

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400 005

Tel. No. 022 22163964/65/69 – Fax 022 22163976

E-mail mercindia@merc.gov.in

Website: www.mercindia.org.in / www.merc.gov.in

Case No. 159 of 2013

In the matter of
**Petition filed by Tata Power Company Ltd for Cumulative fulfilment of Solar RPO
target by FY 2015-16.**

Shri Vijay L. Sonavane, Member

Smt. Chandra Iyengar, Member

Tata Power Company Ltd-(Distribution)

.....Petitioner

Representatives present during the hearing:

For the Petitioner:

.....Smt Swati Mehendale

ORDER

Dated: 20 December, 2013

The Tata Power Company Ltd- Distribution, (hereafter Petitioner or TPC-D) has submitted a Petition on 23 October, 2013 under MERC (Renewable Purchase Obligation, its compliance and Implementation of REC Framework) Regulations, 2010 for Cumulative fulfillment of Solar RPO target by FY 2015-16. TPC-D submitted that, vide *Suo-Motu* Order dated 5 December, 2012 in Case No. 99 of 2012 the Commission had directed TPC-D to fulfill the RPO targets for the years FY 2010-11, FY2011-12 and FY 2012-13 cumulatively by the end of the FY 2012-13.

2.0 The prayers of the Petitioner are as follows;
“

1. *Take into consideration the efforts taken by Tata Power-D in procuring the RE for FY 2011-12 & FY 2012-13 and the inherent shortage of solar generating capacity in the country, allow Tata Power-D to fulfill Solar RPO by end of Control Period i.e. FY 2015-16.*

2. *Condone the levy of Regulatory Charges for the quantum of shortfall in Solar RPO target till 31st March 2016.*

3. *Condone any inadvertent omissions/errors/shortcomings and permit Tata Power to add /change/modify /alter this filling and make further submissions as may be required at a future date.*
4. *Issue any other directions it deems fit. ”*

3. The Petitioner in its Petition submitted as under;

3.1 RPO status for FY 2010-11, 2011-12 and 2012-13;

FY 2010-11

RE Source	Requirement at InSTS (MU's)	Obligation (%)	Obligation (MU's)	Actual purchased (MU's)	Surplus (+ve)/Shortfall (-ve) (MU's)
Non-Solar	4620	5.75	265.62	219.17	(46.45)
Mini Hydro		0.00	0.03	0	(0.03)
Solar		0.25	11.55	0.053	(11.497)
Total		6.00	277.19	219.22	(57.97)

FY 2011-12

RE Source	Requirement at InSTS (MU's)	Obligation (%)	Obligation (MU's)	Actual purchased (MU's)	Surplus (+ve)/Shortfall (-ve) (MU's)
RE other than Mini Hydro and Solar	6124.84	6.74	413.01	414.91	1.9
Mini Hydro		0.01	0.41	0.41	0
Total Non-Solar		6.75	413.43	415.33	1.9
Solar		0.25	15.31	4.12	(11.19)
Total		7.00	428.74	419.45	(9.29)

FY 2012-13

RE Source	Requirement at InSTS (MU's)	Obligation (%)	Obligation (MU's)	Actual purchased (MU's)	Surplus (+ve)/Shortfall (-ve) (MU's)
RE other than Mini Hydro and Solar	6948.82	7.74	537.99	583.19	45.2
Mini Hydro		0.01	0.54	0.57	0.03

Total Non-Solar		7.75	538.53	583.76	45.23
Solar		0.25	17.37	4.7	(12.67)
Total		8.00	555.91	588.46	32.55

Cumulative from FY 2010-11 to FY 2012-13

RE Source	Obligation (MU's)	Actual purchased (MU's)	Surplus (+ve)/Shortfall (-ve) (MU's)
RE other than Mini Hydro and Solar	1216.63	1217.27	0.64
Mini Hydro	0.98	0.98	0
Total Non-Solar	1217.6	1218.25	0.65
Solar	44.23	8.88	(35.35)
Total	1261.84	1227.13	(34.71)

3.2 Petitioner submitted that, there will be surplus of 0.65 MUs of non-Solar RPO till FY 2012-13. However, there is total shortfall of 35.35 MUs against cumulative solar RPO of 8.88 MUs.

3.3 Reasons for not meeting Solar RPO Target;

a) Tata Power had tied up solar generating capacity at Mulshi, Pune for 3 MW and at Carnac, Roof top solar of 60kWp. But due to sudden rise in sales in FY 2012 tied up capacity became insufficient.

b) There is inherent shortage in solar generation in the country. As against requirement of around 3500 MW capacity to meet solar RPOs of all States, there is only about 1440 MW of installed capacity i.e. only 41 % of total requirement.

c) TPC-D made long term contract of 25 MW Solar power at Dinganchi, Satara which is going to be commissioned in Year 2014. Therefore TPC-D approached various solar developers for short term solar RPO requirement. But none of them came forward for short term supply. Solar REC traded during FY 2012-13 were also very low. Against total bid of 3850 RECs by TPC-D, it received only 306 against total 14646 REC traded in the market during FY 2012-13. (As per NLDC monthly report). As against 35 MUs of RPO obligation for TPC-D, only approximately 14 MUs were available in the REC market.

3.4 In view of the above Petitioner submitted following Action Plan to meet RPO target by FY 2015-16;

a. TPC-D has cumulative shortage of 35.35 MUs upto FY 2013. As per MYT order in Case No. 179 of 2011 for TPC-D, it has obligation to purchase 120.01 MUs for FY 2013-14 to FY2015-16. Hence TPC-D has total Solar Obligations of 155.37 MUs.

b. Considering Industry standard of 1.5 MU/ MW/ year output for Solar PV projects the annual requirement work out to be 34.53 MW approximately for FY 2013-14 to FY2015-16. Therefore to meet this requirement, TPC-D has made long-term contract with 25 MW, Solar Power Station of Tata Power at Dhiganchi in Satara District which is expected to commission in FY 2014.

3.5 Status of Dhiganchi Solar Project till October, 2013;

a. Vendors for plant equipment have been finalised and equipment has been mobilised to the site.

b. PPA has been signed with TPC-D. After commissioning, the plant is expected to produce 37.5 MUs annually.#

3.6 Expected Solar Energy available during FY 2013-14 to FY 2015-16;

Total Solar generation available to TPC-D during FY 2013-14 to FY 2015-16

				In MU's
Particular		FY 2013-14	FY 2014-15	FY 2015-16
Generation from 3 MW form Mulashi Solar plant	a	4.33	4.33	4.33
Dhiganchi Power Station of Tata Power(expected)*	b	3.75	43	43
Solar Roof Top Plant	c	0.07	0.07	0.07
REC Solar Purchase	d	0.31	0.31	0.31
Total	e= a+b+c+d	8.45	47.70	47.70

*Solar generation for Dhiganchi Power Station considered as 10% of the total generation possible in the first year.

TPC-D has submitted that, TPC-D in this Petition had inadvertently mentioned at one place the generation capacity from Dhiganchi as 37 MU's instead of 43 MU's.TPC-D further regretted the error and mentioned that the expected generation from this plant is 43 MU's as shown in the table 7 of the Petition.

3.7 Expected RPO status at the end of FY 2015-16;

In MU's				
Particular		FY 2013-14	FY 2014-15	FY 2015-16
Opening balance including Shortfall upto FY 2013	a	-35.35	-63.44	-55.64
Solar Target	b	36.54	39.90	43.57
RPO Met	c	8.45	47.7	47.7
Shortfall	d=c-b	-28.09	7.8	4.13
Closing	e= a+d	-63.44	-55.64	-51.51

3.8 Petitioner has submitted that, considering above scenario there is still shortfall of 51.51 MUs till FY 2015-16. Hence, TPC-D has considered following points for meeting shortfall;

- a) Considering the Solar Generation capacity addition as per MNRE projection of about 3000 MW in country, certain % may be sold through REC, which may be available.
- b) Petitioner submitted that it may add additional generating capacity in Solar generation as per its strategy plan.

4. Vide notice dated 18 November, 2013 the Commission scheduled the first hearing in the matter on 4 December, 2013.

5. During the hearing, Petitioner submitted that, the shortfall in RPO compliance in FY 2010-11 was 57.97 MU's which was including all types of Renewable sources, whereas in FY 2011-12, the shortfall of 11.19 MU's was only in Solar Obligations. Petitioner further submitted that, vide Suo-Motu Order dated 5 December, 2012 in Case No. 99 of 2012 the Commission had directed TPC-D to fulfil the RPO targets for the years FY 2010-11, FY 2011-12 and FY 2012-13 cumulatively by the end of the FY 2012-13; accordingly the total RPO compliance required to be done by TPC-D, cumulatively at the end of FY 2012-13, was 623.17 MU's including all shortfalls of Solar and Non-solar RPO.

6. Regarding status of RPO upto FY2012-13, Petitioner submitted that, , the total RPO to be met for Non-Solar was 583.11 MU's and TPC-D has been able to met 583.76 MU's for the same, hence it has been able to fulfil its obligation in Non-Solar including Mini-hydro. However, in case of Solar RPO it was possible to meet only 12 % of targets, i.e. only 4.70 MU's as against the target requirement of 40.06MU's.

7. As regards to the efforts taken, for meeting the Solar RPO target, Petitioner submitted that, Tata power had tied up capacity with Solar at Mulshi (3MW) and at Carnac (Roof Top Solar Generating capacity of 60 kWp), but due to increase in sale of TPC-D in FY 2011-12

and FY2012-13, the Solar RPO requirement went up substantially by around 7 to 8 MU's and it became insufficient to meet the Solar RPO targets for TPC-D. Further, Petitioner submitted that, it has also tried to fulfil the above shortage by purchasing Solar REC, however the quantum of Solar REC traded in the market during FY 2012-13 was very low to the tune of 14 MU's including all REC's.

8. As regards to the action plan for meeting the cumulative Solar RPO target by FY 2015-16, Petitioner submitted that, it has made a long term contract with 25 MW Solar Generating Station of Tata Power at Dhiganchi, Satara District, which is expected to commission in FY 2014 and once commissioned the generating plant is expected to generate around 43 MU's annually. Petitioner further submitted that, based on the projected Solar Generation/ REC available, there might be shortfall of 51.51 MUs' in Solar RPO at the end of FY2015-16 for TPC-D and the shortfall is likely to be met with following measures;

- c) Considering the Solar Generation capacity addition as per MNRE projection of about 3000 MW in country, certain % may be sold through REC, which may be available.
- d) An additional generating capacity in solar generation may be added as per its strategy plan.

Commission's Ruling:

9. **Having heard the Petitioner and after considering the relevant material placed on record, the Commission is of the view that with the proposed addition of Solar power from 25 MW Dhiganchi Solar power plant, Petitioner has given adequate justification to demonstrate that it has undertaken the efforts in procuring Solar power in order to meet its RPO targets and in spite of the efforts undertaken by it, it faced a genuine difficulty in meeting its solar RPO target. Further, the Commission opines that any constraint regarding availability of Solar power or Solar RECs for meeting Solar RPO targets in future could be mitigated by tying up adequate quantum and sources for Solar power in a timely manner through advance actions and/or timely purchase of Solar RECs from the market.**

10. **As per Regulation 18.1 of MERC (Renewable Purchase Obligation, its compliance and Implementation of REC Framework) Regulations, 2010, the Commission has powers to relax or waive any of the provision of the said Regulations after giving an opportunity of being heard to parties likely to be affected. Relevant extract of said Regulations is as under:**

“18.1 The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected may relax or may waive any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.”

11. Thus, the Commission hereby relaxes/waives the Solar RPO targets as stipulated under Regulation 7.1 of the MERC (Renewable Purchase Obligation, its compliance and Implementation of REC Framework) Regulations, 2010 , for TPC-D for FY 2010-11, FY 2011-12 and FY 2012-13 and directs TPC-D to fulfil the Solar RPO target on a cumulative basis by FY 2015-16.

12. Regarding the shortfall/surplus, if any, in RPO targets for non-solar (including mini/micro hydro targets) for FY 2010-11 and FY 2011-12 and RPO targets for FY 2012-13 cumulatively before 31 March, 2013, the same shall be reviewed by the Commission in the separate proceeding for Verification and Compliance of RPO targets for FY 2012-13 as specified under MERC (Renewable Purchase Obligation, its compliance and Implementation of REC Framework) Regulations, 2010.

13. In this Order, the Commission has relaxed/waived the Solar RPO targets as stipulated under Regulation 7.1 of the MERC (Renewable Purchase Obligation, its compliance and Implementation of REC Framework) Regulations, 2010, for TPC-D for FY 2010-11, FY 2011-12 and FY 2012-13 and directs TPC-D to fulfil the Solar RPO target on a cumulative basis by FY 2015-16. However, since TPC-D's license is expiring on 15 August, 2014 this relaxation will continue subject to grant of licence to TPC-D for distribution of electricity.

With the above, the Petition filed by TPC-D in Case No. 159 of 2013 stands disposed of.

Sd/-
(Chandra Iyengar)
Member

Sd/-
(Vijay L. Sonavane)
Member