

OFFICE OF THE JOINT ELECTRICITY REGULATORY COMMISSION

FOR UT OF J&K AND UT OF LADAKH

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total 5 MW capacity Solar projects under PM

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Petition No. JERC/Law-S/P/2022/F-18 under Compenent -A of

KUSUM Scheme by JAKEDA, initially MNKE had sanctioned in the matter of:

Petition filled by Jammu and Kashmir Energy Development Agency (JAKEDA) for approval/adoption of tariff discovered through bidding for development of Solar PV projects of capacity 0.5 MW to 2 MW under Component-A of the PM-KUSUM scheme and approval of the Power Purchase Agreement to be executed between various developers shortlisted by JAKEDA with JPDCL and KPDCL.

Petitioner DANEDA has discovered L-1 tarifi of Rs 4.75/kWh

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11:	Dr. P. R. Dhar (Chief Executive Officer), JAKEDA
2.	Rahul Rathore (Assistant Executive Engineer), JAKEDA

Coram:

Shri. Lokesh D. Jha, Chairman.

Shri. Ajay Gupta, Member (Technical)

Shri. Mohd. Rafi Andrabi, Member (Finance)

Order No. JERC/08 of 2022 ast of setting up of solar Dated 22 .11.2022

1. Background of the Case and submission of the Petitioner:

The Chief Executive Officer, Jammu and Kashmir Energy Development Agency (JAKEDA), has filed the present petition for approval of tariff of Rs 4.65/kWh discovered through competitive bidding for procurement of power by the distribution licensees (JPDCL & KPDCL) from the Solar PV projects of 0.5 MW to 2 MW capacity to be set up under component A of the PM -KUSUM in UT of J&K. JAKEDA also requested the Commission for approval of "draft of power purchase agreement" to be executed between various developers shortlisted by JAKEDA with JPDCL and KPDCL.

JAKEDA, the nodal agency authorized by the Ministry of New and Renewable Energy (MNRE), GoI for promotion of renewable energy sources in the UT of J&K.MNRE vide order No 32/54/2018-SPV division dated 07.09.2022 had accorded sanction for total 15MW capacity of Solar PV projects to be developed under Component –A of the PM-KUSUM Scheme by JAKEDA. Initially MNRE had sanctioned total 5 MW capacity Solar projects under PM KUSUM scheme to JAKEDA.

JAKEDA had invited bids from the developers for awarding the solar projects as per the approved targets and also had extended the initial term of the bid submission by another 15 days to enable more participation of developers so as to get more competitive response.

JAKEDA has discovered L-1 tariff of Rs 4.79/kWh through competitive bidding by shortlisting the interested developers by floating Expression of Interest (EOI) and after giving ample opportunities to the interested developers.

However, the developers informed JAKEDA that the tariff proposed by the Commission in the Suo-Moto petition is based on the Normative Capital cost of Rs3.42 crores per MW for development of Solar Projects under PM-KUSUM "A" in the States of Madhya Pradesh, Telangana, Jharkhand, Punjab and Haryana, applicable during FY 2019-20 and FY 2020-21, during which the capital cost of setting up of solar project was at its all-time low.

The Solar Project Developers informed JAKEDA that the present cost for development of Solar Energy Projects works out to Rs 4.5 crores per MW for tier-1 equipment with 13.8% average GST and as such the tariff for sale of power comes out to Rs 4.84 per unit.

The terrain and topography of the land in UT of J&K is very different from most of the States like Haryana, Punjab, Madhya Pradesh, Telangana etc. which results in extra expenses on account of logistics, maintenance and higher

cost of land near the 66/33kv/11kv station, which are but allowed near the cities or tehsil.

After deliberations, a tariff of Rs 4.65 per unit was agreed to by the participating bidders for development of Solar Projects under component A of the PM-KUSUM scheme and accordingly all the developers had forwarded the written consent for approval of tariff of Rs4.65 per unit to JAKEDA.

All the developers had given the consent for a tariff of Rs4.65 per unit after negotiation on the lowest price of L-1 @4.79 per unit with a payback duration of 11 years or more. Any negative deviation of 1 Paisa from the accepted tariff of Rs4.65 per unit shall cost the developer equivalent to 20 days' interest and accordingly increasing the payback span of 20 days more.

JAKEDA requested the Commission to issue a Tariff Order in this regard, factoring in the steep hike in input costs for development of solar based projects post 1st April 2022, to enable the developers to gear up for the development of the proposed projects without any further delay, as till date nothing has been implemented on the ground and JK UT has contributed nothing in the ambitious goal of achieving 175 GW of Renewable energy target.

JAKEDA also submitted that as per Ministry guidelines/advice to all States executing Solar Projects under PM-KUSUM-Component-A, the 30th June, 2022, the target date for completing the execution of PPA set by MNRE was to be be strictly followed, failing which the allotted Solar capacity to UT of J&K could be withdrawn by the Ministry and re-allocated to other States based on fresh proposal.

JAKEDA submitted that the Power Purchase Agreement (draft) to be executed by the prospective developers for sale of Solar Power to the distribution licensees has been submitted to the Commission for its approval.

JAKEDA submitted that draft PPA is submitted in accordance with the approved Model PPA as provided in the PM KUSUM project implementation guidelines issued by the

MNRE and the petition is framed in accordance with the Joint Electricity Commission, Jammu & Kashmir and Ladakh (Conduct of Business) Regulations, 2022.

2. Prayer of the Petitioner: all not anabbid animaginity ag set yet

(a) Approve the generic tariff of Rs. 4.65 per unit for grid connected ground mounted solar power projects in Jammu & Kashmir valid for 25 years without any amendment at any stage of the long journey of 25 years and any stage of the long

per unit with a paddink duration of 11 years or more. Any

- (b) Approve the draft of PPA for filing of PPA (Solar Power) on record;
- 3. The Commission has examined the Petition from the perspective of its completeness and with respect to the provisions given in the JERC Conduct of Business Regulations. The Commission noted various deficiencies in the petition, which were communicated to the Petitioner vide letter No JERC/ Law-S/P/2022/F-18/409 dated 26.08.2022. Afterwards a meeting was held with the Petitioner. The Petitioner narrated the details of the Petition in the said meeting. Afterwards, again a data deficiency note with respect to the Petition was forwarded to the Petitioner vide Commission letter JERC/ Law-S/P/2022/F-18/446 dated 22.09.2022. The Petitioner has submitted its response through its letter dated 11.10.2022.

4. Commission's Analysis: dt betthedus osla ACEZAU

- 4.1. The Commission has considered the submissions made by the Petitioner. The Petitioner has filed the present Petition for approval of tariff of Rs 4.65/kWh discovered through competitive bidding for procurement of power by the distribution licensees (JPDCL & KPDCL) from the Solar PV projects of 0.5 MW to 2 MW capacity to be set up under component A of the PM-KUSUM in UT of J&K. The petitioner also requested the Commission to approve the draft of PPA to be executed with the distribution licesees namely JPDCL & KPDCL for 25 years' period.
- 4.2. The Commission has noted that the Ministry of New and Renewable Energy (MNRE), Government of India (GoI), had launched the Pradhan Mantri Kisan Urja Suraksha Evam Utthan

Mahabhiyan (PM-KUSUM) Scheme (PM-KUSUM Scheme) comprising the following components:

a) Component-A: (For Setting up of 10,000 MW of Decentralized Grid Connected Renewable Energy Power Plants on barren land):-

Under this component, renewable energy based power plants (REPP) of capacity 500 kW to 2 MW are to be setup by individual farmers/ group of farmers/cooperatives/ panchayats/ Farmer Producer Organizations (FPO)/Water User associations (WUA) on barren/fallow land. These power plants can also be installed on cultivable land on stilts where crops can also be grown below the solar panels. The renewable energy power project will be installed within five km radius of the sub-stations in order to avoid high cost of sub-transmission lines and to reduce transmission losses. The power generated will be purchased by local DISCOM at pre-fixed tariff;

b) Component-B: (For Installation of 17.50 Lakh stand-

Under this Component, individual farmers are to be supported to install stand alone solar Agriculture pumps of capacity up to 7.5 HP for replacement of existing diesel Agriculture pumps / irrigation systems in off-grid areas, where grid supply is not available. Pumps of capacity higher than 7.5 HP can also be installed, however, the financial support from the Ministry is limited to 7.5 HP capacity.

c) Component-C:

Under this Component, individual farmers having grid connected agriculture pumps are to be supported to solarise pumps. The farmer will be able to use the generated solar power to meet the irrigation needs and the excess solar power will be sold to DISCOMs at pre-fixed tariff

4.3. The Commission noted that under Component-A of PM-KUSUM scheme, Renewable Energy based Power Plants (REPPs) of capacity 500 kW (0.5 MW) to 2 MW will be setup by individual farmers/group of farmers/ cooperatives/ panchayats/ Farmer Producer

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Organizations/ Water User Associations (hereinafter called as Renewable Power Generator (RPG)), preferably within five kilo metre (5 km) radius of the rural 33/11 kV sub-stations to be notified by the distribution companies. 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 Organizations/ 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 licensee which will be considered as Renewable Power Generator (RPG) in this case.

- 4.4. The Distribution companies (DISCOMs) will notify sub-station wise surplus capacity which can be fed from such RE power plants to the Grid. The renewable power generated will be purchased by DISCOMs at a pre-fixed levelised tariff. In case, the aggregate capacity offered by Applicants is more than notified capacity for a particular sub-station, bidding route will be followed by DISCOMs to select Renewable Power generator and in such cases the pre-fixed levellised tariff will be the ceiling tariff for bidding. Selection of bidders will be based on the lowest tariff offered in the ascending order as quoted by the bidders in the closed bid or e-reverse auction agm as the case may be. a mola board lamant of belonging
 - The PM-KUSUM scheme guidelines dated 22.07.2019 and its amendments and clarifications thereon issued by MNRE, GoI spell out the modalities of the Scheme in detail. The guidelines also include the model Power Purchase Agreement (PPA) to be executed between RPG and the distribution licensee.
 - The Commission has considered the present case under Section 63 read with Section 86(1)(b) of the Electricity Act, which reads as under:

"Section 63: Weath reserved the bearings Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government;" towor besed ground palewould a donor

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"Section 86(1) The State Commission shall discharge the following functions, namely: -----

- (b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State."
- 4.7. As per Section 63, of the Act, whenever transparent competitive bidding process is conducted in accordance with the guidelines issued by the Central Government, the tariff discovered under such bidding has to be adopted by the Commission.

the bid. The details of the bidders along with their quased especity

- 4.8. As per the Section 86(1)(b), the Commission is empowered to regulate the power procurement of the Distribution Licensees, including the procurement process, the price at which electricity shall be purchased from the generating company or the Licensees or through other sources through agreement for purchase of power for distribution and supply within the State.
 - 4.9. Thus, as per above settled principles, in the tariff adoption process under Section 63 of the Act, the Commission has to primarily ensure the following things:
 - a) Whether present competitive bidding process is transparent process of bidding in accordance of Section 63 of the Act, and
 - b) Whether tariff discovered through competitive bidding is in accordance with market condition.
- 4.10. JAKEDA submitted that they have floated an Expression of Interest for Installation of Solar PV Plants of capacity 500 KW to 2 MW on Barren / uncultivable and agricultural land falling within a radius of 5 KM from Substations notified by JPDCL & KPDCL under PM-KUSUM Scheme vide EOI No.: ST/ EDA/ GCSPP/ KUSUM/ 07/ 21/ 1383 dated: 10.02.2022. The response to EOI was to be made through J&K E-Tendering portal.
- 4.11. The Commission has been informed that in response to the EOI published by JAKEDA, total 6 bidders submitted their bids for 7 projects of cumulative project capacity of 13.4 MW. The technical evaluation report duly signed by all the evaluation committee members has been submitted by JAKEDA. As per the said report, all the participants were found eligible by JAKEDA to participate in

the bid. The details of the bidders along with their quoted capacity and tariff as submitted are listed below:

om the generating compa emen Name res through agreements for purchase	Project Capacity	Quoted Tariff
JK Electric Engineers Private Ltd	1.4 MW	Rs. 4.79/kWh
Arka Smart Green Energy solutions homographs and hove the solutions homographs and how solutions are solutions and solutions are solutions.	2.0 MW	Rs. 4.80/kWh
Sanji Surya Power Projects Development Services		Rs. 4.85/kWh
Raheeq Infratech Private Limited _ Project 1	2.0 MW	Rs. 5.25/kWh
Raheeq Infratech Private Limited _ Project 2	2.0 MW	Rs. 5.25/kWh
Constant Energy producers Pvt Ltd	2.0 MW	Rs. 7.50/kWh
M/s Talib Hussain Chashti	2.0 MW	Rs. 5.20/kWh
Total Capacity	13.4 MW	pancini to

- 4.12. JAKEDA submitted that in order to discuss modalities for development of the Solar Projects under PM-KUSUM and to negotiate the L1 tariff discovered through bidding and to obtain a uniform consensus in this regard, among all the prospective solar developers, the CEO, JAKEDA convened a meeting, which was held in the Conference Hall of Tawanai Ghar, Bemina Srinagar on 13.05.2022. The decisions taken in the meeting as conveyed to the Commission are given below:
- After a lot of deliberations on the issue, a tariff of Rs 4.65/kWht was finalized, for development of Solar Projects under Component A of PM-KUSUM scheme and accordingly all the developers were advised to give written consent on acceptance of this rate.
- ➤ JAKEDA submitted that a formal request shall be submitted to the Ministry of New and Renewable Energy (MNRE), Government of India for increasing the sanctioned capacity under PM KUSUM Scheme Component from 5 MW to 20 MW to accommodate the cumulative capacity of 13.4 MW offered by the bidders in response to present EoI, and any other fresh demand received under subsequent EoI for PM-KUSUM Component "A".
- > It has been also submitted that JAKEDA shall take up the matter with J&K Power Department (DISCOMs) for acceptance of the tariff

discovered through e-tendering and negotiated later on to i.e. Rs 4.65/kWh, identification of Inter connection Points and vetting & signing of Power Purchase Agreements with the prospective developers.

- 4.13. The Commission has been informed by the Petitioner that they have determined the Tarif through transparent bidding process followed by negotiations.
 - 4.14. The Commission has examined the details furnished by the Petitioner and is satisfied with the bidding process adopted and followed by the petitioner. Hence, the Commission decides to adopt the tariff of Rs 4.65/kWh discovered under the competitive bidding process for procurement of electricity from the solar PV projects set up under component-A of the PM-KUSUM scheme.
 - 4.15. The Commission noted that the tariff discovered though bidding process conducted by JAKEDA is lower than the pre-fix levellised tariff notified by the Commission for solar PV projects to be commissioned under component-A of the PM-KUSUM scheme vide its Suo-Motu RE tariff order JERC/1 of 2022 dated 05.08.2022. Hence the petitioner can proceed further in the matter as per guidelines issued by MNRE in this regard.
 - 4.16. The Commission noted the submission of the petitioner that the draft PPA submitted by the petitioner for approval is in line with the model draft approved by MNRE and no deviation in any form has been made to any clause. Based on the submission of the Petitioner and confirmation of no deviation, the Commission approves the draft PPA to be executed with the distribution licensees namely JPDCL and KPDCL.

5. ORDER:

Considering the facts, figures & circumstances mentioned above, the Commission approves the following:

- **5.1.** The Commission adopts the tariff of Rs 4.65 /kWh for Solar Power Projects to be set up under Component-A of PM KUSUM scheme in UT of Jammu and Kashmir.
- **5.2.** The Commission accords its approval for procurement of power generated from 13.4 MW capacity solar PV projects, to be set up

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under Component-A of PM – KUSUM scheme by the distribution licensees on long term basis for a period of Twenty-Five years.

- 5.3. The Relevant Parties shall sign the PPA(s) based on draft PPA submitted by the Petitioner without any modifications and same shall be completed within 30 days from issuance of this Order.
 - **5.4.** JAKEDA shall submit a copy of the PPA(s) to the Commission within 15 days from signing of the PPA.

With this order the Petition stands disposed off accordingly.

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(Mohammad Rafi Andrabi)

(Ajay Gupta)

(Lokesh D. Jha)

MEMBER - Finance

MEMBER - Technical

CHAIRMAN

JERC/LAW-S/P/2022/F-18/408

Dated:22/11/2022

Place: Jammu.

guidelines issued by MNRE in this regard.

(6. The Controlssion noted the submission of the petitioner that the draft PPA submitted by the petitioner for approval is in line with the model draft approved by MNRE and no deviation in any form has been made to any clause. Based on the submission of the Petitioner and confirmation of no deviation, the Commission approves the draft PPA to be executed with the distribution deensees namely draft PPA to be executed with the distribution deensees namely

S. ORDER:

Considering the facts, figures & circumstances mentioned above, the Commission approves the following:

5.1. The Commission adopts the tariff of Rs 4.65 /kWh for Solar Power Projects to be set up under Component-A of PM KUSUM softenes to UT of James and Luchenia

.2.. The Commission accords its approval for productment of power generated from 13.4 MW capacity solar PV projects, to be set up

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