# POWERGRID NAGAPATTINAM MADHUGIRI TRANSMISSION LTD TRANSMISSION LINE PROJECT vis-à-vis ENVIRONMENT IMPACT on TRANSMISSION LINE PROJECTS.

### Name of Project: 765kV S/C Dharmapuri (Salem) - Madhugiri (Tumkur) Transmission Line.

#### **Our Policy:**

- Transmission line projects are environmentally clean and do not involve any disposal of solid waste, effluents and hazardous substances in land, air and water rather it helps in reducing impacts of power (generation) projects because it:
  - ✓ reduces pollution levels in inhabited areas due to siting of generation projects far away from these areas
  - ✓ reduces transportation of coal due to location of pit head generation further reduces pollution
- We, as a responsible organization is utilizing all available technological resources (GIS & GPS etc.) to optimize route alignment with emphasis on avoidance of forest, National Parks, Wildlife Sanctuary and other ecological sensitive areas even to the extent of adopting more circuitous routes and setting up of state of the art substations en-route. However, in few cases use of forest area becomes unavoidable due to site specificities of a project and the overall topography of the area.
- We, while finalizing the route of transmission line follows the policy of Avoidance,
   Minimization and Mitigation with following parameters:
  - ✓ As a rule, alignments are generally cited 10-15 km away from major towns, whenever possible, to account for future urban expansion.
  - ✓ Similarly, forests are avoided to the extent possible, and when it is not possible, a route is selected in consultation with the local Divisional Forest Officer, that causes minimum damage to existing forest resources.
  - ✓ Alignments are selected to avoid wetlands and unstable areas for both financial and environmental reasons.
  - ✓ In addition, care is also taken to avoid National parks and sanctuaries and any other forest area rich in wild life.
- It is always not possible to avoid such areas completely and if any forest area is getting involved application in required format for obtaining forest clearance is submitted to the concerned State Forest department for processing the forest clearance, after the detailed survey and commencement of work.
- Transmission line projects are linear in spatial distribution and minimally invasive
  of permanent land use changes and are drawn substantially high above the
  ground avoiding possible encounter with ecological sensitive areas as well as
  habitations.

Route Selection of Dharmapuri (Salem) – Madhugiri (Tumkur) Transmission line: The selection of route for the proposed line also is done as per our policy as described above.

Before choosing the optimum & feasible route, 3 alternative feasible routes were studied based on preliminary / walkover survey and keeping in view the length of the line, no. of angle points, power line crossing, statutory clearances from air ports, reserved forests, National / State Highways, Rivers, Railway crossing, Villages, Towns, Scattered habitat, Parallelism to the existing power lines etc.

Upon detailed study, the proposed route is found to be the generally feasible with minimal infringement with the existing permanent features and least inconvenience to the habitat at large. The proposed transmission line does not traverse wholly are partly, in any cantonment, aerodrome, fortress, arsenal, dockyard or camp or any of the buildings or place inoccupation of the Government for Defence purposes.

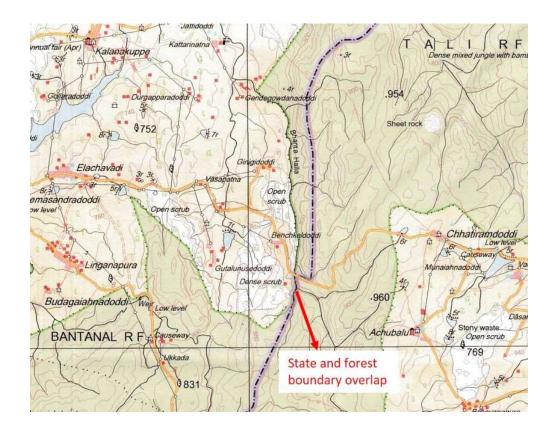
Further, the selection of the route alignment is as per the transmission line practices and as per Indian Standards.

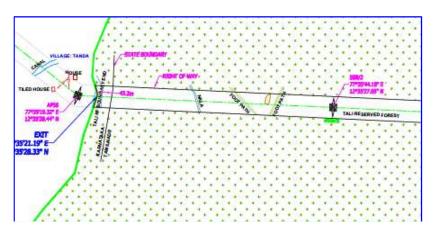
After careful study the following forest stretches are unavoidable in the state of Tamil Nadu & Karnataka; however, due care was taken that the line crosses the forest stretches at a minimum width.

- 1. Papparapatti RF in Dharmapuri Forest Division, Tamil Nadu = 6.42Ha (Forest Clearance received)
- 2. Thali RF in Krishnagiri, Hosur Forest Division, Tamil Nadu = 9.1904Ha (Forest Clearance received)
- Rampur K Kaval RF in Ramnagara, Karnataka = 1.75Ha (Forest Clearance received Dt)
- 4. Banthanal SF under Bannerghatta National Park = 0.2765Ha

During the initial survey we have considered 1436m (9.1904Ha) completely under Thally RF under Cauvery North Wildlife Sanctuary, Tamil Nadu. Accordingly, forest & wildlife clearances were obtained for the entire stretch of 9.1904Ha.

Subsequently, it was gathered that part of the project (63m) passes through the adjoining / contiguous Banthanal State Forest under Bannerghatta National Park in Karnataka. However this part of forest was also cleared under forest & wildlife rules as a part of the 9.1904Ha; inadvertently, in good faith due to overlapping of the state and forest boundaries. The state boundary is delineating the continuous stretch of forest into Thally Reserve Forest in Tamil Nadu & Banthanal State Forest under Bannerghatta National Park in Karnataka, as in the below picture.





In the instant case the transmission line enters the unavoidable Thali RF under Cauvery North Wildlife Sanctuary, Tamil Nadu; thereby has no other alternative than to exit the contiguous forest stretch than through Banthanal State Forest under Bannerghatta National Park, Karnataka.

Hence, as evident from above crossing Banthanal SF under BNP is unavoidable and bare minimum.

(Sanju Kishan P) Manager / Environment

## POWERGRID NAGAPATTINAM MADHUGIRI TRANSMISSION LTD TRANSMISSION LINE PROJECT vis-à-vis ENVIRONMENT IMPACT on TRANSMISSION LINE PROJECTS.

### Name of Project: 765kV S/C Dharmapuri (Salem) - Madhugiri (Tumkur) Transmission Line.

#### **Our Policy:**

- Transmission line projects are environmentally clean and do not involve any disposal of solid waste, effluents and hazardous substances in land, air and water rather it helps in reducing impacts of power (generation) projects because it:
  - ✓ reduces pollution levels in inhabited areas due to siting of generation projects far away from these areas
  - ✓ reduces transportation of coal due to location of pit head generation further reduces pollution
- We, as a responsible organization is utilizing all available technological resources (GIS & GPS etc.) to optimize route alignment with emphasis on avoidance of forest, National Parks, Wildlife Sanctuary and other ecological sensitive areas even to the extent of adopting more circuitous routes and setting up of state of the art substations en-route. However, in few cases use of forest area becomes unavoidable due to site specificities of a project and the overall topography of the area.
- We, while finalizing the route of transmission line follows the policy of Avoidance,
   Minimization and Mitigation with following parameters:
  - ✓ As a rule, alignments are generally cited 10-15 km away from major towns, whenever possible, to account for future urban expansion.
  - ✓ Similarly, forests are avoided to the extent possible, and when it is not possible, a route is selected in consultation with the local Divisional Forest Officer, that causes minimum damage to existing forest resources.
  - ✓ Alignments are selected to avoid wetlands and unstable areas for both financial and environmental reasons.
  - ✓ In addition, care is also taken to avoid National parks and sanctuaries and any other forest area rich in wild life.
- It is always not possible to avoid such areas completely and if any forest area is getting involved application in required format for obtaining forest clearance is submitted to the concerned State Forest department for processing the forest clearance, after the detailed survey and commencement of work.
- Transmission line projects are linear in spatial distribution and minimally invasive
  of permanent land use changes and are drawn substantially high above the
  ground avoiding possible encounter with ecological sensitive areas as well as
  habitations.

प्रवंधक (ईएसएमडी) व भ्यांत्रिकी)/Manager (ESMD/ENGG) पावर्धक (ईएसएमडी) व भ्यांत्रिकी)/Manager (ESMD/ENGG) पावर्धित दक्षेपाप्र—॥ श्लेश्व मुख्यालय/POWERGRID, SRTS-II RHQ (भारत सरकार का उद्यम/A Government of India Enterprise) सिंगनायकनहल्ली, येलाईका होवलां/Singanayakanahalli, Yelahanka Hobli, बंगलक कर्मा जी/Eangalore-560 064(Kamataka)

#

Route Selection of Dharmapuri (Salem) – Madhugiri (Tumkur) Transmission line: The selection of route for the proposed line also is done as per our policy as described above.

Before choosing the optimum & feasible route, 3 alternative feasible routes were studied based on preliminary / walkover survey and keeping in view the length of the line, no. of angle points, power line crossing, statutory clearances from air ports, reserved forests, National / State Highways, Rivers, Railway crossing, Villages, Towns, Scattered habitat, Parallelism to the existing power lines etc.

Upon detailed study, the proposed route is found to be the generally feasible with minimal infringement with the existing permanent features and least inconvenience to the habitat at large. The proposed transmission line does not traverse wholly are partly, in any cantonment, aerodrome, fortress, arsenal, dockyard or camp or any of the buildings or place inoccupation of the Government for Defence purposes.

Further, the selection of the route alignment is as per the transmission line practices and as per Indian Standards.

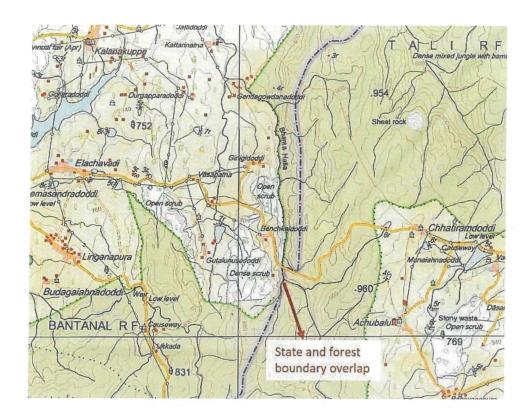
After careful study the following forest stretches are unavoidable in the state of Tamil Nadu & Karnataka; however, due care was taken that the line crosses the forest stretches at a minimum width.

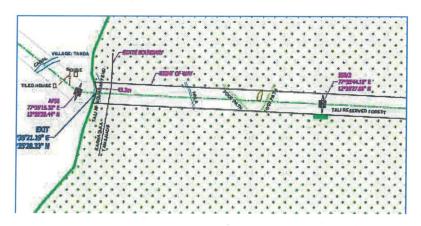
- 1. Papparapatti RF in Dharmapuri Forest Division, Tamil Nadu = 6.42Ha (Forest Clearance received)
- 2. Thali RF in Krishnagiri, Hosur Forest Division, Tamil Nadu = 9.1904Ha (Forest Clearance received)
- 3. Rampur K Kaval RF in Ramnagara, Karnataka = 1.75Ha (Forest Clearance received Dt )
  - 4. Banthanal SF under Bannerghatta National Park = 0.2765Ha

During the initial survey we have considered 1436m (9.1904Ha) completely under Thally RF under Cauvery North Wildlife Sanctuary, Tamil Nadu. Accordingly, forest & wildlife clearances were obtained for the entire stretch of 9.1904Ha.

Subsequently, it was gathered that part of the project (63m) passes through the adjoining / contiguous Banthanal State Forest under Bannerghatta National Park in Karnataka. However this part of forest was also cleared under forest & wildlife rules as a part of the 9.1904Ha; inadvertently, in good faith due to overlapping of the state and forest boundaries. The state boundary is delineating the continuous stretch of forest into Thally Reserve Forest in Tamil Nadu & Banthanal State Forest under Bannerghatta National Park in Karnataka, as in the below picture.

प्रबंधकाईएसएमडी/अपियांत्रिकी)/Manager(ESMD/ENGG) प्रबंधकाईएसएमडी/अपियांत्रिकी)/Manager(ESMD/ENGG) पावरप्रेड दक्षेपाप-॥ क्षेत्रीय मुख्यालय/POWERGRID, SRTS-II RHQ पावरप्रेड दक्षेपाप-॥ क्षेत्रीय मुख्यालय/POWERGRID, SRTS-II RHQ (श्रारत सरकार का उद्यम्/A Government of India Enterprise) (श्रारत सरकार का उद्यम्/A Government of India Enterprise) (श्रारत सरकार का उद्यम्/A Government of India Enterprise) (श्रारत सरकार का उद्यम्/A Government of India Enterprise)





In the instant case the transmission line enters the unavoidable Thali RF under Cauvery North Wildlife Sanctuary, Tamil Nadu; thereby has no other alternative than to exit the contiguous forest stretch than through Banthanal State Forest under Bannerghatta National Park, Karnataka.

Hence, as evident from above crossing Banthanal SF under BNP is unavoidable and bare minimum.

प्राचित्र क्षिण्डा होत्स्य होत्स्य स्थान स्थान