

Joint Electricity Regulatory Commission for Manipur and Mizoram

TBL Bhavan, 2nd to 5th Floor, Peter's Street

E-18, Khatla, Aizawl – 796001, Mizoram

Review Petition No. 1 of 2017

In the matter of

Determination of levelised Tariff for Roof Top Solar Power Plants on Manipur

And

MSPDCL.....Petitioner

Present

Mr. Ngangom Sarat Singh

Chairperson

ORDER

1. Back Ground

On the Petition dated 25.05.2016 of Manipur Renewable Energy Development Agency (MANIREDA) the Commission had issued order dated 02.11.2016 fixing levelised tariff for Roof Top Solar Power Plants in Manipur. Now Manipur State Power distribution company (MSPDCL) in its Petition No. 2/48/2017/MSPDCL-RTS/1042-45, dated 01.07.2017 has requested the Commission to review the following issues.

- A. Coverage of Roof Top Solar Policy.
- B. Consideration of subsidy on benchmark capital cost of Rs. 75000/- instead of on normative capital cost.
- C. Consideration of discounting factor of 13.73%.

D. Wrong Computation of interest on loan.

2. The Commission has reviewed the issues raised by the MSPDCL and the ordered as follows:

A. Coverage of Roof Top Solar Policy:

Though the MANIREDA has requested to fix levelised Tariff to solar roof top power plants of capacity upto 500 KW, the Commission while had fixing tariff upto 500 KW fixed tariff to above 500 KW upto 1 MW. If there are no plants of capacity above 500 KW this tariff shall not be applicable. As such there is no need for deletion of this item.

B. Consideration of subsidy on benchmark capital cost of Rs. 75000/- instead of on normative capital cost.

The MNRE in its letter dated 04.03.2016 has initially issued the pattern of Central Financial Assistance (CFA) to the grid connected solar roof top systems issued vide No. 30/11/2012-13/NSM, dated 26.06.2014 as follows:

Sector-wise eligibility of Central financial Assistance (CFA) and Achievement-linked Incentives/Awards

S. No.	Category	Coverage of Buildings	Central financial Assistance/Achievement linked Incentives and Awards
(i)	Residential	All types of residential buildings	CFA upto 30% of benchmark cost for General Category States/UTs and upto 70% of benchmark cost for Special Category States i.e., North eastern States including Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir and Lakshadweep, Andaman and Nicobar Islands.
(ii)	Institutional	Schools, Health Institutions including Medical Colleges and Hospitals, Universities, educational institutions etc.,	CFA upto 30% of benchmark cost for General Category States/UTs and upto 70%

		(applicable to non - profit registered organisations only except those covered under Sl. No. (iv), (V) and (vi))	of benchmark cost for Special Category States i.e., North eastern States including Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir and Lakshadweep, Andaman and Nicobar Islands.
(iii)	Social Sector	Community Centres, welfare homes, old age homes, orphanages, common service centres, common workshops for artisans or craftsman, facilities for use of community, Trusts/NGOs/Voluntary organisations/Training institutions, any other establishments for common public use etc, (applicable to not -profit registered organisations only, except those covered under Sl.No. (iv), (v) and (vi))	CFA upto 30% of benchmark cost for General Category States/UTs and upto 70% of benchmark cost for Special Category States i.e., North eastern States including Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir and Lakshadweep, Andaman and Nicobar Islands.
(iv)	Government Buildings	Buildings of both Central and State Government, local Government covering all Government Officers.	No CFA Achievement linked Incentives/awards will be provided.
(v)	Government Institutions	Government Institutions, Public Sector Undertakings, all buildings owned by Government directly or by any Government owned societies, companies, corporations, Institutions or organizations, Government educational/health institutions.	No CFA Achievement linked Incentives/awards will be provided.
(vi)	Private, Commercial and Industrial	All Types of Buildings	No CFA

No CFA is applicable for any type of Government buildings, Government Institutions/Government organisations including PSUs. Only achievement incentives/awards will be eligible for which a separate.

Subsequently Sri. Santosh D Vaidya, IAS, Joint Secretary, MNRE (Gol) in Do. Lr. No. 03/09/2016-17/GCRT, dated 05.09.2016 to Chairman JERC for M&M has stated that to promote RTS Power Projects MNRE provides subsidy/incentive upto 30% of project cost of such projects in Residential, Institutional Social, Government and PSU Buildings in general category states /UTs and upto 70% of projects cost in special category states/UTs.

Accordingly the Commission has considered subsidy on normative cost instead of on benchmarks cost of Rs. 75000/-. As such the Commission's order dated 02.11.2016 regarding subsidy is in order.

C. Consideration of discounting factor of 13.73%.

The Commission in its order dated 02.11.2016 has considered discounting factor of 13.73% only.

The formula for discounting factor adopted by the Commission is

$$D = \frac{1}{(1+p)^n}$$

Where,

P is Periodic Interest Rate

N is number of payments

Whereas the Petitioner has adopted the following formula which is not in order.

$$D = 1X(1-P)^n$$

D. Wrong commutation of Interest on loan.

Interest on loan was calculated on pre-subsidised loan amount instead of loan amount after subsidy inadvertently owing to wrong selection of amount. Now the mistake has been rectified and revised tariffs are as follows:

Table: Levelized Tariff for Different Ranges

Range	1-8 kW	above 8-50 kW	above 50-150 kW	above 150-500 kW	above 500 kW - 1 MW
Capital Cost (Rs. Thousands) (Per KW)	82.50	79.60	76.10	73.70	69.80
Levelized Tariff (Rs./kWh)*	9.39	9.11	8.77	8.53	8.15
Levelized Tariff (Rs./kWh)**	3.73	3.65	3.55	3.48	3.36
Levelized Tariff (Rs./kWh)***	6.97	6.77	6.53	6.36	6.10

* Without Subsidy

** With 70% Subsidy

*** With 30% Subsidy

Detailed revised calculation sheets are enclosed.

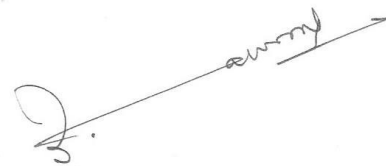
Other terms and Conditions of order dated 02.11.2016 remain unaltered.

The revised rate shall supercede the rate in the Order issued on 02.11.2016 and shall be valid for 1 (one) year from the date of issue of original Order i.e. 02.11.2016.

Fresh petition for Feed in Tariff for Rooftop Solar plan for plan capacities in this Order shall be filed every year.

Place: Aizawl

Date: 02.11.2017



(NGANGOM SARAT SINGH)
Chairperson