

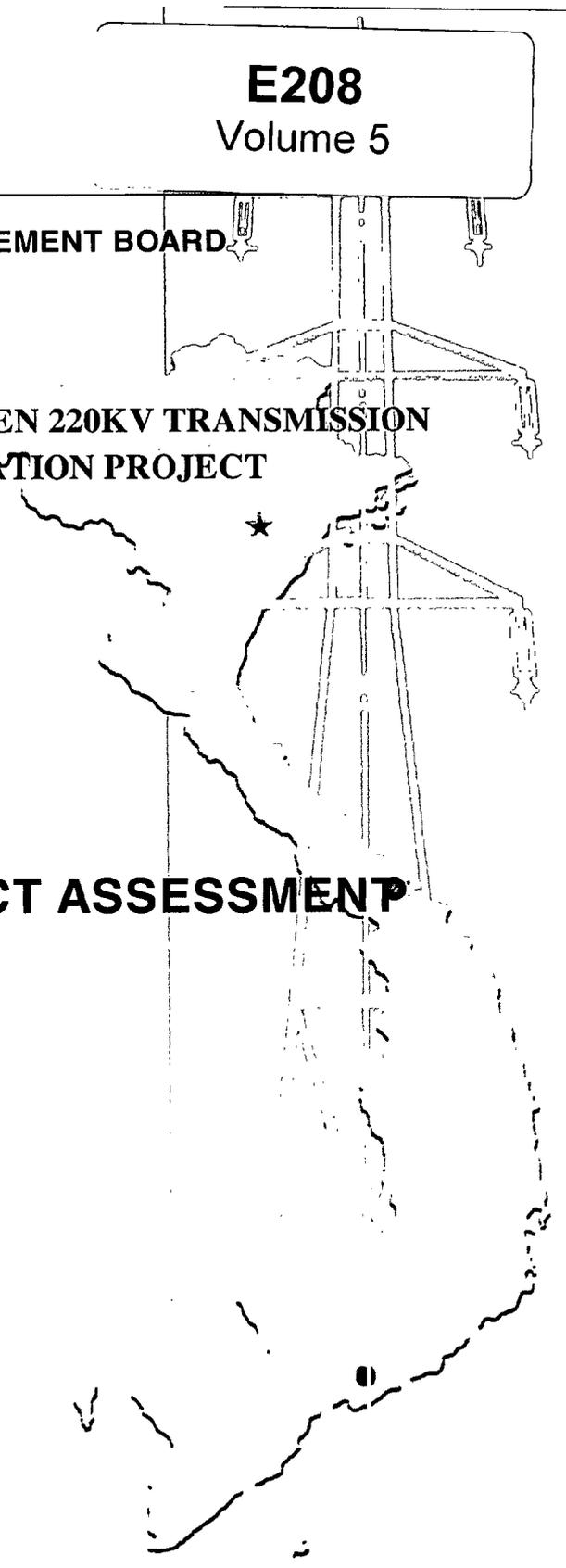
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ELECTRICITY OF VIET NAM

SOUTHERN POWER PROJECT MANAGEMENT BOARD

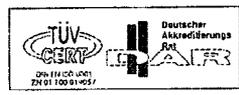
**THOT NOT – CHAU DOC – TINH BIEN 220KV TRANSMISSION
LINE & CHAU DOC 220 KV SUBSTATION PROJECT**

**REPORT OF
ENVIRONMENTAL IMPACT ASSESSMENT**



June, 2003

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SOUTHERN POWER PROJECT MANAGEMENT BOARD

THOT NOT – CHAU DOC – TINH BIEN 220KV TRANSMISSION
LINE & CHAU DOC 220 KV SUBSTATION PROJECT

REPORT OF
ENVIRONMENTAL IMPACT ASSESSMENT

INVESTOR

SOUTHERN POWER PROJECT MANAGEMENT BOARD
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ABBREVIATIONS

EVN	Electricity of Vietnam
WB	World Bank
PPS	Provincial Power Service
SPPMU	Southern Power Project Management Unit
PTC4	Power Transmission Company No.4
ROW	Right of way
EIA	Environmental Impact Assessment
PPC	Provincial People Committee
RAP	Resettlement Action Plan
MOSTE	Ministry of Science, Technology and Environment
MONRE	Ministry of Natural Resource and Environment
DOSTE	Department of Science, Technology and Environment
Km	Kilometer

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EXECUTIVE SUMMARY

Introduction

This report is prepared for implementing of the Thot Not – Chau Doc – Tinh Bien 220 KV transmission line and Chau Doc 220 KV substation project.

Can Tho and An Giang provinces are located at between Tien river and Hau river neighboring to Cambodia and it holds important economical, political positions in the Mekong Delta.

Now, the western area of An giang province is only supplied power by the Tra noc – Long xuyen 110KV transmission line that provide power for two 110KV substations Long Xuyen and Chau Doc. The highest voltage level of An Giang province is 110KV. Until the end of 2002, it only has owned 59.2 Km of 110KV transmission line and two 110KV substations .

Currently, 110KV power network is still main network in An Giang province. See Annex 1 – Power network system of An Giang province to 2002.

The Thot not – Chau doc – Tinh bien 220KV transmission line and Chau doc 220KV substation are important components of the Southern power network of Viet Nam.

The objective of the Thot Not – Chau Doc – Tinh Bien 220KV transmission line and Chau doc 220KV substation project is increasing the national power network for An Giang province (supplying power for Chau Doc 220KV substation); enhancing the reliability and safety of transmission in the power network for the additional charges of the An Giang province. The Chau Doc 220kV substation will be the source substation of An Giang province; launching premise to build 110kV transmission lines and substations in the area as Tan Chau, Cai Dau, Phu Tan, Tri Ton (Tinh Bien). The project will speed up the electrification process and agricultural and industrial development for An Giang province.

This report is prepared for defining, assessing and forecasting main effects of this project on environment during design, implementation and operation stage; together we promote mitigation measures for negative effects and a plan of Environmental Management and Control for the project.

Project Description

1. The Thot Not – Chau Doc – Tinh Bien 220kV transmission line:

The Thot Not – Chau Doc – Tinh Bien 220kV transmission line will be 95,6km long, and traverse the following communes:

- + Trung Nhat and Vinh Trinh communes of Thot Not district, Can Tho province
- + My Hoa commune of Long Xuyen City, An Giang province.
- + Hoa My Thanh, An Hoa, Binh Hoa communes and An Chau town – Chau Thanh district – An Giang province .

- + My Duc, Binh Long, Vinh Thanh Trung, Binh My communes, and Cai Dau town – Chau Phu district – An Giang province.
- + Thoi Son, Nhon Hung, An Phu, Xuan To communes – Tinh Bien district – An Giang province.

Average distance between two towers of the transmission line is about 300 – 350m. The secure corridor of 220kV transmission line is 22m. The safety distance from conductor to the ground is not smaller than 7m for regions which have high density of population., and not smaller than 6m for the rest.

The maps of the project layout in the project commune province and communes are given in annex 2.

2. Chau Doc 220kV Substation.

Location chosen for construction of the Chau Doc 220kV substation belongs to Vinh My commune, Chau Doc town, next to exist Chau Doc 110kV substation, about 360m from Highway 91 and about 4Km from Chau doc town. This is rice field and having relative flat topography.

The 220kV and 110kV equipments are placed outdoors, the 24kV equipments and controller and protecting systems, etc are placed in the control house.

The Resettlement Action Plan for the project was conducted. The project main impacts are:

- i) Total number of PAH is 189
- ii) Total area of land in ROW: 2,101,938 m²
- iii) Total area of land permanently acquired: 87,509 m²

The ROW, according to the regulation are 22m wide for the 220KV transmission line, from which all housing and building would be removed and all trees higher than 4m must be cut.

Legal, policies and administration management

The EIA is based on:

- Feasibilities studies report of each project component, approved by EVN;
- Agreement by the PPCs of concerned provinces where the project component are located or traversed on line route and substation located. Agreement of the communes authorities on the layout of the project within the communes.
- Environmental legal framework as follow:

Vietnamese legal framework:

- Law on Environmental Protection dated July 27th, 1993 of the Socialist Republic of Vietnam.
- Laws of forest protection and forest development:

- Government Decree N^o 175/CP dated October 18th, 1994 guiding the implementation of the Law on Environmental Protection.
- Government Decree N^o 54/1999/ND-CP dated July 8th, 1999 on Protection of High Voltage Networks.
- Ministerial Circular N^o 490/1998/TT-BKHCMMT dated April 29th, 1998 of MOSTE guiding EIA preparation and appraisal.
- National Standard on water quality, air quality, noise and on pollution
- Codes on Electrical Equipment Installation - part II – Power transmission line and distribution system No. 11 TCVN 19 - 84.

WB procedures on environment impact assessment:

- Environmental Assessment (OP 4.01, BP 4.01, GP 4.01),
- Natural Habitats (OP 4.04, BP 4.04, GP 4.04),
- Bank Disclosure Policy (BP 17.50),
- Pest Management (OP 4.09),
- Cultural Property (OPN 11.03),

Environmental management

Presently, the responsibility on environmental management is arranged as follows:

1. Ministry of Natural Resource and Environment (MONRE) of Vietnam is the central government environmental management, responsible for the guidance for the preparation, appraisal and supervision of the implementation of EIA report for the investment projects for the project classified as the project of type I.
2. Department of Science - Technology and Environment (DOSTE) is responsible on environment in each province.
3. EVN, through Department of Science, Technology, Environment and Telecommunication, is responsible for supervising and guiding environmental management and protection in power sector as a whole.
4. For the transmission line and substation projects, the project owner is EVN, therefore during project preparation and construction, EVN has authorized Southern Power Project Management Unit (SPPMU) to be in charge of project management. After commissioning, the project will be handed over to the Power Transmission Company No 4 (PTC4) for the operation and maintenance. PTC4 will be in charge of environmental management during operation period.

Project environment background

The ThotNot – ChauDoc – TinhBien 220kV transmission line:

The transmission line is 95.6 kilometers length, including 20 points (G); the line route goes through territory of communes of CanTho and AnGiang provinces belongs of the Mekong River Delta, including with 90% is ricefield and 10% is orchards, terrain of the project has

very low slope; the difference between altitudes of one is insignificant; but this area is usually flooded from 01 to 03 meters every annual flood season (from September to November).

Except some intersection, the transmission line goes mainly through ricefields and some fruit gardens. According to result of the survey and statistic, the intersection of the transmission line are as following:

- Intersects through Highway, provincial-way : 05 times
- Intersects through pathway : 38 times
- Intersects through rivers, canals, channels 50 -100 meters in length: 12 times
- Intersects through canals, channels less than 30 meters in length : 101 times
- Goes across middle-low voltage transmission line : 33 times
- Goes across 110kV transmission line : 01 time
- Houses located in the ROW : 189 ones

The project areas are characterized by the topical climate and relative homogeneous topography.

Generally, it do not find rare animals or plants in the project area.

The Thot Not - Chau Doc - Tinh Bien 220kV transmission line traverse the areas of two provinces of Can Tho and An Giang where mainly is agricultural economics. In general, the inhabitant density is unequal in the project area; at the cities or towns have higher inhabitants density than the border areas, the less the population density is, the later the transmission line is. In the project area, the quantity of younger people than 18 years old hold 46.55%, people in labor age (from 18-54 years old) hold 49.75%, the rest is older people. Education level of households in the affected area is fairly low (no one in the university and junior college level, the high school level holds 16.22%, the secondary school holds 80.07%).

The 220kV Chau Doc substation:

The substation is placed on a ricefield area, 300m from the existing 110kV Chau Doc substation towards North, 360m from Highway 91 towards East-North and 150m from canal towards South.

Location chosen for construction of the substation belongs to Vinh My commune, Chau Doc town and about 4Km from Chaudoc town. This is area having relative even and flat topography, natural elevation of about 1.35 to 1.5m.

This is a field that has been cultivating, located along the Highway 91; terrain is quite even and flat and without sudden difference about altitude. No house is required to resettled within the substation site area.

The Project area has been taken shape by new alluvium sedimentation of Chau Doc River (a branch of Hau River). The surface water appears mainly on rainy season and the ground water is in aquifers which are influenced directly by tide.

The area was selected to construct Chau Doc 220kV substation locating in dyke area of 7,000 hectare of agricultural land belonging to Chau Doc town; thus, it will not be influenced by common flooded status of the town.

The total land area for laying out the substation is 34,690m² of land type 3 cultivating rice and a few of banana and eucalyptus. The area population is sparse, mainly living by farming and small business.

Potential Environmental Impacts .

The potential environmental impacts of the project can be divided into 4 types:

Impact on physical environment

The project could cause some impacts on water, air and land. These include runoff and sedimentation from grading for line and substation facilities; loss of land and increase in soil erosion due to placement of towers and substations; oil contamination from construction equipment; dust, noise and vibration due to material transportation and construction works; disposal of installation and construction materials.

Impact on ecological environment

The project may cause some negative impacts on biological and ecosystem due to site clearance and maintenance of the project Right of Way (ROW) and substation site. The impacts are effects of clearing and tree cutting, control of vegetable in ROW as all trees of or would be higher 4m in the line ROW must be cut down. The project can also open up more remote lands to human activities and construction of ROW can result in the lost and fragmentation of habitats and vegetation along the ROW.

The total affected area by the project is 2,135,139 m² of which 1,796,952 m² is agricultural land; the rest is garden and residential land.

The project will appropriate permanently 49,504m² of land for constructing the tower foundations; 38,005m² of land for constructing the substation and access road that result causing some impacts to producing agriculture of the area

Impact on human:

The project could cause impact on the residential areas as 189 houses will be affected by the transmission line and the substation. The construction in the residential areas would have negative short-term impacts on air and water quality. Some disruption of waterways and transportation would occur during construction if disposal of waste materials not managed properly. Pollution of dust, noise to human residential area may occur during construction period. The impacts are of a short term nature and would not be a considerable impact if the construction will be managed properly and can be monitored against the national environmental standards.

In operation phase of the Project, the electro-magnetic field intensity produced under the design condition meet the Vietnamese recommended standard (less than 5 kV/m).

Suggested Mitigation Measures:

Mitigation measures to reduce the project impacts are to be carried out in 3 stages: design, construction and operation.

During the design of the layout of the transmission line, the design need to be concurred and cleared by the local authority to minimize the adverse impacts, particularly for the resettlement. In the design phase, the alternatives for each component have been considered and selected to ensure they have the lowest impacts on ecosystem. The route have been discussed and agreed with the local authorities and relevant organisations. The substation will be equipped with all necessary protection devices. No transformers with PCB will be used in the project.

In construction stage, mitigation measures include control on tree cutting, ROW clearance and access road; control of soil erosion; ensure safety regulations in place and mine clearance before construction start; health care regulation for workers in camps and other measures. All measures are included in the bidding documents for works. --

- Construction machinery is used during construction of the substation causing constructing noise. Therefore, construction should be done at day time and avoided at night time as possible to mitigate environmental impact incurred by constructing noise.
- Guard fence should be established during construction of the substation. Periodic water spray should be done with excavated naked earth within the substation; soil transporting vehicles should also be flushed and covered with surface cloth so as to prevent from affecting surroundings.
- Historic relics should be handled and controled according to instruction of local Department of Culture and Information (DCI). Once they are discovered during construction of the substation or tower foundation, they must be ontime reported to DCI for further instruction.
- In designed of the substation, proper distance away residential and sensitive areas have been taken into consideration to meet associated design regulations and environmental protection requirement.
- The transmission line intercrossing highways and rivers should avoid construction at traffic rush time.
- For the land to be occupied by tower foundations and substation, economic compensation will be provided for farmland, houses and crops in strict accordance with Decree No.22 /1998/NN-CP dated April 24th, 1998 and requirement of the WB.

Refer to Table 1 for mitigating measures for the project.

During operation stage, mitigation measures include control of ROW maintenance, access road to sensitive areas, control of fire hazards and ensure safety for workers and local residents.

To the substation:

- Use low noise equipment as possible.

- Make general arrangement of the substation reasonably and arrange the main transformer at center of the substation to minimise environmental impact incurred by operation noise.
- In order to prevent transformer oil leakage, the accident oil pond (capacity of which is designed to be larger than the transformer's oil volume) has been designed in the substation. Transformer oil can run into the pond directly as any accident happens to the transformer and will be recycled together and reused.
- Promote propagation and education on electric equipment safety knowledge among the masses near the substation and advise residents close to the substation of the way to do agricultural production safely.
- Stand a warning sign near outgoing lines of the substation with high electric field intensity to advise residents not to stay there.

To the transmission line:

- The transmission line corridor has been designed to avoid dense residential areas.
- Dwelling to be removed should be relocated to ensure affected residents having houses and their living standard will not be decreased.
- The transmission line has sufficient clear height when crossing highways and rivers, which would not cause impact on land traffic and water navigation.

Analysis of Alternatives:

The analyses of the alternative is based on the principle of maximizing the customers' services, and minimizing the impact on the environment, including the lowest impact on the property of the PAH.

The Thot Not - Chau Doc - Tinh Bien 220kV transmission line project goes along the Highway 91, this is an advantage point in executing process as well as later operation. In order to the transmission line not traversing many houses, the line direction is turned many glide angles to avoid the gathering inhabitant areas. However, the transmission line will traverse some of scattered houses is unavoidable.

Public Consultation and Information Dissemination:

The draft of EIA and RAP of the project were sent to concerned PPC for clearance and to Project Management Board for public display in May 2003.

Public consultation for the project was conducted during the period from April 2003 to May 2003.

Public consultation was carried out by means of holding talks and sending out investigation form. Places involved in the project were investigated, including Thot Not district of Can Tho province; Long Xuyen city, Chau Thanh, Chau Phu, Tinh Bien districts and Chau Doc town of An Giang province.

Consultants from EVN have met with representatives of local Government (Commune, district, provincial People Committees), local people association such as Women Union, Farmer association etc. in the Project area to inform and receive their comments on three main issues:

- Project location, scope and objectives.
- Environmental and Socio economic impact of the project to the local people.

Process of public consultation was carried out in Can tho and An giang provinces. The Minutes of meeting between Consultants and local people was attached in Annex 6. Local Government, all functional department and the masses on the Project sites supporting construction of the Project consider it beneficial to development and enhancement of local living quality. Local people have agreed with the proposed mitigation measures applied during different phases of the Projects and had have no complaint about the potential impacts to the environment as well as to the peoples living nearby.

Environment Management Plan (EMP)

The EMP consists of mitigation, monitoring measures, responsibilities of related parties and necessary training courses to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels.

The environmental management plan has been prepared for construction and operation period of the Project. Environmental management during construction period is implemented by the Southern Power Project Management Unit (SPPMU). SPPMU is responsible for guiding and supervising Contractor during application of mitigation measures as well as environmental monitoring. During the operation phase, the environmental issue will be taken care by PTC4. Accredited institutions will be hired to measure the environmental quality along transmission line and substations. Report on environmental monitoring will be made and submitted to relevant responsible authorities. Refer to Table 1 for mitigating measures.

The EMP also includes plan and costs for institutional strengthening such as training on environmental issues for the Project's staffs as well as related institutions, workers involved.

Table 1. Summarize of main Mitigating measures applied for the Project

<i>Phase</i>	<i>Issue</i>	<i>Mitigating measures</i>	<i>Institutional Responsibility</i>	<i>Supervisor</i>
Construction	Noise	- Use low noise equipment ⁽¹⁾ - Working in the permitted hours	Contractor	SPPMU and local DOSTEs
	Dust	Guard fence and water spray		
	Agricultural ecology	Recover damaged vegetation timely when the construction ends		
	Land Occupation	Minimize land occupation		
	Clearance in occupied land	Do compensation in accordance with laws		
	Training on environmental protection	Educate constructors, Project's staffs, local people	SPPMU	
Operation	Noise	- Equipment noise is conformed with Vietnamese Standards - Consolidated enclosures to absorb dust and reduce noise	Contractor	PTC4 and local DOSTEs
	EMF	- Use transforming devices conform to standards; - Select height of the power the power distributing structure conform to design requirement phase earth and phase-phase distance		
	Training on environmental protection	Strengthen education to local residents, PTC4 staffs.	PTC4	

⁽¹⁾ Apply Vietnamese standard TCVN 5949-1988 for the Standard of noise applied for public and residential areas.

CHAPTER I

INTRODUCTION

The objective of Thot Not – Chau Doc – Tinh Bien 220KV transmission line and Chau doc 220KV substation project is enhancing the national power network for An Giang province (supplying power for Chau Doc 220KV substation); enhancing the reliability of transmission in the power network and safety level for the additional charges of the An Giang province. Chau Doc 220kV substation will be the source station of An Giang province; launching premise to build 110kV transmission lines and substations in the area as Tan Chau, Cai Dau, Phu Tan, Tri Ton (Tinh Bien). The project will speed up the electrification process and agricultural and industrial development for An Giang province.

Besides, whenever asked, Thot Not - Chau Doc - Tinh Bien 220kV transmission line will transfer power from Vietnam network to Cambodia as Power Buying-Selling Convention between Viet Nam and Cambodia Government.

This EIA describes direct and potential environmental impacts incurred by the construction of the project.

The report is composed of:

1. Objectives of the report

- Studying of technical features of Thot Not - Chau Doc - Tinh Bien 220kV transmission line and Chau Doc 220 kV substation project (Chau Doc – An Giang), natural environment and socio-economic feature of the area, where the project components will be located on.
- Determining, estimating and forecasting the main impacts of the project to environment in designing , constructing, and operating periods.
- Proposing the methods minimizing negative impacts and mentioning a environmental management plan for the Project including supervision plan, breakdown prevention and environmental management capacity improvement.

2. Research Content

In order to assess the environmental impacts of the project, the following research contents will be executed:

Potential impacts of transmission line and substation to:

- Botanical system, breakthrough and disorder of the natural environment .
- Utilizing land and historical, cultural places.
- Emigrating birds and plane
- Radio information interference
- Electromagnetic radiation

- Changing landscape and invisible beauty spots
- Impacting to local inhabitant living

The measures minimizing environmental impact for each impacting level and each project executing period (designing period, construction period, operation and management period) are included:

- General minimizing measure
- Technical measure
- Monitoring management measure

3. Applying method of research

- Investigation, field survey, data gathering
- Synthetic analyzing method
- Analyzing listing method, fast estimating method for impacting levels
- Public consultant and information proclaiming method (according to the instruction of WB).

4. Status of power network in the project site

An Giang province is located at between Tien river and Hau river neighbouring to Cambodia and it holds important economical, political positions in the Mekong Delta.

The Thot not – Chau doc – Tinh bien 220KV transmission line and Chau doc 220KV substation are important components of the Southern power network of Viet Nam.

In the year of 2000, the power consumption of the province up to 299.8 GWh and the highest load is 66.2 MW increasing 19.3% compared with that of the last year.

Now, the western area of An giang province is only supplied power by the Tra noc – Long xuyen 110KV transmission line – one circuit ACSR-150 that provide power for two 110KV substations: -

- The Long Xuyen 110KV substation (25+40)MVA supply mainly power for Long Xuyen city and neighbouring area.
- The Chau Doc 110KV substation (16+40)MVA supply mainly power for Chau Doc town and next to districts as Tan Chau, Phu Tan, Tinh Bien, Chau Phu and An Phu.

The highest voltage level of An Giang province is 110KV. Until the end of 2002, it only have owned:

- 59.2 Km of 110KV transmission line,
- Two substation 110KV.

Currently, 110KV power network is still main network in An Giang province. See Annex 1 – Power network system in the project site to the year 2007.

5. Necessity of construction of the project

According to the power network development and rehabilitation planning – stage 2000-2005 having calculation to 2010 of the An Giang province, to the year of 2005 the total power consumption of the An giang province will up to 633.3 GWh and the highest load is 131.3 MW. If only having the Tra noc – Long Xuyen 110KV transmission line will be overloaded seriously resulting the voltage of the load at the end of the transmission line will be lower than 10% compared to norm. Besides, when this transmission line having the problem will result to 60% of the area of An Giang province be lost of power.

The construction of the Thot not- Chau doc – Tinh bien 220KV transmission line and the Chau doc 220KV substation project will help enhancing the reliability and safety in supplying power for the load at the western area of An Giang province and creating the good conditions for construction of the 110KV substations and transmission line in the area as Tan Chau, Cai Dau, Phu Tan, Tri Ton (Tinh Bien).

6. Basis of EIA for the project

EIA is studied by legal foundation documents:

- Environmental preserving law was approved on December 27th, 1993 by Parliament of Socialist Republic of Vietnam and signed on January 10th, 1994 by Prime Minister.
- Decree 175/CP dated October 18th, 1994 of the Government in guiding execution of environmental preserving law included detail instruction in EIA.
- Circular 490/1998/TT–BKHCN&MT in guiding to form the EIA report.
- Decree 22/1998/NĐ–CP dated April 24th, 1998 of Government regulates compensation for recovered land by the Government for national defend, security, national and public interests.
- Viet Nam standard of the land environmental preservation.
- Viet Nam standard of the noise.
- Viet Nam standard of the inhabitant area preservation.
- Viet Nam standard of the ecological preservation.
- Viet Nam standard of the landscape and natural reserve preservation.
- Power equipment regulation – Part II – Power transmission system 11 - TCN-19-84.
- Guiding in EIA by World Bank, including:

- + Policies OP 4.01, BP 4.01, GB 4.01 in Environmental Assessment
- + Bank Disclosure Policy (BP 17.50);
- + Operational Directive for Involuntary Resettlement 4.30.

Requirements for power transmission project by World Bank. The WB comments that power transmission project as one with provision of extensive environmental risk which depends on engineering scale and position.

The incurred impacts are relevant to construction of the substation. The power transmission line or substation of small capacity need not overall EIA while that of large capacity does.

The power transmission project belong to category B according to environmental assessment policy of WB OP 4.01.

CHAPTER 2

PROJECT DESCRIPTION

1. Project name :

The Thot Not – Chau Doc – Tinh Bien 220 KV Transmission Line and Chau Doc 220 KV Substation Project

2. Implementing Agencies:

Investor : Electricity of Vietnam (EVN)

Project Manager : Southern Power Project Management Unit (SPPMU).

Consultant Unit : Power Engineering & Consulting Company No.3 (PECC3)

3. Socio-economic Target of Project:

The objective of Thot Not – Chau Doc – Tinh Bien 220KV transmission line and Chau Doc 220KV substation project is increasing the national power network for An Giang province (supplying power for Chau Doc 220KV substation); enhancing trust and safety level for the additional charges of An Giang province. Chau Doc 220kV substation will be the source station of An Giang province; launching premise to build 110kV transmission lines and substations in the area as Tan Chau, Cai Dau, Phu Tan, Tri Ton (Tinh Bien). The project will speed up the electrification process and agricultural and industrial development for An Giang province.

Besides, whenever asked, the Thot Not - Chau Doc - Tinh Bien 220kV transmission line will transfer power from Vietnam network to Cambodia as Power Buying-Selling Convention between Viet Nam and Cambodia Government.

4. Main Features of the Project

The project includes two main items: the Thot Not - Chau Doc - Tinh Bien 220kV transmission line, the Chau Doc 220kV substation and installs newly two equipment trays at Thot Not substation.

Transmission line description:

The Thot Not - Chau Doc - Tinh Bien 220kV transmission line has following features:

- Route length : 95,6km.
- Start point : the 220kV feeder of Thot Not 220kV/110kV substation.
- Intermediate point : the 220kV feeder of Chau Doc 220/110kV substation.
- End point : the end pole No 84 at the border of Vietnam – Cambodia (nearing Xuan To bridge, An Phu village, Tinh Bien district).
- Voltage : 220kV

- Circuit number : 2 circuits
- Level : 1
- Conducting wire : 450 – A1/S3A-54/7 (equivalent ACSR 450/58)
- Anti-lightning wire : including two anti-lightning wires: one is zinc-galvanizing GSW7/16” and the other is optical cable OPGW 70 (12 optical fiber).
- Insulator : insulating by glass or ceramic
- Tower : zinc-galvanized steel tower
- Foundation : reinforce concrete foundation for all tower positions on the line. For the foundation of the anchor poles, they will be reinforce stake under the foundation .
- Grounding : direct grounding for towers and anti-lightning wires having optical cable at each tower location. Using stake combine ray.
- Anti-shake : using suitable size damper for conducting wire, anti-lightning wire and anti-lightning wire having optical cable.

The medium space of towers is from 300 to 350m. The ROW of 220 KV transmission line is 22m. The transmission line will be set in the air, with safety distance from the conducting wire to the ground is not smaller than 7m for the high inhabitant density area and not smaller than 6m for the low inhabitant density area.

Substation description

The area constructing Chau Doc 220kV substation is close to exist Chau Doc 110kV substation and about 360m from highway 91. This is rice field and having relative flat topography.

The 220kV and 110kV equipments are placed outdoors, the 24kV equipments and controller and protecting systems, ... are placed in the control house.

The Chau Doc 220kV substation has 220/110/22kV voltage level. The capacity of the substation in phase 1 (2004-2005) is a transformer 125MVA, in phase 2 (after 2005) will install the second transformer 125MV more according to the developing level of the additional charge. The 220KV double busbar system has four 220KV feeders, the 110KV double busbar system has three 110KV feeders and the 22KV single busbar system includes four MV switchgear panel.

5. Proposed Schedule of the Project

The project will be implemented from November 2003 to November 2004. Proposed schedule of the Project is given in Annex 5.

6. Project Cost

The total investment for the project is estimated at VND 307,284,630,000 (equivalent USD 20,485,642). The break down of the estimated costs is given bellow

Table 2: Project cost

No	Item	Transmission line		Substation	
		USD million	VND million	USD million	VND million
	Equipment			3.416	51,233.417
	Construction	10.950	164,248.656	2.187	32,804.726
	Other cost	1.323	19,839.612	0.692	10,386.010
	Contingencies	1.227	18,408.827	0.629	9,442.415
	Environmental monitoring (transmission line & substation)	0.061	920.963450		
	Total	13.561	203,418.06	6.924	103,866.568

Capital source : From the Loan and other sources by EVN arrangement in plan.

CHAPTER 3

PROJECT ENVIRONMENT BACKGROUND

1. The Thot Not - Chau Doc - Tinh Bien 220kV transmission line

The ThotNot – ChauDoc – TinhBien 220kV transmission line is 95.6 kilometers length, including 20 points (G); the line route goes through territory of communes belong to CanTho and AnGiang provinces having following characteristics:

- The transmission line section from initial point to G1 is about 8 kilometers length, goes through territory of communes: TrungNhat, ThoiThuan and VinhTrinh of ThotNot district – CanTho province; it is about 01 to 04 kilometers from 91st Highway. This section goes mainly through ricefields and some fruit gardens alongside channels which have even and flat terrain relatively.
- The transmission line section from G3 to G4 is about 12.7 kilometers length, goes through territory of communes: MyHoa, MyThanh, MyThoi of LongXuyen City – AnGiang province. The one is parallel with 91st Highway and far nearly 5 kilometers distance. This section goes mainly through ricefields and some fruit gardens. The one cuts through 80th Highway, CaiSan channel and some transmission lines along with Highways and channels which even and flat terrain relatively.
- The transmission line section from G4 to G5 is about 7.7 kilometers length and goes through territory of communes: HoaBinhThanh, AnChau town of ChauThanh district – AnGiang province. This section is parallel with 91st Highway which is far from 03 to 05 kilometers distance. The one goes mainly through ricefields and some fruit gardens; cuts through 943rd provincial-way, LongXuyen River and some transmission lines along with provincial-ways and channels.
- The transmission line section from G5 to G9 is about 26 kilometers length and goes through territory of communes: HoaBinhThanh, AnChau town, BinhHoa, AnHoa of ChauThanh district – AnGiang province; BinhLong, VinhThanhTrung of ChauPhu district – AnGiang province. The one is parallel with 91st Highway which is far from 01 to 02 kilometers distance; and goes mainly through ricefields and some fruit gardens. This section intersects through 941st provincial-way, many channels fluxxing Hau River, some transmission lines along with provincial-ways and channels.
- The transmission line section from G9 to G11 is longer than 8 kilometers and goes through territory of communes: VinhThanhTrung of ChauPhu district – AnGiang province; the line is parallel with 91st Highway which is farer than 01 kilometer distance, and goes mainly through ricefields and some fruit gardens. The one intersects through MuongKhai, VinhTre channels and some arroyos fluxxing Hau River and some transmission lines along with provincial-ways and arroyos.
- The transmission line section from G11 to G12 and terminal point is about 5.7 kilometers length and goes through territory of MyHoa commune belongs to ChauDoc district – AnGiang Province; is parallel with 91st Highway which is far from 200 to 500 meters distance, and goes mainly through ricefields and some fruit gardens. The one

intersects through CanThao, 2nd channels and some small irrigation ditch fluxxing 2nd channel and some transmission lines along with arroyos.

- The transmission line section from 2nd initial point to G13 is about 3 kilometers length and goes though territory of VinhMy commune of ChauDoc town – AnGiang province; this section is along with 2nd channel which is far from 200 to 300 meters distance. The one goes mainly through ricefields and intersects some small irrigation ditch fluxxing 2nd channel and some transmission lines which rise from existing 110/35/15kV ChauDoc substation.
- The transmission line section from G13 to G14 is about 11.2 kilometers length and goes though territory of communes: VinhTe of ChauDoc town, ThoiSon, NhonHung of TinhBien district – AnGiang province; this section is along the rear of Sam mountain – between of the 2nd channel and 91st Highway. The one goes mainly through ricefields and intersects some small irrigation ditch fluxxing 2nd channel and some transmission lines.
- The transmission line section from G14 to G15 is about 3.4 kilometers length and goes though territory of NhonHung commune belongs to TinhBien district – AnGiang province; this section intersects 91st Highway and goes straight VinhTe channel. The one goes mainly through ricefields and intersects TraSu, CoTre channels and some transmission lines.
- The transmission line section from G15 to G18 is about 6.5 kilometers length and goes though territory of communes: NhonHung of TinhBien district – AnGiang province; this section is along with the dyke of VinhTe channel which is far from 100 to 200 meters distance. The one goes mainly through ricefields, gardens of palm and intersects through TraSu, CoTre channels and some transmission lines.
- The transmission line section from G18 to 2nd terminal point is about 2.3 kilometers length and goes though territory of XuanTo commune belongs to TinhBien district – AnGiang province; this section intersects through VinhTe channel and halts at point which is far the Vietnamese-Cambodian border about 200 meters distance (near to XuanTo bridge). The one goes mainly through ricefields.

The transmission line traverse territories of The Mekong River Delta, including with 90% is ricefield and 10% is orchards, terrain of the project has very low slope; the difference between altitudes of one is insignificant; but this area is usually flooded from 01 to 03 meters every annual flood season (from September to November).

In summary, except some intersection, the transmission line goes mainly through ricefields and some fruit gardens. According to result of the survey and statistic, the intersection of the transmission line are as following:

- Intersects through Highway, provincial-way : 05 times
- Intersects through pathway : 38 times
- Intersects through rivers, canals, channels 50 -100 meters in length : 12 times

1.2 Ecological Feature

Ecological feature of the project area is mainly rice-field and fruit-tree gardens, including: the transmission line goes through rice-field and farm-product land is 79,400m long; the rest is residential land planting fruit-tree including 3543 eucalyptus trees, 60 burnt trees, 50 sonneratia ovata trees, 25 lemon trees, 975 bananas trees, 360 crab trees, 174 coconut trees, 65 dipper trees, 28 silk cotton trees, 110 plum trees, 103 custard apple trees, 1 tamarind tree, 7 longan trees, 14 cashew trees, 3 apricots trees, 2 cherry trees, 383 palmyra trees, 25 cajuput trees, 264 bamboo bushes, 28 star apple trees and 367 mango trees.

Total project effected land area of the ROW is 2,135,139 m² including 87,509 m² of permanent effected land of constructing foundation of towers and the substation. In there, rice field mainly makes up more than 90%, the rest is fruit-tree growing land. The main crops are coconut, orange, longan, banana, mango, jack, rambutan, lemon, custard-apple, plum, eucalyptus, mandarin orange, bamboo, ... About 35% land of the ROW will be effected temporarily when straining wire and installing towers.

Generally, it do not find rare animals or plants in the project area.

Table 3: EFFECT OF THE PROJECT

No.	Name of subproject	Land-withdrawing		House removing		Destroyed trees	
		Substation m ²	Line m ²	House	m ²	Trees	Kind of tree
1	Chau Doc Substation	34,690	3,315	0	0		Ricefield
2	Transmission line		49,504	189	12,134	10,722	Planted fruit and industrial trees
						1,796,952m ²	Crops

1.3 Socio - economic features

The ThotNot - ChauDoc - TinhBien 220kV transmission line traverse the areas of two provinces of CanTho and AnGiang where mainly is agricultural economics.

In there, CanTho province is considered as economic developing center of CuuLong river plain. The total natural land area of CanTho province is 2965sqkm. Thot not is one of districts of Can Tho province, North bordering An Giang province, Earth bordering Dong Thap, South bordering OMon district (CanTho province), West bordering KienGiang province. Natural area is 58,138 ha, in there having 45,894 ha of agricultural land. The population is 328,124 peoples including 62,055 households.

AnGiang province is one of provinces of CuuLong river plain and located between Hau river and Tien river with total natural land area is 3424sqkm and the population is 2,049,024 peoples. Northeastern borders DongThap province, Southwestern borders KienGiang province, Southeastern borders Can Tho province and Northwestern borders Campuchia. AnGiang province has border line with Campuchia extending about 100km. Inhabitant background includes 92% of Kinh people, 5% of K'mer people, 1.5% of Cham people and 1.5% of Chinese.

In general, the inhabitant density is unequal in the project area; at the cities or towns have higher inhabitants density than the border areas, the less the population density is, the later the transmission line is. In the project area, the quantity of younger people than 18 years old hold 46.55%, people in labor age (from 18-54 years old) hold 49.75%, the rest is older people. Cultural level of households in the affected area is fairly low (no one in the university and junior college level, the high school level holds 16.22%, the secondary school holds 80.07%).

More 80% of area population lives by agriculture including growing rice and fruit-tree.

In the project area, the farmers hold 95% of the affected inhabitants (mainly is agricultural land and farm produce). Households having main income from business hold 4% of the affected inhabitants. The primary income of the affected inhabitants is from agriculture (holding 94% of total income). The average income of households is VND 400,000/month.

Table 4: Income statistic of affected households (thousand VND)

Income level	<200	200 - 400	400 - 600	600 - 800	800 – 1000	> 1000
Number of households	27	100	29	8	7	18
Rate	14.29%	52.91%	15.34%	4.23%	3.70%	9.52%

2. The Chau Doc 220kV substation.

The 220kV ChauDoc substation is placed on a ricefield area, 300m from the existing 110kV ChauDoc substation towards North, 360m from Highway 91 towards East-North and 150m from canal towards South.

Location chosen for construction of the substation belongs to VinhMy commune, ChauDoc town and about 4Km from Chaudoc town. This is area having relative even and flat topography, natural elevation of about 1.35 to 1.5m

No house is required to resettled within the substation site area.

2.1 Topography, geology

This is a field that has been cultivating, located along the Highway 91; terrain is quite even and flat and without sudden difference about altitude.

The Project area has been taken shape by new alluvium sedimentation of Chau Doc River (a branch of Hau River). The surface water appears mainly on rainy season and the ground water is in aquifers which are influenced directly by tide.

2.2 Meteorology and hydrology

The area was selected to construct Chau Doc 220kV substation locating in dyke area of 7,000 hectare of agricultural land belonging to Chau Doc town; thus, it will not be influenced by common flooded status of the town.

2.3 Socio - economic features

The ChauDoc 220KV substation is located in agricultural land area (the most is rice field) belonging VinhMy commune – ChauDoc town. The location of substation is placed near to Highway 91, advantaging to the transport serving the construction and maintenance of the substation. The total land area for laying out the substation is 33,201m² of land type 3 cultivating rice and a few of banana and eucalyptus. The area population is sparse, mainly living by farming and small business.

CHAPTER 4

PROJECT IMPACTS ON ENVIRONMENT

The Thot Not - Chau Doc - Tinh Bien 220kV transmission line and Chau Doc 220KV substation project has no large impact on environment (the large impacts is defined as an impact that can destroy environment factors or cause large change on environment). The primary impacts of the project is only in medium or low level.

1. Potential environmental impact during construction period

The potential environmental impact during construction period of the project is listed in the Table 5.

Table 5: Potential environmental impact during construction period

No.	Item	Environment impact
1	Land occupation	. Substation and tower foundation occupation. . Temporary occupation for construction.
2	Hydrological condition and flood	No impact
3	Construction noise	Certain impact on constructors and acoustic environment.
4	Construction dust	Minor impact on ambient air.
5	Sanitary water during construction	Minor or no impact
6	Waste water effluent during construction	No impact
7	Vegetation	Vegetation damaged in occupied land
8	Wetland ecology	Natural wetland not affected
9	Scenic view	Affected a little
10	Shipping	No impact
11	Highway	Short – term or no impact
12	Agricultural production	Loss of VND 3,597,534,000/year
13	Influx of construction team	. No cultural conflict . To increase residential incomes . Increase life facilities
14	Cultural relics	No impact
15	Scenery and places of interest	No impact
16	Resettlement	No-resettlement required; some emigration for the transmission lines.
17	Post and telecom communication wires and power transmission lines	No impact on the communication wires due to a long distance away in design.

1.1. Impacts to Physical Environment

Natural environment impacts is considered in this research including impacts to water environment – air environment – land environment and creature resources.

1.1.1 Contamination of the surface and underground water

Contamination of the surface water may be caused by three sources:

- (i) The increase erosion of the surface soils;
- (ii) From the oil leakage.
- (iii) From domestic waste water of constructing worker

The soil erosion due to excavating foundation of towers could be considered as very minor and only takes place temporarily in the constructing stage.

The contamination by the oil leaked is also considered negligible due to erection of the towers and the electrical equipments are done manually, therefore there will be almost no construction machinery involved, except some mechanical devices.

A little waste water produced during construction for constructor's daily consumption of water would primarily accumulate where they dwell. Owing to small quantity of the waste water and farmland around the substation (waste water is discharged into farmland for irrigation or into drainage rivers nearby), water bodies nearby would not be affected much. This waste water will not be produced when construction is finished.

Mixing concrete needs water and so attention should be paid to stopping turbid water from running off to affect water bodies around.

The contamination of the underground water could be taken place when depth the damage of the surface soils is high and/or with introducing of hazardous substances. In the given project the depth of the pole foundation is very small less than 2 m, and there will not be introduction of the hazardous substances in the project area, therefore this impact could be considered as negligible.

1.1.2 Noise pollution in public and residential areas

Noise level forecasting for construction period are under maximum permitted limits regulated by Vietnamese standard TCVN 5949:1998. For the transmission lines, some mechanical devices will be used during construction phase. All of machine used will be selected to meet the requirement on noise level of TCVN 5949:1998. Time duration for using such kind of machines is rather short in each foundation.

Construction of the line is usually carried out at daytime. Moreover, there are only few places that residential house are closed to the construction sites. It could be said for overall of the project that construction noise can meet relevant standards. Nevertheless, construction work nearby residential areas will be stopped in the evening to avoid impacts. Construction machine will be required to operate only on daytime.

1.1.3 Dust pollution

Dust produced when excavating foundation which causes the ground to be naked on the foundation sites would not affect directly residents nearby, it would increase dust in atmospheric environment around. However, such impact will be incurred temporarily and partially. During construction of tower foundation, secondary fly dust caused by naked soil may affect residents nearby temporarily. Such impacts will disappear when construction is completed.

1.1.4 Oil contamination

Oil contamination may be caused by oil leakage from the construction machines during the construction period.

Erection of the towers and the electrical equipments are done manually, therefore there will be almost no construction machinery involved, except some mechanical devices.

1.1.5 Affecting on vibration, fire:

The Project's executing solutions will not use explosives, but only using the digging-banking measures. Hence, fire and explosive safe problems will be ensured. However, the ability of fire, explosion because of using stove and cigarette ashes of workers is potential risk for this problem but at low level.

1.1.6. Impact on land function

Land occupation of the substation and tower foundation will shift the land function from agricultural field to industrial land. During construction of the substation and tower foundation, it is necessary to acquire some land temporarily, which would bring effect on its function. However, the acquired land will recover when construction is over.

1.2 Impacts to Ecological Environment

1.2.1 Damage to foliage and wild environment

Most topography of the project area is mainly rice-field, fruit-tree garden and residential land, not having forest or reserve. There does not exist nature area without human trace or wild environment with the substation and transmission line site because the site had human activities and agricultural production for a very long time ago. Hence, project impact to creature resources as well as threaten plant-animal system are inconsiderable. Most of plants in ROW area is fruit-tree, rice and some kinds of farm produce; the affected plant quantity is showed in the annex 4.

Consequently, construction of the substation and transmission lines will not bring impact on nature area without human trace or wild environment.

1.2.2 Impact on agricultural ecology incurred by land occupation of the project

Construction of the substation and transmission lines need acquire some land at interim such equipment transportation road, walking paths, and temporary house of construction etc. all the occupied land will grow crops again and crop growth will recover after construction. Hence, crop would be destroyed for the occasion.

- The substation will occupy land of 38,005m² totally with an annual decrease of 50 - 60 tons of rice output every year. Existing plants in the land would be destroyed since construction begins and cannot rehabilitate later.
- Tower foundation will take up an area of 49,504m² totally, which would decrease 70 – 80 tons of rice output every year.

As construction begins, the crop would be damage and agricultural production will be affected accordingly.

1.2.3 Impact on wetland ecological environment

Site of the proposed substation has not passed by lakes and lowland and has no impact on ecological environment.

When the transmission lines cross rivers, no tower will be set up in water so the Project will cause no impact on water body nearby.

In addition, appropriating land to built the temp roads serving execution could cause impacts to the cultivating farm produce of the area inhabitant. However, these impacts only are temporary, the temp roads will be restored as the initial state after the finished project.

Besides, the land appropriating to build tent for project executing workers in the constructing process is unavoidable matter. However, this occur only in short time and having temporary property, so impacts of this action to the natural environment is inconsiderable.

1.3 Impact on social environment

A little dust will produce during construction of substation and tower foundations; but there would be no impact generally on highway environment and traffic nearby.

Stringing of transmission lines intercrossing road/national highway would have little interim impact on the traffic.

Generally, construction of substation and transmission lines has no impact on the social activities of the residents living nearby.

1.4 Affecting to military zone, airport, historical-cultural monument:

Need to examine effects of the Project to landscapes, military zone, airports, historical-cultural monument, temples, pagodas, ... in the area during design stage in order to avoid causing the negative impacts.

According to the selected line alternative and real surveys, the transmission line will be about 4km from Vam Cong airport. Although the airport has not been operated for a long time, but because of the defence objective so needing to ensure that the transmission line will not cause any effect to this one. After EVN consulting to Ministry of Defence – provincial Military Steering Committee - Military Zone No.9 has given conclusion that: this selected plan of the transmission line will not cause any impact to operations of both Vam Cong airport and military zone.

During the surveying process of the transmission line, last section of the transmission line from Chau Doc substation to endpoint at frontier is near to Sam mountain (tourist zone with Madam's birthday festival). This is a major cultural place-name of the ethnic Khmer compatriots. Hence, according to the opinion of Ministry of Culture, the transmission line will go the rear of Sam mountain with at least 2 km distance. With this quite safety distance, the transmission line will not cause any effect on the scenery of Madam's pagoda cultural tourist area. Through consulting to people's committee of An Giang province, the transmission line will not also cause any effect to the tourist zones development planning of Chau Doc town - An Giang province in the future.

The proposed substation site locates in country-side and there is no scenic spot or place of interest around. In addition, during designing phase, the project site is carefully considered to avoid any beauty spot or place of interest. Therefore, no impact on scenic spot will happen.

Once there is any historical treasure or archaeological matter is discovered during construction, it will be timely reported to the provincial Department of Culture and information for further consideration. A suitable training will be provided for workers to fully understand the things they have to do in the case of archaeological discovery.

Generally, the transmission line and the substation does not traverse or causes effect to any cultural relic in the project area.

1.5 Emigrant and Resettlement

The Thot Not - Chau Doc - Tinh Bien 220kV transmission line project locates along the Highway 91, this is an advantage point in executing process as well as later operation. So that the transmission line not going across many households, the line direction is turned many glide angles to avoid the gathering inhabitant areas. However, the transmission line will go across some of scattered households is unavoidable.

Thus, constructing the transmission line will cause some impacts for households having house located in the ROW. According to the surveying data, number of affected houses are 189; in there number of partial removing houses are 55 and number of affected houses that must connect to ground for the corrugated iron roof are 14. However, almost of the above PAHs do not have to resettle at different region because they can reconstruct the house at the near location on the land of their own. Therefore, the project need not to set up the new resettlement area.

In general, the affect of the project to the area inhabitant is small due to the households lay thinly along the transmission line. Total affected area by the project is 2,135,139 m²; in there the permanent affected area for constructing the foundation of towers and the substation is 87,509m². (Synthesize table is showed at the annex 4). The Project will not cause a considerable impacts to the effected peoples in term of emigration issue.

TABLE 6: HOUSEHOLDS EFFECTED BY PROJECT

Location	Number of affected houses	Number of partial removing houses
Thot Not District	24	7
Long Xuyen City	10	2
Chau Thanh District	40	11
Chau Phu District	67	21
Chau Doc District	14	2
Tinh Bien District	34	12
Total	189	55

1.6 Influx of labor force

Principal work of the Project's construction is undertaken by professional staff who have been trained on special technology usually from electric construction companies. Due to speciality of their work, they can not be replaced by locals. However, some local staff may be hired to take up foundation excavation, transportation of soil and stone, building materials that can offer locals some temporary work opportunities.

The mass of construction people will locally increase the consumption and demand of social commodities and services by workers will lead to acceleration of social commodities.

For the construction team, its company has prepared stringent regulations and management methods. All staff must observe the regulation and will not affect social order much.

In general, in building processing of the project has no arising waste or pollution affecting to water quality, air quality, land quality around the project area. However, the construction of the transmission line can change the land using feature by constructing foundation of towers and by ROW.

2. Potential environmental impact during operation period

Potential environmental impacts during operation period is listed in table 7.

Table 7: Potential environmental impact during operation period

No.	Item	Environment impact
1	Land occupation	Substation sites' and trans lines' permanent occupation, land function damage.
2	Substation afforestation	Helpful to improve atmospheric
3	EMF	No impact
4	Noise	Inconsiderable
5	Sanitary water and oily waste water	Minor impact
6	PCBs	No PCBs containing matter, no impact
7	Wetland	No impact
8	Vegetation	Some vegetation will be cut to protect safe ROW
9	Rare animal	No impact
10	Community	No impact
11	Cultural relics	No impact
12	Scenic view	No impact
13	Human health	No impact
14	Agricultural production	No harvest on lost land
15	Fire and explosion	Low level

2.1 Impact on water

In the operation phase, contamination of the surface and ground water may be caused by two sources:

- (i) From the oil leakage due to exploding transformer;
- (ii) From domestic waste water of substation staffs

Under the transformer has the breakdown oil collected pit which volume contains enough the maximum oil amount ensuring not to let oil leakage causing pollution to the water and land environment.

Waste water from daily activities of the staffs of the substation will be treated by the self disintegrating tank before discharge into environment.

Therefore, in the operation phase the project causes inconsiderable impact on the water environment.

2.2 Impact on noise

In the operating stage, the noise by corona discharge when having small rain or humid air is low, inconsiderable.

The noise by the transformer is also not inconsiderable because although the substation is located near the inhabitant area but the shortest distance from the fence of the substation to the transformer is longer than 10m and the transformer will be chosen so that the noise is not higher than 80dB at distance of 2m.

2.3 Impact on ecological environment

In the operating phase of the Thot not – Chau doc – Tinh bien 220KV transmission line, the managing staffs will must to check and cut away the parts of trees in the ROW that is higher than 4m according to the safety regulation of ROW. In addition, the project is without any action causing the negative impact to the area ecological environment.

2.4 Affecting of electromagnetic to health of people and animal:

Base on the industry standard on “Allowing level of the industrial frequency electric field intensity” and the test regulation at work “Regulation on allowing level of the industrial frequency electric field intensity on working time in affected area by electric field”.

The permissible working time in a day and night depends on electric field intensity as follows::

Electric field intensity (kV/m)	< 5	5	8	10	12	15	18	20	25	>25
Permissive working time in a day and night (h)	Not limited	8	4.25	3	2.2	1.33	0.8	0.5	1/6	0

Thus, the affected area by electric field is the space in which the industrial-frequency electric field intensity > 5kV/m. For the residents who live under the transmission line, the

permissive electric field intensity which will not affect to the health is $\leq 5\text{kV/m}$. However, electric field of the 220kV transmission line in the ROW is quite strong; therefore, the houses and structures are not allowed located in this area.

2.5 Affecting of electromagnetic field to radio communication systems:

The affected communication systems includes communicating networks nearing or traversing the 220kV transmission line and transmitter-receiver centers. However, the Thot Not – Chau Doc – Tinh Bien 220kv transmission line will not traverse any transmitter-receiver station.

2.6 Affecting on exploding, fire:

The ability of fire, explosion due to exploding transformer, short circuit and careless manipulation are potential risks for this problem but at low level.

2.7 Impact on land function

Land permanent occupation of the substation and tower foundation will shift the land function from agricultural field to industrial land.

2.8 Damage to foliage and wild environment

Operation of the substation and transmission lines will not bring any impact on nature area without human trace or wild environment.

2.9 Impact on social environment

When the project going operation will contribute increasing the national power network for An Giang province (supplying power for Chau Doc 220KV substation); enhancing trust and safety level for the additional charges and speeding up the electrification process and agricultural - industrial development of An Giang province. From there contributes creating job and enhancing the living standard of the local inhabitant.

2.10 Affecting to military zone, airport, historical-cultural monument:

As in the construction phase, the transmission line and the substation does not traverse or causes effect to any cultural relic in the project area.

CHAPTER 5

ENVIRONMENTAL MANAGEMENT PLAN

1. Mitigating measures:

Environmental negative impact mitigating measures will be carried out in all three stages of the project : design, execution and operation stages.

1.1 In design stage :

Environmental impact mitigating measures of the transmission line were scrutinized carefully in design stage. The selected alternative guaranteed the economic and technologic characteristics of the project. Concurrently solutions for mitigating the impacts were also proposed. The transmission line direction was considered, calculated and chosen in order to reduce the project construction cost as well as project's affection to the residential areas and environment, as followed:

- This transmission line was designed properly, as short as possible, so that the construction cost and appropriated land area were minimized.
- The transmission line tried to avoid residential areas by making steering angles. Although the increasing of the number of steering angles caused the construction cost increasing but it decreased the project's compensating cost and decreased the risk of late execution of the project.
- The transmission line was designed to run along existing roads in order to facilitate the transporting of building materials and operating management, as well as to mitigate the land areas which are utilized for the temporary executing way.
- The selection of transmission line was designed to avoid traversing zones of industrial plants, planted forests, natural forests; minimized impacts to the natural ecological environment.
- The selection of transmission line did not traverse or close to the important places such as: military zones, airports, bomb depots, radio transmitting-receiving stations, historical and cultural monuments, temples, pagodas, etc...
- The transmission line avoided going through the sloping sides in order to decrease the leveling quantity in project executing process.

For the substation, the oil collecting pit was designed to be able to hold whole oil of transformers. Transformers using oil-cooling, without PCBs, were also chosen.

In the technical survey stage and establishing executive technical design stage, the consulting agency has continued researching the investigated transmission lines carefully and has had timely adjustments in order to reduce the traversing households.

In this stage, in order to limit the affections on environment, the measures are:

- Planing and deploying executive process neatly and quickly in order to minimize the time of temporary land occupation.
- For short crop areas, the transmission lines construction should be deployed after harvests in order to reduce affections.
- Researching carefully alternatives of the construction of temporary roads in order to minimize impacts of the temporary roads.

Table 8: Environmental Management Plan during the Design Stage

Potential impact	Mitigating Measures	Expenses	Funding source	Implemented by	Supervised by
Impacts on ecological system: trees cutting, deforestation (natural and planted forests)	Select and design line routes to avoid traversing natural and planted forests; minimize cutting off trees that have economical or ecological values. The line routes should be verified by the local authority.	Including in the total cost for preparation of FS, RAP and EIA.	Investors	Consultant	SPPMU
PCB substance	Transformers use without PCB substance.			Consultant	SPPMU
Impacts on sensitive areas for exploitation	Design line routes is along existing roads (easy to transport materials), but avoid sensitive areas and have consensus with local authorities on mitigation measures.			Consultant	SPPMU, local authority
Impact on residential areas: line routes may traverse houses and other constructions and the noise from equipment may disturb local residents	Align line routes to avoid traversing houses and other structures.	Including in the total cost for preparation of FS, RAP and EIA	Investors	Consultant	
Safety from electricity shocks	Equipment using this project must comply the permitted noise level. Conductors are designed with the insulation type or cable.				
Fire caused by short circuits	Surge arrestors for over voltage wave protection. Lightning arrestor are designed and equipped.	Including in the total cost for preparation of FS, RAP and EIA		Consultant	
Impact on historical sites, reversed areas...	Designed line routes to avoid traversing these sites. Locations of the transmission line and substation were accepted by local authorities.				
Danger of mines	Check with the related authorities on the possibility of the left mines or bombs along the ROW.			Consultant	

1.2 In Construction Stage :

In this stage, the measures of executing organization must obey current regulations for executing works, safety regulations (wearing hat, gloves...). Besides, in the process of execution, the environmental impacts should be scrutinized in order to find measures which will limit negative environmental impacts. These measures include:

1.2.1 Constructing organization

Having the logical constructing arrangement alternative, neatly and quickly executing will reduce the temporary land-acquired time.

The executing as cutting trees clearing site, digging foundation, transporting equipment and materials, raising pole, stringing line, making temporary executing roads,... will definitely cause affections on the environment. Therefore, it needs to make particular reducing measures as follows:

Work of tree-cutting, ROW clearing: Minimize the affects of tree cutting work as possible. At the areas where soil erosion, may happen after cutting high tree in the ROW, other kinds of trees which do not have ability to grow higher than the permitted limitation must be remained in order to keep soil and exclude abilities of desertification.

Work of bomb, mine disarming: the first work which need to carried out before construction is work of bomb, mine disarming in the areas that the transmission line will traverse. Any carelessness in this work will cause the human life people's property and environment damages.

Basing on preliminary investigating data, there is no area that remains bombs, mines.

Work of construction of temporary road: work to define temporary road serving project's construction was considered carefully in design stage and decided before the construction is carried out. In order to reduce affection on environment, the following main mitigating measures will be carried out:

- To avoid forest areas, reserves, lake, pond ...
- To avoid causing land erosion,
- To carry out the compensation for crops, perennial in temporary or permanent appropriated land due to construct temporary road or serve the transmission line's operation.
- To get agreement with local authorities where the transmission line traverse.
- Constructing the temporary roads must be considered carefully; having the suitable drainage alternatives; avoiding of preventing natural stream flow in order to mitigate impacts of soil erosion when it forms new flows.

With temporary road only serving the executing process will be destroyed after the project finished in order to pay the initial actual state back. For the road which was used during operating management period will be controlled strictly.

Transporting materials and equipments: the transport of material and equipment must use special trucks. Means of transport must be checked load before using. Tie must be guarantee and obeying safety regulations of transportation.

Digging foundation and building tower: Digging foundation must obey strictly safety principles. The construction of foundation, pole is mainly carried out by handmade and thus, executive team should have measures of preventing crumbliness event when digging foundation.

In foundation-digging process, if there are water pipeline system, sewer, communicating cable or electric cable, executive team will report to responsible authorities for solving and fulfill strictly directions of management organization.

To carry out the safety measures during installing towers, bars, insulator, spreading wires, straining wires, splicing wires, taking sags, and other accessories installation must obey the regulations.

All equipment, construction devices must be checked on quality and quantity before using. Depending on parts of work, except in-charge agent, the work commander must choose a man who is in charge of safety monitoring. This man has duty to check producing devices, labor safety equipments and regularly remind workers in time of working.

Besides, in to reduce work of compensation for crops along the ROW, the works of conductor stringing, transport poles to install position are carried out after the harvest of crops and rice.

Tents for construction team: By the specification of line constructing, workers should locate temporary tents along with transmission lines. Construction team shouldn't live together local inhabitants in order to avoid making disturbance inhabitant's living. Thus, workers should choose location of placing tents at town or village centres for the convenient of food, drinking water and manpower supplement.

Health protection for workers in the time of project construction is carried out obeying particularly regulations of health service, food hygiene. Each independent working team will choose a staff having knowledge on health and ability to undertake medicine, prevent and cure common diseases and infection diseases via drinking water

1.2.2 Labour safety measures

Labour safety measures for the constructing and operating workers should be applied seriously according to Labour Safety Law of Vietnamese Government. It needs to pay attention to safety measures for constructing workers in:

- Work of bomb, mine disarming before executing the transmission lines.
- Transporting of materials and equipments.

- Work of digging and building foundation of towers .
- Installing of towers, bars, insulators.
- Work of spreading wires, straining wires, splicing wires, taking sags and installing other accessories .

Besides, sanitary condition, prevention and treatment infection diseases in the process of project's executing such as : malaria, typhoid fever, diarrhea, ... should be examined in order to have positive measures for restraining the affections on the health of workers.

1.2.3 Safety of fire, explosive

The constructing measures of the transmission line will not use explosive-causing methods but only primitive excavation. The substation will be equipped fire-explosive preventing devices.

Table 9: Environmental Management Plan during the Construction Stage

Potential impact	Mitigating Measures	Funding source	Expenses	Implement by	Supervise by
Transporting vehicle (dust, smoke, noise)	Covering canvas for trucks	Contractors	Included in the contracts	Contractor	Power Service Local Authority
Constructing area: - Noise affecting to inhabitant, animal and worker - Dust - Safety for vehicle and pedestrian out working time - Damaging crops, trees,...	- Operating equipment must have silencer. - No night works in the populated living quarter. - Watering the work area and material store when necessary. Using guard fence and warning boards. - Lighting warning boards.	Contractors Contractors Contractors	Included in the contracts Included in the contracts Included in the contracts	Contractor Contractor Contractor	Power Service Local Authority Power Service Local Authority Power Service Local Authority
- Damaging vegetable cover in ROW - Fire hazard - Safety from electricity shocks - Worker's safety	- Optimizing the timing of the construction, the construction works should start after harvest. - Managing the work area and land of the project, compensating damages. - Recovering the damaged areas by appropriate type of plant or tree. - Recovering the damaged cover by appropriate type of plant or grass. - No fire allowed for cooking in forest areas. - Safety engineer check before energizing the system. - Providing labor safety regulations and safety instrument for workers. - Take prevention measures for the transmission diseases, such as vaccination, mosquito's nets.	Contractors Contractors	Included in the contracts Included in the contracts	Contractor Contractor	Power Service Local Authority Power Service Local Authority
- Impacts on residential areas mine clearance.	- During the poles erection, no pole is allowed to be placed within the premises. - The house or structures remained under the lines need to be protected according to degree - Must be done before any construction activity if is possible bombs or mines remaining.	Contractors	Included in the contracts	Contractor	Power Service Local Authority
- Land occupation clearance in occupied land.	- Minimize land occupation and compensate in accordance with laws.				

1.3. In Operation Stage

1.3.1 Work of management, operation, repairing, and maintenance of the project

The repairing and operating management of the power network which belongs to project's scope includes: work of repair, regular maintenance and repair, timely surmounting faults of the transmission line and additional charge of the substation undertaken by Power Transmission Company No 4.

In order to reduce negative affections, limit types of network fault ensuring the power network to operate safely; in the process of operating management, operators must obey strictly and sufficiently regulations of safety measures when managing, operating and repairing the transmission line and the substation.

1.3.2 Management of the ROW

Power Transmission Companies will hold to control land which are in the ROW belongs to managing area; find out timely the violations of houses, trees which locate in the ROW; since then have the appropriate methods in order to prevent and treat timely.

Cutting trees which violate the ROW is carried out after inform the possessive organizations, local authorities, and individuals at least 10 days. It must remove quickly trees and branches which are cut out the ROW and the substation protecting scope. Forbid strictly taking advantage of safety protecting measures and repairing of power network in order to cut trees rashly.

1.3.3 With temporary road

Most of temporary roads for construction will be destroyed when the project is completed. Measures such as levelling, grass growing, and tree growing... will be carried out in order to restore the initial state again.

All above regulations are base of managing and mitigating measures to environmental impacts of the managing agencies.

Table 10: Environmental Management Plan during the Operation Stage

Potential impact	Mitigating Measures	Estimated cost	Funding source	Implement by	Supervise by
- Noise of transformers	- Using transformers having allowed noisy level		Operational costs	Provincial Power Service	SPPMU
- Firing or exploding transformer	- Installing fire fighting equipment at the danger area		Operational costs	Provincial Power Service	SPPMU
- Oil pollution from transformers	- Using transformers with no PCBs - Constructing oil collecting pit with a enough volume.		Operational costs	Provincial Power Service	SPPMU
- Impact on electricity	- Using suitable lighting equipment		Operational costs	Provincial Power Service	SPPMU
- Worker's safety	- Installing the protecting and measuring equipment, warning table, fence,...		Operational costs	Provincial Power Service	SPPMU
- Fire hazard	- Periodically check all the protection equipment, in house wiring connection.		Operational costs	Provincial Power Service	SPPMU
- Electric shock	- Training of one local person per commune - Distribute the handbook of the safety use of electricity - Periodically check and test the protection equipment - Place warning signs in appropriate places.		Operational costs	Provincial Power Service	SPPMU

2. Monitoring Plan

Environmental management plan includes mitigating measures, monitoring and institutions are applied during the project executing and operating process in order to eliminate negative impacts on environment and society, limit the impacts or keep them at acceptable levels. The plan also contains actions, necessary expenses in order to enforce these measures. The plan also shows summarily about responsibility of specialized and responsible agencies (Table 11).

3. Capacity Building

Environmental management is not a new work with the electricity area, but a good environmental management needs a good preparation, including a good capacity building. The training courses for the managing staffs on applying the environmental mitigating measures for environmental impacts and monitoring programs will be carried out.

The following trainings are necessary for this project:

- Workshop on Environmental Issue of the project: The main objectives of this workshop are to inform all implementing agencies of the project about the Environmental Issue of the project, safeguard policies of the Bank and relative regulations. This workshop will be conducted on September 2003 by SPPMU.
- Training Workshop on the Environmental Issue: conducted by international and national environmental specialists and SPPMU on November 2003. The objectives of the training are:
 - Legal documents on environment protection
 - WB stipulations on safeguard policies
 - Responsibilities and rights of state functional bodies in environment management
 - Identification of typical impacts of power transmission line projects and mitigation measures

Number of expected people take part in training course: 30 persons from: Project Management Units, Construction team, Contractors, local power branches and branches of power transmission companies, people committees and related parties. The training expenses are detailed in Table 12.

4. Implementation arrangement

a. Implementing responsibility:

The following agencies are responsible for preparation, implementation and management of the EMP of the project :

- **Electricity of Vietnam (EVN):** Project's investor, is responsible for implementing the project, including overall environmental management of the project, by functional boards and project management board. Department of Technology, Science, Environment and Telecommunication, belongs to EVN,

is in charge of guiding and supervising the implementation of EMP for the project.

- **Power Engineering and Consulting Company No. 3 (PECC3)** is an advisory agency, responsible for surveying, detailed designing for the project, preparing EIA and RAP reports, cooperating with SPPMB to organize the public consultation for the project.
- **Southern Power Project Management Board (SPPMB)** is an agency on behalf of the investor, responsible for implementing of the project including RAP and EMP:
 - Overall planning, management and monitoring of the environmental management
 - Ensuring that all environmental protection and mitigation measures of environmental impacts are carried out in accordance with policies, regulations on environment and other relevant laws.
 - Coordinating with provinces' people committees, provinces' power services, districts' people committees... in environmental management activities.
 - Being in charge of organizing training courses of local staff (provinces, districts) and contractors' teams on mitigation measures and safety methods (inviting professional expert on environment shall be included).
- **DOSTEs of provinces** are responsible for environmental management, participating in contributing ideas and approving content of the EIA; guiding and monitoring the EIA implementation at the province according to the approved plan.
- **People's committees of the provinces and districts:** are responsible for combining with PECC3 for discussing and adopting policies of RAP and setting up compensative unit prices, providing guidance and leading the coordination between sectors, departments in the EIA implementation. The communes within the Project's area will appoint staffs participating in the investigation and confirmation the effected data.
- **PAPs** have the right to join directly or elect their representative taking part in the RAP implementing process; answer requests as well as their aspirations in the investigative form.
- **Provincial site clearing board:** are responsible for consulting for the province about RAP and EIA.

implemented, problems encountered, actions taken to resolve environmental problems and results of environmental monitoring.

SPPMU will assign a staff to closely work with Contractors to record and report to SPPMU if there is any change or adjustment according to recommendation of the DOSTEs. This will be the case if environment conditions of the site clearance or construction included in project are not in accordance with environmental standards and regulations or if works are not performed according to technical specifications and contract requirements related to the environment.

During implementation of this Project, public has the right to participate either directly or indirectly which introduces the possibility to present its interests and opinion in process of decision making. In order to reach the best option during this process, state should enable for each individual to get appropriate knowledge connected with basic relation between nature and human health, activities with harmful influence on nature and importance resulting from it.

Public or each individual will be allowed to bring legal action at competent court if it considers that its claim for participation or information is ignored, groundlessly refused or provided information is inadequate.

Provincial site clearing board: are responsible for checking the data of effects and detail implementing plan due to district site clearing boards submitting for approval; guiding and monitoring the RAP implementation at the province according to the approved plan.

Table 11: Monitoring Plan

<i>What</i>	<i>Where</i>	<i>How</i>	<i>When</i>	<i>Cost</i>	<i>Source of fund</i>	<i>Implemented by</i>	<i>Supervised by</i>
Deforestation	Construction site	Inspection	During construction	0	Included in the contracts	SPPMU	Local Authority
Worker safety	Construction site	Inspection	During construction	0	Included in the contracts	Contractor	SPPMU
Soil erosion	In ROW	Compact the fill up, and plan grass on the feed of the poles	During Construction	0	Included in the contracts	Contractor	SPPMU
Land use	In ROW	Replace high tree by shorter trees	During the operation	0	Included in the compensation	PAH	Local Authority
1.Noise (100 samples x VND30,000/sample)	Construction sites	Accredited institution will be hired by Contractor	During construction phase	VND 3,000,000	Included in the Contract	Accredited institution will be hired by Contractor	SPPMU& local Department for Science, Technology & Environment (DOSTE)
2. Dust (100 sample x VND30,000/sample)	Construction sites	Accredited institution will be hired by Contractor	During construction phase	VND 3,000,000	Included in the Contract	Accredited institution will be hired by Contractor	DOSTE

<i>What</i>	<i>Where</i>	<i>How</i>	<i>When</i>	<i>Cost</i>	<i>Source of fund</i>	<i>Implemented by</i>	<i>Supervised by</i>
3. Tree cutting and soil erosion (200 man-days/year X VND100,000/manday x 25 years)	Along the lines	Accredited institution or Independent Consultant will be hired by Power Transmission Company No.4 (PTC4)	During operation phase	VND500,000,000	Production cost of PTC4	Accredited institution or Independent Consultant will be hired by PTC4	- DOSTE - EVN through PTC4
4. Electric field (100 sample x VND50,000 /sample x 25 years)	Along the lines	Accredited institution will be hired by PTC4		VND125,000,000	Production cost of PTC4		- DOSTE - EVN through PTC4
5.Noise (10 samples/year x VND30,000/sample x 25 years)	Surround the substation	Accredited institution or Independent Consultant will be hired by PTC4	During operation phase	VND 7,500,000	Production cost of PTC4	Accredited institution or Independent Consultant will be hired by PTC4	- DOSTE - EVN through PTC4
6. Waste water (10 samples/year x VND450,000/sample x 25 years)	Surface water source surround the substation	Accredited institution or Independent Consultant will be hired by PTC4	During operation phase	VND112,500,000	Production cost of PTC4	Accredited institution or Independent Consultant will be hired by PTC4	- DOSTE - EVN through PTC4
Subtotal 1-6				VND751,000,000			
TOTAL				(USD 50,066)			

Table. 12: Cost Estimation For Training Courses

No-	Item	No of participants (36)	Duration (5 days)	Cost (USD)
1	Accommodation for trainees			1229.24
2	Meal for trainees			1178.1
3	Local transformation fee for trainees			1313.46
4	Rental of lecture room			194.94
5	Rental of equipment			357.54
6	Translation of training the document into Vietnamese			282.38
7	Photocopy of the documents for trainees			135.72
8	Interpreter			390.33
9	Fee for project staff			146.62
10	Local transportation fee for project staff			131.90
11	Make the report			129.46
12	Communication			126.94
13	Stationary			132.67
	TOTAL			5749.30
				= VND 86,239,500 (in equivalent)

5. Estimated expense :

- Training expense (1) : VND 86,239,500
 - Expense for checking, monitoring and performing of environmental protecting measures in the constructing process (2) : VND 6,000,000
 - Annual expense for checking, monitoring and performing of environmental protecting measures (25 years) (3) : VND 745,000,000
 - Spare expenses = 10% (1+2+3) : VND 83,723,950
- Total expenses : VND 920,963,450**
- # USD 61,398**

CHAPTER 6

PUBLIC CONSULTATION AND INFORMATION DISSEMINATION

1 Aims of public consultation and information dissemination

The information dissemination as well as the collection ideas of PAP and related agencies are in order to decrease possibilities causing conflicts as well as to minimize late possibility of the project. Since then, it helps programs for the rehabilitating environmental situations; reducing totally environmental effects, satisfier the expectations of local inhabitants in other to mitigate negative impacts on environment and optimize the socio-economic profits by investing of the Project.

Purposes of public consultation and information dissemination are:

- To share completely purposes of the project, works, and negative impacts on environment as well as the preventing and mitigating measures for that effects
- To collect information of the project area's environment general and environmental problems interested by the local population community.
- To have the co-operation and contribution of the local inhabitants in discovering potential possibilities influence on the environment as well as monitoring activities of the project.
- To reduce the potential social conflicts.
- To reduce potential risks stagnated the Project.
- To create a comprehensive environmental managing plan for the project; thus to intensify extremely the socio-economic profits of the project.

Public consultation and information dissemination will be implemented during two stages, preparing stage and executing stage of the Project.

2 Public consultation and information dissemination in the project preparing stage

Project preparing stage includes works of transmission lines drawing, field measure and survey. Public consultation and information dissemination will be carried out in succession as follow:

Step 1: Announce and discuss to the local authority about the transmission line direction

After researching the map and surveying the location, the consultant drawn the preliminary transmission line directions on the map scaling 1/50,000 and sent them to the regions that transmission line traverses. Then, together the local land survey officers inspect these alternatives ensuring that the selected transmission lines direction will not effect to the planning structures of these regions.

Step 2: Investigating, statistic of impacts

Base on the transmission line directions was agreed, the investigators defined the transmission line direction, set up landmarks and concurrently inquired the number of households have land, agricultural produce that is effected by the transmission line in every commune. Socio-economic investigating reports of will be delivered to PAHs.

Step 3: Organizing the meeting to PAPs

After the investigations have finished, PECC3 and local authorities organized meetings with PAP and commune representatives. In this meeting, consultants and officials have informed to attenders about aim, scope, objectives of the Project; effects of the Project on cultivated land and crops; asking for their comments on the Project's potential impacts and proposed mitigations measures; and giving counsels about they should not build new structures within ROW.

Step 4: Consulting about EIA

Base on inquiring results, the consultants have prepared the preliminary EIA report and sent to EVN and WB in order to request opinions. All received opinions will be examined, and adjusted in order to submit to the related competent agencies approving.

Consulting meetings with attendance of PAP, non-Government organizations and the local authorities have arranged in order to get feedbacks and opinions for the EIA reports. The outcomes out these public consultation meeting were very positive interm of agreement of affected peoples in the proposed mitigation measures applied during different phases of the Project. In general, all of attendances have agreed on the mitigating measures proposed in EIA draft report.

Step 5: Approving EIA report

Base on received feedbacks, the consultants have adjusted the EIA report. The revised EIA report will be sent to WB, the People's Committee of related Provinces, DOSTE in order to approve and grant the certificate of environment. This is legal foundation for carrying out the EIA. The draft EIA report was sent to the Provincial People's Committees and Project Management Board from March to April, 2003 in order to disclosure to the public.

3 Public consultation & information dissemination in the project execution stage

Public consultation & information dissemination in the project execution period hold a important role because in this stage, the Project's influences on environment and community of local inhabitants are maximum. The following information should be popularized:

3.1 General information of the project

After loan contracts concluded and preparing in order to start the work; foremost, the Project Management Board will organize meetings with the People's Committee of related Provinces, Districts to announce the policies of the project.

3.2 Information of Compensation - Resettlement

Public consultation and information announcement campaigns about compensation - resettlement (RAP) must be implemented continuously according to information plans mentioned in RAP including information of resettlement document; delivering statistic form of damaged property, damaged crop; declaring cost of compensation; and announcing the schedule of the project to the inhabitant and the local authority levels.

3.3 Information of EIA

Parallel with information campaign of RAP mentioned above, an information campaign of preventing of environmental impacts is also carried out including:

Inform on local public communication means: the Project Management Board combines with the local authorities announce on newspapers and the local broadcasting station about information of the project as the implementing plan, the items, the environmental impacts on local residents and the mitigating measures,...

Brochure on environment: A brochure of the environmental effects and mitigating measures was prepared basing on the approved EIA report. This brochure was posted up at the main office of People's Committee of villages, districts that the transmission line traverses and be sent to the local organizations such as farmer club, women's club and all PAHs. The brochure was printed 150 ones. The brochure includes following information:

- To describe features of the Project (objective, items, implementing plan).
- To describe the Project's effects on the environment such as: impacts on population area, forests, effects of soil erosion, noise,...
- To describe the mitigating measures for the environment will be applied.
- Responsible agencies in the monitoring process on implementing the mitigating plans of environmental impacts.
- The process of complaint and the procedure for solving of occurred environmental problems of the Project.

Announcing to local Government about environmental impacts: The environmental impacts happen during the project's executing and operating process will be publicized in the conferences with the local authorities in order to find the overcoming solutions avoiding conflicts which could effect to the project schedule. The problems (if happened) will be solved in the monthly conferences with local authorities, project management board, contractors and the consultant.

CHAPTER 7

CONCLUSION

In general, the Thot Not – Chau Doc – Tinh Bien 220 kV transmission line and Chau Doc 220 kV Substation Project have chief environmental features as following:

- The topography of the transmission line and substation is not much differential. The transmission line is placed primarily along traffic roads, therefore advantaging for transporting executing material and operating they are advantages to transporting building material for executing and operating.
- The Project's execution will cause environmental impacts on area which line route goes through. Main effects are moving households belong ROW (189 houses are influenced). Most of them live out of influenced area; thus, they need to move new locations in the same land. Setting up new resettlement area is not necessary.
- Ecological features of Project's area: chiefly there are rice-fields (90%) and orchards, without forests or conservation areas. Along the line route there is not presence of scarce creatures which was noted in the list of protected book of the world. So, the Project doesn't affect creature resource.
- The transmission line and the substation not going through area of historic, cultural relic, military zone, and not cause affection on activities of airports.
- During the process of Project's construction, transporting building materials will cause dust and noise that will influence health of local inhabitants, but the effects are at low and short-term.
- During the process of operation, the Project doesn't almost produce wastes, noise and ensures local inhabitants safely.

Because of features above, we can assess that the influenced levels on environment of the project in construction and operation stage is negligible if the environmental management plan will be carried out completely.

The socio-economic profits of the project are very much, especially impulse the development of industrial and agricultural economy for provinces belong Mekong Delta and An Giang province. Therefore, implementing of the Project is extremely necessary, corresponds to the development demand of the country.

ANNEXES

Annex 3: STATISTIC ON LAND ACQUISITION OF THE PROJECT

No.	Acquiring State	Thot not District	Long Xuyen City	Chau Thanh District	Chau Phu District	Chau Doc Town	Tinh Bien District	Total
1	Permanent (m ²)	3,954.15	6,266.86	17,826.78	4,505.3	48,419.62	6,536.35	87,509
2	Temporary (m ²)	178,090	279,334	749,722	183,834	473,831	270,327	2,135,139

Annex 4: STATISTIC ON HOUSES, STRUCTURES AND FARM PRODUCE LAYING IN THE ROW

No.	Type	Thot Not District		Long Xuyen City		Chau Thanh District		Chau Phu District		Chau Doc Town		Tinh Bien District		Total	
		Amount	Area (m ²)	Amount	Area (m ²)	Amount	Area (m ²)	Amount	Area (m ²)	Amount	Area (m ²)	Amount	Area (m ²)	Amount	Area (m ²)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	Houses and structures for compensating and removing off the ROW														
	Type 1	4	181	2	48	10	401	11	465	2	44	5	85	34	1224
	Type 2	5	198	0	0	1	24	9	565	0	0	0	0	15	787
	Type 3	13	784	8	686	21	1498	43	3287	12	416	29	2152	126	8823
	Total:	22	1163	10	734	32	1923	63	4317	14	460	34	2237	175	10834
B	Strong houses located in the ROW (must connecting to ground for corrugated iron roofs)														
	Type 4	2	276	0	0	8	660	4	364	0	0	0	0	14	1300
C	Breeding facilities														
	0	0	0	0	0	2	175							2	175
D	Tree for compensating and cutting in order to clear the ROW														
	Coconut	45		38		43		24				43		193	
	Bamboo	40		54		76		55		28		21		274	
	Mango	195		66		63		30				58		412	
	Cork	50				30								80	
	Plum	90		15		22		5						132	
	Star apple	20		8		6								34	
	Eucalyptus	65		515		380		1148		102		585		2795	
	Poor tree	10		90				30		60		48		238	
	Small crab	15		45		100		162		25		18		365	
	Custard apple	40		3		24		60						127	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Dipper			10		95		30						135	
	Cherry			2										2	
	Palm					1						382		383	
	Silk cotton					28								28	
	Tamarin					1								1	
	Apricots					3								3	
	Burnt							60						60	
	Longan							7						7	
	Cajuput											25		25	
	Cashew											14		14	
	Apricot					7									
	Jack					6									
	Spawn											3		3	
	Total	570	0	846	0	885	0	1611	0	215	0	1197	0	5311	0
E	Farm produce: compensated at crop (can continue the cultivating in the ROW after the finished project)														
	Rice		258181		293847.4		214505		448736.2		416717				
	Corn				1020.8										
	Watermelon		1815												
	Banana	80		325		165		4700		80					
	Lemon	25													
	Total	105	259996	325	294868.2	165	214505	4700	448736.2	80	416717				

Annex 6: An Example of minute of meeting on public consultation

Content of meeting on public consultation at CanTho province on April 9th, 2003 and at AnGiang province on April 16th, 2003 is:

1. Content of public consultation:

- Objective of the project
- Socio-economic benefit of the project
- Scope of the project
- Possible environmental impact of the project
- Environmental impact mitigation measures
- Environmental management plan of the project
- Resettlement and compensation policy of the project

2. Inhabitant opinion:

- Approve implementing the project.
- Environmental impact of the project is inconsiderable excepting the land acquisition.
- Agree with environmental management plan and resettlement and compensation policy of the project.

BIÊN BẢN HỌP THAM VẤN CỘNG ĐỒNG

Nội Dung : Đóng góp ý kiến của các tham vấn về Báo cáo nghiên cứu khả thi (BCNCKT), Đánh giá tác động môi trường (EIA), Kế hoạch đền bù tái định cư (RAP) của Dự án Đường Dây 220kV Thốt Nốt - Châu Đốc - Tịnh Biên và trạm 220kV Châu Đốc

Hôm nay ngày 16 tháng 4 năm ...2003..

Tại Văn phòng

Chúng tôi gồm đại diện của các cơ quan, ban ngành, đoàn thể, tổ chức xã hội, nhân dân có tên trong danh sách đính kèm.

Sau khi nghe Đại diện của Công ty Tư vấn Xây dựng Điện 3 trình bày tóm tắt nội dung của dự án Đường Dây 220kV Thốt Nốt - Châu Đốc - Tịnh Biên và trạm 220kV Châu Đốc, chúng tôi có các ý kiến đóng góp như sau:

Ông Nguyễn Quốc Tuấn - PGT Sở Công nghiệp:

- + Lợi ích về kinh tế xã hội của dự án đối với sự phát triển của An Giang là rất lớn và đóng vai trò quan trọng.
- + Tỉnh hiện chưa có ĐD 220KV, hiện nay chỉ có đến 40KV do đó việc xây dựng ĐD sẽ có nhiều đóng góp chất lượng cung cấp điện cho AG.

Ông Ngô Thành Duyệt: GĐ ĐL An Giang

Lợi ích của dự án. Tăng cường liên lạc cho tỉnh AG và bắt đầu cho Campuchia.

Hiện nay 100% các xã đã có điện nên có thể có nhiều nhân dân ĐD này được xây dựng chủ yếu cho lợi ích thủ hoạch là bắt đầu cho Campuchia.

Đến lúc AG xin làm xong vấn đề này: Chúng tôi thì lâu đã đặt vấn đề xây dựng ĐD này trước khi đặt vấn đề bắt đầu cho Campuchia, do tốc độ phát triển công nghiệp của tỉnh rất nhanh. Trước đây hiện hiện đã đầy tải, nếu có sự cố, sửa chữa bảo dưỡng → tuyến hiện hiện sẽ không bảo đảm, vấn đề cắt đứt sẽ xảy ra và làm ảnh hưởng đến hoạt động sản xuất, kinh tế.

2. Nguyễn Phúc Hoàn - 100 UBND TX Châu Đức.

• Nhận tin về y kiến của Bà và về tình hình của xã hội, Bà đã có những suy nghĩ và hành động như sau:

- Bà nghĩ đến việc sinh sôi, phát triển của dân tộc, Bà đã nghĩ đến việc giáo dục cho trẻ em, Bà đã nghĩ đến việc xây dựng quê hương, Bà đã nghĩ đến việc bảo vệ môi trường.
- Bà đã nghĩ đến việc xây dựng quê hương, Bà đã nghĩ đến việc bảo vệ môi trường.
- Bà đã nghĩ đến việc xây dựng quê hương, Bà đã nghĩ đến việc bảo vệ môi trường.

3. Phạm Kim Phương: 100 UBND Huyện Vĩnh Bình.

• Trong một buổi họp, Bà đã nói về tình hình của xã hội, Bà đã nói về việc giáo dục cho trẻ em, Bà đã nói về việc xây dựng quê hương, Bà đã nói về việc bảo vệ môi trường.

- Bà đã nói về việc xây dựng quê hương, Bà đã nói về việc bảo vệ môi trường.
- Bà đã nói về việc xây dựng quê hương, Bà đã nói về việc bảo vệ môi trường.
- Bà đã nói về việc xây dựng quê hương, Bà đã nói về việc bảo vệ môi trường.

4. Ông Lê Hoàng Việt, P. Kinh tế H. Châu Đức.

• Ông Lê Hoàng Việt, P. Kinh tế H. Châu Đức, đã nói về tình hình của xã hội, Ông đã nói về việc giáo dục cho trẻ em, Ông đã nói về việc xây dựng quê hương, Ông đã nói về việc bảo vệ môi trường.

- Ông đã nói về việc xây dựng quê hương, Ông đã nói về việc bảo vệ môi trường.
- Ông đã nói về việc xây dựng quê hương, Ông đã nói về việc bảo vệ môi trường.
- Ông đã nói về việc xây dựng quê hương, Ông đã nói về việc bảo vệ môi trường.

- Đến từ đất đỏ đất đỏ và các PAP có > 25% đất bị cỏ hoang là ở nhà thì do quy đất cũ của địa phương ở cũ ⇒ Như lương
- ghép CT làm cũ viết từ để giải quyết
- Phải có ni + nhíp ở sau quố A và địa phương, không nhất nguyên từ đến từ để thực hiện trong bộ.

Đ. Nguyễn Mạnh Khánh - TP. Hồ Chí Minh

- Về các chú pháp lý

- Thông nhất về SV3: bộ công TĐ liên tịch 106 11/2002
- Về dịch tịch đất ở khu vực đất liền ⇒ bị tác ⇒ phải đứng bồi thường từ từ

- AB nhà: từ nhà cấp 3 ⇒ đến giờ xd mới

ép 2 > " thay thế" (= gđ từ cũ lại)

- Đi xuất: làm chủ tịch lập UBND của Tỉnh cho địa phương
- TV3 kết hợp với địa phương làm các công tác tuyên truyền,
- Về dịch phạm vi ảnh hưởng ngoài khu vực địa phương mới cho địa phương, địa phương nhà đất

Đ. Phạm Văn Dũng - Huyện Hòa Thọ Long Xuyên

- Về dịch phạm vi ảnh hưởng của địa phương
- Đến từ quá hóa mẫu pháp luật
- Nhà bị hạn chế quá từ vì dùng do nhà dân đứng đây ⇒
- Là ai mua, ⇒ đi nghỉ đến từ mua
- Đến nay có 4 bộ đang khiếu nại ở một đơn vị dân

Đ. Võ Thành Dũng + Đơn khiếu nại này do được duyệt cho TV3 và TV3 đã có 1b trả lời đi nghỉ xem lại

- Đ. Trương Văn Kỳ - TP. Hồ Chí Minh Việt Nam
- + TP. Hồ Chí Minh có vấn đề từ vì dùng ⇒ nhà ở địa phương trước giờ
- Đến từ từ đất đai có ni chính lịch và ni chính đang khiếu nại

D. Trần Văn Thanh Tâm - PTA Số KHCNMT

- + Thông nhất vì lợi ích chung của dân tộc
- + BICMFTA của TV's đã thực hiện rất tốt và đúng qui định của ~~Luật~~ Luật Môn bóng
- + Trình bày của TV's chưa làm ~~đ~~ phần rõ rệt:
- Về MĐ đã nêu đầy đủ nhưng tài liệu có thể có của đại ab và các báo pháp giao hình. Số KHCNMT và giao rất với thực hiện các báo pháp đã nêu.
- Về RAP: đã nêu rõ, đầy đủ các nội dung cần thiết
- + PBL đại ab cần thực hiện đúng với các nội dung nêu trên

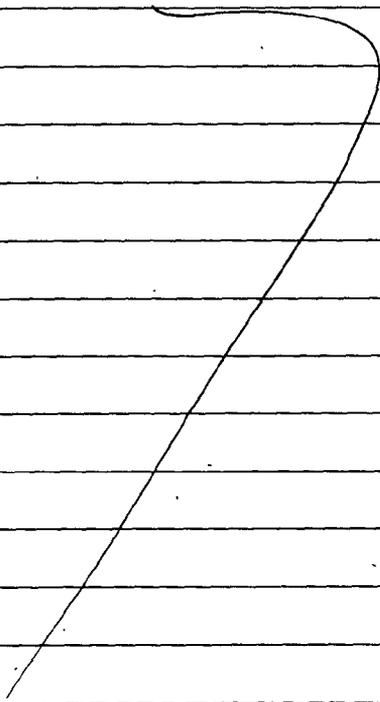
D. Phạm Văn Đạt: PET UBND MTR và HĐVT Thanh

- + Chung tôi về công nghệ số và thông nhất với bc
- + Về thực hiện: nhất ý với ý kiến vì nó phải hợp với địa phương
- + MTTI là làm nhiệm vụ vào đồng và thực hiện qui chế đặc thù tại địa phương
- + Khi thực hiện + đại ab báo cáo công có sẵn tài liệu này, phần đó \Rightarrow sẵn tài liệu báo cáo vào đồng, thuyết phục
- + Nhất trí hoàn toàn là làm điều kiện thuận lợi, HĐ UBND
- + Hợp này không thể báo cáo chất lượng đầu tiên
- + Chung tôi về phần hợp chất chủ yếu nhất đây, tuyên truyền vào đồng quốc gia

D. Nguyễn Văn Hùng - PET UBND Thủ Khoa Huân

- + Nhất trí cao với đại ab
- + Cần thông báo ai tài về khung pháp lý, giá cả, thời gian đến báo cáo địa phương kết quả vào đồng quốc gia
- + Cần kết hợp nghiên cứu CT \neq , do ở số ni thông báo với địa phương, e thông nhất giá đến mà cụ thể \Rightarrow khai thác khách sạn

8 Phan Hồng Đức - CT UBND xã Prims Hoa
+ Đón vị TV cần quan hệ với địa phương, có thông báo đầy đủ để ngăn chặn phát sinh khó giải quyết
+ Đề nghị cần nêu rõ báo cáo cho địa phương quản lý để biết tiêu phạm và xử lý.



Cuộc họp kết thúc vào lúc 9^h15 giờ cùng ngày.

Đại diện

Tổ chức, cá nhân tham vấn
PHÓ GIÁM ĐỐC



Nguyễn Quốc Tuấn

Đại diện

Cty Tư vấn XD Điện 3

TP. Mỹ Hòa & Mới Bình

Dương Thị Thanh Trúc

DANH SÁCH CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Đính kèm theo: Biên bản cuộc họp ngày 16 tháng 04 năm 2003

Tại ..Văn phòng Điện lực., Tỉnh An Giang

STT	Họ và Tên	Địa Chỉ	Chức Vụ	Ký Tên
01	Ngô Quốc Tuấn	Sở CN	P. (GD)	Tuấn
02	Đoàn Lý Nam	Thị trấn Trại Bùn	Chủ tịch Trại Bùn	Đoàn
03	Nguyễn Minh Khau	Sở Địa chất	Trưởng phòng KH	Minh Khau
04	Đỗ Hoàng Minh	Chi cục Dầu	Trưởng Phòng D	Hoàng Minh
5	plan diu Quốc Việt	Cơ Điện Trại Bùn	CN	Quốc Việt
6	Nguyễn Văn Sơ	CBS xã Vĩnh Mỹ		Nguyễn Văn Sơ
7	Huyệch Văn Thành	Chủ tịch xã Vĩnh Mỹ	Chủ tịch xã Vĩnh Mỹ	Thành
8	Nguyễn Văn Sinh Phương	xã Đoàn Vĩnh Mỹ		Nguyễn Văn Sinh Phương
9	Nguyễn Văn Tuấn	UBND xã Đoàn	P. UBND xã	Nguyễn Văn Tuấn
10	Nguyễn Văn Quốc Việt	xã Vĩnh Tế	CT xã	Quốc Việt
11	Phạm Văn Sĩ	phường Sĩ xã Đoàn	CB KH	Phạm Văn Sĩ
12	Lê Thị An Hòa	UBND An Hòa	PC ANH	Lê Thị An Hòa
13	Phạm Ngọc Toàn	xã Đoàn Bình Long	P. BTL	Phạm Ngọc Toàn
14	Nguyễn Văn Sĩ	L. Sĩ xã	CT. UBND xã	Nguyễn Văn Sĩ
15	Huyệch Văn Thành	xã Bình Long	CB	Huyệch Văn Thành
16	Huyệch Phương Nam	xã Vĩnh Tế	P. BTL	Huyệch Phương Nam
17	Nguyễn Văn Quốc Việt	xã Vĩnh Mỹ	CT. KT	Nguyễn Văn Quốc Việt
18	Trần Văn Sĩ	kh. Sĩ xã	CT. UBND	Trần Văn Sĩ
19	Phạm Văn Sĩ	U	CT, UBND xã	Phạm Văn Sĩ
20	Nguyễn Văn Sĩ	xã An Hòa	P. CT. UBND xã	Nguyễn Văn Sĩ
21	Nguyễn Văn Sĩ	thị trấn Trại Bùn	PC xã Trại Bùn	Nguyễn Văn Sĩ
22	Nguyễn Văn Sĩ	xã Mỹ Hòa	CT UBND xã	Nguyễn Văn Sĩ
23	Nguyễn Văn Sĩ	xã Mỹ Hòa	B. Trại Bùn	Nguyễn Văn Sĩ
24	Lê Văn Sĩ	P. Mỹ Hòa	P. BTL xã	Lê Văn Sĩ
25	Nguyễn Văn Sĩ	"	P. CT. UBND xã	Nguyễn Văn Sĩ
26	Phạm Văn Sĩ	xã Hòa Bình Thạnh	P. CT. UBND xã	Phạm Văn Sĩ
27	Nguyễn Văn Sĩ	Sở Xây Dựng TG	CP. CT. M	Nguyễn Văn Sĩ
28	Nguyễn Văn Sĩ	xã Mỹ Hòa	CT. UBND xã	Nguyễn Văn Sĩ
29	Nguyễn Văn Sĩ	phòng Kinh tế TP	CN	Nguyễn Văn Sĩ
30	Nguyễn Văn Sĩ	Thị trấn Trại Bùn	Chủ tịch Trại Bùn	Nguyễn Văn Sĩ
31	Hồ Văn Sĩ	phòng XD & PTNT chủ tịch	phó phòng	Hồ Văn Sĩ

DANH SÁCH CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Đính kèm theo: Biên bản cuộc họp ngày 16 tháng 04 năm 2003

Tại, Tỉnh: An Giang

STT	Họ Và Tên	Địa Chỉ	Chức Vụ	Ký Tên
32	Nguyễn Văn Sinh	UBND xã An Phú TB	Chủ tịch	<i>[Signature]</i>
33	Lê Văn Hùng	UBND xã Xuân An	Chủ tịch	<i>[Signature]</i>
34	Lê Văn Tâm	UBND xã Mỹ Hưng	CT xã	<i>[Signature]</i>
35	Trần Văn Thành	Phòng Kế TB	Trưởng phòng	<i>[Signature]</i>
36	Nguyễn Văn Năm	Phường AG	Phó liên	<i>[Signature]</i>
37	Nguyễn Văn Quyền	Phường AG	Trưởng phân xã	<i>[Signature]</i>
38	Nguyễn Văn Thọ	Huyện Bình Thạnh	CT HĐND xã	<i>[Signature]</i>
39	Nguyễn Văn Quý	Huyện Bình Thạnh	Phó xã đoàn	<i>[Signature]</i>
40	Nguyễn Văn Chất	Huyện Bình Thạnh	CT ủy nhiệm dịch	<i>[Signature]</i>
41	Nguyễn Văn Phát	Huyện Bình Thạnh	UBND xã	<i>[Signature]</i>
42	Hồ Đăng Chiến	UBND TPLX	Phó chủ tịch	<i>[Signature]</i>
43	Nguyễn Thanh Quang	Thành phố TPLX	CB thành phố	<i>[Signature]</i>
44	Phạm Xuân Hòa	UBND M. Thành	CT UBND	<i>[Signature]</i>
45	Lê Phú Lâm	UBND Mỹ Thới	PCI UBND	<i>[Signature]</i>
46	Lý Văn Cảnh	UBND, BV. Châu	CT UBND	<i>[Signature]</i>
47	Đinh Văn Minh	Huyện An Châu	Chủ tịch	<i>[Signature]</i>
48	Lê Văn Kiệt	Chợ TT. C		<i>[Signature]</i>
49	Công Văn Khoa	CC. B. Xã An Hòa	Chủ tịch	<i>[Signature]</i>
50	Lê Văn Hùng	CC. B. Xã Mỹ Tế	Chủ tịch	<i>[Signature]</i>
51	Lê Văn Sơn	Mỹ xã Mỹ Tế	Chủ tịch	<i>[Signature]</i>
52	Nguyễn Văn Khoa	Mỹ. Thới. TPLX		<i>[Signature]</i>
53	Nguyễn Văn Phương	UBND và BHL. H. Y		<i>[Signature]</i>
54	Phạm Văn Đình	Mỹ. Thới. TPLX		<i>[Signature]</i>
55	Nguyễn Văn Lâm	Mỹ. Thới. TPLX		<i>[Signature]</i>
56	Nguyễn Văn Tâm	Mỹ. Thới. TPLX		<i>[Signature]</i>
57	Nguyễn Văn Cảnh	Mỹ. Thới. TPLX	Chủ tịch	<i>[Signature]</i>
58	Lê Văn Hùng	Vĩnh. Thới. Trung. CP	Chủ tịch	<i>[Signature]</i>
59	Phạm Văn Khoa	Vĩnh. Thới. Trung. CP	Chủ tịch	<i>[Signature]</i>
60	Nguyễn Văn Cảnh	Vĩnh. Thới. Trung. CP	Phó. CT. M. T. Q. V. N	<i>[Signature]</i>
61	Huỳnh Văn Khoa	Vĩnh. Thới. Trung. CP	Phó chủ tịch	<i>[Signature]</i>
62	Nguyễn Văn Khoa	Vĩnh. Thới. Trung. CP	CB. C. T. Q. V. N	<i>[Signature]</i>

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc Lập - Tự Do - Hạnh Phúc

BIÊN BẢN HỌP THAM VẤN CỘNG ĐỒNG

Nội Dung : Đóng góp ý kiến của các tham vấn về Báo cáo nghiên cứu khả thi (BCNCKT), Đánh giá tác động môi trường (EIA), Kế hoạch đền bù tái định cư (RAP) của Dự án Đường Dây 220kV Thốt Nốt - Châu Đốc - Tỉnh Biên và trạm 220kV Châu Đốc

Hôm nay ngày 9 tháng 4 năm ...2009...

Tại Văn phòng Sở Công Nghiệp Tỉnh Cần Thơ

Chúng tôi gồm đại diện của các cơ quan, ban ngành, đoàn thể, tổ chức xã hội, nhân dân có tên trong danh sách đính kèm.

Sau khi nghe Đại diện của Công ty Tư vấn Xây dựng Điện 3 trình bày tóm tắt nội dung của dự án Đường Dây 220kV Thốt Nốt - Châu Đốc - Tỉnh Biên và trạm 220kV Châu Đốc, chúng tôi có các ý kiến đóng góp như sau:

- 1) Ông Huỳnh Công Văn phó Chủ tịch UBND xã Trung Nhứt
- Trong thời gian qua đã có những trường hợp chưa có tư vấn Công đồng hội thảo với nhân dân làm cho dân hiểu sai lệch về thông tin, về mục đích ý nghĩa của Công trình bị vậy cần phải có những cuộc phổ biến truyền truyền tới với dân.
- Việc khảo sát đo đạc cần phải chính xác hơn nữa cần phải có Chủ hộ tham gia để tránh kiện cáo.
- Cần niêm yết bản giá bồi hoàn cho dân biết rõ không thể mãi trong dân, đối với những nhà dân phải mất trắng cần phải bồi thường thêm để dân có thể đủ để tái định cư.
- 2) Ông Trình Thanh Bình phó Chủ tịch UBND xã Vĩnh Trinh
- Cần quan tâm và đặt quyền lợi của người dân lên trên hết
- Công tác vận động tuyên truyền phải thực hiện tới hơn 100% hoàn phải phù hợp để người dân yên tâm sinh sống
- 3) Ông Nguyễn Văn phép Cán bộ xã Thời Thuận
- Trong quá trình di dời hộ dân thì phải có chi phí

CỘNG HÒA

Cấp cho quyền sử dụng đất đai còn có thể thi hành có hơn vì
trí mới (kết ruộng sang thuở cũ)

- Cần xem xét hàng loạt đất đai khi hai hồ áp gia
cho đúng và xem xét vấn đề chôn lấp khi thi công
đô dân đô? như sau:

- Cần phổ biến về vấn đề an toàn với dân đô? dân đô?

Đưa vào

- Do đất khảo sát ban đầu cần chỉnh sửa lại

H) Ông Nguyễn Thành Dũng tại đơn thỉnh cầu đất

- Trong những năm qua việc lấn chiếm đất đai xây
nhà nhiều việc không đúng luật lệ nên những vấn đề

Cứ đồng chí phó chủ tịch xã tôi nêu trên giúp cho
chúng ta hiểu biết cái vấn đề có thể xây ra để tránh
vết ròi về sau

- Khi triển khai công trình này BALDA đã có hợp

tham vấn công đồng ở địa phương tuy nhiên khi bắt đầu
công tác phải làm hiệp hội tham vấn cư dân

- Việc chi? xem xét giải tỏa mặt phần cần mua là không
nên nên để lại một căn nhà trên ven

- Rút kinh nghiệm nhưng công trình đã qua các bước
Chuyến ngoại không thông qua địa phương nên chúng tôi

quyết cư thể? Các vấn đề phát sinh làm ảnh hưởng chung
đến công trình vì vậy nên làm kế hoạch chi tiết địa

phương để phối hợp giải quyết công việc tốt hơn là
cần thiết.

5) Ông Dương Điền Lực Cần TR.

- Mái quan hệ địa phương và trên vì chúng tôi
cần làm kết chặt chẽ chúng tôi trong quá trình

Xây lập đơn vị mà cả giải quyết quan hệ vấn
đề công trình

- Chú ý vấn đề giúp dân làm thủ tục đất đai, giảm thuế nông nghiệp - X-V

- Chú ý khi đến tư vấn kiểm kê cây đũa các loại cây cần trồng ND-54/CP (kể cả khi các loại cây này còn rất bé)

b) Riêng vấn đề môi trường sẽ có văn bản góp ý riêng của cơ quan ban ngành liên quan.

12/ 10/ 2011

Cuộc họp kết thúc vào lúc.....g.....giờ cùng ngày.

Đại diện
Tổ chức, cá nhân tham vấn
PHÓ GIÁM ĐỐC



Le Viet Dêm

Đại diện
Cty Tư vấn XD Điện 3

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Dặng Thị Khanh Bình

**ỦY BAN NHÂN DÂN
TỈNH CẦN THƠ**

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

Số: 1738 /UB
V/v thỏa thuận báo cáo kế hoạch
đền bù và đánh giá tác động môi
trường của đường dây 220KV
Thốt Nốt - Châu Đốc - Tịnh Biên

Cần Thơ, ngày 20 tháng 5 năm 2003

Kính gửi: Ban Quản lý dự án các công trình điện
Miền Nam

Phúc đáp Công văn số 0863/EVN-AMN-ĐB ngày 23/4/2003 của Ban Quản lý dự án các công trình điện Miền Nam V/v đề nghị có văn bản thỏa thuận về báo cáo kế hoạch đền bù và tái định cư (RAP) và đánh giá tác động môi trường (EIA) của đường dây 220 KV Thốt Nốt - Châu Đốc - Tịnh Biên. Sau khi nghiên cứu các báo cáo RAP và EIA do Công ty Tư vấn xây dựng điện 3 thực hiện và ý kiến đề xuất của các Sở, ban ngành của tỉnh có liên quan V/v xây dựng đường dây 220 KV Thốt Nốt - Châu Đốc - Tịnh Biên và trạm 220KV Châu Đốc, UBND tỉnh Cần Thơ thống nhất thoả thuận như sau:

1- Về hồ sơ Báo cáo kế hoạch đền bù và tái định cư (RAP):

Ủy ban nhân dân tỉnh Cần Thơ và các ban ngành có liên quan của tỉnh Cần Thơ thống nhất thỏa thuận các nội dung của (RAP) và cam kết thực hiện các chính sách của (RAP) để việc triển khai dự án nêu trên được thuận lợi.

2- Về hồ sơ Báo cáo đánh giá tác động môi trường (EIA):

Dự án xây dựng đường dây 220 KV Thốt Nốt - Châu Đốc - Tịnh Biên và trạm 220KV Châu Đốc của Ban Quản lý dự án các công trình điện Miền Nam không đi qua các vùng cấm, vùng đệm, khu di tích lịch sử.

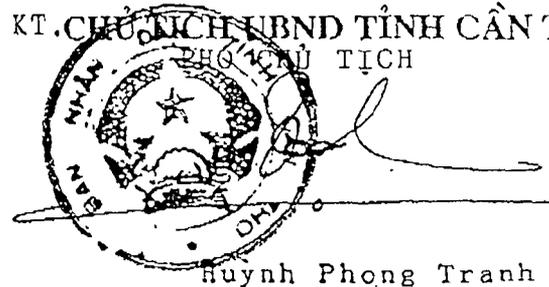
Đồng ý các biện pháp giảm thiểu tác động của môi trường trong giai đoạn thi công và quản lý vận hành dự án./.

Nơi nhận:

- Như trên
- Sở: KH CN&MT
- Cty Tư vấn XD điện 3
- Điện lực Cần Thơ
- UBND huyện Thốt Nốt
- VP.UBND tỉnh (2E, 4)
- Lưu TTLT

D:\CV\Điện\Đường dây 220KV
Thốt Nốt - Tịnh Biên

KT. CHỦ TỊCH UBND TỈNH CẦN THƠ



Huỳnh Phong Tranh

CITY TƯ VẤN XD ĐIỆN 3

CÔNG VĂN BẢN

Ngày: _____

Số: _____

**ỦY BAN NHÂN DÂN
TỈNH AN GIANG**

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

Số: 1183 /CV-UB

Long Xuyên, ngày 07 tháng 5 năm 2003

"Về ý kiến thỏa thuận về các báo cáo RAP, ELA dự án đường dây 220kV Thốt Nốt - Châu Đốc - Tỉnh Biên và trạm 220kV Châu Đốc"

Kính gửi: Ban QLDA các Công trình Điện Miền Nam

Phục đáp Văn bản số 0862/EVN-AMN-ĐB ngày 23/4/2003 của Ban QLDA các Công trình Điện Miền Nam về việc xin ý kiến thỏa thuận của địa phương về hồ sơ báo cáo đánh giá tác động môi trường (ELA) và kế hoạch đền bù tái định cư (RAP) của dự án dự án đường dây 220kV Thốt Nốt - Châu Đốc - Tỉnh Biên và trạm 220kV Châu Đốc, thuộc nguồn vốn vay Ngân hàng Thế giới (WB).

Sau khi nghiên cứu các báo cáo RAP và EIA do Công ty Tư vấn Xây dựng Điện 3 thực hiện và ý kiến đề xuất của các Sở, ngành tỉnh và các đơn vị có liên quan về việc xây dựng đường dây 220kV Thốt Nốt - Châu Đốc - Tỉnh Biên và trạm 220kV Châu Đốc tại Hội thảo Tham vấn được tổ chức ngày 16/4/2003 tại An Giang, Ủy ban nhân dân tỉnh An Giang có ý kiến như sau:

1. Về hồ sơ báo cáo đền bù tái định cư (RAP):

Tỉnh An Giang đã am hiểu và thỏa thuận các nội dung của RAP và cam kết phối hợp cùng với các chủ đầu tư triển khai thực hiện các chính sách của RAP để việc triển khai thực hiện dự án nêu trên được thuận lợi.

2. Về hồ sơ báo cáo đánh giá tác động môi trường (EIA):

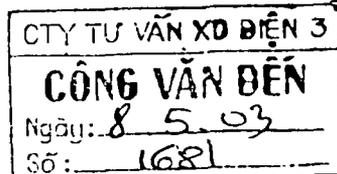
- Dự án dự án đường dây 220kV Thốt Nốt - Châu Đốc - Tỉnh Biên và trạm 220kV Châu Đốc của Ban QLDA các Công trình Điện Miền Nam không đi qua các vùng cấm, vùng đệm, khu di tích lịch sử.

- Đồng ý các biện pháp giảm thiểu tác động môi trường trong giai đoạn thi công và quản lý vận hành dự án nêu trên.

Ủy ban nhân dân tỉnh An Giang thông báo đến Ban QLDA các Công trình Điện Miền Nam được biết và tiến hành các bước tiếp theo theo quy định.

TM. ỦY BAN NHÂN DÂN TỈNH AN GIANG

KT. CHỦ TỊCH
PHÓ CHỦ TỊCH



Nơi nhận:

- Như trên
- Sở CN, Điện lực AG
- Phòng KT
- Lưu VP

UBND TỈNH CẦN THƠ
SỞ KHOA HỌC CÔNG NGHỆ
VÀ MÔI TRƯỜNG

Số: 59 /KHCMNT

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

Cần Thơ, ngày 6 tháng 05 năm 2003

PHIẾU XÁC NHẬN BẢN ĐĂNG KÝ ĐẠT TIÊU CHUẨN MÔI TRƯỜNG

Của dự án (cơ sở) **Ban quản lý dự án các công trình Điện Miền Nam.**
Địa chỉ: huyện Thốt Nốt, tỉnh Cần Thơ.

GIÁM ĐỐC SỞ KHOA HỌC, CÔNG NGHỆ & MÔI TRƯỜNG CẦN THƠ XÁC NHẬN

Điều 1: Dự án (cơ sở) **Ban quản lý dự án các công trình Điện Miền Nam**, đã trình nội dung bản đăng ký đạt tiêu chuẩn môi trường, ngày 23 tháng 04 năm 2003.

Điều 2: Chủ dự án có trách nhiệm thực hiện những nội dung đã được nêu trong bản đăng ký đạt tiêu chuẩn môi trường và các yêu cầu kèm theo.

Điều 3: Bản đăng ký đạt tiêu chuẩn môi trường của dự án là cơ sở để cơ quan quản lý Nhà nước về bảo vệ môi trường kiểm tra việc thực hiện bảo vệ môi trường của dự án.

Điều 4: Sau khi hoàn thành các hạng mục công trình về môi trường, chủ dự án (cơ sở) phải có báo cáo bằng văn bản gửi Cơ quan quản lý Nhà nước về bảo vệ môi trường để kiểm tra.

Điều 5: Sở Khoa học, Công nghệ & Môi trường sẽ kiểm tra đột xuất và định kỳ, nếu cơ sở không thực hiện đúng như cam kết trong bản đăng ký đạt tiêu chuẩn môi trường và các yêu cầu kèm theo thì sẽ thu hồi phiếu xác nhận đạt tiêu chuẩn môi trường.

Phiếu xác nhận này có giá trị 12 tháng kể từ ngày ký.

KT.GIÁM ĐỐC SỞ KHCMNT TỈNH CẦN THƠ

Nơi nhận:

- Chủ dự án (cơ sở)
- Lưu (bản sao)



PHÓ GIÁM ĐỐC

Bùi Minh Tạo