Order dated 08.01.2020 in Case No. 281 of 2019, AEML-D has renegotiated the rate of purchase of power from the RE source at Rs. 3.24/kWh instead of Rs. 3.35/kWh, which was discovered through competitive bidding. Further, AEML-D has also filed a Petition (Case no. 140 of 2020 and MA No. 7 of 2021) seeking approval of procurement of 1000 MW of Power from grid connected Renewable Energy (RE) Power Projects,

complemented with Power from Coal based Thermal Power Projects. The hearing in the case was conducted on 29.04.2021 and it is reserved for Order by the Hon'ble Commission. Procurement of RE power from these sources will help AEML-D in meeting the RPO targets in future years.

A handwritten signature in blue ink, reading "Anish Kumar", with a horizontal line underneath the name.

**Adani Electricity Mumbai Limited**

**Place:** Mumbai

**Date:** 14.05.2021

**BEFORE THE HON'BLE MAHARASHTRA ELECTRICITY REGULATORY  
COMMISSION, AT MUMBAI**

**Case No. 51 of 2021**

**IN THE MATTER OF:**

Verification of compliance of Renewable Purchase Obligation targets of AEML-D for FY 2018-19 and FY 2019-20, as specified under RPO Regulations, 2016.

**AND**

**IN THE MATTER OF:**

Letter dated 27<sup>th</sup> April 2021 bearing reference no: MERC/Tech/RPO/AEML-D/118 seeking verification of compliance of Renewable Purchase Obligation targets of AEML-D for FY 2018-19 and FY 2019-20, as specified under MERC (Renewable Purchase Obligation, its compliance and Implementation of REC framework) Regulations, 2016.

**AFFIDAVIT**

I, Manish Kumar, S/o. Sh. Braj Kishore Prasad, aged about 32 years, working as Manager (Regulatory) in Adani Electricity Mumbai Limited, resident of A12/402, A Wing, 4th Floor, Yogiswami Cooperative Housing Society, Yogi Nagar, Borivali (West), Mumbai – 400091, presently in Mumbai, do hereby solemnly affirm and declare as under:

1. That, I am well conversant with the facts and records of the case and am competent to swear this affidavit. Further, I have been duly authorized by the Adani Electricity Mumbai Limited vide Power of Attorney (POA) dated [01.04.2021] to sign, verify and institute the accompanying Reply.
2. I state that the statements made in the accompanying Reply is true to my knowledge derived from the information and records pertaining to the matter and maintained in the ordinary course of business.



**DEPONENT**



**VERIFICATION**

Verified at Mumbai on May 14, 2021 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed therefrom.

**DEPONENT****Place:** Mumbai**Date:** 14.05.2021

Particulars	As approved in Case No 172 of 2016					
	FY2010-11		FY2011-12		FY2012-13	
	%	MU	%	MU	%	MU
<b>Gross Energy Consumption (GEC)</b>	100%	8,600.18	100%	7,445.73	100%	7,334.57
<b>Solar RPO</b>						
Target	0.25%	21.50	0.25%	18.61	0.25%	18.34
Achievement	0.00%	-	0.61%	0.46	0.82%	60.13
Shortfall/(Surplus)	0.25%	21.50	0.24%	18.16	-0.57%	(41.79)
<b>Non-Solar RPO</b>						
Target	5.75%	494.51	6.75%	502.59	7.75%	568.43
Achievement	6.80%	584.51	4.69%	349.47	8.74%	640.84
Shortfall/(Surplus)	-1.05%	(90.00)	2.06%	153.12	-0.99%	(72.41)
<b>Mini/Micro RPO (Within Non-Solar)</b>						
Target	0.01%	0.49	0.01%	0.50	0.01%	0.57
Achievement	0%	-	0%	-	0%	-
Shortfall/(Surplus)	0.01%	0.49	0.01%	0.50	0.01%	0.57

Particulars	As approved in Case No 172 of 2016					
	FY2013-14		FY2014-15		FY2015-16	
	%	MU	%	MU	%	MU
<b>Gross Energy Consumption (GEC)</b>	100%	7,517.52	100%	8,844.18	100%	9,174.70
<b>Solar RPO</b>						
Target	0.50%	37.59	0.50%	44.22	0.50%	45.87
Achievement	0.93%	69.60	0.77%	68.52	0.74%	68.34
Shortfall/(Surplus)	-0.43%	(32.01)	-0.27%	(24.30)	-0.24%	(22.47)
<b>Non-Solar RPO</b>						
Target	8.50%	638.99	8.5%	750.25	8.50%	779.85
Achievement	8.56%	643.49	8.48%	750.34	8.52%	781.33
Shortfall/(Surplus)	-0.06%	(4.50)	0.00%	(0.08)	-0.02%	(1.48)
<b>Mini/Micro RPO (Within Non-Solar)</b>						
Target	0.02%	1.28	0.02%	1.50	0.02%	1.56
Achievement	0%	-	0%	-	0.06%	5.91
Shortfall/(Surplus)	0.02%	1.28	0.02%	1.50	-0.05%	(4.35)

Particulars	As approved in Case No 210 of 2017		As approved in Case No 325 of 2019		
	FY2016-17		FY2017-18		Cumulative RPO (Surplus)/ Short fall till end of FY 2017-18
	%	MUs	%	MU	MUs
<b>Gross Energy Consumption (GEC)</b>	100%	8,987.64	100%	9,392.37	
<b>Solar RPO</b>					
Target	1.00%	89.88	2.00%	187.85	463.86
Achievement	0.74%	66.55	0.73%	68.52	402.12
Shortfall/(Surplus)	0.26%	23.32	1.27%	119.33	61.74
<b>Non-Solar RPO</b>					
Target	10.00%	898.76	10.50%	986.20	5,619.58
Achievement	7.45%	669.23	2.14%	200.67	4,619.87
Shortfall/(Surplus)	2.55%	229.54	8.36%	785.53	999.71
<b>Mini/Micro RPO (Within Non-Solar)</b>					
Target	0.02%	1.80	0.02%	1.97	9.68
Achievement	0.00%	-	0.00%	-	5.91
Shortfall/(Surplus)	0.02%	1.80	0.02%	1.97	3.77

Particulars	FY2018-19		FY2019-20		Cumulative RPO (Surplus)/ Short fall till end of FY 2019-20
	%	MU	%	MU	MUs
<b>Gross Energy Consumption (GEC)</b>	100%	9,373.27	100%	9,430.16	
<b>Solar RPO</b>					
Target	2.75%	257.76	3.50%	330.06	1,051.68
Achievement	0.79%	74.16	0.74%	69.92	546.20
Shortfall/(Surplus)	1.96%	183.60	2.76%	260.14	505.48
<b>Non-Solar RPO</b>					
Target	11.00%	1,031.06	11.50%	1,084.47	7,735.11
Achievement	2.29%	214.53	2.35%	221.28	5,055.68
Shortfall/(Surplus)	8.71%	816.53	9.15%	863.18	2,679.43
<b>Mini/Micro RPO (Within Non-Solar)</b>					
Target	0.20%	2.06	0.20%	2.17	13.91
Achievement	0.00%	-	0.00%	-	5.91
Shortfall/(Surplus)	0.02%	2.06	0.02%	2.17	8.00

<b>Source-wise procurement (MUs)</b>	<b>FY 10-11</b>	<b>FY 11-12</b>	<b>FY 12-13</b>	<b>FY 13-14</b>	<b>FY 14-15</b>
Dhursar Solar Power Pvt. Ltd.		0.46	60.13	69.60	68.52
Roof Top Solar plants (consumption)					
OA Solar purchase					
<b>Total Solar</b>	<b>-</b>	<b>0.46</b>	<b>60.13</b>	<b>69.60</b>	<b>68.52</b>
Reliance Innoventures Ltd.	584.51	261.94	69.72	87.02	71.84
AAA & Sons Enterprises Pvt. Ltd.			3.57	3.82	3.31
Vector Green Energy Pvt. Ltd.			54.83	40.72	34.73
Vector Green Energy Pvt. Ltd.				12.93	11.94
Tembhu Power Private Limited			5.55	7.59	4.95
Reliance Power Ltd.			2.43	67.22	77.82
REC Purchase		87.53	504.75	424.20	544.91
OA Non-Solar purchase					0.84
<b>Total Non-Solar</b>	<b>584.51</b>	<b>349.47</b>	<b>640.85</b>	<b>643.50</b>	<b>750.34</b>
<b>Mini/ Micro RPO</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

<b>Source-wise procurment (MW)</b>	<b>FY 10-11</b>	<b>FY 11-12</b>	<b>FY 12-13</b>	<b>FY 13-14</b>	<b>FY 14-15</b>
Dhursar Solar Power Pvt. Ltd.		40	40	40	40
Reliance Innoventures Ltd.	45	45	45	45	45
AAA & Sons Enterprises Pvt. Ltd.	3,375	3,375	3,375	3,375	3,375
Vector Green Energy Pvt. Ltd.	18	18	18	18	18
Vector Green Energy Pvt. Ltd.	6	6	6	6	6
Tembhu Power Private Limited	4.5	4.5	4.5	4.5	4.5
Reliance Power Ltd.				45	45

<b>Source-wise procurement (MUs)</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>	<b>FY 19-20</b>
Dhursar Solar Power Pvt. Ltd.	65.75	65.91	65.45	66.20	56.33
Roof Top Solar plants (consumption)		0.65	3.06	7.96	12.93
OA Solar purchase	2.59				0.66
<b>Total Solar</b>	<b>68.34</b>	<b>66.56</b>	<b>68.52</b>	<b>74.16</b>	<b>69.92</b>
Reliance Innoventures Ltd.	68.91	88.57	76.76	89.60	78.55
AAA & Sons Enterprises Pvt. Ltd.	3.14	2.72	2.23	2.83	2.21
Vector Green Energy Pvt. Ltd.	34.02	38.74	31.71	34.75	37.43
Vector Green Energy Pvt. Ltd.	11.63	12.43	11.53	12.28	11.15
Tembhu Power Private Limited	6.14	9.44	7.58	5.61	3.78
Reliance Power Ltd.	79.55	77.00	70.87	69.46	85.73
REC Purchase	576.00	440.33			
OA Non-Solar purchase	7.85				2.45
<b>Total Non-Solar</b>	<b>787.24</b>	<b>669.23</b>	<b>200.67</b>	<b>214.53</b>	<b>221.28</b>
<b>Mini/ Micro RPO</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

<b>Source-wise procurment (MW)</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>	<b>FY 19-20</b>
Dhursar Solar Power Pvt. Ltd.	40	40	40	40	40
Reliance Innoventures Ltd.	45	45	45	45	45
AAA & Sons Enterprises Pvt. Ltd.	3.375	3.375	3.375	3.375	3.375
Vector Green Energy Pvt. Ltd.	18	18	18	18	18
Vector Green Energy Pvt. Ltd.	6	6	6	6	6
Tembhu Power Private Limited	4.5	4.5	4.5	4.5	4.5
Reliance Power Ltd.	45	45	45	45	45

# EXPRESSION OF INTEREST INVITED FOR PURCHASE OF RENEWABLE POWER FROM MINI AND MICRO HYDRO.

## ANNEXURE - 2

### Background:

Reliance Infrastructure Limited (Rlnfra) is an electricity distribution company with distribution license to supply electricity in and around the suburbs of Mumbai catering to nearly 3 million consumer base.

### Renewable Energy (RE) Purchase from Mini/Micro Hydro:

Rlnfra invites bids to Procure upto 1 MW of renewable energy from the grid connected Mini & Micro Hydel generation projects on long term basis within the state of Maharashtra/outside Maharashtra as under:

- Category 1 – Capacity above 500 kW & upto & including 1 MW at single location.
- Category 2 – Capacity 500 kW & below at single location.

Rlnfra is procuring this Renewable Energy to fulfill its mandatory RPO obligation, the successful bidder shall not claim REC against this RE power sold to Rlnfra.

The tariff applicable for the purchase of power from Mini and Micro Hydel sources shall be as approved by Maharashtra Electricity Regulatory Commission (MERC), according to the date of commissioning of the project.

Interested parties whose plants are commissioned or under commissioning or proposing to set-up may submit their bids in sealed envelope on or before 21/08/2018 to mentioned address.

### Details:

1. Name & Address of the Company
2. Telephone nos., fax, email, website
3. Type of project
4. Date of Commissioning(COD)
5. Location Site of the project
6. Installed Capacity (MW)
7. Capacity intending for sale (MU)
8. Duration for sale
9. Whether firm is already in agreement to sell the RE? If yes, furnish the details of the arrangement.
10. Whether the firm is availing accelerated depreciation benefit?
11. Date from which supply can be made available.
12. Point of injection (Voltage and Substation connected)
13. Technical specifications of the plant machinery
14. Current status of Project w.r.t. the following:
  - a. Land Acquisition
  - b. Evacuation Arrangement
  - c. Equipment
  - d. Financing
  - e. Statutory Clearances

For any clarifications, interested parties may contact office of the Power Procurement Group at below mentioned address.

Rlnfra reserves the right to reject any application without assigning any reason thereof.

### Registered Office:

H Block, 1st Floor, Dhirubhai Ambani Knowledge  
City, Navi Mumbai 400 710  
Rlnfra CIN: L75100MH1929PLC001530

Sd/-  
(Kishor Patil)  
Senior Vice President  
Power Procurement Group  
Reliance Infrastructure Limited

### Address for correspondence:

Power Procurement Group, Reliance Infrastructure Limited, CTS -407/A, (New), 408  
Old Village, Eksar, Devidas Lane Off. SVP Road, Near Devidas Lane Telephone  
Exchange, Borivali (W), Mumbai 400 103.  
Phone No: 022 3009 8747, Fax: +91 22 3009 8788,  
Email:Ghanshyam.thakkar@relianceada.com

**RELIANCE**



**EXPRESSION OF INTEREST INVITED FOR PURCHASE OF  
RENEWABLE POWER FROM MINI AND MICRO HYDRO.**

**Background:**

Adani Electricity Mumbai Limited (AEML) is an electricity distribution company with distribution license to supply electricity in and around the suburbs of Mumbai catering to nearly 3 million consumer base.

**Renewable Energy (RE) Purchase from Mini/Micro Hydro:**

AEML invites bids to Procure upto 1 MW of renewable energy from the grid connected Mini & Micro Hydel generation projects on long term basis within the state of Maharashtra/outside Maharashtra as under:

- Category 1 – Capacity above 500 kW & upto & including 1 MW at single location.
- Category 2 – Capacity 500 kW & below at single location.

AEML is procuring this Renewable Energy to fulfill its mandatory RPO obligation, the successful bidder shall not claim REC against this RE power sold to AEML.

The tariff applicable for the purchase of power from Mini and Micro Hydel sources shall be as approved by Maharashtra Electricity Regulatory Commission (MERC), according to the date of commissioning of the project.

Interested parties whose plants are commissioned or under commissioning or proposing to set-up may submit their bids in sealed envelope on or before 03/09/2019 to mentioned address.

**Details:**

1. Name & Address of the Company
2. Telephone nos., fax, email, website
3. Type of project
4. Date of Commissioning (COD)
5. Location Site of the project
6. Installed Capacity (MW)
7. Capacity intending for sale (MU)
8. Duration for sale
9. Whether firm is already in agreement to sell the RE? If yes, furnish the details of the arrangement.
10. Whether the firm is availing accelerated depreciation benefit?
11. Date from which supply can be made available.
12. Point of injection (Voltage and Substation connected)
13. Technical specifications of the plant machinery
14. Current status of Project w.r.t. the following:
  - a. Land Acquisition
  - b. Evacuation Arrangement
  - c. Equipment
  - d. Financing
  - e. Statutory Clearances

For any clarifications, interested parties may contact office of the Power Procurement Group at below mentioned address.

AEML reserves the right to reject any application without assigning any reason thereof.

Sd/-  
(Kishor Patil)  
Senior Vice President  
Power Procurement Group  
Adani Electricity Mumbai Limited

**Address for correspondence:**

**Power Procurement Group**

**Adani Electricity Mumbai Limited**

CTS -407/A, (New), 408 Old Village, Eksar, Devidas Lane, Off. S V P Road,  
Near Devidas Lane Telephone Exchange, Borivali (W), Mumbai 400 103.

Phone No: 022 3009 8747, Fax: +91 22 3009 8788

Email: [Ghanshyam.thakkar@adani.com](mailto:Ghanshyam.thakkar@adani.com)