

**UP Electricity Regulatory Commission
Vidyut Niyamak Bhawan, Vibhuti Khand,
Gomti Nagar, Lucknow**

No.UPERC/ Secy/JD(G)/2018/

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Public Notice

The Commission is in process of reviewing UPERC (Rooftop solar PV Grid Interactive System Gross / Net Metering) Regulations, 2015. The Concept Paper is uploaded on the UPERC's website www.uperc.org The Comments and suggestions are invited upto 21.09.2018.

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***Concept Paper on
amendment of RSPV
(Gross& Net
Metering)
Regulations, 2015***

Introduction

In exercise of powers conferred under section 61, 66, 86(1)(e) and 181 of the Electricity Act, 2003 and all other powers enabling in this behalf, the Uttar Pradesh Electricity Regulatory Commission made the UPERC (Rooftop Solar PV Grid Interactive Systems Gross / Net Metering) Regulations, 2015 or in short RSPV Regulations, 2015 dated 20/03/2015.

Major provisions of UPERC (RSPV) Regulations, 2015-

1. **Capacity of Rooftop PV System** - maximum peak capacity of the grid connected rooftop solar PV system to be installed by any eligible consumer shall not exceed 100% of the sanctioned connected load / contract demand of the consumer and shall be more than one kilo watt peak (1kWp) minimum.
2. **Capacity of Distribution Transformer** - shall not exceed 15% of the rated capacity of such transformer(s).
3. **The connectivity levels** - at which the rooftop solar PV system shall be connected with the distribution system -

Sl.	Connected Load / Contract Demand of Eligible Consumer	Connectivity Level
1	Up to 5 kW	Single phase at 230 V
2	5 kW and above up to 50 kW / 63 kVA	3 Phase, 4 wire at 415 V
3	Above 50 kW and up to 1 MW	3 Phase at 11 kV

4. Energy Accounting and Settlement

For Gross Metering arrangement-

The Solar Injection Compensation, to be paid by the Distribution Licensee to the eligible consumer or third party owner as the case may be, shall be determined on the basis of tariff for new Solar Grid connected PV projects approved by the Commission vide the UPERC (Captive and Renewable Energy Generating Plants) Regulations, 2014 as amended from time or as per determined by the Commission.

For Net Metering arrangement-

- a) If the electricity injected exceeds the electricity consumed during the billing period, such excess injected electricity shall be carried forward to next billing period as electricity credit and may be utilized to net electricity injected or consumed in future billing periods but within the settlement period (i.e. upto end of that financial year).

- b) At the end of each settlement period, any electricity credits, which remain unadjusted, shall be paid at a rate of Rs 0.50/kWh by the Distribution Licensee or as notified by the Commission from time to time.
 - c) At the beginning of each settlement period, cumulative carried over electricity credits shall be reset to zero.
 - d) When an eligible consumer leaves the system, that consumers unused electricity credits shall be paid at a rate of Rs 0.50/kWh by the Distribution Licensee or as notified by the Commission from time to time.
5. **Process for Application and Registration** - The process has been defined in the regulation

Commission's Orders, relaxing/amending some conditions of UPERC (RSPV) Regulations, 2015-

1. **Distribution transformer capacity**- Relaxed from 15% to 25% vide Order dt 29.06.2016
2. **Payment of electricity credits in Net Metering** - At the end of each settlement period, any electricity credits, which remain unadjusted shall be paid at a rate of Rs 2/unit instead of Rs 0.50/unit vide order dt 29.06.2016.
3. **Solar Injection Compensation in Gross metering scheme** – Vide Order dtd 23.08.2017 the Commission decided to keep tariff under gross metering arrangement at APPC of previous FY for every year. For ex. For FY 2018-19 APPC of FY 2017-18 shall be applicable.
4. **RESCO Model for Net Metering**- Vide Order dtd 23.08.2017 the Commission allowed 3rd party model for Net Metering arrangement also.
5. **Relaxation in max 1MWp capacity under Net Metering**- For speedy promotion of rooftop solar power in the State of Uttar Pradesh, taking into consideration the technical feasibility, the Commission has allowed more than 1MWp capacity installation within the limit of contracted load on dedicated feeder/transformers through orders invoking its power to relax under the Regulations on case to case basis.
6. **Clarification regarding Interconnection with the distribution system** – Vide order dated 19.6.16, the Commission clarified that the connectivity and metering is allowed at any voltage level as prescribed in the Table or higher voltage level than

prescribed. The Commission also clarified that there shall be only one point of interconnection for each consumer.

Modifications suggested by MNRE in the regulations for RSPV

MNRE vide its Letter dated 18.07.2018 has suggested some modifications in the Model regulations for Rooftop solar. The suggested modifications are tabled below along with their comparison with UPERC (RSPV) regulations, 2015:

Table-A

SI	Parameter	UPERC (RSPV) regulations, 2015	MNRE suggestions	Commission's Proposal
1	PV system capacity limitation	1 MWp	2 MW	2 MW
2	Distribution transformer capacity	25 %	No limitation	50%
3	Cost of augmentation of distribution network	No provision present	Customer should not bear it	Customer should not bear it
4	Banking of solar power	No provision present. However in Net Metering arrangement, carry forward upto end of settlement period is allowed	May be permitted for 3 months without any banking charges	Not allowed
5	Freedom of choosing between CAPEX and RESCO model	Provided for both Gross metering and Net Metering arrangement.	Customer should not be put with some restrictions to choose either model.	Already present

Standards of Performance (SOP) suggested by MNRE for utilities for installation of Rooftop solar

In the same Letter by MNRE as mentioned above, they have also proposed/ suggested timelines for various activities (SOP) for implementation of rooftop solar. The same has been captured below in Table- B along with its comparison with the UPERC (RSPV) regulations, 2015.

Table- B

SI	Activity	UPERC (RSPV) Regulations, 2015		MNRE suggestions	
		Responsibility	Timeline (Max working days)	Responsibility	Timeline(Max working days)
1	Submission of	Consumer	0 date	Consumer	0 date

SI	Activity	UPERC (RSPV) Regulations, 2015		MNRE suggestions	
		Responsibility	Timeline (Max working days)	Responsibility	Timeline(Max working days)
	application				
2	Acknowledgement of NEM application by DISCOM	DISCOM	Same date	DISCOM	02
3	Site verification/ technical feasibility and issuance of letter of approval (LOA)/ Termination	DISCOM	30 days for feasibility report , 30 days for registration, and 15 days for LOA after registration, 30 days for agreement	DISCOM	15
4	Submission of application of subsidy	Consumer	Not defined	Consumer	0 date for subsidy process (date of LOA from DISCOM)
5	Acknowledgement of subsidy Application from SNA to consumer	SNA	Not defined	SNA	02
6	In- principle approval for subsidy	SNA	Not defined	SNA	10
7	Execution of net metering arrangement	DISCOM & Consumer	30 days from LOA	DISCOM & Consumer	15-20
8	Installation of rooftop solar system	Consumer	Not defined	Consumer	90-180
9	Meter procurement intimation	Consumer	Not defined	Consumer	15 (prior intimating DISCOM on system readiness)
10	Submit work completion report/ certificate	Consumer	Not defined	Consumer	90-180 (from LOA) (depending upon capacity)
11	Inspection by CEIG	CEIG	Not defined	CEIG	15-20
12	Issuance of safety certificate	CEIG	Not defined	CEIG	5-10
13	Intimation to install meter	Consumer	Not defined	Consumer	7-10
14	Inspection by DISCOM, installation of meter and commissioning of the system	DISCOM	Not defined	DISCOM	15-20 (after CEIG approval)

SI	Activity	UPERC (RSPV) Regulations, 2015		MNRE suggestions	
		Responsibility	Timeline (Max working days)	Responsibility	Timeline(Max working days)
15	Inspection for release of subsidy	SNA	Not defined	SNA	7-10
16	Release of subsidy	SNA	Not defined	SNA	5-10
17	Billing process	DISCOM	Not defined	DISCOM	30 (After synchronization with Grid)

Abbreviations-

NEM- Net Energy Metering

SNA- State Nodal Agencies

CEIG- Chief Electricity Inspectorate to Government

Inviting comments/suggestions on concept paper

In view of the above, the Commission has decided to initiate the process for review of the existing provisions of the UPERC (RSPV) regulations 2015 read with the subsequent orders of the Commission. Hence, this concept paper has been prepared for inviting the comments/suggestions of the consumers and stakeholders, in general, and also on the suggestions given by MNRE as captured in Table A and B above.