

DECISION No. 95/2001/QĐ-TTg OF JUNE 22, 2001 RATIFYING THE PLANNING ON VIETNAM ELECTRICITY DEVELOPMENT IN THE 2001-2010 PERIOD, WITH THE PROSPECT TOWARD 2020 TAKEN INTO ACCOUNT

THE PRIME MINISTER

*Pursuant to the Law on Organization of the Government of September 30, 1992;**At the proposal of Vietnam Electricity Corporation (Official Dispatch No.149 EVN/HDQT-KH of June 21, 2000); considering the State Evaluation Council's opinions on investment projects (Official Dispatch No.95/TĐNN of November 24, 2000), and opinions of the relevant ministries and branches regarding the ratification of the planning on Vietnam electricity development in the 2001-2010 period, with the prospect toward 2020 taken into account,*

DECIDES:

Article 1.- To ratify the planning on Vietnam electricity development in the 2001-2010 period, with the prospect toward 2020 taken into account (called Electricity Planning V for short) with the following major contents:

1. On the demand for load:

To firmly develop, raise the quality of, and fully satisfy the demand for, load in service of people's daily life as well as socio-economic development, security and defense; to meet the requirements of national industrialization and modernization. The power plants throughout the country are expected to produce between 45 and 50 billion kWh, by the end of 2005, 70 -80 billion kWh by 2010 and 160-200 billion kWh by 2020.

2. On the development of power sources:

a/ The development of power sources must satisfy the above-said load demand, ensuring the safe, qualitative, stable, efficient and rational supply of electricity for socio-economic development. To fully exploit energy sources with economic efficiency such as hydroelectric power, gas-fired thermal power, coal-fired thermal power and oil-fired thermal power, as well as new forms of energy..., in combination with the step-by-step reasonable exchange of electricity with regional countries. To give priority to the building of hydroelectric power plants with integrated benefits such as flood fighting, water supply, electricity production. To develop small-sized hydroelectric power plants, wind power, solar power...in areas far from power grids as well as mountain, border and island regions.

b/ The balance of power sources must take into account projects on the construction with intensive investment and technological renovation of the currently operating plants; meet the environmental standards and use modern technologies for the new power plants.

- To combine power sources invested in forms of independent power plants (IPP), BOT power plants or joint ventures and exchange electricity with the neighboring countries... in order to supply electricity for each region and the whole electric system.

- To ensure that the total capacity of foreign-invested projects in forms of BOT, IPP or joint ventures... account for not more than 20% of the system's maximum capacity.

c/ Power sources must be structured in compatibility with the practical situation and fuel sources, ensuring the system's exploitation efficacy and characteristics of each locality so as to take initiative in the supply of electricity based on the requirements of socio-economic development and people's daily life in the dry and rainy seasons, including the years when hydroelectric power plants fall short of water as well as the high-demand and low-demand hours, thereby ensuring enough water sources for agriculture and flood fighting when necessary.

d/ To boost the power source projects according to the set plan and schedule (see the list in Appendix 1 to this Decision).

The capacity, location and time for the construction of power source projects shall be decided by the competent authorities when approving the feasibility study report of each specific project.

3. On the development of power grids:

a/ To build power grids of from high tension to low tension synchronously with power sources. To overcome the current state of unsafe, obsolete, patchy and high-loss power grids.

b/ The competence to decide investment in power grid development projects is prescribed as follows:

- The competence to decide investment in power transmission lines and transformer stations shall comply with the general provisions of the Regulation on Investment and Construction Management (the Government's Decree No.52/1999/ND-CP of July 8, 1999 and Decree No.12/2000/ND-CP of May 5, 2000). For projects with investment decided by branches and localities, the electricity branch's agreement is required.

- Projects on transformer stations and power transmission lines of 110 kV or under shall be decided by the Managing Board of the Vietnam Electricity Corporation in accordance with this Decision.

- For power grid development projects for the years after 2010, the Ministry of Industry shall coordinate with branches and localities in directing Vietnam Electricity Corporation to specify them according to the planning and plans before submitting them to the Prime Minister for consideration and decision.

c/ The power grid development projects shall comply with the list in Appendix 2 to this Decision.

4. On the supply of electricity for rural and mountainous areas:

a/ The Ministry of Industry shall coordinate with the concerned branches and localities in directing Vietnam Electricity Corporation to continue implementing the Prime Minister's Decision No.22/1999/QĐ-TTg of February 13, 1999 ratifying the project on rural electricity and Decision

No.294/QĐ-TTg of April 7, 2000 ratifying investment in the project on rural energy according to the set plan and schedule.

b/ The Ministry of Industry shall coordinate with branches and localities in elaborating a plan on the supply of electricity for deep-lying, remote, border and island areas, proposing mechanisms and policies for effective implementation, and submit it to the Prime Minister for consideration and decision. The plan must classify areas to be supplied with electricity from the national electricity system and areas to be supplied with on-the-spot electricity from diesel, wind or solar power source, from small-sized hydroelectric power plants or geothermal sources... For the areas to be supplied with electricity from the national electricity system, where, however, the on-spot power sources can be developed efficiently, such sources should be considered for development.

5. On investment capital sources:

a/ The Vietnam Electricity Corporation shall play a key role in supplying electricity for socio-economic development and people's daily life. It may mobilize all capital sources for investment in power source and grid projects according to mechanism of self-borrowing and self-repaying (borrowing ODA capital, credit capital inside and outside the country, borrowing export credit from equipment suppliers and capital for equipment procurement to be repaid with commodities...) and continue observing the mechanism whereby the central bodies, localities, State and people jointly develop rural power grids.

b/ To encourage domestic and foreign investors to take part in building power source and power distribution projects in the investment forms of independent power plants (IPP), build-operate-transfer (BOT) contracts, build-transfer (BT) contracts, build-transfer-operate (BTO) contracts, joint ventures or joint stock companies...

6. On financial mechanism:

a/ To allow the Vietnam Electricity Corporation to retain the annual capital use levy, which constitutes a source of State budget capital allocated for investment in building power projects.

b/ To carry out plan on the rational adjustment of electricity prices from now to 2005.

7. On the renovation of managerial organization and raising of the electricity branch's operation efficiency:

a/ The Vietnam Electricity Corporation shall continue restructuring its organization, reforming administrative procedures and dividing responsibility for investment decision with a view to raising the production and business efficiency to meet the requirements of electricity development in the coming period.

b/ The Vietnam Electricity Corporation shall invest in boosting the domestic manufacture of electric equipment, first of all focusing on the manufacture of complete equipment for medium- and low-voltage grids, then proceeding to manufacture complete equipment for 110-220 kV grids, gradually reducing the volume of equipment imported from overseas.

c/ The Ministry of Industry, branches and localities shall enhance the State management and draw up specific regulations according to their respective competence so that different economic sectors may take part in electricity investment and business to meet the country's increasing demand.

Article 2.- Tasks of the concerned ministries, branches and localities and The Vietnam Electricity Corporation:

1. The Ministry of Planning and Investment:

To coordinate with the concerned ministries, branches and localities in studying and submitting to the Prime Minister for consideration and decision:

- The national strategy and policy on energy.

- The planning on the rational exploitation and combined use of the country's rivers and other energy sources.

2. The Ministry of Industry:

a/ To direct the electricity branch to implement Electricity Planning V according to the set plan and schedule. To direct the Vietnam Electricity Corporation to work out a plan on organizational restructure in line with the branch development planning in the next 10 years before submitting it to the Prime Minister for approval.

b/ To regularly evaluate and update the demand for load and fuel for electricity production so as to work out a program on rational development of power sources and grids to meet the whole country's demand after 2005. In case of big changes in the demand for load and capability of supplying fuel sources for electricity production, the Ministry should take initiative in calculating and promptly adjusting Electricity Planning V and submit it to the Prime Minister for approval.

c/ To assume the prime responsibility and coordinate with the concerned ministries and branches in promptly promulgating legal documents related to the electricity branch's activities; finalizing the Bill on Electricity so as to report it to the Government for submission to the National Assembly for promulgation according to the set plan.

d/ To assume the prime responsibility and coordinate with the Ministry of Science, Technology and Environment, the Ministry of Construction and the Ministry of Planning and Investment in further materializing the program on the electricity "demand-supply management" (DSM), which puts forth incentive policies in combination with propagation, education, inspection and supervision... for the effective implementation of the DSM program.

e/ To assume the prime responsibility and coordinate with the Ministry of Science, Technology and Environment and concerned agencies in finalizing the pre-feasibility study report for the nuclear power plant project, and submit it to the Prime Minister for consideration and approval.

f/ To assume the prime responsibility and coordinate with the ministries and branches in directing the exchange of electricity with neighboring countries and Vietnam's participation in the electricity system linking countries in Mekong river basin.

g/ To assume the prime responsibility and coordinate with the concerned ministries and branches in organizing the study and perfection of the method of elaborating electricity planning for the following period along the direction of optimizing technologies and renovating the long-term plan elaboration work in service of the adjustment and elaboration of the electricity branch development planning in the coming period.

h/ To direct the Vietnam Electricity Corporation to work out the hydroelectric cascade planning; guide economic sectors to take part in the

investment and business of small and medium hydroelectric power projects. Cases falling beyond its competence shall be reported to the Prime Minister for consideration and decision.

i/ To assume the prime responsibility and coordinate with the concerned ministries, branches and localities in directing the exchange of electricity with neighboring countries and Vietnam's participation in the electricity system linking countries in the Mekong river basin.

3. The Vietnam Electricity Corporation:

a/ To take the prime responsibility for ensuring the stable, safe and sustainable supply of electricity for socio-economic development and people's daily life.

b/ To implement solutions to reduce electricity loss to around 10% by 2010; raise the capacity and increase the number of operation hours of power plants; control the load so as to raise the business efficiency; realize the program on saving electricity in production and consumption, saving investment capital right in the Corporation and the entire society for the sustainable development of the electricity branch.

Article 3.- The Minister of Industry, the heads of the concerned ministries and branches and the presidents of the People's Committees of the provinces and centrally-run cities, the Managing Board and the general director of Vietnam Electricity Corporation shall have to implement this Decision.

Prime Minister
PHAN VAN KHAI

APPENDIX I

PROGRAM ON POWER SOURCE DEVELOPMENT IN THE 2001-2010 PERIOD, WITH THE PROSPECT TOWARD 2020 TAKEN INTO ACCOUNT

(Issued together with the Prime Minister's Decision No.95/2001/QĐ-TTg of June 22, 2001)

I. POWER SOURCES EXPECTED TO OPERATE IN THE 2001-2005 PERIOD

Names of plants Capacity (MW) Years of completion

a/ Power sources managed by the Vietnam Electricity Corporation:

1. Phu My 1 (mixed gas turbines) 1,090 MW 2001
2. Pha Lai 2 (coal-fired thermal power plant) 600 MW 2001
3. Ialy hydroelectric power plant (2 remaining units) 360 MW (720 MW) 2001
4. Ham Thuan- Da Mi hydroelectric power plant 475 MW 2001
5. Steam drum 306-2 Ba Ria 56 MW 2002
6. Phu My 2- 1 (Steam drum) 143 MW 2003
7. Phu My 4 (mixed gas turbines) 450 MW 2002-2003
8. Expanded Phu My 2-1 (Steam drum) 140 MW 2003
9. Expanded Uong Bi (coal-fired thermal power plant) 300 MW 2004-2005
10. O Mon (Oil-gas) 600 MW 2004-2005
11. Dai Ninh (hydroelectric power plant) 300 MW 2005
12. Rao Quan 70 MW 2005

b/ BOT power sources:

1. Can Don (hydroelectric power plant) 72 MW 2003
2. Phu My 3 720 MW 2003-2004
3. Phu My 2-2 * 720 MW 2004

c/ IPP power sources:

1. Na Duong (coal) 100 MW 2003-2004
2. Cao Ngan (coal) 100 MW 2003-2004
3. Ca Mau (mixed gas turbines) 720 MW 2005-2006
4. Cam Pha thermoelectric power plant (coal) 300 MW 2004-2005

Note: * Where the negotiation on Phu My 2-2 contract fails, the Vietnam Electricity Corporation shall look for capital sources to build the plant.

II. POWER SOURCES EXPECTED TO OPERATE IN THE 2006-2010 PERIOD

Names of plants Capacity (MW) Years of operation and completion

a/ Hydroelectric power sources:

1. Cua Dat 120 MW 2006-2007
2. Se San 3 273 MW 2006-2007
3. Na Hang (Dai Thi) 300 MW 2006
4. A Vuong 1 170 MW 2007-2008
5. Plei Krong 120 MW 2007-2008
6. Ban Mai (Ban La line) 260 MW 2008-2009
7. Dong Nai 3 & 4 510 MW 2008-2009
8. An Khe + Ka Nak 155 MW 2008-2010
9. Buon Kuop 280 MW 2008-2010
10. Ba Ha river 200 MW 2008-2010
11. Tranh river 2 200 MW 2008-2010
12. Son La (to be built according to the Xth National Assembly's resolution at its 9th session).

b/ Thermoelectric power sources for which the feasibility study reports shall be elaborated for submission and approval:

1. Hai Phong thermoelectric power plant (coal) 600 MW 2006-2008
2. Lang Bang thermoelectric power plant (coal) 300 MW 2008-2010
3. Southern gas-fired thermal power plant
(location depends on gas source) 1,200 MW 2007-2010
4. Thai Binh gas-fired thermal power plant - The capacity shall depend on the gas source's capacity 2007-2008

c/ Electricity exchange with Laos and Cambodia:

The capacity and time of exchange shall depend on the negotiation process.

d/ Geothermal and wind power: The study of these forms of energy shall depend on the potentials of localities.

III. ORIENTATIONS FOR POWER SOURCES TO OPERATE IN THE 2011-2020 PERIOD

a/ On hydroelectricity:

- To supplement the planning on hydroelectric power system on the main rivers, to proceed with the elaboration of pre-feasibility and feasibility study reports for projects with high efficiency so as to submit them for ratification according to current regulations.
- To actively make all-round preparations for the building of Son La hydroelectric power plant according to the prescribed contents; the construction scope and time shall be decided by the Prime Minister upon approval of the project's feasibility study report.
- To study a number of hydroelectric power storage projects for future use.

b/ On thermoelectric power sources:

To prepare investment in projects based on the capacity of fuel sources (gas, coal, oil...) so as to define locations in Cuu Long river delta, northern provinces and coastal region for submission and approval.

c/ On nuclear power:

The Ministry of Industry shall assume the prime responsibility and coordinate with the Ministry of Science, Technology and Environment in finalizing an overall report on the development of nuclear power in Vietnam, to be submitted to the Prime Minister for consideration in 2001-2002.

APPENDIX II

PROGRAM ON POWER GRID DEVELOPMENT IN THE 2001-2010 PERIOD, WITH THE PROSPECT TOWARD 2020 TAKEN INTO ACCOUNT

(Issued together with the Prime Minister's Decision No. 95/2001/QĐ-TTg of June 22, 2001)

I.1. 500 KV POWER LINES

No.	Names of projects	Number of circuits x km	Operation years
1. The 2001-2005 period			
1	Pleicu - Phu Lam (circuit 2)	1 x 547	2002

2	Pleicu - Dung Quat - Da Nang	1 x 280	2003 - 2004
3	Phu My - Nha Be	2 x 49	2002
4	Nha Be - Phu Lam	1 x 16	2002
5	Nha Be - O Mon	1 x 180	2004 - 2005
6	Ca Mau - O Mon	2 x 150	2005

2. Expectation for the 2006 - 2010 period

1	Nho Quan - Thuong Tin	1 x 75	2006 - 2010
2	Feeder to Nho Quan station of 500 KV	2 x 30	2006 - 2010
3	Phu Lam - O Mon	1 x 170	2006 - 2010
4	Ha Tinh - Nho Quan	1 x 260	2006 - 2010
5	Ha Tinh - Da Nang	1 x 390	2006 - 2010
6	Feeder to Dong Nai 3 & 4	2 x 20	2006 - 2010

3. Orientation for the 2011 - 2020 period

1	Hoa Binh - Son La	1 x 180	2011 - 2020
2	Son La - Nho Quan	1 x 240	"
3	Son La - Soc Son	2 x 200	"
4	Soc Son - Trang Bach	1 x 95	"
5	Trang Bach - Thuong Tin	1 x 110	"
6	Feeder to Quang Tri - Quang Tri	2 x 5	"

7	Phu My - Bien Hoa	1 x 40	"
8	Bien Hoa - Tan Dinh	1 x 30	"
9	Feeder to Hoc Mon - Hoc Mon	2 x 10	"
10	Bien Hoa - Thu Duc	2 x 20	"
11	Nuclear power - Phu My	1 x 160	"
12	Nha Trang - Nuclear power - Di Linh	1 x 160	"
13	Nuclear power - Bien Hoa	2 x 170	"

I.2. 500 KV TRANSFORMER STATIONS

No.	Names of projects	Number of transformers x MVA	Capacity - MVA	Operation years
1. The 2001 - 2005 period				
1	Ha Tinh	1 x 450	450	2002
2	Da Nang	1 x 450	450	2004
3	Di Linh	1 x 450	450	2005
4	O Mon	1 x 450	450	2005
5	Tan Dinh	1 x 450	450	2004 - 2005
6	Nha Be	2 x 600	1,200	2002
7	Phu My	1 x 450	450	2002
2. Expectation for the 2006 - 2010 period				
1	Nho Quan	1 x 450	450	2006 - 2010

2	Thuong Tin	1 x 450	450	2006 - 2010 (Transformer 2)
3	Tan Dinh	1 x 450	450	2006 - 2010
4	Ca Mau	1 x 450	450	2006 - 2010
5	Dung Quat	1 x 450	450	2006 - 2010

3. Orientation for the 2011 -2020 period

1	Son La	1 x 450	450	2011 - 2020
2	Soc Son	2 x 1000	2,000	"
3	Trang Bach	1 x 450	450	"
4	Viet Tri	2 x 450	900	"
5	Hoc Mon	2 x 750	1,500	"
6	Bien Hoa	2 x 450	900	"
7	Nha Trang	1 x 450	450	"
8	Thanh Hoa	1 x 450	450	"
9	Thu Duc	2 x 600	1,200	"

II. PROJECTS ON 220 KV POWER GRIDS

II. 1. 220 KV TRANSFORMER STATIONS

1. The 2001 - 2005 period				
No.	Names of projects	Number of transformers x MVA	Capacity (MVA)	Operation years
Northern provinces				

1	Mai Dong	2 x 250	500	2001 - 2002	Replacement of transformers
2	Soc Son	2 x 125	250	2001 - 2005	
3	Bac Giang	1 x 125	125	2001	
4	Pho Noi	2 x 125	250	2001 - 2005	
5	Trang Bach	1 x 125	125	2001	
6	Quang Ninh	1 x 125	250	2001-2005	
7	Vat Cach	1 x 125	125	2001	
8	Viet Tri	2 x 125	250	2001 - 2005	
9	Ha Tinh	1 x 125	125	2002	
10	Thai Binh	1 x 125	125	2002	
11	Dinh Vu	1 x 125	125	2004 - 2005	
12	Bac Ninh	1 x 125	125	2004 - 2005	
13	Xuan Mai	1 x 125	125	2002	
14	Nam Dinh	1 x 125	125	2002 - 2003	Second transformer
15	Uong Bi	1 x 125	125	2004 - 2005	
16	Yen Bai	1 x 125	125	2004 - 2005	

17	Nghi Son	1 x 125	125	2002	
18	Thai Nguyen	1 x 125	125	2002 - 2005	Second transformer
Central provinces					
1	Hoa Khanh	2 x 125	250	2001 - 2005	
2	Hue	1 x 125	125	2001	
3	Dung Quat	2 x 63	126	2001 - 2005	
4	Quy Nhon	1 x 125	125	2002 - 2003	Second transformer
5	Krong Buk	1 x 125	125	2002	"
6	Nha Trang	1 x 125	125	2003	"
Southern provinces					
1	Long Binh	1 x 125	250	2001	Replacement of transformers
2	Long Thanh	2 x 125	500	2001 - 2005	
3	Binh Chuan (Bien Hoa)	2 x 250	500	2001 - 2005	
4	Bao Loc	1 x 125	125	2001	
5	Phu Lam	2 x 250	500	2001 - 2002	Replacement of transformers
6	Thu Duc	2 x 175	350	2002	

7	Tao Dan	2 x 250	500	2002 - 2005	
8	Cat Lai	2 x 250	500	2002 - 2003	
9	South of Sai Gon	1 x 250	250	2004 - 2005	
10	Ba Ria	1 x 125	125	2002 - 2003	
11	Vung Tau	1 x 125	125	2002 - 2003	
12	Tan Dinh	1 x 250	250	2004 - 2005	
13	Dai Ninh	1 x 63	63	2005	
14	Vinh Long	2 x 125	250	2002 - 2003	
15	Thot Not	2 x 125	250	2002 - 2003	
16	Kien Luong	1 x 125	125	2002 - 2003	
17	My Tho	1 x 125	125	2003 - 2004	
18	Ham Thuan	1 x 63	63	2001	
19	Bac Lieu	1 x 125	125	2002	
20	Chau Doc	1 x 125	125	2003-2004	
21	Tan Rai	2 x 125	250	2005	Aluminum treatment
22	Tri An	1 x 63	63	2004 -	Second

				2005	transformer
<p align="center">2. Projects designed for the 2006 - 2010 period</p> <p align="center">Northern provinces</p>					
1	Yen Phu	1 x 250	250	2006 - 2010	Second transformer
2	Trang Bach	1 x 125	125	"	Second transformer
3	Bac Giang	1 x 125	125	"	Second transformer
4	Thai Binh	1 x 125	125	"	
5	Van Tri	1 x 250	250	"	
6	Hai Duong	1 x 125	125	"	
7	Dinh Vu	1 x 125	125	"	Second transformer
8	Vat Cach	1 x 125	125	"	Second transformer
9	Hai Phong thermoelectric power plant	2 x 125	250	??	
10	Dong Hoa	2 x 250	500	"	Replacement of transformers
11	Quang Ninh thermoelectric power plant	2 x 125	250	??	
12	Son Tay	1 x 125	125	??	
13	Xuan Mai	1 x 125	125	"	Second transformer

14	Phu Ly	1 x 125	125	❖❖	
15	Nghi Son	1 x 125	125	❖❖	Second transformer
Central provinces					
1	Hue	1 x 125	125	2006 - 2010	Second transformer
2	Tam Ky	1 x 125	125	2006 - 2010	
3	Dung Quat industrial park	1 x 250	250	2006 - 2010	
4	Tuy Hoa	1 x 125	125	2006 - 2010	
5	Krong Buk	1 x 125	125	2006 - 2010	Replacement of transformers
Southern provinces					
1	South of Sai Gon	1 x 125	250	2006 - 2010	Second transformer
2	Hoa Xa	2 x 250	500	2006 - 2010	
3	Tan Binh	2 x 250	500	2006 - 2010	
4	Song May	1 x 125	125	2006 - 2010	
5	Nhon Trach	1 x 125	125	2006 - 2010	
6	Vung Tau	1 x 125	125	2006 - 2010	Second transformer

7	My Tho	1 x 125	125	2006 - 2010	Second transformer
8	Long An	2 x 125	250	2006 - 2010	
9	Ben Tre	1 x 125	125	2006 - 2010	
10	Cao Lanh	1 x 125	125	2006 - 2010	
11	Kien Luong	1 x 125	125	2006 - 2010	Second transformer
12	Ca Mau	1 x 125	125	2006 - 2010	
13	Soc Trang	1 x 125	125	2006 - 2010	
14	Phan Thiet	1 x 125	125	2006 - 2010	
15	Trang Bang	1 x 250	250	2006 - 2010	
16	Chau Doc	1 x 125	125	2006 - 2010	Second transformer

3. Projects designed for the 2011 - 2020 period

Northern provinces

1	Dong Anh	2 x 250	500	2011-2020	
2	Dong Trieu	2 x 125	250	2011-2020	
3	Do Son	2 x 125	250	2011-2020	
4	Bim Son	2 x 125	250	2011-2020	

5	Cai Lan	2 x 250	500	2011-2020	
6	Cua Ong	2 x 125	250	2011-2020	
7	Hung Yen	2 x 125	250	2011-2020	
8	Hoa Lac	2 x 125	250	2011-2020	
9	Lao Cai	2 x 125	250	2011-2020	
10	Lang Son	2 x 125	250	2011-2020	
11	Luu Xa	2 x 125	250	2011-2020	
12	Phu Tho	2 x 125	250	2011-2020	
13	Quynh Luu	2 x 125	250	2011-2020	
14	Son La	2 x 125	250	2011-2020	
15	Son Tay	2 x 125	250	2011-2020	
16	Sai Dong	2 x 250	500	2011-2020	
17	Thach Khe	2 x 250	500	2011-2020	
18	Trinh Xuyen	2 x 125	250	2011-2020	

19	Trang Bach	2 x 125	250	2011-2020	
20	Tuyen Quang	2 x 125	250	2011-2020	
		2 x 125			
21	Vinh Phuc	2 x 125	250	2011-2020	
22	Vung Ang	2 x 125	250	2011-2020	
Central provinces					
1	Cam Ranh	2 x 125	250	2011-2020	
2	Dong Ha	2 x 125	250	2011-2020	
3	Ba Don	2 x 125	250	2011-2020	
4	Dung Quat industrial park	2 x 250	500	2011-2020	
5	Doc Soi	2 x 125	250	2011-2020	
6	Kon Tum	2 x 125	250	2011-2020	
7	Quang Nam	2 x 125	250	2011-2020	
Southern provinces					
1	Da Lat	2 x 125	250	2011-2020	
2	Duc Trong	2 x 125	250	2011-2020	

3	An Phuoc	2 x 125	250	2011-2020	
4	An Phuoc	2 x 125	250	2011-2020	
5	Binh Chanh	2 x 250	500	2011-2020	
6	Binh Long	2 x 125	250	2011-2020	
7	Binh Phuoc	2 x 125	250	2011-2020	
8	Song Be industrial park	2 x 125	250	2011-2020	
9	Long Xuyen	2 x 125	250	2011-2020	
10	Nhon Trach	2 x 125	250	2011-2020	
11	Sa Dec	2 x 125	250	2011-2020	
12	Soc Trang	2 x 125	250	2011-2020	
13	Song May	2 x 125	250	2011-2020	
14	Tan Dinh	2 x 250	500	2011-2020	
15	Tan Binh	2 x 250	500	2011-2020	
16	Tay Ninh	2 x 125	250	2011-2020	
17	Tam Phuoc	2 x 125	250	2011-2020	

18	Thap Cham	2 x 125	250	2011-2020	
19	Thu Duc Bac	2 x 250	500	2011-2020	
20	Tra Vinh	2 x 125	250	2011-2020	
21	Xuan Loc	2 x 125	250	2011-2020	

II.2. 220 KV POWER LINES

No.	Names of projects	Number of circuits x km	Operation years	Notes
1. Projects to be operating and completed in the years of 2001 to 2005 Northern provinces				
1	Nam Dinh - Thai Binh	1 x 30	2002	2-circuit poles
2	Thai Binh - Hai Phong	1 x 45	2002	"
3	Bac Giang - Thai Nguyen	1 x 55	2003 - 2004	
4	Viet Tri - Son La	1 x 160	2003 - 2004	Temporary operation of 110 kV power lines
5	Dong Hoa - Dinh Vu	2 x 17	2004 - 2005	
6	Viet Tri - Yen Bai	1 x 75	2004 - 2005	
7	Feeder to Ha Tinh station	2 x 7	2002	
8	Uong Bi - Trang Bach	2 x 19	2004 - 2005	

Central provinces				
1	Hoa Khanh - Hue	2 x 80	2001	
2	Da Nhim - Nha Trang	1 x 140	2003 - 2004	
Southern provinces				
1	Phu My - Cat Lai	2 x 35	2001	Cables + DZK
2	Cat Lai - Thu Duc	2 x 10	2002	Cables + DZK
3	Nha Be - Tao Dan	2 x 10	2002 - 2003	
4	Ba Ria - Vung Tau	2 x 15	2002 - 2003	
5	Dai Ninh - Di Linh	2 x 39	2005	
6	Rach Gia - Bac Lieu	1 x 105	2002	
7	Tan Dinh - Binh Chuan	2 x 18	2002 - 2004	
8	Nha Be ➡ South of Sai Gon	2 x 7	2004 - 2005	
9	Thu Duc - Hoc Mon	1 x 16	2002 - 2003	Circuit 2
10	Long Binh - Thu Duc	1 x 16	2002 - 2003	"
11	My Tho - Ben Tre	1 x 25	2002	Temporary operation of 110 kV power lines
12	Thot Not-Chau Doc-Tinh Bien	1 x 96	2003	
13	Joint to O Mon power plant	2 x 15	2004	
14	O Mon - Thot Not	2 x 28	2004	
15	Bao Loc - Tan Rai	2 x 20	2005	Designed to be

				made of aluminum
<p align="center">2. Projects designed for the 2006 - 2010 period</p> <p align="center">Northern provinces</p>				
1	Dai Thi - Yen Bai	2 x 160	2006 - 2010	
2	Feeder to Nho Quan station	2 x 5	"	
3	Hai Phong thermoelectric power plant- Dinh Vu	2 x 17	"	
4	Hai Phong thermoelectric power plant - Vat Cach	2 x 19	"	
5	Feeder to Hai Duong - Hai Duong	2 x 15	"	
6	Ha Tinh - Thach Khe	2 x 9	"	
7	Van Tri - Soc Son	2 x 25	"	
8	Van Tri - Chem	2 x 10	"	
9	Mai Dong - Yen Phu	2 x 8	"	Circuit 2
10	Vinh - Ha Tinh	1 x 50	"	
11	Ban La - Vinh	2 x 110	"	
12	Lang Bang thermoelectric power plant - Hoanh Bo	2 x 15	"	
13	Lang Bang thermoelectric power plant - Cam Pha thermoelectric power plant	2 x 30	"	
14	Thai Binh thermoelectric power plant - Thai Binh	2 x 20	"	

Central provinces

1	Dung Quat - Dung Quat steel	2 x 9	2006 - 2010	
2	Ha Song Ba - Tuy Hoa	2 x 40	"	
3	Quy Nhon - Tuy Hoa	1 x 95	"	
4	Tuy Hoa - Nha Trang	1 x 110	"	
5	Dong Hoi - Hue	1 x 165	"	
6	Pleikrong - Pleicu	1 x 50	"	
7	A Vuong - Da Nang	1 x 80	"	
8	Buon Kuop  Krong Buk	2 x 40	"	
9	Tranh river 2- Dung Quat	2 x 75	"	
10	SeSan 3 - Pleicu	2 x 35	"	

Southern provinces

1	Hoc Mon - Hoa Xa	2 x 10	2006 - 2010	
2	Tra Noc - Soc Trang	2 x 75	"	
3	Bac Lieu - Soc Trang	1 x 53	"	
4	Bac Lieu - Ca Mau	1 x 70	"	
5	Da Nhim - Da Lat	1 x 50	"	
6	Kien Luong - Chau Doc	1 x 75	"	
7	Trang Bang - Tan Dinh	2 x 35	"	

3. Projects designed for the 2011 - 2020 period

Northern provinces

1	Thanh Hoa - Vinh	1 x 161	2011 - 2020	Circuit 2
2	Hoa Binh - Son Tay	1 x 50	"	
3	Quang Ninh thermoelectric power plant - Mong Duong	2 x 45	"	
4	Bac Giang - Pha Lai	1 x 25	"	Circuit 2
5	Yen Bai - Son La	1 x 140	"	
6	Son La - Son La provincial capital	1 x 20	"	
7	Nam Dinh - Ninh Binh	1 x 28	"	Circuit 2
8	Pho Noi - Sai Dong	2 x 20	"	
9	Pho Noi - Hung Yen	1 x 25	"	
10	Hoanh Bo - Cai Lan	2 x 12	"	
11	Thanh Hoa - Ba Che	2 x 15	"	
12	Tuyen Quang - Thai Nguyen	1 x 70	"	
13	Dong Anh - Sai Dong	2 x 20	"	
14	Da Phuc - Dong Anh	2 x 20	"	
15	Hung Yen - Long Boi	1 x 35	"	
16	Yen Bai - Lao Cai	1 x 110	"	
17	Son La - Huoi Quang	2 x 20	"	

18	Thai Nguyen - Luu Xa	1 x 11	"	
19	Thai Nguyen - Bac Kan	1 x 70	"	
20	Bac Giang - Lang Son	1 x 60	"	
21	Son La provincial capital - Tuan Giao	1 x 55	"	
22	Bac Me - Dai Thi	2 x 60	"	
23	Ha Tinh -Vung Ang	1 x 40	"	
Central provinces				
1	Da Nang - District 3	2 x 8	"	
2	SeSan 4 - Pleicu	2 x 43	"	
3	Serepok - Krong Buk	2 x 80	"	
Southern provinces				
1	Tra Noc - Vinh Long	1 x 35	2011 - 2020	Circuit 2
2	Ham Thuan - Phan Thiet	1 x 60	"	
3	Long Xuyen - Thot Not	1 x 15	"	
4	Long Binh - Tam Phuoc	2 x 6	"	
5	Feeder to Cao Lanh - Cao Lanh	2 x 15	"	
6	Vinh Long - Tra Vinh	1 x 65	"	
7	Tan Dinh - Tay Ninh	2 x 72	"	
8	Tan Dinh - Tan Dinh industrial park	2 x 8	"	

9	Cai Lay - O Mon	1 x 90	"	Circuit 2
10	Cai Lay - Thot Not	1 x 80	"	Circuit 2
11	My Tho - Ben Tre	1 x 25	"	
12	Bac Lieu - Ca Mau	2 x 65	"	
13	Xuan Loc - Long Binh	1 x 40	"	
14	Long Thanh - An Phuoc	2 x 8	"	
15	Nhon Trach - Long Binh	2 x 15	"	
16	Nhon Trach - Cat Lai	2 x 10	"	
17	Nha Trang - Cam Ranh	1 x 35	"	
18	Tay Ninh - Binh Long	2 x 75	"	
19	Dong Nai 6 - Di Linh	2 x 30	"	

THE PRIME MINISTER OF GOVERNMENT

Phan Van Khai