

BEFORE MAHARASHTRA ELECTRICITY REGULATORY COMMISSION,  
MUMBAI

IN THE MATTER OF:

Letter dated 27<sup>th</sup> April 2021 bearing reference no. MERC/Tech/RPO/OR/121 dtd 27.04.2021 from Secretary, MERC addressed to Indian Railways (IR) seeking verification of compliance of Renewable Purchase Obligation Targets of Indian Railways as a deemed Distribution Licensee, for FY 2018-19 and 19-20, as specified under RPO Regulations, 2016.

**Affidavit in Reply on behalf of Indian Railways**

I, Kaushalesh Singh, son of Shri.G. Singh, presently, working as Deputy Chief Electrical Engineer, Traction Distribution/ Central Railway, CSMT Mumbai - 400 001, do hereby solemnly affirm and say as follows:

The present affidavit is filed by Indian Railways (IR) in response to Hon'ble Commission's letter dated 27<sup>th</sup> April 2021 referred herein above. The reply/confirmations/justification sought from IR is reproduced herein under;

**1. Reconciliation statement along with rationale with regards to GEC data reported by MSLDC and audited data of IR**

- i. The Energy Consumption data of Railways is compiled by Central Railway after receiving the ABT meter data from MSLDC on Monthly basis and same data is shared to MEDA for Gross Energy Consumption (GEC). The month wise GEC data shared to MEDA by Indian Railways is as under;

GEC submitted by Central Railway	FY 2018-19	FY 2019-20
MONTH	in MUs	in MUs
APR	214.8837443	218.356641
MAY	219.0554127	233.4793779
JUN	209.5267561	220.7635045
JUL	209.7387146	213.131894
AUG	215.4773703	201.675672
SEP	207.1588666	195.353451
OCT	215.0356822	216.6886574
NOV	209.0847654	217.5197098
DEC	223.0144019	229.1930344
JAN	225.0566656	232.0045179
FEB	197.6085596	217.9965948
MAR	228.0149715	179.368037
<b>TOTAL</b>	<b>2573.655911</b>	<b>2575.531092</b>

- ii. The above consumption details were also communicated by Central Railway to MSLDC for verification and reconciliation by MSLDC vide letter dated 06.05.2021 as there is difference of 94.89 MUs between GEC data of IR submitted by Railways to MEDA and by MSLDC to MEDA. A copy of the letter dated 06.05.2020 is attached herewith and mark as Annexure-A.

2. IR should verify the RPO settlement details for FY 2018-19 & FY 2019-20, as submitted by MEDA (copy attached as annexures to this letter) and highlight the discrepancies, if any with proper justification.

Indian Railways had submitted RPO settlement details for FY 2018-19 & FY 2019-20 to MEDA, vide letter dated 14.06.2019 & 01.12.2020 respectively. Indian Railways has verified the RPO settlement details for FY 2018-19 & FY 2019-20 sent by MEDA to MERC vide letter dated 30.01.2020 & 30.12.2020. The RPO settlement data submitted by IR to MEDA & MEDA to MERC is similar. However there is discrepancies in gross energy consumption (GEC) data provided by MSLDC to MEDA. This has been informed to MSLDC by Railways vide letter dated 06.05.2021.

3. IR 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.173 of 2016, Case No.211 of 2017 and Case No. 40 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 2015-16 to FY 2019-20.

i. The year-wise RPO targets of IR from FY 2015-16 to 2019-20 are as under;

Year	Minimum Quantum of purchase (in %) from renewable energy sources (in terms of energy equivalent in kWh)			Gross Energy Consumption of IR in Maharashtra	Solar RPO targets of IR	Non Solar RPO targets of IR
	Solar	Non-Solar	Total	(in MU)	(in MU)	(in MU)
2015-16	0.50%	8.50%	9.00%	653.24	3.266	55.525
2016-17	1.00%	10.00%	11.00%	2282.11	22.821	228.211
2017-18	2.00%	10.50%	12.50%	2419.64	48.393	254.062
2018-19	2.75%	11.00%	13.75%	2573.66	70.776	283.102
2019-20	3.50%	11.50%	15.00%	2575.53	90.144	296.186
<b>Total</b>				<b>10504.18</b>	<b>235.40</b>	<b>1117.086</b>

- ii. Indian Railways submits that Hon'ble commission in its order dated 02.04.2019 in case no. 40 of 2019 has directed IR to meet its RPO shortfall for FY 2015-16 and FY 2016-17, by the end of FY 2018-19. Also, commission directed that, Indian Railways Standalone shortfall for Solar, non-Solar and Mini-Micro Hydro RPO for year FY 2017-18 to be fully met by the end March 2020. To comply with the direction of Hon'ble Commission, Central Railway made effort to execute the agreement with Trader M/s NTPC Vidyut Vyapar Nigam (NVVN) for procurement of Renewable Energy Certificates (REC) from Exchanges. However it took more time than anticipated initially to execute agreement with M/s NVVN and agreement was executed on 18.04.2019. After completing various formalities like registration with exchanges, execution of Member-Client agreement etc procurement of RECs started from Nov-2019.



*And*  
16.6.21



iii. Indian Railways humbly requests Hon'ble commission, RECs procured during FY 2019-20 & 2020-21 by Indian Railways may be adjusted with the RPO shortfall of IR from FY 2015-16 & 2019-20.

iv. Indian Railways submits to Hon'ble commission that, during FY 19-20 Central Railway procured 118176 Non-Solar RECs and 10492 Solar RECs and during FY 20-21 Central Railway procured 232603 Non-Solar RECs and 56219 Solar RECs through M/s NVVN.

v. Indian Railway further submits that, during FY 2019-20 Central Railway availed 67.34 MU wind power from M/s NTPC Vidyut Vyapar Nigam Ltd. (NVVN) to fulfill Non solar RPO obligations of Railways.

vi. The cumulative Non Solar RPO Targets of IR from FY 2015-16 to FY 2019-20 is 1117.086 MUs against which CR has procured total 350.779 MU through REC procurement in FY 2019-20 & 2020-21. Further 67.34 MUs through RE power has been procured from NVVN in FY 2019-20. Accordingly, C.Rly. has almost fulfilled 43.46 % of Non-solar RPO target upto FY 2019-20.

vi. The cumulative Solar RPO Targets of IR from FY 2015-16 to FY 2019-20 is 235.40 MUs against which CR during FY 2019-20 & 2020-21 has procured total 66.711 MU through REC procurement fulfilling around 28.34% of Solar RPO target upto FY 2019-20.

vii. Last purchase of RECs was carried out by CR in the month of June-2020. Afterwards, CR could not procure any RECs due to ban on REC procurement by APTEL vide order dated 24.07.2020 & 25.09.2020, enclosed herewith as **Annexure-B**.

**4. IR 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.**

The actions and efforts undertaken by IR to fulfill RPO targets are as under;

a) During FY 2018-19, Central Railway (through Railway Energy Management Company Ltd(REMCL)) finalized the tendering process for procurement of 54 MW of wind power through Tariff based competitive bidding to fulfill non solar RPO of Indian Railway. Letter of acceptance (LOA) for availing 50.4 MW wind power was awarded to M/s NTPC Vidyut Vyapar Nigam Ltd. (NVVN) on 19.12.2018. Copy of Letter of acceptance issued to M/s NVVN is attached herewith and mark as **Annexure-C**. Central Railway on 06.03.2019 executed an agreement with M/s NVVN for supply of 50.4 MW wind power to Railways from power plant of M/s NALCO situated at Dist. Jat Sangli in Maharashtra for a period of 25 years. The wind power flow to Central Railway under this agreement started on 22.06.2019.



*[Signature]*  
16.6.21

b) During FY 2019-20, Central Railway also executed an agreement with M/s NTPC Vidyut Vyapar Nigam Ltd. (NVVN) on 18.04.2019 for procurement of Power and RECs through exchanges in order to fulfill RPO obligations of Railways and procurement of RECs is being carried out by CR under this agreement.

c) Shortfall in Solar and Non-solar RPO will be fulfilled through the purchase of green power from G-TAM market and procurement of RECs from Exchange.

**5. Indian Railways should submit the details for long term RE procurement plan for meeting future RPO targets**

a) The Indian Railways is planning to source power from upcoming solar park in Madhya Pradesh being developed by Rewa Ultra Mega Solar (RUMS) Ltd, a JV between Solar Energy Corporation of India (SECI) & Madhya Pradesh Urja Vikas Nigam Ltd.(MPUVNL). The capacity of this solar park being developed is 1050 MW out of which 400 MW power will be supplied to Indian Railways in various States. The 65 MW will be availed in Maharashtra by Indian Railways to fulfill its Solar RPO targets. Tender for this project is invited in January 2020 by RUMS and bid due date for 1<sup>st</sup> part is 21<sup>st</sup> June 2021. Expected date of commissioning is March 2023.

b) Indian Railways (through REMCL) on 30.05.2021 has floated tender for 21 MWp pilot solar power plant with storage feature at Buti-Bori near Nagpur (Maharashtra) in developer mode. Expected date of commissioning is April-2023.

c) A Tender for setting up of solar power plants on vacant Railway land parcels in developer mode for 19 MW at two locations in Maharashtra state floated on 04.06.2021. Expected date of commissioning is April-2023.

d) A Tender for setting up of solar power plants on vacant Railway land parcels in developer mode for 22 MW at various locations in Maharashtra state is scheduled to be floated in June-2021, with expected date of commissioning in April-2023.

e) Central Railway has also identified vacant land parcel of 1790 acres above the tracks for setting up of solar power plants. Railway Energy Management Company Ltd (REMCL) is now working on it.

f) As there are very few generators/capacity available from Mini/Micro Hydro, Hon'ble Commission is requested to allow Indian Railways to fulfill shortfall of Mini-Micro Hydro RPO through the purchase of non- Solar RECs.

g) Considering relatively a new licensee, Indian Railways has sincerely evaluated the available options for fulfillment of its RPO. IR is gradually increasing its power procurement under Open Access. Hon'ble Commission may appreciate concrete efforts being taken as indicated above by IR for planning procurement of RE power through






market as well developing it's available land for installation of large capacity Solar plants. Thus developing long term strategy for procurement of Renewable energy to fulfill RPO targets as per MERC regulations.

h) Further Hon'ble commission is aware that, since last year due to COVID-19 Railway traffic has greatly affected resulting in huge impact on Railways. Despite this, Railways is working towards compliance of RPO targets as per MERC regulations and orders via procurement of RECs and wind power.

In view of the above, Hon'ble Commission is requested to allow Indian Railways to meet its Non Solar and Solar RPO shortfall of FY 2015-16, FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 & FY 2020-21 by the end of financial year 2021-22.

  
(Kaushalesh Singh)  
Deputy Chief Electrical Engineer,  
(Traction Distribution)  
Central Railway (कर्षण वितरण)  
उप मुख्य बिजली इंजीनियर  
मुंबई छ.शि.म.ट. म. रेल  
Dy. Chief Electrical Engineer (TRD)  
Central Railway Mumbai C.S.M.T.

Place: Mumbai

Date: 16.06.2021

#### VERIFICATION

I, Kaushalesh Singh, son of Shri. G. Singh, presently, working as Deputy Chief Electrical Engineer, Traction Distribution/ Central Railway, CST Mumbai - 400 001, do hereby solemnly affirm and declare that whatever stated hereinabove is true and correct and I believe the same to be true and correct.

Solemnly Affirmed at Mumbai

Dated this 16<sup>th</sup> Day of June, 2021

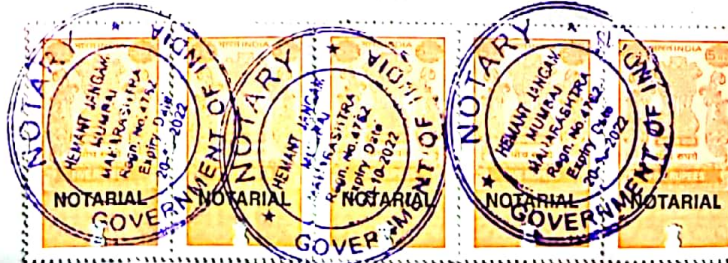
Identified by me

  
Deponent  
उप मुख्य बिजली इंजीनियर (कर्षण वितरण)  
मुंबई छ.शि.म.ट. म. रेल  
Dy. Chief Electrical Engineer (TRD)  
Central Railway Mumbai C.S.M.T.

Before Me



**BEFORE ME**  
HEMANT JANGAM  
NOTARY GOVT. OF INDIA  
MUMBAI, MAHARASHTRA  
16 JUN 2021





CENTRAL RAILWAY

Headquarters Office  
Electrical Branch  
2<sup>nd</sup> Fl., Parcel Office Bldg.  
Mumbai CSMT-400001  
Tele: 54902(Rly), 22621060(MTNL)  
E-Mail: dyceetrdcrly@gmail.com  
cedecrly@gmail.com

LRE.233.P.8.MEDA

Dated: 06.05.2021

The Chief Engineer,  
State Load Dispatch Centre (SLDC)  
Thane-Belapur Road P.O. Airoli  
Navi Mumbai- 400708.


Sub: Verification of compliance of Renewable Purchase Obligation targets of Indian Railways (IR) for FY 2018-19 and FY 2019-20- Case no. 53 of 2021.

Ref: (i) MERC letter no. MERC/Tech/RPO/IR/121 dated 27.04.2021.  
(ii) MEDA letter no. BP/DISCOM-RPO/CR-159/2020-21/3890 dated 30.12.2020.

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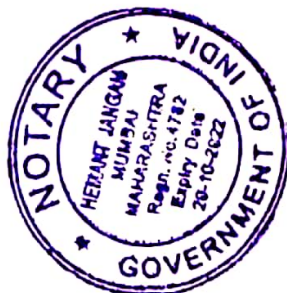
With reference to above subject, Central Railway had submitted RPO compliance data to MEDA and MERC for FY 2018-19 and FY 2019-20. Vide Ref.(i), now MERC has asked all the discoms to provide reconciliation statement with SLDC if any discrepancies found in data submitted by SLDC end and data submitted by DISCOM. It is observed as in Ref.(ii), that GEC for FY 2019-20 submitted from your office and CR is not matching. There is difference of 94.89 mu's between GEC data submitted by SLDC and CR. Central Railway has rechecked GEC data but discrepancies are still there.

In this regard, it is requested to check the GEC data for FY 2019-20 once again at your end, correct it accordingly and intimate it to this office. So that reconciliation statement can be sent to MERC in a given deadline. Please treat this as urgent.

  
(Kaushalesh Singh)  
Dy.CEE/TRD/HQ  
For PCEE/CR

D.A.: Gross Energy Consumption (GEC) data of CR is attached herewith.

Copy to: (i) Director General, MEDA- For information .  
(ii) The Secretary, MERC- For information .  
(iii) CEO/REMCL- For information



GEC submitted by Central Railway	FY 2018-19	FY 2019-20
MONTH	In Mus	In Mus
APR	214.8837443	218.356641
MAY	219.0554127	233.4793779
JUN	209.5267561	220.7635045
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SEP	207.1588666	195.353451
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DEC	223.0144019	229.1930344
JAN	225.0566656	232.0045179
FEB	197.6085596	217.9965948
MAR	228.0149715	179.368037
<b>TOTAL</b>	<b>2573.655911</b>	<b>2575.531092</b>



**COURT-I****IN THE APPELLATE TRIBUNAL FOR ELECTRICITY  
(Appellate Jurisdiction)****DFR NO. 247 OF 2020****Dated: 24<sup>th</sup> July, 2020****Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson  
Hon'ble Mr. S.D. Dubey, Technical Member****In the matter of:****Green Energy Association****.... Appellant(s)****Versus****Central Electricity Regulatory Commission****.... Respondent(s)****Counsel on record for the Appellant(s) :****Mr. Parinay Deep Shah  
Ms. Mandakini Ghosh  
Ms. Ritika Singhal****Counsel on record for the Respondent(s):****Mr. K. R. Sasiprabhu for Caveator-1  
  
Mr. Hemant Singh  
Mr. Lakshyajit Singh Bagdwal for Caveator-2****ORDER**

Proceedings in this matter today are conducted through video conferencing.

We have heard Mr. Sanjay Sen, learned senior counsel arguing for Appellant and Mr. Ramji Srinivasan, learned senior counsel arguing for the Caveator-Captive Power Producers Association and Mr. Gopal Jain, learned senior counsel arguing for BALCO at some length in the presence of Mr. Saurabh Mishra, learned counsel arguing for CERC.





Registry shall number the appeal and the Appellant shall serve all the papers to the impleading applicants also.

It is made clear that if validity for any REC is going to be expired within four weeks, as stated above, the same shall be extended by the concerned authority.

(S.D. Dubey)  
Technical Member

**(Justice Manjula Chellur)**  
**Chairperson**

*pr*



**COURT-1**  
**IN THE APPELLATE TRIBUNAL FOR ELECTRICITY**  
**(Appellate Jurisdiction)**

**APPEAL NO. 118 OF 2020 &**  
**IA NOS. 840, 839 & 1090 OF 2020**

**Dated: 25<sup>th</sup> September, 2020**

**Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson**  
**Hon'ble Mr. S.D. Dubey, Technical Member**

**In the matter of:**

**Green Energy Association**

**.... Appellant(s)**

**Versus**

**Central Electricity Regulatory Commission & Anr.**

**.... Respondent(s)**

Counsel on record for the Appellant(s) : Mr. Parinay Deep Shah  
Ms. Mandakini Ghosh  
Ms. Ritika Singhal

Counsel on record for the Respondent(s): Mr. Saurabh Mishra for R-1  
Mr. R. S. Prabhu for R-2  
Mr. Hemant Singh  
Mr. Lakshyajit Singh Bagdwal  
(for Caveator – BALCO)

**ORDER**

Proceedings in this matter today are conducted through video conferencing.

Heard Mr. Ramji Srinivasan, learned senior counsel arguing for Respondent No.2 and Mr. Gopal Jain, learned senior counsel arguing for the Caveator-BALCO.



Arguments concluded. All parties are at liberty to file written submissions within one week i.e., on or before 02.10.2020 with advance copy to the other side.

**Judgment Reserved.** Interim order, if any shall continue till the judgment is pronounced.

(S.D. Dubey)  
Technical Member(Electricity)

(Justice Manjula Chellur)  
Chairperson

tpd





**REMCL****RAILWAY ENERGY MANAGEMENT COMPANY LIMITED**

(A Joint venture of Indian Railways and RITES Limited)

CIN(U93000DL2013GOI256661)

No.: REMCL/CO/Wind/54 MW/CR/NVVN/LOA

Date: 19.12.18

**LETTER OF AWARD**

Email: pkjena@ntpc.co.in

M/s NTPC Vidyut Vyapar Nigam Limited  
1<sup>st</sup> Floor, Core-5, SCOPE Complex,  
7<sup>th</sup> Institutional Area, Lodhi Road,  
New Delhi-110003

(Kind Attn: Sh. P. K. Jena-AGM)

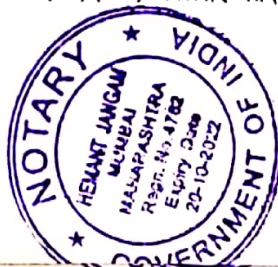
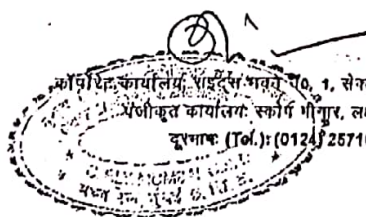
Sub: Supply of Wind Power in the state of Maharashtra.

Ref : 1. RfS No.- REMCL/CO/Wind/54 MW/CR dt: 27.06.2018 & Amendments thereto.  
2. Your Offer comprising Technical Bid and Financial Proposal dt. 04.10.2018

1.0 With reference to your Bid submitted against the subject Tender and acceptance of the terms & conditions of the Bid document, Railway Energy Management Company Ltd. (REMCL) on behalf of the Central Railway (CR) has accepted your Bid for above subject work to supply Wind Power from your plant having capacity of 50.4 MW at Jat Sanghli in Maharashtra as per the following details: -

SN	Descriptions	Wind Power plant capacity	Tariff in Rs./Unit (kWh)
1.	Wind Power Ex-bus (Plant) Tariff fixed for a period of 25 years as per the terms of PPA.	50.4 MW	2.92
2	Maharashtra STU Transmission Charges @ 0.34 Rs/ kWh*	.....	0.34*
3	Maharashtra STU Transmission Losses @ 3.15 %*	.....	0.11*
	Total Per Unit Landed tariff in Rs/kWh at Drawl Point (Railway TSS)		3.37
*The STU transmission charges & transmission losses are tentative. The actual payment of these charges will be governed as per Article 10.2.2 of PPA.			

2.0 You are advised to deposit Rs 62.50 lacs (@ Rs 1.24 Lakh/MW/project) + 18 % GST to REMCL as Success Charges as per Clause 3.12 of Request for Selection (RfS). The payment has to be made in the form of DD/pay order/transfer through RTGS, within 30 days of issuance of LOA.



- 3.0 This letter of Award is being issued by REMCL on behalf of CR with the condition that this award will be effective after signing of Power Purchase Agreement (PPA) by CR with NVVNL.
- 4.0 The Power generated from this plant will be used for meeting Renewable Power Obligations (RPO) of Central Railway in Maharashtra and all the benefits of this plant towards RPO including REC etc. will be passed on to Central Railway by NVVNL. Necessary facilitation & coordination in this regard with state utility, if any, is to be coordinated by NVVNL.
- 5.0 You are requested to execute PPA with CR within 03 month from the date of issue of this LOA as per Clause 3.14 of RfS and other terms & conditions of bid document (RfS & PPA).
- 6.0 You are required to submit Performance Bank Guarantee (PBG) to Central Railway for an amount of Rs.10.08 Crore (@Rs 20 lakh/MW/Project- for 50.4 MW offered capacity) within 30 days of issuance of LOA or before signing of PPA, whichever is earlier, as per Clause 3.11(ii) of RfS.
- 7.0 The terms of payment and all other terms & conditions of this LOA shall be governed as per provisions of Bid document (RfS & PPA & amendments thereto).
- 8.0 This LOA is being issued by REMCL in triplicate on behalf of the Central Railway. You are requested to sign and return two copies of the LOA (one to REMCL office & other to CR) duly accepted & received as an acknowledgement of this LOA within 7 (seven) days of the receipt of this LOA. In case duly signed LOA is not received within the stipulated date, action will be initiated as per terms & conditions of RfS.

*Rupesh Kumar*  
(Rupesh Kumar)  
General Manager

**Copy to:**

1. CEE/CR for appropriate action in respect of signing the PPA.
2. ED/EEM, Railway Board- for kind information.
3. CEO/CFO-REMCL - for kind information
4. Authorized Signatory (REMCL)

*Accepted*

*P. J.*

*26/12/18*

