

Full Title of The Project: Ghatampur- Agra 765 kV S/C Transmission Line

File No.: FP/UP/TRANS/39285/2019

Date of Proposal:

### JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST LAND

Ghatampur Thermal Power Plant (3x660 MW) is being set up by Neyveli Lignite Corporation to generate electricity & cater to the requirement of electricity of the State of Uttar Pradesh. To evacuate the power proposed to be generated at Ghatampur Thermal Power Plant, Government of Uttar Pradesh appointed REC as the bid processing co-ordinator. In the tariff based competitive bidding, **Ghatampur Transmission Limited** has been entrusted to build, operate and maintain the proposed evacuation system. The proposed evacuation system consists of 400 kV D/C Ghatampur- Kanpur Circuit, 765 kV S/C Ghatampur- Hapur, 765 kV S/C Ghatampur- Agra & 765 kV S/C Agra- Greater Noida Circuit(s)/ Lines.

Transmission line is a linear project where the starting & end point of the project are fixed and the rest of alignment is chosen by keeping in mind, a lot of factors that include technical feasibility, ease of construction, ease of maintenance, distance from Protected Area(s) & Eco- sensitive Zone(s), least involvement of forests, least tree felling, safe distance from habitation, places of archaeological importance & other infrastructure.

A Beeline is the shortest distance between the two points (Starting & End Point). The Beeline for Ghatampur- Agra 765 kV S/C line is 211.03 Kms. The geographical location of the Ghatampur Thermal Power Station & Fatehabad Sub-station near Agra is such that the beeline alignment passes through dense forest, National Chambal Wild Life Sanctuary, ESZ of NCWLS on one side & Chambal River on the other side of the alignment. It also passes through densely populated habitations of Auraiya, Etawah & Firozabad District resulting in rejection of the beeline alignment because of environmental & technical concerns.

A number of options were explored before finalizing the proposed route. To avoid the National Chambal Wild Life Sanctuary, proposed Eco Sensitive Zone The proposed 765 kV S/C Ghatampur- Agra transmission line is crossing the Yamuna River three times & passing through six districts namely Kanpur Nagar, Kanpur Dehat, Auraiya, Etawah, Firozabad before terminating at Fatehabad Sub Station in Agra District.

Detailed route survey has been done and the alignment has been finalized keeping in view the abovementioned requirements. An effort has been made to avoid the forest land



NAVNEET CHADDA  
SR. MANAGER  
KANPUR

**Full Title of The Project: Ghatampur- Agra 765 kV S/C Transmission Line**

**File No.: FP/UP/TRANS/39285/2019**

**Date of Proposal:**

completely however, in order to connect the two ends, 4 National Highways (NH-86, NH-92, NH-19 (two times), & NH-25), 3 State Highways (SH-46, SH-21 & SH-62), 2 Canals (Lower Ganga Canal & Etawah- Sakh Nahar) along with some Reserve Forests are unavoidable & will come in the alignment. The side strips of above mentioned National Highways except NH-2, State Highways & Canals have been declared as Protected Forests, making it impossible to avoid the forest land completely. A conscious effort has been made to propose the alignments in such a manner that it involves barest minimum forest land & cutting of trees.

On Successful commissioning of this transmission line the electricity availability in the State of Uttar Pradesh will improve resulting in lesser load shedding which will in turn bring about social & economic development of the area, business opportunities to local people especially in the area of small engineering works, spare shops, hotel & restaurant etc.

Construction of this transmission line will entail employment of about 15 engineers & average 300 people in various supervisory, administration & workers role for a period of two years. Around 5 engineers & 30 workers in supporting roles such as technicians & supervisors will be required for the entire life cycle of the transmission line.

The reasons for choosing the proposed alignment are tabulated below:

S. No.	Description	Route 1 (Proposed Route)	Route 2	Route 3
1	Route Details			
(i)	Transmission Line Bee Line (Shortest Distance between Origin & termination Point)	211.03 Kms.	211.03 Kms.	211.03 Kms.
(ii)	Transmission Line Route Length	228.665 Kms.	221.080 Kms.	235.495 Kms.
(iii)	Angle Points	166	102	153
(iv)	Terrain	Mostly plain, not susceptible to land erosion	Mostly plain with three sections susceptible to land erosion	Mostly plain, not susceptible to land erosion
2	Environment & Forest			
(i)	Protected Areas involved (WLS, NP, BR etc.)	NIL	NIL	9.294 Kms.



NAVNEET CHADDA  
SR. MANAGER  
KANPUR

Full Title of The Project: Ghatampur- Agra 765 kV S/C Transmission Line

File No.: FP/UP/TRANS/39285/2019

Date of Proposal:

(ii)	Eco –Sensitive Zone/ Buffer Zone	NIL	NIL	7.033 Kms.
(iii)	Forest Area involved (Ha.)	79.4992	209.120	54.75992
(iv)	Type of Forest	RF & PF (declared alongside NH ( 04 Nos.), Canal (02 Nos.) & SH04 Nos.)	RF & PF (declared alongside NH (04 Nos.), Canal(02 Nos.) & SH (02 Nos.))	National Chambal Wild Life Sanctuary & its Eco-sensitive zone, RF & PF (declared alongside NH(03 Nos.), Canal( 02 Nos.) & SH 05 Nos.))
(v)	Tree Cutting in Forest Land	2374 Nos.	3257 Nos.	2165 Nos.
(vi)	Tree Cutting in Private Land	Most of the trees coming in this alignment are of small height (dwarf species) but a few trees may require pollarding. Although this requirement is lowest in this alignment.	Most of the trees coming in this alignment are of small height (dwarf species) but a few trees may require pollarding/ cutting. These include Ficus religiosa.	Most of the trees coming in this alignment are of small height (dwarf species) but a few trees may require cutting/ pollarding. These include Ficus religiosa.
3	<b>Technical Feasibility</b>			
(i)	Ease of Construction	Good roads, less forest land involved, away from habitation & orchards	Good roads, most forest land involved, away from habitation but near orchards	Good Roads, least forest land involved, but involved National Chambal Wild Life Sanctuary & its Eco-sensitive Zone.



NAVNEET CHADDA  
SIL. MANAGER  
KANPUR



Full Title of The Project: Ghatampur- Agra 765 kV S/C Transmission Line

File No.: FP/UP/TRANS/39285/2019

Date of Proposal:

(ii)	Ease of Maintenance	Easiest alignment to maintain because of good roads, least forest land involvement, being away from habitation & orchards	Easy to maintain because of good roads, being away from habitation & orchards but involvement of forest land is highest amongst the tree alignments	Easy to maintain because of good roads, being away from habitation & orchards but involvement of National Chambal Wild Life Sanctuary & its Eco-Sensitive Zone is the hindrance.
4	Conclusion	Route 3 involves least forest land but involves 9.294 Kms. Of route length in National Chambal Wild Life Sanctuary & 7.033 Kms. Of proposed Eco-sensitive Zone. As per Supreme Court orders dated 14.2.2000, 25.11.2005 and 14.9.2007, in 202/1995 and MoEFCC guidelines dated 10.04.2015 for activities in NP & WLS, any non forestry activity can be allowed in Protected Areas only under Most Exceptional Circumstances with prior approval of Standing Committee of National Board of Wild Life. Because of this reason, Route 3 is rejected. Route 1 involves lesser forest land & trees, is easiest to construct & maintain & is away from habitation & orchards. Hence route 1 is the preferred route		
5	Recommendation	Route 1 is proposed for construction in view of the above.		

Place: Kanpur

Date: 05/03/2019

  
Navneet Chadda  
Senior Manager