

::TAMIL NADU TRANSMISSION CORPORATION LTD:: (A SUBSIDY ENTITY OF TNEB LTD)

:: NOTE Containing Justification For Locating the Project in Forest Area::

Utilising the existing 230 KV transmission corridor (since 1965)

Conversion of Existing 230 KV SC line on SC Tower with Kundha Conductor into 400 KV Double Circuit line on Double Circuit Tower with Twin HTLS (ACCC Drake) conductor from Kundha PH 3 (Loc .01 to 56) on Kundha PH 3 — Karamadai Feeder — Nellithurai Reserved Forest of Coimbatore Division

Tamil Nadu Electricity Board has proposed to establish a 400 / 230 KV substation at Parali in the existing TNEB premises. This proposal for establishment of a 400 / 230 KVSS at Parali in Coimbatore region is envisaged as system strengthening measure to evacuate power from the Kundah Pumped Storage Hydro Electric Project (Kundah VII) 500 MW and approved in the Board Proceedings No.(Per) FB TANTRANSCO Proceedings No.21 Dated .05.03.2019

Kundah Pumped Storage Hydro Electric Project (4 x 125 MW) in Nilgiris district is proposed to meet the peak power demand of the State Grid with a view to provide quality & reliable power supply by flexible operation of State grid which will facilitate continued development of Tamil Nadu.

Under Kundah Pumped Storage Hydro Electric Project (500 MW), the existing TANNGEDCO's 'Porthimund' and 'Avalanche – Emerald' reservoirs in Nilgiris district will be utilised as the 'Upper' and 'Lower' reservoirs respectively. An underground power house is proposed to house 4 units of 125 MW each, which can be reached by means of an underground tunnel.

This Kundah Hydro Electric Project is a pumped storage Hydro – Electric project. The surplus energy available during off-peak time to be utilised for pumping water from the lower reservoir to the upper reservoir and the same water will be utilised for generation during peak time.

Being hydro generation, this project is pollution free and a green energy project.

Since the project is a pumped storage scheme, the transmission system designed has to meet both power evacuation of 500 MW in Generation mode and 525 MW in pumping mode (Power drawl) for which the Transmission system will comprise the following:

Utilising the existing 230 KV transmission corridor r (since 1965) Conversion of Existing 230 KV SC line on SC Tower with Kundha Conductor into 400 KV Double Circuit line on Double Circuit Tower with Twin HTLS (ACCC Drake) conductor fro Kundha PH 3 (Loc .01 to 57) on Kundha PH 3 – Karamadai Feeder.

It has been proposed to utilise the existing transmission corridor inside the Reserved Forest so that, felling of trees could be minimised. The existing 230 KV Parali PH 3 to Karamadai feeder with Kundah conductor has been commissioned during the year 1965 and has served more than 52 years and this existing 230 KV corridor is proposed to be utilised for 400 KV transmission line.

In this connection, it is to be informed that the existing Row Width for the 230 KV Transmission Line (Since 1965) inside forest is 35meters. The required Row Width for the 400 KV Transmission line inside Forest is 46meters and hence there will be only an additional requirement of 11meters Row Width inside RF.

In this connection, I would like to inform that this is the only possible route for laying this 400 KV line and there is no alternate route.

The present scope of work inside Nellithurai Reserved Forest will be,

1. Dismantling of existing 56 nos. 230 KV towers from loc 1 to 56 inside Nellithurai R.F and the age old 230 KV conductors.

And

 Laying foundation and erection of new 400 KV towers inside Nellithurai R.F in the same existing locations of 230 KV towers from location 1 to 56 and string with new 400 KV conductors

In this connection it is certified that,

 It is proposed to provide new 400 KV towers at the same location of existing 230 KV towers after dismantling the same. The existing 230 KV towers at location 1 to 56 will be dismantled and replaced by new 400 KV towers at the same locations. 2. The existing conductor outer to outer width is 12.80 mts. The existing Right of Way is 35 mts.

The proposed conductor outer to outer width is only 17 mts which is within the existing Right of Way.

3. Due to the proposed work, the ground clearance will be improved and hence electrocution of wild animals and forest fire in this area can be avoided.

This Transmission line proposal requires only an additional requirement of 5.50 m width on eitherside of existing Transmission line. The Total Area required inside the forest is 15.15 ha. The above area falls in Nellithurai Reserved forest of Coimbatore Division.

The 15.15 ha of forest land required for "Conversion of Existing 230 KV SC line on SC Tower with Kundha Conductor into 400 KV Double Circuit line on Double Circuit Tower with Twin HTLS (ACCC Drake) conductor from Kundha PH 3 (Loc .01 o 56) on Kundha PH 3 – Karamadai Feeder Passes through Nellithurai Reserved Forest of Coimbatore Division under the Revenue division Viz Mettupalayam Taluk Nellithurai Village.

Hence in order to salvage the power crisis problem by evacuating the power generated from the proposed Kundah Pumped Storage Hydro Electric Project and also to safeguard the life of wild animals by providing adequate clearance, getting forest permission is required to take up the work of Conversion of Existing 230 KV SC line on SC Tower with Kundha Conductor into 400 KV Double Circuit line on Double Circuit Tower with Twin HTLS (ACCC Drake) conductor from Kundha PH 3 (Loc .01 o 56) on Kundha PH 3 — Karamadai Feeder which is the only possible route.

The cost of the Scheme works out to Rs.65.8910 Crores

Superintending Engineer
General Construction Circle
Coimbatore – 12.