



Suo-Motu P No 37 of 2018(M)

In the Matter of:

Connectivity with distribution licensees and registration charges by SLDC for the solar rooftop PV projects

Respondents:

1. Chhattisgarh State Power Distribution Co Ltd.
2. Chhattisgarh State Renewable Energy Development Agency
3. Chhattisgarh State Load Dispatch Center
4. SAIL-BSP (Distribution licensee)
5. Jindal Steel & Power Ltd – (Distribution business)
6. Chief Electrical Inspector

PRESENT : **Narayan Singh, Chairman**
: **Arun Kumar Sharma, Member**

ORDER

(July 05, 2018)

1. The Commission has notified Chhattisgarh State Electricity Regulatory Commission (Determination of tariff for procurement of power from Rooftop PV Solar Power Projects by distribution licensees of State) Regulations, 2013 and its subsequent amendments in 2016 (in short, CSERC Rooftop PV Solar Power Regulations, 2013 and its amendments) specifying the terms and conditions of tariff for procurement of power from rooftop PV solar power projects by distribution licensees of the State.
2. Subsequently the Commission after due regulatory process approved standard draft power purchase agreement (PPA) to be

entered by distribution licensees with existing and upcoming roof top solar projects.

3. In the past, the Commission vide Interim Order dated October 29, 2014, specified connectivity charges with distribution licensees and registration fee with Chhattisgarh State Load Dispatch Center (SLDC). Relevant para of the Interim Order is reproduced below:

"Conclusion:

- I. *Connectivity charges for Solar PV plant of capacity 50 kW to 100 kW shall be Rs. 10000/-.*
- II. *Connectivity charges for Solar PV plant of capacity 101 kW to 500 kW shall be Rs. 20000/-.*
- III. *Connectivity charges for Solar PV plant of capacity 501 kW to 1000 kW shall be Rs. 40000/-.*
- IV. *Registration fee with SLDC shall be Rs. 1000/- for Solar PV plant of capacity up to 1000 kW.*

Till the time registration fee and charges for connectivity are specified for smaller capacity of renewable category of plants, provisional charges as approved above shall remain applicable and differences from notified charges if any are to be borne by the either party."

4. While issuing Interim Order, the Commission also directed for initiating due regulatory process for fixing the charges for smaller capacity of renewable category of plants.
5. Chhattisgarh State Renewable Energy Development Agency (CREDA), vide its letter 28246 dated 26.02.2018, submitted that the Commission vide Gazette notification dated 16.06.2016 reduced the minimum capacity for grid connectivity as 10 kW. However, the

Commission has not specified connectivity and SLDC registration charges for such plants. CREDA has proposed these charges as follows;

Solar project Capacity	Connectivity Charges	SLDC Registration charges	Total payable by the Consumer
10kW-50kW	Rs. 1000/-	Rs. 100/-	Rs. 1100/-

Legal Framework

6. The Electricity Act, 2003, the National Electricity Policy and the Tariff Policy specifies for promotion of renewable energy technologies by suitable connectivity measures.

Section 86(1)(e) of EA 2003 mandates the State Commission (SERC) as follows (emphasis added):

"promote Co-generation and generation from Renewable sources of energy by providing suitable measures for connectivity to the Grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of total consumption of electricity in the area of distribution licensee."

National Electricity Policy (NEP) specifies as follows for development of renewable energy sector in the country (emphasis added):

"5.12.2 The Electricity Act 2003 provides that co-generation and generation of electricity from non-conventional sources would be promoted by the SERCs by providing suitable measures for connectivity with grid and sale of electricity to any person and also by specifying, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee. Such percentage for purchase of power from non-conventional sources should be made applicable for the tariffs to be determined by the SERCs at the earliest. Progressively the share of electricity from non-conventional sources would need to be increased as prescribed by State Electricity Regulatory Commissions.

Such purchase by distribution companies shall be through competitive bidding process. Considering the fact that it will take some time before non-conventional technologies compete, in terms of cost, with conventional sources, the Commission may determine an appropriate differential in prices to promote these technologies.”

7. As per Forum of Regulators (FOR) report on policies on renewable published in November 2008, non-conventional energy sources are environment friendly and green and should therefore be promoted. The responsibility of promoting non-conventional energy sources has been entrusted to the Commission under section 61 and in particular to the State Commissions under section 86(1)(e) of the Act. Recommendations of the FOR report is reproduced below;

"7.5.1 After considering the above comments and suggestions, the Working Group recommended as follows:

Recommendations

7.5.2 Technical standards for providing grid connectivity for RE-based power stations should be developed expeditiously. The FOR recommends that the CEA should undertake development of such standards through its Grid Connectivity Regulations. Connectivity standards for solar PV and solar thermal power projects, for both grid connected and rooftop systems, should also be formulated.

7.5.3 Grid connectivity should be optimally provided by transmission licensees and distribution licensees for RE sources, through their capex plans submitted to the appropriate commissions for approval. The recovery of costs of transmission and evacuation infrastructure for RE sources should be addressed through the regulatory process of approval of ARR of transmission or distribution licensee. The transmission charges should be computed in a rational manner, ensuring that initial projects in an area are not burdened by the total cost of network expansion. It is further recommended that the concessional transmission charges could be levied on RE being sold within the State keeping in view the spirit of the EA for promoting RE.

7.5.4 A separate co-ordination mechanism should be established for RE in SLDCs and STUs to ensure smoother operations and grid integration of RE sources, while also including the creation and maintenance of databases regarding future RE projects.”

8. Chhattisgarh State Electricity Regulatory Commission (Renewable Purchase Obligation and REC framework Implementation) Regulations, 2016 (in short CSERC RPO-REC Regulations 2016) also emphasises for priority for grid connectivity. Relevant para of the CSERC RPO-REC Regulations 2016 is reproduced below;

"10 Priority for Grid Connectivity

10.1 Any person generating electricity from renewable energy sources, irrespective of installed capacity, shall have priority for open access, connectivity with distribution system or transmission system as the case may be. On an application from such person, the transmission licensee or distribution licensee, as the case may be, shall provide appropriate interconnection facilities, as far as feasible, before commissioning of the renewable energy project. Such interconnection shall follow the grid connectivity standards as specified in the Indian Standard Grid Code, State Grid Code and/or the manner prescribed by the Central Electricity Authority."

9. The commission has been promoting renewable energy based generations by providing preferential tariff, specifying renewable purchase obligations for the distribution licensees as per the mandate in the EA 2003. Also, priority for grid connectivity has been specified. The connectivity fee specified in the Chhattisgarh State Electricity Regulatory Commission (Connectivity and Intra-State Open Access) Regulations, 2011 (in short, CSERC OA Regulations 2011) for seeking connectivity at distribution licensee system is (i.e. Rs 2 Lakh) for large size generating company or captive generating

plant (CGP) i.e. 1 MW and above. Connectivity fee for the renewable energy based plants specially smaller plants i.e. 1 MW and below are not specified in the CSERC OA Regulations 2011.

10. Looking into the mandate in the Act 2003, recommendations of FOR, to expedite connectivity of smaller Solar PV plants i.e. below 1 MW and proposal submitted by CREDA vide its letter 28246 dated 26.02.2018, charges for connectivity with the distribution licensee for renewable plant capacity up to 1 MW were proposed as follows vide draft Order dated 04.06.2018;

- | | | |
|------|-------------------------------------|---------------|
| I. | Solar PV plant of 10 kW to 50 kW | – Rs. 1000/- |
| II. | Solar PV plant of 50 kW to 100 kW | – Rs. 10000/- |
| III. | Solar PV plant of 101 kW to 500 kW | – Rs. 20000/- |
| IV. | Solar PV plant of 501 kW to 1000 kW | – Rs. 40000/- |

11. Also registration fee (Rs. 2 lakh) specified in the Chhattisgarh State Electricity Regulatory Commission (Fees and charges of State Load Despatch Centre and other related matters) Regulations, 2012 are for grid connectivity for the large size renewable power plants i.e. above 1 MW. This charge is not for the smaller renewable plants/rooftop solar plants (1 MW and below).

Since, registration of the roof top solar plants is required at SLDC just for information purpose at single point to know about capacity and number of such plants accordingly same was proposed as Rs 1000/-.

12. Comments /suggestions of the stakeholders on the above proposal were invited by 27.06.2018 and hearing was scheduled on 30.06.2018 at 03:30 PM at the Commission's courtroom.

13. The draft order issued on Jun 04, 2018 was uploaded on the Commission's website for inviting comments/suggestion/ objections from the stakeholders. The Commission, vide public notice dated Jun 06, 2018, also invited comments from various stakeholders. A copy of order was also served to distribution licensees in the State, State Govt., CREDA, SLDC, CEI, members of State Advisory Committee (SAC) etc. List of persons, industries, association who submitted written comments are annexed with this order.
14. Hearing was held as per schedule on June 30, 2018 at 3:30 PM at the Commission's office. List of persons who attended public hearing is annexed with this order.

Summary of views/comments/suggestions of the stakeholders, their analysis and Commission's views are given in following paragraphs.

Views/comments/suggestions of the stakeholders and Commission's View

15. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) have commented that proposed connectivity charges of Rs. 1000/- for SPV plant of capacity 10 to 50 kW is very low. This should be at least Rs. 5000/- as work involved is same as for higher capacity SPV plants. Further, for metering, CSPDCL has proposed installation of "0.5 S" accuracy class meters.

The Commission is of the view that entire expenses of the CSPDCL are pass through in its ARR and addition of such capacities are very nominal. Therefore, analyzing the quantum of work involved and fixing the connectivity charges as per the work involved is irrelevant at this stage. Moreover, to expedite SPV plant integration with the grid, charges for connectivity should be nominal.

Also for faster SPV plant integration with the grid, at this stage, installation of simple import/export meter with class "1 S" or class "0.5 S" accuracy is permitted depending upon the connectivity voltage level.

16. Chhattisgarh State Load Dispatch Center (SLDC) have commented that registration fee for the SPV plants should be Rs. 5000/- for capacity below 1000 kW in view of the FOR report on "Policies on Renewable" published in November 2008 regarding establishment of co-ordination mechanism at SLDC and energy accounting to be carried out in future in light of the decision arising out of the Power Ministers' Conference held on 07.12.2017.

The Commission is of view that entire expenses of the SLDC are pass through in its ARR and addition of such capacities are very nominal. Therefore, analyzing the quantum of work involved and fixing the connectivity charges as per the work involved is irrelevant at this stage. Moreover, to expedite SPV plant integration with the grid, registration fee should be nominal.

17. In view of the above deliberations, the Commission hereby approves charges for connectivity with the distribution licensee for renewable plant capacity up to 1 MW and registration fee with SLDC as follows;

I.	Solar PV plant of 10 kW to 50 kW	- Rs. 1000/-
II.	Solar PV plant of 51 kW to 100 kW	- Rs. 10000/-
III.	Solar PV plant of 101 kW to 500 kW	- Rs. 20000/-
IV.	Solar PV plant of 501 kW to 1000 kW	- Rs. 40000/-
V.	Registration fee at SLDC	- Rs 1000/-

18. Installation of simple import/export meter with class "1 S" or class "0.5 S" accuracy is permitted depending upon the connectivity voltage level as specified in CSERC Rooftop Regulations 2013.
19. CEI is also advised to co-operate with CSPDCL/CREDA/solar developers in this endeavor.

Sd/-
(Arun Kumar Sharma)
MEMBER

Sd/-
(Narayan Singh)
CHAIRMAN

List of the persons attended public hearing on 30.06.2018

Sl. No.	Name & Organization
1.	Shri H.K. Pandey, CSPDCL
2.	Shri D.S. Bhagat, CSPDCL
3.	Shri Arvind Banerjee, CSPDCL
4.	Shri Gireesh Gupta, SLDC, CSPTCL
5.	Ms. Manju Patel, SLDC, CPSTCL
6.	Shri Vinay Parakh, SR Corporate

List of the persons Submitted Written comments

Sl. No.	Name & Organization
1.	Chhattisgarh State Power Distribution Company Ltd
2.	Chhattisgarh State Load Despatch Center