

# **Proposals for the electricity market from competition policy (Summary)**

September 21, 2012  
Japan Fair Trade Commission

## **I. Objectives of the Study (From I-1 to I-4 of the Survey Report (Report))**

The Japan Fair Trade Commission (hereinafter referred to as the “JFTC”), in 1982, conducted a cross-sectional survey and analysis with respect to governmental regulatory system, and the electricity business is one of the targeted sectors. Since then, while the JFTC has discussed the way regulations should be in the electricity business etc., in collaboration with the reviews by the Ministry of Economy, Trade and Industry (hereinafter referred to as the “METI”), then, based on the results from their discussions, the JFTC has provided proposals.

Recently, “Policy on Regulatory and Institutional Reform in the Energy Sector,” which was adopted by the Cabinet on April 3, 2012, articulated what the JFTC is assigned to do as follows: in the light of the current situation that (i) “the General Electricity Utilities have the market power, and the PPSs face difficulties in increasing their market share” and (ii) “there has been no competition among the General Electricity Utilities beyond their respective service areas, and large-scale users cannot purchase electricity in a single contract covering the entire country”, the JFTC is instructed “to comprehend and analyze issues of current state of competition in the electricity market, then to discuss the results from what they learned, while taking the progress of the discussions made by the METI into account, and to draw conclusion on the JFTC view from the standpoint of competition policy.”

This time, the JFTC, in response to the above Cabinet decision, conducted a survey on the current state of the electricity market, discussed what they learned from the standpoint of competition policy, then, crystallized the JFTC ideas.

Meanwhile, the JFTC is willing to continue to discuss the way competition should be in the electricity market that reflects observations etc. of actual competition state in foreign countries, as necessary, while taking the shifts made in the debates concerning the reform of the electricity market into account.

## **II. Points of View (I-5 of the Report)**

In response to the Cabinet decision (I in this summary, above,) the JFTC conducted this survey from the following three (3) points of view to study:

- (1) Whether purposes of regulations are reasonable in the light of the policy requirements, and whether regulations are kept to a minimum to achieve their intended purposes.
- (2) Whether contents and methods of regulations are designed to be able to reasonably achieve their intended purposes in the light of enterprises' incentives.
- (3) If characteristics of the electricity market and enterprises' behavior based on the said characteristics prevent free and effective competition, there should be measures to solve such problems.

## **III. Survey Methods (II of the Report)**

The JFTC posted a notice on its website on April 9, 2012, seeking comments about the current state of competition from users in the deregulated sector of the market, PPSs, and enterprises that operate their own power generation facilities. The JFTC also contacted 27 groups— 9 General Electricity Utilities, 8 PPSs, 4 enterprises that operate their own power generation facilities, 2 enterprises of electricity-related services, 3 users in the deregulated sector of the market, and 1 consumer organization—to interview their representatives. The JFTC also spoke with 55 members of the JFTC's antitrust cooperation committee, including individuals belonging to consumer organizations. At the same time, the JFTC sent out questionnaires to 9 General Electricity Utilities, 11 PPSs, and 26 public organizations that operate hydroelectric plants. These 26 public organizations, which are established under the Article 2 of the Local Public Enterprise Act, are operated by regional governments and municipalities.

## **IV. Major current state and problems in the respective sectors (Survey Results) (II of the Report)**

### **1. Retail sector (II-1 of the Report)**

The PPSs' electricity sales share in the deregulated sector of the retail market is only about 3.5% (as of FY 2010) that is small. The electricity sales share in industrial use for factories etc. was much smaller than that in the business operations for offices and stores etc. As to the reasons of this, it can be reckoned that the power plants of PPSs incur higher variable costs than those of the General Electricity Utilities do, thereby, making it difficult for PPSs to serve users that use a huge amount of electricity at

nighttime since it is hard to offer competitive prices and secure a steady supply of a large amount of electricity. In addition, PPSs argue that because the number of users who use high-voltage power is large while many of such users are small scale users, the operations and customer care for these users cost lot.

Meanwhile, there is only one precedent in which a General Electricity Utility provided electricity to a user outside its own service area. The General Electricity Utilities have optimized their services to tailor them for the needs within their service areas during the years of operations as regional monopolies with supply obligations. Thus, the General Electricity Utilities have no incentive to expand their business outside of their service areas. Moreover, due to the limits set on the capacities of interconnected lines and frequency converters (hereinafter, referred to as “FCs”) between different areas, electricity utilities have a substantial need to establish power plants within the same area where users are located. That raises the cost of providing electricity to users outside their own service areas.

## **2. Generation/wholesale sector (II-2 of the Report)**

More than 70% of electricity generated in Japan is provided by the General Electricity Utilities. On the other hand, PPSs procure only less than 10% of their electricity from the General Electricity Utilities and electric power exchange. Most of PPSs’ source of electricity procurement relies on Non-Utility Power Producers etc. In addition, PPSs rely heavily on power plants that incur high variable costs.

PPSs have difficulty in newly building power plants that have lower variable costs.

Due to the reasons such as its long depreciation period, Non-Utility Power Producers etc., including public organizations, provide electricity to the General Electricity Utilities on long-term supply contracts.

The General Electricity Utilities are being in direct competition with PPSs in the retail sector therefore they have no incentive to provide electricity to PPSs through electric power exchange or by other means.

Electric power exchange is not such a source of electricity procurement that PPSs can rely on due to its small flexibility and so on.

## **3. Transmission and distribution sector (II-3 of the Report)**

As to transmission fee, the calculation method is regulated. The General Electricity Utilities separate the accounting of their transmission and distribution units from that of their other units. Even so, from outside of the General Electricity Utilities,

it appears that the General Electricity Utilities seem to have incentives to disadvantageously treat PPSs through setting excessively high transmission fee on PPSs.

PPSs argue that financial burdens involved with imbalance raise PPSs' costs and create barriers to market entry because PPSs are required to invest in facilities in order to meet the balancing rule and are required to make payments involved with imbalance, despite the fact that the impacts of the imbalance caused by PPSs on the distribution system are small since their business scales are also small. In addition, the General Electricity Utilities do not keep track of actual supply-demand disparities in their retail units. A certain fixed amount is deemed as an amount equivalent to an actual amount of imbalance that has been used in calculation of their wheeling income-expenditure balance.

## **V. The JFTC's view on Competition policy (III of the Report)**

### **1. Basic Viewpoint (III-1 of the Report)**

#### (1) Competition state in the electricity market

In the light of the current state of the electricity market described in the IV, in the immediate previous section of this summary, there is no effective competition in the market even though the market entry to the retail sector has been deregulated. Under these circumstances, even if deregulation expands the range of enterprises' choices, only with deregulation, promotion of competition cannot be expected.

In addition, from the nature of the electricity market in which the number of the users is very large and most of them are small and medium-sized users, and from the current state where PPSs, as electricity suppliers, have not become realistic alternatives, bargaining power disparity exists between the General Electricity Utilities and the small- and medium-sized users.

Whereas, at the moment, full deregulation in the retail sector is currently under discussion, the JFTC reckons that full deregulation itself would be desirable from the viewpoint of competition policy. However, unless the problem described above is solved, even in a case where new entrance to the retail sector is fully deregulated, such sector newly deregulated would end up like the current deregulated sectors, therefore, it is difficult for such a newly fully deregulated sector to achieve effective competition.

#### (2) The way forward to tackle the issues

The ways forward the electricity business system should be and the ways to progress the system reform will be, we reckon, articulated based on respective relevant

authorities' decisions, considering relevant policy requirements such as balancing supply with demand and environment protection. In their decision making, in order to ensure effective competition in the retail sector in the electricity market, thereby, enabling users to benefit from competition, the following efforts are necessarily to be made: the electricity business system must be designed so as to enable sufficient common-use infrastructures to be built. On top of that, incentives should be given to market participants to shape a system with relevant enterprises' business activities based on their rational economic decisions so as that the PPSs' procurement situation would be improved.

At the same time, considering the nature of the electricity market, there should be professional services that represent users in negotiating with electricity utilities. Users should also be encouraged to join forces and negotiate with electricity utilities for better contract terms. It is crucial to enable users' requests to be better reflected in the menus and prices.

In addition, the JFTC will continue to strictly enforce the Antimonopoly Act and provide clear interpretation of the law through the use of "the Guidelines for Proper Electric Power Trade" and so on.

## **2. Consideration for Enterprises' incentives (III- 2 of the Report)**

### **(1) Independent of the General Electricity Utilities' retail units from generation/wholesale units**

In order to ensure the General Electricity Utilities' incentives to supply electricity for PPSs, separating their retail units which directly compete with PPSs in the retail sector and their generation/wholesale units which supply electricity to PPSs from each other as two different independent entities is an option.

Once they become independent from each other to be different entities at least, the terms and conditions between the generation/wholesale units and the retail units and those between the generation/wholesale units and PPSs would become available for comparison of generation/wholesale units' supply contracts with procurement-sides. It could be more difficult for their generation/wholesale units to restrain electricity supply for PPSs or set discriminatory terms and conditions, to the extent which cannot be attached with rational explanations, on electricity supply for PPSs, we reckon, compared with the case where such comparison is not available. For example, in a case where separated generation/wholesale units treat the competitors of their group retail units in a discriminatory manner, such discriminatory conduct would be potentially deemed as a violation of the Antimonopoly Act that prohibits private monopolization

(the first section of Article 3 of the Antimonopoly Act) and unfair trade practices (Article 19 of the Antimonopoly Act).

(2) Independent of the General Electricity Utilities' transmission and distribution units

The General Electricity Utilities' transmission and distribution networks are shared by PPSs and other electricity providers. Therefore, it is necessary to ensure that the said networks are accessible and operated in a neutral and non-discriminatory manner.

Therefore, from the standpoint of competition policy, in order to remove incentives of the transmission and distribution units to unfairly treat enterprises with which the General Electricity Utilities compete in the retail sector or the generation/wholesale sector, the said transmission and distribution networks must be independent from their retail units and from generation/wholesale units. As to the details of such system design, the details should be those so as to materialize the required state that keeps transmission and distribution services accessible and operated in a neutral and non-discriminatory manner as possible as they can achieve.

**3. Ensuring appropriate terms and conditions for the use of facilities and services provided by the monopolistic suppliers (III-3 of the Report)**

(1) Transmission fees

Even if transmission and distribution units are becoming independent from generation/wholesale units and retail units, the state of transmission and distribution service suppliers is continually monopolistic. Thus, certain regulations concerning the level of transmission fees are necessary to prevent harmful effects due to their monopolistic behavior. When authorities impose regulations, from the standpoint of competition policy, it is desirable that such regulations should be designed so as to encourage the transmission and distribution units to streamline their operations as possible as they can.

(2) Payments for obligation of balancing rule and for a supply–demand imbalance

Operators of transmission and distribution networks must ensure to match generation and consumption throughout the system as a whole in an integrated manner (to meet the requirements from balancing rule). Costs necessary for such operations are to be impartially incurred between the General Electricity Utilities and PPSs.

Therefore, it is reckoned that independent of the General Electricity Utilities from transmission and distribution network operators managing the system as a whole is

required and that, then, the General Electricity Utilities are also required to incur the amount of payment involved with supply-demand imbalance that actually turns out.

#### **4. Infrastructure improvements (III-4 of the Report)**

##### **(1) Strengthening interconnected lines and FCs**

Even if the transmission and distribution units become independent from other units, the transmission and distribution sector is monopolized. Therefore, no aggressive investment incentive that strengthens the interconnected lines and the FCs would not work, we reckon. Thus, it seems that some regulatory interventions and regulations from neutral position such as governmental agencies would be necessary to be introduced to encourage strengthening of the interconnected lines and the FCs.

##### **(2) Revitalization of the electric power exchange**

Even after the General Electricity Utilities' generation/wholesale units are completely obtaining their independent from their retail units, we cannot expect enterprises motivated with economic rationality to robustly participate into trading at the electric power exchange unless the electric power exchange improves its usability. Therefore, the electric power exchange's business is expected to be run in a way that the electric power exchange painlessly reviews its product designs and trading rules that are to be more convenient to the participants.

##### **(3) Smart meter specification etc.**

In terms of specifications including those of communication network and handling the information obtained from smart meters, the system design is expected to be something which would not hamper competition among retailers.

#### **5. Consideration for bargaining power disparity in the retail market (III-5 of the Report)**

##### **(1) Multiple Small-lot users' collective negotiation with electricity utilities**

If PPSs become to be able to procure electricity at competitive prices through the respective measures mentioned in above Section 1–4, it is reckoned that users obtain bargaining power against the General Electricity Utilities on the grounds of users' potential switch to PPSs, and if collective negotiation is available for users, negotiation based on such switch potentiality becomes more effective thereby, leading to further enhancement of users' bargaining power.

As to whether such user-side efforts to utilize their bargaining power fall under

any violation of the Antimonopoly Act, for example, when an enterprise association made of small- and medium-sized enterprises conducts users' collective negotiation on electricity, and the enterprise association conducts users' collective negotiation on electricity procurement, in the light of the current state of the electricity market, it is difficult for anyone to imagine an enterprise association whose market share has impact on competition in the electricity market. In general, except a case where the market share of such enterprise association in goods or services supply sector is large, and, except a case where the ratio of electricity charge to the cost required to supply goods or services is high, it is possibly reckoned that users' collective negotiation on electricity procurement conducted by an enterprise association made of small-and medium-sized enterprises would not be deemed problematic in relation to the Antimonopoly Act.

(2) Regulatory obligation to be imposed on enterprises to establish and disclose a "default-service provisions" etc.

In the sector for small-lot users where newly competition is to be introduced by approving new entrants into the whole retail sector, if there is an abuse of market power in such sector, expected negative impact such as a price increase would be more serious than in the deregulated sector of the market. Therefore, in order to prevent such negative impact, it is reckoned that regulatory authority may establish rules on which electricity utility is to be required to ultimately supply for the users who cannot otherwise procure electricity (default services) and may set regulatory obligation on such electricity utility assigned to draw up and disclose the provisions which stipulate minimum terms and conditions of supply contract (a "default-service" provisions) thereby, banning any contracts under more disadvantageous conditions to users than those stipulated in the provisions.

## **6. Miscellaneous (III-6 of the Report)**

- (1) Review of the General Electricity Utilities' special privileges
- (2) Sale of electricity generated by the power plants possessed by public organizations operating public hydroelectric plants etc.