



TELANGANA STATE ELECTRICITY REGULATORY COMMISSION
5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500 004

O. P. No. 69 of 2022

Dated 26.10.2022

Present

Sri T. Sriranga Rao, Chairman
Sri M. D. Manohar Raju, Member (Technical)
Sri Bandaru Krishnaiah, Member (Finance)

In the matter of TSDISCOMS proposals for consent of the Commission for procurement of 1045 MW Solar power from NTPC under CPSU Scheme Phase-II Tranche-III, 500 MW Solar power from NHPC under CPSU Scheme Phase-II Tranche-III at a Tariff of Rs. 2.45 per kWh (including trading margin) and 1000 MW Solar power from SECI under ISTS Tranche-IX with a Tariff of Rs. 2.37 / kWh for 700 MW and Rs. 2.38 / kWh for 300 MW (exclusive of trading margin Rs. 0.07 per kWh) with Basic Custom Duty waiver by TSDISCOMs.

The matter having been taken on file in O. P. No. 69 of 2022 and having considered TSDISCOMs submissions, issues raised during the Public Hearing held on 13.09.2022, responses to the same by TSDISCOMs and all other relevant material placed on record the Commission passed the following:

ORDER

Background

1. As part of Paris Climate Agreement, India has committed to install 40% of its electricity capacity from non-fossil fuels by 2030. For achieving this goal, India has set an ambitious target of setting up 175 GW of renewable energy capacity, by 2022. The Union Cabinet, as per its decision dated 17th June, 2015 revised the Solar capacity target from 20 GW to 100 GW by 2022. Further as per the commitment made by India for achieving 500 GW RE power by 2030 at CoP 26, all States have been directed to increase the RE capacity additions accordingly. This needs to be done in a manner

which is compliant to the World Trade Organization (WTO) Regulations. The Ministry of New and Renewable Energy (MNRE), Government of India (GoI) has issued order No.302 / 4 / 2017-Grid Solar, dated 05.03.2019 for implementation of Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for setting up 12,000 MW grid-connected Solar Photovoltaic (PV) Power Projects by the Government Producers with Viability Gap Funding (VGF) support for self-use or use by Government/Government entities, either directly or through Distribution Companies (DISCOMs).

2. TSSPDCL on behalf of TSDISCOMs vide their Lr. No. CGM (IPC & RAC) / SE (IPC) / F. NTPC CPSU Scheme / D. No. 685 / 21, Dt: 28.08.2021 submitted proposals seeking in-principle approval for procurement of 1,000 & 500 MW Solar power from NTPC & NHPC respectively under Central Power Sector Undertaking (CPSU) Phase-II Tranche-III scheme at a Tariff not more than Rs. 2.45 per unit (including trading margin).

3. After scrutinizing the proposals the Commission vide this office letters dated 17.09.2021 & 21.12.2021 directed TSDISCOMs to submit justification and other information for the said Solar power procurement. Accordingly, TSSPDCL on behalf of TSDISCOMs submitted the justification and other information vide letters dated 10.11.2021 and 07.02.2022 for procurement of Solar power and also load generation balance to justify the procurement.

4. In another proposal TSSPDCL on behalf of TSDISCOMs through their letter dated 20.12.2021 submitted proposals seeking in-principle approval/consent for procurement of 1,000 MW Solar power through SECI under ISTS Solar Tranche-IX Scheme with tariff ranging from Rs. 2.37 / kWh to Rs. 2.38 / kWh (exclusive of trading margin of Rs. 0.07 / kWh) with Basic Custom Duty waiver, for this proposals also Commission directed the DISCOMs through letter dated 05.01.2022 for submitting justification, accordingly TSSPDCL on behalf of TSDISCOMs submitted justification vide their letter dated 19.02.2022.

5. Considering the above two proposals, the Commission decided to take up the issue through public consultation process and directed TSDISCOMS vide letter dated 19.02.2022 to file petition seeking in principle approval for procurement of 1000 MW

& 500 MW Solar power through NTPC & NHPC respectively under CPSU Phase-II Tranche III & for Procurement of 1000 MW Solar power through SECI under ISTS Solar Tranche-IX Scheme.

The Present Petition

6. Consequently, TSDISCOMs on 12.07.2022 filed petition u/s 63, 86 (1) (b) of the Electricity Act, 2003 and u/s 21 (4) of Telangana Electricity Reforms Act, 1998 seeking consent for procurement of 1045 MW Solar power from NTPC under CPSU Scheme Phase-II Tranche-III, 500 MW Solar power from NHPC under CPSU Scheme Phase-II Tranche-III and 1000 MW Solar power from SECI under ISTS Tranche-IX by TSDISCOMs. The averments of the petition are hereunder:

- a. It is stated that the present petition is being filed by the Petitioners (TSDISCOMs) seeking consent u/s 63 & 86 (1) (b) of the Electricity Act, 2003 and u/s 21 (4) of Telangana Electricity Reforms Act, 1998 for procurement of a) 1045 MW Solar power from NTPC and CPSU Scheme Phase-II Tranche-III; b) 500 MW Solar power from NHPC under CPSU Scheme Phase-II Tranche-III; and c) 1000 MW Solar power from SECI under ISTS Tranche-IX by TSDISCOMs.
- b. It is stated that keeping in view the energy requirements of the State to comply with availability of power 24x7 for all the consumers including Agricultural and to meet the proposed LI loads as per the policy directions of Government of Telangana (GoTS), TSDISCOMs have agreed for procurement of Solar power from the following Central Government agencies as detailed below:

Sl. No.	Proposed Procurement Capacity (MW)	Agency	Scheme
1	1045	NTPC	CPSU Ph-II Tranche-III
2	500	NHPC	CPSU Ph-II Tranche-III
3	1000	SECI	ISTS Tranche-IX

- c. It is stated that accordingly, agreements have been concluded for the said procurement of Solar power. The complete details are as below:
 - i. 1045 MW through NTPC under CPSU Scheme Phase-II Tranche-III - Details of Power Usage Agreements (PUAs).

Sl. No.	Location of the Plant	Capacity (MW)	Date of PUA	Tariff (Rs. / kWh)	SCOD
1	Nokh-I, Nokh Solar Park, Pokran, Jaisalmer, Rajasthan	245	07.12.2021	2.45	01.11.2023
2	Nokh-II, Nokh Solar Park, Pokran, Jaisalmer, Rajasthan	245	07.12.2021	2.45	01.11.2023
3	Nokh-III, Nokh Solar Park, Pokran, Jaisalmer, Rajasthan	245	07.12.2021	2.45	01.11.2023
4	NTPC REL Khavda Solar PV Station, Kutch, Gujarat	310	07.12.2021 amended on 13.05.2022	2.45	03.04.2024
Total		1045			

ii. The signing of Power Usage Agreement (PUA) for procurement of 500 MW Solar power through NHPC under CPSU Scheme Phase-II Tranche-III with power usage charges @ Rs.2.45 / kWh is under process.

iii. 1000 MW through SECI under ISTS Tranche-IX

Sl. No.	Name of the Solar Power Developer & Location of Plant	Capacity (MW)	Date of PSA & PPA	Tariff (Rs. / kWh)	SCOD
1	M/s Ayana Renewable Power Three Private Limited, Bikaner, Rajasthan	300	17.02.2022 19.04.2022	2.38 (+) 0.07 trading margin	11.10.2023
2	M/s Eden Renewable Bercy Private Limited, Pusar/Pushad, Tehsil Sheo, Barmer District, Rajasthan	300	17.02.2022 28.04.2022	2.37 (+) 0.07 trading margin	11.10.2023
3	M/s IB Vogt Solar Seven Private Limited, Neemba, Deora	300	17.02.2022 19.04.2022	2.37 (+) 0.07 trading margin	11.10.2023

Sl. No.	Name of the Solar Power Developer & Location of Plant	Capacity (MW)	Date of PSA & PPA	Tariff (Rs. / kWh)	SCOD
	Villages, Fatehgarh, Jaisalmer, Rajasthan				
4	M/s AMP Energy Green Five Private Limited, Badi Seed & Ranjeet Nagar Villages, Bap, Jodhpur, Rajasthan	100	17.02.2022 12.04.2022	2.37 (+) 0.07 trading margin	11.10.2023
Total		1000			

- d. It is stated that the salient features of the CPSU Scheme are as below:
- i) Sanction of the President of India was conveyed vide MNRE orders dated 05.03.2019 for implementation of Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for setting up 12,000 MW grid connected Solar PV Power Projects by the Government producers with Viability Gap Funding (VGF) support for self-use or use by Government/Government entities, either directly or through DISCOMs.
 - ii) The Scheme mandates use of both Solar PV cells and modules manufactured domestically.
 - iii) The Solar PV power project capacity under the Government Producer Scheme would be allocate to the Government Producers by way of bidding, who in turn, will secure an arrangement for usage of power for self-use or use by Government/Government entities, either directly or through DISCOMs.
 - iv) With the objective of covering difference between the domestically produced Solar cells & modules and imported cells & modules, VGF will be provided under the scheme. While the maximum permissible VGF has been kept at Rs.0.70 crore/MW, the actual VGF to be given to a Government Producer under the Scheme would be decided through bidding using the VGF amount as a bid parameter.

- e. It is stated that Ministry of New and Renewable Energy (MNRE), Government of India, vide office Memorandum dated 13.04.2020 identified Indian Renewable Energy Development Agency Limited (IREDA) as the nodal agency for handling the CPSU Scheme on behalf of MNRE.
- f. It is stated that on 29.01.2021, IREDA has issued the RfS document being RfS No. 23016 / 1 / 2020 – IREDA / RfS / 5000 MW / 012021 for selection of Solar Power Developers for setting up of 5000 MW Grid connected Solar PV Power Projects in India (Tranche-III) under Central Public Sector Undertaking Scheme Phase-II (Government Producers Scheme).
- g. It is stated that NTPC Limited has been declared as a successful bidder under the said RfS issued by IREDA for development of 1990 MW Solar PV Power Projects and NHPC was awarded 500 MW.
- h. It is stated that NTPC offered initially 1000 MW and NHPC offered 500 MW to TSDISCOMs under CPSU Scheme Phase-II Tranche-III @ Rs. 2.45 per kWh.
- i. It is stated that having agreed for the offered procurement of Solar power. PUAs for a capacity of 1000 MW were entered with NTPC on 07.12.2020. The total capacity of 1000 MW was offered from 3x245 MW Solar plants at Nokh, Rajasthan and 265 MW from 310 MW of NTPC REL project at Khavda Solar park, Gujarat.
- j. It is stated that subsequently, NTPC offered balance 45 MW capacity from 310 MW NTPC REL project at Khavda Solar park, Gujarat under CPSU Scheme Phase-II Tranche-III for smoothening the accounting and other modalities for the usage of power. Approval was accorded for procurement of balance 45 MW and accordingly supplemental agreement was signed on 13.05.2022, thus totaling the capacity to 1045 MW under CPSU Scheme Phase II Tranche II from NTPC.
- k. It is stated that Solar Energy Corporation of India Limited (SECI) has been identified by the Government of India as the nodal agency for implementation of MNRE Scheme for setting up of ISTS connected Solar Power Projects and shall act as the Intermediary Procurer under the Guidelines for Tariff Based Competitive Bidding Process for

Procurement of Power from Grid Connected Solar Power Projects issued by Ministry of Power vide Gazette Resolution dated 3rd August 2017, including subsequent amendments and clarification.

- I. It is stated that SECI issued RfS vide No. SECI / C & P / SPD / ISTS-IX / RfS / 2000 MW / 032020 dated 20.03.2020 for procurement of 2000 MW Solar power.
- m. It is stated that TSDISCOMs conveyed consent for procurement of 1000 MW through SECI under ISTS Tranche IX with tariff Rs. 2.37~2.38 / kWh. Accordingly, PSA dated 17.02.2022 was entered with SECI and subsequently, PPAs were signed by SECI with Solar Power Developers (SPDs).
- n. It is stated that the said procurement of 2545 MW capacity of Solar power through NTPC / NHPC / SECI has been taken up taking into consideration the following:
 - i) The TSDISCOMs are entrusted with the dual responsibility of not only to adhere to the various regulations/orders issued by TSERC / CERC / MNRE / MoP but also the bigger mandate enlisted in the Electricity Act 2003, to maintain reliable power supply with least cost principle;
 - ii. As such to meet the growing demand of the State of Telangana and to ensure 24 hours uninterrupted power supply to all categories of consumers including agricultural services as per the directions of GoTS, the subject procurement is necessitated;
 - iii. Further, in view of the commitment for achieving 500 GW RE power by 2030 made by India at CoP 26, all States have been directed to increase the RE capacity additions accordingly. Hence, TSDISCOMs need to be prepared for RE capacity addition in a phased manner;
 - iv. The present RE installed capacity tied up by TSDISCOMs under Power Purchase Agreements (PPAs) is as given below:

Category	PPA Capacity (MW)	Remarks
Biomass	30	12 MW PPAs going to expire by Dec'22.

Category	PPA Capacity (MW)	Remarks
Bagasse	61.7	15 MW PPAs going to expire by Dec'22.
Mini Hydel	2.55	
Industrial Waste based	15	
MSW/RDF	19.8	
Wind	128.1	
Solar (including all Bids, Bundled Power)	3289.55	
Solar Roof top	227.34	
Solar NTPC CPSU Phase-II Tranche I&II	1692	199.72 MW commissioned, balance 1492.28 MW to be commissioned by Oct'22.
Solar SECI ISTS Tranche VI	400	270 MW commissioned, balance 130 MW to be commissioned by Oct'22.
Solar NTPC CPSU Phase-II Tranche III	1045	SCOD from Nov'23 to Apr'24, included in the present petition.
Solar SECI ISTS Tranche IX	1000	SCOD Oct'23, included in the present petition.
Solar NHPC CPSU Phase-II Tranche-III	500	PUA yet to be signed, included in the present petition.
Total	8411.04	

v. The TSERC mandated RPPO as given below:

FY	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Solar RPPO %	5.33	5.77	6.21	7.10	7.50	8.00	9.00	10.00	11.00
Non-Solar RPPO %	0.67	0.73	0.79	0.90	1.00	1.25	1.50	1.75	2.00
Total	6.00	6.50	7.00	8.00	8.50	9.25	10.50	11.75	13.00

vi. The details of compliance of RPPO by TSDISCOMs are as below:

Financial Year	Solar RPPO %		Non-Solar RPPO %		Total RPPO %	
	As mandated by TSERC	Achieved by TSDISCOMs	As mandated by TSERC	Achieved by TSDISCOMs	As mandated by TSERC	Achieved by TSDISCOMs
2018-19	5.33	9.57	0.67	0.83	6.00	10.40
2019-20	5.77	9.86	0.73	0.67	6.50	10.53
2020-21	6.21	9.20	0.79	0.79	7.00	9.99
2021-22	7.10	8.52*	0.90	0.94*	8.00	9.46*

‘*’ Calculated for first three quarter of FY 2021-22

- vii. As could be seen from the above table TSDISCOMs were able to satisfy the Solar RPPO targets prescribed by TSERC from FY 2018-19 till FY 2021-22. However, could marginally meet the Non-Solar RPPO targets;
- viii. With the growing demand of the State (estimated at 8~9% growth rate), TSDISCOMs would not be able to meet the RPPO targets fixed by TSERC.
- ix. As such, in light of the higher RPPO targets fixed by the TSERC vide RPPO Regulation No. 7 of 2022 and increasing load growth @ 8.9%, the present procurement of Solar power helps TSDISCOMs comply the same.
- x. Also, the said Regulation No. 7 of 2022 provides that on achievement of Non-Solar RPPO compliance to the extent 85% and above, remaining shortfall if any, can be met by excess Solar energy purchased beyond specified Solar RPPO for that particular year;
- xi. In view of the limited Non-Solar potential availability in the Telangana State, the present procurement of Solar power would also help TSDISCOMs meet the shortfall in Non-Solar RPPO in future;
- xii. The purchase price of the present Solar procurement is very much cost effective when compared to higher tariffs of various Non-Solar RE sources, such as power from RDF based projects which tariff is presently fixed @ Rs. 7.84 / unit. Further, this Solar

tariff is single part levelized tariff fixed for 25 years, unlike Thermal power tariff being two part with increasing variable cost component;

- xiii. As such, this Solar power procurement would help TSDISCOMs in bringing down the average power purchase cost.
- xiv. TSDISCOMs are also benefitted from the exemption of ISTS Transmission charges granted by MoP (vide orders dated 30.09.2016, 14.06.2017, 13.02.2018, 06.11.2019, 05.08.2020, 15.01.2021, 21.06.2021 & 23.11.2021) for a period of 25 years applicable for the Solar projects to be commissioned till 30.06.2025. In other words, it is as good as procurement of power from Solar plants within the State of Telangana.
- xv. Since the CPSU Scheme mandates for use of domestically manufactured Solar Cells & Modules, change in levy of Basic Customs Duty (BCD) on Solar Cells and Modules does not affect the agreed Power Usage Charges.
- xvi. In case of procurement of power from SECI, Solar Power Developers provided commitment for waiver on claim of BCD upto 40% on Solar Modules & 25% on Solar Cells.
- xvii. Taking into consideration the environmental concerns restrictions are being imposed for operating the old Thermal plants beyond their PPA periods. In such a case, keeping the competitive tariffs offered by Solar power in view, procurement of such Solar energy complimented with Battery Energy Storage Systems would be the best alternative to meet the growing demands and peak demand in near future as the cost of Battery Energy Storage would be reduced.

Admission of Petition

7. The petition filed by TSDISCOMs was scrutinized and found to be generally in order as required under the TSERC (Conduct of Business) Regulations No.2 of 2015. The Commission admitted the petition and the same was taken on record by assigning the Original Petition number as O. P. No. 69 of 2022.

Provisions under the Electricity Act, 2003 and Regulations

8. The following are the provisions under the Electricity Act, 2003 and Regulations in the matter of approval or consent of PUAs/PSAs.

Section 86(1)(b) of the Electricity Act, 2003 [Functions of State Commission]

(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.

Regulation No.1 of 2019

4.3. Determination of Tariff for Existing Generating Station

4.3.1. Where the Commission has, at any time prior to April 1, 2019, approved a power purchase agreement or arrangement between a Generating Entity and a Distribution Licensee or has adopted the Tariff contained therein for supply of electricity from an existing generating Unit/Station, then the Tariff for supply of electricity by such Generating Entity to the Distribution Licensee shall be in accordance with the Tariff mentioned in such power purchase agreement or arrangement for such period as so approved or adopted by the Commission.

4.3.2. Where, as on April 1, 2019, the power purchase agreement or arrangement between a Generating Entity and a Distribution Licensee for supply of electricity from an existing Generating Unit/Station or the tariff therein has not been approved by the Commission, or where there is no power purchase agreement or arrangement, the supply of electricity by such Generating Entity to the Distribution Licensee after April 1, 2019 shall be in accordance with a power purchase agreement approved by the Commission.

Provided that the petition for approval of such power purchase agreement or arrangement shall be filed by the Distribution Licensee with the Commission within three months from the date of notification of these Regulations:

Provided further that the supply of electricity shall be allowed to continue under the present agreement or arrangement until such time as the

Commission approves such power purchase agreement, and shall be discontinued forthwith if the Commission rejects it, for reasons to be recorded in writing.

Notification inviting Suggestions/Objections/Comments

9. The Commission with reference to the provisions of the Electricity Act, 2003, under applicable Regulations decided to take up the matter through public consultation process and accordingly, directed TSDISCOMs to issue public notice in two (2) Telugu, two (2) English and One (1) Urdu newspaper. Accordingly, TSDISCOMs have published public notice on 05.08.2022 in daily newspaper (Annexure-I) and submitted compliance report vide letter dated 16.08.2022. In the Public Notice also indicated the intent of the Commission to conduct a Public Hearing in this regard on 13.09.2022 from 11:30 hours onwards at TSERC Court Hall. The Public Notice, filings and supporting material were also hosted on the website of TSDISCOMs as well as the Commission.

Public Hearing

10. There are no objections / suggestions / comments received from the stakeholders (Annexure-II). Public hearing was held on 13.09.2022 at 11.30 AM onwards at the TSERC court hall. There was no participation of stakeholders during the Public Hearing. TSDISCOMs have given brief presentation on their filings during the Public Hearing and responded to the issues raised by the Commission.

Justification submitted by TSDISCOMs during Public Hearing

11. During Public Hearing TSDISCOMs have submitted the following justification in their presentation to the Commission for the procurement of 2545 MW Solar power:

- * The DISCOMs are entrusted with the dual responsibility of not only to adhere to the various regulations/orders issued by TSERC / CERC / MNRE / MoP but also the bigger mandate enlisted in the Electricity Act 2003, to maintain reliable power supply with least cost principle;
- * As such to meet the growing demand of the Telangana State and to ensure 24 hours uninterrupted power supply to all categories of consumers including agricultural services as per the directions of Govt of Telangana State, the subject procurement is necessitated;

* Further, in view of the commitment for achieving 500 GW RE power by 2030 made by India at CoP 26, accordingly all States have been directed to increase the RE capacity additions. Hence, TSDISCOMs need to be prepared for Renewable energy capacity addition in a phased manner;

* The TSERC mandated RPPO as given below:

FY	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Solar RPPO %	5.33	5.77	6.21	7.10	7.50	8.00	9.00	10.00	11.00
Non-Solar RPPO %	0.67	0.73	0.79	0.90	1.00	1.25	1.50	1.75	2.00
Total	6.00	6.50	7.00	8.00	8.50	9.25	10.50	11.75	13.00

* The details of compliance of RPPO by TSDISCOMs are as below:

Financial Year	Solar RPPO %		Non-Solar RPPO %		Total RPPO %	
	As mandated by TSERC	Achieved by TSDISCOMs	As mandated by TSERC	Achieved by TSDISCOMs	As mandated by TSERC	Achieved by TSDISCOMs
2018-19	5.33	9.57	0.67	0.83	6.00	10.40
2019-20	5.77	9.86	0.73	0.67	6.50	10.53
2020-21	6.21	9.20	0.79	0.79	7.00	9.99
2021-22	7.10	8.80	0.90	0.97	8.00	9.77

- As could be seen from the above table, TSDISCOMs were able to satisfy the Solar RPPO targets prescribed by TSERC from FY 2018-19 till FY 2021-22. However, could marginally meet the Non-Solar RPPO targets;
- With the growing demands of the State (estimated at 8-9% growth rate), TSDISCOMs would not be able to meet the RPPO targets fixed by State ERC if additional RE power is not added;
- As such, in light of the higher RPPO targets fixed by this Commission vide RPPO Regulation No. 7 of 2022 and increasing load growth @ 8~9%, the present procurement of Solar power helps TSDISCOMs comply the same;
- Also, the said Regulation No. 7 of 2022 provides that on achievement of Non-Solar RPPO compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Solar energy purchased beyond specified Solar RPPO for that particular year;

- In view of the limited Non-Solar potential availability in the Telangana State, the present procurement of Solar power would also help TSDISCOMs meet the shortfall in Non-Solar RPPO in future;
- The purchase price of the present Solar procurement (viz., less than Rs. 2.50 / unit) is very much cost effective when compared to higher tariffs of various Non-Solar RE sources, such as power from RDF based projects the tariff for which is presently fixed @ Rs. 7.84 / unit. Further, this Solar tariff is single part levelized tariff fixed for 25 years, unlike Thermal power tariff being two part with increasing Variable Cost component;
- As such, this Solar power procurement would also aid TSDISCOMs in bringing down the average power purchase cost;
- TSDISCOMs are also benefitted from the exemption of ISTS Transmission charges granted by MoP (vide orders dated 30.09.2016, 14.06.2017, 13.02.2018, 06.11.2019, 05.08.2020, 15.01.2021, 21.06.2021 & 23.11.2021) for a period of 25 years applicable for the Solar projects to be commissioned till 30.06.2025. In other words, it is as good as procurement of power from Solar plants within the Telangana State;
- Since the CPSU Scheme mandates for use of domestically manufactured Solar Cells & Modules, change in levy of Basic Customs Duty (BCD) on Solar Cells and Modules does not affect the agreed Power Usage charges;
- In case of procurement of power from SECI, Solar Power Developers provided commitment for waiver on claim of BCD upto 40% on Solar Modules & 25% on Solar Cells;
- Taking into consideration the environmental concerns, restrictions are being imposed for operating the old Thermal plants beyond their PPA periods. In such a case, keeping the competitive tariffs offered by Solar power in view, procurement of such Solar energy complimented with Battery Energy Storage Systems would be the best alternative to meet the growing demands and peak demand in near future, as the cost of Battery Energy Storage Systems are expected to reach economical levels;
- Ministry of Power, Govt of India, vide notification dated 12.04.2022, issued revised scheme for Flexibility in Generation and Scheduling of Thermal / Hydro Power Stations through replacement of Thermal / Hydro Power with Renewable Energy and Storage Power;

- While issuing the station-wise targets for substituting the thermal power with RE power, it was directed that all CPSUs, State and private generation utilities to take appropriate action to meet the year-wise trajectory i.e., 20% in 2023-24, 35% in 2024-25 and 45% in 2025-26 of the total target;
- Thus, the thermal plants would be restricted to operate until technical minimum and the rest of power shall be replaced with equivalent RE power;

Analysis and Commission's View

12. The following is the analysis and the Commission's view in the matter of TSDISCOMS proposals for procurement of 2545 MW Solar power from NTPC, NHPC and SECI.

- In 2021, India announced its updated Nationally Determined Contribution (NDC) and set the following targets at COP 26 in Glasgow:
 - India will increase its non-fossil fuel energy capacity to 500 GW by 2030;
 - It will meet 50% of its energy requirements from renewable sources (includes large hydropower) by 2030;
 - The total projected carbon emissions will be reduced by 1 billion tonnes from now through 2030;
 - The carbon intensity of its economy will be brought down to less than 45%;
 - India will achieve its target of net zero by 2070;

Hence, TSDISCOMs need to be prepared for Renewable Energy capacity addition in a phased manner.

- The TSDISCOMs have computed 'load generation balance' for Telangana State for the ensuing years till FY 2030-31 and are anticipating the energy deficit from FY 2023-24 onwards as tabulated below:

Particulars (in MU)	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Energy Availability	75,386	87,288	88,162	90,818	96,130	101,443	106,755	109,411	109,411	109,411
Energy Requirement	72,178	84,222	88,566	93,001	97,701	102,661	107,900	112,285	116,898	121,753
Energy Surplus / (Deficit)	3,028	3,066	(404)	(2,183)	(1,571)	(1,219)	(1,145)	(2,874)	(7,488)	(12,343)

Taking into consideration the variations of both load and generation, TSDISCOMs have to plan for additional generation tie up for maintaining round the clock uninterrupted, reliable and quality power supply to all

categories including agriculture sector. Hence, the proposed procurement of Solar power would help TSDISCOMs to mitigate the energy deficit in the ensuing years.

- c. The Solar power capacity now being proposed for procurement will not only helpful in meeting the energy and demand requirements for the ensuing years but also helpful in achieving a reduction in overall purchase cost of TSDISCOMs. The proposed Solar power procurement of 2545 MW at an average cost of Rs. 2.45 / kWh (including trading margin) would help TSDISCOMs in reducing the overall power purchase cost as the higher variable cost thermal generators (i.e., having variable cost more than Rs.2.45/kWh), could be avoided in Merit Order Dispatch (MOD).
- d. In addition to the above, TSDISCOMs are also benefited from the exemption of ISTS transmission charges granted by MoP for a period of 25 years for procurement of Solar power from these projects to be commissioned by 30.06.2025.
- e. It is also observed from the recent power procurement of Solar power under competitive bidding route in other States the discovered prices are in the range of Rs. 2.58 / kWh to Rs. 2.92 / kWh and are in increasing trend.
- g. In view of the increasing loads of TSDISCOMs estimated at 8% growth annually (such as upcoming Lift Irrigation projects, release of new agricultural connections, additional industrial & commercial loads, etc.), the procurement of power from Renewable Energy Sources is to be enhanced for meeting proportionate increase in RPPO.
- h. Therefore, the Commission opines that TSDISCOMs proposal of procurement of 2545 MW Solar power which will help in bridging the gap between the electrical demand and availability is justified.

13. In view of the above, the Commission hereby accords in-principle approval under Section 86(1)(b) of the Electricity Act, 2003 for power procurement by TSDISCOMs for 1045 MW Solar power from NTPC under CPSU Scheme Phase-II Tranche-III, 500 MW Solar power from NHPC under CPSU Scheme Phase-II Tranche-III at a Tariff of Rs.2.45 per kWh (including trading margin) and 1000 MW Solar power

from SECI under ISTS Tranche-IX with a tariff of Rs. 2.37 / kWh for 700 MW and Rs. 2.38 / kWh for 300 MW (exclusive of trading margin).

14. Further TSDISCOMs are directed to –

- a) approach the Commission for adoption of tariff upon the same is approved by the CERC along with all relevant PSAs/PUAs.
- b) For efficient utilization of the procurement of Solar power and to optimize the power purchase cost, TSDISCOMs need to explore the other options such as effective operation of the pumped storage stations and banking mechanism with other State DISCOMs so as to bank the surplus power and utilise the same in times of deficiency.

This Order is corrected and signed on this the 26th day of October, 2022.

Sd/- (BANDARU KRISHNAIAH) MEMBER	Sd/- (M. D. MANOHAR RAJU) MEMBER	Sd/- (T. SRIRANGA RAO) CHAIRMAN
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**ANNEXURE-I
PUBLIC NOTICES**

Published in Mana Telangana, Namaste Telangana

<p>గౌరవనీయమైన తెలంగాణ రాష్ట్ర విద్యుత్ నియంత్రణ మండలి వారి సమక్షంలో ఇంటి నం. 11-4-660, 5వ అంతస్తు, సింగరేణి భవన్, రెడ్ హిల్స్, హైదరాబాద్-500004</p>	
దక్షిణ తెలంగాణ విద్యుత్ పంపిణీ సంస్థ (TSSPDCL)	ఉత్తర తెలంగాణ విద్యుత్ పంపిణీ సంస్థ (TSNPDCL)

బహిరంగ ప్రకటన

O.P.No. 69 of 2022

1. TSDISCOMs అనగా దక్షిణ తెలంగాణ విద్యుత్ పంపిణీ సంస్థ (TSSPDCL) & ఉత్తర తెలంగాణ విద్యుత్ పంపిణీ సంస్థ (TSNPDCL) దిగువ పేర్కొన్న వాటి ఆమోదం కోరుతూ ఎలక్ట్రిసిటీ యాక్ట్, 2003లోని సెక్షన్ 68, 86(1) (బి) క్రింద మరియు తెలంగాణ ఎలక్ట్రిసిటీ రిఫార్మింగ్ యాక్ట్, 1998లోని సెక్షన్ 21(4) క్రింద ప్రతిపాదన తెలంగాణ రాష్ట్ర విద్యుత్ నియంత్రణ మండలి (TSERC) సమక్షంలో దాఖలు చేసింది.

1) యూనిట్ కు రూ. 2.45 టారిఫ్ లో CPSU ఫేజ్-II ట్రాంచి-III క్రింద వరుసగా NTPC & NHPC ద్వారా 1045 MW & 500 MW సోలార్ పవర్ మరియు II) బేసిక్ కస్టమ్ డ్యూటీ మినుహాయింపుతో 700 MW కొరకు రూ. 2.37/kWh మరియు 300 MW కొరకు రూ. 2.38/kWh టారిఫ్ (ట్రేడింగ్ మార్జిన్ మినుహా)తో ISTS సోలార్ ట్రాంచి-IX పథకం క్రింద SECI ద్వారా 1,000 MW సోలార్ పవర్. ఈ ఫైలింగ్ లు O.P. నం. 69 ఆఫ్ 2022లో గౌరవనీయ కమిషన్ ద్వారా రికార్డ్ లో తీసుకోబడినవి

2) ఈ ఫైలింగ్ ల కాపీలు కమిషన్ వెబ్ సైట్ www.tserc.gov.inలో అప్ లోడ్ చేయబడినవి TSDISCOM ల ద్వారా చేయబడిన దాఖలు ఆధారంగా కమిషన్ ప్రొసీడింగ్స్ ను ప్రారంభించింది మరియు స్టేట్ హోల్ డిస్ట్రిబ్యూషన్ మరియు సాధారణ ప్రజలు సదరు విషయంలో ఏవేని అభ్యంతరాలు/సలహాలు, వ్యాఖ్యలు ఉన్నచో 26-08-2022 న సాయంత్రం 5.00 గంటల వరకు చీఫ్ జనరల్ మేనేజర్ (IPC)/TSSPDCL, 6-1-50, 1వ అంతస్తు, మింట్ కాంపౌండ్, హైదరాబాద్-500063, ఇ-మెయిల్ ఐడి: seipttsspdcl@gmail.com వారికి లేదా చీఫ్ జనరల్ మేనేజర్ (IPC)/TSNPDCL ఇంటి నం 2-5-31/2, కాల్పొరేట్ కార్యాలయం, విద్యుత్ భవన్, నక్కలగుట్ట, హన్మకొండ, వరంగల్, తెలంగాణ-506001, ఇ-మెయిల్ ఐడి cgmir@tsspdcl.in వారికి పంపగలరు మరియు దాని కాపీని కమిషన్ సెక్రటరీ, TSERC, 5వ అంతస్తు, సింగరేణి భవన్, రెడ్ హిల్స్, లక్ష్మీకాపూల్, హైదరాబాద్-500004 ఇ-మెయిల్ ఐడి: secy@tserc.gov.in వారికి కూడా తప్పనిసరి దాఖలు చేయవలెను.

3) తెలంగాణ రాష్ట్ర విద్యుత్ నియంత్రణ మండలి TSERC కోర్ట్ హాల్, లక్ష్మీకాపూల్, హైదరాబాద్ వద్ద 13-09-2022న 11.30 గంటల నుండి ప్రజాభిప్రాయ సేకరణ నిర్వహించుటకు ఉద్దేశిస్తోంది.

హైదరాబాద్
తేది: 05-08-2022

<p>సం/- చైర్మన్ & మేనేజింగ్ డైరెక్టర్ (TSSPDCL)</p>	<p>సం/- చైర్మన్ & మేనేజింగ్ డైరెక్టర్ (TSNPDCL)</p>
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DIPR RO.No. 41-04-PP/CL/ADVT/1/2022-23, Dt: 04-08-2022

www.tserc.gov.in | www.telangana.gov.in | E-Mail: info@tserc.org.in | info@tspcdcl.com
R.O.No: TSPDCL/AGNY/1302/22, Dt: 06.08.2022 | Sd/- Superintending Engineer, TSPDCL, Civil, Kamalageri

**BEFORE THE HONOURABLE
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**
O.No. 11-4-663, 5th Floor, Singareni Bhavan, Red Hills, Hyderabad-500 004.

SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED (TSSPDCL)  **NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED (TSNPDCL)** 

PUBLIC NOTICE
Q.P. No. 69 of 2022

1. TSDISCOMs viz., Southern Power Distribution Company of Telangana Limited (TSSPDCL) & Northern Power Distribution Company of Telangana Limited (TSNPDCL) submitted before the Telangana State Electricity Regulatory Commission (TSERC) proposal u/s 63, 66(1) (b) of the Electricity Act, 2003 and u/s 21(4) of Telangana Electricity Reforms Act, 1998 seeking consent for procurement of
 - i. 1065 MW & 500 MW solar power through NTPC & NHPC respectively under CPSU Phase-II Tranche III at a Tariff of Rs. 2.45 per unit.
 - &
 - ii. 1,000 MW Solar Power through SECI under ISTS-Solar Tranche-IX Scheme with a tariff of Rs. 2.37/RWh for 700 MW and Rs. 2.38/RWh for 300 MW (exclusive of trading margin) with Basic Custom Duty waiver. These filings have been taken on record by the Hon'ble Commission in O.P. No. 69 of 2022.
2. Copies of these filings are uploaded in the Commission website www.tserc.gov.in. Based on the submission made by TSDISCOMs, the Commission has initiated proceedings and Objections / Suggestions / Comments if any, in the subject matter are invited from all the stakeholders and public at large on or before 26.08.2022 by 05.00 PM to the Chief General Manager (IPC)/TSSPDCL, 6-1-50, 1st floor, Mint Compound, Hyderabad - 500 063, email id: seipctsspdcl@gmail.com or to Chief General Manager (IPC)/TSNPDCL, H.No. 2-5-31/2, Corporate Office, Vidyut Bhavan, Nakkalagutta, Hanamkonda, Warangal, Telangana 506 001 email id: cgmir@tspcdcl.in and a copy of the same must also be filed with the Commission Secretary, TSERC, 5th Floor, Singareni Bhavan, Red Hills, Lakdi-Ka-Pul, Hyderabad 500 004, email id: secy@tserc.gov.in
3. Telangana State Electricity Regulatory Commission intends to conduct a Public Hearing on 13.09.2022 from 11.30 hrs onwards at TSERC Court Hall, Lakdi-ka-pul, Hyderabad.

Hyderabad
06-08-2022

Sd/- Chairman & Managing Director (TSSPDCL) Sd/- Chairman & Managing Director (TSNPDCL)

0691 60 : 02-94-PRCL AGENCY/AGNY/1302/22

ANNEXURE-II

**LIST OF STAKEHOLDERS WHO SUBMITTED THE WRITTEN OBJECTIONS/
SUGGESTIONS/COMMENTS AND WHO PARTICIPATED IN PUBLIC HEARING
HELD ON 13.09.2022 AT 11.30 AM, AT TSERC COURT HALL**

- NIL-

