TAMILNADU TRANSMISSION CORPORATION

(A Subsidiary of T.N.E.B. Limited)

From
Er.T.Chandrasekar.,B.E.,M.B.A.,
Executive Engineer
General Construction Circle- II,
Guindy/ Chennai. 600 032

To
The Principle Chief Conservator
of Forests,
(Head of Department) (FAC),
Panagal Maligai, Saidapet,
Chennai. 600 015.

Letter.No: EE/Civil/TP/GCC-II/CNI/F.Thirutheri RF/D 79 /2017 Dated 13.03.2017

Sir,

Sub: TAN TRANSCO - GCC – II/Chennai – Erection of 230 KV DC Transmission line from Cuddalore to Veerapuram (S.P.Koil) via Neyveli - Diversion of **6.026 Ha** land at Thirutheri & Paranur Reserve Forest in Chengalpattu range of Kanchipuram district – Proposal submitted through Online – Remarks – Report furnished Regarding.

Ref: 1.PCC/Chennai's Survey approval No: TS3/32567/2016 Dated 11.11.2016
2.PCC/Chennai's Lr.No:C.No:TS3/3807/2017, Dated 06.03.2017

****

With reference to your letter under reference (2) above cited, the following additional particulars are herewith submitted:-

1. The Reserve Forest name changed into Paranur Reserve forest instead of Chettipunniyam Reserve Forest in the online portal. The total area of Reserve Forest land to be diverted for the proposed erection of above 230 KV EHT line has been calculated as per the Government of India Guidelines as below :

i. For location No: AP 57/0 (Convertion of existing 110 KV S.P.Koil – Oragadam SC tower into MC tower) in Paranur Reserve Forest in Chengalpattu Range. :-

210 Mtr Length x 46 Mtr width = 0.966 Ha.

The Geo reference details (GPS Readings) for the tower location are furnished as below:

Location No: C 56/0 : E 389753
N 1410194

ii. For location No :AP C63/0 to AP C 67/0 in Thirutheri Reserve Forest of Chengalpattu Range :-

1100 Mtr Length x 46 Mtr width = 5.060 Ha.

The Geo reference details (GPS Readings) for the tower locations are furnished as below:

Location No: C 63/0 : E 391075
N 1409407

Location No: C 64/0 : E 391295
N 1409328

Location No: C 65/0 : E 391509
N 1409242

Location No: C 66/0 : E 391716

TAMIL NADU TRANSMISSION CORPORATION LIMITED
ABSTRACT

Electricity - Strengthening of the intra state transmission system for evacuation of renewable energy in various parts of Tamil Nadu - Administrative approval - Accorded.

TECHNICAL BRANCH

Purattasi
Thiruvalluvar Aandu 2045

READ: CHAIRMAN's approval dated 29.09.2014.

PROCEEDINGS:

1. The Chairman, TANTRANSCO approves the proposal for strengthening of the intra state transmission system for evacuation of renewable energy in various parts of Tamil Nadu at an estimated cost of Rs.1424.84 Crores (Gross) and Rs.1387.2 Crores (Nett).
2. The expenditure is chargeable to TANTRANSCO funds – Capital Expenditure - A/c code No. 14.656.
3. By virtue of the provisions contained in sub-section(2)(a) of section 185 of the Electricity Act 2003,the Tamil Nadu Transmission Corporation Ltd being the Transmission utility and successor entity of TNEB will exercise the powers of the Telegraph Authority under the provisions of section 164 of the Electricity Act,2003, which have already been conferred upon the Board under section 51 of the Indian Electricity Act,1910.
4. The work is to be taken up after ensuring necessary budget provision.

//BY ORDER OF THE CHAIRMAN//

K.VIJI
CHIEF ENGINEER / PLANNING & RC

Encl: Report and detailed estimate.

To

The Chief Engineer/ Transmission/TANTRANSCO / Chennai - 2 (2 Copies)

Enclosure to (Per) CH TANTRANSCO Proceedings No: 190 dt. 08.10.2014.

REPORT TO ACCOMPANY THE ESTIMATE

This proposal envisages strengthening of the intra state transmission system for evacuation of renewable energy in various parts of Tamil Nadu at an estimated cost of Rs.1424.84 Crores (Gross) and Rs.1387.2 Crores (Nett).

NEED:

2.1. The installed capacity of wind generators in Tamil Nadu as on date is 7260.105 MW. The already proposed wind generator addition for which load flow study has been completed and recommended up to March 2012 cases also comes around 3350 MW. Similarly the State has come out with Tamil Nadu Solar Energy Policy - 2012 to develop solar power. A capacity addition of 3000 MW through Solar power is proposed within the year 2015 with the major portion of this generation concentrated in the Southern part of the State and the rest in scattered locations of the State.

2.2. M/s PGCIL has conducted the load flow study for development of Green Energy Corridor.

2.3 In the 34th meeting of Standing Committee on Power System Planning of Southern Region held on 16th April 2012 in Hyderabad, it has been agreed for strengthening of transmission network in Tirunelveli & Udumalpet area for facilitating evacuation of wind energy without any constraints based on the joint load flow study conducted.

2.4. In addition to the above, Kayathar – Koilpatty (Tuticorin Pooling point) 400 kV DC Quad line has been planned to provide additional connectivity with ISTS for strengthening the intra state transmission scheme so as to improve system reliability . The above scheme has been agreed in principle during the 36th meeting of the Standing Committee held on 04.09.13 .

4. Ingur-Arasur (PGCIL) 230 kV SC line on DC tower -60 kms
5. Arasur (PGCIL) - Gobi 230 kV SC line on DC tower -55 kms
6. Cuddalore- Veerapuram (SP Koil) via Neyveli 230 kV DC line on DC tower -220 kms

II-D. 230 kV feeder bay provision at the respective sub-stations for the above lines :

1. Kayathar 400/230 kV SS – 2 Nos
2. Tuticorin Auto 230 kV SS – 2 Nos
3. Veeranam 230 kV SS – 2 Nos
4. Kodikurichi 230 kV SS – 1 No.
5. Ingur 230 kV SS – 1 No.
6. Gobi 230 kV SS – 1 No.
7. Cuddalore 230 kV SS – 2 Nos.
8. Veerapuram (SP Koil) 230 kV SS – 2 Nos
9. Abhishekapatty (Tirunelveli PGCIL) 400/230 kV SS – 1 No.
10. Arasur (PGCIL) 400 kV SS – 2 Nos.

Total No. of 230 kV bays - 16 Nos.

II-E. Augmentation of 230/110kV transformation capacity in six sub-stations

E-(i) Augmentation of Auto Transformer capacity from 3x100 MVA in to 3x160 MVA in the following 230/110 kV substations:

1. Sembatty
2. Anuppankulam
3. Cuddalore

Sanction for provision of 3rd 100 MVA auto transformer is available for all the above 3 no. 230 kV substations and the work is also under progress.

E- (ii). Augmentation of Auto Transformer capacity from 2x100 MVA in to 3x160 MVA in 230/110 kV Thiruvannamalai and Pudukkottai substation.

Enclosure to (Per) CH TANTRANSCO Proceedings No: 190 dt. 08.10.2014

ANNEXURE - 2

Erection of 230 KV Transmission lines and 230 KV Bay extension work

SL NO	DESCRIPTION	QTY		RATE RS IN LAKHS	PER	AMOUNT RS IN LAKHS
1	Erection of 230KV DC Line on DC towers with Zebra conductor including OPGW Cable from Kayathar 400 KV SS to the Tuticorin Auto 230 KV SS (Annexure-5)	65	kms	103.280	km	6713.200
2	Erection of 230KV DC Line on DC towers with Zebra conductor including OPGW Cable from Cuddalore 230 KV SS to Veerapuram (SP Koil) 230 KV SS (Annexure-5)	220	kms	103.280	km	22721.600
3	Erection of 230KV SC Line on DC towers with Zebra conductor including OPGW Cable from Veeranam 230 KV SS to Kodikurichi 230 KV SS (Annexure-6)	25	kms	86.420	km	2160.500
4(a)	Erection of 230KV SC Line on DC towers with Zebra conductor including OPGW Cable from Arasur 400 KV PGCIL SS to Ingur 230 KV SS (Annexure-6)	60	kms	86.420	km	5185.200
4(b)	Erection of retaining wall around tower foundation in Odai and low lying areas for erection of 230 KC SC line on DC tower from Arasur 400KV PGCIL SS to Ingur 230 KV SS (Annexure -8)			LS		191.220
5(a)	Erection of 230KV SC Line on DC towers with Zebra conductor including OPGW Cable from Arasur 400 KV PGCIL SS to Gobi 230 KV SS (Annexure-6)	55	kms	86.420	km	4753.100
5(b)	Erection of retaining wall around tower foundation in Odai and low lying areas for erection of 230 KC SC line on DC tower from Arasur 400KV PGCIL SS to Gobi 230 KV SS (Annexure -9)			LS		191.220
6	Stringing of 230KV SC Line in the free arm of existing 230 KV SC line on DC towers from Veeranam 230 KV SS to Tirunelveli (Abishekapatti) 400 KV PGCIL SS (Only Line Cost)(Annexure-6a)	45	kms	21.810	km	981.450
7	230 KV Bay extenstion work with SAS at (a) Kayathar 400 KV SS (2 Nos) and (b) Veerapuram (SP Koil) 230 KV SS (2 Nos.)(Annexure-7)	4	Nos	239.462	No	957.848
8	230 KV Bay extenstion work with out SAS at (a) Tuticorin 230 KV Auto SS (2 Nos.), (b) Cuddalore 230 KV SS (2 Nos), (c) Veeranam 230 KV SS (2Nos.), (d) Kodikurichi 230 KV SS(1 No), (e) Gobi 230 KV SS (1 No) and (f) Ingur 230 KV SS(1 No)(Annexure-7a)	9	Nos	235.428	No	2118.852
9	230 KV Bay extenstion work at Abishekapatti 400KV PGCIL SS(1 no) & Arasur 400KV PGCIL SS (2 Nos)	3	Nos	265.000	No	795.000
10(a)	Extension of Control room in Ingur 230 KV SS to carry out one no. bay extension work at Ingur 230 KV SS			LS		24.890
10(b)	Improvement works within the Ingur 230 KV SS premises to carry out one no. bay extension work at Ingur 230 KV SS			LS		37.000
				TOTAL		**46831.080**

or say Rs. In crores 468.31 (Gross & Nett)