

## **GOVERNMENT OF KERALA**

### No.C3/194/2021/F&WLD

Forest & Wildlife (C) Department Thiruvananthapuram, 09/03/2022

From

The Principal Chief Secretary to Government To

The Deputy Conservator of Forests Central), Ministry of Environment, Forests & Climate Change, Government of India Regional Office (Southern Zone) Kendriya Sadan, 4th Floor, E&F wing 17th main Road, Koramangala Bangalore - 560034

Sir.

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Sub- Forest & Wildlife Department - Forest (Conservation) Act. 1980-Proposal for diversion of 0.7945 ha of forest land laying 220KV Double Circuitline from Thottiyar for Hydro Electric Power House to 220 KV L.P. Madakkathara evacuating of Power from Thottiyar Hydro Electric line for Project - regarding.

Ref:

1. Ministry's letter no.F.No.4-KLB1315/2021-BAN/449 dated 24.02.2022.

- 2. Letter no.FC2-1085/2021 dated 15.02.2022 from the Additional Principal Chief Conservator of Forests, Nodal Officer, Thiruvananthapuram.
- 3. Letter no.FC2-27267/2018 dated 06.11.2021 from theAdditional Principal Chief Conservator of Forests, Nodal Officer, Thiruvananthapuram

I am directed to invite your attention to the reference cited and to forward herewith a copy of reference 2nd & 3 rd cited above for kind consideration for further processing of the proposal for Stage II approval under Forest (Conservation) Act, 1980.

Yours faithfully,

·C~ 12

RAJESH.G.R DEPUTY SECRETARY For Principal Secretary to Government

FC2-1085/2021



Forest Headquarters, Vazhuthacaud, Thiruvananthapuram - 14. Ph: 0471-2529243, 2529325 E-mail: apccf-sa.for@kerala.gov.in **Date :\\$.02.2022** 

#### From

The Additional Principal Chief Conservator of Forests, Nodal Officer, F(C)Act & Chief Executive Officer, CAMPA, Forest Headquarters, Vazhuthacaud, Thiruvananthapuram.

То

The Principal Secretary, Forest & Wildlife Department, Secretariat, Thiruvananthapuram.

Sir,

- **Sub :-** Forest & Wildlife Department Diversion of 0.7945 ha of forest land for laying 220 KV Double Circuit line from Thottiyar Hydro Electric Power House to 200 KV LP Madakkathara line for evacuating power from Thottiyar Hydro Electric Project – reply submitting off – regarding.
- **Ref:** Letter No. F-KLB1315/2021-BAN dated 30.11.2021 of Assistant Inspector General of Forests, Ministry of Environment, Forest & Climate Change, Bangalore.

Kind attention is invited to the reference. The Executive Engineer, KSEBL, Transmission Division, Kothamangalam has furnished the details sought by Ministry of Environment, Forest & Climate Change based on the Regional Empowered Committee Meeting deliberations regarding the proposal for diversion of 0.7945 ha of forest land for laying 220 KV DC Power evacuation line from Thottiyar Hydro Electric Project. The details furnished by KSEBL are logical and

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apt for the field situation and hence the response from KSEBL may be accepted and necessary action may be taken for the onward transmission to Government of India.

Yours faithfully,

Enclosure: As above.

Additional Principal Chief Conservator of Forests Nodal Officer, F(C) Act & Chief Executive Officer, CAMPA

Copy to the Inspector General of Forests (Central), Government of India, Ministry of Environment, Forest & Climate Change, Integrated Regional Office (Southern Zone), Kendriya Sadan, IVth Floor, E&F Wings, 17th Main Road, IInd Block, Koramangala, Bangalore – 560034.

)

### भारत सरकार GOVERNMENT OF INDIA पर्यावरण ,वन एवं जलवायु परिवर्तन मंत्रालय MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE Regional Office (Southern Zone), Kendriya Sadan, IVth Floor, E& F Wings, 17<sup>th</sup> Main Road, IInd Block, Koramangala, Bangalore – 560 034, Tel.No.080-25635908, E.Mail: <u>rosz.bng-mef@nic.in</u>



F.No.4-KLB1315/2021-BAN 1098 Dated, the 30<sup>th</sup> November, 2021

The Principal Secretary to Government, Government of Kerala, Forests & Wildlife (C) Department	No.	181	124-12-	2021
Secretariat, Thiruvananthapuram,	Ріл	/	/	/
Kerala, PIN – 695 001.	12			

Subject:- Diversion of 0.7945 ha of forest land for laying 220 KV'Double Circuit line from Thottiyar Hydro Electric Power House to 220 KV ...P. Madakkathara line for evacuating of power from Thottiyar Hydro Electric Project - reg.

Sir,

To

5907228/2022/OS-F&WI

I am directed to refer to State Government's letter No. C3/194/2021/F&WLD dated 04.10.2021 and APCCF, Nodal Officer(FCA), Kerala letter No.FC2-27267/2018 dated 5.11.2021 on the above subject. In this regard, it is informed that the above proposal was considered by the Regional Empowered Committee (REC) in its meeting held on 23.11.2021 and REC requested the State Government to furnish the following details for further consideration of the proposal:-

- i. Whether the existing 66 KV line can be upgraded to 220 KV for evacuation of the power from the Hydel project. If so, what will be extent of forest area required for upgrading the transmission line as well as the substation. If not, the reasons for the same.
- ii. Possibility of laying an underground 220 KV line either completely or partially.
- iii. Measures proposed to be taken by the User Agency to address the issues that may arise due to laying of overhead high power transmission line over the houses constructed by the occupants of the forest land proposed for diversion.

Yours faithfully.

(B.N. Anjan Kumar) Assistant Inspector General of Forest (Central)

Copy to:-

- The Additional Principal Chief Conservator of Forests, Nodal Officer (FCA), Government of Kerala, 'Vanalakshmi', 1<sup>st</sup> Floor, Forest Headquarters, Vazhuthacaud, Thiruvananthapuram - 695 014.
- Q. Kerala State Electricity Board Ltd., Project Manager, Thottiyar Hydro Electric Project, Karimanal, Thattekkanni. P.O, Idukki District - 685606

(B.N. Anjan Kumar) Assistant Inspector General of Forest (Central)

116/133



KERALA STATE ELECTRICITY BOARD LIMITED (Incorporated under the Indian Companies Act,1956) Office of the Executive Engineer, Transmission Division College P.O. Kothamangalam, Ernakulam, Kerala - 686666 Phone: 0485 2825573, CUG – 9446008369 FCT – 9496009120 eetdkIm@gmail.com www.kseb.in CIN-U40100KL2011SGC027424

TDKM-DB 77/2021-22/1096

Date: 17.01.2022

E 2 22262 18

203

The Additional Principal Chief Conservator of Forests Nodal Officer (FCA) Government of Kerala Vanalakshmi 1<sup>st</sup> Floor, Forest Headquarters, Vazhuthacaud Thiruvananthapuram 695 014

Sir,

To

- Sub:-Diversion of 0.7945 Ha of forest land for laying 220kV Double Circuit line from Thottiyar Hydro Electric Power House to 220kV LP Madakkathara line for evacuating power from Thottiyar Hydro Electric Project – details for further consideration of the proposal-reply submitting of- reg:-
- Ref:-1. Letter No F.No.4-KLB1315/2021-BAN dtd 30.11.2021 of Assistant Inspector General of Forest, Ministry of Environment, Forests & Climate Change, Regional Office, Kendriya Sadan, IV<sup>th</sup> Floor, E&F Wings, 17<sup>th</sup> Main Road, II<sup>nd</sup> Block, Koramangala, Bangalore addressed to the Principal Secretary
  - 2. Letter No.PM/THEP/DB-7/2021-22/496 dtd 28.12.2021 of Project Manager, Thottiyar HEP, Karimanal

The proposal for Diversion of 0.7945 ha of forest land for laying 220 kV DC Power evacuation line from Thottiar HEP was considered by the Regional Empowered committee (REC) in its meeting held on 23.11.2021 and REC requested to the Principal Secretary to Government to furnish certain details for further consideration of the proposal vide ref(1) cited above. In this regard I may submit the following details for consideration of the proposal.

1. Whether the existing 66 kV line can be upgraded to 220 kV for evacuation of power from the hydel project. If so what will be the extend of forest area required for upgrading the transmission line as well as the substation. If not the reason for the same.

For the up-gradation of 66 kV line route, the option considered is connecting from 220 kV Lower Periyar- Madakkathara Line.

The said 66 kV line is passing 97 m away from the taping tower of the 220 kV Lower Periyar-Madakkathara Line. For deviating towards the existing 66 kV RoW, 122 m of new 220 kV line is required. An additional Multi Circuit Multi Voltage. (MCMV) tower is to be inserted along the RoW of the existing 66kV line for connecting the 220 kV line to the nearest tower of the 220 kV Lower Periyar-Madakkathara Line. This 122 m of new 220 kV line connecting between taping tower and new MCMV tower will pass through the forest land and diversion is required only for this portion of the line will be

0.4270 Ha. The RoW width for the existing 66 kV line is only 18m. Hence additional 17m of RoW is required for another 261m of 220 kV line from the new Tower to the Terminal Tower near Thottiar HEP. Hence additional diversion of forest land required for additional RoW is 0.4437Ha. Hence the total diversion of forest land required is 0.8707 Ha in this option which is higher than the required area of diversion in the existing proposal. These areas are shown in Fig-2.

Up gradation of the existing 66 kV Substation to 220 kV substation is not required if we can retain the 66 kV line by using MCMV Towers. This option is analyzed in such a way that the existing 66 kV lines are retained by using MCMV Towers. Hence no additional forest land is not required for the up gradation of the 66 kV Substation. The area of diversion of forest land will be further more if we consider the dismantling of existing 66 kV line and upgrading the existing 66 kV Substation to 220 kV

Hence the alternate option suggested to upgrade the existing 66 kV line can be ruled out due to the following.

- (a) Diversion of Forest land required is more than that in the existing proposal.
- (b) Number of Towers to be constructed in the forest land will be three in place of two in the
- (c) The construction of this line along the existing line which is presently feeding a substation will cause extremely long interruptions to approximately 20000 people in the locality.
- (d) The Constructional cost also will be on the higher side by around 100% increase with the existing proposal due to the additional MCMV Tower and additional length of line.

# 2. Possibility of laying 220 kV Underground cable either partially or completely.

Laying of UG cable Completely is not possible due to the presence of the river. Laying of 220 kV UG cable partially is also practically not recommended due to the following reasons

- Safety concerns in laying of 220 kV UG cables and constructing cable termination yard (i) in the inhabited properties. No road is available to the taping tower and hence laying only though the road is not possible in this case.
- Technical concerns in inserting additional fault points like cable end terminations, (ii) Lightning arrestors, Isolators etc in Power evacuations lines from Two major Generating stations (Thottiar HEP in future and Lower Periyar HEP which is in service).

Even though it is not recommended considering the safety and technical aspects the option of partial laying of UG cable is also examined. A line of length 261m across the river is needed with two numbers of Towers on either bank of the river. The location of the second tower from Thottiar HEP and the route is selected exactly the same as described in point (1) above. The diversion of forest land required for this portion of the line is 0.4437 Ha.

The 220 kV cables cannot be connected to the Towers directly. A 220 kV yard of min size of 50m x 23 m is required at either side of the cables for the termination of the cables with isolators and lightning arrestors as per standards. A short span of 50m 220 kV line also required to connect the Cable yard to the respective towers at both ends. 50 m is the minimum requirement to maintaining the standard skew angle between the Tower and Cable yard Gantry. The RoW requirement of this short span line will become 52m considering the horizontal formation on the standard gantry dimension of 34m for 220 kV Double Circuit line. This is shown in Fig-3 Hence the area of the diversion of forest land required for the one number cable yard along with the short span line is 0.3750 Ha. Three orientations of the cable yards are examined as per Fig-4, Fig-5 and Fig-6. Options vide Fig-4 and Fig-5 are not possible due to space constraints for the second cable yard. Only Fig-6 with two numbers of cable yard with an area of 0.75 Ha ( $2 \ge 0.375$ ) is the possible alternative. Hence the total area of Forest land required for diversion is 1.1937 Ha which is higher than the existing proposal.

Regd.Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram-695004, CIN -U40100KL2011SGC027424

Moreover this option requires construction of yard in the inhabited area forcing evacuation. Also the terrain is not supporting for construction of two numbers of cable yard. Intensive earth work required for the construction of cable yard in this terrain. Also Cable yard construction is almost similar to the substation yard construction which requires complete removal of flora unlike the transmission line where growth of trees and plants are possible to a certain height. Additional tree cutting may also be required for maintaining falling distance for a yard which is having less height than a transmission line. Due to the above said practical difficulties the cable option is not adopted for such shorter spans. Hence the alternate option suggested for laying 220 kV Underground cable either partially or completely also can be ruled out due to the following.

- (a) Laying of 220 kV UG cable through the inhabited properties is not possible due to safety reasons. No road is available to the taping tower and hence laying only though the road is not possible in this case.
- (b) Technical concerns in inserting additional fault points in Power evacuations lines from two major Generating stations
- (c) Diversion of Forest land required is more than that in the existing proposal
- (d) Tree cutting will be more to maintain falling distance to cable yard.
- (e) Number of Towers to be constructed in the forest land will be three in place of two in the existing proposal.
- (f) Two numbers of Additional 220 kV cable yard also to be constructed in the forest land.
- (g) Requires construction of yard in the inhabited area forcing evacuation.
- (h) The terrain is not supporting for construction of two numbers of cable yard.
- (i) Complete removal of flora in the area for cable yard unlike the transmission line where growth of trees and plants are possible to a certain height
- (j) The end termination of the 220 kV cable require certain instruments and machineries and transportation of the same require road access. This is also a limitation. In order to overcome this limitation access roads are also to be constructed in the forest land for the transportation of the instruments and machineries.
- (k) Cost of construction will be very high compared to the existing proposal as 220 kV cable is very expensive.

# 3. Measures proposed to be taken by the user agency to address the issues that may arise due to the laying of over head high power transmission line over the houses constructed by the occupants of the forest lands proposed for diversion.

KSEBL already obtained written no objection declaration for the line construction from the concerned.

Hence as a conclusion the alternate options suggested by point (1) and point (2) having no technical, ecological, social and financial benefits over the existing proposal. The existing switch yard alignment at Thottiar HEP is also supporting the present proposal. Since the mother project has already been sanctioned and which is nearing completion, sanction may kindly be accord for this proposal. It may kindly be noted that these are the only power evacuation lines proposed from this HEP and generated Power cannot be transmitted without these Power evacuation lines.

Yours faithfully

**Executive Engineer** 

Acc:- 1. Fig 1 to 6 2. Copies of Ref (1), (2) & No Objection Declaration from the occupants of Forest land



Brechtive Engineer Transmission Division Kothamangalam @no.1(07(07)

Fig-2 option for upgrading existing 66 kV lin

Additional ROW 17 m width and 261 m length (0.4437 Ha)

ew ROW of 35 m width and 122 m length (0.44270 Ha)

Tepino tower

Existing 66 kV tower

Executive Engineer Transmission Division Kothamangalam

Executive Engineer Transmission Division Kothamangalam X

Ā End ROW A 5 m, 1.5 1.5 1 -17.5 m -1 ann 0 1-0-5 | 22 - all 1 I 0 MAR - 17 m -\*Fensing End of earth mat For public safty E- Did Key plan of cable yard 1 alle a • -1 52 m r-⊙-1 0 MAN ALLAN Ċ - 17 m - AN 1 l 1 0 Isolater Ĩ ∲-@-|A 17.5 m-50 m 5 m 5 m 5 m V T

5907228/2022/OS-F&WL

Additional ROW 17 m width and 261 m length (0.4437 Ha)

Proposed 220 kV tower Cable yard Taping lower Existing 66 kV tower

Brecutive Engineer Transmission Division Kothamangalom 5907228/2022/OS-F&WL



E.C



Cable yard 1 (0.376Ha) [Proposed 220 kV tower

Taping tower

Cable route cable yard 2 (0 37/5 Ha) Existing 66 kV tower

Transmission Division Kothaman

# KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Indian Companies Act, 1956) Registered Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram-695004 Web site : <u>www.kseb.in</u>. CIN:U40100KL2011SGC027424

Office of the Project Manager, Thottiyar HEP, Karimanal Thattekkanni. P.O, Idukki (Dist), Kerala State, PIN – 685606 Telephone No/Fax No: 0485 – 2969406 E- mail – pmthep@hotmail.com

## No: PM/THEP/DB-7/2021-22 /2196

Dated: 28.12.2021

From		TORMAN PORT	No Wh
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To	The Executive Engineer	3 0 DEC 2021	Brown & March
Ľ	Transmission Division Kothamangalam	INWARD: 973 EE W AE & File	Kurkow Her
Sir		Luca in the second s	

Sir,

5907228/2022/OS-F&WL

- Sub: Diversion of 0.7945 Ha of forest land for laying 220kV Double Circuit line from Thottiyar HE Power house to 220kV L.P Madakkathara line for evacuating of power from Thottiyar Hydro Electric Project – forwarding of - Reg.
- Ref. Letter No. F No. 4-KLB 1315/2021/BAN 1098 dtd.30.11.2021 of Assistant Inspector General of Forest (Central), Ministry of Environment, Forest and climate change addressed to the Principal Secretary to Govt., Secretariat, TVM.

I am forwarding herewith a copy of letter under reference above for favour of further necessary action.

Yours faithfully

**Project Manager** 77/2021-22/1020

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20-12

Acc: - As above

F/c to file.

#### 126/133

# സമർപ്പണം

നിലവിലുള്ള 220kvലോവർപെരിയാർ-മടക്കത്തറ വെദ്യുതിലെനിൽ നിന്നും തൊട്ടിയർ പവർഹൗസിലേക്ക് എൻെറ കൈവശമുള്ള വസ്തുവിൽ കൂടി പുതിയ വൈദുതിലൈൻ സ്ഥാപിക്കുന്നതിന് എനിക്ക് യാതൊരുവിധ ആക്ഷേപവും ഇല്ലെന്നുഅറിയിക്കുന്നു. ഇതുമൂലം കാർഷികവിളകൾക്കും മറ്റും ഉണ്ടാകുന്ന കഷ്ടനഷ്ടങ്ങൾക്ക് അപേക്ഷിക്കുന്നു.

് എന്ന്

അൽഫോൻസാ സുധീഷ് പുൽപ്പറമ്പിൽ നീണ്ടപാറ

# സമർപ്പണം

നിലവിലുള്ള 220kvലോവർപെരിയാർ-മടക്കത്തറ വെദ്യുതിലൈനിൽ നിന്നും തൊട്ടിയർ പവർഹൗസിലേക്ക് എൻെറ കൈവശമുള്ള വസ്തുവിൽ കൂടി പുതിയ വൈദുതിലൈൻ സ്ഥാപിക്കുന്നതിന് എനിക്ക് യാതൊരുവിധ ആക്ഷേപവും ഇല്ലെന്നുഅറിയിക്കുന്നു.ഇതുമൂലം കാർഷികവിളകൾക്കും മറ്റും ഉണ്ടാകുന്ന കഷ്ടനഷ്ടങ്ങൾക്ക് അർഹതപ്പെട്ട നഷ്ടപരിഹാരം നൽകണമെന്ന് അപേക്ഷിക്കുന്നു.

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എന്ന്

ചാക്കോ ജോസഫ് കച്ചിറയിൽ നീണ്ടപാറ

## സമർപ്പണം

നിലവിലുള്ള 220kvലോവർപെരിയാർ-മടക്കത്തറ വെദ്യുതിലൈനിൽ നിന്നും തൊട്ടിയർ പവർഹൗസിലേക്ക് എൻെറ കൈവശമുള്ള വസ്തുവിൽ കൂടി പുതിയ വൈദുതിലൈൻ സ്ഥാപിക്കുന്നതിന് എനിക്ക് യാതൊരുവിധ ആക്ഷേപവും ഇല്ലെന്നുഅറിയിക്കുന്നു. ഇതുമൂലം കാർഷികവിളകൾക്കും മറ്റും ഉണ്ടാകുന്ന കഷ്ടനഷ്ടങ്ങൾക്ക് അർഹതപ്പെട്ട നഷ്ടപരിഹാരം നൽകണമെന്ന് അപേക്ഷിക്കുന്നു.

എസ്

കൗസല്യ പ്രസാദ് ചുങ്കത്തുവെളിയിൽ നീണ്ടപാറ

#### 129/133

# സമർപ്പണം

നിലവിലുള്ള 220kvലോവർപെരിയാർ-മടക്കത്തറ വെദ്യുതിലെനിൽ നിന്നും തൊട്ടിയർ പവർഹൗസിലേക്ക് എൻെറ കൈവശമുള്ള വസ്തുവിൽ കൂടി പുതിയ വൈദുതിലൈൻ സ്ഥാപിക്കുന്നതിന് എനിക്ക് യാതൊരുവിധ ആക്ഷേപവും ഇല്ലെന്നുഅറിയിക്കുന്നു. ഇതുമൂലം കാർഷികവിളകൾക്കും മറ്റും ഉണ്ടാകുന്ന കഷ്ടനഷ്ടങ്ങൾക്ക് അർഹതപ്പെട്ട നഷ്ടപരിഹാരം നൽകണമെന്ന് അപേക്ഷിക്കുന്നു.

എന്ന്

എം ൻ തങ്കപ്പൻ മണ്ണാത്തിപ്പാറയിൽ നീണ്ടപാറ

# Translation of No Objection Declaration from the occupants

# Submission

I have no objection in drawing power evacuation line to Thottiyar Power House from the existing 220kV Lower-Periyar Madakkathara line through the land in my possession. Also requested to sanction and disburse the eligible compensation to the damages including crop damage.

Place Date (Signature) (Name & Address of the Occupant) FC2- 27267/2018



Forest Headquarters, Vazhuthacaud, Thiruvananthapuram - 14. Ph: 0471-2529243, 2529325 E-mail: apccf-sa.for@kerala.gov.in **Date : 06.11.2021** 

#### From

The Additional Principal Chief Conservator of Forests, Nodal Officer, F(C)Act & Chief Executive Officer, CAMPA, Forest Headquarters, Vazhuthacaud, Thiruvananthapuram – 695014.

#### То

The Principal Secretary, Forest & Wildlife Department, Secretariat, Thiruvananthapuram.

#### Sir,

Sub :- Forest Department – Proposal for diversion of 0.7945 ha of forest land under section 2 Forest (Conservation) Act, 1980 for laying 220 KV Double Circuit line from Thottiyar Hydro Electric Power House to 220 KV L.P. Madkkathara line for evacuating of Power from Thottiyar Hydro Electric Project - regarding.

**Ref**:- This office letter of even No. dated 05.11.2021

Kind attention is invited to the above subject. A copy of letter under reference is submitted herewith for information.

Yours faithfully,

Additional Principal Chief Conservator of Forests Nodal Officer, F(C) Act & Chief Executive Officer, CAMPA

#### FC2-27267/2018



Forest Headquarters, Vazhuthacaud, Thiruvananthapuram - 14. Ph: 0471-2529243, 2529325 E-mail: apccf-sa.for@kerala.gov.in **Date : 05.11.2021** 

#### From

5626411/2021/OS-F&WL

The Additional Principal Chief Conservator of Forests, Nodal Officer, F (C) Act & Chief Executive Officer, CAMPA, Forest Headquarters, Vazhuthacaud, Thiruvananthapuram.

#### То

The Deputy Inspector General of Forest (Central), Government of India, Ministry of Environment, Forest & Climate Change, Regional Office (Southern Zone), Kendriya Sadan, IVth Floor, E&F Wings, 17th Main Road, IInd Block, Koramangala, Bangalore – 560034.

- Sub:- Diversion of 0.7945 ha of forest land for laying 220 KV Double Circuit line from Thottiyar Hydro Electric Power House to 220 KV LP Madakkathara line for evacuating of power from Thottiyar Hydro Electric Project - regarding.
- **Ref:** Government of India letter No. 4-KLB 1315/2021-BAN/821 dated 13.10.2021 of Ministry of Environment, Forest & Climate Change, Bangalore.

Kind attention is invited to the reference cited above. Details sought for further processing of the proposal is as follows.

- i. Compliance report on the conditions stipulated in the earlier proposal submitted by User Agency is attached herewith.
- ii. The Map, Survey Sketch and Google Earth Map of 0.7945 ha revenue land comprised in Sy. Nos 20/1, 34/1 of Chinnakanal Village in Udumbanchola Taluk of Idukki district in Munnar Division which is the non-forest land proposed to be transferred to Forest Department towards Compensatory Afforestation is uploaded in PARIVESH portal. (copy attached).

- iii. FRA compliance Certificates in he proper format pertaining to Idukki and Ernakulam Districts are as attached herewith.
- iv.

The reason for not including the transmission line component in the original proposal submitted by User Agency is as follows.

The proposal for diversion of forest land for Thottiyar Hydro Electric Project was submitted in April 2005. At that time, it was planned to evacuate the power through the 66 KV line existing in the proposal area. On later stages, the load pattern of the transmission lines has changed. Based on the load flow study which has been conducted for the power evacua ion based on the existing load pattern, anticipated capacity of the Thottiyar HEP, transmission loss and reliability, it has been decided that the power evacuation is to be done in the 220 KV system instead of 66 KV system. Hence the alternate way to comply with recommendation of the load flow studies with minimum requirement of forest land is drawing a very small Transmission line of 350 ni from the nearby Lower Perivar-Madakkathara 220 KV line. This is reason for not including the transmission line component in the initial proposal. This power evacuation line is very essential without which the generated power cannot be transmitted to the lot d centre.

v. Out of the total area proposed for diversion, an area of 0.1233 ha for which possession certificates arε issued is encroachment. Details of the encroached area as per the sketch of the land proposed for diversion are as follows.

Sl. No.	Plot No.	Name	Descrip of lar		Area in Ha.	Remarks
1.	1	Chacko Joseph	Forest	land	0.0075	Nagarampara Reserve
			in posse	3810N	0.0275	Forest Sy. No. 161/1 of Neriyamangalam Village
2.	2	Alfonsa Sudheesh	Forest in posse	land ssion	0.0135	Nagarampara Reserve Forest Sy. No. 161/1
						of Neriyamangalam Village
3.	3	Kousaliya Prasad	Forest	land	0.0218	Nagarampara Reserve
ŝ			in posse	ssion		Forest Sy. No. 161/1 of Neriyamangalam

#### Forest land in possession (Possession certificate issued)

2

			-			Village
4.	4	M.N. Thankappan	Forest	land	0.0605	Nagarampara Reserve
		* *	in posse	ession		Forest Sy. No. 161/1
		· · · · ·	1			of Neriyamangalam
						Village

Yours faithfully,

Additional Principal Chief Conservator of Forests, Nodal Officer, F (C) Act & Chief Executive Officer, CAMPA

Copy submitted to the Principal Secretary, Forest & Wildlife (C) Department for information (with covering letter)

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# COMPLIANCE REPORT: STAGE I CONDITIONS

### Proposal No: FP/KL/HYD/1657/2005

### Name of the Proposal:

DIVERSION OF FL FOR THE THOTTIYAR HEP (40 MW) IN NERIYAMANGALAM FOREST RANGE IN MUNNAR FOREST DIVISION.

## Approval communications:

Letter 4-KLB090/2005-BAN 1493 dt. 09th July 2012 of Ministry of Environments, Forest and Climate Change, Government of India, New Delhi

Letter 4-KLB090/2005-BAN 471 dt. 17.07. 2007 of Ministry of Environments, Forest and Climate Change, Government of India, New Delhi

SI. No	Conditions	Compliance
1	The legal status of forest land shall remain unchanged.	The legal status of the forest land remains unchanged and will continues as forest land even after the diversion.
2	The location and change of schedule of compensatory aforestation site shall not be changed without prior approval of Central Government.	We hereby agree to abide by this condition. The Catchment Area Treatment (CAT) Plan
3.	A detailed Catchment Area Treatment (CAT) Plan, shall be implemented as per the approved plan at the coast of user agency	has been prepared. The compensatory levie have been deposited.
4.	The State Government shall charge the Net Present Value for 3.18134 ha. And .9996 Ha. of forest area to be diverted under this proposal from the user agency	4174928/- has been deposited in
		<u>Total Amount inclusive of all costs:</u> (NPV +CA+CAT) : Rs. 4174928/- <u>Details of DD:</u> DD No. 231552 Dated 11.12.2006 <u>Name of the Bank</u> SBT, Kothamangalam
		Beneficiary Customer AD-HOC-CAMPA(CAF-KERALA) Acc. No.CA1586 of Corporation Bank, Lodhi roa

		New Delhi.
		<ol> <li>As instructed Additional NPV for revised rate of the entire area</li> </ol>
		3.18134 ha. amounting to Rs 469048 has been deposited in CAMPA
		account as per the following details: <u>Total Amount inclusive of all costs:</u> (NPV +CA+CAT) : Rs. 469048/-
21 10 11		<u>Beneficiary Customer</u> AD-HOC-CAMPA(CAF-KERALA) Acc. No.CA1586 of Corporation Bank, Lodhi road New Delhi
		the section
		3 As instructed, NPV of the entire additional area .9996 ha. amounting to Rs. 1142583/- has been deposited in CAMPA account as per the following details:
		<u>Details of DD:</u> DD No. 398711 Dated 18.09.2009 <u>Name of the Bank</u> SBT, Kothamangalam
		Beneficiary Customer AD-HOC-CAMPA Acc. No.CA1586 of Corporation Bank, CGO complex New Delhi.
5.	The total forest area shall not exceed the 3.8134Ha. +0.9996 Ha. And it shall be only for the purpose	$W\varepsilon$ hereby agree to abide by this condition.
	for which it is diverted. In case the land is not used for the stipulated purpose or when it is no longer needed for the said purpose, then	
	the area will be resumed by the forest department.	
6	Demarcation of the proposed forest area shall be carried out by erecting permanent RCC boundary pillar duly	Demarcated the forest area as per this condition.
	numbered at an interval of 20 mts at the cost of the user agency.	
7	Necessary certificates under the schedule tribe and other traditional	Complied.

5626411/2021/OS-F&WL

rs (recognition of forest 006, as per the ministry ent and forest letter F 08-FC (pt) Dated vsall be furnished ng over the forest land	
gency.	We hereby agree to abide by this condition
ndition that the inciple chief of forest (Central ), ice, Banglore may time to time for mprovement of flora the forest area and	
the for enienc	

Immin

PROJECT MANAGER Thottiyar HEP Project Manager Thottiyar H.F. Project K.S.E. Board, Karimanal





KERALA STATE ELECTRICITY BOARD LIMITED (Incorporated under the Indian Companies Act, 1956) Office of the Executive Engineer, Transmission Division College P.O. Kothamangalam, Ernakulam, Kerala - 686666 Phone: 0485 2825573, CUG – 9446008369 FCT – 9496009120 <u>eetdklm@gmail.com</u> www.kseb.in CIN-U40100KL2011SGC027424

TDKM – DB 77 /2021-22/ **75** 2 To The Additional Principal Chief Conservator of Forests Nodal Officer (FCA) Government of Kerala Vanalakshmi

> 1<sup>st</sup> Floor, Forest Headquarters, Vazhuthacaud Thiruvananthapuram 695 014.

Sir,

Sub:-Diversion of 0.7945 has of forest land for laying 220kV Double Circuit line from Thottiyar Hydro Electric Power House to 220kV LP Madakkathara line for evacuating of power from Thottiyar Hydro Electric Project -- reg:-

Ref:-Letter No.4-KLB1315/2021-BAN dtd 13.10.2021 of Ministry of Environment, Forests & Climate Change, Regional Office, Kendriya Sadan, IV<sup>th</sup> Floor, E& F wings, 17<sup>th</sup> Main Road, II<sup>nd</sup> Block, Koramangala, Bangalore.

As per the part No.(iv) of letter vide reference cited above, I submit the following:

The proposal for diversion of Forest land for Thottiyar HEP has been submitted during April 2005. A double circuit 66kV Transmission line is passing through this proposed area and the earlier plan was to evacuate the power through the existing line. Hence the requirement of diverted area for the power evacuation was not needed at that stage. But on later stage the load pattern of the Transmission lines has changed and found that the existing 66kV line is not sufficient to evacuate the anticipated full power generated from the Thottiyar HEP. The load flow study which has been conducted for the power evacuation based on the existing load pattern, anticipated capacity of the THEP, transmission loss and reliability, it has been decided that the power evacuation is to be done in the 220kV system instead of 66kV system. Hence the alternate way to comply with recommendation of the load flow studies with minimum requirement of forest land is drawing a very small Transmission line 350m from the nearby Lower Periyar - Madakkathara 220kV line. This is the reason for not including the transmission line component in the initial proposal. Kindly note that the power evacuation line is very essential to a Hydel Power Station without which the generated power cannot be transmitted to the load centre.

Submitting for your kind favorable consideration.

Yours faithfully **Executive Engineer** 

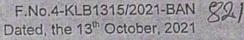
Date: 27 .10.2021

Copy submitted to:-

- 1. The Deputy Chief Engineer, Transmission Circle, Thodupuzha
- 2. The CCF, Kottayam
- 3. The Divisional Forest Officer, Munnar

#### भारत सरकार GOVERNMENT OF INDIA पर्यावरण, वन एवं जलवायू परिवर्तन मंत्रालय MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE Regional Office (Southern Zone), Kendriya Sadan, IVth Floor, E& F Wings, 17th Main Road, lind Block, Koramangala, Bangalore - 560 034, Tel.No.080-25635908, E.Mail: rosz.bng-mef@nic.in

EWI D-C3/194/2021-EWI D



The Principal Secretary to Government, Government of Kerala, Forests & Wildlife (C) Department, Secretariat, Thiruvananthapuram, Kerala, PIN - 695 001.

Subject:- Diversion of 0.7945 ha of forest land for laying 220 KV Double Circuit line from Thottiyar Hydro Electric Power House to 220 KV L.P. Madakkathara line for evacuating of power from Thottiyar Hydro Electric Project - reg.

I am directed to refer to your letter No. C3/194/2021/F&WLD dated 04.10.2021 on the above subject. In this regard, it is requested to furnish the following details for further processing he proposal:-

The compliance report on the conditions stipulated in the earlier FC approvals accorded for Thottiyar Hydro Electric Project vide letters dated 17/07/2007 and 09/07/2012.

The map of the non-forest land /revenue land proposed to be transferred to Forest Department towards CA is to be uploaded in the Parivesh portal. II.

The FRA compliance certificate to be provided in the proper format for both the districts.

The reason for not including the transmission line component in the original proposal.

The status of encroachment in the area proposed for diversion. iv. V.

Yours sincerely,

Deputy Inspector General of Forest (Central)  $\theta(\ell)$ (R. Padmawathe)

Copy to:-

5626411/2021/OS-F&WL

To

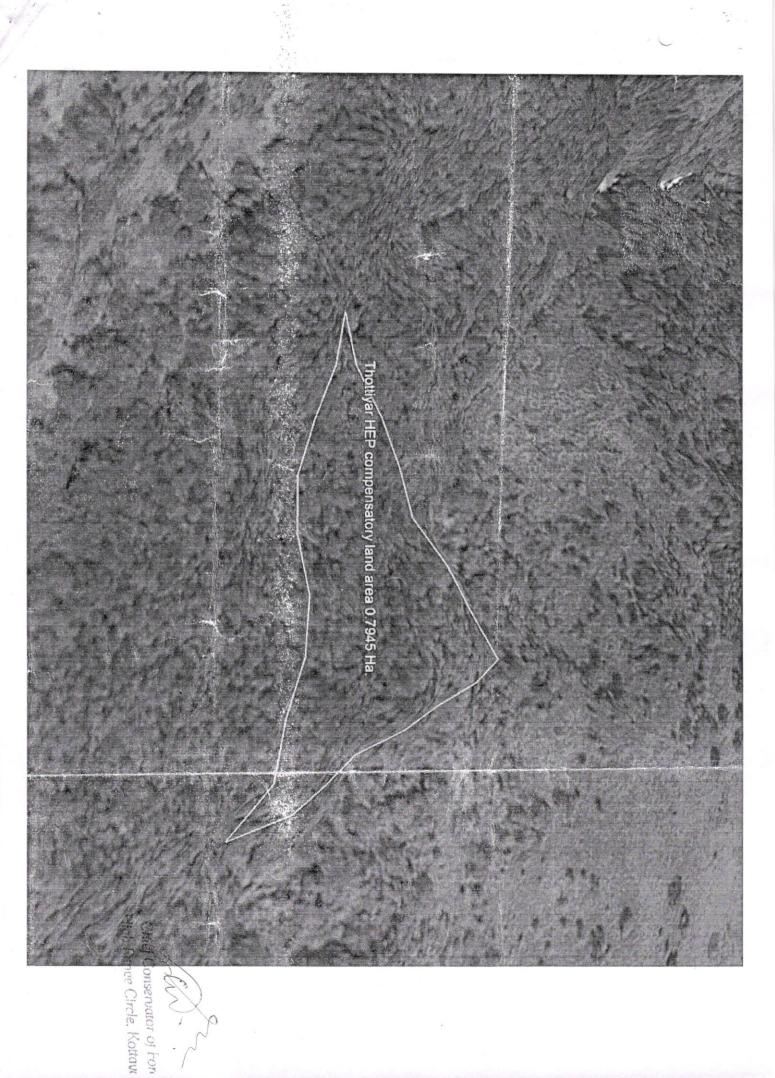
Sir.

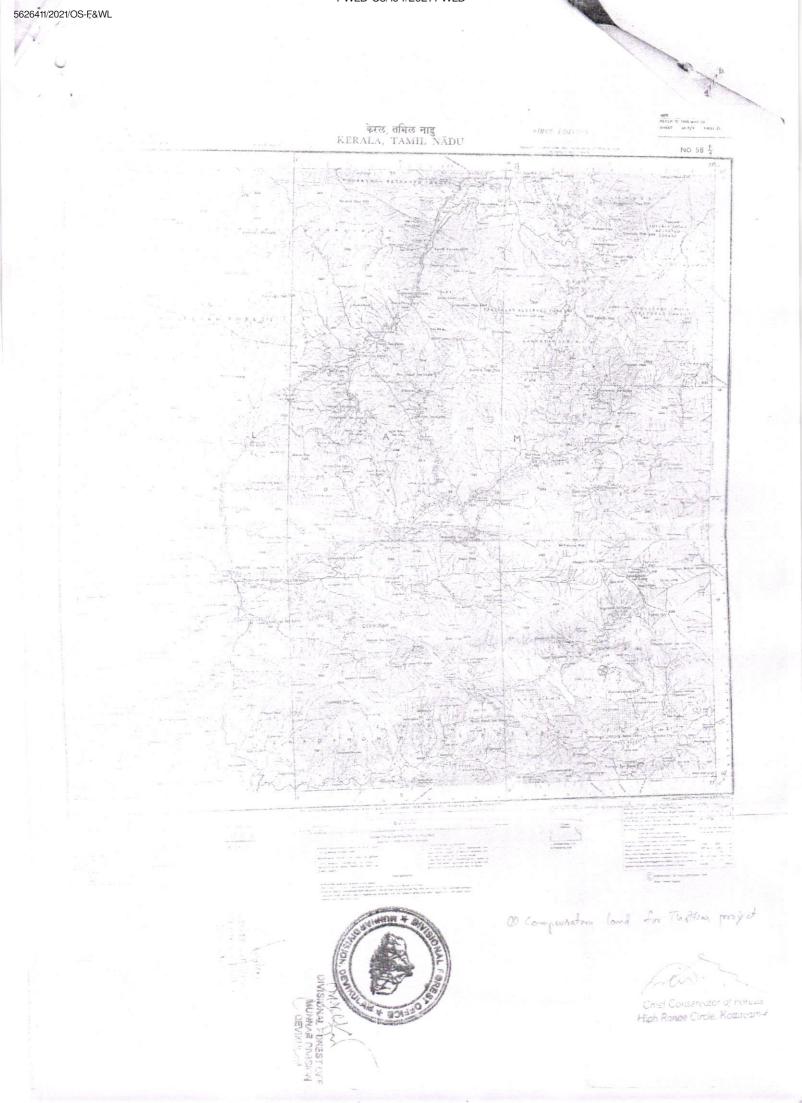
- 1. The Additional Principal Chief Conservator of Forests, Nodal Officer (FCA), Government of Kerala, 'Vanalakshmi', 1st Floor, Forest Headquarters, Vazhuthacaud, Thiruvananthapuram - 695 014.
- 2. Kerala State Electricity Board Ltd., Project Manager, Thottiyar Hydro Electric Project, Karimanal, Thattekkanni. P.O, Idukki District - 685606

010

(R. Padmawathe) Deputy Inspector General of Forest (Central)

FWLD-C3/194/2021-FWLD 5626411/2021/OS-F&WL 26.13 N 10 25-04" E ⑦ 11' 24.09" E 2123 64"N 10 77 11 21.14 E (p) 20/ 15 10 12. July 2 SINS Fronts D 14 × 4 4 10 12.8 Street gund & To their in property Subject to Survey & Denner by the Fature Surve Sug porte 0000 CAUGA. Chief Conservator of Foresta 23 High Range Circle, Kottavom & VILLAGE OFFICE 





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Annexure - 1

Form-I (for linear projects) Government of Kerala Office of the District Collector, Ernakulam

No. L16-7105/2019

Dated, 22.10.2021

#### TO WHOMSOEVER IT MAY CONCERN

In compliances of the Ministry of Environment and Forests (MoEF), Government of India's letter No.11-9/98-FC(pt) dated 3 rd August, 2009 wherein the MoEF issued guidelines on submission of evidences for having initiated and completed the process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 ('FRA', for short) on the forest land proposed to be diverted for non-forest purposes read with MoEF's letter dated 5th February 2013 wherein MoFE issued certain relaxation in respect of linear projects, it is certified that 0.2695 hectares of forest land proposed to be diverted in favour of Kerala State Electricity Board Limited for laying 220 KV Double Circuit line from Thottiyar Hydro Electric Power House to 220 KV L.P. Madakkathara line for Evacuating the Power generated from Thottiyar Hydro Electric Project, in Ernakulam District falls within the jurisdiction of Neryamangalam Village in Kothamangalam tehsil.

It is further certified that:

- a) the complete process for identification and settlement of rights under the FRA has been carried out for entire ...... hectares of forest area proposed for diversion. A copy of records of all consultation and meetings of the Forest Rights Committee(s). Gram Sabha(s), Sub-Division Level Committee(s) and the District Level Committee are enclosed as annexure .......to .......annexre .......
- b) the diversion of forest land for facilities managed by the Government as required under section 3(2) of the FRA have been completed and the Grama sabha have given their consent to it;
- c) the proposal does not involve recognized right of primitive Tribal Groups and preagriculutural communities.

Encls: As above



far Malik

District Collector, Ernakulam