



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

**O.P.No.29 of 2021 &
O.P.Nos.30 to 35 of 2021**

Dated 19.08.2021

Present

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

In the matter of Suo-Moto consent to a) Six (6) PSAs dated 18.06.2016 between TSDiscoms and NTPC for a quantum of 400 MW Solar Bundled Power under Phase-II, Batch-II Tranche-I of National Solar Mission, MoP, Gol [50 MW under Domestic Content Requirement (DCR) @ Rs.5.19/kWh and 350 MW under open category @ Rs.4.66/kWh (for 100 MW) and @ Rs.4.67/kWh (for 250 MW)] for a period of 25 years; and b) One (1) PSA dated 21.01.2020 between TSDiscoms and SECI for a quantum of 400 MW Solar Power under ISTS MNRE Scheme Tranche VI @ Rs.2.78/kWh (including trading margin of Rs.0.07/kWh) for a period of 25 years

The matter having been taken on file in Suo-Moto O.P.No.29 of 2021 and O.P.Nos.30 to 35 of 2021, and having considered the suggestions/ objections/ comments received from stakeholders, the Commission passed the following:

COMMON ORDER

Background

1. The Government of India (Gol) has executed, the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) a legally binding international treaty on climate change, wherein the India has committed to reduce the emission intensity of its GDP by 33.35% by increasing forty percent (40%) installed capacity of electricity generation from Renewable Energy Sources (RES). Pursuant thereof, Government of India (Gol) has set an ambitious target of 100 GW of Solar Power, 60 GW of wind power, 10 GW from bio-power, 5 GW from small hydro power i.e., a total of 175 GW by 2022.

2. The Government of Telangana State (GoTS) has announced an integrated and comprehensive "The Telangana Solar Power Policy 2015" with effective from 1st June 2015 for encouraging Solar Power capacity additions in Telangana State.

3. The Ministry of Power by order No.23/03/.206-R&R, dated 29.01.2021 specified the RPO trajectory with regard to Solar and Non-Solar power. This Commission has also notified TSERC Renewable Power Purchase Obligation (Compliance by Purchase of Renewable Energy /Renewable Energy Certificates) Regulations, 2018 [Regulation No.2 of 2018] wherein fixed Renewable Power Purchase Obligations (RPPO) targets for purchase of minimum level of Solar Power in percentage on total consumption of electricity by an obligated entity excluding consumption met from hydro sources of power other than small-hydel sources of power. The details of year-wise targets of Solar RPO are as given below:

Year	As per TSERC Regulation	As per MoP order dated 29.01.2021
2018-19	5.33%	6.75%
2019-20	5.77%	7.25%
2020-21	6.21%	8.75%
2021-22	7.10%	10.50%

4. TSDiscoms viz., Southern Power Distribution Company of Telangana Limited (TSSPDCL) and Northern Power Distribution Company of Telangana Limited (TSNPDCL) have submitted before the Commission for approval/consent of Power Sale Agreements (PSAs) entered between -

I) Six (6) PSAs dated 18.06.2016 between TSDiscoms and NTPC for a quantum of 400 MW Solar Bundled Power under Phase-II, Batch-II Tranche-I of National Solar Mission, MoP, Gol [50 MW under Domestic Content Requirement (DCR) @ Rs.5.19/kWh and 350 MW under open category @ Rs.4.66/kWh (for 100 MW) and @ Rs.4.67/kWh (for 250 MW)] for a period of 25 years

a) The National Thermal Corporation Limited (NTPC) has been identified by the Gol as the nodal agency for purchase and sale of 33 kV and above grid connected “**Solar PV**” power under the “**State Specific Bundling Scheme**” under National Solar Mission (NSM) by Ministry of Power (MoP), Gol. NTPC has also been authorised by MoP, Gol and under the provisions of the National Solar Mission Phase-II, Guidelines for selection 3000 MW Grid connected Solar PV power Projects under Phase-II, Batch-II, Tranche-I to bundle the purchased Solar power with unallocated quota from NTPC Thermal Power stations on 2:1 on MW basis (2 MW of Solar Power with 1 MW of Thermal Power) as per allocations made by MoP, Gol. NTPC shall sign Power Purchase Agreements (PPAs) with Solar Power Developer (SPD) assigned by Parent Company for procurement of Solar Power on a long term basis and NTPC Vidyut Vyapar Nigam Limited (NVVN) on behalf of NTPC, purchase Solar Power from SPDs and sell it to TSDiscoms after bundling it with the Thermal Power allocated by MoP, Gol, for this purpose. Further, on behalf of NTPC, NVVN will facilitate Daily Scheduling, Billing, Realisation, Data Submission and other associated day to day activities for fulfilling the obligations of NTPC as assigned in PSA agreement. In case the cost of bundled power exceeds the agreed Solar Tariff of PPA with SPD, TSDiscoms shall have the right to surrender the Thermal Power at any point of time during tenure of Agreement.

b) TSSPDCL on behalf of TSDiscoms vide letter No.CGM(Comml&RAC)/ SE(IPC) / F.NTPC solar/D.No.726/16, dated 13.07.2016 submitted that as per the Solar Bundled Power Project under Phase-II, Batch-II Tranche-I of NSM, Gol, the following six (6) nos. of Power Sale Agreements (PSAs) were entered between

NTPC Limited and TSDiscoms on 18.06.2016 for a capacity of 50 MW under Domestic Content Requirements (DCR) @ Rs.5.19/kWh and 350 MW under Open Category @ Rs.4.66/kWh~Rs.4.67/kWh of bundled power with unallocated quota from NTPC thermal stations on 2:1 on MW basis as per allocation made by MoP, Gol, for a period of 25 years on 18.06.2016 and requested the Commission for consent for the six (6) Nos PSAs under Section 86 (1) (b) of the Electricity Act, 2003.

Name of Solar Power Project Parent Company	Capacity (MW)	Rate (Rs./kWh)	Category
M/s Parampujya Solar Energy Private Limited, Ahmedabad	50	5.19	DCR
M/s Parampujya Solar Energy Private Limited, Ahmedabad	50	4.67	Open
M/s ReNew Solar Power Private Limited, Gurgaon	100	4.66	Open
M/s Karvy Consultants Limited, Hyderabad	50	4.67	Open
M/s Azure Power India Pvt. Ltd., New Delhi	100	4.67	Open
M/s ACME Solar Holdings Private Limited, Gurgaon	50	4.67	Open

- c) Pending a decision by the Commission on PSAs, the Commission vide letter No.TSERC/Secy/F.No.T-30004/D.No.480/17, dated 19.08.2017 directed TSDiscoms to proceed with the formalities of synchronisation of the plants and further TSDiscoms are required to take steps to communicate to NTPC that they shall not levy penalties on the developers.
- d) The Commission vide letter No.TSERC Secy/F.No.T-30004/D.No.482/17, dated 22.08.2017 has sought certain information from TSDiscoms for detailed examination with regard to approval/consent of six (6) Nos PSAs. In response TSDiscoms have submitted the required information vide its letter No.CGM(IPC&RAC)/SE(IPC)/F.NTPC Solar/D.No.966/17, dated 04.10.2017. Further, TSDiscoms vide letters No.CGM(IPC&RAC)/SE(IPC)/ F.NTPC Solar/ D.No.533/18, dated 13.08.2018 and No.CGM(IPC&RAC)/SE(IPC)/ F.NTPC Solar/ D.No.651/20, dated 27.11.2020 has requested for consent of six (6) numbers PSAs under Section 86 (1) (b) of the Act.
- e) The Commission vide letter No.T-30004/Secy/JD Law-3/D.No.10/2021, dated 06.01.2021 has sought further information for considering the proposal placed before it.
- f) In response TSDiscoms, vide letter No.CGM(IPC&RAC)/SE(IPC)/F.NTPC Solar/D.No.88/21, dated 19.04.2021 has submitted required information and also stated that Hon'ble Central Electricity Regulatory Commission (CERC) vide orders on 01.03.2021 in Petition No.549/AT/2020 adopted the individual tariff for the Solar Power projects as discovered through the competitive bidding process and requested the Commission for consent for the six (6) Nos. PSAs under Section 86 (1) (b) of the Electricity Act, 2003.
- II) One (1) PSA dated 21.01.2020 between TSDiscoms and SECI for a quantum of 400 MW Solar Power under ISTS MNRE Scheme Tranche VI @ Rs.2.78/kWh (including trading margin of Rs.0.07/kWh) for a period of 25 years**

- a) The Solar Energy Corporation of India Limited (SECI), has been identified by the Government of India (GoI) as the nodal agency for implementation of the Ministry of New & Renewable Energy (MNRE) Scheme for setting up of Inter-State Transmission System (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 (MoP) vide Gazette Resolution dated 3rd August 2017. SECI has sent the proposals to the Government of Telangana State (GoTS) vide letter No.SECI/RPO/PSA/2018/23113, dated 11.07.2018 seeking to communicate the requirement of Solar and Wind Power by the Telangana State for allocation of capacity from MNRE schemes to meet Renewable Power Obligation (RPO) targets at competitive rates. SECI has stated that the developers would be selected through transparent competitive bidding process and expect that the tariff would remain below Rs.3.00/kWh for the reason that Inter-State transmission charges and losses have been waived by the Ministry for a period of 25 years from the date of commissioning of the Solar Projects.
- b) Whereas, GoTS vide letter No.873/PR(A1)/2018, dated 14.08.2018 has requested the CMDs of TSTransco and TSDiscoms to examine the proposal of the SECI. Subsequently, TSSPDCL on behalf of TSDiscoms vide letter No.CGM(IPC&RAC)/SE(IPC)/F.SECI/ D.No.793/18, dated 15.10.2018 has stated that the SECI proposal has been examined by TSPCC and it has been decided to seek for allocation of 500 MW of Solar capacity from the bidding process being initiated by SECI as the price that would be discovered in the Bidding will help TSDiscoms in reducing the average procurement cost of power and requested the Commission to accord in-principle approval. The Commission has accorded in-principle approval for procurement of 500 MW Solar Power from SECI through competitive bidding process only vide letter No.Secy/TSERC/JD(TE)/AO/D.No.720/2018, dated 09.11.2018.
- c) TSSPDCL on behalf of TSDiscoms vide letter No.CGM(IPC&RAC)/SE(IPC)/F.SECI/D.No.1221/19, dated 19.02.2020 and Lr.No.CGM(IPC&RAC)/SE(IPC)/F.SECI/D.No.446/20, dated 24.09.2020 stated that after finalisation of Bids, SECI vide letter dated 06.01.2020 has offered to supply 400 MW (against TSDiscoms indent of 500 MW) Solar Power under ISTS connected Solar Power projects @ Rs.2.78/kWh (including trading margin of Rs.0.07/kWh) for a period of 25 years from the Commercial Operation Date (CoD). Accordingly, Power Sale Agreement (PSA) have been signed between SECI and TSDiscoms on 21.01.2020 and requested the Commission for consent of PSA under Section 86 (1) (b) of the Electricity Act, 2003 (Act) and also including adopting the tariff under Section 63 of the Act.

Solar Power Developers (SPDs)	Project Capacity (MW)	Quantum Mapped to TSDiscoms	Buyer	Buying Entity	Rate (Rs./kWh)
Renew Solar Urja Power Private Limited	300	130	SECI	TSDiscoms	2.78 (Including trading margin of Rs.0.07/kWh)
Avaada Sustainable RJ Project Private Limited	300	140			
Masaya Solar Energy Private Limited	300	130			
Total	900	400			

- d) Whereas, the Commission considers it appropriate that the consent can only be considered after passing of order by the Hon'ble CERC in respect of tariff, the same is informed to TSDiscoms vide letter No.2/18-19/Secy/JD(Law)-2/D.No.416/ 2020, dated 04.11.2020.
- e) TSDiscoms through their letters No.CGM(IPC&RAC)/SE(IPC)/F.SECI/ D.No. 1200/20, dated 01.04..2021 and CGM(IPC&RAC)/SE(IPC)/F.SECI/ D.No. 271/20, dated 08.06.2021 has submitted that Hon'ble CERC by order dated 19.03.2021 in Petition No.552/AT/2020 filed by SECI, has adopted the tariff discovered in the competitive bidding process for individual Solar Power projects under Section 63 of the Act, and requested the Commission to arrange consent to the PSA entered with SECI for purchase of 400 MW of Solar power under ISTS Scheme under Section 86 (1) (b) of the Electricity Act, 2003.

Regulatory Provisions for approval or consent of PPA/PSA

5. The following are the Regulatory provisions in the matter of approval or consent of PPAs/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.

Suo-Moto Proceedings

6. The Commission has taken the requests of TSDiscoms on record. By considering the correspondence made by TSDiscoms, examining with reference to the provisions of the Electricity Act, 2003, provisions under applicable Regulations and sustainability of the clauses in the PSAs the Commission decided to finalise the approval/consent of PSAs through public consultation process and assigned the Suo-Moto O.P. numbers as given below:

- a) Six (6) PSAs dated 18.06.2016 between TSDiscoms and NTPC for a quantum of 400 MW Solar Bundled Power under Phase-II, Batch-II Tranche-I of National Solar Mission, MoP, GoI [50 MW under Domestic Content Requirement (DCR) @ Rs.5.19/kWh and 350 MW under open category @ Rs.4.66/kWh (for 100 MW) and @ Rs.4.67/kWh (for 250 MW)] for a period of 25 years

Name of Solar Power Project Parent Company	Capacity (MW)	Rate (Rs./kWh)	Category	Suo Moto O.P.No.
M/s Parampujya Solar Energy Private Limited, Ahmedabad	50	5.19	DCR	31 of 2021
M/s Parampujya Solar Energy Private Limited, Ahmedabad	50	4.67	Open	30 of 2021
M/s ReNew Solar Power Private Limited, Gurgaon	100	4.66	Open	33 of 2021
M/s Karvy Consultants Limited, Hyderabad	50	4.67	Open	32 of 2021
M/s Azure Power India Pvt. Ltd., New Delhi	100	4.67	Open	35 of 2021
M/s ACME Solar Holdings Private Limited, Gurgaon	50	4.67	Open	34 of 2021

- b) One (1) PSA dated 21.01.2020 between TSDiscoms and SECI for a quantum of 400 MW Solar Power under ISTS MNRE Scheme Tranche VI @ Rs.2.78/kWh (including trading margin of Rs.0.07/kWh) for a period of 25 years

Solar Power Developers (SPDs)	Project Capacity (MW)	Quantum Mapped to TSDiscoms	Buyer	Buying Entity	Rate (Rs./kWh)	Suo Moto O.P.No.
Renew Solar Urja Power Private Limited	300	130	SECI	TSDiscoms	2.78 (Including trading margin of Rs.0.07/kWh)	29 of 2021
Avaada Sustainable RJ Project Private Limited	300	140				
Masaya Solar Energy Private Limited	300	130				
Total	900	400				

Notification inviting suggestions/ objections/ comments

7. The Commission issued a Notice on 24.06.2021 inviting the suggestions/ objections/ comments from all stakeholders and public at large on or before 16.07.2021 by 6:00 pm, on the Power Sale Agreements (PSAs) of TSDiscoms entered between a) TSDiscoms and NTPC for a quantum of 400 MW under Phase-II, Batch-II Tranche-I of National Solar Mission; and b) TSDiscoms and SECI for a quantum of

400 MW under ISTS MNRE Scheme Tranche VI; duly uploading the Notice and the copies of PSAs and correspondence made in this regard with TSDiscoms in the Commission's website. The copy of the Notice is placed in **Annexure-I**.

Response to Notice

8. In response to the Notice, suggestions/ objections/ comments have been received from two (2) stakeholders, whose details are given in **Annexure-II**.

9. The issues have been identified and summarised by considering all the written suggestions/ objections/ comments received from the stakeholders. They are discussed in the subsequent paragraphs by taking the replies given by TSDiscoms into consideration.

Issue 1: Reference Documents

Stakeholder Comments

10. The documents available on the website have not been numbered for enabling referencing, specially during a regulatory hearing. There are pages which are barely legible. There are many abbreviations used that are inevitable in such voluminous document, but it would have been helpful if a glossary of abbreviations were provided.

TSDiscoms' Replies

11. TSDiscoms have submitted all the documents sought for by the Commission.

Commission's View

12. The Commission has taken note of suggestion made by stakeholder.

Issue 2: Delay in seeking approval of PPAs

Stakeholder Comments

13. Letter of Award was issued to the successful bidders between March 2016 & June 2016 in the matter of PPAs for bundled Solar Power, which is now slated for hearing in July 2021, five and half years later.

TSDiscoms' Replies

14. The time delay in seeking the final consent for the NTPC PSAs for bundled power is because there was a delay in adoption of the respective tariffs by Hon'ble CERC which were discovered by NTPC through the competitive bidding process .

Commission's View

15. The Commission is in agreement with the replies given by TSDiscoms.

Issue 3: Notice and Public Hearing

Stakeholder Comments

16. The notice is silent about holding a public hearing on the issues, implying that the Commission would issue its Orders after considering written submissions of interested public. Going by the indicated scheduled dates of commissioning the solar units concerned, there does not seem to be any extraordinary urgency to decide the issues without holding a public hearing on the same. Therefore, public hearings on the subject issues should be held and an adequate time should be given to interested stakeholders to make their submissions, both written and oral. The view that public hearing on long-term load forecast, resource plan, procurement plan, etc., need not be held on the simplistic ground that regulations do not contain such a provision for holding public hearing simply takes shelter behind trivial technicalities, ignoring the principles of transparency, accountability and public participation which the regulatory process is expected to ensure. No regulation prohibits the Commission from holding public hearings on issues under its consideration, if it so decides.

TSDiscoms' Replies

17. No reply has been furnished by TSDiscoms.

Commission's View

18. As mentioned at para (5) above, the Commission has taken the requests of TSDiscoms on record and by considering the correspondence made by TSDiscoms, examining with reference to the provisions of the Electricity Act, 2003, provisions under applicable Regulations and sustainability of the clauses in the PSAs the Commission decided to finalise the approval/consent of PSAs through public consultation process.

Issue 4: Load Forecast

Stakeholder Comments

19. TSDiscoms have not submitted medium and long-term load forecast. Before entering into long-term PPAs with power projects by TSDiscoms and consents given by the Commission, it is imperative to assess availability of power from sources under PPAs in force, capacities being added, availability of surplus or deficit vis a vis growing demand, in which year and how much generation capacity needs to be added on medium and long-term basis. The addition of capacities also should be prudent to maintain balance in power mix to suit fluctuating demand curve to the extent possible, taking into account renewable power which TSDiscoms have to purchase as per their obligations under Renewable Power Purchase Obligation (RPPO). Such a balance needs to be maintained in order to avoid, to the extent possible and subject to technical limitations, availability of substantial surplus power, backing down the same and paying fixed charges therefor, problems of grid integration, need for purchasing power from market sources even in the face of availability of surplus power, etc. Without taking such a holistic view based on ground realities, entering into long-term PPAs indiscriminately and giving regulatory consents to the same would lead to disastrous consequences, disorderly development of power sector and increase in avoidable burdens on consumers of power. Unfortunately, with TSDiscoms continuing to fail to submit their ARR and tariff proposals for the last two years and current financial years.

20. TSDiscoms have not been submitting the required information whenever a PPA or related issues have been coming up for public hearings and consideration of the

Commission. The Commission has power to direct TSDiscoms to submit long-term load forecast, resource and procurement plans, etc., and discretion to hold public hearing on the same before giving its Order.

TSDiscoms' Replies

21. TSDiscoms have been entering into Long-term, Medium-term and Short-term power purchase agreements based on the growing demands and to meet the additional demand of the Lift Irrigation Projects taken up by the State Government. Further, TSDiscoms have to ensure 24 hours uninterrupted power supply to all the categories of the consumers in the State, including the Agricultural consumers, for which TSDiscoms plan the power purchases. The loads have become more dynamic in nature due to 24 hours power supply to Agricultural consumers and Lift Irrigation Projects loads. In respect of the power purchases, whether it is through agreements or through markets, TSDiscoms are ensuring a balance to the extent possible, for ensuring the grid stability and other required technical parameters. Further, while entering the PPAs for purchase of RE power, TSDiscoms are also examining the RPPO targets in vogue both at State level and National level.

22. In the draft Electricity Act Amendment Bill, Section 142 of the Act is proposed to be amended. In the proposed amendment, it is stated that if the power is not purchased from renewable sources as prescribed by the Central Government, penalties ranging from Rs. 0.25 to Rs. 2 per kWh have to be paid.

Commission's View

23. The power purchases from Renewable Energy sources should be promoted in line with the policies of the State and Central Governments. The Commission has considered the RPPO compliance of the State Entities and the RPO trajectory as specified in Regulation No.2 of 2018. The Commission is of the view that TSDiscoms may need to procure additional Solar Power through competitive bidding only taking consumer's best interest into consideration to meet the RPPO.

24. The Commission finds merit in the submission of the stakeholder that TSDiscoms should submit long-term load forecast, resource and power procurement plans, etc. The Commission, in its Order in O.P.No.15 to 19 of 2021 dated 06.08.2021 has directed TSDiscoms to submit Power Procurement Plan as per the Commission's Guidelines issued on Load Forecasts, Resource Plans and Power Procurement Plan for approval of the Commission. Further, TSDiscoms are directed that specific emphasis be given in their Power Procurement Plan with regard to measures that would be taken in fulfilment of RPPO targets both Solar and Non-Solar.

Issue 5: Necessity for power purchase from SECI and NTPC

Stakeholder Comments

25. Since the PSAs with NTPC were signed in June, 2016, TSDiscoms should explain how much Solar Power TSDiscoms were required to procure at that time as per the RPPO Order in force and whether the 400 MW Solar Power sought to be procured from NTPC was required to meet their obligations under RPPO. Further,

TSDiscoms should clarify if they are getting supply of the proposed 400 MW Solar Power, and if so, from when.

26. The Hon'ble CERC adopted the individual tariff for power projects as discovered through competitive bidding by NTPC with effect from 20.05.2020 and stated that the tariff would be valid till PPA remains valid. Expiry date is defined as the date occurring 25 years from the date of commercial operation of the last unit of the Solar Power project. However, when the Solar Power Developers (SPDs) would declare CODs and when NTPC would start supply of power to TSDiscoms are not incorporated specifically in the PSAs between NTPC and TSDiscoms. If the SPDs concerned have not started generation and supply of Solar Power to NTPC Vidyut Vyapar Nigam Ltd. (NVVN) and if the latter has not yet started supply of Solar Power to TSDiscoms, the tariffs for that power as incorporated then in the PSAs being higher than the tariffs discovered by SECI through competitive biddings later, continuing the entire process for such a long period becomes questionable. It also shows that the said Solar Power has not been required by TSDiscoms all these years, though PSAs were signed in the year 2016. Moreover, the delay in execution of Solar Power plants by the SPDs for a long time, gives scope for them to set up the same with much lower capital costs in view of subsequent technological improvements and falling tariffs discovered through competitive biddings and get the old higher tariffs discovered through competitive bidding and incorporated in the PPAs between NTPC and SPDs, without reducing the same as per the subsequent lower tariffs discovered through competitive biddings. If that is the factual position, it is detrimental to the interests of TSDiscoms and their consumers. When Solar Power tariffs discovered through competitive biddings are reaching as low as Rs.2 per kWh, there is no justification in TSDiscoms sticking to the proposal to buy Solar Power at Rs.4.66 per kWh from NTPC. Starting the process of competitive bidding in the year 2015 and getting tariffs discovered through that process for individual SPDs adopted by the Hon'ble CERC with effect from 20.5.2020 provides opportunity to the SPDs to get undue benefit of higher tariffs and impose such burdens on TSDiscoms.

27. The Commission vide its Order dated 20.3.2020 for ARR and transmission tariff for the 4th Control Period, approved transmission contracted capacity for TSTransco to the tune of 21370.12 MW for 2021-22, 21878.73 MW for 2022-23 and 21866.04 MW for 2023-24. It does not include the balance 2400 MW from Telangana Super Thermal Power Project (TSTPP) of NTPC and it is not known whether the bundled Thermal Power to be allocated by the MoP, Gol, is included or not. With this capacity, when TSDiscoms are in a position to meet maximum demand during FY 2021-22, the transmission contracted capacity approved by the Commission for the same year to the tune of 21,370.12 MW is very high. The basis for additional requirement of an additional capacity of 9,157 MW by FY 2022-23, i.e., an increase of 55.15% within a span of less than two years is not clear. TSDiscoms should clarify why 800 MW of Solar Power is required to meet maximum demand, which cannot meet peak demand, its generation and supply being between 8 AM and 6 PM, that, too with occasional intermittence.

TSDiscoms' Replies

28. While entering into these PSAs for 400 MW each with SECI & NTPC, TSDiscoms have taken the upcoming loads from Lift Irrigation Projects and also other loads into consideration, apart from the RPPO targets. RPPO target is fixed as a

percentage of TSDiscoms' annually increasing total power consumption. Further, demand-supply is dynamic in nature and cannot be predicted in absolute terms, particularly in Telangana State where 24 hours power supply is to be ensured by TSDiscoms.

29. Since the Renewable Energy projects are accorded must run status, the power from these projects needs to be mandatorily off taken by TSDiscoms. However, depending on the grid load dynamics, steps have to be taken for merit order despatch in case of grid constraints. Further, the latest market conditions enable TSDiscoms to sell surplus RE power to the other needy purchasers in real time market through Green Term-Ahead Market (GTAM.)

30. The Solar Power Purchase plans are made keeping in view of the total RPPO trajectory issued by TSERC in the relevant regulation. Further, as the mandated RE purchases are in proportion to the total consumption of energy, which are likely to increase in view of the proposed Lift Irrigation loads, the procurement of Solar power is necessitated. Keeping these facts, the present Solar Power purchases in the subject PSAs will not amount to surplus Solar Power purchase. In view of limited Non-Solar RE potential availability in the Telangana State and considering comparatively higher tariffs for Non-Solar RE projects such as Biomass, Industrial Waste & Bagasse projects, TSDiscoms have been requesting the Commission to consider any surplus Solar RE over & above the RPPO obligation against the short fall in the non-solar RE obligation.

31. Besides meeting the Renewable Purchase obligation, the purchase of Solar Power at relatively lower tariffs also results in reducing the average procurement cost of power.

32. TSDiscoms entered into this PSA with NTPC for purchase of 400 MW of Bundled power (400 MW Solar + 200 MW Thermal) in the year 2016, since it is a MNRE scheme approved by Gol for Grid connected Solar PV projects under Batch-II Tranche-I of National Solar Mission Phase-II State Specific Bundling Scheme under DCR Category & Open category for Telangana State.

33. TSDiscoms have been receiving energy from these Telangana State Specific 400 MW Bundled Solar Power Projects from the date of synchronization of the plants as follows. There has been a delay in adoption of the respective Tariffs by the Hon'ble CERC discovered through the competitive bidding process conducted by NTPC.

Project Name	Capacity	Date of Synchronization
M/s Parampujya Solar Energy Pvt Ltd under DCR	50 MW	17.11.2017
M/s Parampujya Solar Energy Pvt Ltd under OCR	50 MW	19.09.2017
M/s Renew Wind Energy (TN2) Pvt Ltd	100 MW	01.11.2017
M/s Azure Power India Pvt Ltd	100 MW	12.01.2018
M/s Acme Solar Holdings Pvt Ltd (ACME Mahabubnagar & ACME Yamunanagar)	50 MW	09.09.2017
M/s Karvy Consultances Pvt Ltd (Achintya, Grinibhrit & Suvarchas)	40 MW	17.01.2018
M/s Karvy Consultances Pvt Ltd (Vishvarupa)	10 MW	28.10.2017

34. Whereas SECI, vide letter dated 11.07.2018, offered for allocation of Solar Power from MNRE schemes. The Commission has accorded in-principle approval vide letter dated 09.11.2018. After finalization of the bids, SECI confirmed allocation of 400 MW Solar Power quantum to TSDiscoms from ISTS scheme Tranche-VI at a tariff of Rs.2.78 per kWh (including trading margin of Rs.0.07/kWh), vide letter dated 13.12.2019. The PSA was entered by TSDiscoms with SECI on 21.01.2020. Thereby the consent for PSA was sought from the Commission vide letter dated 19.02.2020

35. It is to be noted that the tariff of Rs.2.00/kWh pointed out by the stakeholder is the tariff discovered in bidding conducted by SECI during November 2020, for which PPA is entered in January 2021. However, the agreements signed by TSDiscoms are earlier to that period. Besides, the discovered price in the competitive bidding depends largely on various bid specifications such as location of the plant, technical parameters such as level of irradiance, etc., financial parameters such waiver of duties/levies, VGF, etc., In some of the recent bids opened by SECI, the prices are ranging from Rs.2.33 to Rs. 2.44 per unit. As such the tariff Rs.2.00/kWh discovered in FY 2020-21 which is exclusive of Basic Customs Duty cannot be compared with bids conducted during the years 2015 and 2019.

36. NTPC bundled power allocated by MoP, Gol, is included in the ARR and transmission tariff for the 4th Control Period. The necessary submissions required to justify the proposed increase in Transmission capacity have already been furnished in the subject ARR filings.

37. TSDiscoms are obligated, as per the State Government policy, to maintain 24 hours uninterrupted power supply to all the categories of supply, including Agricultural Sector which consume more than 30% of the total energy being supplied by TSDiscoms. Solar power, apart from helping in meeting the RPPO targets, is helpful in meeting the regular demand also. Besides the purchase of Solar Power at relatively lower tariffs also results in reducing the average procurement cost of power.

Commission's View

38. The preamble of the Electricity Act, 2003 specifies that the Act was intended to promote efficient and environmentally benign policies. Section 86 (1) (e) of the Electricity Act, 2003 makes it a function of a State Regulatory Commission, to promote cogeneration and generation of electricity from renewable sources of energy.

39. The reliable power system operation requires constant balancing of supply and demand in accordance with prescribed operating criteria such as maintaining system voltages and frequency within acceptable limits. Thermal, Hydro and Renewable mix power development assume more significance to maintain the State Electricity Grid within IEGC prescribed limit of 49.85 Hz to 50.05 Hz. Telangana State is a Renewable Rich State having installed capacity based on Renewable Energy Source more than 3000 MW (4,389.47 MW). The present share of Renewable Energy in the total installed capacity mix is around 25%. Further, as per MNRE report, the installed solar power capacity for the State is around 3960 MW (includes TSDiscoms purchase, captive generation, 3rd party sale and rooftop installations). The Commission is of the view that the Solar Power meets TSDiscom's most of the agriculture demand and offset the second peak demand which is occurring during day-time between 8:00 hours and 9:00 hours.

40. The Commission has observed that as per CEA reports, the peak power demand of the Telangana State has increased from 6755 MW in FY 2014-15 to 13,688 MW in FY 2020-21. During this period, the energy requirement has grown from 39,866 MU to 67,696 MU. Thus, the peak power demand and energy requirement have increased at Compound Annual Growth Rate (CAGR) of 12.49% and 12.60%, respectively, from FY 2014-15 till FY 2020-21.

41. The Commission has observed that in the 19th Electric Power Survey (EPS) report brought by CEA, it has been forecasted that the maximum demand (MW) and energy requirement (MU) for Telangana State to increase from 14,499 MW and 84,603 MU by FY 2021-22 to the level of 18,653 MW and 1,04,345 MU by FY 2026-27. As per the EPS report, power demand for the Telangana State is forecasted to grow by 4.29% which is considerably lower than 12.49% actual growth in power demand for the past years. Increase in power demand in upcoming years is mainly due to the ambitious Lift Irrigation Projects being implemented in the Telangana State and GoTS policy of 24x7 uninterrupted power for all categories of supply including agriculture sector. The Commission has specified RPPO target of 7.10% for purchase of Solar Power by TSDiscoms for FY 2021-22.

42. The needed Solar installed capacity to meet the Solar RPPO target fixed by this Commission based on the total energy requirement and peak electricity demand as forecasted in EPS report is as given below:

Year	Total Energy Consumption	T&D Losses		Total Energy Requirement	Annual Load Factor	Peak Electricity Demand	RPPO Solar Target	Required Installed Capacity to meet RPPO
	MU	MU	%	MU	%	MW	%MW	MW
2018-19	57386	9245	15.21%	67680	67.54%	11262	5.33%	2167.35
2019-20	63807	10192	15.11%	75164	66.45%	12712	5.77%	2605.72
2020-21	68613	10835	14.98%	80700	65.93%	13757	6.21%	3010.98
2021-22	72052	11239	14.84%	84603	65.58%	14499	7.10%	3609.00

43. As per TSDiscoms submissions, the year-wise solar capacity addition in the State of Telangana State are as given below:

FY/Details	Before Telangana	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22 till Jul'21	Total
Installed Capacity (Sale to TSDiscoms)	60.730	76.800	303.200	713.500	1890.940	235.000	10.000	0.000	0.000	*3290.170
Third party/Captive Installed Capacity	45.580	56.282	60.890	89.020	5.500	5.000	10.000	99.000	53.000	424.272
Roof top Solar System (in MW)	0.012	4.453	4.618	10.532	16.477	40.095	42.015	54.819	21.747	194.800
Total Installed Capacity	106.322	137.535	368.708	813.052	1912.917	280.095	62.015	153.819	74.747	3909.242

* * Includes 400 MW NTPC Solar Bundled Power whose CoDs were between Sep'17 to Jan'18.

44. From the table above, the Commission has observed that TSDiscoms have contracted 3290 MW of solar power by July 2021 which includes 400 MW NTPC Solar Bundled Power. TSDiscoms may also purchase part of solar power from 194.8 MW of Roof top Solar System which may be negligible. Further, it is observed that based on energy forecast of EPS report, an installed capacity of 3609 MW is required to meet the RPPO Targets set by the Commission for FY 2021-22. Thus, there will be a deficit in solar installed capacity from this year onwards and TSDiscoms may need to procure

additional Solar Power to meet the RPPO due to increase in energy requirement to meet the load growth, Lift Irrigation Schemes and 24x7 uninterrupted quality power supply to all the categories of supply including Agriculture sector.

Issue 6: Renewable Power Purchase Obligation (RPPO)

Stakeholder Comments

45. The Commission, in its letter dated 09.11.2018, had given in-principle approval for procurement of 500 MW Solar Power through SECI under competitive bidding only. In response to the queries raised by the Commission in its letter dated 04.07.2020, TSSPSDCL submitted that as per long-term RPO trajectory of MoP, Gol, issued on 14.06.2018, the targets are 17.50% (in which solar is 7.25%) for FY 2019-20, 19% (8.75% solar) for FY 2020-21 and 21% (10.50% solar) for FY 2021-22. The RPO shall be on total consumption of electricity by an obligated entity, i.e., TSDiscoms, excluding exemption from hydro sources of power. The RPPO targets fixed by the Commission, after holding public hearing, in its Order dated 01.04.2018, are 6% (5.33% solar) for the year FY 2018-19, 6.5% (5.77% for solar) for FY 2019-20, 7% (6.21% for solar) for FY 2020-21 and 8% (7.10% for solar) for FY 2021-22 and they are mandatory on TSDiscoms. These RPPO targets are further likely to be enhanced as the targeted RE capacity addition is being revised to 450 GW by Gol to be achieved by the year 2030.

46. TSDiscoms also contended that though it is not mandatory for the State Discoms to comply with the MoP notification, it is likely that the State RPPOs may be directed to align with the RPO specified by MoP, Gol, in terms of National Tariff Policy. It also referred to the amendments proposed by MoP to the Electricity Act, 2003, in this regard. However, the contentions of TSDiscoms have to be examined in the light of the following points, among others:

- a) Though the trajectory was stated to be uniform to all States, in the said Order, MoP made it clear that in exercise of power conferred under the Electricity Act, 2003, SERCs may consider to notify RPO for their respective States in line with aforesaid uniform RPO trajectory. It is for two reasons. One, it is the SERC concerned which has to give its RPPO order as per law. Two, uniform trajectory to all States is irrational and unrealistic, because availability of power under existing sources already contracted, demand position, availability of sources for renewable power, etc., vary from State to State. If a State is having substantial surplus power available, even after TSDiscoms meeting their obligations under RPPO issued by this Commission, imposing obligations of higher percentage of RE on them as per the trajectory of MoP, Gol, is unwarranted, as it would create additional problems by increasing availability of surplus power, with attendant disastrous consequences. Moreover, the trajectory of MoP, Gol, on its own admission, by virtue of recognising the powers and responsibilities of SERC to issue RPPO order, is legally not binding either on TSDiscoms or the Commission concerned.
- b) The announcements by Gol in international fora on its targets of adding RE capacities in the country, accordingly its target and trajectory of MoP, Gol, have been made without consulting the States and without considering the problematic implications for the States. It is also not known whether any consultations have been made in the Central Cabinet. Imposing such arbitrary targets by Gol on the States stifles the spirit of federalism and would be

tantamount to Gol exercising its authority, taking undue advantage of power being in the concurrent list, without itself taking any responsibility and accountability for the disastrous and harmful consequences.

- c) The contention of TSDiscoms that the State RPPOs may be directed to align with the RPO specified by MoP, Gol, in terms of National Tariff Policy, is presumptuous. Such a direction, if issued by Gol, encroaches upon the powers of SERCs and would be questionable for the aforementioned reasons, among others. The States are expected to decide what is in their best interests and SERC also has to take the interests of the State and need for orderly development of power sector while deciding RE targets under RPPO.
- d) TSDiscoms are not expected to proceed on what the Gol is likely going to do by way of the proposed amendments.
- e) TSDiscoms had opposed any enhancement of the targets under RPPO from the then prevailing 5% for very valid reasons during the public hearing held by the Commission before issuing the RPPO Order dated 01.04.2018. The Commission had also taken detailed submissions of the stakeholders into account and enhanced the RPPO targets modestly.

47. TSDiscoms further submitted that, in view of increase in load growth on TSDiscoms due to the upcoming lift irrigation projects, the requirement of purchase of RE power is increased for meeting proportionate increase in RPPO. However, TSDiscoms have to substantiate their submissions based on the following points:

- a) Growth in overall demand leads to need for purchasing more RE proportionately as per the RPPO Order in force, even without increasing the percentage of RPPO. Increasing RPPO percentage would further increase need for purchasing more RE, whether it is required for meeting demand or not.
- b) TSDiscoms should clarify that what are the lift irrigation projects that are coming up periodically and what is their requirement for power. TSDiscoms should also clarify that as a result, how much would be the increase in demand for power in the State periodically.
- c) TSDiscoms should clarify that even after taking into consideration such increase in demand periodically, whether the RE already contracted by TSDiscoms would be sufficient to meet their RPPO obligations as per the Commission's Order in force, or additional RE needs to be contracted, and if so, to what extent and when.
- d) TSDiscoms should clarify whether the existing generation capacities under committed sources, both RE and conventional, are enough to meet the demand of lift irrigation projects, even while TSDiscoms meeting their RPPO obligations.
- e) Since Solar Power can be generated and supplied during day time only, TSDiscoms should clarify if the lifts of irrigation projects are going to be operated during the day time only, or they can be run during night time also using surplus power that is normally available in the night and during off-peak hours during day time in view of fluctuating demand curve.
- f) TSDiscoms should clarify that what is the requirement of power for lift irrigation projects in a year and whether the lifts of those projects need to be operated throughout the year. TSDiscoms should also clarify that if lift irrigation projects

are to be operated periodically subject to availability of water, and what would be the requirement of power for such periodical operation.

- g) TSDiscoms should clarify if power is required for operating lifts of irrigation projects during specific periods in a year, is it prudent to enter into long-term PPAs; the power available under which, if it cannot be used for meeting demand for power of other consumers, would lead to or even enhance availability of surplus power. TSDiscoms should also clarify that in such a situation, what would be the practicable and ideal power mix and what options are available for achieving the same.

TSDiscoms' Replies

48. Through the Energy Department of GoTS, TSDiscoms have already expressed their concerns over the Gol's proposed RE Power Policy stating that 'before insisting for the RPO trajectory uniformly across all the States, the potential of RE resources in each State have to be examined and respective State Commissions may be given free hand to notify the RPO targets u/s 86 (1) (e) of the Electricity Act, 2003, duly considering the Renewable Energy potential available in the respective States. Flexibility needs to be given to States for meeting the Non-Solar RPO with Solar RPO and vice versa depending on the State Resources'.

49. TSDiscoms expressed a concern that if the amended Electricity Act is implemented, then, aligning of the RPPO targets in line with the National RPPO targets may become mandatory for all States.

50. Presently, TSDiscoms are proceeding with the RPPO targets fixed by the Commission only and not with the RPPO targets prescribed by MoP, Gol. Indeed, while the Commission issuing the RPPO Order, dated 01.04.2018, TSDiscoms requested the Commission to consider any surplus solar RE over & above the obligation against the short fall in the non-solar RE obligation, considering the fact that the major non-solar RE potential, i.e., wind power potential is lower in the Telangana State.

51. The existing lift irrigation loads are around 6000 MW and the upcoming proposed loads are around 8000 MW. Lift Irrigation Projects are being run both in day time and in the night time, based on the inflows of water and also, the water requirements for Irrigation needs in the State. Solar power partly meets the requirement of the energy required to run the Lift Irrigation Projects. With varying demands/loads, Lift Irrigation Projects are being run throughout the year and that the power requirements of the Lift Irrigation Projects are dynamic in nature. Hence, TSDiscoms are devising the power purchase plans accordingly in Long-term, Medium-term & Short-term with suitable mix of non-RE and RE power, duly considering the RPPO obligations to be complied with.

52. Considering the unforeseen force majeure conditions also into account, it takes about 2 to 3 years for the RE Projects to complete once the PPAs are signed. Taking the dynamic supply-demand situation in the 24 hours power supply obligation in the Telangana State into consideration, TSDiscoms need to plan for addition of RE power.

53. TSDiscoms have been entering into Long-term, Medium-term and Short-term power purchase agreements based on the growing demands and to meet the

additional demand of the Lift Irrigation Projects taken up by the GoTS. Further, TSDiscoms have to ensure 24 hours uninterrupted power supply to all the categories of the consumers in the State, including the Agricultural consumers, for which TSDiscoms plan the power purchases. The loads have become more dynamic in nature due to 24 hours power supply to Agricultural consumers and Lift Irrigation Projects loads. In respect of the power purchases, whether it is through agreements or through markets, TSDiscoms are ensuring a balance to the extent possible, for ensuring the grid stability and other required technical parameters.

54. Further, while entering the PSAs for purchase of RE power, TSDiscoms are also examining the RPPO targets in vogue both at State level and National level.

Commission's View

55. The Commission is of the view that the TSERC Renewable Purchase Obligation (Compliance by Purchase of Renewable Energy/Renewable Energy Certificates) Regulations, 2018 (Regulation No.2 of 2018) prescribes the minimum percentage of renewable energy which a distribution licensee is required to mandatorily purchase and there is no prescription of the maximum percentage or a ceiling on such percentage. RPPO Regulation has specified RPPO target of 7.10% for purchase of Solar Power by TSDiscoms for FY 2021-22. In view of the actual energy requirement in the past and energy requirement projected in EPS report, the Commission is of the view that TSDiscoms may need to procure additional Solar Power to meet the RPPO due to increase in total consumption of energy in view of load growth, Lift Irrigation Schemes and 24x7 uninterrupted quality power supply to all the categories of supply including Agriculture sector.

Issue 7: Tariff for Solar Power

Stakeholder Comments

56. TSDiscoms submitted that the tariff of Rs.2.78 per kWh discovered through competitive biddings by SECI is well below the present pooled cost of power purchases, i.e., Rs.4.28 per kWh plus benefit of exemption of ISTS charges and transmission losses which works out to Rs.1.50 per kWh. Furthermore, TSDiscoms contended that tariff below Rs.3 per kWh for Solar Power would be most economical tariff and that solar tariff reached saturation point, meaning that it cannot be reduced further. These submissions need to be examined considering the following points:

- a) Even though the proposed tariff of Rs.2.78 per kWh of Solar Power is well below the pooled cost of power purchases, if that Solar Power is to be purchased, even when it is not required, to that extent Thermal Power has to be backed down and fixed charges have to be paid therefor.
- b) If Solar Power is generated and supplied when it is not required, or when the solar units fail to generate and supply power as per the CUF incorporated in the PPAs, when that power is required by TSDiscoms, problems of grid integration would arise.
- c) If Solar Power generated and supplied cannot meet peak deficit, even then that power has to be purchased by TSDiscoms, backing down Thermal Power, on the one hand, purchases from the market sources also will have to be made to

meet such peak demand. The cost of power during peak periods is naturally high.

- d) The view of TSDiscoms that Solar Power tariff reached saturation point and that the price of below Rs.3 per kWh is most economical tariff is not correct. Recently, it is reported that the lowest tariff of Rs.2 per kWh of Solar Power was discovered through competitive bidding and that further technological developments are taking place which would further reduce cost of solar panels, etc., required for setting up Solar Power units.
- e) When additional Solar Power is not required, it is imprudent to enter into long-term PPAs under the pretext that the tariff offered (below Rs.3 per kWh) is most economical tariff and its requirement would increase in future. It would lead to imposing obligations on TSDiscoms to start purchasing that power much before it would be required actually, and that too at relatively higher cost vis a vis a relatively lower tariff for which Solar Power may be available in future.
- f) By inviting competitive biddings to set up Solar Power projects in Telangana State, need for payment of ISTS and transmission losses can be avoided. Payment of trading margin also can be avoided, if trading brokers like SECI and NVVN are avoided and bids for Solar Power are invited by TSDiscoms themselves. It may be noted that TSDiscoms themselves are talking about the virtues of distributed Solar Power and the efforts being made by them in that direction in the State.
- g) As far as exemption of ISTS charges and transmissions losses are concerned, it is incorporated in the PSA between TSDiscoms and SECI dated 21.01.2020 that
 - “3.3.1 *Buying entity (Discoms) shall be liable to bear all the transmission losses as determined by Appropriate Commission from time to time in respect of the power evacuated from the Delivery Points to its receiving substation(s).*
 - 3.3.2 *Government of India from time to time issues order for waiver of inter-state transmission system (ISTS) charges and losses on transmission of wind/Solar Power till a certain date. In case the SCD of the Project is before the date the above ISTS waiver is applicable, and if the commissioning of the Project gets delayed beyond the applicable date of ISTS waiver due to Force Majeure event, the liability of transmission charges and losses would be shared between the SPD and Buying Utility(ies) in ratio of 50:50. However, in case the commissioning of the Project gets delayed beyond the applicable date of ISTS waiver due to reasons attributable to the SPD, the liability of transmission charges and losses would be that of the SPD.”*
- h) In other words, whether the SPDs concerned would commission their Solar Power units before the last date for waiver of transmission charges and losses extended for solar and wind projects to be commissioned till 30.06.2023 and the applicable conditions, including those of force majeure, in the PPA between SECI and SPDs need to be examined to ascertain certainty or otherwise of getting the benefit of the said exemption by TSDiscoms. Neither the term of agreement, nor the CODs to be achieved by the SPDs are incorporated in the

PSA between SECI and TSDiscoms. It means TSDiscoms have to take power as and when CODs are declared by the SPDs and SECI starts supply of power.

- i) Moreover, in schedule I, it is pointed out that the Pooled Tariff (average tariff for power purchased by SECI from the SPDs) is liable to changes depending on actual commissioning achieved by the respective projects, leading to changes in applicable tariffs. This again confirms uncertainty of actual commissioning of solar projects by SPDs, starting of supply of power by SECI to TSDiscoms and firmness of tariff. This kind of questionable arrangement is contrary to standard terms of PPAs and detrimental to the interests of TSDiscoms and their consumers.

TSDiscoms' Replies

57. Based on the upcoming loads, increasing overall power purchases of TSDiscoms and the RPPO targets to be achieved only, the subject Solar Power purchase from SECI and NTPC is planned. Considering the unforeseen force majeure conditions also into account, it takes about 2 to 3 years for the RE Projects to complete once the PPAs are signed. Since Grid operation is dynamic in nature, backing down of power plant units will be done based on merit order dispatch.

58. Eventualities like failure of power supply by the Solar Power generators will be addressed as per the relevant provisions of the power purchase agreements such as levy of penalty.

59. During the peak demand periods, power purchases from the market would be considered, after taking the available Thermal Power into account only.

60. It is to be noted that the tariff of Rs.2.00/kWh pointed out by the stakeholder is the tariff discovered in bidding conducted by SECI during November 2020, for which PPA is entered in January 2021. However, the agreements signed by TSDiscoms are earlier to that period. Besides, the discovered price in the competitive bidding depends largely on various bid specifications such as location of the plant, technical parameters such as level of irradiance etc., financial parameters such waiver of duties/levies, VGF, etc., In some of the recent bids opened by SECI, the prices are ranging from Rs.2.33 to Rs. 2.44 per unit. As such the tariff Rs.2.00/kWh discovered in FY 2020-21 which is exclusive of Basic Customs Duty cannot be compared with bids conducted during the years 2015 and 2019.

61. Further, lower Solar Power tariffs as referred to by the stakeholder, are found to be arrived in respect of major Solar Power Parks, wherein many facilities like the required land and the Grid Interconnection facilities in Plug-in mode are being arranged by the concerned State Government.

62. Proposals for inviting Solar Power purchase bids within the Telangana State are also being considered.

63. In respect of the present proposals for Solar Power purchase from NTPC and SECI, ISTS charges are exempted and the tariff arrived is relatively lower since the land cost in States like Rajasthan and Madhya Pradesh, where majority of these Solar Power Units are upcoming is lower and also irradiation is high in these States.

64. As per the latest orders of Gol, waiver of ISTS charges is extended for the Solar projects to be commissioned up to June 2025. In respect of waiver of ISTS charges, the provision given in the PSA with TSDiscoms holds good since the PPA of SPD with SECI deals with the tariff to be paid to the SPD for the Solar Power supplied at the ex-bus of SPD.

65. In case of delay in COD beyond the stipulated ISTS charges waiver period by the SPD due to force majeure conditions, such specific cases will be taken up with SECI for extension of waiver period proportionately.

Commission's View

66. The Commission is of the view that the tariff discovered through the competitive bidding process is as per the Guidelines issued by MoP and is in line with the tariffs discovered at that time period. In addition, the tariffs discovered are lower than energy charges of some of the Thermal Power Plants. As regards the comments on certain clauses of the PSA, the Commission is of the view that the clauses of PSA are in line with the Model PSA issued by MoP, Gol.

Issue 8: Solar Bundled Power Project

Stakeholder Comments

67. As per the Solar Bundled Power Project under Phase-II, Batch-I Tranche-I of National Solar Mission of Government of India, six (6) nos. of PSAs were entered between NTPC Limited and TSDiscoms for a capacity of 50 MW under domestic content requirements and 350 MW under open category of bundled power with unallocated quota from NTPC Thermal stations on 2:1 on MW basis as per allocations made by MoP, Gol, on 18.06.2016. NTPC Vidyut Vyapar Nigam Ltd. (NVVN) on behalf of NTPC purchases Solar Power from private developers and sells it to TSDiscoms on a long-term basis at Rs.4.66 per kWh. In the PSA dated 17.06.2016 and six PSAs signed between NTPC and TSDiscoms, it is incorporated that the agreed contracted Thermal Power from different stations of NTPC for bundling shall be as per the allocation letter to be issued by MoP, Gol from time to time. Further, it is incorporated that, in case the cost of bundled power exceeds the agreed Solar Tariff of PPA with Solar Power Developer (SPD), TSDiscoms shall have the right to surrender the Thermal Power at any point of time during tenure of PPA. The PSAs dated 17.06.2016 and 18.06.2016 were submitted to the Commission on 14.07.2016. Further correspondence between the Commission and TSSPDCL continued and in its letter dated 13.08.2018, requested the Commission to give its consent to the 6 nos. of PSAs. The above clauses and submissions of TSSPDCL have the following implications, among others:

- a) Bundling of Thermal Power with Solar Power in the subject issue is intended to reduce the average price of the bundled power per unit, i.e., the price of Thermal Power to be allocated for bundling is expected to be less than that of Solar Power.
- b) Allocation of Thermal Power for bundling with Solar Power will be as per the letter to be issued by MoP, Gol, from time to time, i.e., depending on the Thermal Power plant of NTPC from which allocation of Thermal Power is to be made by the MoP, Gol, the price of Thermal Power also may change from time

to time. In other words, there is no finality to the price of Thermal Power to be allocated by MoP for bundling with Solar Power. As such, no effective tariff for bundled power is determined on firm basis for consideration of the Commission. In other words, the above stated clauses in the PSA imply that the Commission has to adopt the tariff for Solar Power only and the price of Thermal Power to be allocated by MoP for bundling with Solar Power and the average tariff for bundled power per kWh should be deemed to have been adopted by the Commission. This approach reflects uncertainty about effective tariff for bundled power.

- c) Another implication is that MoP, Gol, is incapable of allocating bundled Thermal Power from the old units of NTPC on firm basis with pre-determined tariff for bundling with Solar Power for the entire period of the PSA between NTPC and TSDiscoms. Since the PSA is for a period of 25 years, allocation of Thermal Power from the same old units of NTPC for such a long period may not be possible. However, keeping in view the useful life span of different Thermal Power plants of NTPC, an order of priority for allocation of Thermal Power to be bundled with Solar Power can be worked out starting with the oldest plant with lowest tariff and continuing such allocation of Thermal Power in the descending order of the oldest plants from time to time. Therefore, allocation of Thermal Power from the old units of NTPC for bundling with Solar Power should be worked out and finalized in advance to ensure firmness in allocation. There is no provision for such arrangement in the PSAs making it obligatory on the part of MoP, Gol, and NTPC. Even if the price of bundled power is less than the price of Solar Power by a few paise per kWh, the burden on consumers continues to be substantially high compared to the prices of Solar Power being discovered through competitive biddings.
- d) Due to uncertainty about availability of power from the thermal plants of NTPC from which MoP may allocate power for bundling with Solar Power from time to time and variations in variable costs due to various factors like increase in cost of coal, cost of its transportation, taxes and cess on coal, variations in gross calorific value of the fuel and station heat rate, etc., the price of such Thermal Power may vary from time to time.
- e) The clause in the PPA that in case cost of bundled power exceeds the agreed solar tariff of PPA with Solar Power Developer, TSDiscoms shall have the right to surrender the Thermal Power at any point of time during tenure of PPA confirms that it cannot be taken for granted that the effective tariff of bundled power will continue to be attractive and beneficial to TSDiscoms during the entire period of PPA. Surrendering the component of Thermal Power in the bundled power when its cost exceeds the price of Solar Power would deprive TSDiscoms of the benefit, if any, of reduced price of bundled power, thereby exposing hollowness of this arrangement bristling with uncertainties and arbitrariness of MoP, Gol, in allocating Thermal Power from old plants of NTPC for the purpose of bundling with Solar Power.
- f) The very purpose of providing bundled power is to reduce the burden of high cost of Solar Power by allocating Thermal Power to reduce the average cost of bundled power to much less than that of Solar Power. The eventuality of average price of solar and bundled Thermal Power exceeding the already high cost of Solar Power confirms how imprudently TSDiscoms have entered into

PSAs with NTPC as a result of which the former and their consumers continue to be saddled with high-cost Solar Power during the period of long-term PSAs. On that ground, TSDiscs cannot terminate their PSAs with NTPC to get rid of the burden of high-cost Solar Power, as there is no such provision in the terms of the PSAs.

- g) The absurdity of the said clause is that neither the MoP, Gol, nor NTPC, has any binding obligation to allocate power from Thermal Power stations of NTPC for bundling with Solar Power in such a way that ensures price for bundled power is less than the price of Solar Power during the period of PSAs. The very purpose of bundling Thermal Power with Solar Power is to reduce the burden of high-cost Solar Power and without such a binding obligation on the part of MoP, Gol, and NTPC, that purpose gets defeated. Moreover, the so-called right of TSDiscs to surrender the Thermal Power at any point of time during the tenure of PPA is nothing but foregoing the benefit of bundled power at price less than that of Solar Power. As a result of this, TSDiscs and their consumers will continue to be saddled with either high cost bundled power or high cost Solar Power being supplied by NTPC on a long-term basis. With average price of bundled power turning out to be more than the very high price of Solar Power. NTPC, under this questionable arrangement of bundled power, has been trying to impose its costly Thermal Power on the States.

68. Whether TSDiscs require the proposed Solar Power and the Thermal Power from NTPC in the ratio of 2:1, respectively, for bundling also is a moot point. If the bundled Thermal Power is not required by TSDiscs, it would lead to availability of more surplus power with resultant problems. If the bundled Thermal Power is going to be supplied during periods when TSDiscs have lower demand due to daily or seasonal variations, it would lead to availability of surplus power. In other words, under this questionable arrangement, TSDiscs would be saddled with the avoidable burden of purchasing unwarranted bundled Thermal Power from NTPC. If the price of bundled power is more than the price of Solar Power, TSDiscs can surrender the Thermal Power. But, if the price of bundled power is less than the price of Solar Power even by a paise per kWh, TSDiscs can surrender that Thermal Power is not known. If that Thermal Power is to be backed down by SLDC, NTPC may demand payment of fixed charges for such backing down. The related clauses in the PSAs do not provide any clarity, and it may lead to avoidable litigations.

69. TSDiscs should explain the following:

- a) If 25 years plus vintage generation is a precondition to offer solar bundled power, it may be a business decision for NTPC. But this should not be acceptable for TSDiscs. The Commission should direct NTPC/ TSDiscs to clarify whether TSDiscs satisfied techno-commercially, receiving Thermal Power part of the bundled power for 25 years contractually from an already 25+ years old thermal generation plant or not.
- b) NTPC should give a ballpark generation tariff for the next 25 years based on prevailing coal costs at any likely 25 years+ vintage generation station and their estimated fixed cost.
- c) It is to be clarified if 30/35 years generations plants have to be retired as per CERC Regulations or not.

d) Since, the NTPC Thermal Power will have an ISTS Transmission costs and losses, based on today's costs, TSDiscoms should provide an estimated purchase cost at their 33 kV Sub-Station for this bundled power.

70. The ratio of bundled power is 2:1 in MW (2 parts solar for 1 part NTPC Thermal Power). Effectively at best, PLF of 20% for solar and 85% for thermal, in terms of energy in MWh, the ratio becomes 1 kWh solar for every 2 kWh of thermal. This is a win-win situation for both parties.

TSDiscoms' Replies

71. TSDiscoms entered into PSA with NTPC for purchase of 400 MW of Bundled power (400 MW Solar + 200 MW Thermal) in the year 2016, since it is an MNRE scheme approved by GoI for Grid connected Solar PV projects under Batch-II Tranche-I of National Solar Mission Phase-II State Specific Bundling Scheme for Telangana.

72. In accordance with the guidelines for JNNSM Phase-II Batch-II Tranche-I State specific Bundling Scheme, NVVN will purchase the Solar Power generated from the selected Solar PV plants at the quoted tariffs and the Thermal Power at the tariff as determined by CERC as per Regulations from time to time. NVVN will bundle the Solar Power with unallocated Thermal Power from coal based stations of NTPC on 2:1 basis and sell the Bundled power to willing State Utilities under 25 years PSAs at weighted average tariff of the Solar and Thermal components plus Trading Margin of Paisa Seven (7) per kWh.

73. As such, in this Bundled scheme, the weighted average bundled power tariff would be lower than the Solar Power tariff. The tariff for the Solar Power under the bundled scheme is fixed. The tariff for the Thermal Power depends on the allocation of power from the various Thermal Power projects. The tariff for the Thermal Power includes ISTS transmission charges & losses, which works out to around Rs.0.555/kWh. However, in terms of the provisions of the PSA, presently, it is ascertained every month that the weighted average tariff of the bundled power is less than the Solar Power tariff. In future, if the weighted average bundled tariff is found to be higher than the Solar Power tariff, TSDiscoms would consider taking up such eventualities with NTPC as per the provisions of the agreement.

Commission's View

74. The Commission is of the view that very purpose of providing bundled power is to reduce the burden of high cost of Solar Power by allocating Thermal Power to reduce the average cost of bundled power to much less than that of Solar Power. Therefore, as submitted by TSDiscoms, if the weighted average bundled tariff is found to be higher than the Solar Power tariff, TSDiscoms should consider taking up such eventualities with NTPC as per the provisions of the agreement.

Issue 9: PPAs between SECI and SPDs

Stakeholder Comments

75. In the PSA between TSDiscoms and SECI dated 21.01.2020, it is incorporated that copy of the PPAs (between SECI and SPDs) shall be submitted to buying entity (TSDiscoms) within 30 days of the signing of the PPA(s) and such PPA(s) shall be integral part of this agreement. It means the sections or clauses in the PPAs between SECI and SPDs to the extent they are applicable will be binding on TSDiscoms. If such sections and clauses are acceptable to TSDiscoms and not detrimental to their interests, they can be incorporated in the PSA between SECI and Discoms. However, it is not known whether copies of the PPAs between SECI and SPDs were submitted to TSDiscoms and whether the latter examined the same or not. Those copies of PPAs are not included in the papers uploaded in the website of the Commission. Therefore, the terms and conditions in those PPAs need to be examined.

TSDiscoms' Replies

76. MNRE/MoP, Gol has issued standard formats for all these bidding processes, right from RfS documents to PSA/PPA formats. Most of the clauses/articles in these documents are standard in nature and are being adopted and signed by many of the States in the country.

77. It is to clarify that Gol owned agencies like NTPC and SECI are processing the bids after the confirmation of the RE requirements from the respective States only and hence, PPAs with SPDs are coming up after the PSAs are signed by them with the State Discoms. Copies of the PPAs received by TSDiscoms have been submitted to the Commission.

Commission's View

78. The PPAs and PSAs are as per the Model PPA and PSA issued by MoP, Gol.

Issue 10: Payment Security Mechanism

Stakeholder Comments

79. In the PSA between TSDiscoms and SECI, it is stipulated that TSDiscoms have to open letter of credit and provide State Government guarantee in a legally enforceable form to ensure timely payment to SECI. Further, it is incorporated that TSDiscoms have to provide payment security fund which shall be suitable to support payment of at least three months' billing of all the projects tied up with such fund. Imposing the burdens of such hyper-security mechanism on TSDiscoms is questionable; it would add to the power purchase cost. It is also needed to be examined whether SECI has provided for such hyper-security mechanism for payment of bills by itself to SPDs in the PPAs it had with them. If not, SECI should not impose such mechanism on TSDiscoms and the later should not accept the same.

80. In the PSAs signed between TSDiscoms and NTPC, it is provided for opening of letter of credit, default escrow agreement and agreement to hypothecate cum deed hypothecation by TSDiscoms in favour of NTPC. The expenses for all these arrangements have to be borne by TSDiscoms and as such, would add to the tariff to

be paid by the later. Whether NTPC has provided for such hyper-security mechanism for payment of bills by itself to SPDs in the PPAs it had with them also needs to be examined. If not, why NTPC should impose such mechanism on TSDiscoms and why should the later meekly accept the same is a moot point.

TSDiscoms' Replies

81. Opening of letter of credits have been made mandatory by the Central Government for all the Power Purchase Agreements. As such, the same needs to be adhered to by TSDiscoms.

Commission's View

82. The Commission is of the view that opening of Letter of Credit and Escrow Account are standard clauses of PPAs. Such clauses are available in the PPAs between TSGenco and TSDiscoms also. Further, the clauses of PSAs are as per the Model PSA issued by MoP, Gol.

Issue 11: Compensation of backdown

Stakeholder Comments

83. In the PSA between TSDiscoms and SECI, it is provided in clause 6.10.3 that the SPD and the Buyer shall follow the forecasting and scheduling process as per the regulations in this regard by the Appropriate Commission. In the eventuality of a backdown, except for the cases where the backdown is on account of events like consideration of grid security or safety of any equipment or personnel or other such conditions, the SPD shall be eligible for a minimum generation compensation from the Buying Entity, i.e., TSDiscoms, in the manner detailed in the PSA. It is well known that Thermal Power stations can be backed down as per the principle of merit order despatch when substantial surplus power is available, but the number and total capacity of such backing down should be limited in a year as per the terms of the PPA concerned. When such limits of backing down are exhausted, then the turn of RE units comes for backing down their capacities in view of maintaining grid security and safety, etc. In PPAs between Discoms and RE units, there is no provision for payment by TSDiscoms for backing down RE units as per applicable grid code. But in the PSA, likely backing down of solar units for reasons other than grid security and safety, etc., is envisioned which implies that availability of Solar Power may turn out to be surplus for TSDiscoms. Hence, need for the said Solar Power to be ascertained vis a vis fluctuating demand of TSDiscoms.

TSDiscoms' Replies

84. The provisions in the PSA signed between TSDiscoms & SECI and PPA between SECI & SPD are standard in nature and are approved by MNRE, MoP, Gol.

Commission's View

85. The Commission is of the view that Renewable Generation is provided the "must-run" status to promote such generation as per the provisions in the Electricity Act, 2003. Further, the clauses in PSA are as per the Model PSA issued by MoP, Gol.

Issue 12: Statutory taxes, duties, levies and cess

Stakeholder Comments

86. In the PSA between SECI and TSDiscoms and PSA between NTPC and TSDiscoms, it is provided in clause 13.9.1 that buying entity (TSDiscoms) shall bear and promptly pay all statutory taxes, duties, levies and cess, assessed, levied on Buying Entity, contractors or their employees, that are required to be paid by Buying Entity as per the Law in relation to the execution of the Agreement. However, the impact of all such expenses will add to the tariff TSDiscoms have to pay for the Solar Power they purchase from SECI and NTPC.

TSDiscoms' Replies

87. The provisions in the PSA signed between TSDiscoms & SECI and PPA between SECI & SPD are standard in nature and are approved by MNRE, MoP, Gol.

Commission's View

88. The Commission is of the view that the PSA is as per the Model PSA issued by MoP, Gol with such clauses for passing on the legitimate expenses incurred by SPD.

Issue 13: Methodology of Allocation & Termination of NTPC PSAs

Stakeholder Comments

89. The methodology of allocation and termination of NTPC PSA are vague. On the face of it, the contract is heavily loaded in NTPC's favour. Such PSA is nothing but a contract where NTPC extends the life of their vintage assets, and makes a margin of 7 Paisa/kWh. TSDiscoms should clarify if it was a part of the NTPC/NVVN Solar Power SPD auction and finalization.

TSDiscoms' Replies

90. The National Solar Mission Phase-II under Batch-II State Specific Bundling Scheme is a mechanism of "bundling" relatively expensive Solar Power with Thermal Power from the unallocated quota of the MoP, Gol generated at NTPC coal based stations. It is relatively cheaper and onward sale of the bundled power to Distribution utilities at an affordable price was adopted. This Bundled Power scheme is approved by the MoP, Gol, while ensuring weighted average bundled power tariff to be lower than the Solar Power tariff and to make use of power from such plants while paving way for more Solar Power usage. Tariff and other charges are decided by the Hon'ble CERC and MNRE, Gol from time to time. The bidding was conducted by NVVN as per the Guidelines for the scheme issued by MNRE, Gol and TSDiscoms were not part of the finalization of the bids submitted by SPDs.

91. Consequently, under Section 63 of Electricity Act, 2003, Hon'ble CERC vide Order dated 01.03.2021 in Petition 549/AT/2020 adopted the tariffs discovered in the competitive bidding process conducted by NVVN/NTPC in the year 2015 as per the guidelines issued by MNRE.

Commission's View

92. The Commission is of the view that MoP issued this bundling scheme for economisation of the relatively expensive Solar Power plants by bundling it with cheaper and firm power from NTPC Thermal Power plants which were older than 25 years. Further, if the weighted average bundled tariff is found to be higher than the Solar Power tariff, TSDiscoms may consider taking up such eventualities with NTPC as per the provisions of the PSA.

Issue 14: Joint Meter Reading

Stakeholder Comments

93. Joint Meter Readings should be certified by TSSLDC, as ramp up or down is based on SLDC instructions.

TSDiscoms' Replies

94. Standard procedures as laid down in the respective regulations/orders are being followed for collecting the readings.

Commission's View

95. The Commission is of the view that the Metering and Energy Accounting shall be done as per Article 4 of the PSAs entered between TSDiscoms and NTPC/SECI.

Issue 15: Clarification on CERC Order

Stakeholder Comments

96. TSDiscoms are respondents in CERC Order dated 01.03.2021 on Petition No.549/AT/2020 on the matter of adoption of Tariff for 3000 MW grid connected Solar PV Power projects. TSDiscoms/NTPC should provide clarity on for the excerpt as under:

3. *The matter was heard on 30.07.2020 wherein the senior counsel for the Petitioner briefly explained the reasons for filing the Petition in 2020 while bidding was carried in 2015-16. The Petition was admitted upon hearing the senior counsel for the Petitioner and the Respondents were directed to file their reply. However, no reply has been filed by the Respondents despite notice.*

Further in the said Order specified as under:

6. *... .. Learned senior counsel submitted that neither the Guidelines nor the bidding documents (including the PPA/PSA) prescribed/defined the Appropriate Commission from which approval was to be sought and in such circumstances, the Distribution Licensees approached the respective SERCs and obtained the power procurement approval, either by way of specific order or under the ARR orders passed by SERCs. He further added that the projects selected pursuant to bid process under the Guidelines have already commenced power supply under PPAs/PSAs to the Distribution Licensees and are being paid towards such supply.*

97. TSDiscoms should confirm if above statement made by NTPC is true. If not, it should be clarified if TSDiscoms have filed a re-joinder to contradict. It is to be clarified if supply of power has indeed taking place, as claimed by NTPC, whether it is with the permission of the Commission, and from which period with quantity and price. This clarification by Hon'ble CERC on NTPC is perhaps applicable to the respondents (TSDiscoms) too.

TSDiscoms' Replies

98. The Petition was filed by NTPC for adoption of the Solar Power tariffs discovered in the bidding process conducted as per the guidelines and RfS documents issued by MNRE, GoI. In the said Petition, there were about 54 nos. of Respondents, including two Discoms from Telangana State.

99. Further, the supply of Solar Power has commenced from year 2017 and the bundled power is supplied from year 2018. The same was approved by the Commission in the ARR filed by TSDiscoms. The Commission, vide letter dated 19.08.2017 issued permission to TSDiscoms to proceed with the formalities of synchronization of plants, pending decision on the PSAs.

Commission's View

100. The Commission has noted the submissions of the stakeholder and TSDiscoms. In fact, the Commission has considered a part of solar capacity installed and commissioned under NTPC Bundled power scheme while approving power purchase for TSDiscoms in its Retail Supply Tariff Order dated 27.03.2018 based on the approval issued by the Commission for formalities of synchronization of plants vide its letter dated 19.08.2017.

Summary and Commission's findings

101. The Commission is of considered view that the following main contentions of TSDiscoms are of significance for approval/ consent of the PSAs on procurement of Solar Power from NTPC and SECI:

- a) To meet the additional demand arising out of load growth, 24x7 reliable and quality power supply to all the categories of supply including agriculture and Lift Irrigation Schemes;
- b) To meet RPPO targets set out by the Commission as also the MoP, GoI;
- c) Competitive Bidding Process was done by NTPC and SECI in terms of bidding guidelines issued by MoP, GoI;
- d) National Solar Mission provide for a mechanism of 'bundling' of relatively expensive Solar Power with Thermal Power (from the unallocated quota of the GoI as regards power generated at NTPC coal based generating station), which was relatively cheaper, in the ratio of 2:1 basis (2 MW of Solar Power with 1 MW of Thermal Power) for onward sale of the bundled power to TSDiscoms at an affordable price.
- e) The cheaper price discovered in the competitive bidding process help TSDiscoms in reducing the average power procurement cost;

- f) The Commission issued approval for formalities of synchronization of plants vide letter dated 19.08.2017 in respect of PSAs between TSDiscoms and NTPC for a quantum of 400 MW under Phase-II, Batch-II Tranche-I of National Solar Mission and in-principle approval vide letter dated 09.11.2018 in respect of PSA between TSDiscoms and SECI for a quantum of 400 MW under ISTS MNRE Scheme Tranche VI;
- g) To get the benefit of expected lower tariff for the reason that the MoP has waived the Inter-State Transmission Charges and Losses for a period of 25 years, if the Solar Power projects are commissioned by 30th June, 2025 (MoP order No.23/12/2016-R&R-Part (1) [239444], dated 21.06.2021);
- h) Hon'ble CERC in its orders dated 19.03.2021 in Petition No.552/AT/2020 in respect of PSAs between TSDiscoms and NTPC and orders on 01.03.2021 in Petition No.549/AT/2020 in respect of PSA between TSDiscoms and SECI has adopted the tariff discovered in the competitive bidding process and trading margin proposed for individual Solar Power projects under Section 63 of the Electricity Act, 2003;
- i) The terms and conditions specified in PSAs are as per the Model PSA issued by MoP, Gol;

102. In view of the above, and as discussed in the foregoing paragraphs on dealing with the issues based on the suggestion/objections/comments received from the stakeholders the Commission hereby accords consent under Section 86 (1) (b) of the Electricity Act, 2003 to -

- a) Six (6) PSAs dated 18.06.2016 between TSDiscoms and NTPC for a quantum of 400 MW Solar Bundled Power under Phase-II, Batch-II Tranche-I of National Solar Mission, MoP, Gol [50 MW under Domestic Content Requirement (DCR) @ Rs.5.19/kWh and 350 MW under open category @ Rs.4.66/kWh (for 100 MW) and @ Rs.4.67/kWh (for 250 MW)] for a period of 25 years; and
- b) One (1) PSA dated 21.01.2020 between TSDiscoms and SECI for a quantum of 400 MW Solar Power under ISTS MNRE Scheme Tranche VI @ Rs.2.78/kWh (including trading margin of Rs.0.07/kWh) for a period of 25 years

103. Accordingly, these matters are disposed off.

This Order is corrected and signed on this the 19th day of August, 2021.

Sd/-
(BANDARU KRISHNAIAH)
MEMBER

Sd/-
(M.D.MANO HAR RAJU)
MEMBER

Sd/-
(T.SRIRANGA RAO)
CHAIRMAN

//CERTIFIED COPY//

**ANNEXURE-I
NOTICE**



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

NOTICE

1. TSDISCOMs viz., Southern Power Company of Telangana Limited (TSSPDCL) and Northern Power Company of Telangana Limited (TSNPDCL), have submitted before the Telangana State Electricity Regulatory Commission (TSERC) the proposal for consent of Power Sale Agreements (PSAs) entered between the
 - a. TSDISCOMs and NTPC for a quantum of 400 MW under Phase-II, Batch-II Tranche-I of National Solar Mission.
 - b. TSDISCOMs and SECI for a quantum of 400 MW under ISTS MNRE Scheme Tranche VI.

The TSDISCOMs have requested the Commission to accord consent to the above mentioned PSAs.

2. Copies of the proposals along with the related documents are uploaded on the Commission's website www.tserc.gov.in. Suggestions/ objections/ comments in the subject matter are invited from all stakeholders and public at large, so as to reach the following address on or before 16.07.2021 by 5.00 P.M.

Commission Secretary (PAC)
Telangana State Electricity Regulatory Commission
5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul,
Hyderabad 500004
E-mail id: secy@tserc.gov.in

Sd/-
COMMISSION SECRETARY (PAC)

DATE: 24.06.2021

ANNEXURE II
**LIST OF STAKEHOLDERS WHO SUBMITTED WRITTEN SUGGESTIONS/
OBJECTIONS/ COMMENTS**

Sl. No.	Name of the stakeholder
1)	Sri M.Venugopal Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad.
2)	Federation of Telangana Chambers of Commerce and Industry (FTCCI), Hyderabad.

