

TELANGANA STATE ELECTRICITY REGULATORY COMMISSION 5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500004

NOTICE

IN THE MATTER OF

SUO-MOTO DETERMINATION OF PRE-FIXED LEVELISED TARIFF UNDER COMPONENT-A OF PRADHAN MANTRI KISAN URJA SURAKSHA EVAM UTTHAN MAHABHIYAN (PM-KUSUM) SCHEME

O.P. No. 24 of 2020 (Suo-Moto)

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- 1. Government of India had launched the PM-KUSUM Scheme comprising the following components:
 - (a) Component-A: Setting up of 10,000 MW of Decentralized Ground Mounted Grid Connected Solar Power plants of individual plant size upto 2 MW;
 - (b) Component-B: Installation of 17.50 Lakh Standalone Solar Powered Agriculture Pumps of individual capacity upto 7.5 HP; and
 - (c) Component-C: Solarisation of 10 Lakh Grid-Connected Agriculture Pumps of individual pump capacity upto 7.5 HP.
- 2. Under Component-A, solar or other renewable energy-based power plants of capacity 500 kW to 2 MW will be setup individual bv farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations /Water User Associations, preferably within five kilo metre radius of the sub-stations. In specific cases, the power plants of capacity less than 500 kW may also be allowed. In case the farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations/ Water User Associations etc. are not able to arrange equity for setting up of the project, they can opt for developing the project through developer(s) or through local Distribution Company. The detailed guidelines are available on the website of the Commission www.tserc.gov.in.
- 3. Though the Scheme is for setting up of solar or other renewable energy-based power plants, the Commission initially proposes the following norms for pre-fixed levelised tariff determination of solar plants of capacity 500 kW to 2 MW under Component-A:

Parameter	Unit	Proposed Norm
Useful life	Years	25
Capital Cost per MW* (including dedicated line)	Rs. Crore	3.60
Salvage value	%	10%
Debt	%	70%
Equity	%	30%
O&M expenses per MW for 1st year	Rs. Crore	0.045
Annual escalation for O&M expenses	%	4.04%
Depreciation rate		
1-12 years	%	5.83%
13th year onwards	%	1.54%
Loan tenure	Years	12
Interest on long-term loan	%	10.00%
Working capital components	-	O&M expenses for 1 month; Maintenance spares @ 15% of O&M expenses; Receivables for 2 months.
Interest on working capital	%	11.00%
Rate of Return on Equity	%	14.00%
Income Tax	-	Income tax paid by the Generator on the income derived from the power project shall be reimbursed by the Distribution Licensee(s) on submission of challans of payment of Tax to the Income Tax Department.
Discount Factor	%	11.20%
Capacity Utilisation Factor	%	19%
Auxiliary consumption	%	0.75%

*Land value is not part of capital cost

- 4. The pre-fixed levelised tariff computed for solar projects in accordance with the above specified parameters is Rs. 3.13/kWh. The computations for the same have been enclosed.
- 5. These pre-fixed levelised tariffs shall be applicable for the solar projects of capacity 500 kW to 2 MW commissioned under Component-A of the PM-KUSUM Scheme, subject to the terms and conditions of the Scheme.
- 6. Suggestions and comments are invited from all stakeholders and public at large, so as to reach the following address on or before 07.11.2020 by 5.00 P.M.

Commission Secretary [FAC] Telangana State Electricity Regulatory Commission 5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500004 E-mail id: <u>secy@tserc.gov.in</u>

> Sd/-COMMISSION SECRETARY[FAC]

DATE: 09.10.2020

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Particulars	Units													Year												
	Units	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Gross Generation	MU	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664	1.664
Net Generation	MU	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652	1.652
Tariff components																										
O&M expenses	Rs. Lakh	4.50	4.68	4.87	5.07	5.27	5.49	5.71	5.94	6.18	6.43	6.69	6.96	7.24	7.53	7.84	8.15	8.48	8.82	9.18	9.55	9.94	10.34	10.76	11.19	11.64
Depreciation	Rs. Lakh	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	5.55	5.55	5.55	5.55	5.55	5.55	5.55	5.55	5.55	5.55	5.55	5.55	5.55
Interest on term loan	Rs. Lakh	24.15	22.05			15.75	13.65	11.55	9.45	7.35	5.25	3.15	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on working capital	Rs. Lakh	1.33	1.30	1.27	1.23	1.20	1.18	1.15	1.12	1.09	1.06	1.03	1.01	0.71	0.72	0.74	0.75	0.77	0.78	0.80	0.81	0.83	0.85	0.87	0.89	0.91
Return on Equity	Rs. Lakh		15.12			15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12	15.12		15.12	15.12	15.12	15.12
Total	Rs. Lakh	66.09	64.14	62.19	60.26	58.34	56.42	54.51	52.61	50.72	48.85	46.98	45.12	28.62	28.92	29.24	29.57	29.92	30.28	30.65	31.04	31.44	31.86	32.30	32.75	33.22
Per unit Tariff																										
O&M expenses	Rs./kWh	0.27	0.28	0.29	0.31	0.32	0.33	0.35	0.36	0.37	0.39	0.40	0.42	0.44	0.46	0.47	0.49	0.51	0.53	0.56	0.58	0.60	0.63	0.65	0.68	0.70
Depreciation	Rs./kWh	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Interest on term loan	Rs./kWh	1.46	1.33	1.21	1.08	0.95	0.83	0.70	0.57	0.44	0.32	0.19	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on working capital	Rs./kWh	0.08	0.08			0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Return on Equity	Rs./kWh	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Total	Rs./kWh	4.00	3.88			3.53	3.42	3.30	3.18	3.07	2.96	2.84	2.73	1.73	1.75	1.77	1.79	1.81	1.83	1.86	1.88	1.90	1.93	1.96	1.98	2.01
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Levelised Tariff																										
Discount Factor		1.00	0.90	0.81	0.73	0.65	0.59	0.53	0.48	0.43	0.38	0.35	0.31	0.28	0.25	0.23	0.20	0.18	0.16	0.15	0.13	0.12	0.11	0.10	0.09	0.08
Levelised Tariff	Rs./kWh				1		I							3.13												

Computation of Levelised Tariff for Solar projects

Units Value

1 25

3.60 10%

MW

Years

Rs. Crore

%

Parameter

Capital Cost per MW* (including dedicated line) Salvage value

Installed Capacity

Useful life