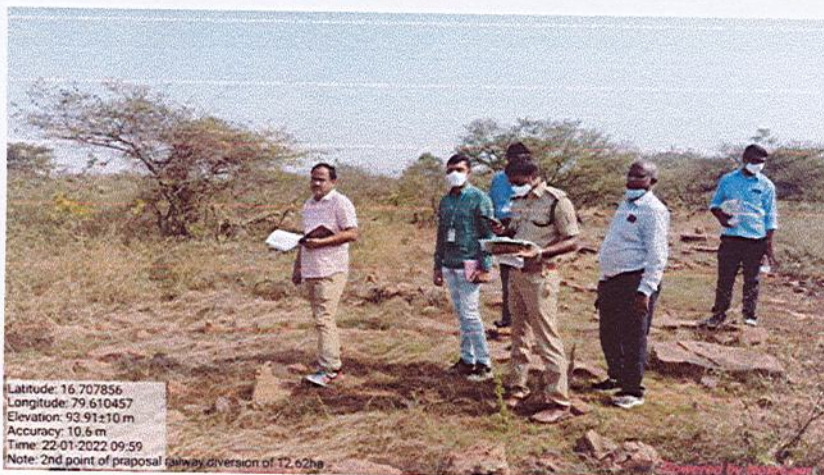
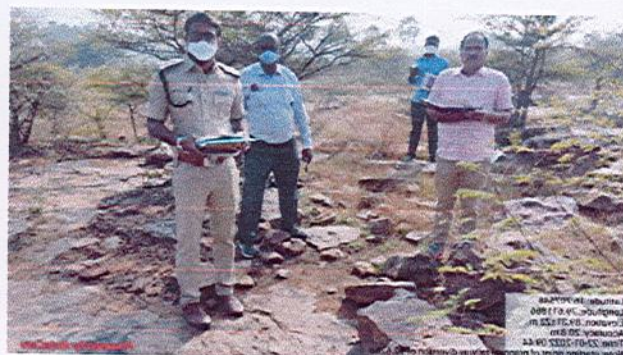


FIELD INSPECTION OF SIVALA RAMBABU, IFS., FOREST DIVISIONAL OFFICER (FAC), DISTRICT FOREST OFFICER, NALGONDA IN 12.6203 HA FOREST AREA IN RAJAGATTU RF BLOCK IN THE PROPOSED RAILWAY LINE IN FAVOR OF YADADRI THERMAL POWER PROJECT (YTPS) ON 24.01.2022.



Observations:-

1. The said land is falling in Compt No.40 of Rajagattu RF and the Rajagattu RF block is notified under section 7 Forest Act Hyderabad no.1 of 1326 F.
2. The type of forest as per Champion and Seth classification is Southern Dry deciduous scrub 5A/C3/DS1, Density 0.1 to 0.2 and the vegetation is thorny scrub type of forest with Sandra, Jana and Blludu (*Chloroxylon swietenia*). There are no timber trees are present and only the scrub thorny bushes which can be used as fuel wood hardly and many open gaps are present.
3. Alternate routes of short distance than the proposed route is verified but the user agency has informed that they are not suitable for the movement of wagons towards the YTPS site and all the possible routes are already verified but this is the route possible for the movement of the wagons. As per the User agency this is barest minimum area and which is unavoidable for the proposed project and to the Coal Storage Reservoir if this alignment is not there and avoided the forest area would cause many bends in the track line which is not suitable as the proposed Line needs 14 Incoming and 14 outgoing wagons per day. The proposed route would be suitable as it is connecting the Storage directly for coal storage reservoir inside the YTPS Power plant. The justification given by the User agency for shortest possible route is not properly justified and requested to submit proper justification for the chosen route.
4. The project aims to generate Power and supply power to the citizens of the state. Government of Telangana has envisioned for un interrupted power supply to the people of the Telangana
5. The site is more than 20 kms away from the boundary of the Amrabad Tiger Reserve (ATR).

**Sivala Rambabu, IFS.,
Forest Divisional Officer &
District Forest Officer,
Nalgonda.**

**FIELD INSPECTION OF SIVALA RAMBABU, IFS., FOREST DIVISIONAL OFFICER (FAC) &
DISTRICT FOREST OFFICER, NALGONDA IN 0.5747 HA FOREST AREA IN
ADAVIDEVULAPALLY RF BLOCK PROPOSED FOR DIVERSION IN FAVOR OF YADADRI
THERMAL POWER PROJECT (YTPS) WATER PIPE LINE DIVERSION**



Observations :-

1. Starting point is 4.18 Kms and ending point is 4.21 Kms distance from core area of Amrabad Tiger reserve (Rajawaram RF).
2. The ESZ notification not yet finalized by GOI for Amrabad Tiger Reserve (ATR), hence special report will be made to the Nodal agency, FCA, O/o PCCF and PCCF (HoFF) to get clarification whether separate wildlife clearance is required or not.
3. The said land is falling in Compt No. 53 of Adavidevulapally RF and the Adavidevulapally RF block is notified under section 4 of forest Act No.2 of 1355 F.
4. The type of forest as per Champion and Seth classification is Southern Dry deciduous scrub 5A/C3/DS1, Density 0.1 to 0.2 and the vegetation is thorny scrub type of forest with Sandra, Jana and Billudu (Chloroxylon swietenia)
5. The justification given by the User agency for shortest possible route is the proposed water pipeline passes through the forest towards Nagarjuna Sagar Tail Pond of Krishna River. As the storage of water is before Tail Pond Dam it is unavoidable to pass through the Forest area. It is unavoidable and the path selected is the barest minimum path to supply raw water to YTPS Power Plant. In order to maintain the flow and to maintain the pipes without damage due to high flow volume the said alignment cannot be changed hence the justification is satisfactory.
6. The project aims to generate Power and supply power to the citizens of the state. Government of Telangana has envisioned for un interrupted power supply to the people of the Telangana.

[Signature]
**Sivala Rambabu, IFS.,
Forest Divisional Officer &
District Forest Officer,
Nalgonda.**

**FIELD INSPECTION OF SIVALA RAMBABU, IFS., FOREST DIVISIONAL OFFICER (FAC),
DISTRICT FOREST OFFICER, NALGONDA IN 12.6203 HA FOREST AREA IN RAJAGATTU RF
BLOCK IN THE PROPOSED RAILWAY LINE IN FAVOR OF YADADRI THERMAL POWER
PROJECT (YTPS) ON 24.01.2022.**

Observations :-

1. The said land is falling in Compt No.40 of Rajagattu RF and the Rajagattu RF block is notified under section 7 Forest Act Hyderabad no.1 of 1326 F.
2. The type of forest as per Champion and Seth classification is Southern Dry deciduous scrub 5A/C3/DS1, Density 0.1 to 0.2 and the vegetation is thorny scrub type of forest with Sandra, Jana and Billudu (Chloroxylon swietenia). There are no timber trees are present and only the scrub thorny bushes which can be used as fuel wood hardly and many open gaps are present.
3. Alternate routes of short distance than the proposed route is verified but the user agency has informed that they are not suitable for the movement of wagons towards the YTPS site and all the possible routes are already verified but this is the route possible for the movement of the wagons. As per the User agency this is barest minimum area and which is unavoidable for the proposed project and to the Coal Storage Reservoir if this alignment is not there and avoided the forest area would cause many bends in the track line which is not suitable as the proposed Line needs 14 Incoming and 14 outgoing wagons per day. The proposed route would be suitable as it is connecting the Storage directly for coal storage reservoir inside the YTPS Power plant. The justification given by the User agency for shortest possible route is not properly justified and requested to submit proper justification for the chosen route.
4. The project aims to generate Power and supply power to the citizens of the state. Government of Telangana has envisioned for un interrupted power supply to the people of the Telangana
5. The site is more than 20 kms away from the boundary of the Amrabad Tiger Reserve (ATR).

**FIELD INSPECTION OF SIVALA RAMBABU, IFS., FOREST DIVISIONAL OFFICER (FAC) & DISTRICT
FOREST OFFICER, NALGONDA IN 0.5747 HA FOREST AREA IN ADAVIDEVULAPALLY RF BLOCK
PROPOSED FOR DIVERSION IN FAVOR OF YADADRI THERMAL POWER PROJECT (YTPS) WATER
PIPIE LINE DIVERSION.**

Observations :-

1. Starting point is 4.18 Kms and ending point is 4.21 Kms distance from core area of Amrabad Tiger reserve (Rajawaram RF).
2. The ESZ notification not yet finalized by GOI for Amrabad Tiger Reserve (ATR), hence special report will be made to the Nodal agency, FCA, O/o PCCF and PCCF (HoFF) to get clarification whether separate wildlife clearance is required or not.
3. The said land is falling in Compt No. 53 of Adavidevulapally RF and the Adavidevulapally RF block is notified under section 4 of forest Act No.2 of 1355 F.
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6. The project aims to generate Power and supply power to the citizens of the state. Government of Telangana has envisioned for un interrupted power supply to the people of the Telangana.


Sivala Rambabu, IFS.,
Forest Divisional Officer &
District Forest Officer,
Nalgonda.

**FIELD INSPECTION OF SIVALA RAMBABU, IFS., FOREST DIVISIONAL OFFICER (FAC),
DISTRICT FOREST OFFICER, NALGONDA IN 12.6203 HA FOREST AREA IN RAJAGATTU RF
BLOCK IN THE PROPOSED RAILWAY LINE IN FAVOR OF YADADRI THERMAL POWER
PROJECT (YTPS) ON 17.03.2022.**

The DFO, Nalgonda vide RC No.4286/2019/S5 (I), Dt:29.01.2022 has requested the YTPS authorities to clarify and justify on the following.

Alternate routes of short distance than the proposed route is verified but the user agency has informed that they are not suitable for the movement of wagons towards the YTPS site and all the possible routes are already verified but this is the route possible for the movement of the wagons. As per the User agency this is barest minimum area and which is unavoidable for the proposed project and to the Coal Storage Reservoir if this alignment is not there and avoided the forest area would cause many bends in the track line which is not suitable as the proposed Line needs 14 Incoming and 14 outgoing wagons per day. The proposed route would be suitable as it is connecting the Storage directly for coal storage reservoir inside the YTPS Power plant. The justification given by the User agency for shortest possible route is not properly justified and requested to submit proper justification for the chosen route.

**INSPECTED BASICALLY TO VERIFY THE FURTHER JUSTIFICATION SUBMITTED BY CE, YTPS
VIDE REFERENCE IN PURSUANCE TO THE REQUEST MADE BY DFO, NALGONDA AS
ABOVE. THE JUSTIFICATION DETAILS ARE AS FOLLOWS.**

TSGENCO, the state power generation company of Telangana is setting up greenfield Yadadri Thermal Power Station (YTPS) in Veerapalem Village of Damarcharla Mandal, Miryalguda Division, Nalgonda District of Telangana. The proposed capacity of the project is 4000 MW (5 x 800 MW).

ITES has been engaged as Project Management Consultant for Survey and Detailed Project Report (DPR) vide TSGENCO's Purchase Order No. (i) CCDO55/ CE/ Civil/ Th/ SE/ TCD-I/YTPS/F.ITES-Damercherla/D.No.254 /2015. Dt. 22.08.2015 and PO No. (ii) CCD-0022/ CE/ Civil/ T/ SE/ TCD-I/EE/TCD-I/F.YTPS PMC/D.No.57/ 2020.Dt. 30.05.2020 for Private Railway Infrastructure project to get coal transport from Singareni Collieries Company Limited group of Mines i.e.from Rudrampur, Sathupally and other areas. The movement of the Coal is planned through the Indian Railway Network connecting the railway stations Manuguru, Dornakal, Motumari and through branch line from Janpahad Goods railway station and also from the ports situated at Krishnapatnam/Visakhapatnam/Kakinada etc., via Nadikudi - Bibi Nagar Section; The serving station for the proposed Rail infrastructure is Vishnupuram (Class-B).

The transportation of the requirement of huge quantity of coal i.e., 15 MTPA (14-15 rakes/day) shall be met through Railway Corridor only which will also minimize the adverse effect on environment and Eco-system.

A detailed survey on route finalization was carried out by M/s RITES for the said Rail Corridor from Vishnupuram Serving Station as a Rail Head station based on the reconnaissance/ preliminary/detailed location survey keeping in view the economics, technical, operational, geographical requirements and the most vital aspect of rail traffic safety norms. The most feasible and suitable alignment was selected and South Central Railway **Authorities have also approved the same** after thorough scrutiny in terms of technical & operational points of the project vide **SCR letter No. GNT/T.143/YTPS/RDPR Approval/2021/11/a, Dt:24.11.2021** (copy enclosed) and planning to sustain the Rail Infrastructure for augmentation of proposed Thermal Power Station as well as Rail Corridor in the coming 50 years or more.

Though the length of Siding from take-off station to Marshalling Yard is about 10.64 KM and there was no feasibility to hold the YTPS Coal traffic at take-off station VNUP, there is a need of creating an intermediate crossing station on the lead line/siding line at the most feasible location, in terms of geography/technicality/operations in order to regulate/handle uninterrupted, continuous coal rakes movement of 14-15 rakes incoming and outgoing i.e., total 30 rakes/day to the In-plant Yard.

For this Intermediate station, design was done for 5 lines presently. Provision shall also be needed for further 2 more lines to handle bunching of Coal rakes as well as future increase potential.

For provision of this yard design and for 7 full length clear standing room of each line 750mts alongwith track ladder design length as well as traffic safety devices such as overshoot line etc., there must be **1300m to 1600m length** with bare minimum width of 100mts and was planned at the location where height of bank is less than 6.0mtr and through terrain where there is gentle slope transversely.

The following **basic design criteria** was strictly followed:

1. Station is to be constructed in straight alignment as far as possible with level/flatter gradient of 1 in 1200 and upto steepest gradient of 1 in 400 in economical land width as per Railway norms and also on curvature of not more than 2 degree (i.e., 875mts radius) under unavoidable circumstances.

2. There should not be any entry curves sharper than 4 degree (i.e., radius of 450 mts) to the approaching yard design.
3. There should not be any reverse curve alignment on either side of the yard as per Railway visibility norms of Rail traffic.

In view of the above, RITES has adopted 1 in 400 gradient to minimize the bank height less than 6 mt. and bare minimum land width i.e., 100mts. The proposed alignment through forest area is the only feasible area and is fulfilling the above basic criteria and as such South Central Railway authorities have approved the same.

The sketch depicting the alignment through forest area for a bare minimum length of 1200mt and width of 100mt is enclosed herewith for perusal as Annexure-I which is self explanatory.

However, RITES has noted the DFO's site visit observations that "why the alignment was not proposing through the forest corridor where minimum length of forest is involved" vide their letter No. RC No.4286/2019/S5 (I), Dt:29.01.2022.

Accordingly, RITES once again reviewed the backdrop survey design for minimizing the forest land extent and studied two other options avoiding forest land.

A pictorial sketch on google map is also enclosed for two options shown in cyan colour and blue colour. The following constraints are noted in the new caes.

CASE-1 (In Cyan colour):

1. only 600 mts stretch straight length is available for yard design against the minimum length of 1000mt., which is insufficient and cannot be extended towards state highway due to habitations etc.,
2. Further, on either side of the approach of the straight line, 8-degree curvature is accommodating. But as per procedure in vogue i.e., visibility norms, there should be less than 2-degree curves on either side of approach of the straight length to accommodate full station/yard length requirement of 1000mt., which is not permitted.

CASE-2 (In Blue colour):

1. Though about 900mts to 1000mts length of forest land is available, the yard is to be kept on 1.5-degree curvature followed by 8-degree sharper curve which is also not ideal condition in operational and safety point of view.
2. This alignment is crossing existing state highway with about 60-degree skew angle which can't be allowed by Road authorities thus keeping in view of their future widening etc., Also, this is not allowed by Railways as the skew angle limit should be less than 30 degree.

Moreover, there is remarkable difference in ground levels between the approved alignment in forest area and proposed alignment in above two cases. Normally siding/rail line embankment up to maximum height of 6m is recommended. In the alignment suggested by the DFO, about 15 - 20mts embankment is required to match with the gradients design between serving station and inplant yard which necessitate land width of 160mtr of forest land instead of 100mt. Thus proposing /creating station yard on such a high bank of about 15-20mts is not advisable due to operational, maintenance, road accessibility as well as safety norms.

Hence, there is no scope of connecting the alignment though the observed shorter width as explained above in two cases.

At the end, looking into the above constraints, the proposed alignment is the only one to fulfill all the criteria which is most suitable and justified. South Central Railway has also approved the same considering all the parameters.

Every care is taken to design the alignment in such a way that it passes through such a portion of forest, where the density of forest is very thin, thus involving minimum number of felling of trees. Also, the alignment is designed in such a way that it does not affect any village habitations falling near the Rail-route.

Observations of the DFO, Nalgonda on the above justification:-

The justification given above is discussed in the field with YTPS authorities and with the little knowledge and experience of DFO, Nalgonda in this aspect, the justification seems to be acceptable but need of further discussion at higher level on the justification submitted by the YTPS authorities.

Encls: Maps mentioned as above enclosed.

District Forest Officer, RC No. FI / 2018 / S5, Dt. 17.03.2021


 Forest Divisional Officer (FAC),
 District Forest Officer,
 Nalgonda.