TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

5th Floor, Singareni Bhavan, Red Hiils, Lakdi-ka-pul Hyderabad 500 004

R. P. (SR) No. 19 of 2021
in
O. P. No. 24 of 2020

Dated 23.09.2021

Present

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

Between:

Southern Power Distribution Company of Telangana Limited,
Corporate Office, # 6-1-50, Mint Compound,
Hyderabad – 500 063.

Northern Power Distribution Company of Telangana Limited,
Vidyuth Bhavan, Warangal, Telangana ... Petitioners.

AND

-Nil- ... Respondents.

This petition has come up for hearing on 15.09.2021. Sri. Mohammad Bande Ali, Law Attaché of TSSPDCL for the petitioners appeared through virtual hearing 15.09.2021. This petition having been heard and having stood over for consideration to this day, the Commission passed the following:

ORDER

The TSDISCOMS have filed a petition seeking review of the order dated 02.01.2021. The review petitioners have raised certain grounds in the review petition and stated as below

(a) The present review petition is being filed under section 94 (1) (f) of the Electricity Act, 2003 (Act, 2003) read with clause 32 of the Conduct of Business Regulations, 2015 for seeking review of Commission's order dated 02.01.2021 in O.P.No.24 of 2020 regarding determination of tariff for energy injected into the grid from the solar power projects having capacity ranging between 500 kW to 2 MW to be set up by individual farmers / group of farmers / cooperatives / panchayats / farmer producer organizations (FPO) / water user associations (WUA) under Component-A of Pradhan Mantri Kisan Urja Suraksha Utthan Mahabhiyam (PMKUSUM) scheme notified by Ministry of New and Renewable Energy (MNRE), Government of India (GoI).

(b) It is stated that MNRE has issued operational guidelines for implementation of PMKUSUM scheme on 22.07.2019. This scheme has provision for the renewable energy plants, solar agriculture water pumps and solarisation of existing grid connected agriculture pumps.

 (i) Component-A: Setting up of 10,000 MW of decentralized ground/stilt mounted grid connected solar or other renewable energy based power plants.

(c) MNRE vide letter No.32/54/2018–SPV division, dated 13.01.2021 has sanctioned the target of 500 MW (TSSPDCL–300 MW and TSNPDCL–200 MW) for FY 2020-21 to be set up decentralised grid connected solar power plants of capacity 500 kW to 2 MW.

(d) Such solar or other renewable energy based power plants (REPP) of capacity 500 kW to 2 MW will be setup by individual farmers / group of farmers / cooperatives / panchayats / FPO/WUA or project developer hereinafter called renewable power generator (RPG).

(e) The REPP will be preferably installed within five km radius of the substations in order to avoid high cost of sub transmission lines and to reduce transmission losses. The distribution companies (DISCOMs) will notify substation wise surplus capacity which can be fed from such RE power plants to the grid and shall invite applications from interested beneficiaries for setting up the renewable energy plants. The renewable power generated will be purchased by DISCOMs at a prefixed levelised tariff.

(f) In case, the aggregate capacity offered by applicants is more than notified capacity for a particular substation, bidding route will be followed by DISCOMSs to select RPG and in such cases the prefixed levelised tariff will be the ceiling tariff for bidding. Selection of bidders will be based on the lowest tariff offered in the ascending order as quoted by the bidders in the closed bid or e reverse auction as the case may be. A model power purchase agreement (PPA) to be executed between RPG and DISCOMs has been prepared by MNRE. The duration of PPA will be 25 years from commercial operation date (COD) of the project. The total energy purchased from these RE plants will be accounted for fulfilment of RPO by the DISCOM.

(g) In case the farmers / group of farmers / cooperatives / panchayats / FPO / WUA etc. are not able to arrange equity required for setting up the REPP, they can opt for developing the REPP through developers(s) or even through local DISCOM, which will be considered as RPG in this case. In such a case, the land owner will get lease rent as mutually agreed between the parties. The lease rent may be in terms of Rs. per year per acre of land or in terms of Rs. per unit energy generated per acre of land area.

(h) The farmer(s) may opt for payment of lease rent directly in their bank account by the DISCOM, from the payment due to the developer. A model land lease agreement to facilitate the beneficiaries has also been prepared by MNRE. However, the terms of land lease agreement may be finalised on mutual consent of concerned parties.

(i) The REPP under the scheme would be implemented primarily on barren / uncultivable land.

(j) DISCOM / Implementing Agency (IA) shall assess and notify RE generation capacity that can be injected in to all 33 / 11 kV substation of rural areas and place such notification on its website for information of all stakeholders.

(k) To facilitate farmers willing to lease out their land for development of RE plants near above notified substation(s), as per provisions of this scheme, DISCOM / IA may also place list of such farmers on their website. The DISCOM / IA would request RPGs to submit non-refundable processing fee which in no case shall be higher than Rs.5000 per MW or part thereof.

(l) However, the leasing of land of any farmer will be a bipartite agreement between the farmer and the developer and DISCOM / IA will not be held responsible for failure in getting the land leased out to a developer. To meet additional demand DISCOM will augment the capacity of substation under IPDS or any other scheme.

(m) DISCOMs / IA shall invite 33 / 11 kV substation wise expression of interest (EoI) from RPG to participate in selection process for development of decentralised renewable power plants. The RPG shall submit their interest against the EoI as per the schedule notified by DISCOM. An RPG will not be allowed to apply for more than one renewable power plant for a particular 33 / 11 kV substation.

(n) REPP of capacity up to 2 MW may be connected at 11 kV side of substation and the selected RPG will be responsible for laying of dedicated 11 kV line from REPP to substation, construction of bay and related switchgear at substation where the plant is connected to the grid and metering is done.

(o) Alternately, RPG can get constructed the 11 kV lines through DISCOM by paying the applicable cost and other charges. RPG will be responsible for maintaining this dedicated 11 kV line.

(p) A copy of standard PPA to be executed between the DISCOM and the RPG shall be provided by DISCOM along with invitation for submission of EoI. The model PPA agreement shall be as provided by MNRE.

(q) The PPA shall be for a period of 25 years from the date of COD. The DISCOM will be obliged to buy the entire power from RPG within the contract capacity.

(r) MNRE will provide procurement based incentive (PBI) to the DISCOMs at the rate of 40 paise / kWh or Rs.6.60 lakh / MW / year, whichever is lower, for buying solar/other renewable power under this scheme. The PBI will be given to the DISCOMs for a period of five years from the commercial operation date of the plant. Therefore, the total PBI that shall be payable to DISCOMs will be Rs.33 lakh per MW.

(s) The total energy purchased from these RE plants will be accounted for fulfilment of RPO by the DISCOM.

(t) It is stated that Commission by order dated 02.01.2021 in O. P. No. 24 of 2020 has determined the tariff of Rs. 3.13 per unit for the solar power projects of capacity 500 kW to 2 MW commissioned under Component-A of PMKUSUM scheme.

2. The review petitioners stated that this review petition is filed for review of order dated 02.01.2021 in O.P.No.24 of 2020 on the following and among other grounds:

a. That the tariff of Rs.3.13 per unit determined for the solar power projects of capacity 500 kW to 2 MW under Component-A of PMKUSUM scheme is comparatively more than the tariff determined by the ERCs of respective states participating in the scheme that is Punjab: Rs. 2.748 / kWh; Madhya Pradesh: Rs. 3.07 / kWh; and Jharkhand: Rs. 3.05 / kWh.

b. That the cost of solar energy available in the market is considerably reduced over the past few years due to advancement of technology, efficiency improvement and several other factors.

c. That the applicability period of tariff determined for the solar power project of the capacity of 500 kW to 2 MW under Component-A of PMKUSUM scheme is not taken into consideration.

d. That the Act, 2003 mandates the DISCOMs to procure power on least cost principle from the cheaper and economical sources for safeguarding the interest of the end consumers and the benefit will be passed onto the consumer ultimately.

e. That the Commission did not take into consideration the suggestions / comments of the petitioners herein on various parameters and issued the impugned order determining levelised tariff of Rs.3.13 per unit for the solar power projects of capacity 500 kW to 2 MW commissioned under Component-A of PMKUSUM scheme. The Commission approved the following parameters:

Parameter	**Unit**	**Proposed Norm**
Useful life	Years	25
Capital Cost per MW (including dedicated line)	Rs. in crore	3.60
Salvage value	%	10%

Debt	%	70%
Equity	%	30%
O&M expenses per MW for 1st year	Rs. in crore	0.045
Annual escalation for O&M	%	4.04%
Depreciation		
1-12 years	%	5.83%
13th year onwards	%	1.54%
Loan tenure	Years	12
Interest on long-term loan	%	10%
Working capital components	-	▪ O&M expenses for 1 month; ▪ Maintenance spares @ 15% of O&M expenses; ▪ Receivables for 2 months.
Interest on working capital	%	11%
Rate of Return on Equity	%	14%
Income Tax	-	Income tax paid by the Generator on the income derived from the power project shall be reimbursed by the Distribution Licensee(s) on submission of challans of payment of Tax to the Income Tax Department.
Discount Factor	%	11.20%
Capacity Utilisation Factor	%	19%
Auxiliary Consumption	%	0.75%
Levelised Tariff	**Rs./kWh**	**3.13**

Proposal for redetermination of levelised tariff determined for solar MW scale projects (500 kW – 2 MW) under Component-A of PMKUSUM scheme:

f. The review petitioners have adopted the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 (CERC RE Regulation 2020). CERC has specified the solar tariff to be project specific based on the prevailing market trends for solar PV projects. Though, it has mentioned certain operational and financial parameters and described the basis of determination of the same.

g. While, the review petitioners have adopted most of the parameters laid down in the CERC RE Regulation, 2020. It has determined certain parameters based on the prevailing market trends in the state, keeping the state specific market conditions in mind. The objective was to arrive at a tariff benefiting the end consumers, while balancing the interests of the solar developers.

h. Based on the above considerations, the petitioners proposed a levelized tariff for solar MW scale projects (500 kW – 2 MW) at the rate of Rs. 2.80 / kWh based on the estimated solar capital cost of Rs. 3.4 crore / MW.

3. The review petitioners stated that the Commission did not consider the following facts while issuing the order under review:

i) Capital Cost

(a) The Commission proposed a solar capital cost of Rs.3.6 crore per MW in the order. But the proposed capital cost is higher than the norms considered by the recent solar levelised tariff orders under Component-A of KUSUM scheme.

(b) It is stated that CERC RE Regulation, 2020 has specified the capital cost for solar PV projects to be ‘project specific’ based on the prevailing market trends for solar PV projects.

(c) Based on the prevailing market conditions, the solar capital cost has been estimated as Rs.3.40 crore/MW (excluding land cost). The details break up* of component-wise costs has been mentioned below:-

Sl. No.	Component	Units	Value
1	Module price	Rs. CR / MWp	1.70
2	Safeguard duty	%	20%
		Rs. Cr / MWp	0.30
3	Balance of system (BoS)	Rs. Cr / MWp	0.60
4	Inverter	Rs. Cr / MWp	0.15
5	Transmission line*	Rs. Cr / MWp	0.20
6	Bay cost+Transformer cost+ CT/PT, metering, protection	Rs. Cr / MWp	0.21
7	GST	%	5% (on 70% of capital cost), 18% (on rest of 30% of capital cost)
8	**Total**	**Rs. Cr / MWp**	**3.40**

‘’ Notes: Network costs have been considered for evacuation at 11 kV level (5 km transmission line)*

(d) It is stated that the KERC has considered a solar capital cost of Rs. 3.40 crore / MW for MW scale ground mounted projects. Rajasthan and Punjab Electricity Regulatory Commissions have finalized the tariff for sale of solar power under Component-A of PMKUSUM scheme taking Rs. 3.40 lakh per MW as O & M cost. In view of the above, the Commission may consider the capital cost of Rs. 3.40 crore / MW, in line with the prevalent orders mentioned above.

ii. Interest on Term Loan:

(a) The Commission proposed an interest rate of 10% on loan for the debt component of the capital cost. In this regard, it is stated that the interest rate for both deposits and loans keep on changing with advent time. As per the CERC RE Regulation, 2020, normative interest rate of 200 basis points above the average State Bank of India marginal cost of funds based lending rate (MCLR) (one year tenor) prevalent during the last available six months shall be considered. As per the CERC Regulation, 2020, interest on loan works out to 9% per annum.

(b) It is a known fact that the rate of interest has been witnessing a downward trend. DISCOMs shall be held entitled to such benefit. Hence, the Commission may be pleased to review the interest on term loan and fix it as 9% in line with the CERC norms.

iii. Interest on working capital:

(a) The Commission proposed on interest rate of 11.0% on working capital. In this regard, it is stated that as per the CERC RE Regulation, 2020, normative interest rate of 350 basis points above the average State Bank of India marginal cost of funds based lending rate (MCLR) (one year tenor) prevalent during the last available six months shall be considered. The average of SBI MCLR of last six months is 7%. This works out to 10.5%.

(b) The rate of interest on working capital adopted by the Commission at the rate of 11% is higher than the rate prescribed by CERC. It is a known fact that the rate of interest has been witnessing a downward trend. DISCOMs shall be held entitled to such benefit. Therefore, the Commission may be pleased to review the interest on working capital and fix it at the rate of 10.5% in line with the CERC norms.

iv. Working capital component:

(a) As per the CERC RE tariff Regulation, 2020, the working capital is comprised of following components:

O&M Cost	1 month
Maintenance spare	15% of O&M Cost
Receivables	1.5 months of energy charges for sale of electricity, calculated on the normative CUF.

Whereas, the Commission proposed the following working capital components:

O&M Cost	1 month
Maintenance spare	15% of O & M Cost
Receivables	2 months of energy charges for sale of electricity calculated on the normative CUF.

In this regard, the Commission may be pleased to review the working capital component and may be pleased to fix it in line with the financial principles laid out in the CERC RE tariff Regulation, 2020.

v. **Discount Rate:**

(a) The Commission proposed a discount rate of 11.20%. In this regard, it is stated that as per the CERC RE Regulation, 2020, for the purpose of tariff computation, discount factor equivalent to post tax weighted average cost of capital shall be considered. Computation of the same is given below:

Discount factor= [(Debt Component x Interest on debt) x (1 - corporate tax) + (equity component x RoE)]

= [(70% x 9%) x (1 – 0%) + (30% x 14%)] = 10.5%

In such view of the matter, they pray the Commission to review the discount rate and fix it at the rate of 10.5% in line with the CERC norms. The Commission may review the following parameters and issue the order in line with CERC RE Regulation, 2020 norms.

Parameter	**Unit**	**Proposed norms by TSERC**	**Norm as per CERC Regulation, 2020**
Useful life	Years	25	25
Capital Cost per MW* (including dedicated line)	Rs. crore	3.60	3.4
Salvage value	%	10%	10%
Debt	%	70%	70%
Equity	%	30%	30%
O&M expenses per MW for 1st year	Rs. crore	0.045	0.045
Annual escalation for O & M expenses	%	4.04%	4.04%
Depreciation rate			
1-12 years	%	5.83%	4.67% for first 15 years
13th year onwards	%	1.54%	

Parameter	Unit	Proposed norms by TSERC	Norm as per CERC Regulation, 2020
			2% for remaining period
Loan tenure	Years	12	15
Interest on long-term loan	%	10%	9%
Working capital components	-	▪ O&M expenses for 1 month; ▪ Maintenance spares @15% of O&M expenses; ▪ Receivables for 2 months.	▪ O&M expenses for 1 month; ▪ Maintenance spares @15% of O&M expenses; ▪ Receivables for 1.5 months.
Interest on working capital	%	11%	10.5%
Rate of Return on Equity	%	14%	14%
Income Tax	-	Income tax paid by the Generator on the income derived from the power project shall be reimbursed by the Distribution Licensee(s) on submission of challans of payment of Tax to	Income tax paid by the Generator on the income derived from the power project shall be reimbursed by the Distribution Licensee(s) on submission of challans of payment of Tax to

Parameter	Unit	Proposed norms by TSERC	Norm as per CERC Regulation, 2020
		the Income Tax Department.	the Income Tax Department.
Discount Factor	%	11.20%	10.50%
Capacity Utilisation Factor	%	19%	19%
Auxiliary consumption	%	0.75%	0.75%
Levelised Tariff	**Rs./kWh**	**3.13**	**2.80***

4. The review petition has been taken up for hearing and the representative of the petitioners has been heard. Also the Commission examined the material available in the original proceeding in the light of the submissions made in the review petition. The submissions for the day are extracted below:

Record of proceedings dated 15.09.2021:

"… …The representative of the review petitioners stated that the review petitioners are seeking review of the order passed by the Commission with regard to the tariff made applicable under the PM KUSUM scheme, more particular the Component–A thereof. It is his case that the solar tariff has seen a downward trend over the years and the Commission had not considered the prevailing market conditions in respect of solar tariff. It is stated that several other Commissions have fixed the tariff, which is reflecting the tariff conditions. He has referred to the tariff determined by the other states under the same scheme.

The representative of the review petitioners stated that the proposals were submitted to the Commission relying on most of the parameters notified by CERC, however, the Commission did not consider all the parameters as have been notified in the CERC regulations. The Commission ought to have considered several factors, which were realistic to the market conditions as provided in the CERC regulations. He made reference to the issues of capital cost, interest on working capital, interest on term loans and on the final tariff by explaining the prevailing market conditions and the financial parameters to be adopted. The representative highlighted the importance of downward trend of the tariff, which is required to be considered in the interest of the end consumer while ensuring reasonable return to the project developers, as the capacity involved in the scheme is ranging between 500 kW to 2 MW only. Therefore, he requested for review of the order passed by the Commission by fixing the tariff at Rs.2.80 per unit."

5. The Commission is vested with the power of reviewing its decisions, directions and orders under section 94 (1) (f) of the Act, 2003 and that power has to be exercised in terms of its Conduct of Business Regulations, 2015 being Regulation No.2 of 2015 wherein clause 32 (1) provides for entertaining petitions/applications for undertaking review of the order. For better appreciation the clause 32 (1) is extracted below -

"32. **Review of the decisions, directions, and orders**

(1) The Commission may on its own motion, or on the application of any person or parties concerned, within 75 days of any decision, direction, or order, review such decision, direction or order as the case may be and pass such appropriate orders as the Commission thinks fit.

Provided that the Commission may allow on production of sufficient cause to the petitioner, a further period not exceeding 30 days for filing the review petition on such terms and conditions as may be appropriate."

6. In the instant matter, this Commission has passed the order on 02.01.2021 in O.P.No.24 of 2020. The petitioner has filed the review petition on 09.06.2021, raising certain issues, which required reconsideration by the Commission.

7. The Commission notices that review of the order is sought on the premise that other Commissions have passed orders determining the tariff under the PMKUSUM scheme at much lower rate than what is fixed by this Commission. Nothing prevented the petitioners from placing such information before the Commission at the time of hearing. Even otherwise, the Commission, while undertaking determination of the tariff under the scheme, reduced the tariff than what has been proposed by the petitioners in terms of the scheme keeping in mind the trends available in the market.

8. The Commission, while determining the tariff, had considered all the parameters as have been proposed by the petitioners. It cannot now be said that the Commission had not taken into consideration any aspect, which has been submitted

for consideration by the review petitioners. Reliance is placed on CERC Regulation on RE tariffs. The review petitioners cannot now allege that the same was not completely considered as it was taken into consideration to the extent required.

9. The review petitioners have raised issues relating to capital cost, interest on term loan, interest on working capital and working capital components along with discount rate. The Commission is of the view that all the parameters mentioned have been taken into consideration but in the context of the prevailing state specific conditions regarding development of the solar projects. Nothing prevented the review petitioners from placing factual situation before the Commission while submitting its arguments at the time of hearing on the parameters being considered, which require consideration in order to arrive at the tariff.

10. It is not out of place to state that the tariff arrived at by the Commission should not affect the development of solar power while at the same time, should not burden the end consumer through the DISCOM.

11. For entertaining the review petition, the following should be satisfied. The review of an order passed by a Commission is dependent on the following aspects under the Code of Civil Procedure, 1908.

a. Where there is a typographical mistake that has crept in the order;
b. When there is an arithmetical mistake that has crept in while effecting calculation or otherwise;
c. When there is a mistake committed by Commission, which is apparent from the material facts available on record and/or in respect of application of Law;
d. When the Commission omitted to take into consideration certain material facts on record and 'law on the subject' and that if on taking into consideration those aspects, there is a possibility of Commission coming to a different conclusion contrary to the findings given;
e. If the aggrieved party produced new material which he could not produce during the enquiry in spite of his best efforts and had that material or evidence been available, the Commission could have come to a different conclusion; The review petitioners have sought only the relief of review of the order passed in O.P.No.24 of 2020 in the present petition raising

the plea of reviewing the order dated 02.01.2021. They gave no proper reason / submission which would fit into any of the above principles on which review petition is to be entertained;

12. The Commission notices the aspect of review and the view expressed on the issue of review. The ratio decided by the Hon'ble Supreme Court in its various decisions for invoking the power of review, has been culled out by the Hon'ble Appellate Tribunal for Electricity (ATE) in its judgement dated 17.04.2013 in Review Petition No. 12 of 2012 in Appeal No. 17 of 2012, which would squarely apply in the present circumstances of the petition.

13. The Commission notices that the statute did provide for undertaking the reviewing of its decisions, directions and orders in the provisions relating to review, however, the enabling provision makes it clear that the Commission has the same powers as are vested in a Civil Court under Code of Civil Procedure, 1908. Suffice it to state that the present petition filed by the petitioners should satisfy the provisions of Order XLVII Rule 1 of the above said code. Nothing is placed on record as stated earlier insofar as the conditions for the review as enumerated above. Maintainability of the review petition per-se does not merely involve the authority to entertain but also to look into whether any error has crept into the order that was passed by the authority.

14. In terms of section 61 (a) of the Act, 2003, the principles and methodologies specified by CERC shall be guiding purpose and are not mandatory. The Commission had considered what is appropriate in the interest of all the stakeholders. Relying on the Hon'ble ATE order dated 17.04.2013 in R.P.No.12 of 2012 in Appeal No.17 of 2012 [para 17 (e)]

> "The party is not entitled to seek a Review of a judgment delivered by the Court merely for the purpose of rehearing a fresh decision of the case. The principle is that the judgement pronounced by the court is final. Departure from that principle is justified only when circumstances of a substantial and compelling character make it necessary to do so."

The Commission opines that the petitioner has simply sought for the fresh decision of the case on rehearing the entire matter. This is not permissible under the review jurisdiction and there is no mistake apparent on the face of the record as contended by the review petitioners and therefore, the review sought is not maintainable.

15. In the result, the Commission is of the view that the review petition is devoid of merits and the same is liable to be rejected. Accordingly, the petition is disposed.

This order is corrected and signed on this the 23rd day of September, 2021.

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

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