

Environmental Monitoring Report

3rd Quarterly Report
February 2016

VIE: Power Transmission Investment Program - Tranche 2 500 kV Pleiku–My Phuoc–Cau Bong Transmission Line

Prepared by Central Viet Nam Power Projects Management Board (CPPMB) for National Power Transmission Corporation and the Asian Development Bank.

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NATIONAL POWER TRANSMISSION CORPORATION
CENTRAL VIETNAM POWER PROJECTS MANAGEMENT BOARD

ENVIRONMENTAL MONITORING REPORT
FOR THE THIRD QUARTER OF 2015

(July - September 2015)

PLEIKU – MY PHUOC – CAU BONG 500 KV TRANSMISSION LINE PROJECT
(POWER TRANSMISSION INVESTMENT PROGRAM - TRANCHE 2)
(LOAN 2959-VIE)

September 2015

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ABBREVIATIONS

ADB	Asian Development Bank
AFD	Agency of French Development
CEMP	Contractor's Environmental Management Plan
CPCs	Commune People's Committees
CPMB	Central Power Projects Management Board
DARD	Department of Agriculture and Rural Development
DONRE	Department of Natural Resources and Environment
DRCC	District Resettlement and Compensation Committee
EIA	Environmental Impact Assessment
EMF	Electric and Magnetic Fields
EMR	Environmental Monitoring Report
EMP	Environmental Management Plan
EO	Environmental Officer
EVN	Electricity of Vietnam
FGDs	Focus Group Discussions
GoV	Government of Vietnam
IDIs	In-depth interviews
IEE	Initial Environmental Examination
MONRE	Ministry of Natural Resources and Environment
NPT	National Power Transmission Corporation
PAHs	The project affected households
PAPs	The project affected peoples
PPC	Provincial People Committee
PTC3	Power Transmission Company No.3
PTC4	Power Transmission Company No.4
RoW	Right of Way
TL:	Transmission line

1. INTRODUCTION

1.1. Description of the Subproject

1. The Socialist Republic of Viet Nam has applied for a loan from the Asian Development Bank (ADB) for the co-financing with Agency of French Development (AFD) towards the cost of the Power Transmission Investment Program, Tranche 2. Part of the proceeds of the loan will be applied for the construction of the Pleiku - My Phuoc - Cau Bong 500 kV transmission line. The National Power Transmission Corporation (NPT) is the investor and executing agency. The Central Vietnam Power Project Management Board (CPMB) is the management and implementing agency for the subproject. The Pleiku - MyPhuoc - Cau Bong 500kV transmission line is a high priority project and is one of several projects for construction to meet its target of connecting 90% of the population to electricity by 2020 and 100% by 2025. The TL will meet the energy demand in the southern part of Vietnam growing at 14% per year and up to 25% in 2015. The TL constructed together along with the expansion of Pleiku substation will enhance power supply reliability for the rapid development in the southern provinces of Vietnam.

1.2. Location of the subproject

2. The Pleiku - My Phuoc - Cau Bong 500 kV transmission line is 437 km in length and traverses 5 provinces (Gia Lai, Dak Lak, Dak Nong, Binh Phuoc and Binh Duong) and Ho Chi Minh City. The TL does not cross or intrude into any buffer areas or any possible planned future extension of conservation areas (Figure 1).

1.3.Environmental Monitoring and Reporting Requirements

3. In compliance with Vietnamese policy, an EIA report met requirements of GoV Ministry of Natural Resources and Environment was prepared and approved in August 2011. Based on the ADB's Safeguard Policy Statement 2009 (SPS) the subproject was classified as Category B project and an IEE with EMP was prepared and approved in 2012. The EMP has become a condition of the loan.

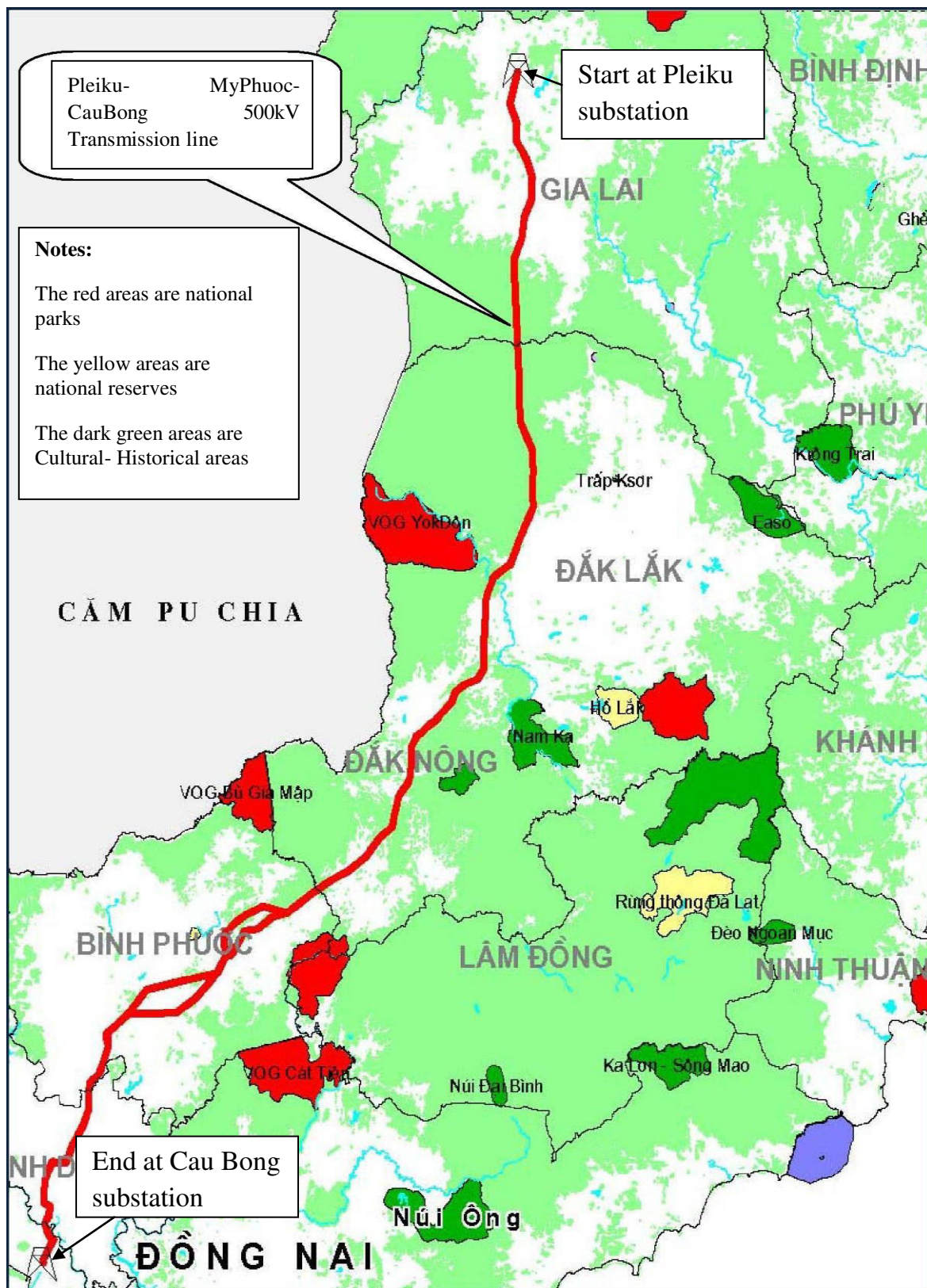


Figure 1: Location of 500kV Pleiku - My Phuoc - Cau Bong transmission line with regard to natural conservation areas

4. As defined in the approved IEE and EMP, the subproject management unit-Central Power Projects Management Board (CPMB), contractors and the construction monitoring and operating units (PTC3 & PTC4) are the key agencies who are responsible for implementing the mitigation measures proposed in the EMP. During the operation phase, PTC3 and PTC4 will be responsible for complying with the EMP requirements that are control of vegetation along the RoW and control of development within the RoW. The Environmental Officer (EO) of PTC3 and PTC4 will arrange to check compliance with the EMP requirements. Other issues such as work place safety when operating within high voltage areas will be addressed by PTC3 and PTC4's own safety operating procedures which they will apply.

5. Pursuant to the official letter of Asian Development Bank (ADB) dated 09 October 2015 regarding requirements of quarterly environmental monitoring reports until the project completion of Tranche 2 (dated 31/05/2016) - Loan2959 and adjustment of the scope of work of the national safeguard specialist on environment (called consultant) to meet the requirements of the loan agreement was signed on 21 December 2012, the consultant has been required to support the EVNNPT - CPMB in preparing quarterly environmental monitoring reports for the submission to the ADB until the project completion based on the loan agreement. The first quarter environmental monitoring report (EMR) 2015 and the second quarter EMR 2015 have been approved and disclosed on ADB website in December 2015.

2. RESULTS OF ENVIRONMENTAL MONITORING

2.1 Subproject Operation Status

6. Since receiving the TL from CPMB in May 05, 2014, both PTC3 and PTC4 have implemented the operation and management of the TL directly. They have arranged and maintained the operation and management teams (called the local Power Transmission Units) in charge of each TL segment to perform their tasks. PTC3 includes three (03) local units being Gia Lai Power Transmission, Dak Lak Power Transmission and Dak Nong Power Transmission. PTC4 includes two (02) local units such as the Eastern Power Transmission 2 (responsible for the section from Binh Phuoc to Binh Duong province) and Eastern Power

Transmission 1 (responsible for the section in Ho Chi Minh City). Each local unit regularly has three (03) main functional divisions responsible for safety of the TL operation which are technical division, environmental safeguard division and communication division. These divisions work independently but support each other in sharing information related to the TL. Therefore, the TL operation has been stable and safe.

2.2. Compliance with Environment Management Plan

2.2.1. Monitoring Activities

7. During the third quarter of 2015, monitoring and compliance with the environmental management plan of CPMB, PTC3 and PTC4 and the relevant parties was built based on an organization structure. The organization structure for implementing the environmental monitoring task was closely established (Figure 2), the information on occupation and community health and safety and other environmental impacts was quickly reflected to PMU, concurrently the duties of parties including PMU, the national safeguard specialist on environment, management and operating units (PTC3 & PTC4), local authorities and communities have been determined clearly and closely.

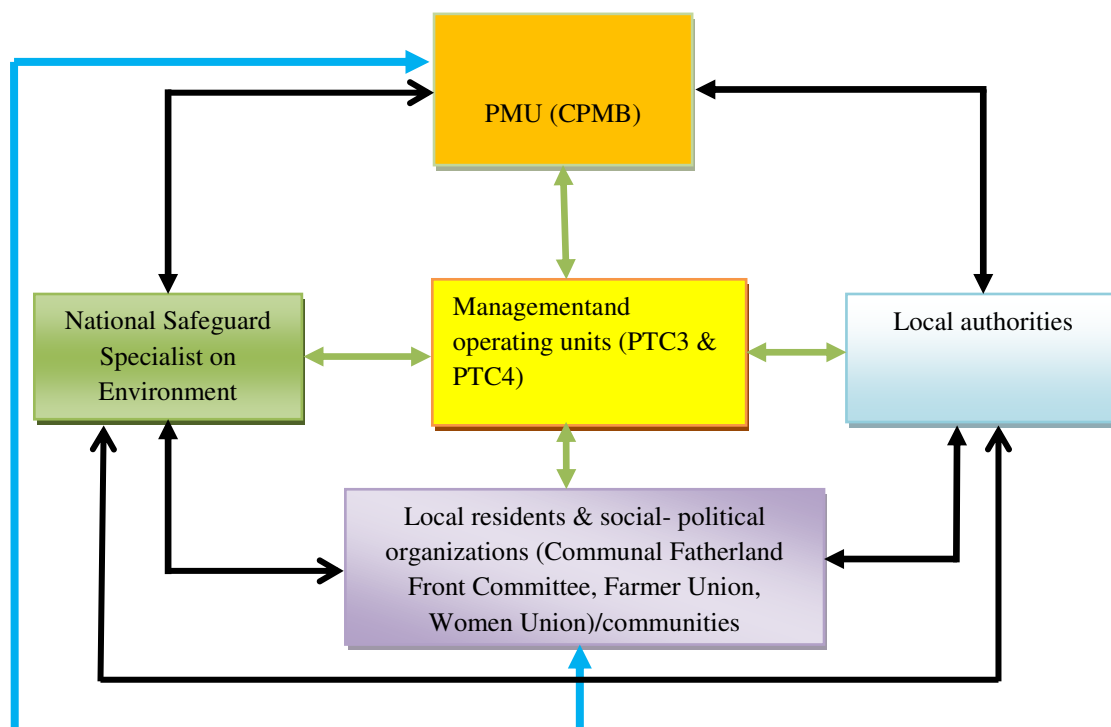


Figure 2: Organization structure of the environmental monitoring

8. The participatory approach was used in the environmental monitoring during the third quarter of 2015. Bases for the environmental monitoring are relevant legal documents in Vietnam, the Safeguard Policy Statement of ADB 2009 (SPS), and the approved IEE and EMP. The environmental monitoring was conducted with a combination of qualitative and quantitative methods. The data for the environmental monitoring included the secondary data from previous environmental monitoring and compliance reports of the subproject from CPMB, PTC3 and PTC4 and provincial reports & decisions and the primary data collected through observation and in-depth interviews.

2.2.2. Compliance with Environmental Management Plan Issues Raised in Previous Monitoring Period and its Effectiveness

9. In order to dismantle the affected houses and physical structures within the RoW which existed before the start of subproject implementation, the CPMB closely worked with the DRCCs and CPCs to obtain information related to structures existing within the RoW. From which, CPMB with the support of local social- political organizations (Communal Fatherland Front Committee, Farmer Union, Women Union) provided direction and coordinated with the DRCCs and CPCs in order to totally dismantle structures within the RoW as required in the EMP. As a result, the number of houses or structures within the RoW has reduced from 19 in the second quarter to 13 in the third quarter. At the present, 12 structures are temporary shelters/camps in Gia Lai, Dak Nong and Binh Duong province and 01 structure is owned by a household in Binh Duong province.

10. During the third quarter of 2015, CPMB has very positively worked with PPCs for accelerating administrative procedures for the replacement afforestation. In detail, the CPMB has transferred the required amount of money for replacement afforestation to the Gia Lai Forest Development and Protection Fund. CPMB has continually implemented administrative procedures for replacement afforestation in Dak Nong province. The current status of replacement afforestation is detailed as the follows:

- In Dak Lak province: After transferred the required amount on 21 April 2015, CPMB has constantly urged the PPC to accelerate afforestation implementation as the plan. However, the afforestation depends on the provincial plantation scheme for several projects. The PPC/DARD will inform CPMB of location for replacement afforestation and assign afforestation units for tracking.

- In Gia Lai province: On 25 June 2015, after obtained the PPC approval CPMB submitted to Gia Lai PPC and DARD the minute No.2994/CPMB-DB of undertaking reforestation payment. On 23 July 2015, CPMB received the Gia Lai PPC's permission through the official minute No.3054/UBND-NL – 23 July 2015 - for reforestation payment to the Provincial Forest Development and Protection Fund. On 13 August 2015, CPMB transferred the amount of money (VND 1.845.410.000) to the Provincial Forest Development and Protection Fund for reforestation activities. The PPC/DARD will inform CPMB of location for replacement afforestation and assign afforestation units for tracking.

- In Dak Nong province: CPMB has revised the reforestation plan two times and re-submitted to the provincial DARD on 05 May 2015 for approval. On 11 September 2015, the Dak Nong PPC issued the Decision No.1371/QD-UBND approving the reforestation area of 9.746 ha in Dak Nong province, the amount of money which CPMB must transfer to the Provincial Forest Development and Protection Fund is VND 799.998.685. At the present, CPMB is implementing procedures for the payment.

11. To minimize risks for community safety, PTC3 and PTC4 have checked the earthing of the buildings prior to the start of subproject implementation in the area about 16-72m from the centreline of the RoW for additional earthing. By September 2015, 1836 sets of earthing were being installed along the TL, in which 311 sets were under the operation and management of PTC3 and 1525 sets were under the operation and management of PTC4. The earthing result showed that the sections under PTC3's management completed but the sections under PTC4's management lacked of 35 sets. It means that the earthing rate currently is 98%. The lacking number will be supplemented in the next period.

2.2.3. Compliance with Environmental Management Plan During Current Monitoring Period and its Effectiveness

12. During the third quarter of 2015, site observation along the Pleiku- My Phuoc- Cau Bong 500kV transmission line showed that the PTC3 and PTC4 have generally complied with the EMP and relatively well controlled the vegetation along the RoW and control of development within the RoW. In addition, the coordination of the local Power Transmission Units of PTC3 & PTC4, the representatives of CPCs, the communities, CPMB and the relevant departments is well done on implementation of the environment safety measures.

13. In fact, safe operating procedures have been established and strictly complied by PTC3 and PTC4. They have arranged the operation and management teams (called the local Power Transmission Units) in charge of each TL segment to perform their tasks. Most of the mitigation measures proposed in the IEE with EMP have been applied. Thus none of accidents, risks, emergencies on fire, lightning or electrocution are found within the period. The local Power Transmission Units of PTC3 and PTC4 have implemented control of vegetation along the RoW and control of development within the RoW.

a) Control of vegetation along the RoW

14. Workers of the local Power Transmission Units of PTC3 and PTC4 monthly trim vegetation within and along the RoW to meet the necessary conductor safety clearances. Machetes, hammers, saws have been used to trim plants. They did not use herbicides and pesticides to control vegetation growth as required in the EMP.

15. No invasive species including *Mimosa pigra* have been discovered along the RoW so far.

b) Control of development within the RoW

16. CPMB has coordinated with PTC3, PTC4 and relevant communal governments & social- political organizations (Communal Fatherland Front Committee, Farmer Union, Women Union) to urge and facilitate the local people to dismantle the built works completely. PTC3 and PTC4 have arranged the operation and management teams (called the local Power Transmission Units) in charge of each TL segment to perform their tasks for controlling the development within the RoW. Staff and workers of the Units regularly and directly conduct their observation to check all issues of the TL along the RoW going through densely populated areas to directly consult the local people on potential risks to people and the TL to propose solutions timely. PTC3 and PTC4 have checked the earthing of the buildings near the RoW for additional earthing. PTC3 and PTC4 implemented a propaganda program for electrical safety based on the Circular No.03/2010/TT-BCT and the Decree No. 14/2014/NĐ-CP. The interviewed people said that the units combined a diversity of communicative tools for the propaganda such as communal speaker, leaflet, banners and meetings. As a result, all new buildings have been earthed with the technical support by PTC3 & PTC4. Also, local people committed to compliance with the Decree No.14/2014/NĐ-CP (Annex 2)

c) Monitoring on Electric and Magnetic Fields (EMF)

17. Based on the GOV's environmental policy, EMF is only required to monitor two times per year so during this monitoring period, EMF was not monitored. Also, there was not any complaint of electric and magnetic fields from residents so irregular inspection of EMF was not implemented.

2.2.4. Recommended Actions

18. Recommended actions for CPMB:

(i) CPMB will continually work with the DRCCs and CPCs with the support of local social- political organizations (Communal Fatherland Front Committee, Farmer Union, Women Union) in order to completely dismantle 13 structures within the RoW as required in the EMP;

(ii) CPMB will transfer the required money to the Dak Nong Forest Development and Protection Fund in October for the afforestation in the province and urge the PPCs in Dak Lak, Gia Lai and Dak Nong provinces to accelerate afforestation implementation to complete this responsibility;

(iii) CPMB will work together with PTC4 to install 35 sets of the earthing to complete the earthing as required to minimize possible negative impacts on residents' safety.

19. Recommended actions for both PTC3 and PTC4: Maintain safe operating procedures, activities for control of vegetation along the RoW, control of development within the RoW as previous periods for compliance with SPS and monitoring electric and magnetic fields in the last six months of 2015 in order to comply with GOV's environmental policy.

3. CONCLUSION AND RECOMMENDATIONS

3.1. Summary of Monitoring Results

20. In general, the environmental issues raised in the previous monitoring period have been paid attention to and resolved step by step and the EMP during the current monitoring period is strictly complied by relevant parties: (i) CPMB closely coordinated with PTC3, PTC4 to complete 98% of the earthing; (ii) CPMB worked with the DRCCs and CPCs with the support of local social - political organizations to dismantle six (06) structures within ROW of which 02 structures were determined as houses; (iii) CPMB has transferred the amount of

money (VND 1.845.410.000) to the Gia Lai Forest Development and Protection Fund, still implemented procedures for the payment in Dak Nong province and constantly urged the Dak Lak PPC to accelerate afforestation plan implementation; (iv) PTC3 and PTC4 have seriously taken safe operating procedures, well controlled vegetation along the RoW and development within the RoW and implemented a variety of communication activities on electrical safety. As results, none of accidents, risks or emergencies on fire, lightning and electrocution happened. All new buildings have been earthed and local people committed to compliance with the Decree No.14/2014/NĐ-CP.

3.2. Summary of Recommended Actions

21. Through the inspection and monitoring of the consultant, it showed that the implementation of the environmental mitigation measures of the subproject is limited. Specifically, replacement afforestation has not been implemented yet; there are still 13 structures within RoW; 35 buildings in the areas at a distance from 25m to 72m from the centre line of the RoW have not been earthed. These issues should be continually resolved in the next period. To ensure full compliance with the ADB's environmental policy specified in the EMP, the CPMB and the Operation and Management Units (PTC3& PTC4) should have close coordination with local authorities to complete their responsibilities.

Annex1: Some photos of site visits



Photo 1: Earthing wire of a house in Gia Lai



Photo 2: Warning at a tower in DakNong province

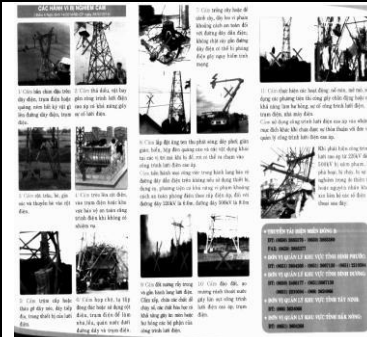


Photo 3: Leaflet for electric safety of PTC4

Annex 2: Local people committed to compliance with the Decree No.14/2014/ND-CP.

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM Độc lập - Tự do - Hạnh phúc

Phủ ban ngày 21 tháng 03 năm 2014

BẢN CAM KẾT

Bảo vệ an toàn công trình lưới điện cao áp

Căn cứ Nghị định số 14/2014/NĐ-CP, ngày 26 tháng 2 năm 2014 của Chính phủ quy định chi tiết thi hành Luật điện lực về an toàn điện.

Hôm nay, ngày 21 tháng 03 năm 2014. Tại gia đình: Nguyễn Đình Trung

Chúng tôi gồm có:

I. ĐẠI DIỆN TRUYỀN TẢI ĐIỆN PLEIKU (Điện thoại: 059. 22.1166.4)

- 1- Ông: Hà Thanh Xuân Chức vụ: Phó giám đốc
2- Ông: HS Minh Tâm Chức vụ: CN
3- Ông: Lê Đức Văn Vinh Chức vụ: CN

II. ĐẠI DIỆN CHÍNH QUYỀN ĐỊA PHƯƠNG:

- 1- Ông: Chức vụ:
2- Ông: Nguyễn Hồng Hải Chức vụ: Thôn Trưởng
3- Ông: Chức vụ:

III. ĐẠI DIỆN CÁ NHÂN (TỔ CHỨC):

Ông (bà): Nguyễn Đình Trung Điện thoại: 0978.664.7935

Địa chỉ: Thôn 4 - Thị trấn Phú Hòa - Chư Păh

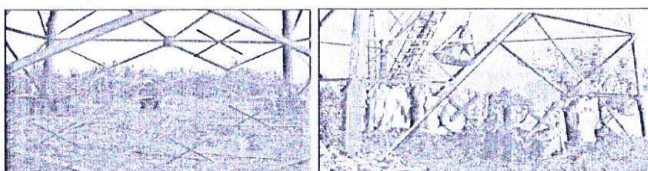
Chúng tôi có (Công trình, vườn cây): Rẫy cà phê + Cao su

Trong hành lang đường dây: 500KV - PK - IUP - CB tại khoảng cột TBA - 01

(Chiều rộng hành lang được giới hạn bởi hai mặt thẳng đứng về hai phía của đường dây, song song với đường dây, có khoảng cách từ dây ngoài cùng về mỗi phía khi dây ở trạng thái tĩnh theo quy định như sau: $\geq 6,0m$ đối với cấp điện áp 220kV và $\geq 7,0m$ đối với cấp điện áp 500kV).

A. Tổ chức/Cá nhân Nguyễn Đình Trung xin cam kết thực hiện nghiêm các hành vi sau: (Điều 4 nghị định 14/2014/ND-CP)

1. Không trộm cắp hoặc tháo gỡ dây néo, dây tiếp địa, trang thiết bị của lưới điện; trèo lên cột điện, vào trạm điện hoặc khu vực bảo vệ an toàn công trình điện khi không có nhiệm vụ.



2. Không để cây đổ vào đường dây điện khi chặt tỉa cây hoặc lợi dụng việc bảo vệ, sửa chữa công trình lưới điện cao áp để chặt cây.