THE PRIME MINISTER

THE SOCIALIST REPUBLIC OF VIETNAM Independence - Freedom - Happiness

No. 1208/QD-TTg

Hanoi, 21 July 2011

DECISION

APPROVAL OF THE NATIONAL MASTER PLAN FOR POWER DEVELOPMENT FOR THE 2011 - 2020 PERIOD WITH THE VISION TO 2030

THE PRIME MINISTER

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

Pursuant to the Electricity Law dated 14 December 2004; and

With regards to Statement No.2068/TTr-BCT dated March 11, 2011 of the Ministry of Industry and Trade and comments of the ministries and agencies on the national master plan for power development for the 2011 – 2020 period with the vision to 2030,

DECISION:

Article 1. Approve the National Master Plan for power development for the 2011 – 2020 period with the vision to 2030 (referred to as power master plan VII) with the following contents:

- 1. Development perspectives:
- a) To develop the electricity sector in conjunction with the national socio-economic development strategies, ensure adequate supply of electricity for the national economy and social life.
- b) Effectively utilize the national energy resources for electricity development in combination with the reasonable import of electricity, fuel, diversification of primary energy sources for electricity production, conservation of fuel and energy security for the future.
- c) Gradually improve the quality of electricity to provide power with the increasing quality. Implement electricity prices according to the market mechanism to encourage investment in power development, and encourage the use of electricity in a saving and effective manner.
- d) Development of power along with protection of natural resources, ecological environment and ensuring sustainable development of the country.
- dd) Gradually establishing, developing competitive electricity market, diversification of power investment and trading. The State only monopolizes the power transmission grid to ensure security of the national energy system.
- e) Develop the electricity sector on the basis of proper and efficient use of primary energy resources of each region; continue to promote rural electrification, ensure adequate, continuous and safe provision of electricity in all regions nationwide.

2. Objectives:

a) General objectives:

Efficient use of energy resources in the country in combination with import of primary energy for power production, supplying adequate power with increasing quality, reasonable price for socio-economic development; ensure the national energy security.

b) Specific objectives:

- Provide adequate electricity for the domestic demand, electricity production and import will range from 194 to 210 billion kWh in 2015; 330 to 362 billion kWh in 2020; and 695 to 834 billion kWh in 2030.
- Prioritize the development of renewable energy sources for electricity production, increasing the percentage of electricity produced from these energy sources from 3.5% of total electricity production in 2010 up to 4.5% in 2020 and 6.0% in 2030.
- Reduce electricity elasticity coefficient / GDP from the current average 2.0 to 1.5 in 2015 and 1.0 in 2020.
- Accelerate the program of electrification in rural and mountainous areas to ensure that in 2020 most of the rural households access to electricity.
- 3. The national master plan for power development:
- a) Master plan for development of power sources:
- Development orientation:

Development of power sources in the following orientation:

- + Develop a balanced capacity of power sources on the Northern, Central and Southern regions; to ensure the reliability of power supply system in each region in order to reduce transmission losses, share capacity reserves and efficiently exploit hydro power plants in all seasons.
- + Reasonably develop power centers in the regions nationwide to ensure reliable power supply in place and reduce technical losses on the national electricity system as well as ensuring the economics of projects, contribute to the socio-economic development of each region and the country in general.
- + Developing new power sources in parallel with intensive investment, technological innovation of the operating plants; meeting environmental standards, using modern technology for new power plants.
- + Diversify forms of investment to develop the power sources in order to increase competition, improve economic efficiency.
- Master plan for power source development:
- + Prioritize development of power sources from renewable energy (wind energy, solar energy, biomass energy, ...) of rapid growth, gradually increasing the proportion of electricity produced from renewable energy sources:
- Bringing the total wind power capacity from the current negligible levels to around 1,000 MW by 2020, about 6,200 MW by 2030; increase the proportion of electricity production from wind power from 0.7% in 2020 to 2.4% in 2030.
- . Development of biomass power, and power generation in sugar mills, by 2020 this

power source will have a total capacity of about 500 MW, up to 2,000 MW by 2030; proportion of electricity production will increase from 0.6% in 2020 to 1.1% in 2030.

- + Prioritize the development of hydropower resources, especially the projects of multipurposes such as flood control, water supply and electricity production; bring the total capacity of hydroelectric power from 9,200 MW at present to 17,400 MW by 2020.
- + Implement researches and bring energy storage hydropower plants into operation in accordance with the development of electrical system in order to improve operational efficiency of the system: the capacity of energy storage hydropower plants will increase from 1800 MW in 2020 to 5,700 MW by 2030.
- + Development of thermal power plants with appropriate rate, consistent with the supply and distribution of fuel:
- Thermal power plants using natural gas: In 2020, electricity generation capacity using natural gas will be about 10,400 MW, produce about 66 billion kWh of electricity, accounting for 20% of electricity production; it is oriented that in 2030 the total capacity of thermal power using natural gas will be 11,300 MW, producing about 73.1 billion kWh of electricity, accounting for 10.5% of total power capacity.

The Southeast Region: Ensuring a stable gas supply for power plants in Ba Ria, Phu My and Nhon Trach.

The Southwest Region: Quickly bring gas from Block B to the shore in 2015 to provide fuel for power plants at the O Mon power center with a total capacity of 2,850 MW, bringing the total capacity of gas power plants in the region up to 4,350 MW by 2016, annual use of about 6.5 billion m³ of gas, producing 31.5 billion kWh.

The Central Region: it is expected to develop a 1,350 MW power plant consuming about 1.3 billion m³ gas / year in the years later than 2020

- . Coal thermal power plant: Make the most use of domestic coal resources for the development of thermal power plants, prioritize use of domestic coal for thermal power plants in the Northern region. By 2020, the total coal thermal power capacity will be about 36,000 MW, producing about 156 billion kWh (accounting for 46.8% of total electricity production), consuming 67.3 million tons of coal. By 2030, the total coal thermal power capacity will be about 75,000 MW, producing about 394 billion kWh (accounting for 56.4% of total electricity production), consuming 171 million tons of coal. Due to the limitation in domestic coal production, it is required to consider building and putting power plants using imported coal into operation from 2015.
- + Development of nuclear power plants to ensure stable power supply in the future as the primary sources of domestic energy will be depleted: Putting the first nuclear power plant into operation in Vietnam in 2020; by the year 2030 nuclear power capacity will be 10,700 MW, producing about 70.5 billion kWh (accounting for 10.1% of electricity production).
- + Develop power plants using liquefied natural gas (LNG) in order to diversify fuel sources for electricity production, ensure the security in supply of electricity and gas. In 2020, electricity generation capacity using LNG will be about 2,000 MW; in the orientation by the year 2030, the capacity will increase to about 6,000 MW.
- + Import and export of electricity: Implement efficient power exchange with the

countries in the region, ensuring the interests of the parties, increase the exchange to ensure the safety of the system, enhance electricity import from the potential regions of hydropower, especially Laos and then Cambodia, China. It is expected that in 2020, imported electricity capacity will be about 2200 MW, approximately 7000 MW in 2030.

- Structure of power sources:
- . In 2020: The total capacity of power plants will be about 75,000 MW, of which hydropower accounts for 23.1%, energy storage hydropower accounts for 2.4%, coal 48.0%, and gas burn power 16.5% (of which LNG power accounts for 2.6%); power using renewable energy accounts for 5.6%, nuclear power accounts for 1.3% and import power accounts for 3.1%.

Produced and imported electricity will be about 330 billion kWh in 2020, of which hydropower accounts for 19.6%, coal 46.8%, natural gas thermal power 24.0% (including LNG 4.0%); power using renewable energy accounts for 4.5%, nuclear power accounts for 2.1% and imported power accounts for 3.0%.

Orientation to 2030: The total power plant capacity will be about 146,800 MW, of which hydropower accounts for 11.8%, energy storage hydropower 3.9%; coal thermal power 51.6%; and gas fired power 11, 8% (of which LNG 4.1%); power using renewable energy 9.4%; nuclear power 6.6%; and imported power 4.9%.

Electricity output in 2030 will be 695 billion kWh, hydropower accounts for 9.3%, coal thermal 56.4%; natural gas thermal power 14.4% (including the use of LNG 3.9%), power using renewable energy 6.0%; nuclear power 10.1%; and imported power 3.8%.

List and schedule of commissioning of power projects are shown in Annexes I, II and III together with this Decision.

- b) Master plan for development of the power grid:
- Criteria for preparing Master plan for development of the power grid:
- + Invested power transmission grid must satisfy reliability standard N-1 for major equipment and meet the quality standards prescribed in the Regulation of power transmission grids.
- + Development of the power grid in accordance with technical standards of the countries in the region, ensure the connectivity, integration with power systems of Vietnam and the countries in the region.
- + Transmission grid must provide reservation, simplicity, flexibility, and ensure power quality (voltage, frequency) for power loads.
- + electing appropriate transmission voltage on the basis of transmission capacity and transmission distance.
- Development orientation:
- + Development of power transmission grid must synchronize with operation schedules of power plants to achieve investment efficiency of the whole system.
- + Develop the power transmission grid in line with the development strategy, master plan for power development and other local master plans.
- + Development of 220 kV and 500 kV transmission grids in order to improve power

- supply reliability, reduce power losses and ensuring a favorable mobilization of power in the rainy season, dry season and the mobilization of power in all operating modes of the electricity market.
- + Development of 220 kV and 110 kV grids, improvement of regional power network to enhance stability and reliability in power supply, minimizing power losses, creating favorable conditions for the improvement of medium-voltage grid to 22 kV voltage and rural electrification.
- + Development of power transmission lines with reservation for long-term development in the future, using multiple circuits, multiple voltages on a single pole line to reduce the land area. For cities, the major load centers, the grid maps must have the greater reservation and flexibility; implement the modernization and gradually underground electricity grids in cities, towns, reducing the adverse impact on landscape and environment.
- + Gradually implement grid modernization, renovation and upgrading of switchgear, protection and automation of the grid; research on using FACTS, SVC devices to increase the transmission limits and step by step modernize the control system.
- + Research on developing "Smart Grid" technology, making the interaction between consuming households, equipment and the electricity grid to exploit the most effective ability of supply in order to reduce costs in grid development and improve security of power supply.
- Master plan for development of the power grid:
- + Master plan for development of ultra high voltage transmission grid:
- . The 500 kV is the major ultra-high voltage transmission voltage in Vietnam.
- . Study the possibility of developing voltages of 750 kV, 1000 kV or DC transmission for the period after 2020.
- . 500 kV grid is used to transmit power from the power center, the large power plants to major load centers in each region and performs the tasks of power exchange between regions to ensure optimal operation of power systems.
- + Master plan for development of the 220kV power grid:
- . The substations will be built to scale of 2 to 3 transformers; consider developing 4-transformer substations and GIS substations, underground substations in large cities.
- . The construction of new lines is of at least double circuits; lines from the major electricity sources, 500/220 kV substations are designed with at least double circuits using phase separation conductors.

Table 1. Volume of transmission grid to be built in periods

Item	Unit	2011 - 2015	2016 - 2020	2021 - 2025	2026 - 2030
500 kV substation	MVA	17,100	26,750	24,400	20,400
220 kV substation	MVA	35,863	39,063	42,775	53,250
500 kV line	km	3,833	4,539	2,234	2,724
220 kV line	km	10,637	5,305	5,552	5,020

- + Master plan for development of 110 kV grid and distribution grid:
- . Invest in developing 110 kV grid and distribution grid in synchronization with the transmission grid in order to improve power supply reliability, meeting the quality standards prescribed in the Regulation of electricity distribution grid.
- . Applying modern technology to improve the quality of power distribution grids, gradually develop underground electricity grids of cities and towns to reduce the impact on the landscape and environment. Using modern technological solutions in the investment and operational management to reduce power losses and eventually to develop the smart grid, smart communities to reduce power losses, improve the efficiency of electricity use.

List and schedule of the projects on power transmission grid investment under Appendix IV and V is attached to this Decision.

- c) Connectivity to power grids of countries in the region:
- Implementing the program of cooperation and connectivity with the power grids in South East Asian Nations (ASEAN) and the Mekong sub-region (GMS).
- Connectivity to the Lao grid:
- + Northern Laos: By 220 kV and 500 kV voltages toward Thanh Hoa and Nho Quan (Ninh Binh) and Son La.
- + Central and Southern Laos: By 220 kV and 500 kV voltages toward Thach My (Quang Nam) and Pleiku (Gia Lai).
- Connectivity to Cambodia grid:
- + Link electricity trading with Cambodia over the voltage levels 220 kV and 500 kV, depending on capacity.
- Connectivity to China grid:
- + Maintain electricity import via the voltage levels 110 kV and 220 kV.
- + Research on power import by a voltage of 500 kV or DC voltage with a total import capacity of about 2000 ÷ 3000 MW.
- d) The power supply to rural and mountainous areas and islands:
- Objectives:
- + Make new investment in the national grid or local power sources (small hydro, micro; solar, wind, combined with diesel power plants) to supply electricity to rural areas; 100% of communes and 98.6% of rural households access to electricity by 2015; most of the rural households access to electricity by 2020.
- + Renovate and upgrade rural power grids to meet the technical standards, effectively provide power with ensured quality for needs of production development and living of the rural areas.
- The development perspective of electrification in rural and mountainous areas:
- + Promote rural electrification in order to help accelerate industrialization and modernization of agriculture and rural areas.
- + Using the sources of new and renewable energy to supply electricity to the remote, border and island areas. Develop favorable mechanisms for management and

- investment to maintain and develop power sources in the regions.
- + Strengthen the rural electricity price controls to ensure the implementation of the electricity price policy stipulated by the Government.
- Master plan for electricity supply in rural areas:
- + The 2011 to 2015 period:
- . Invest for expansion of the national grid to supply electricity for 500 thousand households in rural areas.
- . Supply electricity from renewable energy sources to about 377 thousand rural households.
- + The 2016 2020 period:
- . Invest in new power supply from the national grid to 200 thousand rural households.
- . Supply electricity from renewable energy sources to about 231 thousand rural households.

dd) The total investment capital demand:

Total investment for the sector in 2020 is about 929.7 trillion (equivalent to 48.8 billion USD or 4.88 billion USD per year on average). In the 2021 – 2030 period, estimated total investment is approximately 1,429.3 trillion (equivalent to 75 billion USD). In the 2011 - 2030 period, the investment need is about 2,359 trillion (approximately 123.8 billion USD). Where:

- Investment in power sources: The 2011 2020 period requires 619.3 trillion VND, accounting for 66.6% of the total investment; the 2021 2030 period requires 935.3 trillion VND, accounting for 65.5%.
- Investment in the grid: The 2011 2020 period requires 210.4 trillion VND, accounting for 33.4% of the total investment; the 2021 2030 period requires 494 trillion, accounting for 34.5%.
- 4. Solutions to master plan implementation
- a) Solutions to ensure power supply security:
- Vietnam Electricity Corporation, Vietnam Oil and Gas Corporation, and Vietnam Coal Industry Minerals Corporation are responsible for developing power sources; The National Electricity Transmission Company takes the major responsibility for ensuring development of transmission system in the country.
- Actively seek for additional sources of gas which will decline and deplete in the near future. Speed up the negotiations with other countries to sign the stable, long-term contracts for import of coal, providing coal for thermal power plants.
- Accelerate development of nuclear energy and develop nuclear power plants.
 Coordinate with other countries and international organizations to develop nuclear energy, gradually master the technology and develop nuclear power for peaceful purposes.
- Implement policies of financial incentives and expand international cooperation to enhance the exploration for increasing reserves and capacity of coal, gas and renewable energy, ensure the security in provision of fuel for power production.

- b) Solutions to create investment capital for development of the electricity sector:
- Gradually increase the mobilization of finance from local enterprises in the electricity sector through the following solutions: Improve the efficiency, performance of enterprises in the electricity sector, ensuring capital accumulation, the ratio of own capital for investment and development as required by domestic and international financial institutions; in the future, the main source of funding for power projects will be capital accumulated by enterprises.
- Develop of Groups and Corporations in electricity sector of high financial credit for reducing the cost of raising capital for power projects, self-funding without the support of the Government's quarantee.
- Increase funding by issuing bonds at home and abroad to invest in power projects, take measures to transfer domestic savings into investment in infrastructure. In the initial period, the State will guarantee bond issuing for major and urgent power projects.
- Develop domestic and foreign joint ventures to attract foreign and local investors participating in power project development.
- Implement the equitization of state enterprises in electricity sector without 100% state own.
- nhance the attraction of foreign direct investment (FDI) in developing power projects. Give priority to FDI projects where payment can be made in domestic currency, or payment in barter without government guarantees.
- Attract capital from overseas, including official incentive development aid, official non-incentive development aid, and commercial overseas loans ...

c) Solutions to electricity prices:

- Apply electricity prices under the market mechanism regulated by the State, ensure a harmonious combination between the political - economic - social objectives of the State and the goals of business and financial autonomy of enterprises in the power sector. Selling price of electricity must stimulate the development of electricity, creating an environment for investment attraction and competition encouragement in production, transmission, distribution and use of electricity.
- Electricity price must recover costs and reasonable profit (investment components for expanded reproduction) to ensure the financial autonomy of enterprises in power sector.
- Improve and perfect the current electricity tariff in the direction:
- + Make adjustments of electricity selling prices according to changes in fuel prices, exchange rates and structure of electricity distribution.
- + educing and then removing diagonal offset between customer groups, between regions; research on implementation of seasonal and regional electricity tariff.
- + Develop two component electricity tariff: Capacity price of electricity price; initially applied to the large electricity consumers.
- Electricity price should consider the characteristics of regions and the regional residents: borders, islands, rural, mountainous areas, etc. ... with the necessary regulatory price and tax subsidies to reduce the gap in electrical energy consumption, promote socio-economic development and urbanization across regions and segments of the population, between the mountain and plains,

- between rural and urban areas.
- Electricity prices are adjusted gradually to achieve long-term marginal cost of electricity system in 2020 equivalent to 8 ÷ 9 US cents / kWh, to ensure that the electricity industry is capable of sustainable development, meeting the demand for power system development.
- The pricing of electricity must aim to conserve energy, avoid waste in non-renewable energy sources, encourage the rational use of energy sources and use of domestic energy, reducing reliance on imported energy.
- d) Solutions to renewal of management and improvement of efficiency in electricity activities:
- Research and implement of suitable management model in power sector to improve productivity, accelerate investment in power projects; and enhance the reliability in operation of power systems.
- Restructure the power sector to gradually establish a healthy competitive power market based on security in electricity supply; in order to reduce costs, improve efficiency in electricity production and business activities, make open and transparent price signals to attract investment and develop sustainable power sector.

dd) Solutions to environmental protection:

- Implement the provisions of the legislation on environmental impact assessment of projects and strategic environmental assessment of master plans.
- Enhance, strengthen environmental management institutions of the state management agencies and enterprises operating in the electricity sector.
- Fully perform environmental monitoring and observation, measurement and management of environmental criteria; inspect and supervise the implementation of environmental protection regulations of the electricity enterprises.
- Effectively implement program of electricity savings, enhance performance in the areas of production, transmission, distribution and use of electricity.
- Combine power sector development with environmental protection:
- + The State will develop policies on investment and tax incentives to develop forms of energy with minimum impact to the environment, contributing to environmental improvement: new and renewable energy; using agricultural waste, forestry waste and urban waste to generate electricity, ...
- + Strictly control power generation technology in terms of the environment. The technology chosen must be advanced with high performance and low environmental impact.
- Develop mechanism to attract capital investment for environmental protection activities from other economic sectors, attract financial support from abroad for environmental protection.
- Develop financial regulations on the electricity industry environment, proper and sufficient incorporation of environmental costs into the investment, electricity prices.
- Encourage cooperation between large enterprises in energy production and consumption with countries to implement clean development mechanism (CDM) under the forms of: development of new and renewable energy; improve efficiency in energy use and energy conservation projects.

- e) Solutions and policies for the development of science technology:
- Optimize, modernize and innovate electrical equipment and technology to develop energy for the immediate and long term purposes.
- Identify appropriate patterns and technological roadmap for electricity sources and grids, ensuring stable and suitable development to the conditions of Vietnam in terms of potential resources, investment capacity, reasonable price and environmental protection.
- New energy projects must be developed with modern technologies, consistent with the economic conditions of Vietnam; gradually upgrade and renovate existing facilities to ensure technical, economic and environmental standards.
- Combine modern technology and improvements of existing technology to enhance performance, energy savings.
- Encourage the use of new technologies in thermal power plants: spraying combustion chamber, fluidized bed, steam parameter upper limit, cycle of mixed gas turbine technology, waste disposal etc ... to enhance performance and environmental protection.
- Renovate and upgrade the transmission grid and distribution network, reduce losses, ensure safety and reliability.
- Modernize moderation, operation, communication, control and automation systems of the grid for domestic and regional connectivity.
- Gradually apply the recommended and compulsory measures to encourage innovation of technology and equipment of the power-intensive industries (steel, cement, chemicals); limit and then ban import of old equipment with low efficient rates of production and energy use.
- g) Solutions to develop human resources:
- On the training of human resources: develop the group of specialized schools in electricity and strive to develop several schools of international standards; develop uniform standard training programs in the areas of sound expertise.
- Focus on training human resources for key sectors in the areas of electricity production, transmission and distribution. Focus on vocational training for technical workers, skilled professionals capable of understanding and proficient use of technical facilities and modern technology. Organize retraining programs for technical and managerial staff, gradually raise the training quality on a par with other countries in the region and the world.
- Innovate human resources training in electricity sector, diversify forms of training and training in connection with the actual production; focus on recruitment and sending scientific staff, management staff for overseas training in key fields. Implement additional training, pioneer training for the absent, weak sectors especially the nuclear power industry, new energy. Develop appropriate incentive mechanisms to attract high quality human resources.
- Organize, reorganize production model scientifically and reasonably to ensure efficiency in labor use and improve working productivity.
- h) Construction and development of electrical engineering and localization:
- Increase investment and diversify sources of capital, attract foreign participation in the research, design, manufacturing of equipment, parts for the power sector. The

- production facilities for electrical equipment and accessories strive for achieving international standards for the products.
- Establish a joint research, design and manufacture of electrical equipment with the core being domestic mechanical engineering enterprises.
- Develop modern repair and maintenance centers for electrical equipment repair and inspection.
- Innovate and modernize the existing electrical engineering plant; develop joint venture, new plants, creating areas of electrical equipment manufacturing, strive for the goal of domestic manufacturing without importing of most electrical equipment for transmission and distribution grids, manufacturing 50 to 60% of equipment for coal thermal power plants; 40 to 50% of the equipment for nuclear power plants in 2020.
- i) Solutions to power saving and use efficiency:
- Enhance communication, dissemination and implementation of Law on energy saving and efficiency to improve energy use efficiency in general and electricity consumption in production, business and households in particular.
- Widely deploy and enhance the efficiency of the National target program on electricity savings and efficiency with the target to save 5 to 8% total electricity consumption in 2015, and 8% to 10% in 2020.

Article 2. The mission of the ministries, localities and the relevant agencies:

- 1. The Ministry of Industry and Trade:
- a) Periodically inspect and urge the assigned investors and contractors to projects under the master plan and related agencies, timely direct and remove the obstacles in the investment process to comply with the approved schedule and efficiency of investment projects. Report to the Prime Minister for consideration and handling of delayed projects.
- b) Closely monitor the electricity supply consumption, progress of projects on power sources and grids to decide and adjust the project schedule under the approved master plan or report to the Prime Minister for adding new projects into the master plan or eliminate unnecessary projects from the master plan in accordance with practical needs of economic social development in different periods.
- c) Direct the formulation, appraisal and approval of master plan on locations, detailed master plans of thermal power centers, hydropower master plans in rivers. Direct the development or import of gas resources, coal resources for electricity production, industry and other necessities.
- d) Publicize the list of approved projects under the master plan and select of investors for projects and submit to the Prime Minister for approval; chair in developing and submitting to the Prime Minister for approval the mechanism for investor selection in developing new power sources, the mechanism for management and implementation to ensure the project construction and operation in accordance with the approved schedule.
- dd) Organize international bidding to select investors for power source projects under BOT form. Where necessary to appoint contractors, the Ministry of Industry and Trade

- will coordinate with relevant ministries for consideration and submission for the Prime Minister's decision.
- e) Develop funding plan for electricity development, reporting to the Prime Minister in October 2011.
- g) Research and submit the proposal on development of smart grid for the Prime Minister's approval in December 2011.
- h) Chair and coordinate with the relevant ministries, agencies and localities to develop mechanisms and policies to encourage investment and development projects of new and renewable energy, the national target program on development of renewable energy.
- i) Chair and coordinate with the relevant ministries and agencies in negotiation and cooperation, electricity exchange with neighboring countries and Vietnam's participation in the power system between countries in the Mekong River subregion.
- k) Direct and supervise the localities, investors to implement projects in rural electrification development under the specified plans and schedules.
- I) Complete the necessary conditions (legal, technical infrastructure) for the formation and operation of competitive electricity market.
- m) Chair in developing and submitting to the Prime Minister for approval, and implement research programs, manufacturing and localization of equipment for coal-fired power plants, hydropower plants and nuclear power plants.
- n) Develop a mechanism to develop the energy market, make balanced use of primary energy sources for electricity production with the priority given to domestic coal, gas for power projects.
- o) Chair and coordinate with ministries, agencies and localities to implement energy saving program for period from 2011 to 2015.
- p) Draft the Decision on the establishment of the State Steering Committee on master plan for development of national electricity, and submit to the Prime Minister for approval.
- 2. The Ministry of Planning and Investment:
- a) Develop mechanisms and policies to attract foreign investment, ODA and private capital for synchronous, balanced and sustainable development of the electricity sector.
- b) Chair and coordinate with the Ministry of Industry and Trade in registering, allocating and providing sufficient additional budget for preparation and promulgation of master plan for power development.
- 3. The Ministry of Finance: Chair and coordinate with related ministries and agencies to develop financial mechanism and capital mechanism for development of power sector in accordance with the approved master plan; coordinate with the Ministry of Industry and Trade in developing policies on electricity prices according to the market mechanism.
- 4. The State Bank of Vietnam: chair and coordinate with the relevant ministries and agencies in developing appropriate policies and mechanisms to enhance the capacity of banks meeting capital demand for power projects in the approved master plans.

- 5. Vietnam Electricity Corporation:
- a) Invest and bring into operation of assigned power source projects and transmission grid projects in accordance with the approved schedule. Responsible for purchasing electricity from power sources, import of electricity, management and operation of power transmission and distribution grids in order to comply with the key role in ensuring power supply for the country.
- b) Develop master plans on locations, detailed master plans for coal thermal power center in the national electricity master plan and submit to the Ministry of Industry and Trade for approval.
- c) Chair in investment and construction of infrastructural projects of thermal power center that the Vietnam Electricity Corporation makes partial investment in power source projects.
- d) mplement solutions to further reduce the power loss, power saving program in electricity production, transmission and distribution for sustainable development.
- e) Assign the National Electricity Transmission Company to invest in 500 kV and 220 kV power transmission projects in power master plan VII.
- 6. Vietnam National Petroleum Corporation
- a) Implement investment and operation of assigned power projects in accordance with the approved schedule.
- b) Develop and bring into operation new oil and gas fields in sync with the schedule of commissioning and ensure adequate supply of gas for power plants approved in the master plan. Draw up plans to import liquefied natural gas for electricity generation in accordance with the development progress of power plants in the master plan, and submit to the Ministry of Industry and Trade for approval.
- 7. Vietnam Coal Minerals Industry Corporation
- a) Invest and bring into operation assigned power source projects in accordance with the approved schedule.
- b) Invest and bring into production new coal mines, play a key role in import of coal and securing the supply of coal for electricity generation and other needs of the national economy.
- 8. People's Committees of provinces and municipal cities:
- a) Allocate land in land use master plan for local power supply and power transmission works approved in this master plan and other electricity distribution projects approved in the local master plan for power development.
- b) Chair and coordinate closely with investors in site clearance, compensation, and resettlement for the projects of power sources and power grids meeting the approved schedule.

Article 3. This Decision shall take effect from the date of signing.

The ministers, heads of ministerial-level agencies, chairmen of the People's Committees of provinces and municipal cities, the Members' Council, Chairmen of the Members' Council, CEOs of: Vietnam Electricity Corporation, Vietnam Oil and Gas Corporation, Vietnam Coal - Minerals Industry Corporation and the relevant agencies are responsible to implement this Decision. /.

To:

- Party Central Committee Secretariat;
- Prime Minister, the Deputy Prime Ministers;
- The ministries, ministerial-level agencies,
- Office of the Central Direction Agency on the prevention of corruption;
- The People's Committees and Councils of provinces and municipal cities;
- Central Office and the Commissions;
- Office of the President;
- National Council and Committees of NA;
- Office of the National Assembly;
- Supreme People's Court;
- Institute of the Supreme People's Procuracy;
- State Auditor;
- Central Committee of Vietnam Fatherland Front;
- Central offices of associations;
- The Corporations: Electricity of Vietnam, Vietnam Oil and Gas, National Coal - Minerals;
- National Power Transmission Corporation;
- The Corporation 91;
- Mr. Thai Phung Ne;
- GO; Deputy Chairmen, Portals, departments and units, the Gazette;
- Archive

THE PRIME MINISTER

Nguyen Tan Dung

Translating confirmation

HAVIP Intellectual Property Co., Ltd confirms that the above translation version was translated completely and exactly from Vietnamese version of the **Decision No. 1208/QD-TTg dated July 21, 2011**.

Hanoi, date 18 month 08 year 2011

