

776th Meeting of the Board of Directors of Nepal Electricity Authority

2075/6/8

Amendments to Procedure for Purchase of Electricity from Solar PV Systems, 2074

The Solar Photovoltaic System Regulations, 2074 were ratified in the 751st meeting of NEA's Board of Directors on 2074/1/3. The goal of the regulations is to facilitate utilization of access electricity generated by 500 watts or higher-capacity photovoltaic (PV) systems and provide net-metering in places with access to the national grid.

The PV system within the premises of Commission for Investigation of Abuse of Authority (CIAA) was connected to the national grid on 2074/01/23 as per the 2074 Regulations in agreement with the CIAA. CIAA's letter to NEA (2075/4/2) suggests amendments in the regulations and a review of the current electricity tariff rates and basic provisions in the Standard Connection Agreement.

The commission's letter suggests the following:

- Review and revise the tariff rates per unit for the electricity generated and distributed by NEA through solar cell technology.
- Remove the limit set on annual consumption of solar power (points 5 and 11).
- Carry out accounting and appropriation/adjustments of the revenue/tariff on the basis of the allocated rate per unit at the end of each fiscal year (point 11).
- Carry out all the operations that are not included in the agreement according to the Solar Photovoltaic System Regulations, 2074 (NEA) and Development of Grid-Connected Alternative Electrical Energy Regulations, 2074 (Ministry of Energy, Water Resources and Irrigation)

NEA's Executive Director presented the proposed amendments (above) to the Board of Directors. After comprehensive discussions, the following decisions were made:

1. Amendments to be made in Sections 5, 6 and 12 of the Regulations, 2074:

Section 5: Capacity and classification of photovoltaic (PV) systems

- a. The minimum power output of any PV system installed by a customer must be at least 500 watt. For net-metering, NEA's customers must follow these specifications during installation:
 - i. 230 volts: up to 5 kW
 - ii. 400 volts: 5 to 40 kW
 - iii. 11,000 volts: above 40 kW
- b. PV systems will be classified as follows:
 - i. Household (Rooftop) PV System: 500 W to 10 kW
 - ii. Institutional PV System: above 10 kW

Section 6: PV System Installation

- a. While securing connection to NEA distribution grid, it should be ensured that the power factor of the electricity generated by the customer's PV system is maintained in-between 0.85 lag and 0.95 lead. Additional technical criteria related to this are given in Appendix 3.

Section 12: Accounting and Adjustments related to Solar Energy

If the energy (in units) supplied by a customer to NEA exceeds the energy supplied by NEA to the customer, the amount will be calculated and adjusted at the end of the month. NEA's purchase rate for solar energy will be Rs. 7.30 per unit. The prices will be adjusted as given in Appendix 2.

- 2. Make the required amendments in Appendix 2 and add Appendix 3.
- 3. Amend the previous agreements between NEA and other electricity providers (organizations) according to the amendments made in Solar Photovoltaic System Regulations, 2074.
- 4. The provisions will be applicable only to the PV systems connected to the NEA grid by the

Appendix 2

Billing of Net-Metering

Nepal Electricity Authority

Distribution and Customer Services Directorate

..... Distribution Center

Customer's name:

Agreed capacity:

Customer number:

Month/Year:

Time	Energy supplied by NEA (X ₁)kWh				Energy supplied by the customer (X ₂)kWh				Amount to be billed (Y ₃ =Y ₁ -Y ₂)	Remarks
	Current number (A)	Previous number (B)	Unit (X ₁ =A-B)	Amount Y1	Current number (C)	Previous number (D)	Unit (X ₂ =C-D)	Amount Y2		
T1 (Peak)										
T2 (Normal)										
T3 (Off Peak)										
Total										

Note: Tariff rates for different 'times' will not apply on customers who do not have TOD meters installed in their systems.