Resettlement Due Diligence Report

April 2015

VIE: Ha Noi and Ho Chi Minh City Power Grid Development Sector Project

Prepared by Electricity of Viet Nam – Ha Noi (EVN Ha Noi) for the Asian Development Bank.



April 2015

Vietnam: Vietnam: Hanoi and Hochiminh City Power Grid Development Sector Project

(EVN HANOI: Expansion of 110 kV Thuong Dinh Substation – E1.5)

Prepared by Electricity of Vietnam- Hanoi (EVN Hanoi) to the Asian Development Bank (ADB).

ABBREVIATIONS

ADB	:	Asian Development Bank	
AP	:	Affected people	
PMB	:	Project Management Board	
EVN	:	Electricity of Vietnam	
EVN Hanoi	:	Electricity of Vietnam- Hanoi	
EVNNPT	:	National Power Transmission Corporation	
GoV	:	Government of Vietnam	
DMS	:	Detailed Measurement Survey	
NPMB	:	Northern Power Project Management Board	
LURC	:	Land use right certificate	
PC	:	People's Committee	

ELECTRICAL TERMINOLOGY

kV (kilovolt) - 1,000 volts MW (Megawatt) - 1,000 kW MVA (Megavolt-ampere) - 1,000 kVA

Transmission System - 500 kV, 220 kV, 110 kV lines

Medium Voltage Distribution (MV) - 35 kV, 22 kV or 10 kV lines supplying distribution substations

Low Voltage Distribution (LV) - 400/230 V distribution and service lines

Load Factor - Ratio of average power demand to maximum power demand - Difference between energy delivered and energy sent out

REMARKS

In this report, "\$" refers to US dollars.

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1.0. SUMMARY

- 1. 110 kV Thuong Dinh Substation (SS) E1.5 is the existing SS located at Alley 282 Khuong Dinh Road, Thanh Xuan District, Hanoi. The 2,705.6 m² of land for the expansion of 110 kV Thuong Dinh SS is within the boundary of Thuong Dinh Warehouse under the management of the National Power Transmission Corporation (EVNNPT).
- 2. The expansion of 110 kV Thuong Dinh SS will cause impacts on a tennis court and a grade IV warehouse of EVNNPT.
- 3. The Project does not cause any physical or economic impacts on any households.
- 4. During the project preparation, Hanoi HPMB conducted consultations with Ha Dinh Ward PC and residents living near Thuong Dinh SS and Thuong Dinh Warehouse area to verify project impacts. It was determined that none of the residents will be affected by the project. As such, only a due diligence report has been prepared.
- 5. EVN issued the decision allocating land to EVN Hanoi to implement the Project in accordance with the Official Letter No. 3432/EVN-KH dated September 6 2013. Based on this EVN agrees to allot a part of Thuong Dinh Warehouse land area for the expansion of 110 kV Thuong Dinh SS.
- 6. 27 trees will be cut down and 160 m² of sport ground and 185 m² of a warehouse will be dismantled due to the SS expansion. No households are affected. For the affected land area and the trees that belong to NPPMB, Hanoi HPMB will agree internally with NPPMB on the compensation arrangements.
- 7. The total cost of compensation for affected trees and structures is estimated at VND 1,333,819,200 equivalent to USD 61,899.91 including 20% contingency cost. This cost is included in the total investment of the project.
- 8. The Project is expected to be implemented from May 2015 to May 2016.
- 9. In compliance with the ADB's 2009 SPS requirements, the land area for expansion of Thuong Dinh SS is under the management of EVN and thus does not cause any safeguard issue for households; a Resettlement Plan, therefore, is not required and has been substituted with this due diligence report.
- 10. As such, in order to ensure that the project impacts are well managed, a Due Diligence Document is prepared as a safeguard document of the Project.

2.0. INTRODUCTION TO THE PROJECT

2.1. Objectives of the Project

- 11. The 110 kV Thuong Dinh SS E1.5 is the existing SS located at Alley 282 Khuong Dinh Road, Thanh Xuan District, Hanoi. EVN Hanoi expects to expand Thuong Dinh SS E1.5 with the aims to:
 - Meet the growing loads of Thanh Xuan and Hoang Mai area, particularly supply power to a number of urban areas and shopping centers in the planning such as investment project on the land parcels 233, 233B and 235 Nguyen Trai, urban

functioning area at 74 Nguyen Trai and in the 2011-2015 period with consideration up to 2020, demand for power supply will be very high.

- Meet the "Master Plan for Power Development of Hanoi City for the 2011-2015 period with consideration up to 2020" approved by the Ministry of Industry and Trade according to the Decision No. 4351/QD-BCT dated August 29 2011.
- In line with the current operational status of 110 kV E1.5 SS.

2.2. Salient features of the 110 kV Thuong Dinh SS expansion subproject

- 12. The expansion of 110 kV Thuong Dinh SS is carried out within the boundary of Thuong Dinh Ward under the management of EVNNPT at Alley 282 Khuong Dinh Road, Ha Dinh Ward, Thanh Xuan District, Hanoi City. The expansion of Thuong Dinh SS is in line with the local planning and grid development map of Hanoi City.
- 13. 110 kV Thuong Dinh SS is located at Alley 282 Khuong Dinh Road, Ha Dinh Ward, Thanh Xuan District, Hanoi City. The geographical location is as follows:
 - The North borders Thuong Dinh Warehouse under the management of NPPMB-NPT;
 - The South borders the cemetery of Ha Dinh Ward and 110 kV outgoing feeders to 220 kV Ha Dong SS;
 - The East partly borders Thanh Xuan District Health Center and partly borders Alley 282 Khuong Dinh Road;
 - The West partly borders the cemetery of Ha Dinh Ward and partly borders garden land area.
- 14. Capacity and voltage level:

Voltage level : 110/22/6kV

• Capacity : 63/63/21 MVA

- 15. Main electrical diagram:
 - The 110 kV side: The SS expansion is design in H-shaped and located outside. This phase will install two incoming cubicles T4 and T5, one circuit breaker, and two 110 kV feeders.
 - The 22 kV side is designed within the distribution cubicles installed in house comprising 31 cubicles:
 - o 02 110 kV incoming cubicles;
 - o 02 auxiliary transformer cubicles;
 - o 02 power transformer cubicles;
 - o 01 bus coupler; and
 - o 24 22 kV outgoing feeders (including 02 capacitor cubicles).

- 16. The land acquisition area of the following components for the expansion of the SS is 2,705.6 m2.
 - Tower foundation, equipment support foundation: reinforced concrete
 - Tower: Hot dip galvanized steel tower
 - Bus bar, equipment support foundation: Hot dip galvanized steel tower
- 17. Access road outside the SS: non-reinforced concrete with seams at two sides.
- 18. The Control-Distribution house is arranged at the Southwest of the expanded SS with an area of (7.8 x 25.2) m²and two storeys: on the first floor is 22 kV distribution room, on the second floor are functional rooms (control room, working room, accumulator, storage room, toilet, etc.) with the arrangement of basement to install medium-voltage outgoing feeder cable. The main bearing structure is monolithic reinforced concrete, brick wall, reinforced concrete foundation, and fieldstonewall foundation.
- 19. Cable trench: use underground cable trench, the trench wall and bottom are made of reinforced concrete M150, the cover is made of in-situ reinforced concrete M200, inside the cable trench arranged steel and galvanized steel cable support racks.
- 20. Incident oil container: using 35 m³ container for mains transformer, submerged, in-situ reinforced concrete.
- 21. SS gate and fence: steel gate with rust inhibitive paint and wheels. Fence and fence foundation are made of brick.

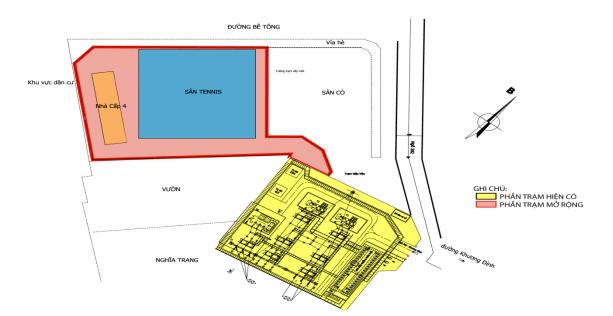


Figure 1. Location of Thuong Dinh Substation

- 22. The expanded area of 110 kV Thuong Dinh SS is built within the boundary of Thuong Dinh Warehouse under the management of NPT at Alley 282 Khuong Dinh Road, Ha Dinh Ward, Thanh Xuan District, Hanoi City.
- 23. The arrangement of the total area of 110 kV Thuong Dinh SS is based on the current status of the SS premise, equipment arrangement, and directions of the 110 kV and 220 kV connections as well as the traffic roads near the SS.
- 24. The land acquisition area for the expansion of the SS is 2,705.6 m². The total SS area is divided into three main parts including the 110 kV switch yard, operation and distribution house, and fire protection pump house.

• 110kV switch yard: 1,404.4m².

• Operation house: 196.6m².

• Foundation of the transformer: 183m².

• Internal road of the SS: 559m².

• Location of the capacitors: 32m².

• Firefighting water container and pump house: 84m².

• Wall fence and pavement: 246.6m²

- 25. 2.705.6 m² are permanently acquired for the expansion of the 110 kV Thuong Dinh SS within the boundary of the existing Thuong Dinh Warehouse. This infrastructure is under the management of EVNNPT and the unit directly manages Thuong Dinh Warehouse is NPPMB.
- 26. The existing Thuong Dinh Warehouse is used to store power equipment.
- 27. On the area that needs acquiring for the expansion of the 110 kV Thuong Dinh SS are a tennis court and a grade-IV storehouse.
- 28. The expansion of the SS also requires to cut down 27 trees of different kinds around the warehouse.
- 29. The Project does not cause any physical or economic impact on any household.

Table 1. Summary of scope of impacts

No.	Impacts	Organization	Unit	Quantity
1	Land under the land use rights of EVN	NPPMB	m ²	2,705.6
2	Warehouse	NPPMB	m ²	185
3	Sport ground	NPPMB	m ²	160
4	Trees	NPPMB	tree	27

3.0. PUBLIC CONSULTATION

- 30. During the project preparation stage, Hanoi HPMB conducted consultation with Ha Dinh Ward PC and local communities around Thuong Dinh SS and Thuong Dinh Warehouse. The consultation results show that:
 - The Thuong Dinh Warehouse is separated from the residential area because of the warehouse fence and next to the existing 110 kV Thuong Dinh SS;
 - There are no assets belonging to any households in the area planned for the subproject;
 - During the construction period, if any damage is caused to any facilities along the existing access road, this will be repaired.

Summary of the consultation minutes is presented at Annex 2.

- 31. The land allocation for EVN Hanoi to implement the Project is based on the following decisions:
 - Official Letter No. 1524/SCT-QLDN dated May 4 2013 by Hanoi Department of Industry and Trade approving the consistency with the Power Development Plan of the expansion of the 110 kV Thuong Dinh SS.
 - ii. Official Letter No. 2721/EVN HANOI-X09 dated June 25 2013 by EVN Hanoi to EVN reporting about the Project and asking for instructions concerning land use under the management of NPT to serve the expansion of 110 kV Thuong Dinh SS.
 - iii. Resolution No. 17/NQ-HDTV dated January 13 2014 by EVN approving the conversion of use purpose of a part of Thuong Dinh Warehouse land for the expansion of 110 kV Thuong Dinh SS.
 - iv. Official Letter No. 1817/QHKT-P7 dated May 16 2014 by Hanoi Department of Planning and Architecture to Hanoi City PC on the expansion of 110 kV Thuong Dinh SS in line with the approved Master Plan of Hanoi City and Power Development Plan.
 - v. Official Letter No. 3965/UBND-CT dated June 4 2014 by Hanoi City PC approving and allowing EVN Hanoi expanding 110 kV Thuong Dinh SS.
 - vi. Document No. 5527/TTr-QHKT-P7 dated December 15 2014 by Department of Planning and Architecture approving the adjustment of detailed planning of the area for the expansion of 110 kV Thuong Dinh SS at Ha Dinh Ward, Thanh Xuan District, Hanoi.
- vii. Official Letter No. 3432/EVN-KH dated September 6 2013 by EVN agreeing to hand over a part of land area of Thuong Dinh Warehouse for the expansion of 110 kV Thuong Dinh SS.

Summary of the relevant decisions are presented at Annex 1.

4.0. NEGOTIATION ON COMPENSATION FOR AFFECTED STRUCTURES

32. As for the sport ground and 500m² of the warehouse to be demolished for the expansion of the SS, Hanoi HPMB and NPPMB will agree internally on the compensation procedure.

5.0. BUDGET AND IMPLEMENTATION SCHEDULE

- 33. The costs for compensation for the affected items due to the expansion of the 110 kV SS are estimated in accordance with the compensation provisions of Hanoi City PC. These costs will be included in the total investment of the Project. EVN Hanoi/PMB is responsible for transferring this budget to NPPMB.
- 34. It is estimated that the total compensation for affected structure is VND 1,333,819,200 equivalent to USD 61,899.91 (contingency cost is included). This budget is included in the project total investment.

Table 2. Costs of land lease and site return

No.	Affected assets	Owner	Component	Unit	Quantit y	In amount (VND)
1	Land lease rent	0		0		0
2	Compensation for affected structures	NPPMB	SS site	m ²		1,109,791,000
3	Compensation for affected trees	NPPMB	SS site	tree	27	1,725,000
	Contingency cost			%	20	222,303,200
						1,333,819,200
	Total					61,899.91 (USD)

Exchange rate: 1\$ = 21,150 VND

35. It is expected that the duration for expansion of the 110 kV Thuong Dinh SS is one year. Details are shown in the Table 3 below.

Table 3. Implementations schedule

No.	Activities	Timeframe
1	Handing over demarcation of boundaries on map and on site (handing over site)	Sept 2014
2	Organizing public consultation	Mar 2015
3	Preparing Resettlement Due Diligence Document (RDDD) and submitting to the PMB for review and approval	April 2015
4	ADB approving RDDD.	May 2015
5	Commencement of civil works	May 2015
6	Completion of civil works	May 2016

36. EVN Hanoi will inform ADB about all project activities during the project implementation process through internal monitoring reports including quarterly report, six-month report and annual report.

Annex1. Summary of decisions related to the expansion of 110 kV Thuong Dinh SS-E1.5

Document	Issued by	Main contents
Official Letter No. 1524/SCT- QLDN dated May 4 2013	Department of Industry and Trade – Hanoi City PC	Based on the Power Development Plan of Hanoi City for the 2011-2015 period with consideration up to 2020 approved by the Department of Industry and Trade at the Decision No. 4351/QD-BCT dated August 29 2011. The Department of Industry and Trade has the following opinions: The expansion of 110 kV Thuong Dinh SS- E1.5 subproject by EVN-HANOI has the location at Thanh Xuan District, Hanoi with the total capacity after expansion of 4MBAx63MVA-110/22 kV. The implementation schedule: 2013-2014. The expansion of 110 kV Thuong Dinh SS is in line with the approved Power Development Plan of Hanoi City.
Official Letter No. 2721/EVN HANOI-X09 dated June 25 2013	EVN Hanoi, EVN	To form the basis for the implementation of the subproject, EVN Hanoi informs and asks for instruction from EVN concerning the use of land area under the management of NPT to serve the expansion of 110 kV Thuong Dinh SS-E1.5 (The 110 kV side: installing two 110 kV feeders connecting to 220 kV Thanh Cong SS (E1.11); installing 02 transformers 63MVA-110/22 kV. After improvement and expansion, the SS will operate with four transformers T1, T2, T4, and T5 (110 kV-63MVA, Transformer T3 110kV-25 MVA will be taken back); The 22 kV side: building 22 kV distribution house with 24 22 kV cubicles to supply the loads of Thanh Xuan District and neighboring area). The expansion area is about 2,350 m ² .
Official Letter No. 3432/EVN- KH dated September 6 2013	EVN	The EVN agrees with the request from EVN HANOI and issued the Document No. 2696/EVN-KH dated July 16 2013 concerning the "use of a part of area for EVN Hanoi to implement the expansion of 110 kV Thuong Dinh SS- E1.5". Request EVN Hanoi, based on the design of the subproject, to cooperate with EVNNPT to identify and prepare the minute on handing over the boundary on site for the implementation of the subproject, ensuring the following requirements: (i) sufficient area for the implementation of the subproject, about 2,500 m²; (ii) reasonable so that EVNNPT can efficiently use the remaining area. EVN Hanoi to promptly contact the Steering Committee 09 of Hanoi City to present the necessity and urgency of the project for the agencies of Hanoi City to support and approve the proposal of EVN Hanoi and request of the EVN.
Resolution No. 17/NQ-HDTV dated January 13 2014	EVN	The Board of Member approves the conversion of land use purpose of a part of Thuong Dinh Warehouse area under the management of EVNNPT for EVN Hanoi to implement the "Expansion of 110 kV Thuong Dinh SS E1.5" subproject to ensure power supply to Thanh Xuan District and neighboring area in accordance with the Power Development Plan of Hanoi City approved by Ministry of Industry and Trade. Assign the General Director to instruct EVN Hanoi to cooperate with

		EVNNPT to work with the concerned agencies of Hanoi City PC. To approve the plan to use a part of Thuong Dinh Warehouse area, agreed by EVN and Steering Committee 09 of Hanoi City (Public Property Management Bureau-Ministry of Finance), to carry out the procedures for the expansion of 110 kV Thuong Dinh SS E1.5.
Official Letter No. 1817/QHKT- P7 dated May 16 2014	Department of Planning and Architecture – Hanoi City PC	Based on the Master Plan of Hanoi City up to 2013 and vision up to 2050, detailed planning of Thanh Xuan District, Power Development Plan of Hanoi City for the 2011-2015 period with consideration up to 2020, Official Letter No. 2692/EVN-KH dated July 16 2013 by EVN reporting the rearrangement of 25 houses and land of EVN in the area of Hanoi City; Official Letter No. 1014/UBND-QLDT dated September 30 2013 by Thanh Xuan DPC informing the planning of land area surrounding 110 kV Thuong Dinh SS; and other relevant documents. Hanoi Department of Planning and Architecture has the following opinions: the expansion of 110 kV Thuong Dinh SS is in line with the Master Plan of Hanoi City and approved Power Development Plan, the expected area for expansion is within the boundary of existing Thuong Dinh Warehouse under the management of NPPMB-EVNNPT, and thus, considering planning, the expansion is approved. The Department requests the Hanoi City PC to approve the expansion plan of Thuong Dinh SS as proposed by EVN Hanoi.
		After the approval of the City PC, the following activities need carrying out: following the procedure to revise the detailed planning of Thanh Xuan District from industrial and warehouse land to infrastructure land. The adjustment will be updated and linked to the Urban Area H2-3 Planning submitting to City PC for approval. The location, boundary and site of the expanded SS should be in line with the architectural landscape of the area and the safety distance to the existing structures in compliance with the prevailing regulations.
		Approve the plan for expanding the 110 kV Thuong Dinh SS as proposed by EVN Hanoi. Hanoi City PC requests that:
Official Letter No. 3965/UBND-CT	Hanoi City	- Following the procedures to revise the detailed planning of Thanh Xuan District from the industrial and warehouse land to infrastructure land.
dated June 4 2014		- The location, boundary and site of the expanded SS should be in line with the architectural landscape of the area and the safety distance to the existing structures in compliance with the prevailing regulations.
Document No. 5527/TTr- QHKT-P7 dated December 15 2014	Department of Planning and Architecture- Hanoi City PC	The adjustment of the detailed planning of the planning parcel No. 30 from industrial and warehouse land to infrastructure land to serve the expansion of 110 kV Thuong Dinh SS is in line with the power supply plan in accordance with the Master Plan of Hanoi City and Power Development Plan of Hanoi. Thanh Xuan DPC has received the opinions of the residential area of ha Dinh Ward concerning the expansion of 110 kV Thuong Dinh SS, the result shows that 100%

support the project. The Department of Planning and Architecture realizes that the adjustment of planning ensured the consistence with the architectural landscape and infrastructure system in the area and compliance with the regulations of Urban Planning Law.

Revised content:Adjust the detailed planning of the land parcel for the expansion of 110 kV Thuong Dinh SS at Ha Dinh Ward, Thanh Xuan District.

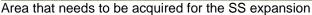
Location and boundary: The land parcel is at Ha Dinh Ward, Thanh Xuan District.

Scale: the total area is about 2,705.6m².

Revised plan: a part of the area is converted from industrial and warehouse land to infrastructure land (SS).

Annex 2. Some pictures of public consultation and Thuong Dinh SS





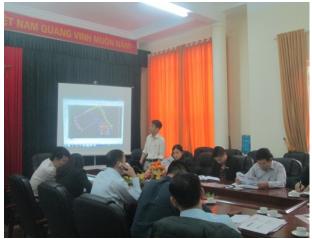


Tennis court and warehouse to be affected



Equipment in Thuong Dinh Warehouse

Hanoi and Hochiminh City Power Grid Development Sector Project Resettlement Due Diligence Document of 110 kV Thuong Dinh SS Expansion- E1.5





Public consultation held at Ha Dinh Ward

Annex 3. Public consultation on environmental and social safeguards

Participants	Feedback
Ward PC leadersRepresentatives of the ward	- The use of the warehouse land of NPT is reasonable as it avoids land acquisition and impacts on households, and thus speeds up the project implementation progress.
agenciesRepresentatives of the mass organizationsResidential group leaders	- The SS is located at Alley 282 Khuong Dinh Road, which will cause some difficulties during construction as the alley is narrow with dense population. Thus, it is important to arrange traffic reasonably to avoid obstructions to the traffic as well as impacts on residents as it is the only road to the SS.
• Some households near the SS	- Although the Project does not cause any impact on land as well as assets of the households in the ward, we are concerned that the transportation of materials and equipment to serve the construction will damage the existing alley 282. Therefore, prior to the civil works, the project owner needs to work with the Ward PC and the residential groups to identify the current status of the alley and commit to return the road if any impact and damage is caused.
	- The return of the road if it is damaged is necessary; however, it is noted that small damages can be repaired later; however, serious damages such as big potholes, damages to manhole covers, or construction to the drainage system or traffic and environmental pollution must be repaired immediately to avoid unexpected incidents.

Annex 4. Cost estimates of compensation for affected structures

No.	Items	Unit	Quantity/ Area	Rates	In amount (VND)
1	Warehouse	m ²	185	2,242,000	414,770,000
2	Sheet metal roof	m ²	35	395,000	13,825,000
3	Brick floor	m ²	160	180,000	28,800,000
4	Brick cement floor	m ²	230	205,000	47,150,000
5	Concrete yard		950	259,000	246,050,000
6	Fence made of iron net B40 (150m, 4m high)		600	250,000	150,000,000
7 Brick wall (65m, 2m high)		m ²	130	1,078,000	140,140,000
8	Brick wall (8m, 4m high)	m ²	32	1,078,000	34,496,000
9	9 Sewerage made of brick with reinforced concrete cover		60	576,000	34,560,000
Total					1,109,791,000

Annex 5. Cost estimates of compensation for affected trees

No.	Туре	Unit	Quantity	Rates	In amount (VND)
1	Jackfruit D=10 cm	Tree	1	150,000	150,000
2	Longan D=10 cm	Tree	1	300,000	300,000
3	Lemon D=3cm	Tree	2	40,000	80,000
4	Crape myrtle D=80 cm	Tree	2	200,000	400,000
5	Milk flower tree D=60 cm	Tree	1	200,000	200,000
7	Papaya	Tree	5	50,000	250,000
8	Banana trees with banana	Tree	6	35,000	210,000
9	Banana trees without banana	Tree	9	15,000	135,000
	Total		27		1,725,000