THE PRIME MINISTER OF GOVERNMENT

No: 40/2003/QD-TTg

SOCIALIST REPUBLIC OF VIET NAM

Independence - Freedom - Happiness

Ha Noi, day 21 month 03 year 2003

DECISION No. 40/2003/QD-TTg OF MARCH 21, 2003 ADJUSTING A NUMBER OF CONTENTS OF THE PLANNING ON VIETNAM'S ELECTRICITY DEVELOPMENT IN THE 2001-2010 PERIOD, WITH PROSPECT TILL 2020 TAKEN INTO ACCOUNT

THE PRIME MINISTER

Pursuant to the Law on Organization of the Government of December 25, 2001;

At the proposal of the Ministry of Industry (Official Dispatch No. 4505/CV-KHDT of November 13, 2003), the appraisal opinions of the State Council for Evaluation of Investment Projects (Official Dispatch No. 19/TDNN of January 29, 2003) and the comments of the concerned ministries and branches on the adjustment of the planning on Vietnam's electricity development in the 2001-2010 period, with prospect till 2020 taken into account,

DECIDES:

Article 1.- To adjust a number of contents of the planning on Vietnam's electricity development in the 2001-2010 period, with prospect till 2020 taken into account (called the adjusted electricity planning V for short) as follows:

1. On load demand: In 2005: 48.5-53 billion kWh; in 2010: 88.5-93 billion kWh.

2. On the development of power sources:

- The Ministry of Industry shall direct Vietnam Electricity Corporation and other concerned investors to speed up the construction tempo of power source and grid projects; to upgrade the existing power sources; to renovate operation and management modes thus meeting the increasing demand for load in a qualitative, efficient and thrifty manner.

- The list of power source projects to be invested by Vietnam Electricity Corporation is specified in Appendix 1 (enclosed herewith).

- The list of power source projects to be invested by enterprises not belonging to Vietnam Electricity Corporation is specified in Appendix 2 (enclosed herewith).

To encourage enterprises of all economic sectors to make investment in coal-fired power projects in Quang Ninh province and hydroelectric power projects of a capacity of around 100 MW in the form of joint-stock companies where State-run corporations hold dominant shares.

- The Ministry of Industry shall soon promulgate electricity-purchase prices and concretely announce the list of projects for enterprises not belonging to Vietnam Electricity Corporation to participate therein.

The capacities, locations and durations for construction of power source projects shall be decided by competent authorities before the investors approve the feasibility study report of each specific project.

3. On the development of power grids:

a) To speed up the construction of projects on high-voltage power grids, concretely the projects on the 500 kV power lines of Phu My-Nha Be-Phu Lam; Pleiku-Phu Lam; and Pleiku-Doc Soi-Da Nang-Ha Tinh-Thuong Tin according to the set schedules.

b) The projects on power grids shall be adjusted (see the list in Appendix 3).

4. On investment capital sources:

a) Vietnam Electricity Corporation may mobilize all capital sources for investment in projects on power sources and power grids according to the mechanism of self-borrowing and self-repaying (borrowing ODA capital, credit capital at home and abroad, borrowing export credit from equipment suppliers, borrowing capital in equipment and making repayment in goods, issuing bonds and capital-contributing shares) while still complying with the mechanism whereby the central bodies, localities, State and people jointly develop rural power grids.

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

5. On a number of mechanisms and policies:

a) To accelerate the implementation tempo of projects, to allow Vietnam Electricity Corporation to skip the step of elaborating pre-feasibility study reports of power source and grid projects inscribed in the Appendices to this Decision.

b) To allow Vietnam Electricity Corporation to appoint domestic consultancy agencies to act as main consultants for power source and grid projects. For complicated issues, it may sign contracts to hire foreign consultancy agencies.

c) The Ministry of Industry shall coordinate with the Ministry of Finance in studying and submitting to the Prime Minister mechanisms of providing partial budget capital support for investment in power sources and grids in service of economic and social development in remote and deep-lying areas; allocating capital for on-the-spot energy sources in areas where the national power grids do not exist; and separating Vietnam Electricity Corporation's public-utility activities from its production and business activities.

d) Commercial banks shall be allowed to provide Vietnam Electricity Corporation with a loan exceeding 15% of their own capital for investment in electricity projects if deeming that they are efficient and their feasibility study reports have been approved by competent authorities.

e) The provincial/municipal People's Committees shall have to closely coordinate with the Ministry of Industry, Vietnam Electricity Corporation and other investors in settling the compensation for ground clearance and population resettlement related to power source and grid projects in accordance with schedules approved by competence authorities.

Article 2.- This Decision takes effect 15 days after its signing. Other contents shall continue to comply with Decision No. 95/2001/QD-TTg of June

22, 2001 of the Prime Minister

Article 3.- The Minister of Industry, the concerned ministers, the heads of the concerned branches, the presidents of the provincial/municipal People's Committees and the Managing Board and the directorate of Vietnam Electricity Corporation shall have to implement this Decision.

Prime Minister
PHAN VAN KHAI

APPENDIX 1

POWER SOURCE PROJECTS TO BE INVESTED BY VIETNAM ELECTRICITY CORPORATION

(Issued together with the Prime Minister's Decision No. 40/2003/QD-TTg of March 21, 2003)

Ordinal number	Names of plants	Capacity - MW	Year of operation
I. Power sources expected to operate in the 2003-2005 period			
1.	Steam drum of Phu My 2.1	160	2003
2.	Steam drum of expanded Phu My 2.1	160	2005
3.	Mixed gas turbines of Phu My 4	450	2003 - 2004
4.	Expanded Uong Bi coal-fired thermal power plant	300	2005
5.	Se San 3 hydroelectric power plant	273	2005 - 2006
II. Power sources expected to operate in the 2006-2010 period			
6.	Tuyen Quang hydroelectric power plant	342	2006 - 2007
7.	Dai Ninh hydroelectric power plant	2x150	2007 - 2008
8.	A Vuong 1 hydroelectric power plant	170	2007
9.	Expanded Thac Mo hydroelectric power plant	75	2008
10.	Quang Tri hydroelectric power plant	70	2007
11.	Dak Rinh hydroelectric power plant	100	2007
12.	PleiKrong hydroelectric power plant	110	2008
13.	Ban La (Nghe An 1) hydroelectric power plant	300	2008
14.	Dong Nai 3 - 4 hydroelectric power plant	510	2009 - 2010
15.	Tranh river 2 hydroelectric power plant	120	2009
16.	Con river 2 hydroelectric power plant	70	2010
17.	Ba Ha river hydroelectric power plant	250	2010 - 2011

18.	Upper Kon Tum hydroelectric power plant	220	2010 - 2011
19.	Buon Kuop hydroelectric power plant	280	2008 - 2009
20.	Ban Chat hydroelectric power plant	200	2010
21.	An Khe + Ka Nak hydroelectric power plant	163	2009
22.	Buon Tua Srah	85	2009
23.	Sre Pok 3 hydroelectric power plant	180	2009 - 2010
24.	Se San 4 hydroelectric power plant	330	After 2010
25.	O Mon I oil-gas thermoelectric power plant	600	2006 - 2007
26.	Expanded Ninh Binh coal-fired thermal power plant	300	2007
27.	Unit 2 of expanded Uong Bi coal-fired thermal power plant	300	2008
28.	Nhon Trach thermoelectric power plant	600 (*)	2007 - 2008
29.	Nghi Son thermoelectric power plant	600	2010 - 2011
30.	Hai Phong thermoelectric power plant	600 (**)	2006 - 2007
31.	Quang Ninh thermoelectric power plant	600	2008 - 2009
32.	O Mon II thermoelectric power plant (according to the technology of high-speed mixed gas turbines)	750	2010 - 2011

(*) In the first phrase: 600 MW.

(**) In the first phrase: According to coal-firing technology.

APPENDIX 2

POWER SOURCE PROJECTS TO BE INVESTED BY ENTERPRISES NOT BELONGING TO VIETNAM ELECTRICITY CORPORATION

(Issued together with the Prime Minister's Decision No. 40/2003/QD-TTg of March 21, 2003)

Ordinal number	Names of plants	Capacity - MW	Years of completion
I. Power sources expected to be operate in the 2003-2005 period			
1.	Can Don hydroelectric power plant	72	2003
2.	Phu My 3 power plant	720	2003
3.	Phu My 2.2 power plant	720	2004
4.	Na Duong thermoelectric power plant	100	2004
5.	Cao Ngan thermoelectric power plant	100	2005
	Total	1,712	

II. Power sources expected to operate in the 2006-2010 period			
1.	Cua Dat hydroelectric power plant	97	2008
2.	Se San 3A hydroelectric power plant	100	2006
3.	Bac Binh hydroelectric power plant	35	2006
4.	Srok Phu Mieng hydroelectric power plant	54	2006
5.	Ngoi Bo hydroelectric power plant	20	2006
6.	Ngoi Phat hydroelectric power plant	35	2006
7.	Nhan Hac and Ban Coc hydroelectric power plant	32	2006
8.	La Ngau hydroelectric power plant	38	2006
9.	Binh Dien hydroelectric power plant	20	2006
10.	Tra Som hydroelectric power plant	24	2006
11.	Eak Rong Rou hydroelectric power plant	34	2006
12.	Bao Loc hydroelectric power plant	23	2006
13.	Dai Nga hydroelectric power plant	20	2006
14.	Dak Rti'h hydroelectric power plant	72	2006
15.	Thac Muoi hydroelectric power plant	53	2007
16.	Na Le hydroelectric power plant	90	2007
17.	Coc San - Chu Linh hydroelectric power plant	70	2007
18.	Dan Sach hydroelectric power plant	6	2007
19.	Da Dang Dachamo hydroelectric power plant	16	2007
20.	Nam Mu hydroelectric power plant	11	2008
21.	Hieu river hydroelectric power plant	5	2008
22.	Eak Rong Hnang hydroelectric power plant	65	2008
23.	Iagrai hydroelectric power plant	9	2008
24.	Ca Mau thermoelectric power plant	720	2006
25.	Cam Pha thermoelectric power plant	300	2006

APPENDIX 3

POWER GRID DEVELOPMENT IN THE 2002-2010 PERIOD

TABLE 3.1. 500 KV POWER LINES

(Issued together with the Prime Minister's Decision No. 40/2003/QD-TTg of March 21, 2003)

Names of projects	Number of circuits x km	Length	Notes
Projects to be built in the 2002-2005 period			
Pleiku - Phu Lam (circuit 2)	1 x 547	547	2003
Phu My - Nha Be	2 x 49	98	2003

Nha Be - Phu Lam	1 x 16	16	2003
Nha Be - O Mon	1 x 180	180	2005
Pleiku - Doc Soi - Da Nang	1 x 300	300	2004
Da Nang - Ha Tinh	1 x 390	390	Second quarter of 2005
Ha Tinh - Thuong Tin	1 x 335	335	2005 2006
Feeder to Nho Quan 500 KV station	2 x 30	60	2005
Total		1,926	
Projects to be built in the 2006-2010 period			
Feeder to Dong Nai 3&4	2 x 20	40	2008 - 2009
Quang Ninh - Thuong Tin	1 x 110	110	2007 - 2008
Phu Lam - O Mon	1 x 170	170	2006 - 2007
Phu My - Nhon Trach	1 x 30	30	2008 - 2009
Song May - Nhon Trach	1 x 20	20	2008 - 2009
Song May - Tan Dinh	1 x 30	30	2008 - 2009
Total		400	

TABLE 3.2. 500 KV TRANSFORMER STATIONS

Ordinal number	Names of projects	Number of transformer x MVA	Capacity-MVA	Notes
Projects to be built in the 2002 - 2005 period				
1	Nha Be	2 x 600	1,200	2004
2	Phu My	2 x 450	900	2003
3	Da Nang	1 x 450	450	Transformer 2 - 2004
4	O Mon	1 x 450	450	2005 - 2006
5	Tan Dinh	1 x 450	450	2005 - 2006
6	Thuong Tin	1 x 450	450	2005 - 2006
7	Nho Quan	1 x 450	450	2005 - 2006
	Total		4,350	
Projects to be built in the 2006 2010 period				
1	Thuong Tin	1 x 450	450	Transformer 2 (2007 - 2008)

2	Tan Dinh	1 x 450	450	Transformer 2
3	Doc Soi	2 x 450	900	2006 - 2008
4	Di Linh	1 x 450	450	In synchronicity with Dai Ninh
5	Nhon Trach	1 x 450	450	2008
6	Quang Ninh	1 x 450	450	2007 - 2009
7	Song May	1 x 600	600	2008 - 2009
8	O Mon	1 x 450	450	Transformer 2
	Total		4,200	
	Gross total		8,550	

TABLE 3.3. 220 KV POWER LINES

Ordinal number		Names of projects	Number of circuits x km	Length	Notes
Projects expected to operate in 2002 - 2005					
1	Northern region	Nam Dinh - Thai Binh	1 x 30	30	2-circuit poles
2		Thai Binh - Hai Phong	2 x 45	90	2004
3		Bac Giang - Thai Nguyen	1 x 55	55	2003
4		Viet Tri - Son La	1 x 190	190	Operating 110 kV power lines
5		Dong Hoa - Dinh Vu	1 x 17	17	2005
6		Ha Dong - Thanh Cong	2 x 10	20	2005 - 2006
7		Mai Dong - An Duong - Chem	2 x 18	36	2005 - 2006
8		Viet Tri - Yen Bai	2 x 75	150	2004 - 2005
9		Uong Bi - Trang Bach	2 x 19	38	2005
10	Central region	Hoa Khanh - Hue	1 x 80	80	Hanging circuit 2
11		Da Nang - Hoa Khanh	1 x 12	12	
12		Da Nhim - Nha Trang	1 x 140	140	2003 - 2004
13		Dung Quat - Doc Soi	2 x 10	20	2005 - 2006
14		Se San 3 - Pleiku	2 x 35	70	2005 - 2006
15		Hue - Dong Hoi	1 x 170	170	2005 - 2006
16		Da Nang - Doc Soi	1 x 100	100	Stretching lines of circuit 2
17	Southern region	Nha Be - Tao Dan	2 x 10	20	Cable + DZK
18		Nha Be - Cat Lai	2 x 10	20	2005
19		Phu My - Cat Lai	2 x 35	70	2002 - 2003
20		Long Binh - Thu Duc	1 x 16	16	Circuit 2

21		Cat Lai - Thu Duc	2 x 10	20	2003
22		Ba Ria - Vung Tau	2 x 15	30	2005
23		Dai Ninh - Di Linh	2 x 39	78	In synchronicity with Dai Ninh
24		Bao Loc - Tan Rai	2 x 20	40	2005
25		Tan Dinh - Binh Hoa	2 x 18	36	2004 - 2005
26		Thu Duc - Hoc Mon	1 x 16	16	Circuit 2
27		Tan Dinh - Phuoc Long	2 x 70	140	2004 - 2005
28		Tan Dinh - Trang Bang	1 x 50	50	2-circuit poles
29		Kien Luong - Chau Doc	1 x 75	75	2005
30		O Mon - Tra Noc	2 x 15	30	2005
31		Ca Mau - O Mon (or Rach Gia)	2 x 150	300	2005 - 2006
32		Ca Mau - Bac Lieu	1 x 70	70	2005
33		O Mon - Thot Not	2 x 28	56	2003 - 2004
34		Thot Not - Chau Doc	2 x 70	140	2003
		Total		2,425	
Projects to be built in the 2006 - 2010 period					
1	Northern region	Na Hang - Yen Bai	2 x 160	320	
2		Feeder to Nho Quan	4 x 4	16	
3		Hai Phong thermoelectric power plant- Dinh Vu	2 x 17	34	
4		Hai Phong thermoelectric power plant - Vat Cach	2 x 19	38	
5		Feeder to Hai Duong - Hai Duong	2 x 15	30	
6		Ha Tinh - Thach Khe	2 x 9	18	
7		Van Tri - Soc Son	2 x 25	50	
8		Van Tri - Chem	2 x 10	20	
9		Huoi Quang - Son La	2 x 20	40	
10		Thanh Hoa - Ha Tinh	1 x 215	215	
11		Ban La - Vinh	2 x 150	300	
12		Quang.Ninh thermoelectric power plant - Hoanh Bo	2 x 15	30	
13		Quang.Ninh thermoelectric power plant - Cam Pha thermoelectric power plant	2 x 30	60	
14		Uong Bi - Trang Bach	2 x 20	40	
15	Central region	Doc Soi - Quang Ngai	1 x 40	40	
16		Lower Ba river- Tuy Hoa	2 x 40	80	

17		Quy Nhon - Tuy Hoa	1 x 95	95	
18		Tuy Hoa - Nha Trang	1 x 110	110	
19		Srepok 3 - Buon Kuop	1 x 20	20	
20		Buon Kuop - KrongBuk	2 x 45	90	
21		Kon Tum - Pleiku	2 x 70	140	
22		A Vuong - Song Con - Da Nang	2 x 70	140	
23		Dung Quat - Song Tranh 2	2 x 75	150	
24		Se San 4 - Pleiku	2 x 43	86	
25		Se San 3 - Se San 3A	1 x 10	10	
26	Southern region	Nha Be - Cat Lai	2 x 10	20	
27		Ham Thuan - Phan Thiet	1 x 60	60	
28		Song May - Long Binh	2 x 30	60	
29		Tra Noc - Soc Trang	1 x 75	75	
30		Bac Lieu - Soc Trang	1 x 53	53	
31		Feeder to Thap Muoi	2 x 10	20	
32		Tan Dinh - Trang Bang	1 x 50	50	Stretching lines of circuit 2
33		Nhon Trach - Cat Lai	2 x 10	20	
34		Tan Dinh - Song Be industrial park	2 x 12	24	
35		My Tho - Ben Tre	1 x 35	35	
36		Da Nhim - Da Lat	1 x 50	50	
		Total		2,639	

TABLE 3.4. 220 KV TRANSFORMER STATIONS

Ordinal number	Region	Names of projects	Number of transformer x MVA	Capacity -MVA	Notes
Projects to be built in the 2002 - 2005 period					
1	Northern region	Dinh Vu	1 x 125	125	2005
2		An Duong	1 x 250	250	2005
3		Mai Dong	2 x 250	500	2005
4		Bac Ninh	1 x 125	125	2005
5		Hoanh Bo	1 x 125	125	Transformer 2
6		Nghi Son	1 x 125	125	2003
7		Pho Noi	1 x 125	125	Transformer 2
8		Soc Son	1 x 125	125	Transformer 2
9		Thai Binh	1 x 125	125	2002 - 2003

10		Thai Nguyen	1 x 125	125	Transformer 2
11		Thanh Cong	1 x 250	250	2005
12		Uong Bi	1 x 125	125	2005
13		Viet Tri	1 x 125	125	Transformer 2
14		Xuan Mai	2 x 125	250	2002 - 2005
15		Yen Bai	1 x 125	125	2004 - 2005
16	Central region	Doc Soi	1 x 125	125	Transformer 2
17		Dong Hoi	1 x 125	125	Replacing transformers
18		Dung Quat	1 x 125	125	
19		Hoa Khanh	2 x 125	250	2003 - 2005
20		KrongBuk	1 x 63	63	Transformer 2
21		Nha Trang	1 x 125	125	
22	Southern region	Dai Ninh	1 x 63	63	In synchronicity with Dai Ninh
23		Binh Hoa	1 x 250	250	Transformer 2
24		Ba Ria	1 x 125	125	
25		Bac Lieu	1 x 125	125	
26		Cat Lai	2 x 250	500	2003
27		Ca Mau	1 x 125	125	2005 - 2006
28		Chau Doc	1 x 125	125	2004
29		Kien Luong	1 x 125	125	
30		Long Thanh	1 x 250	250	Transformer 2
31		My Tho	1 x 125	125	
32		Southern Sai Gon	1 x 250	250	2005
33		Phuoc Long	2 x 125	250	2004 - 2005
34		Tan Dinh	1 x 250	250	
35		Tan Rai	2 x 125	250	Aluminum treatment
36		Tao Dan	2 x 250	500	2003 - 2004
37		Thot Not	2 x 125	250	
38		Thu Duc	2 x 250	500	Replacing transformers-2003
39		Trang Bang	1 x 125	125	
40		Tri An	1 x 63	63	Transformer 2
41		Vung Tau	1 x 125	125	
42		Vinh Long	1 x 125	125	Transformer 2

		Total		7,939	
Projects to be built in the 2006 - 2010 period					
1	Northern region	Dinh Vu	1 x 125	125	Transformer 2
2		Dong Hoa	2 x 250	500	Replacing transformers
3		An Duong	1 x 250	250	Transformer 2
4		Bac Giang	1 x 125	125	Transformer 2
5		Hai Duong	1 x 125	125	
6		Hai Phong thermoelectric power plant	1 x 125	125	
7		Quang Ninh thermoelectric power plant	2 x 250	500	
8		Na Hang	2 x 63	126	2007 - 2008
9		Nam Dinh	1 x 125	125	Transformer 2
10		Nghi Son	1 x 125	125	Transformer 2
11		Phu Ly	1 x 125	125	
12		Son Tay	1 x 125	125	
13		Son La	1 x 125	125	
14		Thai Binh	1 x 125	125	Transformer 2
15		Thanh Cong	1 x 250	250	Transformer 2
16		Trang Bach	1 x 125	125	Transformer 2
17		Van Tri	2 x 250	500	2006
18		Vat Cach	1 x 125	125	Transformer 2
19		Xuan Mai	1 x 125	125	Transformer 2
20	Central region	Dung Quat	1 x 125	125	Transformer 2
21		Hue	1 x 125	125	Transformer 2
22		Ba Don	1 x 63	63	
23		Dong Hoi	1 x 125	125	Replacing transformers
24		KrongBuk	1 x 125	125	Replacing transformers
25		Quang Ngai	1 x 125	125	
26		Quy Nhon	1 x 125	125	Transformer 2
27		Tam Ky	1 x 125	125	
28		Tuy Hoa (Phu Yen)	1 x 125	125	
29	Southern region	Ben Tre	1 x 125	125	
30		Ca Mau	1 x 125	125	Transformer 2
31		Cao Lanh (Thap Muoi)	1 x 125	125	

32		Chau Doc	1 x 125	125	Transformer 2
33		Song Be industrial park	1 x 125	125	
34		Kien Luong	1 x 125	125	Transformer 2
35		Long An	2 x 125	250	
36		My Tho	1 x 125	125	Transformer 2
37		South Sai Gon	1 x 250	250	Transformer 2
38		Phan Thiet	1 x 125	125	
39		Binh Phuoc (HCM city)	2 x 250	500	
40		Soc Trang	1 x 125	125	
41		Song May	1 x 125	125	
42		Tan Binh	2 x 250	500	
43		Vung Tau	1 x 125	125	Transformer 2
		Total		7,689	

THE PRIME MINISTER OF GOVERNMENT
PRIME MINISTER
(Đã ký)

Phan Van Khai