Structural Reform in the Japanese Electricity Industry

Hisatake Narita

BACKGROUND OF STRUCTURAL REFORM

The background of mounting discussions on a structural reform of the Japanese electric power industry comprises three key points.

First, revitalization of the recession-hit Japanese economy involves efforts to reduce electricity rates to internationally competitive levels by correcting the high cost structure of the Japanese economy—in other words, by removing cost differences between Japan and other countries.

Second, there is a strong argument for deregulation of the Japanese markets in a bid to reform the nation’s whole economic structure, not limited to the structure of the electric power industry.

The third point is a series of measures implemented in other countries to infuse more elements of competition into the electric power industry, including the liberalization of retail supply and the creation of electric power pools.

VIEWS ON PROMOTION OF STRUCTURAL REFORM

Let me explain important considerations in promoting the structural reform of the Japanese electric power industry.

First, we have to maintain the balance between efficiency gains to secure a low-cost supply of electric power and the implementation of four public policy goals, comprising universal service, supply reliability, energy security, and environmental protection. This is an essential consideration for Japan, which relies on overseas supply sources for most of its energy requirements and applies a very high standard of performance to electric power companies with respect to environmental protection and supply reliability.

Another important consideration is to change the character of public utility regulation. More specifically, action should be taken for a shift from the conventional idea of operating public utilities mainly under administrative guidance to a new form of public utility regulation that is based on the principle of minimum government intervention.

OUTLINE OF STRUCTURAL REFORM

From these points of view, what is called “partial liberalization” of the electric power market with a limited scope of liberalization was proposed as a direction of policy deliberations in May 1998. The reason for adopting this proposal was
that it was considered desirable that electric power companies with an integrated system of power generation and transmission bear the main responsibility for maintaining the balance between efficiency gains and the implementation of the public policy goals. It was contended that total liberalization of the market and the introduction of a pool system are premature for the time being but are to be reviewed in the future.

Among major issues involved in steps toward the implementation of the proposed partial liberalization are the scope of liberalization and the establishment of rules on the use of transmission networks. These issues were discussed in the Electric Power Industry Council with the participation of industry representatives and university professors as well as regular council members.

DETAILS OF STRUCTURAL REFORM

Now let us look at the details of the proposed structural reform of the electric power industry, divided into the power generation, transmission, and retail supply sectors.

In the power generation sector, a bidding system was introduced for all new thermal power plants, including those that would be built by electric power companies themselves and would have both long and short lead-times.

In the power transmission sector, it was decided that electric power companies will continue to hold a monopoly of transmission networks in their respective service areas, but open access to the networks would be granted to extra-high-voltage users. In order to secure fair competition, the proposed reform stipulates that wheeling charges be borne equitably by users and that the provisions of the change be registered by 4 January 2000, about three months before the reform. Also fairness and transparency must be secured by the isolation of information and separate accounting from the marketing division.

In the retail supply sector, the reform calls for partial removal of the existing local monopoly and partial liberalization of electric power supply limited to extra-high-voltage users.

PARTIAL LIBERALIZATION OF RETAIL SUPPLY

Let us explain the proposed partial liberalization of retail supply by a block diagram.

As seen in Figure 1, the partial liberalization will permit new entrants and other electric power companies to offer retail supply to customers in the service area of a local electric power company through its transmission network.
Now I would like to report on a review of the electricity rate system. The extra-high-voltage sector to be liberalized by the proposed structural reform will no longer be subject to any rate regulation or supply obligation. In other words, electricity rates in this sector will be left to free negotiations between suppliers and customers. Meanwhile, the high-voltage, low-voltage, residential, and some other sectors, which are not covered by the proposed partial liberalization, have been subject to an approval system that requires procedures such as a public hearing and individual and yardstick assessments for each revision of electricity rates. However, the review of the rate system led to a decision that electric power companies, when lowering their rates, will be required only to notify the competent authorities of the rate revision. This means that action will be taken to respect business independence and simplify the rate revision process by eliminating the individual and yardstick assessments.
REMOVAL OF NONCORE BUSINESS REGULATION

Another notable point in the recent series of proposed structural reforms is a decision, also adopted from the viewpoint of respecting business independence, to remove the noncore business regulation that has restrained electric power companies from diversifying into other sectors of industry. In the past, the diversification of business operations by electric power companies has been subject to an approval system, apart from some exceptions. After the revision of the system, official approval of such new business projects will no longer be necessary.

Examples of new business ventures by electric power companies include communications, wholesale gas supply, and environment-related operations.

SCHEDULE FOR MODIFICATION OF ELECTRIC UTILITIES INDUSTRY LAW

Now I will talk about a schedule for the modification of the law comprising the structural reforms described above. The amended Electric Utilities Industry Law was promulgated in May 1999, and discussions are now being held on a detailed design of the revised system. In response to the institutional revision, electric power companies are preparing to submit the last resort and other necessary provisions for the proposed partial liberalization of the electric power market. The revised system will be implemented on 21 March 2000.

Also, it was decided that the new system be reviewed three years after its implementation, to examine the results of the partial liberalization and the state of new entrants, liberalization in other countries, technical state of network stability, and any negative effects on public policy goals. We can say that the progress of Japanese structural reform depends on the result of the review.

MAINTAINING PUBLIC POLICY

GOALS: PROMOTION OF NUCLEAR POWER

While these structural reforms are going on in Japan, we are taking measures to maintain public policy goals steadily. Among others, we believe further promotion of nuclear power generation is essential, both to meet the steady growth of electric power demand and from the viewpoint of arresting global warming (see Figure 2). In this connection, we have recently started the construction of Unit 2 at our Shika Nuclear Power Station, on a progress schedule to start commercial operation in March 2006.
ENVIRONMENTAL PROTECTION POLICIES

Finally, let us look at measures for environmental protection. As part of measures to reduce greenhouse gas emissions, efforts are needed to effectively utilize, among others, new energy sources and, in addition, to obtain accreditation of our environmental management system from the International Standardization Organization (ISO) and to promote efficient use of available resources.

As I mentioned above, Japan’s electric power industry is promoting the structural reforms steadily, while maintaining a balance between efficiency gains and the implementation of public policy goals. I would like to emphasize that this is the big difference in comparison with the structural reforms in western countries.