ELECTRICITY REGULATION





••• LEXOLOGY ••• Getting The Deal Through Consulting editor Milbank LLP

Electricity Regulation

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Quick reference guide enabling side-by-side comparison of insights into the local legal framework; regulation of power generation, grid connection, and alternative energy sources; climate change policy; energy storage; nuclear power; transmission and distribution; sale of power, including retail and wholesale pricing and public service obligations; regulatory authorities; competition regulation including merger control; cross-border considerations including mergers and acquisitions and interconnection regulations; transactions between affiliates; and recent trends.

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Table of contents

LEGAL FRAMEWORK

Policy and law Organisation of the market

REGULATION OF ELECTRICITY UTILITIES – POWER GENERATION

Authorisation to construct and operate generation facilities Grid connection policies Alternative energy sources Climate change Storage Government policy

REGULATION OF ELECTRICITY UTILITIES – TRANSMISSION

Authorisations to construct and operate transmission networks Eligibility to obtain transmission services Government transmission policy Rates and terms for transmission services Entities responsible for grid reliability

REGULATION OF ELECTRICITY UTILITIES – DISTRIBUTION

Authorisation to construct and operate distribution networks Access to the distribution grid Government distribution network policy Rates and terms for distribution services

REGULATION OF ELECTRICITY UTILITIES – SALES OF POWER

Approval to sell power Power sales tariffs Rates for wholesale of power Public service obligations

REGULATORY AUTHORITIES

Policy setting Scope of authority Establishment of regulators



Challenge and appeal of decisions

ACQUISITION AND MERGER CONTROL – COMPETITION

Responsible bodies

Review of transfers of control

Prevention and prosecution of anticompetitive practices

Determination of anticompetitive conduct

Preclusion and remedy of anticompetitive practices

INTERNATIONAL

Acquisitions by foreign companies

Authorisation to construct and operate interconnectors

Interconnector access and cross-border electricity supply

TRANSACTIONS BETWEEN AFFILIATES

Restrictions

Enforcement and sanctions

UPDATE AND TRENDS

Key developments of the past year



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LEGAL FRAMEWORK

Policy and law

What is the government policy and legislative framework for the electricity sector?

The electricity sector in Japan is governed by the Electricity Business Act (EBA).

Before 1995, the EBA allowed 10 general electricity utilities to dominate the generation, transmission, distribution and sale of power. Although the industry, especially the generation and sale of power to high-voltage consumers, had been partially liberalised since 1995, it was not until the Fukushima nuclear disaster in March 2011 that the Japanese government began to seriously reform the electricity market.

The regulations on the electricity business created by the EBA were amended in three steps: the first in April 2015, the second in April 2016 and the third in April 2020.

The Organisation for Cross-regional Coordination of Transmission Operators (OCCTO) was established by the first amendment. This organisation is expected to facilitate nationwide efficient grid establishment and operations.

The second amendment liberalised the sale of power to low-voltage consumers (those with contracts for electricity consumption of less than 50 kilowatts (eg, ordinary households), which has been dominated by general electricity utilities, and all electricity retail companies registered with the Minister of Economy, Trade and Industry (METI) (the METI Minister) are generally able to provide electricity to any consumers at discretionary terms and conditions. Regulations on the wholesale of electricity were also fully abolished.

In the third amendment, a company that engages in general transmission business (which provides wheeling services through its grids) is no longer permitted to engage in retail or power generation, and the general transmission utility has to be a separate legal entity from the generation or retail business company.

Since then, the EBA has been amended several times. In 2020, it was amended to sustain a stable electricity supply even in the event of a natural disaster, such as an earthquake or typhoon. These amendments, with some exceptions, were implemented in April 2022 and are mainly composed of the following matters:

- changing the calculation method of the wheeling service tariff from a cost-plus-profit concept to an expected revenue concept;
- · creating a distribution utility licence; and
- creating a specified wholesale supply utility licence.

The EBA was also amended in 2022 to reflect the growing momentum toward decarbonisation. With effect from April 2023, this amendment categorises the business of discharging electricity from large grid storage batteries as a type of power generation business, allowing it to connect to and obtain transmission services from a general transmission utility's facilities unless there are justifiable grounds for refusal.

Law stated - 30 June 2022

Organisation of the market

What is the organisational structure for the generation, transmission, distribution and sale of power? How is this reflected in the regulatory structure?

Generation and wholesale



With effect from 1 April 2016, all power producers are required to make certain filings with the METI Minister before engaging in the power generation business, unless the power producer satisfies certain requirements (eg, the total power-producing ability of facilities owned by a producer being lower than 10 megawatts), which are provided by rules of the METI. In April 2016, wholesale regulation was abolished, and wholesale entities are generally able to supply electricity at terms and conditions determined at their discretion.

Since July 2012, suppliers of electricity generated from certain renewable energy sources are entitled to sell the electricity to an electricity utility at a fixed price for a fixed period under a feed-in tariff (FIT) programme. With effect from April 2022, for the supply of electricity generated from certain competitive renewable sources, FIT no longer applies and the suppliers are able to receive not a fixed purchase price but certain premiums if they sell the electricity to electricity retailers through the electricity wholesale exchange or individual transactions with the retailer under a new feed-in premium (FIP) programme.

Also, a specified wholesale supply utility, whose business is to aggregate electricity that is generated or discharged from power plants or batteries and then supply it to a general transmission utility, a distribution utility or an electricity retailer, is required to make certain filings with the METI Minister before engaging in its business.

Transmission and distribution

A utility must obtain approval from the METI Minister to operate a business providing wheeling services through its own transmission and distribution lines dominantly throughout any of 10 service areas. Only 10 general transmission utilities (the former general electricity utilities before April 2016) are allowed to engage in that business in each service area. Other companies that operate transmission lines for the connection between power plants and general transmission utilities' lines are required to obtain the approval of the METI Minister, and those that operate transmission lines to supply electricity to customers in a specific area must make a filing with the METI Minister.

Also, an entity (excluding a general transmission utility) that operates a business providing wheeling services through its own distribution lines has to obtain approval from the METI Minister.

Sale of power

Until March 2016, the retail market for low-voltage consumers had not been liberalised, and 10 local general electricity utilities had been allowed to dominate the market in their respective service areas.

In April 2016, the retail market was fully liberalised, and all entities that are registered as electricity retailers are permitted to provide electricity to low-voltage consumers as well. As of June 2022, more than 700 entities are registered as electricity retailers.

Law stated - 30 June 2022

REGULATION OF ELECTRICITY UTILITIES – POWER GENERATION

Authorisation to construct and operate generation facilities

What authorisations are required to construct and operate generation facilities?

As of 1 April 2016, all power producers are required to make certain filings with the Minister of Economy, Trade and Industry (METI) (the METI Minister) before engaging in the power generation business, unless the power producer satisfies certain requirements (eg, the total power-producing ability of facilities owned by a producer being lower than 10 megawatts), which are provided by rules of the METI.



For the construction of a power plant, prior filing of the construction plan with the METI Minister is generally required, unless the output of the power plant is below certain thresholds. Concerning the construction and operation of nuclear plants, the Electricity Business Act requires approval of the construction plan before construction and the inspection of construction before operation by the Nuclear Regulation Authority and the METI Minister. Also, the installation of a nuclear power reactor requires the approval of the Nuclear Regulation Authority.

Also, the construction of thermal power, hydropower, wind power or geothermal plant with a generating power exceeding certain thresholds, or a nuclear plant, requires prior environmental impact assessments.

Law stated - 30 June 2022

Grid connection policies

What are the policies with respect to connection of generation to the transmission grid?

A general transmission utility must allow connection of generation to the grid and provide a wheeling service unless there are justifiable grounds to refuse it.

A general transmission utility must also allow power producers to connect with its transmission facilities unless there are justifiable grounds for refusal.

Law stated - 30 June 2022

Alternative energy sources

Does government policy or legislation encourage power generation based on alternative energy sources such as renewable energies or combined heat and power?

In July 2012, a feed-in tariff (FIT) for electricity generated from certain renewable energy sources (renewable energy electricity) was introduced. Under FIT, transmission utilities must purchase renewable energy electricity from the producer (which obtained certification on the business plan from the METI) at a fixed price for a fixed period. Solar photovoltaic (PV), wind, small and medium-sized hydro, geothermal and biomass are the renewable energy sources eligible for FIT.

The purchase prices and periods differ depending on the type of renewable energy and the scale of the plant and are decided by a public notice issued by the METI Minister, who takes into consideration the opinion of the Calculation Committee of Purchase Price. The purchase prices and periods are renewed every year, and the set price and period apply to a project as of the date on which the certification on the business plan is issued.

With effect from April 2022, in addition to FIT, a feed-in premium (FIP) for renewable energy electricity was introduced. Under FIP, renewable energy producers sell the energy to electricity retailers through electricity wholesale exchange or individual transactions with the retailers and receive certain premiums from the Organisation for Cross-regional Coordination of Transmission Operators (OCCTO), in addition to the sales revenue. The METI Minister determines:

- the renewable energy sources eligible for FIP;
- standard prices, which are required to calculate the amounts of premiums; and
- grant periods, which are periods during which the premiums are granted, taking into consideration the opinion of the Calculation Committee of Purchase Price.

Law stated - 30 June 2022



Climate change

What impact will government policy on climate change have on the types of resources that are used to meet electricity demand and on the cost and amount of power that is consumed?

FIT, which was introduced in July 2012, has facilitated and will facilitate a substantial number of new companies to enter the electricity generation market and is expected to increase the amount of electricity produced by solar PV, wind, small and medium-sized hydro, geothermal and biomass sources. From April 2012 to December 2020, total capacity expanded by approximately 65.5 gigawatts from new renewable power plants (approximately 59.4 gigawatts of such additional capacity come from solar power plants).

The costs of FIT will ultimately be borne by electricity consumers as a surcharge but is arranged so that the costs are spread equally throughout Japan by the Surcharge Adjustment Organisation. From April 2022, the OCCTO took over the position of the Surcharge Adjustment Organisation and conducts operations concerning surcharges with respect to FIT and FIP.

Law stated - 30 June 2022

Storage

Does the regulatory framework support electricity storage including research and development of storage solutions?

There are subsidy programmes to support the introduction of electricity storage batteries, some of which are for households and others for business enterprises, provided by METI, the Ministry of Environment or some local governments or both. The provider, scope and amount of subsidy programmes change year to year. Also, with effect from April 2023, the business of discharging electricity from large grid storage batteries will be categorised as a type of power generation business, and it will be eligible to connect with and obtain transmission services from a general transmission utility's facilities unless there are justifiable grounds for refusal.

Law stated - 30 June 2022

Government policy

Does government policy encourage or discourage development of new nuclear power plants? How?

The Japanese government continued to position nuclear power as important base-load electricity in the Fundamental Energy Plan promulgated in October 2021, and tries to develop an environment that is supportive to electricity utilities restarting existing nuclear plants, once the utilities obtain the approval of the Nuclear Regulation Authority. However, it is difficult to construct new nuclear plants after the Fukushima accident for enhanced safety regulation and political reasons (including the difficulty to obtain the prefecture governor's consent).

Law stated - 30 June 2022

REGULATION OF ELECTRICITY UTILITIES – TRANSMISSION

Authorisations to construct and operate transmission networks



What authorisations are required to construct and operate transmission networks?

An entity that intends to construct transmission facilities for high voltages (170 kilovolts or more) must file its plan of construction with the Minister of Economy, Trade and Industry (METI) (the METI Minister).

An entity that engages in the construction and operation of transmission networks to supply electricity for consumers must obtain a licence as a general transmission business. There are 10 general transmission utilities that dominate the ownership of the licences and transmission lines in each of their service areas. A transmission utility that provides wheeling services for general transmission utilities (J-Power and entities that operate transmission lines through which remote renewable power plants access general transmission utilities' lines) is also required to obtain a licence from the METI Minister. Other entities that provide electricity to their customers by their own transmission and distribution lines are required to make certain filings with the METI Minister.

Law stated - 30 June 2022

Eligibility to obtain transmission services

Who is eligible to obtain transmission services and what requirements must be met to obtain access?

All electricity retail companies registered with the METI Minister are eligible to obtain transmission services (ie, wheeling services) from a general transmission utility, under the tariff on which the general transmission utility has obtained approval from the METI Minister, unless there are justifiable grounds for refusal.

All power producers are also eligible to connect with and obtain transmission services from a general transmission utility's facilities unless there are justifiable grounds for refusal.

Law stated - 30 June 2022

Government transmission policy

Are there any government measures to encourage or otherwise require the expansion of the transmission grid?

The cost-plus-margin wheeling service fee (this will be amended to the expected-revenue-based wheeling service fee) under the Electricity Business Act, by which the costs for the expansion of the transmission grid are finally borne by consumers through these wheeling service fees paid by electricity retailers, enables general transmission utilities to expand the transmission grid. Also, bondholders of a corporation acting as a general transmission utility have priority over other creditors in the right to receive payments from claims on the corporation's property, which enables general transmission utilities at lower interest rates on corporate bonds. From 2025, it will no longer be possible to issue bonds with such preferential treatment for bondholders.

In April 2015, the Organisation for Cross-regional Coordination of Transmission Operators (OCCTO) was established and it prepares development plans for nationwide transmission lines and strengthens the capacity to transmit electricity beyond each of the service areas of the 10 general transmission utilities.

Law stated - 30 June 2022



Rates and terms for transmission services

Who determines the rates and terms for the provision of transmission services and what legal standard does that entity apply?

A general transmission utility must formulate a wheeling service tariff that sets rates and other supply conditions for the wheeling service and obtain approval on the tariff from the METI Minister.

The tariff must satisfy certain requirements including the following:

- · the tariff will not harm the interests of recipients of the electricity supply;
- the recipients of the electricity supply under the wheeling service tariff will not experience any difficulty in receiving the wheeling service;
- the rates shall be calculated based on cost plus appropriate profit under the rule set by the METI (this will be amended to the requirement that the rates shall be calculated based on expected revenue under the rule set by the METI);
- · the rates are clearly set as fixed rates or fixed amounts; and
- nobody will be treated in an unfair and discriminatory manner.

If the METI Minister finds that the wheeling service tariff fails to satisfy the requirements above, he or she may order the general transmission utility to revise the wheeling service tariff.

Law stated - 30 June 2022

Entities responsible for grid reliability

Which entities are responsible for the reliability of the transmission grid and what are their powers and responsibilities?

In Japan, general transmission utilities own and operate transmission facilities, and they are responsible for assuring the reliability of the transmission grid. The OCCTO plans and monitors a nationwide transmission network beyond each regional transmission area owned and operated by a general transmission utility.

Law stated - 30 June 2022

REGULATION OF ELECTRICITY UTILITIES – DISTRIBUTION

Authorisation to construct and operate distribution networks

What authorisations are required to construct and operate distribution networks?

An entity that intends to construct distribution facilities for 50 kilovolts or more must file its construction plan for the distribution facilities with the Minister of Economy, Trade and Industry (METI) (the METI Minister).

Any entities that supply electricity to their customers by their own distribution lines (other than general transmission utilities and the transmission utility that have a licence from the METI Minister) are required to make certain filings with the METI Minister.

Also, an entity (excluding an entity that engages in a general transmission business) that engages in the construction and operation of distribution networks to supply electricity for consumers has to obtain a licence as a distribution



utility.

Access to the distribution grid

Who is eligible to obtain access to the distribution network and what requirements must be met to obtain access?

Any electricity retail companies that are registered at the METI Minister have access to the distribution grid. They are required to become a member of the Organisation for Cross-regional Coordination of Transmission Operators beforehand.

Law stated - 30 June 2022

Government distribution network policy

Are there any governmental measures to encourage or otherwise require the expansion of the distribution network?

The general transmission utilities and the distribution utilities are obligated to ensure there is an electricity supply to all consumers in their service areas. To perform this obligation, general transmission utilities and distribution utilities expand the distribution network as long as it is necessary to supply electricity to consumers.

Law stated - 30 June 2022

Rates and terms for distribution services

Who determines the rates or terms for the provision of distribution services and what legal standard does that entity apply?

A general transmission utility must determine a wheeling service tariff that sets rates and other supply conditions for the wheeling service (including distribution services) and must obtain approval on the tariff from the METI Minister. The requirements for the tariff are the same as the requirements for the tariff for transmission.

Also, a distribution utility has to determine a wheeling service tariff that sets rates and other supply conditions for the wheeling service and isrequired to make filings on the tariff to the METI Minister. The requirements for the tariff are the same as the requirements for a general transmission utility's tariff except that the rates shall be appropriate compared to the rates of a general transmission utility whose supply area includes the distribution utility's supply area.

If the METI Minister finds that the wheeling service tariff fails to satisfy the requirements above, he or she may order the general transmission utility or the distribution utility to revise the wheeling service tariff.

Law stated - 30 June 2022

REGULATION OF ELECTRICITY UTILITIES – SALES OF POWER

Approval to sell power

What authorisations are required for the sale of power to customers and which authorities grant such approvals?



All entities are allowed to engage in the retail electricity business, including supplying electricity to low-voltage consumers, by registering as electricity retailers.

An entity without registration as an electricity retailer is allowed to supply electricity after obtaining approval on 'specified supply' from the Minister of Economy, Trade and Industry (METI) (the METI Minister) to a recipient with which it is closely associated (such as a subsidiary).

Law stated - 30 June 2022

Power sales tariffs

Is there any tariff or other regulation regarding power sales?

Yes. Even after full liberalisation of the retail market in April 2016, regarding the electricity supply to low-voltage consumers (consumers with contracts for electricity consumption of less than 50 kilowatts), electricity retail companies (which were former general electricity utilities) must provide a power sales tariff and obtain approval for it from the METI Minister, and must supply electricity to low-voltage consumers under the tariff as long as such consumers desire. In 2019, the METI Minister determined that this treatment would continue until the METI Minister determined that this treatment would continue until the Set METI Minister determined that this treatment would continue until the Set METI Minister determined that the set of each general transmission utility) that sufficient competition exists.

From April 2016, all retail companies are legally required to explain retail prices and other conditions in writing to their customers before entering into supply agreements.

Law stated - 30 June 2022

Rates for wholesale of power

Who determines the rates for sales of wholesale power and what standard does that entity apply?

After the wholesale regulation was abolished in April 2016, all power generators are generally able to sell electricity at their discretionary conditions, even when they engage in electricity supply to the former general electricity utilities. On the other hand, to the extent that there is still a regulation requiring the former general electricity utilities to provide electricity at regulated prices to low-voltage consumers who desire it, the validity of the costs to procure electricity will be reviewed by METI when the regulated price increases, unless such utilities hold a bidding process, when they are to construct or replace certain thermal power plants by themselves. Prohibitions against insider trading and manipulation in the electricity wholesale market and relevant rules were introduced in April 2016.

The rates and terms of supply of certain renewable energy electricity are provided under feed-in tariffs or feed-in premium.

Law stated - 30 June 2022

Public service obligations

To what extent are electricity utilities that sell power subject to public service obligations?

Ten general transmission utilities (and, for supply to low-voltage consumers, retail companies that were former general electricity utilities until the METI Minister decides that sufficient competition exists in a certain supply area) are responsible for meeting certain public service obligations (to supply electricity at regulated conditions when certain end users cannot receive such service from any retail companies).



Law stated - 30 June 2022

REGULATORY AUTHORITIES

Policy setting

Which authorities determine regulatory policy with respect to the electricity sector?

The Ministry of Economy, Trade and Industry (METI) (including the Agency for Natural Resources and Energy, an affiliated agency of the METI, and the Advisory Committee for Natural Resources and Energy, a part of the Agency for Natural Resources and Energy) determines regulatory policy with respect to the electricity sector.

Since September 2015, the Electricity and Gas Market Surveillance Commission monitors and supervises whether electricity companies comply with the Electricity Business Act (EBA).

The Nuclear Regulation Authority, which is an affiliated agency of the Ministry of the Environment, has the authority to supervise nuclear power plants.

Law stated - 30 June 2022

Scope of authority

What is the scope of each regulator's authority?

The METI has the authority to:

- · issue licences to electricity utilities;
- order general transmission utilities to improve their operations;
- require an electricity utility to supply electricity to electricity retailers, general transmission utilities or distribution utilities in the event of a disaster or other emergency; and
- order a general transmission utility to provide a wheeling service.

The Electricity and Gas Market Surveillance Commission has the authority to:

- · issue a warning against electricity companies to comply with the EBA; and
- recommend that the Minister of Economy, Trade and Industry (METI) the METI Minister) issue orders against electricity companies.

The Nuclear Regulation Authority has the authority to:

- · approve the installation of a nuclear power reactor; and
- · inspect nuclear plants periodically.

Law stated - 30 June 2022

Establishment of regulators

How is each regulator established and to what extent is it considered to be independent of the regulated business and of governmental officials?



The METI is one of the ministries of the Japanese government. Staff members of the METI are public officials who are not allowed to have another job while serving in the METI to maintain independence from the regulated business.

The Electricity and Gas Market Surveillance Commission was established in September 2015. Its role is to supervise and monitor whether electricity companies comply with the EBA. The commission is independent of the Agency for Natural Resources and Energy.

The Nuclear Regulation Authority was established in 2012 after the Fukushima accident as an affiliated agency of the Ministry of the Environment. To achieve the nuclear regulatory authority's independence from the owners and operators of nuclear plants, staff members of the Nuclear Regulatory Agency, the administrative agency of the authority, are discouraged from moving to other government departments that may promote nuclear plants and also from being hired by owners or operators of nuclear plants even after retirement from the agency.

Law stated - 30 June 2022

Challenge and appeal of decisions

To what extent can decisions of the regulator be challenged or appealed, and to whom? What are the grounds and procedures for appeal?

All decisions and orders of the METI Minister can be challenged by an administrative appeal at the METI or by a lawsuit at a judicial court. Valid grounds for a challenge include the claim that the content or the procedures of a certain decision or order violates the EBA or other laws.

Law stated - 30 June 2022

ACQUISITION AND MERGER CONTROL – COMPETITION

Responsible bodies

Which bodies have the authority to approve or block mergers or other changes in control over businesses in the sector or acquisition of utility assets?

Mergers and demergers involving a corporation acting as a general transmission utility that results in the takeover of an entire transmission business are not effective unless approved by the Minister of Economy, Trade and Industry (METI) (the METI Minister). Also, assignment and acceptance of the entirety of a transmission business are not effective unless approved by the METI Minister. Transfers of shares of an electricity utility and acquisitions of a part of a utility's assets are not subject to the approval of the METI Minister. Power generators and electricity retailers must make a filing without delay when they engage in mergers, demergers or business transfers that result in the transfer of the entire power generating business or electricity retail business.

For mergers, stock acquisitions and business acquisitions that meet certain thresholds, the parties involved must file a pre-merger notification or a pre-acquisition notification with the Fair Trade Commission, and the transaction cannot be completed until 30 days have passed from the date that the commission accepted the notification. If the Commission believes that the transaction will substantially restrain competition in a particular market, it can order the entity concerned to dispose of all or a part of its stock, transfer a part of its business, or take any other measure necessary to remedy the situation.

Law stated - 30 June 2022



Review of transfers of control

What criteria and procedures apply with respect to the review of mergers, acquisitions and other transfers of control? How long does it typically take to obtain a decision approving or blocking the transaction?

When the METI Minister examines the application for a merger or acquisition of general transmission utilities, he or she considers the same items considered when granting a licence to a new applicant, such as whether the successor has sufficient financial resources and the technical capability to operate the electricity business properly. The general consideration period for the approval is eight weeks after the application is received, although the applicant is expected to consult with the METI beforehand.

On the other hand, the Fair Trade Commission considers whether the transaction will affect competition in the electricity market. The commission is generally expected to decide whether it approves the transaction within 30 days after it receives the filing. If the commission cannot decide within that period, it may extend the consideration period to the final date of 120 days that have passed since it received the filing and the final date of 90 days that have passed since it received the applying party to submit.

Law stated - 30 June 2022

Prevention and prosecution of anticompetitive practices

Which authorities have the power to prevent or prosecute anticompetitive or manipulative practices in the electricity sector?

The METI Minister has the authority to order a general transmission utility to provide wheeling services to electricity retail companies. If a general transmission utility takes advantage of its dominant position in the transmission and distribution market and refuses to provide wheeling services to an electricity retail company outside the utility's group, the Minister can order the general transmission utility to provide the wheeling service.

The Fair Trade Commission has the power to prevent anticompetitive or manipulative practices in the electricity sector as well. The Commission can issue a cease-and-desist order or an order for the payment of a surcharge if it decides that an electricity company is engaging in anticompetitive practices that violate provisions of the Anti-Monopoly Act.

Law stated - 30 June 2022

Determination of anticompetitive conduct

What substantive standards are applied to determine whether conduct is anticompetitive or manipulative?

The METI Minister considers whether there are justifiable grounds for refusing the service when deciding whether to order a general transmission utility to provide wheeling services.

The Fair Trade Commission together with the Ministry of METI provides guidelines for what constitutes appropriate electricity sales. (The latest amendments to the guidelines were made in 2022.) The guidelines provide that the following behaviours engaged in by a former general electricity utility may violate the Anti-Monopoly Act:

- behaviour that hinders the business of a newcomer in the retail market, such as:
 - · offering substantially lower rates to consumers who may enter into an agreement with a newcomer, or who



purchase the combined sale of electricity and other goods or services from the former general electricity utility;

- offering higher rates to consumers who intend to purchase electricity both from the general electricity utility and a newcomer; and
- · offering higher rates to consumers who have purchased electricity from a newcomer; and
- behaviour that hinders the business of a newcomer in the wholesale market (such as an independent power producer), such as:
 - offering a purchase price much higher than the market value for an electricity generation facility that a newcomer in the wholesale market intends to purchase; and
 - refusing to provide continuous backup services to a newcomer in the wholesale market.

Law stated - 30 June 2022

Preclusion and remedy of anticompetitive practices

What authority does the regulator (or regulators) have to preclude or remedy anticompetitive or manipulative practices?

The METI Minister has the authority to do the following:

- order a general transmission utility to stop using or providing another person with information concerning electricity suppliers and users, which the general transmission utility has obtained in the course of providing wheeling services, for purposes other than for the provision of wheeling services;
- order a general transmission utility to stop treating any particular electricity retailer in an unreasonably
 preferential or disadvantageous manner or giving any other benefits or causing any other hindrances to such an
 electricity retailer in the course of providing a wheeling service; and
- order a general transmission utility to stop transactions with a specified affiliated utility (eg, an electricity retail company, a power producer or a specified wholesale supply entity) that falls into the category of a subsidiary or a parent company of the general transmission utility) on terms that may hinder fair competition.

The Fair Trade Commission has the authority to do the following if it decides that certain behaviour of a general electricity utility violates the Anti-Monopoly Act:

- issue a cease-and-desist order;
- issue an order for the payment of a surcharge; and
- file a formal notification with the prosecutor general.

Law stated - 30 June 2022

INTERNATIONAL

Acquisitions by foreign companies

Are there any special requirements or limitations on acquisitions of interests in the electricity sector by foreign companies?

When a foreign company intends to obtain a share of a non-listed company or one per cent (if certain requirements are



met, 10 per cent) or more of issued shares of a listed company operating in the Japanese electricity sector, the company must report the business purpose, amount and timing, among other items, of the investment to the Minister of Finance and the Minister of Economy, Trade and Industry beforehand. When examining the report, these Ministers must take into consideration whether the investment by the foreign company may impair Japanese national security, disturb the maintenance of public order, obstruct the protection of public safety, or have a significant adverse impact on the effective management of the Japanese economy. Although the period for the examination of the report is generally set at 30 days, the Ministers may extend the period for up to five months.

Law stated - 30 June 2022

Authorisation to construct and operate interconnectors

What authorisations are required to construct and operate interconnectors?

There are 10 divided areas of electricity transmission lines in Japan, each of which is owned and operated by a regional transmission utility. These areas are interconnected with the neighbouring areas through interconnection lines between these areas. Authorisations required to construct and operate these interconnection lines are generally the same as those required for transmission lines. General transmission utilities have constructed and operated these interconnection lines.

Law stated - 30 June 2022

Interconnector access and cross-border electricity supply

What rules apply to access to interconnectors and to cross-border electricity supply, especially interconnection issues?

Regarding access to the interconnection lines between the neighbouring transmission areas in Japan, the indirect auction rule is adopted, the available interconnection capacity is generally allotted to the preceding day spot market transaction at the electricity wholesale exchange (JEPX) and therefore parties that would like to provide or procure electricity through the interconnection grid between the neighbouring transmission areas need to sell or purchase the electricity at the JEPX. Only those that succeed in completing the deal at the JEPX can use the interconnection line between neighbouring transmission areas.

Because Japan is an isolated island country, cross-border electricity supply does not exist at this stage and there are no rules relating to it.

Law stated - 30 June 2022

TRANSACTIONS BETWEEN AFFILIATES

Restrictions

What restrictions exist on transactions between electricity utilities and their affiliates?

Under the Electricity Business Act (EBA), general transmission utilities are prohibited from giving preferential treatment or conferring other benefits to their affiliates when they provide wheeling services. General transmission utilities are also prohibited from providing affiliates with information concerning other electricity suppliers and electricity users that they have gathered in the course of providing wheeling services, for purposes other than the provision of the wheeling service. Also, general transmission utilities are prohibited from trading with the specified affiliated utilities on terms that may hinder fair competition.



If a general transmission utility gives preferential treatment to its affiliates, such as charging its affiliates rates unreasonably lower than those provided in the tariff, it will also be deemed to violate the Anti-Monopoly Act, which prohibits discriminatory consideration.

Law stated - 30 June 2022

Enforcement and sanctions

Who enforces the restrictions on utilities dealing with affiliates and what are the sanctions for non-compliance?

The Minister of Economy, Trade and Industry (the METI Minister) may order the general transmission utility to discontinue or modify preferential treatment for its affiliates. If the utility violates the order, the utility is subject to a fine of up to ¥3 million. The METI Minister also has the authority to cancel the utility's licence, if the utility has violated the EBA or any order issued under the EBA, and he or she finds this violation to be harmful to the public interest.

If a general transmission utility company gives preferential treatment to its affiliates, the Fair Trade Commission may issue a warning, cease-and-desist order or an order for payment of a surcharge.

Law stated - 30 June 2022

UPDATE AND TRENDS

Key developments of the past year

Are there any emerging trends or hot topics in electricity regulation in your jurisdiction?

The government continues its efforts to facilitate fair competition in the deregulated electricity market and decarbonisation.

The efforts to facilitate such fair competition include the introduction of the capacity market in 2020, whereby the Organisation for Cross-regional Coordination of Transmission Operators secures the capacity from power generators through auctions, to ensure that power plants provide sufficient electricity to adjust for any imbalance in the competitive market situation, even after the increase of renewable power plants. Also, the government introduced the balancing market in 2021, which enables the general transmission utilities to purchase electricity for balancing beyond each of the supply areas, and allows various types of power plants to join and sell the electricity in the market.

The government is considering the possibility of amending the wheeling service cost charging framework in 2024, by which the costs will be imposed not only on electricity retailers but also on power generators, and collecting the fixed costs of the wheeling system more from the base rate rather than the meter rate, to make cost collection more stable in the future in a society where distributed power generation is evolving.

Regarding decarbonisation, the Japanese government recently announced that it would aim to achieve a 46 per cent reduction of carbon emissions by 2030 in comparison with 2013 and to achieve substantial carbon neutrality (zero carbon emissions) by 2050. To facilitate the reduction of carbon emissions, the government introduced the non-fossil fuel value trade markets that enable relevant companies to trade the value of electricity generated without using fossil fuels, such as renewable energy and nuclear power. To improve access to such markets as part of its efforts to achieve decarbonisation, the government created a new market (renewable energy value trade market) where consumers can directly participate in market transactions regarding non-fossil fuel value (originating from Feed-in Tariffs (FIT)) in 2021. The government is also considering the possibility of allowing consumers to purchase non-FIT, non-fossil fuel certificates in another market (a market for trading non-FIT, non-fossil fuel value to fulfil retail companies' obligations relating to targets for non-fossil fuel power source ratios under the Act on the Advancement of Energy Supply Systems



(the Energy Supply Advancement Act)), provided that certain conditions are met, for example, the certificates being for new power plants. In addition, for the purpose of securing investment in decarbonised power plants and ensuring that their capacities are available over the long term, the government is discussing the introduction of a long-term decarbonised power supply auction in 2023 as a type of special auction in the capacity market.

To promote the use of decarbonised fuel, the government amended the Energy Supply Advancement Act in 2022 and positioned hydrogen and ammonia as non-fossil fuel energy sources under the act.

Also, in response to changes in the energy environment in Japan, such as soaring electricity market prices, the government amended the Electricity Business Act (EBA) in 2022 to ensure a stable energy supply. Under the amended EBA, power producers are required to:

- notify the Minister of Economy, Trade and Industry before suspending or discontinuing power plants; and
- comply with a capacity reservation agreement with the OCCTO as an obligation under the EBA.

Law stated - 30 June 2022



Jurisdictions

Australia	King & Wood Mallesons
Belgium	Linklaters LLP
★ Ghana	Kimathi & Partners Corporate Attorneys
India	Trilegal
Japan	Nishimura & Asahi
Panama	Anzola Robles & Asociados
C* Turkey	Boden Law
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