TAMIL NADU ELECTRICITY REGULATORY COMMISSION

Order of the Commission dated this the 12th day of December 2024

PRESENT:-

Thiru K.Venkatesan Member

and

Thiru B.Mohan Member (Legal)

M.P.No. 44 of 2024

Tamil Nadu Power Distribution Corporation Ltd. (TNPDCL)
NPKRR Maaligai
144, Anna Salai,
Chennai – 600 002

....... Petitioner
(Thiru N.Kumanan &
Thiru.A.P. Venkatachalapathy
Standing Counsel for TNPDCL)

This Miscellaneous Petition has been preferred by the Petitioner seeking, inter alia directions to hold that the obligation of the State Distribution Licensee in terms of power purchase commitments has been and continues to be stranded and there is an unavoidable obligation and incidence to bear fixed costs consequent to such agreements and to determine the additional surcharge of Rs.1.06 per unit payable by open access consumers on adjusted quantum of power purchase through open access, and to consider the information submitted by TNPDCL for determining the said surcharge and to pass any other orders as the Commission deems just and proper.

This petition having come up for hearing on 01-10-2024 in the presence of Tvl. N.Kumanan and A.P. Venkatachalapathy, Standing Counsel for the Petitioner TNPDCL and on consideration of the representation made by the Standing Counsel for the Petitioner and on perusal of the material records, this Commission passes the following.

ORDER

1. Facts of the Case:-

- 1.1. The Tamil Nadu Power Distribution Corporation Limited(TNPDCL) has filed this petition for determination of the Additional Surcharge payable by the consumers for the quantum of power purchase through Open Access during the period from 01.10.2024 to 31.03.2025.
- 1.2. The petitioner has prayed for the determination of the Additional surcharge on the following grounds –
- (i) The liability for payment of Additional Surcharge by a class of consumers to meet the fixed cost of the distribution licensee arising out of its obligation to supply under Section 42(4) of Electricity Act 2003.
- (ii) Regulation 24(2) of the TNERC (Grid connectivity and Intra-State Open Access) Regulations, 2014, which makes Additional Surcharge applicable only if the obligation of the licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear the fixed cost to such a contract.

- 1.3. The petitioner has sought to determine the Additional surcharge for the period from October 2024 to March 2025, based on the details of Capacity available, Scheduled power, Capacity not availed, Allowed Open access quantum and Fixed cost incurred during October 2023 to March 2024. The petitioner has prayed to determine the additional surcharge at Rs.1.06 per kWh.
- 1.4. After admitting the petition, the Commission directed the petitioner in the Daily order dated 10-09-2024to webhost the petition and to file the comments received from the stakeholders along with replies sent to the stakeholders by way of an affidavit. The petitioner filed the comments/objections received from the Stakeholders and the reply given to them on 01.10.2024 before the Commission.

2. Contention of the petitioner:

2.1. The petitioner TNPDCL has stated that its Contracted capacity as on 31.03.2024 was as follows:

Sl. No.	Generation Category	Installed capacity
		(in MW)
1	Thermal	4320.00
2	Gas	516.08
3	Central Generating Stations - Share	7170.00
4	Independent Power Project	1105.50
5	Long Term Open Access	2830.00
6	Medium Term Open Access	100.00
7	Captive Power Projects	223.80
	Total	16265.38

	Non Conventional Energy	
1	Hydro	2321.90
II	Wind	1347.51
III	Solar	3463.34
IV	Co-Generation	228.30

V	Bio mass	2.40
	Total	7,363.45
	Grand Total	23,628.83

- 2.2. With regard to demand and supply position, the maximum power demand of the State was 19,409 MW and average daily consumption of the State was 426.439 MU during FY 2023-24. Maximum demand met was 20,830 MW (02.05.2024) and maximum consumption per day was 454.320 MU (30.04.2024) so far in FY 2024-25.
- 2.3. The petitioner has stated that the petition has been filed within the following legal frameworks -
- 2.4. The relevant Provisions of Electricity Act 2003, Policies of Government of India and Regulations on Open Access Notified by the Commission.
- 2.5. The Section 40 of Electricity Act describes the duties of Transmission Licensee related to open access
 - "to provide non-discriminatory open access to its transmission system for use by(i) any licensee or generating company on payment of the transmission charges;
 or
 - (ii) any consumer as and when such open access is provided by the State Commission under sub-section (2) of section 42, on payment of the transmission charges and a surcharge thereon, as may be specified by the State Commission: Provided that such surcharge shall be utilised for the purpose of meeting the requirement of current level cross-subsidy:

Provided further that such surcharge and cross subsidies shall be progressively reduced in the manner as may be specified by the State Commission:

Provided also that the manner of payment and utilisation of the surcharge shall be specified by the State Commission.

2.6. Section 42 (2) of the Electricity Act 2003 provides following provisions wherein the powers have been given to State Commissions for specifying cross subsidy and surcharge.

"The State Commission shall introduce open access in such phases and subject to such conditions, (including the cross subsidies, and other operational constraints) as may be specified within one year of the appointed date by it and in specifying the extent of open access in successive phases and in determining the charges for wheeling, it shall have due regard to all relevant factors including such cross subsidies, and other operational constraints:

Provided that such open access shall be allowed on payment of a surcharge in addition to the charges for wheeling as may be determined by the State Commission:

Provided further that such surcharge shall be utilised to meet the requirements of current level of cross subsidy within the area of supply of the distribution licensee: Provided also that such surcharge and cross subsidies shall be progressively reduced in the manner as may be specified by the State Commission:

Provided also that such surcharge shall not be leviable in case open access is provided to a person who has established a captive generating plant for carrying the electricity to the destination of his own use:"

2.7. Further, Section 42 (4) of the Act provides following provisions related to 'Additional Surcharge'.

"Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply."

2.8. Section 8.5 of the National Tariff Policy provides following provisions that deal with calculation of cross subsidy surcharge and applicability of additional surcharge to be paid by open access consumers.

"National Electricity Policy lays down that the amount of cross-subsidy surcharge and the additional surcharge to be levied from consumers who are

permitted open access should not be so onerous that it eliminates competition which is intended to be fostered in generation and supply of power directly to the consumers through open access."

- "8.5.4The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges."
- 2.9. The clause 8.5.6 which stipulates that in case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee on the payment of tariff for temporary connection to that consumer category as specified by the Appropriate Commission. Provided that such charges shall not be more than 125 percent of the normal tariff of that category.
- 2.10. The Regulation 24 of TNERC (Grid connectivity and Intra-State Open Access) Regulations, 2014, provides following provisions, which deal with 'Additional Surcharge'
 - "24. Additional Surcharge. –
 - (1) An open access customer, receiving supply of electricity from a person other than the distribution licensee of his area of supply, shall pay to the distribution licensee an additional surcharge on the charges of wheeling, in addition to wheeling charges and cross-subsidy surcharge, to meet out the fixed cost of such distribution licensee arising out of his obligation to supply as provided under subsection (4) of section 42 of the Act.
 - (2) This additional surcharge shall become applicable only if the obligation of the licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. However, the fixed costs related to network assets would be recovered through wheeling charges.

(3) The distribution licensee shall submit to the Commission on six monthly basis, a detailed calculation statement of fixed cost which the licensee is incurring towards his obligation to supply. The Commission shall scrutinize the statement of calculation of fixed cost submitted by the distribution licensee and obtain objections, if any, and determine the amount of additional surcharge:

Provided that any additional surcharge so determined by the Commission shall be applicable only to the new open access customers.

(4) Additional surcharge determined on per unit basis shall be payable, on monthly basis, by the open access customers based on the actual energy drawn during the month through open access:

Provided that such additional surcharges shall not be levied in case distribution access is provided to a person who has established a captive generation plant for carrying the electricity from such plant to the destination of his own use.

- 2.11. The petitioner has filed this petition based on the directions issued in the order dated 29.09.2021 in the petition M.P.No.30 of 2021, in which Commission has directed TANEDCO as follows:
 - "7.2. Further, the Commission hereby directs the petitioner to file the petition for determination of the Additional Surcharge on six monthly basis in future under 24(3) of the TNERC Grid Connectivity and Intra State Open Access Regulations, well in advance, even though no stranded capacity was identified during a set of six months period. 15 minutes Block wise data in respect of the power scheduled by Open access consumers shall be filed by the petitioner in respect of both Renewable & Non-Renewable energy along with the petition."
- 2.12. The additional surcharge for the period from 01.10.2024 to 31.03.2025 based on data for the period from 01.10.2023 to 31.03.2024 sis now filed before this Commission for determination of Additional Surcharge payable by the open access consumers.

2.13. Additional Surcharge for the period from 01.10.2024 to 31.03.2025

The Additional Surcharge for the period from October 2024 to March 2025 is to be determined based on the details from October 2023 to March 2024. The additional surcharge worked out by the petitioner based on the methodology approved earlier in M.P.No.30 of 2021 is as follows:

Calculation of Additional Surcharge for the period from October 2024 to March 2025							
S.No.	Description	Nomenclature	Value	Unit			
1	Contracted Capacity	А	23628.83	MW			
2	Maximum Availability	В	19381.12	MW			
3	Minimum Availability	С	10547.97	MW			
4	Average Availability	D	13969.59	MW			
5	Maximum Scheduled	E	18642.76	MW			
6	Minimum Scheduled	F	7138.82	MW			
7	Average Scheduled	G	13282.16	MW			
8	Capacity not availed (Max)	Н	6563.56	MW			
9	Capacity not availed (Min)	1	0.00	MW			
10	Capacity not availed (Avg.)	J	687.42	MW			
11	OA Allowed (Max)	K	1336.32	MW			
12	OA Allowed (Min)	L	12.55	MW			
13	OA Allowed (Avg.)	М	419.77	MW			
14	Capacity stranded due to OA	N	290.17	MW			
15	Total Fixed Charge (PPA)	0	8790.59	Rs in Crore			
16	Fixed charges per MW available	P=O/D	0.63	Rs in Crore			
17	Fixed charges of stranded capacity	Q=P*N	182.59	Rs in Crore			
18	Transmission Charges paid	R	3846.88	Rs in Crore			
19	Energy Scheduled	S	58335.26	MU			
20	Transmission Charges per kWh	T=R/S*10	0.66	Rs./kWh			
21	Distribution Charges (As approved in Tariff Order)	U	1.00	Rs./kWh			
22	Total T & D Charges per kWh	V=T+U	1.66	Rs./kWh			
23	Energy Consumed by OA Consumer from Discoms	W	5254.77	MU			
24	T & D charges payable to Discoms by OA consumers	X= W*V/10	872.00	Rs in Crore			

	Calculation of Additional Surcharge for the period from October 2024 to March 2025								
S.No. Description Nomenclature Value Unit									
25	Demand Charges Recovered by Discoms from OA	Y	767.20	Rs in Crore					
26	Demand Charges to be adjusted	Z=Y-X	0.00	Rs in Crore					
27	Net stranded charges recoverable	AA=Q-Z	182.59	Rs in Crore					
28	OA adjusted energy	AB	1725.89	MU					
29	Additional surcharge AC	AC=AA/AB*10	1.06	Rs./kWh					

The details of Power purchase fixed cost, availability and energy adjusted details have been submitted as Annexure I to V in the typed set.

3. Prayer of the Petitioner -

- (i) To determine additional surcharge payable by all open access consumers who purchase power through 3rd party sale and power exchanges (viz.IEX, PXI, etc.,) for the period from 01.10.2024 to 31.03.2025.
- (ii) Hold that the obligation of the state distribution licensee in terms of power purchase agreements has been and continues to be stranded and there is an unavoidable obligation and incidence to bear fixed costs consequent to such agreements.
- (iii) To fix the additional surcharge as **Rs.1.06** per unit payable by open access consumers on Adjusted quantum of power purchase through open access.
- (iv) Consider the information submitted by TNPDCL for determining the amount of additional surcharge.
- (v) Pass such other further orders as this Commission may deem just and proper in the circumstances of the case.

4. Findings of the Commission:

- 4.1. The petitioner has filed the present M.P.No.44 of 2024 for determination of Additional Surcharge payable by Open Access consumers under TNERC (Grid connectivity and Intra-State Open Access) Regulations 2014 based on the recent six months data (from 01-10-2023 to 31-03-2024) applicable for the period from 01-10-2024 to 31-03-2025.
- 4.2. The petitioner, TNPDCL in its additional affidavit filed on 01.10.2024 furnished the replies on the comments received from the stakeholders with reference to the legal provisions and the procedure adopted by them.
- 4.3. The Commission has gone through the comments of the stakeholders and the replies given by the TNPDCL with reference to the standardised procedure formulated by the Commission based on the Orders passed in M.P.No.18 of 2020 dated 15.04.2021, M.P.No.41 of 2022 and M.P.No.32 of 2021 dated 08.02.2022.
- 4.4. The Commission has also carefully gone through the comments furnished by the stakeholders and the replies furnished by the TNPDCL. Most of the comments given on this M.P.No.44 of 2024 are similar to those comments received against the earlier petitions filed by the TNPDCL for determination of Additional surcharge viz., M.P.18 of 2020, M.P.30 of 2021, M.P.41 of 2022 and M.P.19 of 2024.
- 4.5. All those comments have been taken into consideration by the Commission, in the present process of determination of additional surcharge.
- 4.6. While considering the similar contentions in the appeal filed against the Order in M.P.18 of 2021 of the Commission, Hon'ble APTEL observed in Appeal No.177 of 2021

dated 15.11.2021 upheld the methodology adopted by the Commission dismissing all the objections as follows:-

"203. We also note that if the contentions of the Appellants were to be accepted, it would tantamount to requiring all other consumers of TNPDCL to bear the burden of choice exercised by open access customers. We also agree with the State Commission that it is unfair to saddle other consumers with such unrecovered cost.

204. In view of the above we are of the considered opinion that the Impugned Order dated 15.04.2021 passed by the Respondent No.1/ TNERC in the M.P.No. 18 of 2020 does not call for any interference by this Tribunal and accordingly the Appeal No. 177 of 2021 is dismissed as devoid of merit."

- 4.7. The Section 42 (4) of the Electricity Act 2003 which deals with Additional Surcharge reads as follows.
 - "42. Duties of distribution licensee and open access –

XXXX XXXX

- (4) Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply."
- 4.8. The Commission has set out the applicability and requirement for levying "Additional Surcharge" under TNERC (Grid Connectivity and Intra-State Open Access)
 Regulations 2014 and one such requirement under Regulation 24(3) is that the

distribution licensee shall submit to the Commission on six month basis, a detailed calculation on fixed cost which the licensee is incurring towards its obligation to supply.

- 4.9. Accordingly the petitioner has filed the Maximum availability, Average availability, Maximum scheduled quantum, Average scheduled quantum, Capacity not availed for scheduling (Maximum, Minimum, Average), Scheduled Open Access quantum (Maximum, Minimum, Average), Stranded capacity due to Open Access and Net stranded charges to be recovered.
- 4.10. In this petition, TNPDCL has stated that it's "total Contracted capacity" is 23628.83 MW. During the period of October 2023 to March 2024, it had maximum availability of 19,381.12 MW including RE power and average availability of 13,969.59MW. Maximum scheduling was 18,642.76 MW with an averageof 13,282.36 MW. Hence, the average capacity stranded during the period was 687.42 MW. However, the petitioner restricted the claim for stranded capacity prevailed in corresponding blocks and limiting to the quantum of OA scheduled. The fixed cost incurred by the petitioner was Rs.8790.59.88Crores during the period from 10/2023 to 03/2024. Considering the above data, the petitioner has claimed the Additional Surcharge to be determined at Rs.1.06 per Unit.
- 4.11. It has been pointed out by some of the stakeholders that the Additional surcharge can be claimed by the Discom only when it is able to demonstrate on 15 minutes time block basis that the power had been continuously stranded throughout the period of six months. In this connection, the Commission has obtained the 15 minutes block wise data for the TNPDCL's Power availability, Scheduled quantum and stranded quantum. The

details so furnished were taken into consideration for determination of Additional surcharge.

4.12. As per National Tariff Policy 2016, the additional surcharge is applicable only when the licensee is able to demonstrate its unavoidable obligation of fixed costs towards the surplus power available in the said period.

"National Tariff Policy 2016

8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.

In this petition, TNPDCL has furnished details of block-wise capacity of power available and its available capacity backed down during the block of OA power availed. These details were taken into consideration in this exercise along with the Renewable energy details furnished by the TNPDCL.

4.13. <u>Determinants of Additional Surcharge</u>:

4.13.1.Under Section 42(4) of the Electricity Act 2003, the Additional surcharge shall be levied to meet the fixed cost incurred by the distribution licensee arising out of his obligation to supply. Under Regulation 24(2) of Grid connectivity and Intra state open access Regulations, the Additional surcharge shall become applicable only if the obligation of the licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear the

fixed costs consequent to such contract. However, the fixed costs related to network assets would be recovered through wheeling charges.

4.13.2. In order to justify the claim of Additional Surcharge, the petitioner has to provide the Fixed capacity charges incurred by the petitioner towards the available capacity in terms of power purchase commitment which has been continuously stranded. Accordingly, the petitioner (TNPDCL) has provided the details of Fixed charges and Block-wise availability & power scheduled details. These are taken into scrutiny by the Commission with reference to regulation 24(3) which requires submission of details with reference to fixed cost by the licensee.

4.14. <u>Determination of Fixed capacity charges incurred by the Petitioner during</u> October 2023 to March 2024:

4.14.1.Under Regulation 24 (3) of the TNERC (Grid Connectivity and Intra-State Open Access) Regulations, 2014, the distribution licensee shall have to submit a detailed calculation statement of fixed cost incurred towards its obligation to supply and the Commission shall scrutinise the calculation statement for the determination of Additional Surcharge. Accordingly, the petitioner has submitted the details of Fixed capacity charges incurred / paid for power purchased from (i) TNPGCL & TNGECL's Generating stations and (ii) Other sources. TNPDCL has worked out its Fixed capacity charges as Rs.8790.59 Crores for the period of six months. The petitioner has submitted the details duly certified by the Chartered Accountants.

4.14.2. In this petition TNPDCL submitted its Fixed charges details on actual basis as certified by the Auditors in respect of certain parameters. The Commission hereby views that since the True up of FY2023-24 is not yet made, it would be appropriate to consider the Fixed capacity charges as approved in the Tariff Order No.7 of 2022 dated 09.09.2022 for TNPGCL& TNGECL's generating plants for the period 2023-24 and in line with the normativesspecified in TNERC (Terms and Conditions for Determination of Tariff) Regulations, 2005, where-ever necessary. The calculated values of fixed costfor the period from October 2023 to March 2024 with respect to the TNPGCL & TNGECL's generating stations based on the ARR approved for FY 2023-24 are as below.

Table-1 : Fixed Cost i.r.o.TNPGCL & TNGECL generating stations for the period

from October 2023 to March 2024

based on the ARR for the FY 2023-24 in T.O.No.7 of 2022

(Rs.in Crores)

Net Fixed Cost for Claimed **Fixed Cost** Oct.23 - Mar.24 Amount for Fixed cost components disallowed (w.r.to T.O.7 of Oct.23 - Mar.24 2022) 807.21 Depreciation 807.21 2130 2130.00 Interest on Loan capital 283.15 283.15 Interest on Working capital 335.02 Return on Equity 335.02 0.00 O&M expenses 688.47 58.66 629.81 Other Interests / other debts 0.00 0.1 0.1 4.02 4.02 0.00 Prior period charges Subtotal 3850.16 4247.96 397.80 Other income 92.29 92.29 Net fixed cost -TNPGCL & 4155.67 3757.87 397.80 TNGECL's Generating stations

4.14.3. The components of fixed cost viz., Depreciation, Interest on Loan capital, Interest on Working capital, O&M expenses net off other income arrived as above by disallowing the Return on Equity, other Debts in line with the earlier Orders.

(i) Depreciation, Interest on Loan capital, Interest on Working capital:

The petitioner has claimed Fixed cost towards Interest on Loan Capital and Interest on Working capital in line with the approval of Fixed cost components in Tariff Order No.7 of 2022 Dated 09-09-2022 and claimed Depreciation as certified by the Chartered Accountants. The Commission decides to considerthe calculated values based on the ARR approved for FY 2023-24 for the Fixed cost components Depreciation, Interest on Loan Capital and Interest on Working Capital.

(ii) Return on Equity:

The Return on Equity has been claimed by the petitioner of Rs.335.02 Crores for the period of 10/2023 to 03/2024. In this connection, it would be appropriate to mention the earlier observation of the Commission on the claim of RoE by the TNPDCL. In the T.O. dated 11-08-2017, the Commission has stated that, the Commission is of the view that TNPDCL is mixing the revenue account with capital account and the equity approved may be again diverted to Revenue account; the actual borrowings are significantly higher than capital expenditure. Hence, the Commission, in line with the decision taken in Suo motu order dated 11th December 2014, adopted the same approach while approving the RoE. The Commission finally observed under para 3.10.8 of the T.O. dt.11-08-2017 that, "Funding of Capital expenditure has been considered entirely through loans and hence,

no RoE was approved for the FY 2015-16. Here, in this case too, the petitioner has not demonstrated the portion of equity deployed in the operation of its business. In the recent Tariff Order no.7 of 2022 also, the Commission had the similar view in respect of the RoE claimed by the petitioner. Hence, the Commission hereby decides to disallow the cost claimed under the RoE fully.

(iii) Operation and Maintenance expenses:

The petitioner is stated to have claimed the O&M expenses based on the actual cost incurred during the period from 10/2023 to 03/2024. Though the petitioner has claimed on actual basis, the Commission while going through its performance has found that O&M expenses is not in line with the approved value for 2023-24; hence the Commission decides to approve the O&M cost in line with norms under Tariff Regulations, 2005, which is in line with the True up order for the year 2021-22 as taken in M.P.No.19 of 2024 for the period from April 24 to September 24. Therefore it would be just and appropriate to approve the O&M at the rate of 5.72% Year-on-Year basis upto the FY2023-24.

(iv) Other Debts and Prior period credits / charges:

TNERC's (Terms and Conditions for determination of Tariff) Regulations 2005 has not defined the components "Other Debts" and "Prior period credits / charges". Hence, in the absence of direct norms for such tariff components, we are not inclined to allow such expenses without carrying out the detailed true up exercise. Hence, the Commission disallows the fixed cost components viz., 'Other Debts', 'prior period charges' and 'extra ordinary charges' of Rs.0.09 Crores, (-)Rs.196.66 Crores and Rs.39.58 Crores

respectively for calculation of Fixed capacity charges for the period of 10/2023 to 03/2024.

- (v) The TotalNet Fixed capacity charges for TNPGCL & TNGECL's generating stations, approved by the Commission is Rs.3627.49 Crores for determination of fixed cost of the stranded capacity.(Annexure-1)
- 4.14.4. Calculation of Fixed Capacity charges incurred by the Petitioner towards Power purchase from Other Sources :
- 4.14.4.1. The petitioner has sought approval of fixed capacity charges incurred by it for the period from October 2023 to March 2024 towards Central Generating Stations (CGS), Independent Power Producers, Renewable energy purchase and other Long term Power purchase agreements.
- 4.14.4.2. The Fixed capacity charges claimed in respect of CGS have already been approved by the Central Electricity Regulatory Commission and the FCC claimed in respect of IPP, Renewables and Long Term power purchase/Medium Term Open Access have also been approved by this Commission except STOA. Hence, the Commission hereby approves the claim for calculation of the cost of stranded capacity as prayed for.
- 4.14.5. The consolidated Fixed capacity charges in respect of the petitioner is calculated as below for the period of six months.

<u>Calculation of Consolidated Fixed capacity charges for the period from October</u> <u>2023 to March 2024 (All the sources of Power purchases) :</u>

Table – 2

SI.No	Sources	Quantum (MU)	Fixed Cost claimed by TNPDCL	Fixed Cost approved by TNERC
1	TNPGCL & TNGECL Generation			
	Kundha	721.697	260.27	213.03
	Kadamparai	276.269	163.23	93.16
	Erode	104.076	295.44	303.25
	Tirunelveli	624.302	234.95	161.76
	NCPTS Stage-I	1616.534	288.24	537.43
	NCTPS Stage .II	3426.654	432.54	435.35
	M.T.P.S Stage-I	2692.484	374.84	387.46
	M.T.P.S Stage.II	1567.060	295.85	404.66
	T.T.P.S.	3003.287	665.28	580.05
	Kovil Kalapal	0.000	89.89	106.76
	Valuther Phase -I & II	511.814	199.50	148.65
	Kuttalam	338.420	80.42	90.97
	Basin Bridge	0.000	149.61	164.98
	Total	14882.596	3530.06	3627.49
2	C.G.S.			
	Neyveli Lignite Corpn Ltd. TS-II	1162.310	189.19	189.19
	Neyveli Lignite Corpn Ltd. Expn.TS-I	670.172	92.56	92.56
	Neyveli Lignite Corpn Ltd. Expn.TS-II	418.922	33.30	33.30
	NLC/NNTPP	2418.148	429.04	429.04
	NTPC/SR I & II	1609.215	188.46	188.46
	NTPC/SR STAGE -III	457.913	41.38	41.38
	NTPC/KUDIGI	953.776	224.14	224.14
	NTPC/TALCHER 2	2019.150	224.47	224.47
	NTPC/ER	104.620	21.02	21.02
	NTPC/SIMHADRI ST-2	714.602	121.88	121.88
	NTPC/Barh-1	213.737	52.39	52.39
	NTPC/Barh-2	346.037	74.37	74.37
	NTPC/Bongaigaon	-0.005	0.16	0.16
	NTPC/KBUN	-0.002	0.06	0.06

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	NTPC/Telangana	89.402	16.89	16.89
	NTPC/KAYAMKULAM	0.000	2.47	2.47
	NTECL/VALLUR	1581.323	357.52	357.52
	NTPL	1055.877	186.39	186.39
	Kudankulam Nuclear Power Corpn.	3783.141	-0.33	-0.33
	NPC/MAPS	585.571	0.02	0.02
	NPC/KAIGA	875.406	3.68	3.68
	Sub Total	19059.317	2259.05	2259.05
3	IPP's			
	SEPC Power Private Limited	1550.356	315.23	315.23
	PPN Power Gen. Co. Pvt. Ltd.	0.000	39.31	39.31
	TAQA/ST-CMS	668.244	133.21	133.21
	Sub Total	2218.600	487.75	487.75
4	Renewable			
	Windmill	256.650	0.00	0.00
	Co-Generation	326.391	79.83	79.83
	Biomass	1.233	0.16	0.16
	Captive Power	0.630	28.23	28.23
	Solar	2645.438	0.00	0.00
	UI	-315.016	0.00	0.00
	Sub Total	2915.325	108.23	108.23
5	Traders (MTOA)			
	PTC India Ltd. (Pilot-II DB Power)	375.183	78.73	78.73
	PTC India Ltd. (Pilot-II Jai Prakash	211.873	29.81	29.81
	Power)			23.01
	PTC India Ltd. (ILFS)	0.000	144.08	144.08
	PTC India Ltd. (GMRKEL)	390.494	80.70	80.70
	Sub Total	977.551	333.31	333.31
6	Traders (LTOA)			
	Jindal Case1 Bidding	1693.744	336.16	336.16
	Opg Pvt Ltd	193.071	28.72	28.72
	Coastal Energen Pvt. Ltd.	1454.578	239.42	239.42
	PTC India Ltd.	427.957	128.67	128.67
	Dhariwal Infrastructure Ltd.	369.678	48.41	48.41
	DB Power Ltd.	825.543	167.83	167.83
	IL&FS Tamil Nadu Power	2066.048	389.57	389.57
	Bharath Aluminium	829.356	90.29	90.29
	KSK Mahanadi Power	1862.242	507.43	507.43
	GMR Energy Trading Ltd.	583.474	125.53	125.53
	Nvvn Solar	15.588	0.00	0.00
	Sub Total	10321.277	2062.02	2062.02
7	Traders (STOA)			

	Total 1 Power Purchase Cost	56282.468	8790.59	8877.85
	Sub Total	4799.484	0.00	0.00
	Power Exchange	4799.484	0.00	0.00
8	STOA Charges			
	Sub Total	1108.318	10.17	0.00
	Shree Cement	18.600	8.96	0.00
	Refex Industries Ltd.	0.000	0.00	0.00
	Instinct Infrastructure	0.000	0.14	0.00
	Arunachal Pradesh Corporation	0.000	0.04	0.00
	PTC Adhunik	35.203	0.00	0.00
	PTC Simhapuri	52.289	0.00	0.00
	PTC Sembcorp	110.593	0.00	0.00
	Manikaran Energy(Coastal)	342.564	0.00	0.00
	PTC India Ltd.	0.000	1.02	0.00
	NVVN – ILFS	265.053	0.00	0.00
	NVVN JNSTPP	66.714	0.00	0.00
	NVVN JVPL, Nigire	217.301	0.00	0.00

4.15. The Commission has calculated above Fixed capacity charges for the determination of Additional surcharge taking into account of Fixed charges approved for TNPGCL & TNGECL's generating stations and the Fixed costs related to other Power purchase transactions.

4.16. <u>Determination of Stranded capacity (for the period October 2023 to March</u> 2024):

4.16.1. The petitioner is obligated to demonstrate that its power purchase commitments continued to be stranded during the period under question and the petitioner had unavoidable obligation to bear fixed cost for such contracts as stipulated under Regulation 24(2) of the TNERC (Grid Connectivity and Intra State Open Access) Regulations, 2014.

- 4.16.2. The petitioner has submitted the 15 minutes block-wise data obtained from the State Load Despatch Centre in respect of the capacity available and scheduled details of the Distribution licensee & Open Access Consumers.
- 4.16.3. The Commission has carefully gone through the details furnished by the Petitioner. Whatever the block-wise quantum was scheduled by the SLDC, ithas been compared against the 'available capacity' in the corresponding block; the unscheduled quantum under each block is considered as 'Capacity not availed' under respective block. The average unscheduled capacity (stranded capacity) of the petitioner's conventional plants is 687.42 MW; however, the stranded capacity due to such Open access purchase (viz., 3rd party purchase, IEX, Power Exchange, etc.,) alone is to be quantified.
- 4.16.4. The petitioner has provided the quantum of power purchased by the Open Access consumer in each 15 minutes block during the period from October 2023 to March 2024. The petitioner / SLDC has provided such data. The block wise stranded capacity i.e., 'Capacity not availed' has been compared with the energy scheduled by the Open Access consumers; the comparison is made to justify that since the claim can be only with reference to third party purchase, IEX, Power exchange etc., In every block, the least of the 'OA scheduled energy' or 'Capacity not availed' is considered to arrive at the 'Average stranded capacity' for the entire period of six months i.e., October 2023 to March 2024. The data furnished in this petition is scrutinised with reference to the petitioner / SLDC's data. From this comparison, there is an average stranded capacity of 290.17 MW due to Open access consumers during the six months period.

4.16.5. The Commission has arrived the stranded capacity based on those power quantum which are being scheduled by the SLDC.

4.17. <u>Calculation of Additional surcharge payable by the Open Access consumers</u>:

<u>Table-3</u>: <u>Determination of Additional Surcharge payable by Open Access consumers:</u>

S. No.	Description	Nomenclature	Unit	Submittedby TNPDCL	Approved by TNERC
1	Contracted Capacity	Α	MW	23628.83	23628.83
2	Maximum Availability	В	MW	19381.12	19381.12
3	Minimum Availability	С	MW	10547.97	10547.97
4	Average Availability	D	MW	13969.59	13969.59
5	Maximum Scheduled	E	MW	18642.76	18642.76
6	Minimum Scheduled	F	MW	7138.82	7138.82
7	Average Scheduled	G	MW	13282.16	13282.16
8	Capacity not availed (Max)	Н	MW	6563.56	6563.56
9	Capacity not availed (Min)	I	MW	0.00	0.00
10	Capacity not availed (Avg.)	J	MW	687.42	687.42
11	OA Allowed (Max)	K	MW	1336.32	1336.32
12	OA Allowed (Min)	L	MW	12.55	12.55
13	OA Allowed (Avg.)	M	MW	419.77	419.77
14	Capacity stranded due to OA	N	MW	290.17	290.17
15	Total Fixed Charge (PPA)	0	Rs in Crore	8790.59	8877.85
16	Fixed charges per MW available	P=O/D	Rs in Crore	0.63	0.64
17	Fixed charges of stranded capacity	Q=P*N	Rs in Crore	182.59	184.41
18	Transmission Charges paid	R	Rs in Crore	3846.88	3846.88
19	Energy Scheduled	S	MU	58335.26	58335.26
20	Transmission Charges per kWh	T=R/S*10	Rs./kWh	0.66	0.66
21	Distribution Charges (As approved in Tariff Order)	U **	Rs./kWh	1.00	1.00

22	Total T & D Charges per kWh	V=T+U	Rs./kWh	1.66	1.66
23	Energy Consumed by OA Consumer from Discoms	W	MU	5254.77	5254.77
24	T & D charges payable to Discoms by OA consumers	X= W*V/10	Rs in Crore	872.00	872.00
25	Demand Charges Recovered by Discoms from OA	Y	Rs in Crore	767.20	767.20
26	Demand Charges to be adjusted	Z=Y-X	Rs in Crore	0.00	0.00
27	Net stranded charges recoverable	AA=Q-Z	Rs in Crore	182.59	184.41
28	OA Adjusted energy	AB	MU	1725.89	1725.89
29	Additional surcharge AC	AC=AA/AB*10	Rs./kWh	1.06	1.07

4.17.1. Capacity stranded due to OA consumer:

The Commission has prudently verified the data submitted by the petitioner and taken the availability of such source which only have been scheduled by SLDC into account, under the items of Sl.no.2 to 10 of the above table. Though there is an average unavailed capacity of 687.42 MW during the said period of six months, the block wise comparison is made only with the OA quantum to arrive at an exact stranded capacity due to Open access consumers. In this exercise, it is found that the average stranded capacity of licensee's power is 290.17MW during the period of October 2023 to March 2024.

4.17.2. Total fixed capacity charges:

Based on the actual fixed capacity charges incurred during the period from October 2023 to March 2024, the petitioner has claimed the fixed cost forRs.8790.55 Crores for determination of Additional surcharge in respect of TNPGCL & TNGECL's generating stations as well as other sources of power purchase. The Commission has allowed the

fixed cost payable to external sources of power purchase as claimed; but the fixed cost claim towards its own generating stations is allowed with reference to the T.O.No.7 of 2022 as explained in the Table – 1 and paras there under above. The Commission hereby approves to consider the total Fixed cost of Rs.8877.85 Crores towards Additional surcharge. Thus the Fixed cost incurred per MW is calculated as Rs.0.64 Crore per MW.

4.17.3. The rate of Additional Surcharge:

A thorough checking of datas coupled with scrutinization of the details furnished by the petitioner propels this Commission to arrive at the actual stranded capacity of the licensee due to Open Access Consumers at 290.17 MW. As a corollary, the Fixed Cost obligation on such stranded capacity is worked out as Rs.184.41 Crores. Further the Net Demand charges arrived after deducting the Transmission and Distribution Charges (T & D charges), the charges absorbed for the consumption of Discom power is taken into account for adjustment against Fixed capacity charges recoverable for the stranded capacity. Such net stranded fixed capacity charges divided by the actually drawn OA energy would be the rate of Additional Surcharge recoverable from the OA consumers of October 2024 to March 2025.

In the instant case, if the above referred methodology, is applied the rate of Additional Surcharge is arrived at Rs.1.07/Unit (Refer Table-3). However, this Commission is conscious of the fact that if the Additional Surcharge is fixed at Rs.1.07, the same would be against the letter and spirits and tenor of the proviso clauses of Sub Sec(2) of Section 42 of the Electricity Act, 2003, since the rate is manifestly higher when compared to the

earlier surcharges approved by this Commission. Situated thus, a conspectus evaluation of all facts and circumstances propels this Commission to arrive at the logical conclusion that fixing the rate of Additional Surcharge at Rs.0.54 per unit which is 50% of the rate of Rs.1.07 worked out in the earlier part of this order would be not only just and proper but also in the interest of all the stakeholders.

- 4.18. It is to be noted that the Commission has clarified on the chargeability of Additional surcharge in M.P.No.32 of 2021 dated 08.02.2022, as below
 - "8.10. Taking into account of all the above circumstances and facts, we are of the well considered view that the Additional surcharge shall be levied on the quantum of OA power actually drawn only as stipulated in Regulation 24(4) of the TNERC Intra-State Open Access Regulations 2014."

Therefore, the Commission decides to permit levy of Additional surcharge on the OA power actually drawn by the OA consumer during the period concerned.

- 4.19. In view of the above elaborate discussion and conclusions arrived on relevant issues, this Commission decides that this petition deserves to be allowed.
- 5. In the result, Commission passes the following order.
- i) The prayer for determination of additional surcharge payable by all open access consumers who purchase power through 3rd party sale and power exchanges (viz.IEX, PXI, etc.,) for the period from 01.10.2024 to 31.03.2025 is hereby stand allowed.
- ii) It is further held that the obligation of the State distribution licensee in terms of power purchase agreements has been and continues to be stranded and there is an

unavoidable obligation and incidence to bear fixed costs consequent to such agreements.

- iii) The petitioner is permitted to collect the Additional Surcharge at the rate of Rs.0.54 per Unit from the Open Access consumers on the quantum of the electricity actually drawn by the OA consumer.
- iv) Further it is made clear that the additional surcharge of Rs.0.54per kWh is collectable by the petitioner (TNPDCL) from the date of this Order and the said rate is applicable in respect of the OA power drawn by the consumer upto 31-03-2025 from the date of this Order.
- v)It is further directed that the Additional Surcharge as determined by the Commission is applicable to the Open Access consumers who purchase the power through 3rd party Sale and power exchanges (viz., IEX, PXI, etc.,)
- vi) The rate of Additional surcharge, for subsequent period will be determined based on the block-wise six monthly data furnished by the licensee as the methodology and formulae of determination of Additional Surcharge has already been approved by the Commission in earlier Orders taking into account of the comments obtained from the stakeholders as such methodology has also been upheld by Hon'ble APTEL in the judgment of A.No.177 of 2021 dated 15.11.2021.
- 6. In addition to the above orders, Commission issues the following directions.
- 1) The Commission hereby directs the petitioner to file the petition for determination of the Additional Surcharge on six monthly basis in future under 24(3) of the TNERC Grid

Connectivity and Intra State Open Access Regulations, well in advance, even if no stranded capacity was identified during a set of six months period.

- 2) Commission further directs that 15 minutes Block wise data in respect of the power scheduled by Open access consumers shall be filed by the petitioner in respect of both Renewable & Non-Renewable energy along with the petition.
- 3) The petitioner shall file a monthly report on total energy consumed by OA consumers, Energy wheeled by captive consumers, Energy consumed by OA consumers through 3rd Party purchase and Energy consumed by OA consumers through exchanges.
- 4) The petitioner shall submit certified copies of TNSLDC for various data obtained from them in future without fail.

The petition ordered accordingly.

(Sd/-...)
Member (Legal)
(Sd/-...)

//True copy//

Secretary
Tamil Nadu Electricity
Regulatory Commission

Annexure-1

Summary of Fixed Capacity charges of TNPGCL & TNGECL Generating Stations (from 04/23 to 09/23) (Rs. in Crores)

S. No.	Name of the Plant	Depreciation	Interest on loan capital	Interest on Working Capital	Retur n on Equit y	Operation and Maintenance Expenses	Other Interest/ other debts	Prior period credits/ charges	Extra Ordin ary Charg es	Other Income	Non- Tariff Income	Total Fixed Cost
1	TTPS	85.82	330.16	54.88	0.00	165.42	0.00	0.00	0.00	56.22	0.002	580.05
2	MTPS	49.31	197.03	36.07	0.00	146.42	0.00	0.00	0.00	41.36	0	387.46
3	NCTPS-I	82.35	342.51	39.94	0.00	125.74	0.00	0.00	0.00	53.10	0.0010	537.43
4	MTPS-II	203.50	182.51	43.04	0.00	1.68	0.00	0.00	0.00	26.06	0	404.66
5	NCTPS-II	144.81	202.26	65.47	0.00	38.56	0.00	0.00	0.00	15.74	0.004	435.35
6	ThirumalKottaiGTPS	17.50	78.08	3.38	0.00	7.82	0.00	0.00	0.00	0.01	0	106.76
7	Kuttalam-GTPS	17.44	65.90	6.08	0.00	2.79	0.00	0.00	0.00	1.23	0	90.97
8	Basin Bridge-GTPS	17.26	136.88	4.70	0.00	6.15	0.00	0.00	0.00	0.00	0	164.98
9	Valuthur-GTPS	21.47	109.83	6.72	0.00	11.18	0.00	0.00	0.00	0.55	0	148.65
10	Erode-HPS	94.90	161.31	9.22	0.00	38.00	0.00	0.00	0.00	0.17	0.001	303.25
11	Kadamparai-HPS	14.59	66.88	2.91	0.00	20.12	0.00	0.00	0.00	11.33	0	93.16
12	Kundah-HPS	33.43	154.74	6.19	0.00	34.09	0.00	0.00	0.00	15.41	0	213.03
13	Tirunelveli-HPS	24.86	101.95	4.58	0.00	31.85	0.00	0.00	0.00	1.48	0	161.76
	TOTAL	807.21	2130.00	283.15	0.00	629.81	0.00	0.00	0.00	222.66	0.008	3627.49