BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION, BIDYUT NIYAMAK BHAWAN. PLOT No-4, CHUNOKOLI, SHAILASHREE VIHAR, BHUBANESWAR-751021

Case No:____/2022

IN THE MATTER OF: Application for approval of maintaining Inventory of material for meeting the urgency in Cyclone ("Cyclone Inventory").

And

IN THE MATTER OF: TP Central Odisha Distribution Ltd. (Formerly CESU), Corporate Office, Power House, Unit 8, Bhubaneswar- 751 012 represented by its Chief –Regulatory & Government Affairs.

.... Petitioner

IN THE MATTER OF: DOE ,GOO , GRIDCO Ltd , OPTCL and all Concerned Stake Holders.

.... Respondents

<u>Affidavit</u>

I, Puneet Munjal, aged about 58 son of late Jagdish Lal Munjal residing at Bhubaneswar do hereby solemnly affirm and say as follows:

- I am the Chief-Regulatory & Government Affairs of TP Central Odisha Distribution Ltd., the Petitioner in the above matter and I am duly authorized to swear this affidavit on its behalf.
- The statements made in the submission -File No- TPCODL/Regulatory/2022/ 84/ 5123 herein shown to me are based on information provided to me and I believe them to be true.

Bhubaneswar. Dated: 29.06.2022

Chief-Regulatory & Government Affairs

BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION, BIDYUT NIYAMAK BHAWAN. PLOT No-4, CHUNOKOLI, SHAILASHREE VIHAR, BHUBANESWAR-751021

Case No:____/2022

IN THE MATTER OF: Application under Clause 9.4 of the OERC ("Terms and Conditions for Determination of Wheeling and Retail Supply Tariff) Regulations 2014 for approval of maintaining Inventory of material for meeting the urgency in Cyclone ("Cyclone Inventory") over and above the Inventory permitted under the Tariff Regulations.

And

IN THE MATTER OF: TP Central Odisha Distribution Ltd. (Formerly CESU), Corporate Office, Power House, Unit 8, Bhubaneswar- 751 012 represented by its Chief –Regulatory & Government Affairs.

.... Applicant

IN THE MATTER OF: DOE ,GOO , GRIDCO Ltd , OPTCL and all Concerned Stake Holders.

.... Respondents

Prayer

TPCODL prays to the Hon'ble Commission for the following

- a) Permit TPCODL to maintain inventory ("Cyclone Inventory") estimated to be about Rs.
 120 Crores for use of the same to meet the need during the restoration of network by all the Discoms in Odisha.
- b) Approve the cost of maintaining of inventory as well as the consumption from the Inventory in the ARR of the Discoms as particularly explained in section "F Treatment of Cyclone Inventory in the ARR of Discoms" of this petition.
- c) Have a Public Hearing on the subject.
- d) Pass any other direction it deems fit.

29th June , 2022 File No TPCODL/Regulatory /2022/84/5123

Secretary Odisha Electricity Regulatory Commission Bidyut Niyamak Bhawan Plot No 4, Chunokoli Shailashree Vihar Bhubaneshwar 751021

Dear Sir

Subject: - An Application under Clause 9.4 of the OERC ("Terms and Conditions for Determination of Wheeling and Retail Supply Tariff) Regulations 2014 for maintaining Inventory of material for meeting the urgency in Cyclone ("Cyclone Inventory") over and above the Inventory permitted under the Tariff Regulations

In order to restore the network at the earliest, it is imperative that the optimum quantum of material is available at the disposal of the Distribution Licensee. In this regard, it is therefore necessary to maintain inventory ("Cyclone Inventory") for usage by the Distribution Licensee. While the OERC Tariff Regulation 2014 permit maintaining of Inventory on a normative basis, it is submitted that the Cyclone Inventory is over and above this inventory

We are therefore through this petition in the **Appendix** seeking the approval of the Hon'ble Commission for allowing maintaining of this Inventory and the cost of maintaining such inventory may be passed on in the ARR of Discoms.

We trust our submissions are in order

Yours faithfully

(Vidyadhar Wagle) Head Regulations

A. Background

1. Odisha is multi-hazard-prone state in the eastern part of India. Amongst the various disasters, the frequency and severity of cyclones have increased at an alarming rate in the last two decades. Intense and more frequent cyclones such as the 1999 super cyclone, Phailin in 2013, HudHud in 2014, Titli in 2018, Fani and Bulbul in 2019, Amphan in 2020 and Yaas and Jawad in 2021 as well as floods have resulted in severe devastation in Odisha. The various cyclones experienced by the state is captured in the table below

	Name of Cyclone	Districts Affected	Peak Wind Speeds (Km/Hr)		
1999	Super Cyclone	14	260-270		
2913	Phalin	19	214		
	Hudhud	11	180-190		
2018	Titli	17	60-80		
2019	Fani	14	200-215		
2019	Bulbul	9	110		
2020	Amphan	4	120		
2021	Yaas	4	130-140		
2021	Jawad	Few	<100		

Table: History of Cyclones in the State

2. In Odisha the density of the electricity network is higher in the coastal belt and as a result, the chance of disruption is higher in the coastal zone. It is evident that the low tension (voltage) lines and DTRs (distribution transformers), 11kV, 33kV, 33KV/11Kv substations, within a distance of upto 30 Kms. from the Coastal Zone are at higher risk. It is imperative that the network in the state developed is able to withstand the cyclone and in the event of the cyclone impacting, the network is restored in the shortest possible time.

B. Cyclone Resilient Network

3. The Government of Odisha, OPTCL and also the four Distribution companies are pursuing setting up robust network that would withstand the severity of cyclones. The Capital expenditure for such network is being proposed by the a) Government of Odisha and b) the concerned Transmission and Distribution License in their Capex plans.

C. Quicker Response time

- 4. It is also observed that the power has become the most crucial and vital infrastructure in comparison to the other sectors, and is required to be restored immediately after the disasters, since all other services, such as search and rescue, water supply, telecommunication and health care, depends on the restoration of the power supply.
- 5. Keeping in mind the need for quick restoration of supply, it is imperative that adequate material is stored and mobilised. Further, also noting that all the four distribution licensee are owned by Tata Power, it will be appropriate to have common inventory thereby avoiding any duplication of the same. Such preparedness will enable the consumers of affected area to receive power supply in quickest possible manner at the most optimum costs.
- 6. We are in this petition making a proposal to determine the inventory that needs to be stored and treatment of the same in computation of Tariff to the consumers.

D. Level of Inventory ("Cyclone Inventory")

- 7. While the inventory created would be utilised by all the Discoms in the state, at present the requirement has been prepared by TPCODL considering its own requirement alone. For this purpose, TPCODL has determined the number of sections that would be in the proximity of 30 kms of the Sea coast. The same works out to 77 No.
- 8. Based on this, it has estimated the quantum of inventory as well as the amount required to be spent (Rs Cr) for creating such inventory. The summary of the inventory worked out is about **Rs 116 Crores**. The details of the same is as given in the table below

Table: Cyclone Inventory requirement

Row Labels	Units	Proposed Stock Value	Rs Cr
AB Switch	No	1232	1.62
Channels	Kg	115500	1.04
Conductor	Km	1288.2	5.80
DT	No	947	6.86
LA	No	17325	14.88
LT AB Cable	Km	1617	29.42
LTDB	Km	407	1.54
O/H Accessories	No	92400	5.84
Poles	No	67144	41.58
Substation Equipment	No	74	0.80
UG Cable	Km	84	7.10
Grand Total			116.47
Rounded off			120

9. It is therefore proposed that an inventory of **Rs 120 Crores** would be required to be procured and maintained . In our humble submission, we propose that this amount may be appropriate for meeting the requirement of all the Discoms initially. In case any further inventory is required , we will approach the Hon'ble OERC subsequently. Further, the above amount has been estimated based on the assessment of present situation and hence any change in material required for meeting the requirement may be permitted by the Hon'ble Commission keeping the overall amount of **Rs 120 Crores** in the inventory.

E. Period of Holding Cyclone Inventory

10. Further, as mentioned earlier, both Government of Odisha and the Discoms are investing in Capital Expenditure for building a cyclone resistant network and post the availability of such network, the requirement of maintaining such Cyclone Inventory would be very minimal. Keeping in mind the various capex schemes of the Discoms and the Government of Odisha, it is proposed that above Cyclone Inventory would be required for a period of 8 years.

F. Treatment of Cyclone Inventory in the ARR of Discoms

- 11. In this regard the following is submitted
- i. The usage of such Cylcone Inventory should be done only for meeting the need of material for restoration of supply after the cyclone i.e this inventory cannot be used for meeting the need of normal R&M and also the use in Capital Expenditure Schemes undertaken by Discoms

- The material may be used by other discoms like TPSODL , TPWODL and TPNODL.
 However, as applicable to TPCODL the usage should be restricted only to the extent of restoration of network affected by the Cyclone.
- iii. When the material is used for the cyclone , based on the assessment of the situation the inventory may be replenished by TPCODL. However the level of Inventory will not be higher than **Rs 120 Crores** or any other level approved by the Hon'ble OERC
- iv. In case TPCODL uses the material, the cost of the same should be allowed as cost in the ARR. This cost does not include cost of erection and transporation. In this regard, it is submitted that while the Tariff Regulations permit R&M Costs of 5.4% of the GFA, such amounts is required to carry out only normal R&M and it is not adequate for meeting the expenditure arising out such eventualities like cyclones and hence the expenditure towards restoration of supply needs to be allowed separately.
- v. In case other discoms (i.e other than TPCODL) draw upon material from this inventory, they would reimburse TPCODL for the same including impact of statutory levies like GST and Impact of Related Party Transaction (RPT) on Inter Company Transfer of material. Further, any transportation cost to be incurred for transportation of material will be borne by the respective Discom. The Other discoms would reimburse TPCODL for the inventory used and these Discoms would be allowed to claim such costs in their ARR. As the material has been paid for by TPCODL, it will however not offer this income in the ARR as Non Tariff income.
- vi. TPCODL would be allowed to include the cost of the average balance of Cyclone Inventory in the ARR at the rate applicable for Interest on Working Capital. In addition, cost of insurance, storage, billing, security of such inventory would also be allowed.
- vii. The inventory at the end of the period (i.e 8 years) would be liquidated by TPCODL ("Terminal Value"). The difference in a) amount realised by liquidation and b) the book value of inventory at the end of 8 years would be charged in the ARR. Alternatively the inventory would be allowed to be used by TPCODL for their use in R&M or Capex. Further in case of obsolescence of Inventory, it shall be declared as such with the prior approval of the Hon'ble Commission and its consequential impact shall be allowed in ARR of TPCODL
 - 12. The above treatment is presented in the table below as an illustration

Table: Illustration of the amounts to be treated in the ARR

Sr No	Particulars	Rate		1	2	3	4	5	6	7	8
1	Opening Balance of Inventory		Rs Cr	116.5	109.5	103.7	100.7	92.0	83.3	77.4	68.7
2	Used by TPCODL (For Eg)		Rs Cr	11.6	11.6		11.6	11.6	11.6	11.6	11.6
3	Used by Other Discoms (For Eg)		Rs Cr	2.3		5.8	5.8	5.8		5.8	5.8
4	Replenishment of Inventory (For Eg)		Rs Cr	7.0	5.8	2.9	8.7	8.7	5.8	8.7	8.7
5= 1-sum(2:3)+4	4 Closing Balance of Inventory		Rs Cr	109.5	103.7	100.7	92.0	83.3	77.4	68.7	60.0
6= Avg (1,5)	Average Balance of Inventory		Rs Cr	113.0	106.6	102.2	96.4	87.6	80.4	73.1	64.3
7= 6 x IOWC	Interest on Working Capital	8%	Rs Cr	9.0	8.5	8.2	7.7	7.0	6.4	5.8	5.1
	Expenses claimed in the ARR by TPCODL										
8=2	Material Used		Rs Cr	11.6	11.6	0.0	11.6	11.6	11.6	11.6	11.6
8A=.15% x6	Cost of Insurance, storage etc	0.15%	Rs Cr	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.10
9=7	Interest on Working Capital		Rs Cr	9.0	8.5	8.2	7.7	7.0	6.4	5.8	5.1
	Expenses claimed in the ARR by Other Discoms										
10=3	Material Used		Rs Cr	2.3	0.0	5.8	5.8	5.8	0.0	5.8	5.8
	Terminal Value Impact claimed by TPCODL in the	ARR									
11	Sale Value of the Balance Inventory (For Eg)		Rs Cr								70
12=5-11	Amount to be charged in the ARR		Rs Cr								-10.02

Notes and Assumptions for the illustration

- 1. While working out the values in the Illustration above, we have assumed a certain consumption quantum and replenishment. The actual amounts may be different from that assumed and used in the above table
- 2. Interest on Working Capital (IOWC) has been taken as 8% p.a
- 3. The cost of insurance, storage, security etc has been considered at 0.15% for illustration
- 4. The Sale Value of Balance Inventory or Terminal Value has been assumed for illustration

G. Impact on maintaining Cyclone Inventory on Tariff to consumers

- 13. The impact on Tariff would be the cost of maintaining such inventory. For the purpose of estimating the impact, the sales of only three discoms is being considered as three Discoms (i.e excluding TPWODL) would be primarily affected by the cyclone.
- 14. If the inventory will be replenished to the extent used, then based on the same, the impact on Tariff of consumers on an average is as worked out in the table below:

Sr No	Particulars	Units	Value
1	Opening Inventory Value	Rs Cr	116.48
2	Equated Yearly Installments (@8%) for 8 years	Rs Cr	20.27
3	Sales of TPCODL, TPNODL and TPSODL (FY 2022-23 Order)	Mus	15753
4	Imact on Tariff	Paise/Kwh	1.3

Table: Impact on Tariff of Consumers

15. The Impact of maintaining such inventory works out about 1.3 paise per Kwh which is quite small .

H. Advantages of maintaining the Inventory

16. The advantage of maintaining the inventory is as follows:

- i. Such common Cyclone Inventory would enable the network to be restored early which would benefit the consumers in terms of the improved reliability.
- ii. The proposed arrangement insulates the consumers from the vagaries of prices and availability of material at the time of cyclone restoration as the expenditure is charged at the cost in the books and not Market Value.

I. Request to the Hon'ble Commission

17. We request the Hon'ble Commission to permit maintaining the inventory as discussed above and also permit the consumption of the same and cost of its maintenance to be passed on in the ARR in the manner described above.

J. Provision under Tariff Regulations for implementation

 The OERC ("Terms and Conditions for Determination of Wheeling and Retail Supply Tariff) Regulations 2014 ("Tariff Regulations") provides the necessary powers under clause 9.4. The extracts from the Tariff Regulations are as under

Power to Relax :

- 9.4 The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.
- 19. Hence the Hon'ble Commission has adequate powers under the Tariff Regulations to approve of such inventory and pass the cost of same in the ARR.

K. Prayers

- 20. TPCODL prays to the Hon'ble Commission for the following
- e) Permit TPCODL to maintain inventory ("Cyclone Inventory") estimated to be about Rs
 120 Crores for use of the same to meet the need during the restoration of network
 by all the Discoms in Odisha
- f) Approve the cost of maintaining of inventory as well as the consumption from the Inventory in the ARR of the Discoms as particularly explained in section "F Treatment of Cyclone Inventory in the ARR of Discoms" of this petition
- g) Have a Public Hearing on the subject
- h) Pass any other direction it deems fit.