UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

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Statement of Reasons for Draft UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) (Fourth Amendment) Regulations, 2015.

Statement of Reasons

- The Commission had issued UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2013 (hereinafter referred to as "Principal Regulations" or "RE Regulations, 2013") vide notification dated April 15th, 2013.
- 2. The Commission vide notification dated October 15th, 2013 had issued first amendment to the above mentioned Principal Regulations reinstating regulation 3 of Chapter 1, Chapter 4 & Chapter 5 of the RE Regulations, 2010. The Commission had vide said notification also amended sub-regulation 9(1) of the Principal Regulation wherein, co-generation based captive users have been exempted from RPO compliances. These amendments have been made applicable from the date of publication in official Gazette, i.e. October 26th, 2013.
- 3. Thereafter, the Commission had issued second amendment dated June 20th, 2014 to the above mentioned Principal Regulations to be applicable w.e.f. April 1st, 2014. Vide the said amendment the Commission had amended sub-regulation 14(7) allowing additional expenditure of capital nature which becomes necessary on account of damages caused by natural calamities with certain conditions. Further, Regulation 26 and Regulation 28 of the Principal Regulations have also been amended revising PLF of SHPs from 45% to 40% and their corresponding tariffs have also been revised by the said amendment.
- 4. The Commission also issued third amendment dated July 21st, 2015 of the Principal Regulations in compliance with the Hon'ble APTEL's order dated 10.04.2015 in Appeal no. 31 of 2015.
- 5. Consequent upon the Commission's decision/directions vide Order dated 04.08.2015 on the

- Petition filed by UREDA, State Agency in the matter of increase in Solar RPO as specified in Principal Regulations current proceedings for fourth amendment of Principal Regulations has been initiated as discussed in subsequent paragraphs.
- 6. Uttarakhand Renewable Energy Development Agency (UREDA), State Agency, responsible for facilitation of development and promotion of renewable energy based power plants and other such relevant activities in the State of Uttarakhand, had filed a Petition before the Commission seeking increase in percentage of Solar-RPO required to be complied by obligated entities as specified in the RE Regulations, 2013. Vide the said Petition UREDA requested the Commission to revise the percentage of Solar RPO for FY 2015-16 from existing 0.1% to 1.5%. State Agency also requested for revision of Solar RPO from 0.3% to 2.5% and from 0.5% to 3.5% for FY 2016-17 & FY 2017-18 respectively.
- 7. The Commission on the above Petition of UREDA vide Order dated 04.08.2015 clarified that revision in Solar RPO would require amendment in the Principal Regulations and the same could not be taken up by way of an Order. While rejecting the aforesaid Petition of UREDA the Commission held that:
 - "8. However, UREDA is required to submit detailed concrete plan for implementation of Solar PV power plants indicating capacity under development/construction at the beginning of financial year, capacity to be added during the financial year, date by which the said capacity shall be made available to the obligated entities, expected energy to be made available to obligated entity within 7 days of the date of Order. These details are required to be submitted under affidavit by UREDA depicting upcoming solar plants to be commissioned financial year wise clearly indicating scheme under which these projects shall be implemented.
 - 9. The Commission holds that the Petition is not maintainable as review/modification of Regulations cannot be undertaken by the Commission through an order while discharging its judicial function under the Act/Regulations.
 - 10. However, considering the roadmap submitted by the Petitioner (UREDA) for development of Solar PV power projects in the State under various schemes approved by MNRE and also the submission made by UPCL during the hearing, the Commission directs its staff to frame a draft amendment to RE Regulations, 2013 for inviting comments from all stakeholders. The Application is hereby disposed off accordingly. "
- 8. The Commission observed that proviso of sub-regulation 9(1) of the Principal Regulations provides that:
 - "Provided that if energy from renewable and non-conventional sources of energy becomes available, over and above the specified RPO, the generator or the obligated entity shall approach the Commission."

UREDA being a facilitator for development and promotion of renewable energy based power plants have been designated as nodal agency for the implementation of Solar Power Plants in the State of Uttarakhand. Further, UREDA has also been a representative of a group of Solar Power Plant developers. Moreover, UPCL (State Distribution Licensee) had authorized UREDA for selection of project developers based on competitive bidding for implementation of Solar Power Plants in the State. Hence, the Commission based on UREDA's submissions decided to look into the possibility of increase in percentage of Solar RPO for ensuing years provided, capacity addition as envisaged by the State Agency under various initiatives/schemes of Central as well as State Government is found to be reasonable on Commission's analysis of the Action Plan submitted by UREDA as discussed in following paragraphs.

9. Sub-clause 6.4(i) of Tariff Policy requires that:

"(i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification in the Official Gazette which will go up to 0.25% by the end of 2012-2013 and further up to 3% by 2022."

The Commission noted that existing Solar RPO specified in the RE Regulations, 2013 is relatively lower than that of the provisions of the Tariff Policy. Further, Solar RPO specified by SERC of other States are comparatively higher than that of Uttarakhand State as following:

S.No.	State	2015-16	2016-17	2017-18
1	Bihar	1.00%	1.25%	1.50%
2	Chhattisgarh	1.00%		
3	Delhi	0.30%	0.35%	
4	Gujarat	1.50%	1.75%	
5	Haryana	0.75%	1.00%	1.25%
6	Jammu & Kashmir	1.50%	2.00%	
7	Madhya Pradesh	1.00%	1.25%	1.50%
8	Punjab	1.00%	1.25%	1.50%
9	Rajasthan	2.0%	2.50%	
10	Uttarakhand	0.10%	0.30%	0.50%

Solar RPO is State specific based on various solar parameters in the States.

10. MNRE, GOI conveyed its resolution vide letter no. 30/80/2014-15/NSM dated 01.07.2015 in the matter of "Scalling up of Grid Connected Solar Power Projects from 20,000 MW by the year 2021-2022 to 1,00,000 MW by the year 2021-2022 under National Solar Mission." Vide the said letter year wise targets to be achieved to accomplish the Scale-up targets has been informed as following:

Catagour	Year-wise Targets (in MW)							
Category	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Total
Rooftop Solar Plants	200	4,800	5,000	6,000	7,000	8,000	9,000	40,000
Ground Mounted	1,800	7,200	10,000	10,000	10,000	9,500	8 500	57,000
Solar Plants	1,000	7,200	10,000	10,000	10,000	9,300	8,500	37,000
Total	2,000	12,000	15,000	16,000	17,000	17,500	17500	97,000

Vide the said letter it has been informed that 3,743 MW has already been commissioned by FY 2014-15. The above mentioned resolution expects cooperation from various Ministries/Departments of Government of India and State Government.

11. MNRE vide letter no. 30/58/2014-15/NSM dated 10.07.2015 while referring to the enhanced target of 1,00,000 MW solar plant capacity to be achieved by 2022 informed that the Ministry is working on comprehensive action plan for achieving said target. MNRE vide said letter stated that the SERCs are required to set Solar RPO of 1% for the current financial year, 8% by 2019 and 10.50% by 2022. MNRE has also desired that the State Commissions shall review their Regulations considering the enhanced target and suitably revise the Solar RPO trajectory upto 2022. MNRE has also given a tentative breakup of solar capacity in MW to be added in Uttarakhand as follows:

FY 2015-16		I	Y 2018-19	FY 2021-22	
Solar	Solar Capacity	Solar	Solar Capacity	Solar	Solar Capacity
RPO	Required	RPO	Required	RPO	Required
1%	74 MW	8%	642 MW	10.50%	876 MW

12. Government of Uttarakhand also notified an "Uttarakhand Solar Power Policy, 2013" wherein, following four categories of Solar Power Projects could be implemented:

	Projects selected as per the competitive bidding process for selling power to			
Type I:	Uttarakhand DISCOM for meeting their RPO Obligation as specified by UERC			
	from time to time.			
	Projects set up on private land for captive use or sale of power to 3rd party			
Type II :	within or outside the state or project setup on private land under Renewable			
	Energy Certificate (REC) Mode.			
	Projects set up on Government land for captive use or sale of power to 3rd party			
Type III:	within or outside the state or project setup on Government land under			
	Renewable Energy Certificate (REC) Mode.			
	Solar Power Projects established under Jawaharlal Nehru National Solar			
Type IV :	Mission Programme of MNRE, Govt. of India.			

- 13. The Commission has taken cognisance of initiatives of Central as well as State Government for implementation of Solar Power Plants so as to achieve enhanced target capacity of 1,00,000 MW of such plants. UREDA informed that about 457 MW capacity of solar plant have been allocated to the Uttarakhand State under various scheme/initiatives of the governments.
- 14. The Commission noted UREDA's submission that under Type-I category solar project of 30 MW capacity have been allotted to different projects developer which are under implementation stage. UREDA also informed that total installed capacity of Solar Plants in the State is 6.612 MW. UREDA further submitted the breakup of solar power plant capacities allocated to Uttarakhand under various Schemes of MNRE and also projects installed/under development as follows:

Installe	Installed					
1	Under GBI scheme of MNRE, GoI	5 MW				
2	Under Grid interactive rooftop scheme of MNRE	1.612 MW				
	Subtotal (1 +2)	6.612 MW				
Under (Construction					
3	Under Type-I of Uttarakhand Solar Policy-2013	30 MW				
4	Under Grid interactive rooftop scheme of MNRE	5.4 MW				
	35.40 MW					
Under I	Under Development					
5	Under Canal top scheme of MNRE	20 MW				
6	Under Solar Park scheme of MNRE					
7	7 Under Grid interactive rooftop scheme of MNRE					
8	8 Under unemployed youth scheme of MNRE					
9	9 Under Type- I of Uttarakhand Solar Power Policy-					
	2013					
	457 MW					
	499 MW					

- 15. The Commission is of the view that inspite of the fact that "Uttarakhand Solar Power Policy, 2013" is in existence since past two years and other promotional schemes of Central Government are also in place, the total installed capacity of such plants in the State is merely 6.612 MW which also includes recently commissioned Solar Power Plants of 1.612 MW under grid interactive rooftop scheme.
- 16. The existing capacity of such plants in the State of Uttarakhand is relatively lower than the capacity available in other States. The pace at which development of Solar Power Plants in the State is taking place is an indicator of lack of willingness/interest on the part of project developers. The Commission is aware of the fact that for implementation of such plants

- minimum 12 months of period shall be required. Further, Solar Power capacity allocated to the State by MNRE is under planning stage.
- 17. Since the Control Period under the Principal Regulations is getting over on March 31st, 2018 accordingly, Solar RPO of FY 2016-17 & FY 2017-18 is being reviewed through this amendment.
- 18. Based on the submissions made by UREDA in its Petition and considering the likely development in the solar generation envisaged by UREDA, the Commission has decided to revise the Solar RPO for FY 2016-17 & FY 2017-18 has been specified.
- 19. Accordingly, sub-regulation 9(1) of the Principal Regulations shall be read as:
 - "(1) In line with the provisions of the Act, National Electricity Policy and the Tariff Policy, to promote development of renewable and non-conventional sources of energy, all existing and future distribution licensees, captive (excluding co-generation based captive)users and open access customers, hereinafter referred to as "Obligated Entity", in the State shall be obliged to procure minimum percentage of their total electricity requirement for own consumption, as indicated in table given below, from eligible renewable energy sources as defined under Regulation 4. The same shall be called the Renewable Purchase Obligation (RPO) of the Obligated Entities.

Year	Renewable Purchase Obligation -Non-Solar	Renewable Purchase Obligation - Solar		
	Obligation -Non-Solar	Existing Proposed		
2013-14	6.00%	0.050%	0.050%	
2014-15	7.00%	0.075%	0.075%	
2015-16	8.00%	0.100%	0.100%	
2016-17	9.00%	0.300%	1.50%	
2017-18	11.00%	0.500%	2.50%	

"Percentage RPO" as stipulated above denotes Minimum Quantum of purchase from non-fossil fuel based co-generation and generation of electricity from renewable energy sources" as a percentage of total energy purchased from all sources/generated by the Obligated Entity during the year for own consumption.

Provided that if energy from renewable and non-conventional sources of energy becomes available, over and above the specified RPO, the generator or the obligated entity shall approach the Commission."

This increased RPO will only be applicable if matching solar capacity is developed in the State. Accordingly, the Commission has decided to issue the Amendment Regulations.

By the order of the Commission

(Neeraj Sati) Secretary