

Ha Noi , 05 Oct 2004

DECISION

**APPROVING THE STRATEGY ON DEVELOPMENT OF VIETNAM
ELECTRICITY INDUSTRY IN THE 2004-2010 PERIOD, WITH ORIENTATIONS
TOWARDS 2020**

THE PRIME MINISTER

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

Pursuant to the October 24, 2003 conclusions of the Party's Political Bureau on the strategy and planning on development of Vietnam electricity industry;

Considering the Industry Ministry's Report No. 1768/TTr-KHDT of May 2, 2003 and Official Dispatch No. 4312/CV-NLDK of August 24, 2004 requesting the approval of the development strategy of Vietnam electricity industry in the 2004-2010 period, with orientations towards 2020; and ministries' and branches' comments thereon,

DECIDES:

Article 1.- To approve the strategy on development of Vietnam electricity industry in the 2004-2010 period, with orientations towards 2020, with the following major contents:

1. Development viewpoints:

- The development of electricity industry must be carried out in advance so as to meet the requirements of socio-economic development, ensure national security and defense in the context of international economic integration, meet electricity demands for people's daily life and assure national energy security. To boost the electrification in rural, remote, deep-lying and mountainous areas and offshore islands.

- To ensure electricity quality so as to provide electricity services of higher and higher quality at competitive prices. To attach special importance to electricity saving from the

stage of generation and transmission to the stage of use.

- To economically and efficiently use the country's primary energy sources such as hydroelectric power (in combination with irrigation), gas, oil and coal for electricity production, use equipment of scientific and technological advances and reduce environmental pollution.
- To continue surveying, studying and preparing conditions for the construction of a nuclear power plant (after 2015), ensuring the absolute safety in the use thereof, so as to diversify energy sources.
- To accelerate the research into, and development of, new and regenerated energy forms in order to meet the demands for electricity use, especially in off-shore islands and remote and deep-lying areas.
- To step by step form a domestic competitive electricity market, diversify modes of electricity investment and trading, encourage various economic sectors to participate therein and not change State monopoly into enterprise monopoly. The State shall only hold monopoly in electricity transmission as well as in construction and operation of large hydroelectric power plants and nuclear power plants. To take initiative in linking electric grids as well as in selling and purchasing electricity with regional countries.
- To set electricity prices for the objectives of promoting investment for development of the electricity industry and raising the competitiveness of electricity prices as compared with regional countries, especially the prices of electricity for production, separating electricity prices from social policies. To work out appropriate policies on electricity use in rural and mountainous areas.
- To combine the uniform administration of the electric network throughout the country with the safe construction and administration of electric systems in each region with a view to synchronizing and modernizing the national electricity-transmitting and -distributing network so as to provide quality electricity services in a continuous, safe and efficient manner.

2. Development objectives:

The development objectives of Vietnam electricity industry till 2010 are: To well use sources of hydraulic power (in combination with irrigation), gas and coal for the balanced development of electric sources. To build gas-electricity-nitrogenous fertilizer complexes in Phu My and southwestern area. To step up the research into, and construction of, Son La

hydroelectric power plant. To research into the plan on the use of nuclear energy. To synchronize and modernize the national electricity-distributing network. To diversify modes of electricity investment and trading; to work out appropriate policies on electricity use in rural and mountainous areas. To raise the competitiveness of electricity prices as compared with the region.

Specific objectives:

- To fully satisfy the electricity demand for socio-economic development. To strive to reach the output of around 53 billion kWh by 2005; 88-93 billion kWh by 2010 and 201-250 billion kWh by 2020.
- To step up the program on electricity supply for rural and mountainous areas, strive for the target that 90% and 100% of rural households will be supplied with electricity by 2010 and 2020, respectively.
- To ensure the sustainable financial balance.
- To diversify modes of the branch's development investment and prepare plans on electricity import from Laos, Cambodia and China.
- To train a contingent of officials and employees who possess high professional qualifications and sense of responsibility so as to meet the increasing requirements for development of the electricity industry.
- To follow the operational mechanism of diversifying products, involving many companies, which have the legal person status and operate after the financial cooperation-industry-trade-service-consultancy model.
- To control and reduce environmental pollution in electricity activities.

3. Development strategy:

To synchronously develop electric sources and grids along the direction of modernization. To develop hydroelectric power, coal-fired thermal power, gas-fired thermal power, nuclear power,... in combination with exchanging and linking electric grids with regional countries. Vietnam Electricity Corporation shall make investment only in electricity-generating works of a capacity of 100 MW or higher and create conditions for other enterprises to invest in works of smaller capacity. To quickly, synchronously and modernly develop the electricity-transmitting and -distributing system in order to raise the reliability and safety in electricity

supply and reduce electricity loss.

1. Strategy on development of electric sources:

a/ To give priority to the development of hydroelectric power, especially works with combined benefits (water supply, flood and drought combat...). To encourage investment in small-sized hydroelectric power sources in various forms with a view to making full use of that clean and regenerated power source.

In the coming 20 years, hydroelectric power plants shall be built in places where conditions permit. It is estimated that by 2020, the total capacity of hydroelectric power plants shall reach around 13,000-15,000 MW.

b/ To proportionally develop thermoelectric power plants, suitable to the supply and distribution capacity of fuel sources:

- Coal-fired thermal power: It is estimated that by 2010, the total capacity shall be around 4,400 MW. In the 2011-2010 period, it is necessary to build plants with a capacity of around 4,500-5,500 MW (base load) and 8,000-10,000 MW (high load). Since the source of home-made coal is limited, it is necessary to consider the construction of power plants using import coal.

- Gas-fired thermal power: By 2010, the total capacity shall be around 7,000 MW; in the 2011-2020 period, it is necessary to build plants with a capacity of around 3,500 MW (base gas-supply plan). In cases where a larger gas source is detected, it is necessary to build plants with a capacity of around 7,000 MW.

- To invest in, survey, research into, and prepare necessary conditions for, the construction of the first-ever nuclear power plant in Vietnam with a capacity of around 2,000 MW, which is expected to be commissioned after 2015.

c/ Electricity import: According to agreements on energy cooperation already concluded, Vietnam shall import around 2,000 MW of electricity from Laos, then consider the import of electricity from Cambodia and China.

d/ To develop plants that use new and regenerated energy sources. To make full use of on-the-spot new energy sources to generate electricity for areas where electricity cannot be supplied from the national electric grid or is supplied with low efficiency, especially in offshore islands and remote and deep-lying areas.

2. Strategy on development of electric grids

- To develop electric sources in parallel with electric grids, and develop electricity-distributing grids in conformity to the electricity-transmitting grids.
- To quickly develop the 220 and 500 KV transmission system in order to raise the reliability of electricity supply and reduce electricity loss on transmission grids, ensuring the efficient exploitation of electric sources; to develop the 110 KV grids into the distribution networks for direct load supply.
- To research into, and reduce the supply of medium-voltage electricity by electricity-distributing grids. To quickly expand electricity-distributing grids to remote and deep-lying areas. To concentrate investment in the renovation of electricity-distributing grids so as to reduce electricity loss, restrict incidents and raise the reliability of electricity supply.

3. Strategy on electricity development in rural and mountainous areas

- To boost rural electrification with a view to accelerating agricultural and rural industrialization and modernization.
- To use new and regenerated energy sources to supply electricity for remote, deep-lying, border areas and offshore islands. To build a managerial mechanism for maintenance and development of electric sources in these areas.
- To encourage the diversification of investment in, and management of, rural electric grids.
- To enhance the rural electricity price control so as to ensure the compliance with the ceiling prices prescribed by the Government.

4. Financial strategy and capital mobilization:

- To work out proper financial mechanisms so that Vietnam Electricity Corporation can perform its leading role in the realization of development objectives of Vietnam electricity industry.
- To continue implementing a number of investment projects in the forms of build-operate-transfer (BOT), joint venture or BOO in order to attract more investment capital and raise the debt-repayment capability of Vietnam Electricity Corporation.
- To work out measures for mobilizing capital from the population for investment in electricity development.
- To enhance relations with banks and international financial organizations in order to

borrow investment capital, with priority given to the borrowing of ODA capital sources with low interest rates and long debt-repayment duration (ODA capital shall be allocated only to Vietnam Electricity Corporation); to borrow capital from commercial banks, first of all domestic banks, then foreign commercial banks.

- To study the participation in securities market as well as the issuance of stocks at home and abroad for investment in electric works.

- To continue implementing the roadmap on electricity price reforms already approved along the direction of gradually reaching long-term marginal expenses and at the same time reforming electricity price table and reducing large cross-offset between customers' groups.

5. Strategy on scientific and technological development:

- To concentrate efforts on researching into scientific and technological advances to be applied to electricity production and transmission. To research into and apply modern production technologies along the direction of efficiently and economically using energy and minimizing impacts on environment with rational steps.

- To make intensive investment in, improve, upgrade and modernize the existing electric sources and grids, to improve the management and trading activities as well as customer services.

6. Orientations for development of telecommunications and information technology

- To make full use of advantages regarding telecommunications infrastructure of the electricity industry, combining telecommunications network in service of administration of electricity production and business with the development of public telecommunications services.

- To boost the application of information technology in service of the management and administration of production activities and raising of business efficiency of the electricity industry.

7. Orientations for development of electro-mechanics:

To strongly develop electro-mechanics thus contributing to developing domestic industries and reducing imports. To strive to basically meet the demands for equipment of a voltage of 110 kV or less by 2005 and partially meet the demands for 220 kV transformers and other 220 kV equipment by 2010. To research into the production of complete sets of equipment

for small-sized hydroelectric power stations, solar energy stations as well as spare parts for the repair of electricity plants. In the long term, it is necessary to research into and manufacture equipment compatible with international standards as well as national and regional particularities so as to meet the demands for domestic consumption and partial export.

8. Strategy on development of electricity construction consultancy

To concentrate on developing multi-branch consultancy companies specialized in intensive domains and step by step raise their qualifications so that they can be capable of designing large electricity works such as electricity plants, ultra-high voltage electric grids.

9. Strategy on development of electricity construction and installation branch:

To enhance the capability of electricity construction and installation units so that they can be capable of undertaking investment projects from the stage of technical designs to the stage of construction and installation of equipment for large electricity plants and electricity grids in the country as well as participating in bidding for overseas projects.

10. Strategy on human resource development:

- On personnel: To make planning on personnel and organize the training and fostering of cadres covered by the planning.

- On human resource training: To develop specialized schools of electricity branch, strive to build some schools of international standards. To carry out the accreditation training between collegial, intermediate vocational training and workers' training; to formulate uniform standard curricula for specialized training disciplines.

11. Strategy on development of electricity market:

To step by step form domestic electricity market, where the State holds monopoly in electricity transmission and dominates electricity production and distribution stage. In the immediate future, to form electricity sale and purchase market within Vietnam Electricity Corporation. To study and formulate adequate legal frameworks and conditions so as to soon form an independent electricity market.

4. Implementation solutions

1. Solutions on organization and mechanisms

- To submit supplements and adjustments of the Electricity Law to the National Assembly

for approval in 2004, which shall serve as a legal basis for all electricity activities, creating the legal framework for the control and coordination of electricity market. To research into, and formulate adequate legal frameworks and conditions so as to soon form a competitive electricity market.

- To formulate a roadmap for renovating the organizational structure of the electricity industry along strategic orientations already set forth.

2. Solutions on development investment:

- To formulate mechanism and policies, including policies on diversifying investment modes in order to bring into full play all resources, meeting the requirements for development of the electricity industry and the whole country.

- To calculate and elaborate rational plans on electricity import from Laos, Cambodia and China.

- To assign Vietnam Electricity Corporation to play the leading role in making investment in the development of electricity sources and grids, meeting the national socio-economic development requirements, being in line with its financial capability and debt-repayment capacity and ensuring long-term financial balance.

- To publicize the list of investment projects, encouraging various economic sectors at home and abroad, especially non-State economic sectors, to invest in electricity generation and distribution on the basis of attracting capital from the market for investment.

- To formulate proper investment mechanisms along the direction of reforming administrative procedures, quickly handling the issues of compensation for ground clearance so as to step up the tempo of electricity investment works.

3. Financial solutions and capital mobilization:

- To continue implementing electricity price reform according to approved schedule and study the adjustment of electricity price tables along the direction of reducing large cross-offset between customers' groups. To permit Vietnam Electricity Corporation to make separate cost accounting for public-utility services.

- To consider the reduction of value added tax for electric products to 5% from 10% so as to reduce the pressure for electricity price increase.

- To give priority to the allocation of preferential credit capital from the development

assistance fund, ODA capital and bilateral foreign loans to Vietnam Electricity Corporation for investment in national key electricity projects.

- To encourage the diversification of investment in, and management of, rural electric grids on the basis of enhancing the control over electricity selling prices in rural areas so as to ensure that such prices do not exceed the ceiling prices prescribed by the Government.

- To provide budget capital support for projects on electrification in rural, mountainous areas and off-shore islands in service of economic development as well as hunger eradication and poverty alleviation in these areas.

- To carry out the equitization of electricity works where the State needs not to hold 100% of capital. To carry out the experimental issuance of bonds and stocks to securities market. To enter into joint-venture and partnership in investment in electricity works.

4. Scientific and technological solutions:

- To enhance investment in sciences, technologies and management so as to strive to reduce electricity loss to around 10% by 2010 and below 10% in subsequent years.

- To use information technology to ensure the optimal operation of electric system.

- To implement the program on demand management (DSM) in order to reduce peak capacity, so as to economize investment capital and create favorable conditions for the operation of electric system and thriftily use electricity for daily-life activities.

- To apply appropriate technologies so as to raise the efficiency of investment as well as production and business activities.

5. Solution on human resources:

- To attach importance to training and raising the quality of the contingent of cadres who possess high professional qualifications and sense of responsibility, thus meeting the requirement for development of electricity industry.

- To pay attention to the training of a contingent of engineers and specialists on nuclear energy so as to prepare for the construction and operation of nuclear power plants.

Article 2.- Implementation assignment

1. The Ministry of Industry

- To bear responsibility for directing the implementation of the strategy on the development

of the electricity industry and the planning on development of Vietnam electricity branch, consider and approve independent electricity projects in accordance with the planning and submit urgent projects to the Prime Minister for approval for investment.

- To study and propose mechanisms and policies for the implementation of the planning on electricity development in conformity with its competence prescribed by the Government.

2. Vietnam Electricity Corporation:

- To assume the prime responsibility for the satisfaction of the national electricity demand as well as the exchange of electricity with regional countries.

- To give priority to allocating preferential investment credit capital to investment projects on electricity development from the sources of preferential loans and ODA capital with the interest rates equal to the lending interest rates of financial institutions plus managerial costs, bilateral credit capital and State credit for its development investment.

- To adjust electricity prices according to roadmap prescribed by the Government.

- To allocate budget capital for investment in electric sources and grids for the targets of economic development in remote and deep-lying areas, rural electrification and public-utility infrastructure works; to allocate budget capital for investment in areas where electricity cannot be supplied from the national electric grids.

- Vietnam Electricity Corporation shall make independent cost accounting for activities of electricity supply to rural and mountainous areas, separating them from production and business activities.

3. The ministries, branches and provincial/municipal People's Committees shall, within the ambit of their assigned functions and tasks and particular characteristics of their respective branches and localities, have to coordinate with the Ministry of Industry and Vietnam Electricity Corporation in implementing the strategy on development of Vietnam electricity industry, prescribed in this Decision.

4. Vietnam Fatherland Front and socio-political organizations are requested to actively participate in the implementation of this strategy within the scope of their operation.

Article 3.- This Decision takes effect 15 days after its publication in the Official Gazette.

Article 4.- The Minister of Industry, the other ministers, the heads of the concerned branches, the provincial/municipal People's Committees; the Management Board and general director

of Vietnam Electricity Corporation and concerned enterprises shall have to implement this Decision.

Prime Minister

PHAN VAN KHAI