Trend in Japan’s Energy Policy

Deliberations toward revision of energy policy and the electricity business system have been ongoing in Japan since the occurrence of the Great East Japan Earthquake and Tokyo Electric Power Company’s Fukushima Daiichi Nuclear Power Station accident in March 2011.

Energy Mix

Pursuant to the Basic Act on Energy Policy enacted in June 2002, the Japanese government framed a Basic Energy Plan that puts together long-term, comprehensive and systematic policies concerning energy supply and demand. Under the said Act, the Plan’s contents must be reviewed, and the Plan amended as necessary, once every three years.

In April 2014 the Cabinet approved the Fourth Basic Energy Plan. On the basis of an “S + 3 Es”* approach, this plan positions nuclear power generation as “an important base-load power source” contributing to the stability of the energy supply-demand structure, and moreover sets forth an orientation of accelerating the introduction of renewable energies. In July of this year, an energy mix for FY2031 has been put forward that is based on the roles of such energy source and is balanced so as not to depend excessively on any particular energy source.

In July 2018 the Cabinet approved the Fifth Basic Energy Plan. While maintaining the concept of the Fourth Plan, the direction of measures to ensure the realization of energy mix in 2030 was shown.

In a form that conforms to this energy mix, Japan's overall CO2 emission control target was set as a “26% reduction in FY2031 compared to FY2014”, and a target “aiming for an emission factor of approximately 0.37 kg-CO2/kWh in FY2031 (35.0% reduction compared to FY2014)” was set for electricity businesses, too, provided that the energy mix was achieved. Aiming to achieve the overall electricity business targets, each business is currently moving ahead with efforts.

*S + 3 Es: Activities, with Safety (“S”) as over-arching precondition, that give first priority to the stable supply of energy (energy security, the first “E”) and devote maximal efforts to achieving energy supply at low cost through raising of economic efficiency (second “E”) while at the same time seeking environmental compliance (third “E”).

**Energy Mix and CO2 Emissions Reduction Target (Decided by the cabinet in July 2015)
Japan was using a system whereby 10 general electric utilities that have to carry out all the operations from power generation through to retail fulfilling the supply responsibilities in their defined supply areas. But given facts such as the electricity shortages in the aftermath of the Great East Japan Earthquake, there are held to be increased societal needs for “utilizing supply capacity across wider areas” and “letting people choose a power company of their own free will”. Accordingly, Electricity System Reform is now underway which will reform the electricity business system in three phases.

The first phase—“Expanding operations of wide-area electrical grids”—got underway in April 2015, when the “Organization for Cross-regional Coordination of Transmission Operators” commenced their duties. These bodies are to coordinate certain power supply-demand plans and operations across wide areas covering the electric power of various districts.

The second phase—“Full liberalization of the retail sale participation”—is scheduled to be implemented from April 2016 onward.

The third phase—“Legal separation of the power transmission/distribution sector”—is to be implemented by April 2020, as stipulated in the Electricity Business Act which passed the National Diet in June 2015.

In each phase of the Electricity System Reform, verification as to conformity with the government’s energy policy and as to the power supply-demand situation, etc., are to be conducted, and such measures as may be necessary are to be devised in line with the results of such verification and from the perspectives of competitive conditions, funding and so forth.

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**Outline and Schedule of Electricity System Reform**

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<th>Schedule (Calendar year)</th>
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<td>2015</td>
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<td>2020</td>
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2015.04.01

**Phase 1**<sup>1</sup>

OCCTO*1 commenced the duties

2016.04.01

**Phase 2**

Full liberalization of the retail sale participation<sup>2</sup>

2020.04.1

**Phase 3**

Legal separation of transmission/distribution sector<sup>3</sup>

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*1 Organization for Cross-regional Coordination of Transmission Operators: independent organizations that centrally collect information on system users and coordinate supply-demand plans/operations across a wide area in their various regions.

*2 Expansion of the scope of liberalization to include low-voltage customers (homes, offices and so on), thus enabling all customers to select the business they purchase power from.

*3 Retail businesses will be obliged to ensure a supply capacity commensurate with their own demand.

*4 Businesses will be free to set their own rates, in principle. However, as a transitional measure to protect consumers, the supply obligation and rate regulation with regard to low-voltage customers will continue to be imposed on the general electric utilities.

*5 The Act prohibits general power transmission and distribution businesses, and power transmission businesses, from engaging in retail electricity business or electricity generation business.

*6 In order to ensure a fair competitive environment, the Act sets up conduct regulations that prohibit directors of a general power transmission and distribution business and power transmission businesses from serving concurrently as a director of an electricity generation business or retail electricity business in the same corporate group, or vice-versa.