#### **G** Before the

### MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

13<sup>th</sup> Floor, Centre No.1, World Trade Centre, Cuffe Parade, Mumbai - 400 005 Tel: 022-22163964/65/69 Fax: 022-22163976

E-mail: mercindia@merc.gov.in Website: www.merc.gov.in

#### Case No. 56 of 2021

Case for Verification of compliance of Renewable Purchase Obligation targets by KRC Infrastructure and Projects Pvt. Ltd. for FY 2019-20

#### Coram

Sanjay Kumar, Chairperson I.M. Bohari, Member Mukesh Khullar, Member

#### **Parties**

- 1. KRC Infrastructure and Projects Pvt. Ltd. (KRCIPPL)
- 2. Maharashtra Energy Development Agency (**MEDA**)
- 3. Maharashtra State Load Despatch Centre (MSLDC)

#### Appearance For

KRCIPPL
 Shri. Nitin Chunarkar
 MEDA
 Shri. Manoj Pise
 MSLDC
 Smt. Juelee M. Wagh

#### **ORDER**

Date: 7 September, 2021

1. The MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2016 ('RPO-REC Regulations 2016') specify the Renewable Purchase Obligation (RPO) targets for Obligated Entities, including KRCIPPL as Deemed Distribution Licensee, for FY 2019-20. The RPO targets specified in Regulation 7.1 are as below:

Year	Quantum of purchase (in %) from Renewable Energy sources (in terms of energy equivalent in kWh)									
	Solar	Solar Non-Solar Total (other RE)								
	(a)	(b)	(c)							
2016-17	1.00%	10.00%	11.00%							
2017-18	2.00%	10.50%	12.50%							
2018-19	2.75%	11.00%	13.75%							
2019-20	3.50%	11.50%	15.00%							

Provided that each Distribution Licensee shall meet 0.2% per year of its Non-solar (other RE) RPO target percentage for the period from FY 2016-17 to FY 2019-20 by way of purchase from Mini Hydro or Micro Hydro Power Projects;

2. Regulation 12 of the RPO-REC Regulations, 2016 empowers the Commission to deal with shortfalls in compliance of RPO targets by Obligated Entities as follows:

#### "12. RPO Regulatory Charges

12.1 If the Obligated Entity fails to comply with the RPO target as provided in these Regulations during any year and fails to purchase the required quantum of RECs, the State Commission may direct the Obligated Entity to deposit into a separate fund, to be created and maintained by such Obligated Entity, such amount as the Commission may determine on the basis of the shortfall in units of RPO, RPO Regulatory Charges and the Forbearance Price decided by the Central Commission; separately in respect of Solar and Non-Solar RPO:

Provided that RPO Regulatory Charges shall be equivalent to the highest applicable preferential tariff during the year for Solar or Non-Solar RE generating sources, as the case may be, or any other rate as may be stipulated by the State Commission:

Provided further that the fund so created shall be utilised, as may be directed by the State Commission."

- 3. Through its Order dated 1 July 2010 in Case No. 21 of 2010, the Commission designated MEDA, Pune as the State Agency to undertake the functions envisaged under the Regulations.
- 4. As per Regulation 10.4 of the RPO-REC Regulations 2016, a Distribution Licensee is required to submit, at the end of each financial year, a detailed statement of energy procured from Renewable Energy (**RE**) sources, certified by its auditors.
- 5. The Commission had taken on record the status of KRCIPPL, being a Special Economic Zone (SEZ) Developer, as a Deemed Distribution Licensee under the provisions of the Electricity Act (EA), 2003. KRCIPPL started its operations as a Distribution Licensee from 1 June 2019 (during FY 2019-20). Thus, FY 2019-20 is first financial year in which KRCIPPL has to comply with stipulated RPO targets. The Commission is verifying the compliance of the same through this proceedings.
- 6. In accordance with Regulation 9.5, MEDA, vide its letter dated 30 December 2020, submitted the RPO settlement data for FY 2019-20 in respect of KRCIPPL which is summarized below:

RPO settlement data for KRCIPPL as furnished by MEDA							
Itom	FY 20	FY 2019-20					
Item	%	MU					
Gross Energy consumption (GEC)	100%	6.340					
Solar RPO							
Target	3.50%	0.222					
Achievement	0.000%	0.000					
Shortfall /(Surplus) 3.500% 0.222							
Non-Solar RPO							
Target	11.50%	0.73					

RPO settlement data for KRCIPPL as furnished by MEDA						
Item	FY 20	FY 2019-20				
Item	%	MU				
Achievement	0.00%	0.00				
Shortfall /(Surplus)	11.50%	0.73				
Mini-Micro RPO(Within Non-Solar)						
Target	0.20%	0.0015				
Achievement	0.00%	0.000				
Shortfall /(Surplus)	0.20%	0.0015				
Total RE to be procured as per the Target	15.00%	0.951				
Total Actual RE Procured	0.00%	0.000				
Total Shortfall/(Surplus)	15.00%	0.951				

- 7. According to MEDA, the RPO status of KRCIPPL for FY 2019-20 is as below:
  - a. In Solar RPO, KRCIPPL has a shortfall of 0.222 MU.
  - b. In Non-Solar RPO, KRCIPPL has a shortfall of 0.73 MU.
  - c. In Mini/Micro Hydro RPO (within Non-Solar RPO), KRCIPPL has a shortfall of 0.0015 MU.
- 8. The Commission asked KRCIPPL to submit its response to the data furnished by MEDA. Further, the Commission sought replies from KRCIPPL on the following points:
  - a. Reconciliation statement along with rationale with regards to GEC data reported by MEDA and audited data of KRCIPPL.
  - b. Detailed statement for project wise energy procurement in MU 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 2019- 20.
  - c. Detailed list of action and efforts undertaken by it prior to and during FY 2019-20 to ensure compliance of RPO targets in respect of Solar RPO, Non-Solar RPO and Mini/Micro Hydro RPO.
  - d. Details of long term RE procurement plan (in MU and corresponding MW) for meeting the future RPO targets.
- 9. In its response dated 18 May 2021, KRCIPPL stated as follows:
  - A. Reconciliation statement along with rationale with regards to GEC data reported by MEDA and audited data of KRCIPPL.
  - 9.1. KRCIPPL has submitted the data along with its response which is in line with the data submitted by MEDA and no discrepancies have been observed.

FY	%	2019-20	Cumulative
MU		6.34	Shortfall /
		0.5 1	(Surplus)
Solar	3.50%	0.222	0.222

REC		0.000	0.000
Shortfall/(Surplus) - SL		0.222	0.222
Non-Solar	11.50%	0.729	0.729
REC		0.000	0.000
Shortfall/(Surplus) -			
NSL		0.729	0.729

- B. Detailed statement for project wise energy procurement in MU 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 2019- 20.
- 9.2. There are no specific contracts entered with renewable generators as on 31 March 2021.
- C. Detailed list of action and efforts undertaken by it prior to and during FY 2019-20 to ensure compliance of RPO targets in respect of Solar RPO, Non-Solar RPO and Mini/Micro Hydro RPO.
- 9.3. KRCIPPL's operations in SEZ area, as a distribution licensee, commenced in June 2019 with lower demand during first two quarters. After commencement, KRCIPPL was having discussion with exchanges regarding type of registration to be opted for procurement of RECs. From earlier experiences with group Discoms, KRCIPPL was taking efforts to opt for cost effective direct membership on exchange platforms which would have benefitted its consumers. However, since the direct membership option worked out to be commercially unviable, KRCIPPL processed with registration on IEX platform as a client of trader member for the purpose of procurement of RECs in June 2020. However, immediately after registration on platform, REC sessions were put on hold by Hon'ble Appellate Tribunal of Electricity (APTEL) from July 2020. Since then, the sessions are on hold which have resulted in entire shortfall of RPO since commencement of operations in 2019.
- 9.4. The limited demand at the time of commencement of operations got extended due to widespread pandemic which has led to extension of deadline of projects within SEZ area. This limited demand puts technical restrictions on KRCIPPL to enter into bilateral agreement with RE generators for sourcing actual green power to meet RPO targets.
- 9.5. However, since mid of FY 2020-21, KRCIPPL has seen marginal increase in demand and some stability in demand patterns. KRCIPPL submits that with the stable demand patterns in place, it is proposing to invite tender through combined power purchase process with other K Raheja Group Discoms as approved by the Commission to source green energy.
- D. Details of long term RE procurement plan (in MU and corresponding MW) for meeting the future RPO targets.
- 9.6. The Commission in its Order dated 30 March 2020 in Case No. 329 of 2019, has allowed KRCIPPL to fulfil its renewable purchase obligations till end of FY 2021-22 through procurement of RECs. However, KRCIPPL is in the process to issue a tender inviting bid from Non-Solar generators for procurement of actual green power.

9.7. Due to widespread global pandemic since March 2020, it has witnessed steep fall in its electricity demand vis-à-vis sales projections. This has severely hampered the revenues of the distribution licensee. KRCIPPL would like to initiate the green energy procurement with gradual year on year increase and thereby balancing its overall cost of power purchase. As approved by the Commission in its Order dated 23 January 2021 in Case No. 231 of 2020, KRCIPPL along with other two distribution licensees of K. Raheja Corp shall initiate the process to request proposals from generators through competitive bidding process. Details are as mentioned below:

Period	Туре	Quantum (MW)	Quantum (MU)
01.10.2021 – 30.09.2025	Non-Solar	1.25	1.75

- 9.8. Apart from the base quantum which shall be available from the above- mentioned contract, KRCIPPL has been procuring power through Green Term Ahead Market (G-TAM) segment and other products if introduced in future on exchanges or any other platform which is transparent, neutral and offer competitive pricing.
- 9.9. Further, KRCIPPL is assessing the requirement of its consumers to meet the requirement specific to green power and is committed to meet the RPO target and consumer demand for green energy.

#### **Regulatory Process**

- 10. Through a Public Notice dated 16 June 2021 published in the Loksatta and Maharashtra Times (Marathi) and Times of India and Indian Express (English) daily newspapers, the Commission invited suggestions and objections considering the submissions of MEDA and KRCIPPL. The Commission also impleaded MEDA and MSLDC as Parties. An online Public e-Hearing was held on 13 July 2021.
- 11. The summary of RPO compliance of KRCIPPL for FY 2019-20, based on details provided by MEDA and KRCIPPL, is at Annexure-1 of this Order. The list of persons who gave their comments in writing or made oral submissions during the Public Hearing is at Annexure-2 (A). The list of persons present at the Public Hearing is at Annexure-2(B). (These lists include persons/organizations concerned with the RPO compliance verification hearings held on the same day in respect of the other Distribution Licensees also.)
- 12. At the Public e-Hearing, KRCIPPL reiterated the points regarding its compliance of RPO targets as made in its written submissions.

#### Suggestions/Objections received

13. Shri Kiran Chudhari vide email dated 30 June 2021 shared paper cuttings and objected levying of Green Tariff for supply of green energy by Distribution Licensee.

#### Commission's Analysis and Ruling

14. The Commission notes that the KRCIPPL by its submission dated 18 May 2021 has confirmed that there is no discrepancy with the data submitted by MEDA for FY 2019-20. The status of achievement of RPO targets by KRCIPPL, as determined by the Commission considering the details provided by MEDA, MSLDC and KRCIPPL, is as shown in table below:

RPO settlement data for KRCIPPL (Approved)							
Item	FY 20	19-20	Cumulative RPO (Surplus)/ Short fall till end of FY 2019-20				
	%	MU	MU				
Gross Energy consumption	100%	6.340					
Solar RPO							
Target	3.50%	0.222	0.222				
Achievement	0.00%	0.000	0.000				
Shortfall /(Surplus)	3.50%	0.222	0.222				
Non-Solar RPO							
Target	11.50%	0.729	0.729				
Achievement	0.00%	0.00	0.00				
Shortfall /(Surplus)	11.50%	0.729	0.729				
Mini-Micro RPO(Within No							
Target	0.20%	0.0015	0.0015				
Achievement	0.00%	0.00	0.0000				
Shortfall /(Surplus)	0.20%	0.0015	0.0015				

#### '-' or () indicates surplus

#### 15. The Commission notes that KRCIPPL has:

- a. Shortfall in its standalone Solar RPO targets for FY 2019-20 by 0.222 MU. Thus, the cumulative Solar RPO shortfall at the end of FY 2019-20 is 0.222 MU.
- b. Shortfall in its standalone Non-Solar RPO targets for FY 2019-20 by 0.729 MU. Thus, the cumulative Non-Solar RPO shortfall at the end of FY 2019-20 is 0.729 MU.
- c. Shortfall in standalone Mini/Micro Hydro RPO targets (within Non-Solar RPO) for FY 2019- 20 by 0.0015 MU. Thus, the cumulative Mini/Micro Hydro RPO shortfall at the end of FY 2019-20 is 0.0015 MU.
- 16. The Commission notes that KRCIPPL has not utilized any source, either RE or REC to meet its RPO targets. KRCIPPL in its submission has provided justification citing low power demand during the initial phase of operationalization and higher charges of direct registration on power exchanges for buying RECs considering very low requirement of RECs (equivalent to 0.951 MU). The Commission notes that through its Order dated 23 January 2021 in Case No. 231 of 2020 has already allowed proposal of K Raheja Group Dicoms (including KRCIPPL) for combined power procurement including Renewable Energy. The Commission also notes that KRCIPPL has initiated efforts to procure RE (through bidding and G-TAM) to meet its RPO targets.

- 17. Therefore, although KRCIPPL has not been able to meet its RPO targets for FY 2019-20, but considering efforts taken by it, which would help it to meet its Solar and Non-Solar RPO targets on cumulative basis including past RPO shortfall, the Commission thinks it appropriate to not take any action against KRCIPPL as envisaged in Regulation 12 of MERC RPO Regulations 2016.
- 18. Accordingly, the Commission allows KRCIPPL to carry forward its RPO shortfall till FY 2019-20 to future years. The Commission notes that next Control Period i.e. FY 2020-21 to FY 2024-25 is governed by the 'MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019' (RPO REC Regulations 2019). Said Regulations allows carry forward of shortfall from FY 2020-21 and FY 2021-22 to FY 2022-23, subject to the provision of Penalty in form of reduction in the Annual Revenue Requirement (ARR). The relevant excerpts from the RPO-REC Regulations 2019 are reproduced below:
  - "12.3 Any shortfall in meeting the minimum percentage of RE as specified in Regulation 7 may be carried forward from FY 2020-21 and FY 2021-22 to FY 2022-23 and from FY 2023-24 to FY 2024-25 and Obligated Entity shall meet such shortfall on cumulative basis by 31 March 2023 and 31 March 2025, respectively;

Provided that Distribution Licensee shall be subjected to reduction in Annual Revenue Requirement at a rate of Rs 0.10 per kWh for cumulative shortfall in total RE procurement target for each year;

Provided further that other Obligated Entities shall be subjected to penalty of Rs. 0.10 per kWh for cumulative shortfall in total RE procurement target for each year;

Provided further that any cumulative shortfall in RE procurement as on 31 March 2023 and/or 31 March 2025 shall not be carried forward for next year and be adjusted by imposing reduction in ARR for Distribution Licensees and imposing penalty for other Obligated Entities, at rate of floor price of respective REC as on that date;

Provided further that if Obligated Entity is able to demonstrate that even after taking all possible measures including procurement of RECs, it is not able to meet RPO then the Commission may reduce the penalty amount subject to conditions as may be stipulated in that Order."

Thus, as per above Regulations, RPO shortfall cannot be allowed to be carried forward beyond 31 March 2023. Hence, the Commission allows KRCIPPL to meet its cumulative shortfall till FY 2019-20 by 31 March 2023, failing which it will be liable for penal action as per above stated Regulations.

19. Further, the Commission notes that the MoP by its Order dated 29 January 2021 has notified the RPO trajectory for the Hydro Energy Sources i.e. the Hydro Power Obligation (HPO). As per the Order, the large hydro power projects (above 25 MW) which have come into commercial operation after 8 March 2019 shall be the eligible sources for HPO:

- "4. On 8th March 2019, the Government had issued an order detailing various policy measures to promote hydropower sector in India inter-alia declaring large hydropower projects including pumped storage projects having capacity of more than 25 MW (LHPs) which come into commercial operation after 8.3.2019 as renewable energy source and to specify Hydropower Purchase Obligation (HPO) within Non-Solar Renewable Purchase Obligation (RPO).
- 5 In compliance of the above decision and with the objective to add 30,000 MW of hydropower capacity by the year 2029-2030, Ministry of Power has prepared a revised trajectory of RPO including long term trajectory for HPO considering the LHPs commissioned after 8<sup>th</sup> March 2019.
- 6 In super-session of orders dated 22<sup>nd</sup> July 2016 and 14<sup>th</sup> June 2018, Ministry of Power hereby specifies the following RPO Trajectory-

Year	Solar RPO	НРО	Other Non-	Total Non-	Total RPO	
		нго	Solar RPO	Solar RPO		
2019-20	7.25%	-	10.25%	10.25%	17.50%	
2020-21	8.75%	-	10.25%	10.25%	19%	
2021-22	10.50%	0.18%	10.50%	10.68%	21.18%	
2022-23		0.35%				
2023-24	]	0.66%				
2024-25	T. 1	1.08%		T. 1	T. 1	
2025-26	To be	1.48%	To be	To be	To be	
2026-27	specified	1.80%	- specified	specified	specified	
2027-28	later	2.15%	– later	later	later	
2028-29	1	2.51%				
2029-30	1	2.82%	1			

....."

The Commission has not yet amended its RPO Regulations 2019 to include HPO. However, the Commission notes that its RPO Regulations 2019 is based on broad principle of specifying achievable RPO targets as mandatory target and target set by the Central Government as overall target. Non achievement of mandatory target is liable for penalty, whereas obligated entities are incentivized (Rs. 0.25/kWh) for achieving overall target set by the Central Government. Relevant part of MERC RPO Regulations 2019 is reproduced below:

"12.2 Distribution Licensee shall endeavor to achieve total RPO target notified by the Central Government and for doing so it will get incentive of Rs. 0.25 per kWh for RE procured above the minimum percentage specified in Regulation 7 upto the percentage notified by the Central Government as under or as may be notified from time to time:

,,,

In view of above, HPO specified by the Ministry of Power vide order dated 29 January 2021 forms integral part of above provision of RPO Regulations 2019. Hence, Distribution Licensee would be eligible for above incentive of Rs. 0.25/kWh for meeting HPO targets

- specified by the Central Government. Accordingly, KRCIPPL shall endeavor to achieve RPO and HPO targets specified by the Central Government.
- 20. The Commission notes that only objection received during the public process is from Shri. Kiran Chudhari which relates to Green Tariff option approved by the Commission for consumers who voluntarily wish to procure only green energy from Distribution Licensee. Shri. Chudhari has objected to levying extra charge for such supply of Green Energy. However, this issue is not part of the present proceeding beside the fact that it is just an enabling provision, the Commission is not addressing the same in this proceeding.
- 21. Next RPO verification process under RPO Regulations 2019 will be conducted for FY 2020-21 and FY 2021-22 as part of Mid Term Review process under MYT Regulations 2019.
- 22. Hence, the Following Order:

#### **ORDER**

- 1) The Case No. 56 of 2021 stands concluded with the following ruling:
  - a. KRC Infrastructure and Projects Pvt. Ltd. has shortfall in its standalone Solar RPO targets for FY 2019-20 by 0.222 MU. The cumulative Solar RPO shortfall at the end of FY 2019-20 is 0.222 MU.
  - b. KRC Infrastructure and Projects Pvt. Ltd. has shortfall in its standalone Non-Solar RPO targets for FY 2019-20 by 0.729 MU. The cumulative Non-Solar RPO shortfall at the end of FY 2019-20 is 0.729 MU.
  - c. KRC Infrastructure and Projects Pvt. Ltd. has shortfall in standalone Mini/Micro Hydro RPO targets (within Non-Solar RPO) for FY 2019- 20 by 0.0015 MU. The cumulative Mini/Micro Hydro RPO shortfall at the end of FY 2019-20 is 0.0015 MU.
- 2) KRC Infrastructure and Projects Pvt. Ltd. to fulfill its cumulative RPO shortfall till FY 2022-23.

Sd/- Sd/- Sd/(Mukesh Khullar) (I.M. Bohari) (Sanjay Kumar)
Member Member Chairperson



# $\underline{Annexure-1}$ Summary of RPO compliance by KRCIPPL for FY 2019-20, as submitted by MEDA and KRCIPPL (in MU)

GEC(Gross			Solar RPO		Non-Solar RPO			Mini/Micro Hydro		
Discom- RPO targets compliance for FY 2019-20	Energy Consumption) (Transmission Loss adjusted) (MU's)	Target (3.5%)	Met	Shortfall (+ve) / Surplus (-ve)	Target (11.50%)	Met	Shortfall (+ve) / Surplus (-ve)	Target (0.2%) within Non-Solar RPO	Met	Shortfall (+ve) / Surplus (-ve)
As per MEDA	6.34	0.222	0	0.222	0.729	0	0.729	0.0015	0	0.0015
As per KRCIPPL	6.34	0.222	0	0.222	0.729	0	0.729	*	*	*

<sup>\*</sup>KRCIPPL has not submitted the bifurcated targets for the Mini/Micro Hydro RPO Targets within Non-Solar category

#### **Annexure -2**

## A] List of those who submitted written comments/suggestions or made oral submissions at the Online Public e-Hearing

1. Shri Kiran Chudhari

#### B] List of persons at the Online Public e-Hearing:

- 1. Shri. Nitin Chunarkar, GEPL, MBPPL & KRCIPPL
- 2. Shri. Nikhil Chauganjkar, GEPL, MBPPL & KRCIPPL
- 3. Shri. Ajit Pujari, GEPL, MBPPL & KRCIPPL
- 4. Smt. Juelee M. Wagh, MSLDC
- 5. Shri. Manoj Pise, MEDA