

RAJASTHAN ELECTRICITY REGULATORY COMMISSION JAIPUR

Petition No. RERC/2195/2024

In the matter of

Petition filed under Section 63 (Determination of Tariff by Bidding Process) of the Electricity Act 2003, read with Regulation 19 and 21 of RERC (Transaction Of Business), Regulations, 2021, for approval of Levelized Tariff Discovered Through Transparent Competitive Bidding Carried out by AVVNL for Solar Power Projects under Component-C (Feeder Level Solarization) of PM-KUSUM Scheme under TN-DSM-06.

Coram:

Dr. B.N. Sharma, Chairman

Shri Hemant Kumar Jain, Member

Dr. Rajesh Sharma, Member

Ajmer Vidyut Vitran Nigam Limited.

Petitioner

Date of hearing:

23.01.2024

Present : Sh. Bipin Gupta, Advocate for Petitioner

Date of order

06.02.2024

Order

1. The present Petition has been filed by Ajmer Vidyut Vitran Nigam Limited (hereinafter referred to as 'Petitioner') under Section 63 of the Electricity Act, 2003 for Determination of Tariff by bidding process read with regulation 19 and 21 of the RERC (Transaction of Business), Regulations, 2021, for approval of Levelized tariff discovered through transparent competitive bidding carried out by AVVNL for Solar Power Projects under

Component-C (Feeder Level Solarization) of the PM-KUSUM Scheme UNDER TN-DSM-06.

2. The matter was heard on 23.01.2024. Advocate Sh. Bipin Gupta, appeared for the Petitioner.
3. Petitioner in its petition and during hearing mainly submitted as under:
 - 3.1. MNRE issued guidelines for implementation of all three components of PM-KUSUM on 22.07.2019, which corners the following components:
Component A: Installation of Decentralized Ground Mounted Grid Connected Renewable Power Plants of individual plant size up to 2 MW.
Component B: Installation of 17.50 lakhs standalone Solar Powered Agriculture Pumps of individual pump capacity up to 7.5 HP.
Component C: Solarisation of 10 Lakhs Grid-connected Agriculture Pumps of individual pump capacity up to 7.5 HP.
 - 3.2. On 04.12.2020, MNRE introduced and issued guidelines for implementation of Feeder Level Solarization('FLS') under Component-C of PM-KUSUM scheme wherein grid connected solar power plant of capacity that can cater to the annual power requirement of one or more segregated agriculture feeders can be installed either through CAPEX mode or RESCO mode to supply power to that feeder(s).
 - 3.3. As per scheme guidelines, feeder level solarization under Component C of PM-KUSUM includes the following key provisions:
 - a. Installation of grid connected solar PV power plant near Discom's substation to meet the annual power requirement of segregated agriculture feeder(s).
 - b. One SPV Plant may cater power requirement of single or multiple feeders.
 - c. Solar Plant to feed power at 11kV or above voltage level side of substation.
 - d. No capping on capacity of individual solar power plant

e. Central Financial Assistance (CFA) limited to solar capacity for 7.5 HP pumps.

f. Installation of solar PV power plant either through CAPEX mode or RESCO mode:

(i) CAPEX mode of implementation:

- 30% CFA from MNRE and balance through loan from NABARD / PFC/REC
- Annual subsidy outlay for the solarized feeders / consumers to become zero after repayment of loan.

(ii) RESCO mode of implementation:

- Developer to get Rs. 1.05 Cr per MW CFA from MNRE and supply solar power to Discom at levelized tariff for 25 years.
- State government may offer upfront subsidy (currently given to agriculture consumers) to RESCO developer in the form of Viability Gap Funding (VGF) (in addition to 30% CFA), to supply power to farmers of an agriculture feeder at present subsidized rates or any other rate fixed by state Government.

g. Discoms to get Service charges @2% of eligible CFA from MNRE.

h. Project commissioning timeline of 9 months from date of signing of PPA.

i. Mandatory to use indigenously manufactured solar panels with indigenous solar modules.

j. Farmers to get incentive from Discoms for reduction in energy consumption below benchmark levels.

3.4. As on 01.08.2022, MNRE order the waiver of the condition of the domestic content requirement for solar cells as:

"3 (ii) The conditions of the domestic content requirement for solar cells has been waived off for the feeder level solarization under Component C for the projects awarded by the implementing agency on or before

20.06.2023. Recently PROVISION OF INDEGENOUS SOLAR CELLS (DCR) UNDER COMPONENT C (FLS) OF THE PM KUSUM SCHEME HAS BEEN RELAXED TILL 31.03.2024.

- 3.5. Further, as on 10.03.2023 MNRE exempted the requirement of procuring Solar PV modules from ALMM in its order as:

"With reference to the Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019 and subsequent amendments and clarifications thereto, the undersigned is directed to convey that subject Order is hereby held in abeyance for one financial year, i.e. FY 2023-24. Thus, projects commissioned by 31.03.2024 will be exempted from the requirement of procuring Solar PV modules from ALMM."

- 3.6. As per scheme guidelines, feeder level solarization under Component-C of PM-KUSUM, the provision under Central Financial Assistance (CFA) is limited to solar capacity for 7.5 HP pumps. However, as per RfP, the CFA has been calculated on basis of per HP annual consumption (1451 units) or calculated on basis of SPV capacity (80% of Power Transformer Capacity), whichever is less.

- 3.7. As on 30.08.2022, MNRE sanctioned 1,00,000 grid connected agricultural pumps to the Distribution licensees of Rajasthan for feeder level solarization under Component-C of PM-KUSUM scheme with following breakup:

Discom Name	FY 2020-21 Target	FY 2022-23 Target
JVVNL	8,000	25,000
AVVNL	8,000	25,000
JdVVNL	9,000	25,000
Total	25,000 pumps	75,000 pumps

- 3.8. Based on the above on 02.06.2023 AVVNL has floated tender TN-DSM-06. Technical bids were opened on 21.09.2023 and price bids of the technically qualified bidders were opened on 04.10.2023.
- 3.9. Tender was floated for total 30 Nos sub-stations/plants out of which bids have been received for 20 Nos substations/Plants. The Plant wise abstract of price bids received under TN-DSM- 06 is as follows:

S.N o.	Name of sub-station/plant	Name of circle	Plant capacity (MW)	Approx.El igible CFA(Cr.)	Name of the bidder	Rate quote by the bidder(inc lusive all taxes) Rs. per kWh	Bidder Rank
1	Budhwara	Ajmer	3.33	3.28	M/s Solar 91 Cleantech Pvt Ltd	3.44	Single bidder
2	Ismailpur (Plant 1)	Jhunjhunu	2.11	0.93	M/s Deepanjali solar power plant	3.55	Single bidder
3	Ismailpur (Plant 2)	Jhunjhunu	2.67	1.21	M/s Deepanjali solar power plant	3.55	Single bidder
4	Babai	Jhunjhunu	1.35	1.00	Mukesh Kumar Gurjar	4.14	Single bidder
5	Nimeda ki Dhani	Sikar	1.56	1.43	M/s Solar 91 Cleantech Pvt Ltd	3.44	Single bidder
6	Sargoth(Plant-1)	Sikar	2.64	1.41	M/s Solar 91 Cleantech Pvt Ltd	3.55	Single bidder
7	Sargoth(Plant-3)	Sikar	2.87	1.64	M/s Solar 91 Cleantech Pvt Ltd	3.55	Single bidder
8	Udansar	Sikar	2.51	2.33	M/s Diwakar Renewable and Infra Pvt Ltd	3.44	Single bidder
9	Kudan(Plant -1)	Sikar	3.48	1.77	M/s Solar 91 Cleantech Pvt Ltd	3.48	Single bidder
10	Kudan(Plant -2)	Sikar	3.59	1.82	M/s Solar 91 Cleantech Pvt Ltd	3.48	Single bidder
11	Jerthi	Sikar	2.78	1.43	M/s Diwakar Renewable and Infra Pvt Ltd	3.56	Single bidder

S.No.	Name of sub-station/plant	Name of circle	Plant capacity (MW)	Approx. Eligible CFA(Cr.)	Name of the bidder	Rate quote by the bidder(inclusive all taxes) Rs. per kWh	Bidder Rank
12	Budsu	Nagaur	1.95	1.69	M/s Diwakar Renewable and Infra Pvt Ltd	3.48	Single bidder
13	Alniyawas(Plant-1)	Nagaur	2.63	1.82	M/s Solar 91 Cleantech Pvt Ltd	3.44	Single bidder
14	Alniyawas(Plant 2)	Nagaur	1.56	1.59	M/s Solar 91 Cleantech Pvt Ltd	3.44	L-1
15	Alniyawas(Plant 3)	Nagaur	3.04	2.48	M/s Solar 91 Cleantech Pvt Ltd	3.44	L2
16	Kamediya	Nagaur	1.22	0.45	Sh. Bhanwar Lal Godara	3.84	Single bidder
17	Kadel	Ajmer	2.41	2.34	M/s Diwakar Renewable and Infra Pvt Ltd	3.44	Single bidder
18	Borav (Plant 1)	Chittorgarh	1.89	1.70	Sh. Neeraj Shringi	3.54	Single bidder
19	Borav (Plant 2)	Chittorgarh	2.18	1.88	Sh. Neeraj Shringi	3.54	Single bidder
20	Badayli	Nagaur	0.77	0.50	Sh. Ramniwas	3.57	Single bidder

3.10. Further, the bidder wise abstract received for 20 Nos of substation/plants under TN-DSM-06 is as follows:

S.No.	Name of sub-station/plant	Name of Sub-station/plant	Circle	SPV Plant Capacity (MW)	Final negotiated Rate (Rs. Per Unit)
1	M/s Solar 91 Cleantech Pvt Ltd	Budhwara	Ajmer	3.33	3.40
		Nimeda ki Dhani	Sikar	1.56	3.40
		Sargoth(Plant-1)	Sikar	2.64	3.50
		Sargoth(Plant-3)	Sikar	2.87	3.50
		Kudan(Plant-1)	Sikar	3.48	3.44
		Kudan(Plant-2)	Sikar	3.59	3.44
		Alniyawas(Plant-1)	Nagaur	2.63	3.40

S.No.	Name of sub-station/plant	Name of Sub-station/plant	Circle	SPV Plant Capacity (MW)	Final negotiated Rate (Rs. Per Unit)
		Alniyawas(Plant 2)	Nagaur	1.56	3.40
		Alniyawas(Plant 3)	Nagaur	3.04	3.40
2	M/s Deepanjali solar power plant	Ismailpur (Plant 1)	Jhunjhunu	2.11	3.52
		Ismailpur (Plant 2)	Jhunjhunu	2.67	3.52
3	Sh. Mukesh Kumar Gurjar	Babai	Jhunjhunu	1.35	3.50
4	Sh. Ramniwas	Badayli	Nagaur	0.77	3.52
5	Sh. Bhanwar Lal Godara	Kamediya	Nagaur	1.22	3.53
6.	Sh. Neeraj Shringi	Borav (Plant 1)	Chittorgarh	1.89	3.50
		Borav (Plant 2)	Chittorgarh	2.18	3.50
7	M/s Diwakar Renewable and Infra Pvt Ltd	Udansar	Sikar	2.51	3.40
		Jerthi	Sikar	2.78	3.50
		Budsu	Nagaur	1.95	3.44
		Kadel	Ajmer	2.41	3.40

- 3.11. In view of the above, in line with RfS documents and as per section 63 of the Electricity Act 2003, the petitioner has prayed for approval of following Solar PV plant wise levelized tariff for the projects under Component-C of PM-KUSUM scheme, which has been discovered through the transparent competitive bidding process of MNRE guidelines and The Rajasthan Transparency in Public Procurement Rules, 2013.
- 3.12. Counsel for Petitioner during hearing also requested the Commission to exempt them from filing petitions for approval of levelized tariff for such group of solar power plants to be installed under Component-C (feeder level solarization) wherein the discovered levelized tariff for 25 years is less than or equal to the ceiling tariff as decided by the Hon'ble Commission.
- 3.13. Counsel for Petitioner during hearing also requested the Commission to allow the petitioner to file individual/ project specific petition for approval of levelized tariff for each such solar power plant under feeder

level solarization wherein the discovered levelized tariff for 25 years is more than the ceiling tariff as decided by the hon'ble commission.

Prayer of the Petitioner:

3.14. Petitioner prayed as under:

- (i) To adopt the above tariff for TN-DSM-06 discovered through transparent bidding.
- (ii) To approve a ceiling tariff of levelized tariff under PM-KUSUM Scheme Component-C (feeder level solarization).
- (iii) To exempt the Petitioner from filing petitions for approval of levelized tariff for such group of solar power plants to be installed under Component-C (feeder level solarization) wherein the discovered levelized tariff for 25 years is less than or equal to the ceiling tariff as decided by the hon'ble commission.
- (iv) To allow the petitioner to file individual/ project specific petition for approval of levelized tariff for each such solar power plant under feeder level solarization wherein the discovered levelized tariff for 25 years is more than the ceiling tariff as decided by the hon'ble commission.
- (v) To condone any error/omission and to give opportunity to rectify the same.
- (vi) To permit the Petitioner to make further submission, additions and alterations to this Petition as maybe necessary from time to time.
- (vii) To pass any such other order/s and/or direction/s, which the Hon'ble Commission may deem fit and proper in the facts and circumstances of the case.

Commission's view:

4. We have considered the submissions made on behalf of the Petitioner in their petition and during the hearing.
5. The present Petition has been filed under Section 63 (Determination of Tariff by Bidding Process) of The Electricity Act 2003, Read With Regulation 19 And 21 of RERC (Transaction Of Business), Regulations, 2021, for approval of levelized tariff discovered through transparent competitive bidding carried out by AVVNL For Solar Power Projects Under Component-C (Feeder Level Solarization) of PM-KUSUM Scheme under TN-DSM-06.
6. As per MNRE guidelines for PM-KUSUM Component C (feeder level solarization), individual solar PV plant capacity is to be calculated based on the total annual power requirement of the feeder with no capping on the capacity and CFA is limited to capacity based on capping of pumps upto 7.5 HP only. Therefore, AVVNL has also computed individual solar PV plant capacities based on actual annual consumption of individual pumps irrespective of pump size to ensure 100% solarization of such pumps. However, this results in reduction of per MW CFA for such plants as most of the agriculture pumps in AVVNL are of capacity more than 7.5 HP. Even although this results in slight increase in levelized tariff but will help Discom to tap the intended benefit envisaged under the scheme.
7. On 02.06.2023, AVVNL published Request for Selection (RfS) on e-procurement portal of Rajasthan. The technical bids were opened on 21.09.2023.
8. Tender was floated for total 30 Nos sub-stations/plants out of which bid have been received for 20 Nos substations/Plants.
9. As per the submission of the Petitioner bidder wise abstract is as under:

S.No.	Name of sub-station/plant	Name of Sub-station/plant	Circle	SPV Plant Capacity (MW)	Final negotiated Rate (Rs. Per Unit)
1	M/s Solar 91 Cleantech Pvt Ltd	Budhwara	Ajmer	3.33	3.40
		Nimeda ki Dhani	Sikar	1.56	3.40
		Sargoth(Plant-1)	Sikar	2.64	3.50
		Sargoth(Plant-3)	Sikar	2.87	3.50
		Kudan(Plant-1)	Sikar	3.48	3.44
		Kudan(Plant-2)	Sikar	3.59	3.44
		Alniyawas(Plant-1)	Nagaur	2.63	3.40
		Alniyawas(Plant 2)	Nagaur	1.56	3.40
		Alniyawas(Plant 3)	Nagaur	3.04	3.40
2	M/s Deepanjali solar power plant	Ismailpur (Plant 1)	Jhunjhunu	2.11	3.52
		Ismailpur (Plant 2)	Jhunjhunu	2.67	3.52
3	Sh. Mukesh Kumar Gurjar	Babai	Jhunjhunu	1.35	3.50
4	Sh. Ramniwas	Badayli	Nagaur	0.77	3.52
5	Sh. Bhanwar Lal Godara	Kamediya	Nagaur	1.22	3.53
6.	Sh. Neeraj Shringi	Borav (Plant 1)	Chittorgarh	1.89	3.50
		Borav (Plant 2)	Chittorgarh	2.18	3.50
7	M/s Diwakar Renewable and Infra Pvt Ltd	Udansar	Sikar	2.51	3.40
		Jerthi	Sikar	2.78	3.50
		Budsu	Nagaur	1.95	3.44
		Kadel	Ajmer	2.41	3.40

10. Petitioner's counsel during the hearing also submitted that in line with RfS document and as per Section 63 of Electricity Act, 2003, and prayed for approval of 20 nos. in TN-DSM-06 Solar PV plant wise levelized tariff for the projects under Component-C of PM-KUSUM scheme, which has been discovered through the transparent competitive bidding process of MNRE guidelines and the Rajasthan Transparency in Public Procurement Rules, 2013.
11. In this order, Commission has considered the tariff discovered during the bidding process.
12. It is also observed that the Petitioner has also prayed to exempt them from filing petitions for approval of levelized tariff for such group of solar power

plants to be installed under Component-C (FLS) wherein the discovered levelised tariff for 25 years is less than or equal to the ceiling tariff as decided by the Commission. In this regard we are of the view that for approval of the tariff for the power procurement u/s 63 of the Electricity Act 2003 the procuring Discoms have to file the Petition for adoption of the tariff. Therefore, Petitioner's request in this regard cannot be accepted and all Discoms are required to file petition for adoption of tariff for each of the bidding conducted by them.

13. It is observed that tender was floated on 02.06.2023, however, the petitioner approached the Commission in January 2024 only. In our view any delay will have implications as in case of rise in prices of the components of the solar plants the bidder may no longer remain interested to set up their awarded projects. On the other hand, Discoms will remain concerned about price fall during the delay period. It is, therefore, directed that Discoms should carry out the tendering activity in a timely manner and projects are set up under the PM-KUSUM scheme in a time bound manner and cheaper power becomes available to the consumers.
14. If due to price fall Discom goes for new tendering process, which again takes time and if in the meanwhile the prices increase or some other terms and conditions having impact on price like ALMM and DCR content changes, the Discom will lose on both the capacity addition as well as the price edge. Rajasthan as of now is resorting to short term power purchase through Energy exchange and will need Renewable Energy capacity addition to meet out its demand during the day as well as to fulfill its RPO. Thus, any delay in capacity addition will adversely impact both the goals and due to this lost opportunity, the Discom will have to again resort to procurement of costly short term power.

15. The Commission in its various orders has stressed the need for integrating more and more distributed power. Commission is of the view that if schemes like KUSUM Component-C (feeder level solarization) are implemented in a right earnest by the Discoms it can prove to be a game changer for the sector as a whole.
16. Accordingly, looking to the submissions of the Petitioner the Commission orders as under:
- (1) The Commission approves the purchase of power from 20 nos of solar PV plants (as per table at para 9 depicted hereinabove) for 25 years under Component-C of PM KUSUM Scheme.
 - (2) The Commission approves Rs 3.55/kWh as the ceiling tariff for the solar projects to be set up under PM KUSUM Scheme, Component-C Feeder Level Solarisation. Discoms shall file petition for adoption of tariff after every bid. This will be applicable to all Discoms of the State.
 - (3) Discoms are also directed that before initiating every future bidding, the Discoms will monitor the market condition and in case of any downwards revision in the cost, they should revise the above ceiling tariff downwardly at their own level.
 - (4) In case upward revision is required in the ceiling tariff the Discoms shall file a separate petition before the Commission.
 - (5) Discoms are advised to preferably select the feeders where maximum CFA from the GoI may be availed so that benefit of lower tariff can be achieved.
 - (6) Discoms will continuously monitor the change in law events and will ensure timely recovery/ payment on account of change in law events as per law.

- (7) Discoms should follow the directions issued by MNRE in respect of implementation of Feeder Level Solarisation under Component-C of PM KUSUM Scheme from time to time.
- (8) Discoms should ensure that the petition for adoption of tariff is filed preferably within 60 days of opening of the bid.
17. The Commission also notes that the pump size in Rajasthan is much higher than 7.5 hp in most of the area whereas, MNRE in its Guidelines has capped the CFA to 7.5 hp. Due to this, Rajasthan Discoms are not able to get the maximum benefit of subsidy as compared to other States where the pump capacity is 7.5 hp or lower. Accordingly, the Commission advises the Discoms to take up the matter with MoP/MNRE for suitable increase in the CFA for pump size more than 7.5 hp.
18. The Petition is disposed of accordingly.
19. Copy of this order may be sent to all Discoms.

(Dr. Rajesh Sharma)
Member

(Hemant Kumar Jain)
Member

(Dr. B.N. Sharma)
Chairman