Operational Rules

Organization for Cross-regional Coordination of Transmission Operators, Japan

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Revision History

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Chapter 1 General Provisions

(Purpose)

Article 1

These Operational Rules (hereinafter "Rules") aim to establish provisions on matters related to business and implementation by the Organization for Cross-regional Coordination of Transmission Operators, JAPAN (hereinafter "Organization") and to exercise such provisions properly and smoothly based on the provisions of Article 28-41 of the Electricity Business Act (Act No. 170, 1964, hereinafter "Act") and Article 6 of the Articles of Organization.

(Terms)

- 1. Terms used in these Rules shall have the same meaning as those used in the Act and cabinet or ministerial orders issued according to the Act and the Articles of Organization, in addition to the meanings defined specifically in these Rules.
- 2. In these Rules, definitions of terms specified in each of the following items shall be as defined in the same item.
- i. "Holidays" shall mean Saturday, Sunday, and National Holidays specified in the Act on National Holidays (Act No. 178, July 20 of 1948) and other days specified by the Organization.
- ii. "Weekdays" shall mean days other than Holidays.
- iii. Deleted
- iv. Deleted.
- v. "Reserve capacity" shall mean the sum of the reserve capacity of power generators to generate electricity except for balancing the capacity to increase or decrease electricity.
- vi. "Balancing capacity" shall mean the capacity of power generation facilities (including pumped storage generation facilities), power storage facilities, systems to control demand response, other electricity demand and supply, and other similar equipment (except transmission and distribution facilities) necessary for frequency control, adjustment of the demand and supply balance, and other business to stabilize networks.
- vii. "Balancing capacity for deficiency" shall mean balancing capacity to supply electricity or suppress the demand for electricity when the amount of supply becomes insufficient for the demand.
- viii. "Balancing capacity for redundancy" shall mean balancing capacity to suppress supply or increase the demand for electricity when the amount of supply exceeds the demand.
- ix. "Supply shortage" shall mean the case where the amount of supply becomes insufficient.
- x. "Insufficient ability to reduce the power supply" shall mean the case where balancing capacity for redundancy becomes insufficient, and the members who are general transmission and distribution companies cannot resolve the surplus of electricity even by suppression of output from power generators that are not able to be adjusted online.
- xi. "Frequency control" shall mean the business to control the amount of electricity supply according to demand, which is conducted by members who are general transmission and distribution companies to maintain frequency in regional service areas based on Paragraph 1, Article 26 of the Act.

- xii. "Short-cycle frequency control" shall mean frequency control of the short-cycle fluctuation within a period from a several seconds to thirty minutes.
- xiii. "Long-cycle frequency control" shall mean frequency control of the long-cycle fluctuation of surplus electricity for more than thirty minutes that stems from errors in the forecast for demand and power output from renewable energy.
- xiv. "Short-cycle cross-regional frequency control" shall mean frequency control by utilizing the balancing capacity of members who are general transmission and distribution companies of other regional service areas through interconnection lines when the balancing capacity necessary for the short-cycle frequency control (hereinafter "Short-cycle balancing capacity") becomes or might become insufficient.
- xv. "Long-cycle cross-regional frequency control" shall mean frequency control by utilizing the balancing capacity of members who are general transmission and distribution companies of other regional service areas through interconnection lines when balancing capacity for redundancy becomes or might become insufficient in regional service areas.
- xvi. "Cross-regional frequency control" shall mean the short-cycle cross-regional frequency control and the long-cycle cross-regional frequency control.
- xvii. "Total transfer capability" (TTC) shall mean the maximum electricity that can be sent to the distribution facilities while securing supply reliability without damaging the transmission and distribution facilities.
- xviii. "Transmission margin" shall mean shall mean the amount of electricity managed by the Organization as a part of TTC of the interconnection lines to receive electricity from other regional service areas through interconnection lines under abnormal situations of electric network, supply shortage or other emergent situations, to keep stabilizing the electric network, or to procure balancing capacity from other regional service areas.
- xix. "Scheduled power flow" shall mean the power flow managed by the Organization as defined in item xlii.
- xx. "Available transfer capability" (ATC) shall mean the amount of total transfer capability(TTC) of the interconnection lines managed by the Organization less the amount secured for transmission margin, scheduled power flow, and cross-regional frequency control.
- xxi. "Congestion" shall mean a situation where the ATC becomes negative.
- xxii. "Congestion management" shall mean measures taken to resolve the congestion of the interconnection lines.
- xxiii. "Generation facilities" shall mean generation facilities, electric storage facilities, and other facilities to generate or discharge electricity.
- xxiv. "Specified generation facilities" shall mean generation facilities or other facilities of which the sum of the maximum receiving power is not less than 10,000 kW.
- xxv. "Applicant for network interconnection" shall mean an applicant for interconnection with transmission network (except general transmission and distribution companies).
- xxvi. "Specified applicants for network interconnection" shall mean applicants for interconnection with specified generation facilities among the applicants for the network interconnection.
- xxvii. "FIT Act" shall mean the Act on Special Measures Concerning Feed-in Tariff Scheme for Renewable Energy by electric power companies in Japan (Act No. 108 of August 30, 2011)
- xxviii. "FIT generators" shall mean certified power generation facilities specified in the FIT

Act.

- xxiv. "Guidelines on cost allocation of network reinforcement for generator installment" shall mean the Guidelines on Reinforcement of Electric Networks Associated with Construction of Generation Facilities and on Cost Allocation Among Companies (No. 16 of Department of Resource and Electricity of 2015)
- xxx. "Guidelines on network information disclosure" shall mean the Concepts of Publication of Network Information (No. 17 of Department of Resource and Electricity of 2015)
- xxxi. "Contractor of transmission networks" shall mean a person who concluded a contract of transmission networks with members who are general transmission and distribution companies, and a member who is a retail company certified as the general transmission and distribution companies.
- xxxii. "Contractor of power generation" shall mean the person who concluded energy imbalance adjustment contract with general transmission and distribution companies, and a member who is a generation company certified as the general transmission and distribution companies.
- xxxiii. "Contractors of demand reduction" shall mean the person who concluded imbalance adjustment supply contract for demand reduction with members who are general transmission and distribution companies.
- xxxiv. "Contractor of actual demand and supply balancing" shall mean a member who is a retail company and under contract for transmission network use with the general transmission and distribution company at the time of enforcement of the Act on the Partial Revision of the Electricity Business Act (Act No. 72 of 2014) and applied for application of the special measure based on the contract.
- xxxv. "Gate closure" shall mean the due date of the daily plan (1 hour before the start of actual demand and supply for each 30 minutes)
- xxxvi. "Day-ahead spot trading" shall mean trading of electricity transferred on the next day, which is operated by the Japan Electric Power eXchange (JEPX).
- xxxvii. "1-hour ahead trading" shall mean the trading of electricity until one-hour before the actual demand and supply, which is operated by JEPX.
- xxxviii. "Generator connection line" shall have the meaning which is defined in Ministerial Order on cost allocation for developing generator connection line (Ordinance no.119 of METI 2004).
- xxxix. "Cross-regional Operation System" shall mean a system that electronically receives various types of plans on power generation, demand, or others from members and conducts business regarding the management of demand and supply or interconnection lines.
- xl. "Supplier Switching Support for electricity customers" shall mean the business to streamline procedures for consumers changing their electric power suppliers.
- xli. "Market splitting" shall mean the case where the market splitting process specified in the trading rules of JEPX must be conducted.
- xlii. "Registration of transfer capability" shall mean registration of the power flow as the transfer capability using interconnection lines in the Cross-regional Operation System by the Organization.
- xliii. "Market price differentials receiving rights" shall mean products those clear the trading price differentials between regional service areas due to market splitting in the day-ahead market of JEPX.
- xliv. "Balancing market" shall mean a market for trading the balancing capacity required by

members constituting general transmission and distribution companies.

(Handling of deadline)

Article 3

Except as may otherwise be provided in these Rules, when the last day of the due dates provided in these Rules are Holidays of the Organization specified in Paragraph 3 of Article 11, such due dates shall be the business days immediately before such due date.

(Standard policy of business operation)

Article 4

- 1. As for business operation of the Organization, the following articles shall be the standard policy.
- i. The Organization shall fundamentally reinforce the structure to secure stable supply under both ordinary and extraordinary circumstances and reinforce the function to coordinate supply-demand across the nation so as to lower the cost of electricity.
- ii. The Organization shall maintain neutrality among members of the Organization and secure fairness among each member and group specified in each item of Paragraph 1, Article 24 of the Articles of Organization.
- iii. The Organization shall properly disclose information from time to time to reinforce the transparency of its business
- iv. The Organization shall reduce the burden and secure benefits for electricity consumers.
- 2. The Organization shall regularly make plans for improvement of its business and appraise the actual improvement of the business based on the annual report described in Article 181, which will be prepared by the Organization, information collected in the country and from abroad, and requests from members and other electric power suppliers.

(Information publication and disclosure)

- 1. The Organization shall strive to disclose information on the business of the Organization and cross-regional operation of the electricity business progressively, as well as to reinforce and enforce other publications inside and outside of the country.
- 2. The Organization shall disclose information on the proceedings of the board of directors, the board of councilors, and the committees and the composition, business, and finances of the Organization except for information specified in each of the following items.
- i. Information of which disclosure may result in loss of important functions of the state or local governments
- ii. Information on terms and conditions of any particular contracts of electricity supply
- iii. Information of which disclosure may result in disturbance of proper implementation of the business of the Organization
- 3. Disclosure of the information mentioned in the preceding paragraph shall be conducted by posting on the website of the Organization or other means.
- 4. If any outsiders request the information disclosure, the Organization shall handle the information according to the Act on Access to Information Held by Administrative Organs

(Act No. 42, 1999).

(Public Comments)

Article 6

- 1. When the Organization makes decisions at the board of directors, which significantly affect the business activities of the members and other electric power suppliers, it shall hear opinions from the members and other electric power suppliers and, in principle, disclose the results of such consultations prior to making such decisions.
- 2. When the Organization makes a decision at a meeting of the Board of Directors that significantly affects the operations of the electric network or where otherwise deemed necessary, it shall hear opinions from experts with professional knowledge and, in principle, disclose the results of such consultations prior to making such a decision.

(Information processing system)

Article 7

- 1. The Organization shall be furnished with the information processing system for its business with the object of effective conduct of business and reinforcement of convenience of the members and other electric power suppliers.
- 2. When the Organization develops or introduces the information processing system, it shall strive to design the system in consideration of scalability for flexible alteration of the system and addition of features in cases where laws, these Rules, or the Network Codes are amended, or where the members and other electric power suppliers demand such alteration or addition in future.
- 3. The Organization shall take requests related to alteration of the information processing system or addition of features of the system from the members and other electric power suppliers, and consider the necessity of such alteration or addition of features and take necessary steps.
- 4. The Organization shall take proper cybersecurity measures so that its website or the information processing system block malicious attacks from external networks.

(Information Management)

- 1. The Organization shall manage information on its business properly and take measures specified in each of the following items to prevent its confidential information, information prescribed in each item of Paragraph 2 in Article 5 of these Rules and personal information (hereinafter, collectively "confidential information") from being leaked, plagiarized or used outside of its purpose.
- i. Establish a provision which stipulates that personnel of the Organization shall not disclose or use illegally the confidential information during their employment or after losing their status of employees because of retirement or displacement in the employment regulation.
- ii. Have board members or employees who assume the offices of the Organization sign pledges not to disclose the confidential information to any persons or use the confidential information illegally

- iii. Have board members or employees who resign their offices sign pledges not to illegally disclose to any persons or use the confidential information they obtained during their tenure.
- iv. Establish provisions on treatment of a person assigned to the Organization from other corporation (hereinafter "assigned person") who violated the provision of Article 2 of the Code of Conduct for Personnel specified in the Exhibit 2-1 after returning to an assignor company in a secondment agreement between the assignor company and the Organization.
- 2. The Organization shall prepare information management rules that separately regulate the management system of the confidential information and the handling of the confidential information when the board members or employees gain such information.
- 3. The Organization shall implement proper management and publication according to the provisions of Paragraph 1 to 3, Article 11 of the Public Documents and Records Management Act (Act No. 66 of 2009) as for documents developed or gained by board members or employees in their business.

(Procurement)

Article 9

When the Organization procures service or goods (including the information processing system), it shall secure transparency and fairness and try to suppress the procurement cost through measures, such as a public offering.

Chapter 2 Organization and Personnel

(Administrative Office)

Article 10

- 1. The Organization shall have an administrative office to handle operation administrative jobs and other business.
- 2. An administrative office shall be composed of personnel appointed by the President according to Article 28-28 of the Act
- 3. An administrative office shall have a secretary general and the following departments.
- i. General Affairs Department
- ii. General Planning Department
- iii. Power System Planning Department
- iv. Cross-regional Operation Department
- v. Dispute Resolution Office
- vi. Audit Office
- 4. A Secretary General shall be appointed by the President and take charge of business of the administrative office.
- 5. Each department may have offices and divisions.
- 6. Cross-regional Operation Department shall have a cross-regional operation center.
- 7. Segregation of business of each department and cross-regional operation center shall be as specified in the Appendix 2-1.
- 8. General Affairs Department shall promote smooth coordination among each department, and run the meeting for general coordination to have each department support each other according to necessity.

(Location, dates, and hours of business)

- 1. The organization shall operate its business at the location specified in Article 2 of the Articles of Organization in principle.
- 2. The Organization shall monitor supply-demand state of electricity as specified in Chapter 8 and give instructions when the state gets worse as specified in Chapter 9 throughout the year on a steady basis.
- 3. As for business other than those conducted in a steady basis as described in the preceding paragraph, holidays of the Organization shall be those specified in each of the following items, and the other days shall be business days.
- i. Saturday and Sunday
- ii. Holidays specified in the Act on National Holidays (Act No. 178 of 1948)
- iii. Year-end and New Year holidays (December 29 to January 3)
- iv. Other days specified by the Organization
- 4. Business hours on the business days specified in the preceding paragraph shall be from 9:00 to 17:40 excluding a lunch break (12:00 to 13:00).

(Active employment of person with professional knowledge and women)

Article 12

- 1. The Organization shall always have lawyers, accountants, and persons who have professional knowledge of the transmission and distribution of electricity as its board members or employees and obtain proper advice from them on its business operation.
- 2. The Organization shall actively employ women for securing its board members and employees.

(Securing of personnel)

Article 13

- 1. The Organization shall secure the adequate number of personnel with necessary abilities for business operation, various knowledge, and experience.
- 2. Securing of personnel as prescribed in the preceding paragraph shall be conducted through employment with indefinite or definite term or acceptance of secondees
- 3. When the Organization appoints personnel through employment with indefinite or definite term, such appointment shall be conducted in a transparent and fair manner, for example, by reporting the employment conditions on the website of the Organization.
- 4. When the Organization secures its personnel through acceptance of a secondee, it shall regulate the rules of such acceptance in a secondment agreement so that such a secondee will not suffer from pressure, approaches, or undue influence from the assignor corporation as well as properly conduct performance appraisal of such a secondee.

(Allocation of personnel)

Article 14

- 1. The Organization shall allocate personnel in light of the facts described in each of the following items.
- i. Such allocation helps smooth conduct of business and vitalization of the Organization.
- ii. Such allocation is based on adequate consideration of employment status, abilities, knowledge and experience of each personnel.
- iii. Such allocation will allow Auditors and the Audit Office to implement effective audit from an independent standpoint.

iv. Such allocation will allow high level of continuous investigation and research.

- 2. When the Organization allocates an assigned person as personnel, it shall strive to comply with each of the following items.
- i. Persons assigned from the same category of business shall not be allocated to a specific business in a significantly disproportionate manner.
- ii. Person with experience in a various business category shall be allocated proportionately to each department.
- 3. The Organization shall strive to allocate personnel appointed through employment with indefinite or definite term proportionately to each department.

(Mid-and-long term policy on securing of personnel) Article 15 The Organization shall regularly prepare a mid- and long-term policy on employment, securing, allocation, and education of board members and employees based on Article 3.

(Code of conduct for personnel) Article 16 A person who is or was personnel of the Organization shall comply with the Code of Conduct for Personnel specified in the Exhibit 2-1.

(Disposition of Personnel)

- 1. When the personnel conducted any acts that breach the Code of Conduct for Personnel specified in the Exhibit 2-1, the Organization shall conduct an investigation of the fact including questioning about the incident and, in a case where the breach of such personnel is confirmed, it shall take a disciplinary action specified in the Employment Regulation and other necessary steps on the personnel.
- 2. When it was revealed that a person whose assignment was terminated has breached the Code of Conduct, the Organization shall take a necessary step based on a secondment agreement with the assignor corporation.

Annendix	2-1-	Segregatio	on of business	
representation	4 I	Degregatio	n or business	

Name of Department	Segregation of business
General Affairs Department	Business related to general coordination of the office, liaison to various State agency and management of cooperated business(including general procedures of permission and authorization), general meeting, extraordinary meeting, board members, secretaries, board of directors, councilors, board of councilors, security management of documents and information, building, equipment and expendables, prevention and countermeasures of/to disaster and risk management, legal work(including Articles of Organization, Operational Rules, Network Codes), environment, business plan/budget, organization/employment plan, committee, public relations, business improvement, human affairs, labor, accounting, consignment/purchase agreement, publicity, statistics (including preparation of annual reports), network information disclosure, supplier switching support service(*), development/operation/maintenance of information system (except for systems supervised by the Cross-regional Operation Department), utilization support for IT technology of members, operation/maintenance of communication lines, other business not assigned to any Room or Department.
General Planning	Business related to general planning, research, capacity
Department	market
Power System Planning	Business related to demand forecast across the country,
Department	evaluation of supply-demand balance, compiling of electricity supply plans, power system development plan, network access
Cross-regional Operation Department	Business related to compiling of supply-demand plan, performance of supply-demand, countermeasures to tight supply-demand balance or its possibility, management of interconnection lines across regions (operational capacities, scheduled power flow, reduction of allocated capacity), scheduled outage plan, cross-regional frequency control, development/operation/maintenance of Cross-regional Operation System
Cross-regional Operation	Business related to monitoring/operation of state of supply-
Department (cross- regional	demand and network
operation center)	
Dispute Resolution Office	Handling of complaints, consulting, dispute resolution (arrangement, arbitration), instruction/advise, sanction
Audit office	Business audit

Exhibit 2-1 Code of Conduct for Personnel

Article 1

Personnel must fully understand the purpose and the basic operational policy of the business of the Organization and comply with relevant laws, the Articles of Organization and the Operational Rules, always act with a high moral values and common sense, follow instructions from the Organization, and strive to improve efficiency of business operation and to maintain order of the Organization.

Article 2

Personnel may not leak or fraudulently use the Confidential Information gained in the course of their business. This provision shall apply even after their resignation (or after termination of the assignment as for secondee).

Article 3

Personnel shall acquire personal information of network users in a proper manner and use such information within the scope of the purpose of usage, and shall take necessary and proper steps for safety management of such personal information, including prevention of leakage, loss, or destruction of the information.

Article 4

Personnel shall properly protect the rights in the intellectual assets of the Organization developed through its business.

Article 5

Personnel shall not conduct any acts that cause any advantages or disadvantages to specific stakeholders or discriminate in the course of business.

Article 6

When the personnel have knowledge of important facts that are expected to have a significant effect on the decision of investment into valuable securities, including information on the operation, business, or assets of corporations, such personnel shall not newly acquire or dispose of such valuable securities during their tenure. Provided, however, that this provision shall not apply to the acquisition by inheritance and a case where a secondee continues to acquire stocks of the assignor corporation through employee stock ownership.

Article 7

Personnel may not engage as a primary responsible person in reception or coordination of job assignments or other business that involves direct negotiations with the assignor corporation in respect of the business related to the interests of the assignor corporation.

Article 8

Given the fact that personnel are deemed to be persons engaged in public business pursuant to the Article 28-30 of the Act in the application of penalties of Penal Code (Law no. 45, 1907) and other laws, and in consideration of National Public Service Ethics Code (Code no. 101, 2000) and other laws, a board member shall act properly in or out of the course of business.

Chapter 3 Demand Forecast

(Implementation of the demand forecast)

Article 18

The Organization shall conduct business related to the electricity demand forecast (hereinafter "demand forecast") to conduct the business described in the next chapter properly.

(Drawing-up of premises of the demand forecast)

Article 19

The Organization shall draw up premises regulating matters specified in the following items (hereinafter "premises of the demand forecast") and publish for the proper and smooth demand forecast by members who are general transmission and distribution companies, retail companies and specified transmission, distribution and retail companies (only applied to registered specified transmission, distribution and retail companies).

- i. Basic matters on demand forecast (period, segment, responsible entity and subject of forecast, and segment of demand)
- ii. Method of correction of actual demand (specific method of correction of influence from weather, a leap year, etc.)
- iii. Forecast method of demand in regional service areas (hereinafter "demand in regional service areas")
- iv. Forecast method of demand for receivers of retail supply

v. Submission format to the Organization

vi. Other matters necessary for proper preparation or submission of demand forecast

(Demand forecast and verification of premises of the demand forecast) Article 20

1. The Organization shall receive information on the following matters of actual demand in regional service areas from the members who are general transmission and distribution companies in accordance with the provisions of Network Codes.

i. Actual demand in regional service areas

- ii. Information on influence of weather, etc. on the actual demand
- iii. Results of comparison and verification of demand forecast of regional service areas submitted as electricity supply plans
- 2. The Organization shall verify past demand forecasts and the premises of demand forecasts with respect to the following matters based on information submitted from members as prescribed in the preceding paragraph and knowledge gained in the course of business.
- i. Difference between demand forecast of regional service areas and actual demand, and causes of the difference
- ii. Transition of the matters specified in item i above, from the previous year
- iii. Concepts of verification by the members who are general transmission and distribution companies, and method of verification
- iv. Other matters that the Organization considers to be necessary for demand forecast and verification of the premises of demand forecast

(Amendment of the premises of demand forecast)

Article 21

- 1. The Organization shall amend the premises of demand forecast if it is necessary based on the result of verification specified in Paragraph 2 of Article 20 by the beginning of November of each year in principle, and publish such an amendment.
- 2. When the Organization recognizes that revisions to the premises of the demand forecast that significantly changes the conventional method of the demand forecast is necessary, it shall hear opinions from the members and other intellectuals.

(Drawing-up of national economic outlook)

Article 22

- 1. The Organization shall draw up the outlook of economic indicators, such as population, Gross Domestic Product (GDP), Index of Industrial Production (IIP), and others, which become the premises of the demand forecast from each fiscal year to 11 years later, including the current year.
- 2. The Organization shall publish the economic outlook drawn-up in the preceding paragraph by the end of November of each year.

(Drawing-up of national demand forecast)

- 1. The Organization shall receive demand forecast of regional service areas from members who are general transmission and distribution companies in accordance with the provisions of Network Codes.
- 2. When the Organization received the demand forecast of the regional service areas, it shall hear the grounds and the foundation of the forecast from such members as needed and shall check the compatibility with the Network Codes and the premises of the demand forecast and other matters necessary for proper demand forecast, and confirm the validity of them.
- 3. When the Organization considers the forecast of regional service area is improper as a result of the confirmation in the preceding paragraph, it shall ask the members who are general transmission and distribution companies of such service area to review and submit the reviewed demand forecast by a specified due date. When the Organization received the reviewed demand forecast, it shall confirm its validity according to the preceding paragraph.
- 4. The Organization shall confirm the validity of demand forecasts of all regional service areas according to the provisions of Paragraphs 2 and 3, and draw up the national demand forecast aggregating all such demand forecasts by the end of January of each year.
- 5. When the Organization draws-up the national demand forecast, it shall publish the demand forecast across the nation and of each regional service area.

Chapter 4 Aggregation of Electricity Supply Plans

(Aggregation and review of electricity supply plans)

Article 24

The Organization shall aggregate and review electricity supply plans (hereinafter, electricity supply plans submitted to Minister of Economy, Trade and Industry by the members based on Paragraph 2, Article 29 of the Act).

(Submission of a draft of electricity supply plan)

Article 25

The Organization shall receive the drafts of electricity supply plans from the members according to necessity based on provisions of the Network Codes.

(Adjustment based on a draft of electricity supply plan)

Article 26

- 1. The Organization shall check the contents of the draft electricity supply plans submitted according to the previous article by considering the security of the demand and supply balance, maintenance of frequency, formation of proper transmission and distribution facilities, and other matters provided in the Network Codes, and it shall ask the members to review the draft and submit the reviewed draft by the due date specified by the Organization as needed.
- 2. The Organization may hear the grounds and concepts of the draft electricity supply plan from the members who submitted such draft for the check described in the previous paragraph.
- 3. When the Organization considers that the development plan of members' transmission and distribution facilities (hereinafter "transmission and distribution facility plan") falls under Item i, Paragraph 1, Article 51, and that it is necessary to review such a development plan in respect of cross-regional network for confirmation according to the previous paragraph, it shall start a planning process (specified in Article 50) based on Article 51.

(Submission of electricity supply plans)

Article 27

The Organization shall receive electricity supply plans from the members according to necessity based on provisions of the Network Codes.

(Aggregation of electricity supply plans)

Article 28

1. When the Organization received the electricity supply plans from the members, it shall aggregate contents of such plans as specified in the ordinances of the Ministry of Economy, Trade and Industry and based on Paragraph 2, Article 29 of the Act. In this case, the Organization may hear the grounds and concepts of the electricity supply plans from the

members who submitted such electricity supply plans as needed.

- 2. Upon the aggregation of the electricity supply plans, it shall review the following matters by considering the matters specified in the Network Codes and in the context of knowledge gained in the course of business of the Organization.
- i. Matters on adequacy of the electricity supply plans submitted from each member
- ii. Matters on state of securing of proper supply capacity for demand in each general transmission and distribution company's regional service area and across the nation and on necessary measures (hereinafter "long-term supply-demand balance evaluation")
- iii. Matters on compatibility of the transmission and distribution facility plan with the longterm policy on cross-regional network(prescribed in Article 48) and the cross- regional network development plan (prescribed in Article 50, the same meaning shall apply).
- 3. The Organization may request necessary information and other cooperation from the members and other electric power suppliers when it considers them necessary for evaluation of the demand and supply balance.

(Delivery and publication of electricity supply plans) Article 29

- 1. When the Organization has any opinions on the aggregated electricity supply plans in light of the result of the review in Paragraphs 1 and 2 of the preceding article, it shall submit the plans with its opinions to the Minister of Economy, Trade and Industry by the end of March of each year according to the ordinance of the Ministry of Economy, Trade and Industry by reflecting the result of review of the following matters.
- i. Measures for improvement and forecast of supply capacity by the Organization, members and other electric power suppliers, when it was found out that the supply capacity in each regional service area and across the nation is lower than the necessary supply capacity, as a result of evaluation of the demand and supply balance
- ii. Necessity of new policies and guidelines, when it was found out that the supply capacity in each regional service area and across the nation is lower than the necessary supply capacity, as a result of evaluation of the demand and supply balance and when it is difficult to take measures for improvement only by the Organization, members and other electric power suppliers
- iii. Other matters which the Organization considers appropriate to be escalated to the Government from the viewpoint of stabilization of demand and supply
- 2. The Organization shall publish the plans on supply-demand and transmission and distribution facilities across the nation and in each regional service area, as well as the result of the supply-demand balance evaluation based on the result of electricity supply plans aggregated by the end of March of each year.
- 3. The Organization shall monitor the subsequent supply-demand state based on the supplydemand balance evaluation prescribed in the preceding paragraph, and shall confirm the implementation of measures.

(Submission of electricity supply plans when companies become the electric power companies in the middle of any fiscal year)

Article 30

- 1. The Organization shall receive electricity supply plans from members who became the electric power companies in the middle of any fiscal year based on the provisions of the Network Codes.
- 2. When the Organization received the electricity supply plans from the members as described in the preceding paragraph, it shall review the plans in accordance with preceding two Articles, and immediately send the plans with its opinions, if any, to the Ministry of Economy, Trade and Industry.

(Revision of electricity supply plan)

Article 31

- 1. The Organization shall receive submission of revised matters when the member changed the electricity supply plan according to necessity based on provisions of the Network Codes.
- 2. When the Organization received a revised electricity supply plan from the member according to the preceding paragraph, it shall review the plan based on Article 28 and 29, and send the plan with its opinions, if any, on the revised matters to the Minister of Economy, Trade and Industry.

(Sharing of information regarding electricity supply plans)

- 1. When the Organization received draft electricity supply plans or electricity supply plans from members other than general transmission and distribution companies, it shall immediately share the following information with members who are the general transmission and distribution companies.
- i. Planned supply capacity for peak demand
- ii. Planned energy supply
- iii. Planned transaction
- 2. The Organization shall share information that it considers necessary for planning of proper transmission and distribution facilities by members who are general transmission and distribution companies and transmission companies with such members among information on construction plan of power stations written in electricity supply plans.
- 3. The Organization shall share information that contributes to the construction plans of power stations among information on construction plan of transmission and distribution facilities written in electricity supply plans with the members.

Chapter 5 Capacity Market and Safeguard Measures of Generator Procurement

Section 1 Capacity Market

<Subsection 1 Establishment of Capacity Market>

(Capacity Auction)

Article 32-2

The Organization shall conduct the following auctions (hereinafter collectively "capacity auction") to solicit electric power suppliers (hereinafter "capacity resource providers") who promise to secure and provide the necessary supply capacity (hereinafter "necessary supply capacity") for the demand in each regional service area and across the nation, except the Okinawa area and isolated islands in other areas in the capacity market in accordance with Item v, Paragraph 1, Article 28-40 of the Act.

- i. Main auction: An auction to be held four years prior to the year of actual provision of the supply capacity (hereinafter "delivery year") to procure the whole amount of the necessary supply capacity.
- ii. Additional auction: An auction of either of the following a. or b. to be held one year prior to the delivery year, when the Organization decides it is necessary by considering the expected demand after holding the main auction or the increase and decrease of the supply capacity procured by the main auction.
 - a. Incremental auction: An additional auction to solicit additional capacity resource providers when the supply capacity procured by the main auction is considered insufficient.
 - b. Release auction: An additional auction to solicit capacity resource providers who sell the capacity defined in a capacity contract (defined in Item i.-e. of Article 32-12) executed with the Organization (hereinafter "capacity resource releaser") when there is an excess in the supply capacity procured by the main auction.

(Introduction of capacity market system)

Article 32-3

- 1. The Organization shall properly grasp the information on the members and other electric power suppliers who wish to participate in the capacity auction or the special conditional auction (defined in Paragraph 1 of Article 32-42) and introduce an information processing system with the necessary functions to operate the market smoothly (hereinafter "capacity market system").
- 2. The Organization shall monitor the use of the capacity market system and confirm whether the members and other electric power suppliers are properly using the system.
- 3. The Organization shall receive opinions from the members and other electric power suppliers regarding improvement of or the addition of functions to the capacity market system as needed and consider the actualization of such improvements or additions if necessary.
- 4. When the Organization considers the improvement of or the addition of functions to the capacity market system, it shall collect opinions from the members and electric power suppliers.

5. Business that can be conducted through the capacity market system and other matters regarding the use of the capacity market system shall be provided for in the Network Codes.

Article 32-4

The Organization shall conduct business to provide support for the preparation and provision of a manual on the use of the capacity market system and other matters (hereinafter "capacity market system manual") and for the reception of and answering inquiries from the members and other electric power suppliers regarding the capacity market system and other support for the use of the capacity market system by the members and other electric power suppliers.

Article 32-5

- 1. The Organization shall draw-up a manual providing for the procedures related to the capacity market, materials to be submitted, and other matters necessary for a smooth operation of the capacity market (hereinafter "capacity market operation manual"), and publish it by posting on its website or by other means.
- 2. The Organization shall apply provisions of Paragraph 1 of Article 6 mutatis mutandis upon drawing-up or amending the capacity market operation manual, if such drawing-up or amending of the capacity market operation manual has a significant influence on business activities of the members and other electric power suppliers.

<Subsection 2 Procedures for an advanced registration on the capacity market system>

 $(Reception \ of \ the \ application \ for \ the \ registration \ of \ company \ information)$

Article 32-6

- 1. The Organization shall receive applications for the registration of the names and addresses of companies and other information necessary for the use of the capacity market system (hereinafter "company information") from the members and other electric power suppliers who satisfy the requirements for participation in the capacity auction (hereinafter "eligible market participants") in accordance with the Network Codes.
- 2. The Organization shall prepare an application form necessary for the registration of company information and publish it by posting on its website or by other means.

(Evaluation of applications for the registration of company information and notice of completion of the registration)

Article 32-7

- 1. When the Organization receives an application for the registration of company information, it shall evaluate the validity of the contents of the application. Provided, however, that such evaluation shall be conducted after a reception period of bids at the capacity auction.
- 2. When the Organization considers that the received content of the application for registration

is appropriate as a result of the evaluation in the preceding paragraph, the Organization shall register the contents on the capacity market system and notify the relevant eligible market participant of the completion of registration and information necessary to log in the capacity market system.

3. When the Organization considers that the received application for registration is inappropriate as a result of the evaluation in Paragraph 1, the Organization shall notify the relevant eligible market participant of the reasons for such consideration and will not register the information on the capacity market system. When the Organization receives a re-application for the registration of company information from the eligible market participant, it shall re-evaluate the application in accordance with Paragraph 1 above.

(Reception of the application for the registration of capacity resources information) Article 32-8

The Organization shall receive applications for the registration of the names of power generation facilities and regional service areas that are subject to biddings by eligible market participants who completed the registration of company information and other necessary information (hereinafter "capacity resources information") from such eligible market participants in accordance with the Network Codes.

(Evaluating information on capacity resources and notifying the completion of registration) Article 32-9

- 1. When the Organization receives an application for the registration of capacity resources information, it evaluates the validity of application, provided, however, that such evaluation shall be conducted after the expiration of the reception period for bids at the capacity auction.
- 2. The Organization shall request the information necessary for the evaluation in the preceding paragraph from the government, the members who are general transmission and distribution companies, and other relevant persons if necessary.
- 3. Where the Organization deems that the received information on capacity resources is appropriate as a result of an evaluation conducted in accordance with paragraph (1) hereof, the Organization shall register the information with the capacity market system and provide a notification of the fact of the completion of the registration of information on capacity resources.
- 4. When the Organization considers that the capacity resources information is inappropriate as a result of the evaluation in Paragraph 1, the Organization shall notify the relevant eligible market participant of the reasons for such consideration and will not register the information on the capacity market system. When the Organization receives a reapplication for the registration of capacity resources information from an eligible market participant, it shall re-evaluate the application in accordance with Paragraph 1.

(Reception of an application for amendment or cancellation of eligible market participant's basic information) Article 32-10 The Organization shall receive applications for amendment or cancellation of company

information or capacity resources information registered on the capacity market system (hereinafter collectively "eligible market participant's basic information") from eligible market participants.

(Evaluation of amendment or cancellation of eligible market participant's basic information and notice of completion of amendment or cancellation)

Article 32-11

- 1. When the Organization receives an application for amendment or cancellation of eligible market participant's basic information, it shall evaluate the validity of the application, provided, however, that such evaluation shall be conducted after expiration of the reception period for bids at the capacity auction.
- 2. The Organization shall request the information necessary for the evaluation in Paragraph 1 above from the government, the members who are general transmission and distribution companies, and other relevant persons.
- 3. Where the Organization deems that the application to amend or expunge received basic information on an eligible market participant is appropriate as a result of an evaluation conducted in accordance with paragraph (1) hereof, the Organization shall carry out required amendment or expungement procedures.
- 4. Where the Organization deems that the application to amend or expunge basic information on an eligible market participant is inappropriate as a result of an evaluation conducted in accordance with paragraph (1) hereof, the Organization shall notify such eligible market participant of the applicable reason and refrain from registering information with the capacity market system. When the Organization receives a re-application for amendment or cancellation of the eligible market participant's basic information from the eligible market participant, it shall re-evaluate the application in accordance with Paragraph 1 above.

<Subsection 3 Capacity Auction>

(Drawing-up and publication of a main auction outline)

Article 32-12

The Organization shall draw-up an auction outline providing for matters specified in each item of the following (hereinafter "main auction outline") before a main auction, notify the eligible market participants who completed the registration of company information, and publish it by posting on its website or by other means.

- i. Auction schedule
- a. Planned due date for publication of a curve displaying the relationship between the supply capacity to be auctioned at a main auction (hereinafter "main auction target amount") and the price (hereinafter "main auction demand curve")
- b. Reception period of the application for the registration of the capacity that can be expected as supply capacity in regional service areas for the delivery year (hereinafter "expected capacity") out of the facility's capacity registered as capacity resources information
- c. Reception period of bids

- d. Planned due date of publication of contract results
- e. Period of procedure for execution of a contract containing the auction results (hereinafter "capacity contract") that will be executed with the Organization after a successful bid
- f. Planned due date of publication of a result of execution of the capacity contract
- ii. Period of the covered delivery year
- iii. Conditions for participation in main auction
- iv. Registered content of the expected capacity
- v. Manners of main auction
 - a. Bidding system

b. Contract method

- vi. Necessary conditions required by the Organization against the capacity resource provider after execution of the capacity contract (hereinafter "requirements")
- vii. Method with which the Organization confirms whether the capacity resource provider fulfills the requirements (hereinafter "assessment")
- viii. Conditions on payment
 - ix. Contents of penalty and restrictions on participation in the capacity market (hereinafter collectively "penalty") imposed by the Organization in accordance with Article 32-41
 - x. Form of the capacity contract
 - xi. Other matters related to the implementation of the main auction

Article 32-13

- 1. The Organization shall draw-up an original plan for the main auction demand curve.
- 2. The Organization shall submit the original plan drawn-up in Paragraph 1 above to and asks for opinions from councils or other institutions associated with the government (hereinafter "relevant national councils").
- 3. Given the opinions from the relevant national councils, the Organization shall define the demand curve.
- 4. The Organization shall publish the main auction demand curve defined in the preceding paragraph by posting it on its website or by other means by the planned due date for publication as specified in the main auction outline.

(Reception of applications for the registration of the expected capacity) Article 32-14

The Organization shall, in accordance with the Network Codes, receive applications for the registration of the expected capacity from eligible market participants who have completed the registration of information on capacity resources during the reception period for applications to register the expected capacity as specified in the main auction outline.

(Evaluating the expected capacity and notifying the completion of registration) Article $32\mathchar`15$

- 1. When the Organization receives an application for the registration of the expected capacity in the preceding article, it shall evaluate the validity of the application by considering the existence of penalties based on Article 32-41 and other relevant information, in addition to the eligible market participant's basic information.
- 2. The Organization shall request the information necessary for the evaluation in the preceding paragraph from the members if necessary.
- 3. When the Organization considers that the received expected capacity is appropriate as a result of the evaluation in Paragraph 1, it shall register the expected capacity on the capacity market system and notify the relevant eligible market participant of the completion of registration.
- 4. When the Organization considers that the received expected capacity is inappropriate as a result of the evaluation in Paragraph 1, it shall notify the relevant eligible market participant of the reasons for such consideration and will not register the capacity on the capacity market system. When the Organization receives a re-application for the registration of the expected capacity from the eligible market participant, it shall re-evaluate in accordance with Paragraph 1.
- 5. The Organization shall receive applications for amendment or cancellation from the eligible market participants who completed the registration of the expected capacity in Paragraph 3 only during the reception period for the application for the registration of the expected capacity. In such cases, the Organization shall re-evaluate the applications in accordance with Paragraph 1.
- 6. The Organization shall notify an eligible market participant who has completed the registration of expected capacity with the capacity market system of the fact that participation in main auctions is possible.

(Reception, amendment, cancellation of bids) Article 32-16

- 1. The Organization shall, in accordance with the Network Codes, receive bids from eligible market participants who can participate in main auctions (hereinafter referred to as "main auction eligible participants") during a reception period for bids as specified in a main auction outline.
- 2. Upon the reception in the preceding paragraph, information which the Organization requires the main auction eligible participants to submit (hereinafter "bidding information") shall be information on bidding price and capacity. Provided, however, that the bidding capacity shall not exceed the maximum capacity for bids notified in accordance with paragraph 6 of the preceding Article.
- 3. The Organization shall receive applications for amendment or cancellation of bidding information from the main auction eligible participants only during a reception period of bids mentioned in Paragraph 1.
- 4. The Organization may request information on FIT generators from the government before a start of the reception period of bids mentioned in Paragraph 1.

(Decision of capacity resource provider) Article 32-17

The Organization shall decide the capacity resource providers based on the main auction outline after expiration of the reception period of bids mentioned in the preceding article.

(Publication of contract results of the main auction)

Article 32-18

The Organization shall publish the following matters by posting on its website or by other means based on the main auction outline.

- i. Contract total capacity
- ii. Contract price
- iii. Contract total price
- iv. Other matters that should be published

(Execution, amendment and cancellation of the capacity contract)

Article 32-19

- 1. The Organization shall execute capacity contracts containing the following contents with capacity resource providers based on the main auction outline and in accordance with the contract results of the main auction published under the preceding article.
 - i. Supply capacity which the capacity resource provider must provide with in the delivery year (hereinafter "capacity contract amount")
 - ii. Amount of money planned to be paid to the capacity resource provider (hereinafter "capacity contract price")
 - iii. Delivery year
 - iv. Requirement
 - v. Assessment
 - vi. Conditions on payment
 - vii. Penalty
- viii. Conditions on amendment or cancellation of the capacity contract
- ix. Other matters that should be specified in the capacity contract
- 2. The Organization shall use a form specified in the main auction outline for execution of the capacity contract in the preceding paragraph.
- 3. When the Organization considers that the amendment or cancellation fulfills the conditions on amendment or cancellation of the capacity contract specified in Item viii of Paragraph 1 above, the Organization shall amend or cancel the capacity contract.

(Publication of results of execution of the capacity contract)

Article 32-20

- 1. The Organization shall publish the following matters by posting on its website or by other means based on the main auction outline.
 - i. Contract total capacity confirmed by execution of the capacity contract
 - ii. Contract price
 - iii. Contract total amount confirmed by execution of the capacity contract
 - iv. Other matters that should be published
- 2. When the Organization is required to disclose the names of eligible participants of the main

auction who made bids and the information on execution of the capacity contract of each generation facility or capacity resources list (defined in Paragraph 1 of Article 32-24) by the members or other electric power suppliers, the Organization shall evaluate the purposes of the use of such information and other matters before disclosing them (except information with which individual generation facility or capacity resources list can be identified).

- 3. The Organization shall provide the members who are general transmission and distribution companies with the names of capacity resource providers of the relevant regional service areas, capacity contract amounts, and other information (hereinafter "capacity resource provider's information").
- 4. When the Organization amends or cancels a capacity contract with the capacity resource provider based on Paragraph 3 of the preceding article, it shall publish, disclose, and provide the members who are general transmission and distribution companies with information after the amendment or cancellation of the capacity contract in accordance with each paragraph of the preceding paragraph.

 $(Decision \ of \ implementation \ of \ additional \ auction)$

Article 32-21

- 1. The Organization shall decide the necessity of an additional auction for the supply capacity necessary for the next year by considering the matters specified in each item of the following, provided, however, that the Organization confirms from the capacity resource providers of the main auction whether they apply for an amendment or cancellation of the capacity contract before such decision.
 - i. The contract total capacity of the main auction that decreased along with the amendment or cancellation of the capacity contract by a capacity resource provider of the main auction
 - ii. Reviewed necessary supply capacity based on the estimated increase and decrease of demand, amendment of proper level of reserve, and adjustment capacities in regional service areas in the delivery year of the main auction
- 2. When the Organization decides that an additional auction is necessary in the preceding paragraph, it shall hold either of the incremental auction or the release auction.
- 3. When the Organization holds an additional auction in the preceding paragraph, it shall draw-up an original plan of a curve displaying the relationship between the supply capacity to be bidden at an incremental auction and the price (hereinafter "demand curve for an incremental auction") or the relationship between the supply capacity to be bidden at a release auction and the price (hereinafter "supply curve for a release auction").
- 4. The Organization shall submit the original plan drawn-up in the preceding paragraph to and ask for opinions from the relevant national councils.
- 5. Given the opinions from the relevant national councils, the Organization shall define the demand curve for an incremental auction or the supply curve for a release auction.
- 6. The Organization shall publish the fact that the Organization will hold an additional auction in addition to the demand curve for an incremental auction or the supply curve for a release auction defined in the preceding paragraph by posting on its website or by other means.

(Application mutatis mutandis of provisions on main auction to an incremental auction) Article 32-22

- 1. Provisions of Article 32-12, Article 32-14 to 32-20 will be applied mutatis mutandis to an incremental auction (except for provisions specified in Item i.-a. of Article 32-12). In such a case, the term, "main auction", shall be replaced with the term, "incremental auction".
- 2. The Organization shall start to receive applications for the registration of the expected capacity from eligible market participants who wish to participate in an incremental auction in advance of drawing-up and publication of an incremental auction outline.

(Application mutatis mutan dis of provisions for main auction to a release auction) Article $32\mathchar`23$

- Provisions of Article 32-12, Article 32-16 to 32-20 will be applied mutatis mutandis to a release auction (except for Item i-a and b, Items iv, vi, vii, and ix of Article 32-12, and Items i, iii to v, and vii of Paragraph 1 of Article 32-19). In such cases, the terms, "main auction," "execution," and "capacity resource provider," shall be replaced with the terms, "release auction," "amendment," and "capacity resource releaser," respectively.
- 2. Where the Organization holds a release auction, it shall, pursuant to the provisions of the Network Codes, notify capacity resource providers who satisfy the conditions for participation in a release auction of the fact that they can participate in the release auction.

(Reception of applications for registration of the capacity resources list) Article 32-24

- 1. The Organization shall receive applications for the registration of lists specifying information on generation facilities or electricity consumers justifying the supply capacity (hereinafter "capacity resources list") in accordance with the Network Codes from providers whose supply capacity needs to be verified in terms of validity two years prior to the delivery year (hereinafter "capacity provider subject to capacity verification").
- 2. The Organization shall notify the capacity providers subject to capacity verification of the reception period for the capacity resources lists and publish it by posting on its website or by other means.
- 3. The Organization shall prepare the form necessary to prepare the capacity resources lists and publish it by posting on its website or by other means.

(Evaluation of the capacity resources lists and notification of completion of registration) Article 32-25

- 1. After the reception period of the capacity resources lists mentioned in Paragraph 2 of the preceding article, the Organization shall evaluate the validity of the capacity resources lists received from the capacity providers subject to capacity verification.
- 2. The Organization shall request information necessary for the evaluation in the preceding paragraph from the government, the members who are general transmission and distribution companies and other relevant persons if necessary.
- 3. When the Organization considers that the received capacity resources list is appropriate as a result of the evaluation in Paragraph 1 above, it shall register the list on the capacity

market system and notify the relevant capacity provider subject to capacity verification of the completion of registration of the list.

- 4. When the Organization considers that the received capacity resources list is inappropriate as a result of the evaluation in Paragraph 1 above, it shall notify the relevant capacity provider subject to capacity verification of the reasons for such consideration and does not register the list on the capacity market system. When the Organization receives a reapplication for registration of the capacity resources list from the capacity provider subject to capacity verification, shall re-evaluate the list in accordance with Paragraph 1.
- 5. The Organization shall receive applications for amendment or cancellation from the capacity providers subject to capacity verification in accordance with provisions of the Network Codes. In such cases, the Organization shall re-evaluate in accordance with Paragraph 1. Provided, however, that an application for amendment or cancellation in the delivery year specified in the Network Codes shall be evaluated as needed.
- 6. The Organization shall provide the members who are general transmission and distribution companies with information on capacity resources lists whose registration or amendment is completed.

(Selection of capacity providers subject to the capacity verification test) Article 32-26

- 1. The Organization shall select capacity providers whose supply capacity needs to be tested in terms of ability to provide (hereinafter "the capacity verification test") based on the capacity resources lists registered in Paragraph 3 of the preceding article (hereinafter "capacity providers subject to the capacity verification test").
- 2. As for capacity providers subject to capacity verification who were not selected as providers subject to the capacity verification test, the Organization shall register their supply capacity specified on their respective capacity resources list submitted to the Organization as verified capacity (defined in Item ii, Paragraph 1 of Article 32-29) on the capacity market system and notify them.

(Coordination of schedule of the capacity verification test) Article 32-27

The Organization shall request coordination of the capacity verification test by the capacity providers subject to the capacity verification test selected in Paragraph 1 of the preceding article and the members who are general transmission and distribution companies in regional service areas relevant to such capacity providers (hereinafter "cooperative general transmission and distribution companies").

(Reception of report of schedule of verification test) Article 32-28

1. The Organization shall receive in accordance with the Network Codes a schedule of the capacity verification test after coordination with cooperative general transmission and distribution companies from the capacity providers subject to the capacity verification test.

2. The Organization shall notify the capacity providers subject to the capacity verification test of the reception period for the report of schedule of the capacity verification test and publish it by posting on its website or by other means.

(Request of submission of a result of the capacity verification test) Article 32-29

- 1. The Organization shall request submission of the result of the capacity verification test, including the following matters, from the capacity providers subject to the capacity verification test (hereinafter "result of the capacity verification test") based on the schedule of the capacity verification test reported in Paragraph 1 of the preceding article.
 - i. Schedule of the capacity verification test
 - ii. Actually provided supply capacity (hereinafter "verified capacity")
 - iii. Other information on the capacity verification test
- 2. The Organization shall prepare a form necessary to register the result of the capacity verification test and publish the form by posting on is website or by other means.

(Reception of a result of verification test) Article 32-30

The Organization shall receive results of the capacity verification test from the capacity providers subject to the capacity verification test in accordance with the Network Codes.

(Evaluation of results of verification test) Article 32-31

- 1. When the Organization receives the results of the capacity verification test in the preceding article, it shall evaluate the validity of the results.
- 2. The Organization may request submission of information necessary for the evaluation in the preceding paragraph from the cooperative general transmission and distribution companies as needed.

(Notice of results of evaluation of the results of the capacity verification test) Article $32\mathchar`-32$

The Organization shall notify the capacity providers subject to the capacity verification test of the verified capacity confirmed as a result of the evaluation in Paragraph 1 of the preceding article.

(Omission of submission of results of verification test) Article 32-33

1. When a capacity provider subject to the capacity verification test has actually provided with the supply capacity for the year of implementation of the capacity verification test, which is the delivery year, and when such actual provision of the supply capacity and the underlying capacity resources list satisfy the conditions specified in the capacity market operation manual, and when such a capacity provider subject to the capacity verification test submitted the actual provision results and the capacity resources list, the Organization may omit the submission of a result of the capacity verification test mentioned in Paragraph 1 of Article 32-29.

2. Procedures for the evaluation and notification of the result of evaluation after the reception of actual provision results of the supply capacity and the capacity resources list in the preceding paragraph shall follow the provisions of Article 32-31 and 32-32.

<Subsection 4 Settlement, etc.>

(Assessment)

Article 32-34

- 1. The Organization shall assess the capacity resource providers based on the provisions of the capacity contract.
- 2. The Organization may request submission of information necessary for the assessment in the preceding paragraph from the members who are general transmission and distribution companies if necessary.
- 3. Contents and procedures of the assessment shall be provided for in the Network Codes.

(Payment based on a capacity contract)

Article 32-35

- 1. The Organization shall calculate the amounts that should be paid to capacity resource providers or capacity resource releasers and pay such amounts to them based on the provisions of the capacity contracts by referring to the capacity contract prices.
- 2. The Organization shall pay the amounts mentioned in the preceding paragraph from the compensation for capacity resources collected from the general transmission and distribution companies or the members who are retail companies in accordance with the Articles of the Organization.

(Reception of the application for the registration of replaceable capacity resource information) Article 32-36

- 1. The Organization shall receive applications for the registration of information on replaceable capacity resources (hereinafter "replaceable capacity resource information") from the eligible market participants who wish to provide a generation facilities or capacity resources list that can replace the supply capacity (hereinafter "replaceable capacity resources") for capacity resource providers (hereinafter "replaceable capacity resources providers") in accordance with the Network Codes.
- 2. When the replaceable capacity resources of the replaceable capacity resource providers mentioned in the preceding paragraph do not register the expected capacity, the Organization shall receive applications for the registration of the expected capacity as needed. In such cases, the Organization shall evaluate the applications in accordance with Paragraphs 1 to 5 of Article 32-15.

(Evaluation and registration of applications for the registration of replaceable capacity resource information)

Article 32-37

- 1. When the Organization receives an application for the registration of replaceable capacity resource information in Paragraph 1 of the preceding article, it shall evaluate the validity of the content of application.
- 2. When the Organization considers that the received content of replaceable capacity resource information is appropriate as a result of the evaluation in the preceding paragraph, it shall register such replaceable capacity resource information on the capacity market system and publish them.
- 3. When the Organization considers that the received content of replaceable capacity resource information is inappropriate as a result of the evaluation in the preceding paragraph, it shall notify the relevant replaceable capacity resource provider of the reasons of such consideration, and will not register the information on the capacity market system or publish them. When the Organization receives a re-application for the registration of replaceable capacity resource information from a replaceable capacity resource provider, it shall re-evaluate the information in accordance with Paragraph 1.

(Reception of the application for the registration of capacity resources replacement) Article $32\mathchar`32\mathchar`38$

The Organization shall receive applications for the registration of capacity resources replacement from the capacity resources providers in accordance with the Network Codes.

(Evaluation of the application for the registration of capacity resources replacement) Article 32-39

- 1. When the Organization receives an application for the registration of capacity resources replacement in the preceding article, it shall evaluate the validity of the application.
- 2. When the Organization considers that the received application for the registration of capacity resources replacement is appropriate as a result of the evaluation in the preceding paragraph, it shall notify the relevant capacity resource provider that the replacement of capacity resource is possible, then amend the capacity contract based on Paragraph 3 of Article 32-19.
- 3. When the Organization considers that the received application for the registration of capacity resources replacement is inappropriate as a result of the evaluation in Paragraph 1, it shall notify the relevant capacity resources provider of the reasons for such consideration. When the Organization receives a re-application for the registration of capacity resources replacement from the capacity resources provider, the Organization shall re-evaluate in accordance with Paragraph 1.

(End of publication of replaceable capacity resource information) Article 32-40

The Organization shall end the publication of replaceable capacity resource information, when any of the following occurs:

- i. When the replacement of capacity resources is completed
- ii. When the period of publication by posting set upon registration of replaceable capacity resource information expires

iii. When the capacity resource providers do not amend or cancel the replaceable capacity resource information as needed in a proper manner

(Penalty)

Article 32-41

- 1. The Organization may impose penalties specified in each item of the following on electric power suppliers (hereinafter "capacity providers subject to a penalty") who committed an activity that violates any of the Articles of the Organization, these Operational Rules, Network Codes, auction outlines, capacity contracts and other laws and regulations regarding capacity market.
 - i. Economic penalty: The Organization asks for payment of penalties based on a capacity contract from a capacity provider subject to a penalty who falls into any of the following:
 - a. When the provider canceled the capacity contract
 - b. When the provider amended the capacity contract to decrease capacity contract amount
 - c. When the provider was not able to supply necessary capacity under the conditions specified in the capacity contract for the delivery year
 - ii. Entry penalty: The Organization prohibits the capacity provider subject to a penalty who committed a significant violation from participating in the whole or a part of a capacity auction or special conditional auction (defined in Paragraph 1 of Article 32-42) after discussing the validity of such prohibition at a meeting at which experts attend.
- 2. A capacity provider subject to a penalty who paid the economic penalty based on the conditions specified in a or b of Item i of the preceding paragraph before the Organization decides the necessity of an additional auction based on Article 32-21 of the Operational Rules will receive a refund of the whole or a part of the penalty from the Organization, when any of the following occurs:
 - a. When an additional auction is not held
 - b. When a release auction is held
 - c. Although when an incremental auction is held, the necessary supply capacity could be secured more economically than the main auction.
- 3. The Organization shall return the penalties received as the economic penalty from capacity providers subject to a penalty to the members who are retail companies every year.
- 4. The Organization may publish the names of capacity providers subject to a penalty after imposing penalties on such providers as needed.

<Subsection 5 Miscellaneous>

(Special conditional auction in case of emergency) Article 32-42

1. Regardless of the provisions of this Section, if it becomes clear from the capacity contract amount secured by a capacity auction that there is a possibility of a tight supply-demand balance or other difficulty in ensuring the stable supply in future or otherwise when the Organization considers it necessary, the Organization shall decide on the necessity of an auction with special conditions (hereinafter "special conditional auction").

2. The Organization shall draw-up a special conditional auction outline after the decision in the preceding paragraph and publish it by posting on its website or by other means.

(Verification of functions of capacity market)

Article 32-43

The Organization shall periodically evaluate the results of capacity auction and special conditional auction that the Organization held, and continuously review the functions and business improvement of capacity market as necessary based on the review at the meeting at which experts attend and the results of discussion at the relevant national councils.

(Preparation of report) Article 32-44 The Organization shall prepare a report including operational status of capacity market and publish it by posting on its website or by other means.

(Preparation of analysis tools)

Article 32-45

- 1. The Organization shall prepare the analysis tools necessary to simulate a capacity auction so as to conduct the business mentioned in respective article of this Section.
- 2. Given the knowledge gained through the business, the Organization considers improvement of analysis tools or introduction of new analysis tools.

(Handling of information) Article 32-46 The Organization shall handle the information on capacity market properly as confidential, in principle.

Section 2 Safeguard Measures of Generator Procurement

(Implementation of safeguard measures of generator procurement) Article 33

1. The Organization shall solicit electric power suppliers (hereinafter "companies to maintain and operate generation facilities") who conduct business defined in the following items (hereinafter "business to maintain and operate generation facilities") based on Item 5, Articles 28–40 of the Act, and conduct safeguard measures of generator procurement.

i. Installation, addition, maintenance and operation of electric facilities for power generation ii. Maintenance and operation of existing electric facilities for power generation

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- iii. Restoration, maintenance and operation of suspended or retired electric facilities for power generation
- 2. The Organization shall decide the companies to maintain and operate generating facilities based on procedures for generator procurement in principle. Regardless of this provision, the Organization conduct business to promote installation of electric facilities for power generation without a procurement procedure when it is found to be urgent in light of the electricity demand and supply state or when it is found that other procurements are not rational.
- 3. The Organization may solicit members who are retail companies and who will purchase electricity generated by electric facilities for power generation subject to the procurement based on the procedures before the generator procurement.

(Evaluation of the long-term demand and supply balance and risk analysis of demand and supply fluctuations by the committee)

Article 34

The Organization shall establish a standing committee of intellectuals based on Article 41 of the Articles of Organization, evaluate the long-term demand and supply balance based on the aggregated electricity supply plans, and analyze the risk of demand and supply fluctuations as needed every fiscal year.

(Initiation of consideration for safeguard measures of generator procurement) Article 35

1. The Organization shall initiate the consideration of safeguard measures of generator procurement when any of the following situations occur.

i. The Organization finds any of the following situations as a result of evaluation and analysis described in the preceding article

- a. Necessary reserve capacity or balancing capacity may not be secured.
- b. Electric facilities for power generation need to be secured as a risk management measure by considering the risk of demand and supply fluctuations that might be caused by natural disasters, changes in social surroundings, or other special circumstances.
- ii. The Organization is asked to consider safeguard measures of generator procurement by members who are general transmission and distribution companies.

iii. The Organization is asked to consider generator procurement by the Government.

- iv. Even if the Organization holds a special conditional auction under Article 32-42, the necessary supply capacity may not be secured.
- 2. When the Organization initiates the generator procurement based on the preceding paragraph, it shall publish it.

(Consideration and evaluation of necessity of generator procurement) Article 36

- 1. When the Organization initiates the consideration of generator procurement, it shall discuss the necessity of the procurement at the committee of intellectuals by considering matters specified in the Network Codes according to the purpose of the procurement.
- 2. The Organization shall hear opinions from members about operational performance and the

operational plan of electric facilities for power generation, deterioration of generating facilities, plans on fuel procurement, procurement of the supply capacity, available additional supply capacity, amount of possible demand shedding, risk management measures, and other necessary matters as needed upon the discussion described in the preceding paragraph.

3. The Organization shall initiate the generator procurement when it finds it necessary based on the discussion described in Paragraph 1.

(Consideration of basic requirements)

Article 37

- 1. The Organization shall establish the basic requirements for the generator procurement (hereinafter "basic requirements of procurement") based on the review by the committee of intellectuals when the Organization decides to initiate the procurement.
- 2. When the Organization established the basic requirements of procurement, it shall publish them. When the Organization established the upper limit of the subsidy for the procurement (hereinafter "compensation for generator procurement"), it may decide not to publish such limit.

(Soliciting companies to maintain and operate generating facilities) Article 38

- 1. The Organization shall solicit the companies to maintain and operate generating facilities based on the provisions of Network Codes after establishing the basic requirements of procurement.
- 2. The Organization may ask specific electric power suppliers to participate in the procurement for generating facilities when necessary by considering the contents of business to maintain and operate generating facilities subject to the procurement.

(Appointment of companies to maintain and operate generating facilities) Article 39

- 1. The Organization shall evaluate the participants of procurement with respect to the evaluation items prescribed in the Network Codes at the committee of intellectuals on generator procurement and appoint the companies to maintain and operate generating facilities.
- 2. When the Organization appoints the companies to maintain and operate generating facilities, it shall publish the following matters.
- i. Name of companies to maintain and operate generating facilities and installed location of electric facilities for power generation
- ii. Supply capacity provided by the companies, and provisional duration of such capacity
- iii. Procurement price

(Execution of contracts with successful procurer) ${}$

Article 40

The Organization shall execute a contract on the business of maintenance and operation of

generating facilities, payment terms of the compensation for generator procurement, and conditions of sales of electricity in accordance with the application requirements with companies to maintain and operate generating facilities.

(Payment of the compensation for generator procurement)

Article 41

The Organization shall pay a compensation for generator procurement to the companies to maintain and operate generating facilities in accordance with the contract prescribed in Article 40.

(Reports of business of maintenance and operation of generating facilities by the successful procurer)

Article 42

- 1. The Organization shall periodically receive reports on the business of the maintenance and operation of generating facilities from the companies to maintain and operate generating facilities based on the provisions of Network Codes.
- 2. When the Organization finds that there are improper matters in the business of maintenance and operation of generating facilities by the companies to maintain and operate generating facilities, it shall request improvement of such business to the companies.
- 3. The Organization shall report to the committee of intellectuals about the reports from the companies to maintain and operate generating facilities based on Paragraph 1.

(Handling upon emergency)

Article 43

Regardless of the provisions of this Section, the Organization may omit any part of the procedures for procurement, when the demand and supply balance became tight due to natural disasters or other causes, and when it became necessary to secure supply capacity urgently.

(Handling when the procurement is not concluded)

Article 44

When there are not any or proper participants in the procurement for generating facilities, and when the Organization cannot appoint the companies to maintain and operate generating facilities, it shall review the basic requirements of procurement and implement the procurement again.

(Handling of information)

Article 45

The Organization shall properly handle the information on the safeguard measures of generator procurement as confidential.
Chapter 6 Network System Development

Section 1 Network system development for cross-regional networks

(Network system development for cross-regional network)

Article 46

The Organization shall engage in operations pertaining to the formation of facilities for crossregional interconnection networks pursuant to the provisions of items v-2, v-3, and viii of paragraph 1 of Article 28-40 of the Act.

(Establishment of Cross-Regional Network Development Committee) Article 47

The Organization shall establish a standing committee for the development of a system of crossregional networks (hereinafter "Cross-Regional Network Development Committee") pursuant to the provision of Article 41 of the Articles of Organization for conducting business prescribed in Article 46.

Section 2 Long-term policy on cross-regional networks

(Drawing-up of long-term policy on cross-regional networks) Article 48

- 1. The Organization shall draw up a long-term policy that organizes the directions for development and updating of the cross-regional networks across the nation (hereinafter "long-term policy on cross-regional networks") based on the review by the Cross-Regional Network Development Committee and express the ideal electrical network across the nation in the next 10 years and more and the concepts for realization of such networks.
- 2. The Organization shall draw-up the long-term policy on cross-regional networks by considering the following matters.

i. National policy

- ii. Deliberation at councils based on the ordinance of Advisory Committee for Natural Resources and Energy (Ordinance No. 293 of June 7, 2000)
- iii. Contents of existing plans on cross-regional network development
- iv. Results of investigation and analysis of electrical networks by the Organization
- v. Knowledge gained through opinions from electric power companies or exchanging opinions with overseas institutions associated with its business
- vi. Other important matters regarding development of cross-regional interconnection networks
- 3. The Organization shall draw up the long-term policy on cross-regional networks through a transparent process, such as hearing opinions from members, and immediately publish the contents of the policy after drawing up.

(Review of a long-term policy on cross-regional networks) Article 49

1. A long-term policy on cross-regional networks shall be reviewed regularly every five years after drawing-up or previous reviews in accordance with Article 48.

- 2. In cases specified in the following items, the Organization shall consider the necessity of reviews of the long-term policy on cross-regional networks, in addition to the regular review specified in Paragraph 1, and if the Organization considers such an additional review as necessary, it shall review the plan accordingly.
- i. In a case where a basic energy plan based on the Basic Act on Energy Policy (Act No. 71 of June 14, 2002) and other national policies having an effect on the long-term policy on cross-regional networks are established or amended.
- ii. In a case where the Organization aggregated and published the electricity supply plans of members.
- iii. In other cases where the Organization recognizes that the premise of the long-term policy on cross-regional networks has significantly changed.

Section 3 Cross-regional Network Development Plan

(Cross-regional network development plan)

Article 50

The Organization shall draw up individual plans on the development of cross-regional network (hereinafter "cross-regional network development") according to the procedure defined in this section(hereinafter "planning process") from the viewpoint of cross- regional operation based on the long-term policy of cross-regional network, state of power flows on cross-regional network, and their update plans.

(Starting planning process)

- 1. The Organization shall start the planning process when the situation falls under any of the following.
- i. When the Organization considers the situation falls under the condition of starting a review prescribed in the Network Codes from the viewpoint of the following a. or b.
 - a. Stable supply: a viewpoint of ensuring stable supply by power interchanges among regional service areas in cases where several power generators are under unscheduled outage or where supply capacity in regional service areas are lost significantly due to major disasters, etc.
- b. Development of environment for cross-regional trade: a viewpoint of developing environment for cross-regional electricity trade and of preventing existing or future congestion of cross-regional interconnection system
- ii. When requests on cross-regional network development are raised from the electric power suppliers from the viewpoint of the following a. to c., and the conditions for initiation of consideration provided in the Network Codes are met
- a. Stable supply: a viewpoint of ensuring stable supply by power interchanges at the time of

sharp decrease of supply capacity in general transmission and distribution company's regional service area with forced outage of the several generators due to major disasters, etc.

- b. Development of environment for cross-regional trade: a viewpoint of preventing congestion of cross-regional network due to individual cross-regional electricity trade and of developing environment for cross-regional electricity trade
- c. Generator installment: a viewpoint of cross-regional electricity trade derived from installation of particular power supply
- 3. When the Organization is required to review the cross-regional network development from the Government

(Confirming state of members who is general transmission and distribution company) Article 52

- 1. The Organization shall confirm situations, implementation and possibilities of measures for members who are general transmission and distribution companies or transmission companies, and maintaining and operating such cross-regional network before starting the planning process, when the cross-regional network subject to the review are intra-regional bulk transmission lines and are lines that do not have a direct impact on the calculation of total transfer capabilities or operation of interconnection lines across regions.
- 2. Regardless of Items i and ii of the previous article, when the Organization considers that the development plan of transmission and distribution facilities of members who are general transmission and distribution companies or transmission companies will achieve the purpose of starting the planning and drawing-up process by the Organization or will actualize the request on the cross-regional network development from the claimant as a result of the confirmation of situations prescribed in the preceding paragraph, the Organization shall not start the planning process.

(Notice when the planning process will not be started)

Article 53

When the electric power suppliers raised a request on the cross-regional network development, and when the Organization considers that the conditions for starting consideration prescribed in the Network Codes are not satisfied or decides that it will not start the planning process as a result of the confirmation in Article 52, it shall notify the electric power suppliers about such facts and reasons in writing.

(Determination of procedure for planning process)

- 1. When the Organization starts the planning process for the cross-regional network development plan, it shall decide procedures for such planning process based on the review at the Cross-regional Network Development Committee.
- 2. The Organization establishes the standard review period of planning process in provisions of Network Codes.

(Publication of procedures of the planning process)

Article 55

1. The Organization shall publish the following matters after establishing the procedures for the planning process.

- i. Start of planning process
- ii. Review schedule, when the planning process will be continued
- iii. The fact that the planning process will not be continued and its reason, when the process will not be continued

2. As for the project of which planning process has been started based on the request of the Government, the Organization shall notify the Minister of Economy, Trade and Industry about the matters specified in the preceding paragraph after establishment of procedures of planning process.

(Basic requirements and designation of beneficiary)

Article 56

As for projects of which procedures for the planning process have been decided, the Organization shall establish the basic requirements of cross-regional network development (hereinafter "basic requirements of cross-regional network development") and the scope of persons who receive benefits in light of the purpose of the cross-regional network development (hereinafter "beneficiary") based on the review by the Cross- Regional Network Development Committee (including comparative reviews with alternative measures).

(Soliciting procedure of electric power suppliers)

Article 57

- 1. The Organization may solicit electric power suppliers who seek to expand the utilization of cross-regional networks that are subject to the consideration of the planning process through cross-regional electric trading, when the Organization considers such solicitation is necessary based on the review prescribed in the preceding article.
- 2. When the Organization received applications for the solicitation specified in the preceding paragraph from electric power suppliers, the Organization shall consider the basic requirements of cross-regional network development and the scope of beneficiaries based on the contents of the application for such companies.

(Solicitation and decision of implementation plan) Article 58

- Article 58
- 1. The Organization shall solicit implementation plans for the construction, maintenance, and operation of facilities (hereinafter "implementation plan") and operators who implement such plans (hereinafter "implementing entity") based on the basic requirements of cross-regional network development.
- 2. Regardless of the provision of the preceding article, when the Organization considers that it is proper to reinforce the existing facilities or in other cases where it considers such solicitation for implementation plans is irrational, it shall specify the members to whom it will request submission of implementation plans and ask such members to submit

implementation plans after presenting the conditions for the plan.

3. The Organization shall comprehensively evaluate the implementation plans submitted according to the provisions of the preceding paragraphs from the viewpoints of economic efficiency, network stability, cost-effectiveness, feasibility of the project, and project continuity at the Cross-regional Network Development Committee and then choose an implementation plan and implementing entity.

 $(\ensuremath{\text{Decision}}$ on beneficiary and cost allocation ratio)

Article 59

- 1. The Organization shall decide on the cost allocation ratio (of general allocation and special allocation, and of each electric power suppliers, hereinafter the same shall apply) of the cost necessary for the cross-regional network development based on the review by the Cross-Regional Network Development Committee.
- 2. In the case of the preceding paragraph, if the Organization recognizes beneficiaries other than those defined in the provision of Article 56 in light of the purpose of the cross-regional network development based on the implementation plan, the Organization shall decide on the cost allocation ratio by including such other beneficiaries.

(Drawing up of cross-regional network development plan)

Article 60

The Organization shall draw up and publish the cross-regional network development plans based on the decided implementation plan, implementing entity and cost allocation ratio reviewed at the Cross-regional Network Development Committee.

(Termination of planning process)

Article 61

The Organization shall terminate the planning process when it has accomplished drawing up the implementation plan or other cases according to provision of the Network Codes.

(Publishing and notifying cross-regional network development plans)

Article 61-2 Where a cross-regional network development plan has been formulated pursuant to the provisions of Article 60 hereof, the Organization shall publish the formulated cross-regional network development plan and provide a notification thereof to the operating entities and beneficiaries.

(Reporting cross-regional network development plans)

Article 61-3 Where a cross-regional network development plan formulated pursuant to the provisions of Article 60 hereof is subject to the implementation of operations for the granting of a subsidy as prescribed in item v-2 of paragraph 1 of Article 28-40 of the Act (hereinafter referred to as "cross-regional network development subsidy"), the Organization shall report the cross-regional network development plan, in which matters as prescribed in paragraph 2

of Article 28-47 of the Act have been stated, to the Minister of Economy, Trade and Industry.

(Confirmation of progress of the cross-regional network development plan) Article 62

- 1. The Organization shall confirm the progress of the cross-regional network development plan after drawing-up the plan by receiving necessary information from the operating entity.
- 2. The Organization shall confirm the situation of the site as needed based on information submitted according to provision of Paragraph 1 and confirm the existence of delay of the process of the plan and report such confirmation to the Cross-Regional Network Development Committee.

3. When the Organization considers that the purpose of the cross-regional network development plan will be affected by a delay in the progress of the plan or other reasons, it shall consider countermeasures at the Cross-Regional Network Development Committee.

(Changing cross-regional network development plans not subject to the implementation of operations for the granting of a cross-regional network development subsidy) Article 63

- 1. When the Organization changes a cross-regional network development plan that has not been reported under Article 61-3 hereof given that it is not subject to the implementation of operations for the granting of a cross-regional network development subsidy, the Organization may change the plan after a study is conducted by the Cross-Regional Network Development Committee.
- 2. Notwithstanding the provisions of the preceding paragraph, the Organization may, where changes in a cross-regional network development plan that has not been reported under Article 61-3 hereof are minor, change the cross-regional network development plan without having it reviewed by the Cross-Regional Network Development Committee. Provided, however, that the Organization shall report such changes to the Cross-Regional Network Development Committee in such a case.
- 3. Where the Organization changes a cross-regional network development plan pursuant to the provisions of the preceding paragraphs, it shall publish the changed cross-regional network development plan and provide a notification thereof to the operating entities and beneficiaries.
- 4. Where the Organization seeks to make a cross-regional network development plan to be changed pursuant to the provisions of paragraph 1 hereof subject to the implementation of operations for the granting of a cross-regional network development subsidy, it shall re-implement the plan formulation process.

(Handling of a system impact study when planning process has been started) Article 64

The Organization shall proceed with planning process immediately and properly and define, publish, and notify the relevant general transmission and distribution companies about the capacity to be secured in the peripheral networks, timing of the start of such securing, possibility of response to application for a contract, and other handling of a network access

business based on the review at the Cross-Regional Network Development Committee when the Organization considers that such decision, publication, and notice are necessary to guarantee the realization of the cross-regional network development.

(Preparation of analysis tool)

Article 65

- 1. The Organization shall prepare analysis tools to simulate the power system for conducting the business of each of the articles of this chapter, and it shall review matters necessary for drawing-up of the long-term policy of cross-regional network and the cross-regional network development plan.
- 2. The Organization shall consider improvement of the existing analysis tools or introducing of new one based on knowledge gained in the course of business.

(Details of business of this chapter)

Article 66

Details of business of this chapter shall be regulated in the Network Codes other than those regulated in this Chapter.

Chapter 7 Network Access

Section 1 Network Access Business

(Implementation of business on network access) Article 67

- 1. The Organization shall conduct business related to the reception of applications for preliminary consultation and system impact study from persons who seek connection of power generation facilities to the transmission network (except generation facilities which do not transmit power to the transmission network, hereinafter the same meaning shall apply in this chapter), confirmation of the results of a review, verification, and response based on Item 8, Article 28-40 of the Act.
- 2. The Organization shall conduct necessary review based on Guidelines on network information disclosure and Guidelines on cost allocation of network reinforcement for generator installment when it proceeds with network access business.
- 3. Provisions on preliminary consultation and system impact study in the Network Codes shall be applied mutatis mutandis to the system impact study received by the Organization.

Section 2 Preliminary Consultation and System Impact Study

(Receiving of applications for preliminary consultation and system impact study) Article 68

- 1. The Organization shall receive applications for preliminary consultation and interconnection study required from the applicant for specified network interconnection.
- 2. When the Organization received applications according to the preceding paragraph, it shall immediately notify the applicant for specified network interconnection of the estimated date of response set within the time frame defined in Paragraph 3 of Article 70 or Paragraph 2 of Article 72.
- 3. When the Organization may not be able to give a response by the estimated date of response, it shall notify the applicant for specified network interconnection of the reasons, progress, and forecast of the state (including the estimated date of response after extension of the schedule) immediately after such a possibility became apparent and give an individual explanation according to the request from such an applicant. The same shall apply when the Organization may not be able to give a response by the estimated date of response after such an extension of the schedule.

(Consideration of preliminary consultation) Article 69

1. When the Organization received an application form for preliminary consultation, it shall ask the relevant member who is a general transmission and distribution company who operates transmission line subject to (hereinafter, "general transmission and distribution company" in this Chapter), to consider the preliminary consultation. Provided, however, that

if there are deficiencies in the application form, it shall ask for correction of such deficiencies, and shall proceed the application procedure after confirming that there are no deficiencies in the form.

- 2. When the Organization received the results of the consideration prescribed in the preceding paragraph from the member who is a general transmission and distribution company, it shall confirm the validity of the matters specified in each of the following items and verify the matters according to necessity.
- i. When there are restrictions on interconnection in the context of capacity for the maximum receiving electric power, thermal capacity, or estimated power flow of the transmission network
- ii. When there is a difference between receiving electric power of the transmission network and those that are required from the applicant for specified network interconnection, the reasons for such a difference
- iii. Supposed interconnection point and direct distance from the installed location of specified power generation facilities to such an interconnection point
- 3. When the Organization considers reconsideration is necessary as a result of confirmation and verification described in preceding paragraph 3, it shall ask the member who is a general transmission and distribution company to reconsider by presenting reasons, and when it receives a result of such reconsideration from the member, it shall confirm such a result according to preceding paragraph.

(Response on the preliminary consultation)

Article 70

- 1. When the Organization completes the confirmation and verification of the result of reconsideration according to the Paragraph 2 or 3 of the preceding article, it shall give a response on the contents of each of the following items and the necessary explanation to the applicant for specified network interconnection.
- i. Existence of restrictions on interconnection in the context of maximum power interconnected (if there are any restrictions on interconnection, the maximum power which is able to be connected evaluated from a viewpoint of capacity)
- ii. Direct distance from a supposed interconnection point to the installed location of specified power generation facilities
- 2. In addition to the response presented in the preceding paragraph, according to the request from the applicant for specified network interconnection, it shall present an estimation of standardized unit cost and construction period of generator installment lines based on the Guidelines on network information disclosure by the Government.
- 3. The Organization shall give a response within one month in principle after the receiving day of the preliminary consultation.

(System impact study)

- 1. When the Organization received an application form for system impact study, it shall notify that to the member who is a general transmission and distribution company.
- 2. When the Organization received a notice of deposit of necessary consideration fees from the

relevant member who is a general transmission and distribution company, it shall proceed with an application procedure for system impact study and request the member to consider the connection. Provided, however, that, if there are deficiencies in the application form, it shall ask correction of the deficiencies and proceed with the application process after confirming there are no deficiencies in the form.

- 3. When the Organization received the results of the consideration prescribed in the preceding paragraph from the member who is a general transmission and distribution company, it shall confirm the validity of the matters specified in each of the following items and verify the validity according to necessity.
- i. When the interconnection is impossible for the maximum power interconnected requested by the applicant for specified network interconnection, reasons for such impossibility and an alternative plan, and when it is impossible to present an alternative plan, reasons for such impossibility
- ii. Reasons of selection of the interconnection point and route of transmission line, necessity of construction work and size of facilities
- iii. Estimated construction cost, estimated cost allocation (a range of cost allocation)
- iv. Necessary construction period
- v. When the applicant for specified network interconnection is required to take measures, necessity of such measures and contents of construction
- vi. Fiscal year subject to the consideration, preconditions of the consideration of cross- section, etc. vii. When there are restrictions on operation, reasons for such restrictions
- viii. Possibility of the connection after conducting cross-regional frequency control and countermeasures against insufficiency of capacity to reduce the power supply utilizing interconnected lines (limited to cases of giving response to notice connection is impossible due to insufficiency of capacity to reduce the power supply, as for the interconnection study related to intermittent generation, such as renewable energy, including wind power and solar power)
- ix. Other matters written in the results of the system impact study
- 4. When the Organization recognizes it is necessary to reconsider as a result of the confirmation and verification described in preceding paragraph, it shall request the member who is a general transmission and distribution company to reconsider by presenting the reasons for such reconsideration, and when the Organization receives a result of the reconsideration from the member, it shall reconfirm and re-verify the result according to the preceding paragraph.

(Response on the system impact study)

- 1. When the Organization completes the confirmation and verification of the results of the consideration according to the Paragraph 3 or 4 the preceding article, it shall give a response of the confirmation and verification about matters specified in each of the following items to the applicant for specified network interconnection in writing and give the necessary explanation.
- i. Possibility of the connection for the maximum power interconnected requested by the applicant (if it is impossible to connect, reasons for such impossibility and an alternative plan, and when it is impossible to give an alternative plan, reasons for such impossibility)

- ii. Summary of construction of network interconnection (drawing of design or layout of the construction etc., according to the request from the applicant)
- iii. Estimated construction cost (including breakdown) and basis of calculation
- iv. Estimated cost allocation (including breakdown) and basis of calculation
- v. Necessary construction period
- vi. Measures necessary for the applicant for specified network interconnection
- vii. Prerequisite of the interconnection study (data relevant to a network used for consideration)
- viii. Restrictions on operation (including reasons of restrictions)
- 2. The Organization shall give a response according to the preceding paragraph within three months after the date of receiving the application form described in Paragraph 1 of the preceding article in principle.
- 3. If the result of the system impact study described in the preceding article falls under the following condition, in addition to the response and explanation specified in Paragraph 1, the Organization shall include the following matters in the response and give necessary information to the applicant for specified network interconnection
- i. When the reinforcement work (as well as new installation, the same meaning shall apply) of the cross-regional network is included in the construction for network interconnection, the fact whether or not the applicant falls under the electric power suppliers who can raise requests on the planning process to the Organization based on Item ii-c, Paragraph 1, of Article 51, and the procedure for the start of the planning process
- ii. Where construction work for network interconnection by a specified network interconnection applicant might become subject to a collective study process for generator interconnections (as prescribed in Article 75 hereof; same hereunder): The fact that such construction could become subject to a collective study process for generator interconnections and the procedures leading to the start of such a process

(Handling when the Organization received a result of review of interconnection study from a member who is a general transmission and distribution company) Article 73

- 1. When the Organization received a report from the member who is a general transmission and distribution company which states that the results of the system impact study of the application for interconnection which was received by such a member according to the Network Codes falls under the condition specified in Item i, Paragraph 3, of the preceding article, the Organization shall explain to the applicant for specified network interconnection according to the same Item after such a member gives a response to the applicant.
- 2. When the results of the system impact study of the application for interconnection of which the report has been received in the preceding paragraph also falls under the condition specified in Item ii, Paragraph 3, of the preceding article, the Organization shall explain to the applicant for specified network interconnection according to the same Item, in addition to the explanation described in the preceding paragraph.

(Confirmation of necessity of system impact study) Article 74

- 1. When the Organization is asked to confirm the necessity of an system impact study from the applicant for the specified network interconnection upon changing all or part of the generation facilities or ancillary facilities (including updating), it shall ask the member who is general transmission and distribution company to confirm the necessity of an system impact study.
- 2. When the Organization received a result of the confirmation described in the preceding paragraph from the member who is the general transmission and distribution company, it shall confirm the validity of such result, and when it finds that such result is not valid, it shall ask the member to reconsider by presenting reasons. When the Organization received a result of reconsideration from the member, it shall confirm the result again according to this paragraph.
- 3. When the Organization considers that the result of consideration of the necessity of a system impact study by the member who is a general transmission and distribution company is valid, it shall notify the applicant for the specified network interconnection about such result.

(Method of calculating a bond amount to apply for an agreement concerning power generation facilities)

Article 74-2 The Organization shall stipulate and publish at a meeting of the Board of Directors of the Organization the method by which a bond amount required when a network interconnection applicant applies for an agreement concerning power generation facilities shall be calculated.

Section 3 Solicitation process for the generator interconnection

(Requesting a collective study process for generator interconnections) Article 75.

1. Where the Organization deems it necessary from the viewpoint of efficient system maintenance, etc., to commence procedures for soliciting applicants for network interconnection who shall jointly assume the allocated cost for necessary construction costs for work on extra-high voltage transmission networks (including transformers that interconnect extra-high-voltage and high-voltage transmission networks; same hereinafter in this section) (excluding cases in which power generation is suppressed with the use of a protective relay) through procedures for which fairness and transparency have been secured) (hereinafter referred to as "collective study process for generator interconnections"), the Organization shall submit a request for the commencement of a collective study process for generator interconnections to members constituting general transmission and distribution companies.

2. In considering whether the commencement of a collective study process for generator interconnections as provided for in the preceding paragraph is necessary, the Organization shall hear the opinions of members constituting general transmission and distribution companies operating transmission networks that are subject to this process.

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(Publishing procedures related to the implementation of a collective study process for generator interconnections)

Article 80. The Organization shall prescribe procedures related to the implementation of a collective study process for generator interconnections and other matters required to smoothly operate this process and publish these procedures and matters by posting them to its website.

(Accepting applications to system impact study in a collective study process for generator interconnections from specified network interconnection applicants)

- Article 81.
- 1. Where a collective study process for generator interconnections has commenced in accordance with the Network Codes, the Organization shall accept applications for a system impact study from specified network interconnection applicants seeking interconnections with transmission networks subject to solicitation.
- 2. The Organization shall request such system impact study received in the preceding paragraph toward members who are general transmission and distribution companies according to Section 2, and confirm and verify the result of the study, and give response.

(Accepting an application to conduct additional system impact study from a specified network interconnection applicant based on the response given for the initial system impact study) Article 82.

- 1. Where the Organization receives a notification from a member constituting a general transmission and distribution company to the effect that another system impact study (hereinafter referred to as "additional system impact study") will be conducted based on the response given for the system impact study as prescribed in the Network Codes, the Organization shall accept an application for additional system impact study.
- 2. The Organization shall submit a request for additional system impact study as accepted under the preceding paragraph to a member constituting a general transmission and distribution company in accordance with Section 2 hereof and confirm, verify, and convey the results thereof.

(Method by which the bond amount for a collective study process for generator interconnections is calculated)

Article 82-2. The Organization shall stipulate and publish at a meeting of the Board of Directors of the Organization the method by which a bond amount required when an application for additional system impact study in a collective study process for generator

interconnections is made by a network interconnection applicant shall be calculated.

Article 83 Deleted Article 84 Deleted Article 85 Deleted Article 86 Deleted Article 87 Deleted Article 88 Deleted

(Suspending a collective study process for generator interconnections) Article 89.

1. Where, despite having continued a collective study process for generator interconnections in light of the scale of the expected network reinforcement work to be carried out (including in terms of the amount of the allocated cost for construction and the duration of construction), past preliminary consultations, and the state of applications for system impact studies, the Organization determines that it is highly probable that it will not be possible for all network interconnection applicants to establish interconnections or that it will not be possible to ensure fairness for network interconnection applicants or where there is otherwise a reasonable reason for suspending or discontinuing the process, the Organization shall notify the reason to members constituting general transmission and distribution companies and submit a request for the suspension or discontinuation of the process thereto.

2. When a request as provided for in the preceding paragraph is made, the Organization shall listen to opinions from members constituting general transmission and distribution companies who have been implementing the process.

Article 90 Deleted Article 91 Deleted Article 92 Deleted Article 93 Deleted Article 94 Deleted Article 95 Deleted Article 96 Deleted

Section 4 Miscellaneous

(Confirmation of response along with the application for contract) Article 97

- 1. When the member who is a general transmission and distribution company received the application for a contract from the applicant for the specified network interconnection because the Organization has given a response to such an applicant according to Paragraph 1 of Article 72, and Paragraph 2 of Article 82, and when the results of the consideration for such an application is different from the one given by the Organization, the Organization shall receive the results of the consideration according to the Network Codes, review the validity of such result, and verify it as needed.
- 2. When the Organization considers reconsideration is necessary as a result of the confirmation and verification described in Paragraph 1, it shall ask the member who is a general transmission and distribution company to reconsider by presenting reasons, and when it receives a result of such reconsideration from the member, it shall confirm and verify such a result again.
- 3. When the Organization considers the results of the system impact study is valid as a result of confirmation and verification in preceding two paragraphs, it shall notice that to the relevant member who is a general transmission and distribution company.

(Confirmation and verification of applications received by the member who is a general transmission and distribution company)

Article 98

- 1. The Organization shall confirm and verify, if necessary, the application for preliminary consultation or system impact study which the applicant for specified network interconnection has applied to the member who is a general transmission and distribution company and has received a response, according to the request from such an applicant based on Paragraphs 2 and 3 of Article 69 or Paragraphs 3 and 4 of Article 71.
- 2. When the Organization completes the confirmation or verification of Paragraph 1, it shall immediately give a response and a necessary explanation to the applicant for specified network interconnection.

(Application and response procedures of a system impact study)

Article 99

- 1. The Organization shall define and publish unified forms of application and response for preliminary consultation and system impact study received by both the Organization and the members who are general transmission and distribution companies.
- 2. The Organization shall discuss with the general transmission and distribution companies in advance for preparing the forms for the application and response to a system impact study.

(Compile of reception and response status of study) Article 100

- 1. The member who is a general transmission and distribution company must submit information on preliminary consultation, system impact study and reception of and response to applications for contract based on the provisions of the Network Codes.
- 2. The Organization shall regularly compile and publish the information submitted according to the preceding paragraph, as well as information on reception and response status by the Organization.

(Improvement of business)

Article 101

The Organization shall consider measures for improvement of the operation of business related to the reception, consideration, and response regarding the application for a system impact study with other electric power suppliers as needed, while sharing information on the matters specified in the following items with members who are general transmission and distribution companies to improve the quality of the network access business.

- i. Good examples of a network access business
- ii. Situation of response to complaints and application for consultation to the Organization and example of dispute resolution
- iii. Case examples that did not reach a complaint or application for consultation to the Organization, but the general transmission and distribution companies received complaints from the applicant for the network interconnection
- iv. Other information that seems to be beneficial for improvement of a network access business

(Preparation of analysis tools)

Article 102

- 1. The Organization shall prepare analysis tools necessary to conduct business described in each article of this chapter.
- 2. The Organization shall consider improvement of the analysis tools or introducing of new ones based on knowledge gained in the course of its business.

(Request for necessary cooperation)

Article 103

The Organization may request the necessary information for implementation of business described in this chapter and other necessary cooperation from members who are general transmission and distribution companies and other electric power suppliers.

(Information management of Network Access Business)

Article 104

The Organization shall strictly manage information of applicant for network interconnection on Network Access Business and properly handle the information as confidential information according to necessity.

Chapter 8 Monitoring Supply-demand State

(Monitoring supply-demand state)

Article 105

The Organization shall monitor the supply-demand state of electricity related to the electricity business operated by the members (hereinafter "supply-demand situation") based on Item 1, Article 28-40 of the Act.

(Subjects of monitoring of supply-demand state)

Article 106

The Organization monitors the matters in each of the following items as monitoring the demand-supply state mentioned in Article 105.

i. Supply-demand state of each member

- a. Securing of demand and supply capacity of members who are retail companies and specified transmission and distribution companies (applied only to registered specified transmission, distribution and retail companies)
- b. Supply capability, electric energy supply and reserve capacity of members who are generation companies
- ii. Supply-demand state of each regional service area
- a. Demand and supply capacity in regional service areas of members who are general transmission and distribution companies and securing of balancing capacity
- b. Demand and supply capacity in service areas of members who are specified transmission and distribution companies
- iii. Supply-demand state and capacities across the nation
- iv. Power flow among service areas, state of the use of the interconnection lines

(Obtaining of plans for monitoring supply-demand)

- 1. The Organization shall receive plans specified in each of the following items and other information for monitoring of supply-demand state and other business based on the provisions of Network Codes from persons specified in each of the corresponding following items.
- i. Contractors of transmission networks: Plans on securing of supply capacity and demand, and on the utilization of the interconnection lines
- ii. Contractors of generation: Plans on generating capacity, electric energy supply and reserve capacity and on the utilization of the interconnection lines
- iii. Members who are general transmission and distribution companies: Plans and information defined from a. to f. below
- a. Plans on demand and supply capacity in each regional service area
- b. Plans on balancing capacity
- c. Plans on procurement and supply of electricity generated from FIT generators
- d. Frequency, demand, balancing capacity, reserve capacity, generation facilities, crossregional interconnection networks, and other matters that are monitored steadily by the central load dispatching office.

- e. Actual demand of contractors of transmission networks utilization and actual electric energy generated by the contractors of generation
- f. Capacity of interconnection lines to be secured as margin based on the results obtained from concluding a balancing market agreement.
- iv. Members who are specified transmission and distribution companies: Plans on demand and supply capacity of each service area, and plans on procurement and supply of electricity generated from FIT generators
- v. Contractors of demand reduction: Plans on demand reduction, procurement and supply
- 2. The Organization shall keep itself informed on the amount of electricity traded by JEPX.

(Delivery of plans to members who are general transmission and distribution companies) Article 108

When the Organization received plans specified in Items i, ii and v of the Paragraph 1 of the preceding article (including revised plans), it shall deliver those plans to the relevant members who are general transmission and distribution companies.

 $(Modification \ of \ planned \ value \ by \ the \ Organization)$

Article 109

The Organization may modify the values in the plans specified in Items i, ii, and v of Paragraph 1 of Article 107 submitted by the contractors of transmission networks use, contractors of generation or contractors of demand reduction so as to implement the business of the Organization such as monitoring supply-demand state if it shall be necessary.

(Submission of additional materials)

Article 110

The Organization shall demand to persons adopted in each items of paragraph 1 in Article 107, to submit plans for more detailed calculation unit and other additional materials when it considers it necessary.

Chapter 9 Instructions under a Tight Supply-demand State

(Instructions or requests under a tight supply-demand state) Article 111

- 1. When the supply-demand situation of electricity related to either retail electric business conducted by the member who is a retail company, general transmission and distribution business conducted by the member who is a general transmission and distribution companies, or specified transmission and distribution business conducted by the member who is a specified transmission and distribution companies, worsen or might worsen, the Organization may give such members instructions on matters specified in each of the following items when it considers improvement of the situation is necessary, based on Paragraph 1, Article 28-44 of the Act. Provided, however, that the Organization may not give instructions on the matters either specified in Item i to the members who are transmission companies, or Item iii to the members who are transmission companies and generation companies.
- i. To supply electricity to the members relevant to the tight supply-demand state
- ii. To supply electricity by cross-area transmission network use for member who is a retail company, general transmission and distribution company or specified transmission and distribution company
- iii. To receive the supply of electricity from the members
- iv. To lend and deliver, borrow or share electrical facilities to/from/ with the members
- v. To take necessary steps to improve the supply-demand state, in addition to the instructions specified in the preceding each item
- 2. The Organization shall request electric power suppliers other than the members to do the matters specified in each item of the preceding items when it considers it necessary.

(Instructions or requests under a tight supply-demand state or its possibility)

Article 112

When it is revealed that there are or might be deficiencies in the reserve in a specific supply area or across the nation and when the Organization considers that it is necessary to improve the supply-demand situation, it shall give instructions or require to the members to do the following items specified in item v. in paragraph 1 of the preceding article.

- i. To increase supply capacity in specified general transmission and distribution company's regional service area or nationwide by an adjustment of scheduled outage plan, restoration of the suspended generators, and increased output of the operating generators
- ii. To reduce the amount of electricity consumed by specific users to whom the members related to the worsened supply-demand state supply electricity, based on contracts with them in specified general transmission and distribution company's regional service areas or nationwide

(Procedures to give instructions when the demand and supply balance is or might become tight)

- 1. Where the demand and supply balance is or might become tight and where the Organization issues the instructions defined in Paragraph 1 of Article 111 to the members, it shall do so in a procedure specified below after the gate closing in principle (hereinafter the general transmission and distribution companies in regional service areas where the tightness of the demand and supply balance or such possibility is recognized shall be "general transmission and distribution companies whose demand and supply balance is tight" in this article and Article 116). Provided, however, that if there is not sufficient time to conduct the following procedures, the Organization issues the instructions specified in Paragraph 1 of Article 111 without regard to the following procedures.
- i. The Organization shall confirm the duration and the capacity of supply necessary to dissolve the situations or possibilities of tightness of the demand and supply balance as well as the interconnection lines of the general transmission and distribution companies whose demand and supply balance is tight seek to use when they receive electricity (hereinafter "preferred interconnection lines" in this article).
- ii. The Organization shall confirm the duration and the capacity of supply that members other than the general transmission and distribution companies whose demand and supply balance is tight can provide (hereinafter "Cross-regional transmission capacity at supply end" in this article). Upon such a confirmation, the Organization confirms from the members in an order from the Organization expected to give a response regarding the Crossregional transmission capacity at supply end immediately.
- iii. Members who are confirmed in Item ii above shall immediately calculate and notify the Organization about the Cross-regional transmission capacity at supply end by taking account of the constraints on the power flow of transmission and distribution facilities and on the operation of generation facilities accompanying the maintenance work for transmission and distribution facilities or power generation facilities (hereinafter "electric facilities"), the constraint on the procurement of fuel, and the state of demand and supply of the members. In addition, the members who have generation facilities in multiple service areas shall report the Cross-regional transmission capacity at supply end of each service area.
- iv. The Organization shall define the members subject to the instructions to supply electricity and the duration, amount of supply from the members, and transmission routes in the order of the following a. to e. based on the Cross-regional transmission capacity at supply end reported in Item iii above.
- a. Where the electricity can be received via preferred interconnection lines
- b. Where the electricity will be supplied via smaller numbers of regional service areas upon the cross-regional transmission network use
- c. Where the general transmission and distribution companies whose demand and supply balance is tight would receive the necessary electricity for a longer period
- d. Where the general transmission and distribution companies whose demand and supply balance is tight would receive larger amounts of the necessary electricity
- e. Where the network capacity in the regional service area where the generation facilities are located is big
- v. The Organization shall give instructions to supply electricity based on the members subject

to instructions to supply electricity defined in Item iv above with the duration, amount of supply from such members, and transmission route and shall give instructions to the general transmission and distribution companies whose demand and supply balance is tight to receive the supply of electricity.

2. Regardless of the preceding paragraph, the Organization shall give the instructions specified in Paragraph 1 of Article 111 before the gate closure, in cases where such instructions are necessary, such as when the Organization gives instructions to supply electricity for long hours or when the starting of a generator takes time.

(Procedures for instructions when the ability to reduce the power supply is or might be insufficient)

- 1. When the ability to reduce the power supply is or might be insufficient and when the Organization issues the instructions defined in Paragraph 1 of Article 111, it shall do so to the members who are general transmission and distribution companies in procedures specified in the following items after the gate closing in principle (hereinafter the general transmission and distribution companies in service areas where the ability to reduce the power supply is or might be insufficient are called "general transmission and distribution companies whose ability to reduce the power supply is insufficient" in this article). Provided, however, that if there is not sufficient time to conduct the following procedures before the time the ability to reduce the power supply is expected to be insufficient, the Organization issues the instructions specified in Paragraph 1 of Article 111 without regard to the following procedures.
- i. The Organization shall confirm the duration and the amount of supply necessary to dissolve the insufficiency of ability to reduce the power supply of the general transmission and distribution companies whose ability to reduce the power supply is insufficient as well as the interconnection lines that the companies seek to use when they supply electricity (hereinafter "preferred interconnection lines" in this article).
- ii. The Organization shall confirm the duration when the general transmission and distribution companies other than the general transmission and distribution companies whose ability to reduce the power supply is insufficient can receive electricity and the receiving capability (hereinafter "cross-regional transmission capability at receiving end" in this article). Upon such a confirmation, the Organization confirms from the general transmission and distribution companies in an order from the Organization expected to give a response regarding the cross- regional transmission capability at receiving end immediately.
- iii. Members who are the general transmission and distribution companies and were confirmed in Item ii above shall immediately calculate and notify the Organization of the cross-regional transmission capability at receiving end by taking account of the constraints on the power flow of transmission and distribution facilities and on the operation of power generation facilities accompanying the work of electric facilities, the constraint on procurement of fuel, the state of demand and supply of such members, and balancing capacity necessary to secure a stable supply.
- iv. The Organization shall define the members who are the general transmission and distribution companies subject to the instructions to receive the power supply and the

duration and cross-regional transmission capability at receiving end by such members and transmission routes in an order of the following a. to e. based on the receiving capability notified from the members who are the general transmission and distribution companies in Item iii above.

- a. Where the electricity can be supplied via preferred interconnection lines
- b. Where the electricity will be supplied via a smaller number of service areas upon the crossregional transmission network use
- c. Where the general transmission and distribution companies whose ability to reduce the power supply is insufficient would supply the necessary electricity for a longer period
- d. Where the general transmission and distribution companies whose ability to reduce the power supply is insufficient would receive bigger amount of necessary electricity
- e. Where the network capability in the regional service area of members who are the general transmission and distribution companies who will receive electricity is big
- v. The Organization shall give instructions to receive electricity to the members who are the general transmission and distribution companies subject to instructions to receive the power supply defined in Item iv above based on the duration and the amount of receiving by such members, and transmission route and shall give instructions to the general transmission and distribution companies whose ability to reduce the power supply is insufficient to supply electricity.
- 2. Regardless of the preceding paragraph, the Organization shall give instructions specified in Paragraph 1 of Article 111 before the gate closure, in cases where such instructions are necessary, such as when the Organization gives instructions to supply electricity for long hours, or when the starting of a generator takes time.

(Instructions under tight supply-demand state of a specific member)

Article 115

When the supply-demand state of a specific member who is a retail company or specified transmission, distribution company (applied only to registered specified transmission, distribution and retail company) falls under any of the following items and the Organization considers that it is necessary to improve the state, it shall give such a member instruction specified in Paragraph 1, Article 111.

- i. When the supply capacity of the member is insufficient relative to the demand forecast, and when it might become difficult to actualize a plan on future securing of supply capacity when viewed in light of actual deficiency of supply capacity of such a member, past experience and market conditions such as contract amount in each market of Japan Electric Power eXchange (JEPX)
- ii. When the demand forecast of the member is improper when compared to the performance of such a member, and when it might be impossible to ensure necessary supply capacity
- iii. In other cases such as when the state of supply-demand of the member got or might be get worse

(The use of the interconnection lines when it is based on instructions or requests from the Organization)

Article 116

- 1. The Organization shall make the most of the interconnection lines, if it is necessary for the supply of electricity based on instructions or requests based on Article 111.
- 2. For the supply of electricity based on instructions or requests from the Organization, the available transfer capability (ATC) of the interconnection lines shall be used first, and if the ATC of the interconnection lines became insufficient, the Organization shall give instructions or requests to supply by utilizing the transmission margin of the interconnection lines and the increased part of total transfer capability (TTC) according to Article 152 and Article 153. Provided, however, that when the Organization gives instructions or requests according to Article 111 and when the transmission margin to be supplied and received through interconnection lines from other regional service areas has been set up on the interconnection lines neighboring with the service areas of the general transmission and distribution companies whose demand and supply balance is tight for a case of tight supply-demand state or other emergent states, the Organization margin according to Article 152 before using the ATC of the interconnection lines.

Article 117 Deleted.

(Notice to the general transmission and distribution companies of instructions or request from the Organization)

Article 118

When the Organization gives instructions or requests according to Article 111, the Organization shall notify the general transmission and distribution companies in regional service areas where the members and other electric power suppliers who will receive such instructions or requests are located about the contents of such instructions or requests immediately beforehand or afterward.

 $(Hand ling \ of \ the \ stagnancy \ in \ tight \ supply \ demand \ state)$

Article 119

If the supply-demand state still has not improved even after the Organization gave instructions or requested based on provisions in Article 111, the Organization shall cooperate with the Government, the members and other electric power suppliers in taking additional measures for supply-demand.

(Report of contents of instructions)

Article 120

When the Organization gives the members instructions according to Paragraph 1, Article 28-44 of the Act, it shall immediately report about contents of such instructions and other matters to the Minister of Economy, Trade and Industry based on Paragraph 2 of the same article, and

according to the ordinance of the Ministry of Economy, Trade and Industry.

Article 121

When the Organization recognized that the member who has received instructions specified in Paragraph 1, Article 28-44 of the Act failed to take measures required by such instructions without due reasons, it shall immediately report to the Minister of Economy, Trade and Industry based on Paragraph 3 of the same article and according to the ordinance of the Ministry of Economy, Trade and Industry.

(Publication of instructions)

Article 122

When the Organization gives the members instructions according to Paragraph 1, Article 28-44 of the Act, it shall immediately publish such a fact.

(The amount of money paid/received by the instructed or required members or other electric supply companies)

Article 123

- 1. When the Organization gives instructions or request according to Article 111, matters on the amount of money that the relevant member or other electric power supplier paid or is payable to the member shall be decided through discussions between the relevant parties based on the cost of generation relating to the supply or the cost on a transmission network use contract provided by a member who is a general transmission and distribution company.
- 2. Regardless of the provision in the preceding paragraph, when electricity is shared between members who are general transmission and distribution companies based on instructions from the Organization, such matters described in the preceding paragraph shall be decided through discussions between the relevant parties based on the cost of electricity to compensate gaps between plans subject to interconnection.
- 3. When the parties described in the preceding paragraph cannot reach an agreement, the Organization arbitrates the discussions based on provisions in Chapter 20 according to the request from any of the parties.

(Handling of one hour ahead trading under a tight supply-demand state) Article 123-2

When a major problem occurs in the power system or when the demand and supply situation is or might become tight, the Organization may refuse for an inquiry into the determination of transfer capability allocation for one hour ahead of trading. Provided, however, that the Organization shall explain such refusal to the contractors of transmission networks, contractors of generation and contractors of demand reduction immediately before or after the refusal.

Chapter 10 Management of Cross-regional Interconnection Lines

(Management of interconnection lines)

Article 124

The Organization shall manage the interconnection lines specified in the Appendix 10-1 according to Item 8, Article 28-40 of the Act.

Appendix 10-1: Interconnection lines		
Area	Subject facilities	
Between Hokkaido	1 st and 2 nd Electricity	
and Tohoku	interconnection facilities between	
	Hokkaido and Honshu AC/DC C.S.	
Between Tohoku and	Soma-Futaba bulk line	
Tokyo	Iwaki bulk line	
Between Tokyo and	Sakuma FC,	
Chubu	Shin-Shinano FC,	
	Higashi Shimizu FC	
	Hida-Shinano FC (*4)	
Between Chubu and	Mie-Higashi Omi line	
Kansai		
Between Chubu and	Interconnection facilities of Minami	
Hokuriku	Fukumitsu HVDC BTB C.S. and	
	Minami Fukumitsu Substation	
Between Hokuriku	Echizen-Reinan line	
and Kansai		
Between Kansai and	Seiban-Higashi Okayama line,	
Chugoku	Yamazaki-Chizu line	
Between Kansai and	Interconnection facilities between	
Shikoku	Kihoku and Anan AC/DC C.S.	
Between Chugoku	Honshi interconnection line	
and Shikoku		
Between Chugoku	Kanmon interconnection line	
and Kyushu		
	Area Between Hokkaido and Tohoku Between Tohoku and Tokyo Between Tokyo and Chubu Between Chubu and Kansai Between Chubu and Hokuriku Between Chubu and Hokuriku Between Kansai and Chugoku Between Kansai and Shikoku Between Chugoku Between Chugoku and Shikoku	

Appendix 10-1: Interconnection lines

- (*1) Interconnection lines between Tohoku and Tokyo will be managed according to the fence power flow for which the power flow that would take a roundabout path into a sound route (hereinafter referred to as "Tohoku-Tokyo fence power flow") in the event of a route disconnection within a loop network that includes such interconnection lines is taken into account.
- (*2) As for the interconnection facilities between Chubu and Hokuriku and interconnection lines between Hokuriku and Kansai, in addition to management of each interconnection lines, the fence power flow (Hokuriku fence power flow) that combines the power flows of lines between Chubu and Hokuriku and lines between Hokuriku and Kansai shall be managed by considering the power flows routed into the interconnection lines between

Hokuriku and Kansai because of the outage of interconnection facilities between Chubu and Hokuriku in a case of failure of AC system.

- (*3) Interconnection lines between Kansai and Chugoku shall be managed by the fence power flow (hereinafter "Kan-Chu fence power flow") that takes into account the power flow that flows around into a sound route at the time of an outage causing the disconnection of routes within a loop network that includes such interconnection lines.
- (*4) Hida-Shinano FC includes interconnection facilities of Hida converter station and Shin-Shinano Substation.

(Principle of management of interconnection lines)

Article 125

The Organization shall follow the principle of allocating capability based on day-ahead trading or an-hour ahead trading when it manages the interconnection lines.

(Calculation of total transfer capability [TTC])

- 1. The Organization shall hold a meeting to discuss with the members who are the General Transmission and Distribution Companies or the Transmission Companies who maintain and operate interconnection lines, (hereinafter "Working Group on Cross-regional Transfer Capability") and for calculation of the total transfer capability of the interconnection lines in the long-term plan and the annual plan of each fiscal year after the next fiscal year (hereinafter "total transfer capability[TTC]" in this chapter), and shall define the discussion schedule, calculation cross-section of TTC, demand, and other conditions of discussion by the end of May of each year based on the meeting mentioned above and shall publish them. At this time, if the Organization considers that it is projected to avoid market splitting by subdividing the calculation units of the TTC of such interconnection lines by seasons and weekdays and holidays, based on the utilization of the interconnection lines and requests from users of the lines, the Organization shall subdivide the calculation units.
- 2. When the Organization received a request for review of the conditions of discussion published according to Paragraph 1 above from the electric power suppliers who plan to procure electricity from other service area or sell electricity to other service area, it shall discuss how to respond to such a request and review the conditions as needed at the Working Group.
- 3. The Organization shall calculate the TTC of annual and long-term plan beyond next year by the end of each February, based on the review of the Working Group on Cross-regional Transfer Capability conducted by precondition in Paragraph 1, according to the provision of Network Codes.
- 4. The Organization shall publish the progress and the results of the Working Group on Crossregional Transfer Capability and calculated TTC.
- 5. The Organization shall calculate the operational capacity based on the annual operational capacity and review conditions and publish the value thereof by the publication deadline as prescribed in the separately published Table of Network Information Items to be Published by the Organization and Corresponding Publication Deadlines.

(Temporal review of the TTC)

Article 127

- 1. The Organization shall temporary review the TTC of interconnection lines when it confirmed a state of facilities which the members maintain and operate at the time of an unplanned maintenance work or in emergency where there is an outage of electric facilities or other event when it considers that a temporary review is necessary.
- 2. The Organization shall publish the reviewed TTC without delay when it conducted the review according to the preceding paragraph.
- 3. The Organization shall continuously confirm the state of event that causes temporary review of the TTC, and when it recognizes that there are no longer such causes, the Organization shall change the figure of the TTC to the original one before such a temporary review, and publish it.

(Publish of outlook for establishing transmission margin)

Article 128

- 1. The Organization shall decide and publish outlook for establishing transmission margin in each interconnection line through actual supply-demand cross-section (hereinafter, "outlook for establishing transmission margin").
- 2. The Organization shall set the figure for the transmission margin as zero, in principle, except when the margin is required in an actual supply-demand calculation unit, and shall announce the amount of the margin to be secured and the reasons for such securing when the margin must be secured.
- 3. The Organization shall set and publish margin values based on the thinking underlying the setting of margin values by the publication deadline as prescribed in the separately published Table of Network Information Items to be Published by the Organization and Corresponding Publication Deadlines.

(Calculation of the transmission margin)

- 1. The Organization shall hold a discussion meeting with the members who are general transmission and distribution companies and who operate interconnection lines specified in Appendix 10-1 to discuss about the transmission margin after the next fiscal year (hereinafter "Working Group on Transmission Margin in this article).
- 2. The Organization shall calculate the transmission margin for long-term figure and annual figure of each fiscal year after the next fiscal year by the end of February of each year based on the result of the Working Group on Transmission Margin based on the outlook for establishing transmission margin.
- 3. The Organization shall publish the process and the results of Working Group on Transmission Margin and calculated the transmission margin.
- 4. The Organization shall calculate margin values based on the thinking underlying the setting of margin values by the publication deadline as prescribed in the separately published Table of Network Information Items to be Published by the Organization and Corresponding Publication Deadlines.

(Review of the transmission margin) Article 130

- 1. The Organization may review the transmission margin of the interconnection lines after confirming the demand and supply state of relevant members who are general transmission and distribution companies in cases specified in each of the following items.
- i. Where the TTC was temporarily reviewed based on Article 127
- ii. Where the outlook for establishing the transmission margin were reviewed
- iii. Where the supply capacity became insufficient due to unexpected facility malfunction or others, and it is recognized that the review of the transmission margin is needed so as to operate electric networks steadily
- iv. In other cases when it is proper to review the transmission margin
- 2. In a case specified in Item i of the preceding paragraph, and when the reviewed TTC is less than the transmission margin, such TTC shall be deemed as the reviewed transmission margin.
- 3. When the Organization reviews the transmission margin according to the Paragraph 1, it shall publish reviewed transmission margin and other necessary matters without delay.
- 4. Upon the review of the transmission margin, if the Organization considers an additional review at the Working Group on Transmission Margin, it shall review according to the procedures specified in Paragraphs 2 and 3 of the preceding Article, and establish and publish them according to the Paragraph 3 of Article 128.

(Short-cycle cross-regional frequency control)

Article 131

When the Organization received a request from a member who is a general transmission and distribution company whose short-cycle balancing capacity necessary for short-cycle frequency control in a regional service area is or might become insufficient, the Organization shall secure the balancing capacity for the short-cycle cross-regional frequency control (capacity and time period necessary for a control of short-cycle frequency of the interconnection lines, hereinafter the same shall apply) by following the procedures specified in each of the following items.

- i. The Organization shall receive a notice of balancing capacity of the interconnection lines expected to be necessary for the short-cycle cross-regional frequency control from the member who is a general transmission and distribution company whose short-cycle balancing capacity is or might become insufficient.
- ii. The Organization shall ask the members who are general transmission and distribution companies other than the company specified in the preceding item to calculate the short-cycle balancing capacity and time period necessary for control that they can offer.
- iii. The Organization shall set the available capacity necessary for the short-cycle crossregional frequency control within the range of ATC of the interconnection lines after 12:00 on the previous day of the date of actual demand and supply, after considering the matters specified in the following a. to c., based on the result of calculation in the preceding item, and shall notify the relevant members who are general transmission and distribution companies
- a. ATC of the interconnection line
- b. The number of the interconnection lines to be bypassed
- c. Available balancing capacity of members who are general transmission and distribution

companies

- iv. The Organization shall receive the notice of necessity of short-cycle cross-regional frequency control on the day and of balancing capacity necessary for control from the member who is general transmission and distribution company whose short- cycle balancing capacity is or might become insufficient and shall confirm the necessity of modification of the available capacity set on the previous day. When the Organization reviews the available capacity set for interconnection lines, it shall do so according to items i. to iii. above within the range of available capacity set in item iii. above.
- v. The Organization shall make a final decision on the available capacity necessary for the short-cycle cross-regional frequency control based on the result of the confirmation in the preceding item and shall notify the relevant members who are general transmission and distribution companies

(Long-cycle cross-regional frequency control)

Article 132

When the Organization received a request from a member who is a general transmission and distribution company whose ability to reduce the power supply the necessary for control of long-cycle frequency in a regional service area is or might become insufficient, The Organization shall control the electric energy and time period for long-cycle cross- regional frequency control by following the procedures specified in each of the following items.

- i. The Organization shall receive a notice of electric energy and time period expected to be necessary for the long-cycle cross-regional frequency control from the members who are general transmission and distribution companies whose ability to reduce the power supply is or might become insufficient.
- ii. The Organization shall ask the members who are general transmission and distribution companies other than those specified in the preceding item to calculate the electric energy to receive and time period necessary for the control that they can offer and shall receive the notice of the result by 16:00 of the previous day of the date of actual demand and supply in principle.
- iii. The Organization shall define temporarily the electric energy and time period necessary for the long-cycle cross-regional frequency control within the range of ATC of the interconnection lines after 12:00 of the previous day of the date of actual demand and supply, after considering the matters specified in the following a. to c., based on the notice specified in the preceding item, and shall notify the relevant members who are general transmission and distribution companies.
- a. ATC of the interconnection lines
- b. The number of the interconnection lines to be bypassed
- c. The electric energy to receive which can be offered by members who are general transmission and distribution companies
- iv. The Organization shall receive information regarding the necessity of the long-cycle crossregional frequency control and the necessary electric energy and the time period from the members who are general transmission and distribution companies whose ability to reduce power supply is or might become insufficient based on the demand and supply balance of the day.
- v. The Organization shall make a final decision on the necessary electric energy and the time

period within the scope of available capacity of each interconnection lines that is after the gate closure, in principle, and notify the relevant members who are general transmission and distribution companies.

(Calculation of available transfer capability)

Article 133

- 1. The Organization shall calculate and publish the available transfer capability of the interconnection lines in each cross-section of the calculated total transfer capability according to Paragraphs 3 and 5 of Article 126.
- 2. Calculation of ATC in the preceding paragraph shall be conducted by using a formula defined in Appendix 10-2
- 3. When the Organization changed the total transfer capability, transmission margin, or scheduled power flow, it shall calculate the available transfer capability in accordance with the preceding two paragraphs.

Appendix 10-2: Calculation formula of ATC

Calculation formula of ATC	ATC = TTC - transmission margin - scheduled power flow
(*1,*2,*3,*4, *5, *6,*7, *8)	

- (*1) ATC shall be calculated for each direction of power flow of each interconnection line. Upon the calculation, each component of the right side of the calculation formula shall be calculated and managed for each direction.
- (*2) Transmission margin of interconnection lines in capability allocation plans that use the transmission margin specified in Article 151 and Article 152 shall be deducted from the figure of the transmission margin in calculation formula.
- (*3) Power flow that uses the increased amount of the TTC described in Paragraph 1 of Article 153 and power flow of which the TTC exceeds the capacity described in Paragraph 3 of Article 153 shall not be included in the calculation formula. In addition to that, such an increased amount of the TTC will not be included in the calculation formula.
- (*4) The capacity necessary for the cross-regional frequency control shall be deducted from the ATC upon the decision of such control.
- (*5) Scheduled power flows used for calculating available transfer capability of interconnection lines between Kansai and Chugoku areas shall be the figures of Kan-Chu fence power flow.
- (*6) As for ATC of the flow for Shikoku at interconnection lines between Kansai and Shikoku areas, TTC shall be determined reflecting the TTC of the network system within Shikoku area.
- (*7) For calculation of the monthly or weekly available transfer capability, the same figure with the annual transmission margin shall be used.
- (*8) The scheduled power flows used for calculating the available transfer capacity of the interconnection lines between Tohoku and Tokyo shall be the values for the Tohoku-Tokyo fence power flow.

(Notice of the TTC and transmission margin related to market price differentials receiving rights)

Article 133-2

The Organization shall notify JEPX regarding the TTC and the transfer margin of the relevant interconnection lines by the calculation unit necessary for trading of market price differentials receiving rights.

(Notifying operational capacity and the upper margin limit corresponding to the balancing market)

Article 133-3. The Organization shall notify general transmission and distribution companies of the operational capacity of an interconnection line and the upper limit of the margin at which balancing capacity transactions can be made in a cross-section required for balancing capacity transactions in the balancing market.

(Management of scheduled power flow of interconnection lines)

Article 134

The Organization shall manage the scheduled power flow of interconnection lines according to procedures defined in the following items.

- i. The Organization receives a notice of trading information on the trades under contracts of day-ahead spot trading and one-hour ahead trading (hereinafter "trading information") from JEPX.
- ii. The Organization defines whether such trading information can be registered to use the transfer capability of interconnection lines (hereinafter "determination of the transfer capability allocation"), and the Organization shall determine that it can transfer electricity for such trading when it defines that no congestion will occur in the interconnection lines and stable operation of electric networks will not be disturbed.
- iii. When the Organization determines that it can transfer electricity for such trading information upon determination of the transfer capability allocation, the Organization will register the transfer capability for such trading information and manage it as a scheduled power flow and notify JEPX of such transfer capability allocation.
- iv. When the Organization determines that it cannot transfer electricity for such trading upon determination of the transfer capability allocation, it shall notify JEPX of such determination.
- v. When the Organization registered the transfer capability allocation based on the trading information, it shall notify members who are general transmission and distribution companies on the transmission routes related to the interconnection lines used for the scheduled power flow (hereinafter "related general transmission and distribution companies") of such registration.

Article 135 Deleted

Article 136 Deleted

Article 137 Deleted

Article 138 Deleted

Article 139 Deleted

Article 140 Deleted

Article 141 Deleted

Article 142 Deleted

(Congestion management)

Article 143

- 1. When congestion occurs on the interconnection line, the Organization shall take steps to dissolve the congestion of a scheduled power flow after registration of transfer capability based on the information of day-ahead trading according to procedures specified in each item below.
- i. The Organization shall decrease the scheduled power flow of the interconnection line and the reported figure subject to the reduction of allocated capability to the figure that will not cause congestion according to the decrease order defined in the Article 143-2 and define such figure as a new scheduled power flow of the interconnection line or new reported figure and change to such figure.
- ii. When the Organization manage the congestion according to Item i. above, it shall notify the contractors of the cross-regional interconnection network use, of generation and of demand reduction as well as related general transmission and distribution companies having such decreased scheduled power flow of the interconnection line about the decreased cross-section and the capability.
- 2. Regardless of the preceding paragraph, the Organization will not manage the congestion when the stability of electric networks can be secured even if congestion occurs along with a decrease in the total transfer capability after 12:00 of the previous day of the date of supply on the premise that adjustment efforts, such as procurement of alternative supply capacity by contractors of the cross-regional interconnection network use, of generation and of demand reduction who own scheduled power flow, are properly implemented.

(Order of suppression for congestion management)

Article 143-2

1. The Organization will reduce the scheduled power flow by complying with the following order for each item to manage congestion. If there are multiple scheduled power flows that fall under each of the following items, all such scheduled power flows shall be reduced to the same rank in the order for the decrease.

- i. Scheduled power flows relevant to the day-ahead spot trading and the one-hour ahead trading
- ii. Scheduled power flows relevant to instructions from the Organization (including scheduled power flow relevant to adjustment of frequency utilizing interconnection lines)
- 2. The amount of reduction of multiple scheduled power flows of the same rank in the order for a decrease shall be the amount calculated by dividing proportionately the sum of amount

of the reduction required to avoid the occurrence of congestion in accordance with the amount of the scheduled power flow before the reduction. For calculation of the amount of reduction, a fraction less than 1 kW shall be rounded up to 1 kW.

(Congestion management when congestions occur simultaneously on multiple interconnection lines)

Article 143-3

When the congestion occurred at the same time on multiple interconnection lines, and when there is a need to reduce the scheduled power flows using such multiple interconnection lines, the Organization will consider the maximum amount among the amounts of any reduction calculated for each interconnection line on which congestion occurred based on the preceding article as the amount of the reduction of such scheduled power flow to manage the congestion.

(Procedure of congestion management in an emergency case)

Article 143-4

When the total transfer capability (TTC) of interconnection lines decreased because of the revision of the TTC based on Article 127, and when the congestion occurred on the interconnection lines, the Organization may reduce the scheduled power flow where the reduction effect is major regardless of the order for the decrease defined in Article 143-2 (hereinafter "emergency reduction") when the Organization recognizes the need to manage congestion urgently. Provided, however, that the Organization shall manage the congestion immediately after the emergency reduction and then terminate the emergency reduction.

(Scheduled power flow not subject to the congestion management)

Article 143-5

Notwithstanding the provision in Paragraph 1 of Article 143, the Organization will not apply the management of congestion to the following scheduled power flows.

- i. Scheduled power flow relevant to the supply using the transmission margin of interconnection lines specified in Article 152
- ii. Scheduled power flow relevant to the supply using the expanded total transfer capability of interconnection lines as specified in Article 153.

(Approval of power generators or contracts that require consideration of output operation) Article 144

1. The Organization shall examine matters specified in the following items based on applications from the contractors of transmission networks, contractors of power generation or members who are general transmission and distribution companies who have power generators or contracts (including plans alternative to such contracts, hereinafter referred to as "power generators or contracts") (hereinafter such contractors and companies shall be referred to as "owners of power generators or contracts") that should be treated as subjects of trades that consider the output operation in day-ahead spot trading, and if the Organization determines that all of the following items are applicable to such owners of

power generators or contracts, it shall approve the power generators or contracts relevant to the application (hereinafter refer to such approved power generators or contracts as "approved power generators or contracts" and owners of such approved power generators or contracts as "owners of approved power generators or contracts").

i. Power generators fall under each item of the following article.

ii. Owners of power generators or contracts are able to comply with the provisions of the Network Codes regarding the handling of approved power generators or contracts.

2. The Organization will notify the owners of power generators or contracts who applied for approval and publish the results of the approval specified in the preceding paragraph.

(Power generators or contracts subject to approval)

Article 144-2

The Organization will consider the power generators or contracts specified in each of the following items for the approval specified in Paragraph 1 of the preceding article.

- i. Long-term fixed power generators (nuclear power, hydro power [except for pumped storage hydro] or geothermal power)
- ii. Power generators that have an output shedding equipment that has an effect on the total transfer capability of interconnection lines through the output of power generators in operation
- iii. Power receiving contracts (limited to those involving electricity relevant to the power generator specified in the preceding two Items) or plans within the same company that alternate such power receiving contracts
- iv. Contracts for the operation of electricity between members who are general transmission and distribution companies relevant to transmission through electric lines installed outside the regional service area specified in Paragraph 1, Article 24 of the Act
- v. Contracts for the operation of electricity along with the scheduled outage of transmission and distribution facilities between members who are general transmission and distribution companies

(Approval period)

Article 144-3

The Organization shall set the approval period for the approved power generators or contracts as one year (or until the end of the fiscal year, when the approval date is in the middle of the fiscal year). Provided, however, that such an approval period shall be extended with the same conditions unless the need for a change of approved contents is recognized as a result of the regular examination specified in Article 147.

(Revision of approved contents)

Article 145

The Organization shall receive an application for revision of the approved contents from the owners of approved generators or contracts and shall revise the approved contents when there are due reasons for such revision.

(Definition and publication of form for approved generators and contracts) Article 146

The Organization shall define and publish form of the application for approval of generators and contracts and their contents.

(Periodical examination of approved generators or contracts) Article 147

1. The Organization shall periodically examine the approved generators according to procedures specified in each item below.

- i. The Organization shall be submitted the necessary materials for periodical examination if necessary by the owners of approved generators or contracts according to Network Codes.
- ii. When the Organization considers that the contents of the approved generators or contracts are not proper as a result of examination in each item above based on the submitted materials, it shall immediately ask the owners of such approved generators or contracts to apply for change of the approved contents.
- 2. The Organization shall notify to the owners of approved generators or contracts regarding the examination and publish the result of examination specified in preceding paragraph.

(Reference of contents on examination of generators or contracts)

Article 148

The Organization may inquire materials related to the examination to the persons who applied for approval of generators or contracts, or who have owned approved generators or contracts, and accept request of addition and correction of such materials as for examination specified in Article 144 and Article 147 according to necessity.

Article 149 Deleted

Article 150 Deleted

Article 151 Deleted

(Use of the transmission margin under tight supply-demand balance or insufficient ability to reduce power supply)

- 1. When the Organization considers the employment of the transmission margin of interconnection lines is necessary in cases where the supply-demand balance is tight or insufficient capacity ability to reduce power supply or there are such possibilities, it shall approve the member who is a general transmission and distribution company to supply by employing the transmission margin, and register the transfer capability according to the procedure specified in each of the following items.
- 2. The Organization shall approve the request by a member who is a general transmission and distribution company for supply by employing transmission margin according to the

procedure specified in each of the following items

- i. The Organization shall receive plans on supply-demand in the relevant regional service area (hereinafter, "subject service area" in this article) and explanation of necessity for the employment of the transmission margin by a member who is a general transmission and distribution company in cases where the supply-demand balance is tight or insufficient ability to reduce power supply or there are such possibilities in its regional service area.
- ii. The Organization shall accept the use of the transmission margin when it recognizes the necessity for a stable supply to the subject service area after being given an explanation in the preceding item.
- 3. When there is not enough time to receive explanation of Item i in the preceding paragraph or to approve the Item ii in the preceding paragraph in emergency cases, the Organization shall immediately approve employment of transmission margin by a member who is a general transmission and distribution company. Provided, however the Organization shall verify the validity of the employment of the transmission margin immediately after such employment according to the Items above.
- 4. The Organization shall confirm the amount of the transmission margin available for the interconnection lines on the transmission route for the supply that uses the transmission margin for supply from each relevant general transmission and distribution company according to necessity.
- 5. The Organization may cancel the acceptance of the employment of the transmission margin in Item ii of Paragraph 2 according to necessity, if the supply-demand balance in a related general transmission and distribution company's regional service area on a transmission route for the supply that employs the transmission margin became or might become tight again or when there are request to do so from the relevant general transmission and distribution company.

(Capability allocation of interconnection lines in an emergency) Article 153

- 1. If the Organization considers that it is or might be impossible to avoid reducing of the demand and load interruption due to tightness or a possibility of tightness of supply-demand balance in general transmission and distribution company's regional service area, even after the Organization took a measure of employing transmission margin in the preceding article, it shall approve a member who is a general transmission and distribution company to supply electricity which uses the interconnection lines exceeding the total transfer capability despite of the decrease of the level of supply reliability, and register the transfer capability.
- 2. The Organization shall approve the supply in the paragraph above according to the procedure specified in the following items.
- i. When a member who is a general transmission and distribution company considers it is necessary to increase total transfer capability (which means adding the increased amount accompanied by decrease of supply reliability to the total transfer capability and temporarily utilization such sum as an emergency operational capacity, the same meaning shall apply hereinafter) to handle the tightness of the supply-demand balance or such a possibility in general transmission and distribution company's regional service area or when the member is required the increase by the Organization, the Organization shall receive plans on supply-demand in the power supply and information on the increased
amount of the total transfer capability, duration and influence of such increase, as well as explanation of necessity of such an increase from a member who is a general transmission and distribution company of relevant service area.

- ii. The Organization shall apply mutatis mutandis provisions in item ii in Paragraph 2, Paragraphs 3 and 4 of Article 152 to the preceding paragraph. In such a case, the term "employment of the transmission margin" in Article 152 shall be replaced by the term "increase of total transfer capability," and the term "to employ the transmission margin" in Article 152 shall be replaced by "to use the increased amount of the total transfer capability.
- iii. When the Organization accepted the increase of the total transfer capability in the preceding paragraph, it shall publish the emergency operational capability and the estimated level of decrease of supply reliability.

iv. The Organization shall verify the validity of the increased TTC after using such capability. 3. When the member who is a general transmission and distribution company temporarily uses capacity exceeding TTC (or emergency operational capacity, when the TTC is increased in the preceding item) on the interconnection lines in a case where the member has to handle an unexpected and unforeseeable situation or when the balance of supply-demand is tight even after increasing the supply capacity or there are such possibilities, the Organization shall require such a member to give explanation and report.

(Preparation of analysis tools)

Article 154

- 1. The Organization shall prepare a system stability simulation tool and other analysis tools to conduct business specified in each article of this chapter.
- 2. The Organization shall consider improvement of existing analysis tools or introducing of new one based on knowledge gained in the course of business.

(Consideration)

Article 155

The Organization shall continuously proceed with consideration of review of provisions of this chapter including provisions on setting up of the TTC, the way of capability allocation and management of interconnection lines and the way of receiving and submission of planning data to promote actualization of flexible operation of interconnection lines.

Chapter 11 Coordination of Scheduled Outage Plans

(Scheduled outage plan)

Article 156

- 1. The Organization shall compile the plans on the suspension of the electric facilities to conduct inspection or repairs (for each type specified in Appendix 11-1, hereinafter "scheduled outage plan") for electric facilities that have an influence on the TTC of cross-regional interconnection networks or interconnection lines (hereinafter "cross-regional interconnection networks") based on Item 8, Article 28-40 of the Act.
- 2. The Organization shall coordinate the scheduled outage plans for the cross-regional interconnection networks that have an influence on the TTC of the interconnection lines (hereinafter "scheduled outage plans subject to cross-regional coordination").

Types		Contents
Scheduled outage plan	Annual plans	Scheduled outage plans for two fiscal years (the next fiscal year and the year after that) drawn-up by coordinating the range, time, and period of suspension based on outage plans for maintenance work submitted by members who are general transmission and distribution companies, transmission companies or specified transmission and distribution companies, contractors of power generation, and contractors of actual demand and supply balancing system (hereinafter "persons who submit scheduled outage plan") so as to conduct maintenance in a systematic
	Monthly plans	and smooth manner. Scheduled outage plans for two months (the next month and the month after that) drawn-up for systematic and smooth maintenance work based on the annual plans

(Obtaining and sharing of drafts of scheduled outage plans) Article 157

1. The Organization shall receive a draft of scheduled outage plans for the electric facilities specified in each of the following items from persons specified in the same item to conduct

compiling and coordination of scheduled outage plans according to the preceding article based on the provisions of Network Codes by the deadline specified in Appendix 11-2. As for transmission and distribution facilities specified in Item iii, it is limited to a case where contractors of power generation or contractors of real- time balancing system (hereinafter "persons who submit power generation plans") request such submission.

- i. Cross-regional interconnection networks: General transmission and distribution companies ii. Generation facilities: Persons who submit generation plans
- iii. Transmission and distribution facilities (limited to those subject to submission from persons who submit generation plans): Persons who submit generation plans
- 2. When the Organization received the draft of scheduled outage plans of electric facilities submitted through the cross-regional operation system from persons who submit generation plans specified in Items ii. and iii. of the preceding paragraph, it shall deliver such drafts of scheduled outage plans to members who are general transmission and distribution companies of regional service areas where such electric facilities are located by the deadline specified in Appendix 11-2.
- 3. When the Organization received the drafts of scheduled outage plans according to Paragraph 1, it shall compile the scheduled outage plans for cross-regional interconnection systems and share the plans with members, other relevant electric power suppliers, and other persons who submitted scheduled outage plans (limited to persons who submitted scheduled outage plans and owners of generation facilities as for scheduled outage plans of electric facilities for which operation state and demand by users are possible to be estimated) by the deadline specified in Appendix 11-2.

(Coordination of drafts of scheduled outage plans) Article 158

- 1. The Organization shall coordinate the time and period of maintenance work between persons who submitted scheduled outage plans as for scheduled outage plans subject to cross-regional coordination among drafts of scheduled outage plans submitted in Paragraph 1 of the preceding article.
- 2. The Organization asks persons who submitted scheduled outage plans to review the drafts of scheduled outage plans subject to cross-regional coordination if it is necessary.

(Submission and sharing of coordinated scheduled outage plans) Article 159

- 1. The Organization shall receive the scheduled outage plans coordinated in light of their draft according to Paragraph 1 in Article 157
- 2. When the Organization received the coordinated scheduled outage plans from persons who submitted generation plans, the Organization shall deliver such plans to members who are general transmission and distribution companies according to Paragraph 2 of Article 157.
- 3. When the Organization received the coordinated scheduled outage plans, according to Paragraph 3 of Article 157, it shall compile the coordinated scheduled outage plans for the cross-regional networks and shall share such plans along with information of the deadline for the application for re-coordination specified in the next article with members, other relevant electric power suppliers, and other persons who submitted the scheduled outage

plans. In such a case, if the TTC of the interconnection lines will increase or decrease, such information shall be shared as well.

(Coordination of coordinated scheduled outage plans) Article 160

- 1. The Organization shall receive the application for re-coordination of coordinated scheduled outage plans of cross-regional interconnection networks shared as specified in Paragraph 3 of Article 159 based on the provisions of Network Codes from the persons who submitted the generation plans.
- 2. When the Organization received the application specified in Paragraph 1 above, it shall coordinate the time and period of suspension for work of the coordinated scheduled outage plans subject to cross-regional coordination among members who are general transmission and distribution companies and persons who submitted generation plans at the time specified in Appendix 11-2, and shall ask for a review of the coordinated scheduled outage plans subject to cross-regional coordination according to necessity.

(Submission and acceptance of final drafts of scheduled outage plans) Article 161

- 1. The Organization shall receive the final drafts of scheduled outage plans finally coordinated in light of coordinated plans according to the procedure specified in Paragraph 1 of Article 157.
- 2. The Organization shall deliver to members who are general transmission and distribution companies the final drafts of scheduled outage plans of electric facilities submitted by persons who submitted generation plans in accordance with Paragraph 1 of Article 157.
- 3. When the Organization received the final drafts of scheduled outage plans, it shall compile the scheduled outage plans for cross-regional interconnection systems and accept them after confirmation by the time specified in Appendix 11-2. As for monthly plans, only plans for the next month will be accepted.

(Sharing of scheduled outage plans)

Article 162

- 1. The Organization shall deliver the scheduled outage plans for cross-regional interconnection network accepted in Paragraph 3 of Article 161 to members who are general transmission and distribution companies.
- 2. The Organization shall share the scheduled outage plans for cross-regional interconnection network with members, other relevant electric power suppliers, and persons who submitted scheduled outage plans in accordance with Paragraph 3 of Article 157. In such a case, if the TTC of the interconnection lines will increase or decrease, such information shall be shared as well.

(Matters to be taken into account upon coordination of scheduled outage plan) Article 163

The Organization shall take into account the maintenance of electric facilities, securing of safety of workers and other matters defined in the Network Codes upon coordination of

scheduled outage plans defined in Article 158 and 160.

(Handling of failure of scheduled outage plans)

Article 164

When the Organization is asked to address the resolution of failures of scheduled outage plans of cross-regional interconnection networks subject to the coordination (excluding scheduled outage plans subject to cross-regional coordination) from members who are general transmission and distribution companies based on the provisions of Network Codes, the Organization shall address such coordination.

 $(Procedure \ of \ omitting \ submission \ of \ scheduled \ outage \ plans)$

Article 165

The Organization shall coordinate scheduled outage plans as no revision in plans are submitted from the members if the members may omit submission of scheduled outage plans except that the Organization required review for draft and coordinated plans.

(Revision of scheduled outage plans)

Article 166

- 1. When there are inevitable changes (including cancellation, hereinafter the same meaning shall apply) in or additions (including unscheduled outage, hereinafter the same meaning shall apply) to annual plans or monthly plans of scheduled outage plans due to changes in the state of demand and supply or of network or unexpected malfunction of facilities after acceptance of such annual plans or monthly plans as specified in Appendix 11-1, the Organization shall immediately receive submission of the scheduled outage plans after the change (hereinafter revised scheduled outage plans) from persons who submitted scheduled outage plans in accordance with the provisions of Network Codes.
- 2. When the Organization received the revised scheduled outage plans in Paragraph 1, it shall coordinate according to Article 158 and require a review of the revised scheduled outage plans, if necessary.
- 3. The Organization shall accept the revised scheduled outage plans according to Paragraph 3 of Article 161 after coordination specified in Paragraph 2 above, and deliver the plans to members who are general transmission and distribution companies.
- 4. The Organization shall share the revised scheduled outage plans for cross-regional interconnection network according to Paragraph 2 of Article 162.

(Procedure of operations)

Article 167

Upon implementation of operations based on scheduled outage plans for cross-regional interconnection network, the Organization shall receive reports about suspension and use of facilities from members who are general transmission and distribution companies according to Network Codes.

		Types		Others
Contents o	f works	Annual plan (for the next year and the year after that)	Monthly plan (next month and the month after that)	Changes and Additions in annual and monthly plans
Submission of the scheduled outage plans for generation facilities and Cross- regional	Draft	Around the end of October of each year	Around the 1 st day of each month	
	Coordinated draft	Around the end of December of each year	Around the 10th day of each month	
interconnection network (*1)	Final draft	Middle of February of each year	Middle of each month	
Sharing of scheduled	Draft	(Immediately) After submission from the members who are general T/D companies	(Immediately) After submission from the members who are general T/D companies	As needed (Immediately)
outage plans for the cross-regional interconnection networks	Coordinated draft	(Immediately) After submission from the members who are general T/D companies	(Immediately) After submission from the members who are general T/D companies	
	Accepted and defined plan (*2)	March 1 of each year	20th of each month	
Coordination of coordinated drafts of scheduled outage plans		January of each year (or February according to necessity)	According to necessit	y
Acceptance of the scheduled outage plans by the Organization (*3)		Late February of each year	Middle of each month (For the next month)	As needed (Immediately)

Appendix 11-2: Each deadline in coordination of scheduled outage plans

(*1) Specific deadlines of submission of scheduled outage plans to the Organization will be defined separately by taking the day of the week into account by the Organization and be published by the end of February of each year.

(*2) Plans defined by the members who are general transmission and distribution companies after acceptance by the Organization.

(*3) Specific deadlines of scheduled outage plans to be accepted by the Organization will be defined separately by taking the day of the week into account by the Organization and be published by the end of February of each year.

Chapter 12 Network Information Disclosure

(Network information disclosure)

Article 168

- 1. The Organization shall disclose information contributing to the capability allocation of crossregional network based on Item 8, Article 28-40 of the Act and the Guidelines on network information disclosure defined by the Government.
- 2. Items of information to be disclosed and the time of disclosure according to Paragraph 1 as well as those Organization recognizes the necessity taking into account national policies or results of relevant national councils shall be defined by resolutions of board of directors and publish the results.
- 3. The Organization shall require and receive necessary information contributing to the publication of network information.

Appendix 12-1 Deleted

Chapter 13 Supplier Switching Support Service for Electricity Consumers

(Supplier Switching Support service for electricity customers) Article 169

- 1. The Organization shall operate and provide to members who are retail companies an information processing system that has a function to obtain necessary information regarding electricity customers or other functions for supplier switching support (hereinafter "Supplier Switching Support System") so as to streamline the process under which the customers switch their electric suppliers (hereinafter "supplier switching") based on Item 8, Article 28-40 of the Act. And the Organization shall provide partial function of Supplier Switching Support System to the contractors of demand reduction so as to streamline the business of the contractors of demand reduction.
- 2. The Organization shall supervise the use of the Supplier Switching Support System and confirm whether the members and contractors of demand reduction are using the system properly.
- 3. The Organization shall receive opinions from members regarding amendments or additions of functions of the Supplier Switching Support System and study the necessity of such amendments or additions accordingly.
- 4. Upon such study described in Paragraph 3 above, the Organization shall hear opinions from members.
- 5. Business which can be achieved through the Supplier Switching Support System and other matters related to the use of the Supplier Switching Support System will be defined in the Network Codes.

(Support for the utilization of system)

Article 170

The Organization shall provide technical materials related to system connections between the Supplier Switching Support System and the external system, prepare and provide manuals related to the utilization of the Supplier Switching Support System, receive inquiries related to the system from members, and support the utilization of the system by electricity customers.

(Compiling of state of system utilization)

Article 171

The Organization shall compile and publish state of utilizing Supplier Switching Support System.

Chapter 14 Marginal Standard Cost Shared by All Network Users

(Marginal Standard Cost Shared by All Network Users)

Article 172

- 1. The Organization shall consider and specify the marginal standard cost shared by all network users (hereinafter "upper limit of cost shared by all network users") based on the Guidelines on cost allocation of network reinforcement for generator installment after considering the following matters.
- i. Distribution of unit cost per facilities for reinforcement of transmission facilities triggered by past installation of generating facilities (including projects under which facilities were not interconnected)
- ii. Benefit of reinforcement of transmission facilities
- iii. Difference in distributions of unit cost among each size of network to which the generation facilities will be connected
- iv. Nature of transmission facilities that need reinforcement
- 2. When the Organization specified the upper limit of cost shared by all network users, it shall publish such limit.
- 3. The Organization shall regularly evaluate and verify the upper limit of cost shared by all network users and review the limit as needed.

Chapter 15 Emergency Response to Disasters and Review of Disaster Cooperation Plan

Section 1 Emergency Response to Disasters

(Emergency Response to Disasters)

Article 173

In emergency situations such as when the electric facilities are damaged significantly due to huge natural disaster or other equivalent causes (hereinafter "major disasters"), the Organization shall take necessary steps based on Item 9, Article 28-40 of the Act so that the members may engage in restoration or other works in cooperation with each other.

(Response at the normal situations)

- 1. The Organization shall prepare and publish an operational plan for disaster prevention to liaise and coordinate smoothly with the Government and the members when the major disasters occur or in other situations.
- 2. The Organization shall establish and notify the parties concerned of an emergency contact system based on the operational plan for disaster prevention.
- 3. The Organization shall establish a mechanism to notify its personnel when the major disasters occur and when the order of preparation for response specified in Paragraph 2 of

the next article is issued.

- 4. The Organization shall receive information specified in each of the following items from the members for each fiscal year in accordance with the provisions of operational plan for disaster prevention.
- i. Location and performance of electric facilities maintained and operated by the members themselves
- ii. State of maintaining vehicle-mounted electricity generator, mobile power generator and other facilities (including state of fuel storage)
- iii. State of maintaining equipment for response to disaster
- iv. State of staff for response to disaster (including staff of cooperate companies of members)
- v. State of executing contracts such as a supply-demand balancing contract which is useful for emergency situations
- vi. Other matters that the Organization considers necessary
- 5. When the Organization received the submission of information on equipment storage and other measures, it shall update the maintaining information and shall request securing of enough equipment and other measures from the members according to necessity.
- 6. The Organization shall implement training of major disaster response with the cooperation of the members and parties concerned more than once a year according to the operational plan for disaster prevention.

 $(Response \ at \ the \ emergency \ situations)$

- 1. The Organization shall issue an order of response and set up teams for response specified in Appendix 15-1, according to the operational plan for disaster prevention when the major disasters occur or might occur
- 2. An issuer shall issue an order of preparation for response after receiving an escalated report from an Executive Vice President or employee pre-appointed by the President, and define a set-up of a team for response, and notify and ask for necessary responses from the members according to the operational plan for disaster prevention.
- 3. If an issuer or an Executive General Manager of headquarters is absent, a board members or employee pre-appointed by the President shall act on behalf of them.
- 4. When an order of preparation for response is issued, all business for response to the major disasters conducted by the Organization shall be implemented under the monitoring the headquarters of vigilance or of emergency response to disasters.
- 5. The Executive General Manager of headquarters or his/her representative shall exercise authority of the headquarters and take measures against major disasters actively, provided, however, that omission of decision by vote at the board of directors or other emergency measures may be taken which is necessary to be taken urgently even if such measures are out of the range of authority. As for matters out of the range of authority, the predefined procedure shall be taken immediately after its exercise.
- 6. The Organization shall report total demand, frequency, and other matters that the Minister of Economy, Trade and Industry requires for each general transmission and distribution company's regional service area to the Minister.
- 7. The Executive General Manager of headquarters or representative shall dissolve the response team and notify the members and parties concerned when they confirm the end of

major disasters.

(Drawing-up of business continuity plan)

Article 176

The Organization shall prepare a business continuity plan according to guidelines on business continuity defined by the Government so that it can continue or re-start business immediately even when the Organization suffers damage and its part or whole of function is lost due to major disasters, etc.

Situations	Preparation for response	Teams for response
 When the incidence specified in the following items occurred, and the disasters related to electric supply and demand such as significant deterioration of supply and demand states occurred or are expected to occur 1. When an earthquake with an intensity of upper 5 happens 2. When a tsunami alert is issued 3. Other major disaster similar to 1 and 2 above occurred or are expected to occur 	On alert (Issuer: an Executive Vice President who presides over the General Affairs Department)	Headquarters for vigilance (Executive General Manager: an Executive Vice President who presides over the General Affairs Department)
 When the incidence specified in the following items occurred, and electric facilities were damaged to the considerable extent, and significant negative social affect such as needs for long periods of repair work occurred or might occur 1. When an earthquake with an intensity of lower 6 happens 2. When the alerting information, forecast or warning declarations of Tokai earthquake is issued 3. When the big tsunami warning was issued 4. Other major disaster similar to 1 to 3 above occurred or are expected to occur 	On red alert (Issuer: the President)	Headquarters of emergency response to disasters (Executive General Manager: the President)

Appendix 15-1: Preparation and teams for response to Disasters

Section 2 Review of Disaster Cooperation Plan

(Review of disaster cooperation plan)

Article 176-2.

The Organization shall carry out operations for the reviewing of disaster cooperation plans in accordance with paragraph 3 of Article 33-2 of the Act (which means a disaster cooperation plan that must be notified to the Minister of Economy, Trade and Industry by a member constituting a general transmission and distribution company in accordance with paragraph 1 of Article 33-2 of the Act; same hereunder).

(Submission of disaster cooperation plan)

Article 176-3.

The Organization shall, pursuant to the provisions of the Network Codes, receive a disaster cooperation plan submitted by a member constituting a general transmission and distribution company.

(Review of disaster cooperation plan) Article 176-4.

- 1. When a disaster cooperation plan submitted by a member constituting a general transmission and distribution company is received, the Organization shall review the disaster cooperation plan in light of knowledge obtained through the implementation of its operations in accordance with paragraph 3 of Article 33-2 of the Act. In such a case, the Organization may, where necessary, ask the member constituting a general transmission and distribution company that submitted the disaster cooperation plan to explain its rationale and thinking as they apply thereto.
- 2. In conducting a review as provided for in the preceding paragraph, the organization shall take matters as prescribed in the Network Codes into account.

(Delivery of disaster cooperation plan)

Article 176-5.

If there are any opinions on a disaster cooperation plan submitted by a member constituting a general transmission and distribution company, the Organization shall promptly send a report with such opinions attached thereto to the Minister of Economy, Trade and Industry.

(Revision of disaster cooperation plan) Article 176-6.

- 1. Where there has been a change made to a disaster cooperation plan by a member constituting a general transmission and distribution company, the Organization shall receive changed matters as submitted by such member pursuant to provisions of the Network Codes.
- 2. Where changed matters in a disaster cooperation plan changed by a member pursuant to

the preceding paragraph are received, the Organization shall conduct a review in accordance with Article 176-4 hereof and, if there are any opinions, promptly send a report with such opinions attached thereto to the Minister of Economy, Trade and Industry.

Section 3 Mutual Assistance of Disaster Recovery Funds

(Granting disaster recovery funds)

Article 176-7.

The Organization shall carry out operations for the granting of subsidies to cover part of the costs related to recovery from damage caused by a disaster affecting electric facilities or other circumstances (hereinafter referred to as "disaster assistance subsidies") pursuant to the provisions of paragraph 2 of Article 28-40 of the Act.

(Setting a total amount of the disaster assistance contribution and the reserve standard for the disaster assistance contribution for each fiscal year)

- Article 176-8.
- 1. The Organization shall set the total amount of the disaster assistance contribution for each fiscal year by taking the reserve portion for accommodating large-scale disasters occurring once every several years into account in addition to the portion for accommodating regular-scale disasters that are highly likely to occur each year.
- 2. In order to avoid accumulating an excessive amount of the disaster assistance contribution, standards shall be prescribed for the amount of the disaster assistance contribution to be accumulated (hereinafter referred to as "Reserve Standard For The Disaster Assistance Contribution").
- 3. In principle, the total amount of the disaster assistance contribution and Reserve Standard For The Disaster Assistance Contribution as set forth in the preceding two (2) paragraphs shall be reviewed every five (5) years. Provided, however, that this provision shall not apply where the need to conduct a review arises, such as where a substantial shortfall in the reserve emerges.

(Accumulating the disaster assistance contribution) Article 176-9.

- 1. In order to allocate funds for the granting of disaster assistance subsidies, the Organization shall accumulate the disaster assistance contribution as contributed by members constituting general transmission and distribution companies each fiscal year.
- 2. Notwithstanding the provisions of the preceding paragraph, the Organization shall not request a contribution of the disaster assistance contribution from members constituting general transmission and distribution companies in a given fiscal year where the amount of the reserve balance as of the end of the preceding fiscal year exceeds the Reserve Standard For The Disaster Assistance Contribution.

(Persons eligible for the granting of disaster assistance subsidies) Article 176-10.

A person eligible for the granting of disaster assistance subsidies shall be a member constituting a general transmission and distribution company or a transmission company.

(Disasters eligible for the granting of disaster assistance subsidies) Article 176-11.

The Organization shall prescribe specific standards for disasters and other circumstances eligible for the granting of disaster assistance subsidies in operational guidelines as prescribed in Article 176-15 hereof.

(Costs eligible for the granting of disaster assistance subsidies) Article 176-12.

- 1. Disaster assistance subsidies are eligible costs to cover the costs of temporary restoration work carried out in order to resolve blackouts as soon as possible.
- 2. The Organization shall prescribe specific items as costs eligible for the granting of disaster assistance subsidies as provided for in the preceding paragraph in operational guidelines as prescribed in Article 176-15 hereof.

(Determining the amount of disaster assistance subsidies) Article 176-13.

- 1. Where an application for disaster assistance subsidies is made by a person eligible for the granting of disaster assistance subsidies, the Organization shall examine the details of the application in accordance with standards as set forth in the operational guidelines as prescribed in Article 176-15 hereof.
- 2. The Organization shall, based on the examination as provided for in the preceding paragraph, determine the amount of disaster assistance subsidies after deducting a ten (10) percent copayment charge from the amount deemed to be the costs that will be covered by the granting of disaster assistance subsidies and notify the person eligible for the granting of disaster assistance subsidies from whom the application was received.

(Granting disaster assistance subsidies)

Article 176-14.

- The Organization shall grant the amount notified pursuant to the provisions of paragraph 2 of the preceding Article to the person eligible for the granting of disaster assistance subsidies from whom the application was received.
- 2. Notwithstanding the provisions of the preceding paragraph, the Organization shall, where the amount of disaster assistance subsidies to be granted in a given fiscal year exceeds the reserve balance of the disaster assistance contribution, grant persons eligible for the granting of disaster assistance subsidies the amount in excess in or subsequent to the following fiscal year with the disaster assistance contribution paid in or subsequent to the following fiscal year.

(Formulating operational guidelines related to mutual aid to cover disaster recovery costs) Article 176-15.

The Organization shall formulate and publish on its website and through other means operational guidelines setting forth specific standards for disasters and other circumstances to be covered by the granting of disaster assistance subsidies; specific cost items to be covered by the granting of disaster assistance subsidies; and operational procedures, materials to be submitted, and other matters required for the smooth operations of mutual aid to cover disaster recovery costs.

Chapter 16 Network Codes

(Drawing-up and revision of Network Codes) Article 177

- 1. The Organization shall draw up the Network Codes and gain an approval from the Minister of Economy, Trade and Industry based on Item 3, Article 28-40 of the Act.
- 2. When the Organization plans to revise the Network Codes, it shall gain an approval from the Minister based on Paragraph 1, Article 28-46 of the Act, provided, however, that a minor change defined by the ordinance of the Ministry of Economy, Trade and Industry and specified in the same paragraph shall be notified to the Minister of Economy, Trade and Industry based on Paragraph 4 of the same article.
- 3. When the Organization draws up or revises the Network Codes according to preceding 2 paragraphs, it shall disclose them immediately.

(Investigation and consideration of revision of the Network Codes) Article 178

- 1. When the Organization considers it necessary for its business or in light of proposal from the members or other electric power supplier, it shall conduct investigation and consideration on necessity of revisions of the Network Codes.
- 2. When the Organization will make a decision on drawing-up or revision of the Network Codes at the board of directors, it shall hear opinions from the members or other electric power suppliers beforehand and disclose the result of hearing in principle.

Chapter 17 Instructions, Recommendations and Verification

(Instructions and recommendations)

- 1. When the Organization considers that the electric power suppliers fall under any of the following items, it shall give instructions or recommendations to such suppliers based on Item 6, Article 28-40 of the Act.
- i. In business for monitoring the supply-demand state specified in Article 105, when the

members who are retail companies or specified transmission and distribution companies (applied only to registered specified transmission, distribution and retail companies) are not expected to secure proper supply capacity for demand in light of the past performance or members who are general transmission and distribution companies are not striving to secure balancing capacity.

- ii. In business for consideration of electricity supply plan in Paragraph 2, Article 28, when a electricity supply plan of a member is deemed improper in light of the Network Codes, the Outline of the demand forecast or a long-term policy of the cross- regional network or development plan of the cross-regional network, and when the member will not response to the request of review without due reasons.
- iii. In business for response to complaint and consultation in Chapter 19 and dispute resolution in Chapter 20, when instructions or recommendations are necessary.
- iv. In establishing the total transfer capability or transmission margin according to the provisions of Articles 126 through 130, when the members who are general transmission and distribution companies or transmission companies will not respond to the request of consultation or submission of necessary data without due reasons.
- v. In operation for network access in Chapter 7, when it is found that a member who is a general transmission and distribution company fails to consider and answer properly, and such a company will not response to the request of reconsideration or improvement of business without due reasons.
- vi. When the electric power suppliers do not comply with the penalty specified in Article 32-41 upon the operational business of capacity market under Section 1 of Chapter 5.
- vii. When requests or coordination based on these Rules are not implemented without due reasons.
- viii. When it is found that electric power suppliers conduct improper activities in light of laws and the Articles of Organization or these Rules or the Network Codes.
- ix. In addition to each item above, when the board of directors recognizes the necessity of instructions or recommendations
- 2. When the Organization gives instructions or recommendations according to Paragraph 1 above, it shall publish the name or trade name of the electric power suppliers subject to such instructions or recommendations, contents of instructions or recommendations and their reasons without delay.

(Verification of suppression of output)

- 1. If a member who is a general transmission and distribution company suppresses output according to provisions of Network Codes, the Organization shall receive materials related to such suppression of output.
- 2. The Organization shall confirm and verify whether such suppression of output by the general transmission and distribution company in light of laws or the Network Codes was proper or not based on the materials specified in Paragraph 1 and publish the result of such confirmation and verification.

Chapter 18 Annual Report, Research and Study

(Annual report)

Article 181

The Organization shall analyze information collected (including results of investigation and research according to Article 183) and information submitted from the members and compile it as a report and publish them regarding matters specified in each of the following items once a year.

- i. Actual electric supply and demand (including evaluation and analysis of quality of electricity in light of frequency, voltage, and blackouts of each regional service area)
- ii. State of electric network
- iii. Actual Network Access Business until the previous year.
- iv. Forecast on electric demand and electric network (including forecast of improvement of restriction on network interconnection of generation facilities) for the next fiscal year and a mid- and long-term period based on a result of compiling of electricity supply plans and their issues.
- v. Evaluation and verification of proper standards of reserve margin and balancing capacities of each regional service area based on the next article, as well as contents of review as needed

(Consideration of proper standards of reserve and balancing capacities) Article 182

The Organization shall annually evaluate, verify and revise as necessary about proper standards of reserve and balancing capacities for each general transmission and distribution company regional service area based on information submitted from the members according to the preceding article above and the Network Codes.

(Research and study)

- 1. The Organization shall conduct research and study on matters specified in each of the following items to contribute to business specified in Article 181 and other business of the Organization.
- i. Technical trend of electric business on cross-regional operation inside and outside the country
- ii. Electric business system in other countries, restrictions on power companies and various systems on electric networks
- iii. Economic indicators necessary for business for demand forecast, socio-economic situations on cross-regional operation of other electric business
- iv. Evaluation of outage event by major disturbance and other risk analysis of supply- demand of electricity
- v. Other matters necessary for preparation of annual reports according to the Article 181
- 2. When the Organization gained beneficial outcome in a result of research and study specified in the preceding paragraph, it shall publish such outcome accordingly without waiting for issuance of the annual report according to the Article 181.

Chapter 19 Complaint and Consultation

(Response to complaint and consultation)

Article 184

- 1. When the Organization received complaint about operation of transmission and distribution from the electric power suppliers, it shall immediately take necessary steps according to Item 7, Article 28-40 of the Act.
- 2. When the Organization received application for consultation from the electric power suppliers regarding operation of transmission and distribution, it shall conduct necessary steps including answering for such electric power suppliers according to Item 8, Article 28-40 of the Act.
- 3. When the Organization received complaint or application for consultation regarding business of the Organization from the electric power suppliers, it shall deal with them according to the above two paragraphs.
- 4. The Organization shall regularly compile and publish the contents of complaint and consultation specified in the each preceding paragraphs.
- 5. Among the contents of complaint and consultation of the preceding paragraph, information that identifies persons or corporations shall be treated as confidential information.

(Transition to mediation and arbitration)

Article 185

The Organization shall explain about procedures for mediation and arbitration specified in Chapter 20 according to necessity to the person who submitted complaint or applied for consultation according to Paragraph 1 and 2 of Article 184.

Chapter 20 Dispute Resolution

(Dispute Resolution)

Article 186

The Organization shall engage in business for arbitration of dispute resolution (mediation) based on Act on Promotion of Use of Alternative Dispute Resolution (Act No. 151, 2004) to resolute dispute about power distribution business between electric power suppliers according to Item 7, Article 28-40 of the Act.

Chapter 21 Utilization Support of Information Technology

(Drawing-up of standards for exchange of electronics information) Article 187

- 1. The Organization shall draw up standards for exchange of electronics information for the members and other persons who use the distribution networks (hereinafter "network user") to utilize information technology, when the Organization considers that such standards will contribute to streamlining of business operation of the network users and optimization of electric business across the nation.
- 2. When the Organization draws up or revises the standards specified in Paragraph 1, it shall consult with the relevant network users and coordinate with the Government and hear opinions from intellectuals according to necessity.
- 3. When the Organization draws up or revises the standards specified in Paragraph 1, it shall immediately publish such standards.

(Education, awareness, and provision of information related to information security) Article 188

The Organization shall continuously educate the members and contractors of demand reduction of personal information protection measures related to the use of the supplier switching support system and other measures for information security and provide information regarding the vulnerability of information system from time to time.

Chapter 22 Miscellaneous

(Temporal revise of period or deadline)

Article 189

- 1. The Board of Directors may temporarily revise period or deadline specified in these Rules if it is inevitable due to business-operational reasons.
- 2. When the Organization revised period or deadlines according to paragraph 1, it shall report such fact and its reasons at the General Meeting.

(Submission of reports or documents)

Article 190

In these Rules, reports or documents of that the Organization ask for submission from the members shall be based on Article 28-42 of the Act except for reports or documents specified in each article.

(Aggregation of amount of imbalance of electricity across the nation) Article 190-2

1. The Organization shall receive information on the imbalanced energy in the regional service

area from members who are general transmission and distribution companies as specified in the Network Codes

2. The Organization shall aggregate the amount of imbalanced energy reported in the preceding provision as the imbalanced energy across the nation and notice the result of aggregation to JEPX before the fifth business day of the month after the next month of the calculation period in principle.

(Introduction of bulletin board for generation facilities information) Article 190-3

The Organization shall establish a bulletin board on its website with the functions with which the members and the other electric power suppliers are able to provide information on generation facilities to promote the effective utilization of generation facilities through trading between the members and the other electric power suppliers.

(Detailed regulations of operation)

Article 191

Matters necessary for business of the Organization other than those specified in these Rules shall be defined separately by the Board of Directors.

Supplementary Provisions

(Enforcement date) Article 1 These Rules shall be effective from the date of foundation of the Organization.

Article 2 Deleted

(Reduction of allocated capacity before certification of contract) Article 3

- 1. The Organization shall define and publish the effective period of certification of contracts defined in Article 73 by considering the period necessary for application and examination of existing contracts immediately after its foundation.
- 2. When the Organization conducts the congestion management according to Article 72, it shall conduct such management according to the existing contracts that have been certified by the Electric Power System Council of Japan on the previous day of the foundation day of the Organization as for a period from its foundation date to the deadline defined in Paragraph 1.

Supplementary Provisions (as of April 28, 2015)

(Enforcement date)

Article 1

These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry.

(Handling of transitional period of electricity supply plans in FY 2015 of members who are specified electric power companies or power producers and suppliers) Article 2

Handling of the electricity supply plans in FY 2015 of members who are specified electric power companies or power producers and suppliers shall be complied with the ordinance of the Ministry of Economy, Trade and industry.

Article 3 Deleted

(Start of acceptance of plans)

Article 4

The Organization shall start the acceptance of plans based on Article 67-2 of these Rules from the next day of the date of approval of these Rules.

Supplementary Provisions (as of August 31, 2015)

(Enforcement date) These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry.

Supplementary Provisions (as of April 1, 2016)

(Enforcement date) Article 1 These Rules shall be effective from April 1 of 2016 or the date of approval by the Minister of Economy, Trade and Industry, whichever comes later.

Article 2 Deleted

(Transition of registration of planned values)

Article 3

Planned values (including reported figures, hereinafter the same shall apply) of each plan of the 1st fiscal year to 10th fiscal year as of the enforcement date of these Rules shall be planned values (including registration time as for capability allocation plan of the interconnection line and reported figures) registered on the Cross-regional Operation System at the end of the previous day of the enforcement day of these Rules.

Supplementary Provisions (as of July 11, 2016)

(Enforcement date) Article 1 These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry.

Article 2 Deleted

(Solicitation of persons who seeks to submit request plan of interconnection line) Article 3

Provision of Paragraph 3 of Article 134 shall be applied only to the case of increase in available transfer capability based on cross-regional development plan reviewed in Cross-regional Network Development Committee.

Supplementary Provisions (as of April 1, 2017)

(Enforcement date)

These Rules shall be effective from April 1 of 2017 or the date of approval by the Minister of Economy, Trade and Industry, whichever comes later.

Supplementary Provisions (as of September 6, 2017)

(Enforcement date)

Article 1

- 1. These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry.
- 2. Notwithstanding the preceding paragraph; the provisions of Article 2 (except for Item xxxviii, Paragraph 2); Articles 17, 107 (except for operative part of Paragraph 1, Item iii and iv of the same paragraph); Articles 123-2, 125, 126, 128 to 130, and 133 to 153 (except for Paragraph 3); Articles 160, 168, and 179 (except for Items i to iii and Items v to viii of Paragraph 1 and Paragraph 2); as well as Articles 3 to 9 of the Supplementary Provisions shall be enforced within one year from April 1 of 2018 defined by a resolution adopted by the board of directors of the Organization (after the date when approved by the Minister of Economy, Trade and Industry).
- 3. Before the date when the provisions specified in the preceding paragraph are enforced, Paragraph 3 in Article 133 10-2(*3) shall be deemed as Paragraph 2 and Paragraph 3 in Article 153 shall be deemed as Paragraph 2.

(Handling of usage of interconnection lines when the interconnection lines are enhanced for cost sharing by specified entities)

Article 2

The Organization will review the handling relevant to the use of interconnection lines based on reinforcement in the interconnection lines implemented with cost sharing by specified entities.

(Management of plans subject to transitional scheme for revised rule of cross-regional interconnection lines)

Article 3

1. The Organization shall handle and manage the plan on the use of interconnection lines for long-term cross-sections in FY 2016 (hereinafter "capability allocation plans of interconnection lines") as plans that could be subject to the transitional scheme following the revision of provisions regarding management of cross-regional interconnection lines (hereinafter "plans subject to transitional scheme") after the date of enforcement of Paragraph 2, Article 1 of the Supplementary Provisions and shall notice JEPX of the plans subject to transitional scheme.

- 2. The Organization shall succeed the registered time specified in the capability allocation plans of interconnection lines to the plans subject to transitional scheme.
- 3. The Organization determines whether the plan can be a subject of the transitional scheme for revised rule of cross-regional interconnection lines (hereinafter "determination of relevance to transitional scheme") by following the provision in the next article, and define and manage the subject of the transitional scheme based on the result of such determination.
- 4. The Organization shall notify the companies who own the plans subject to transitional scheme (including an opposite party of an agreement who agreed on the transitional scheme relevant to the trading upon registration of capability allocation plans of interconnection lines, hereinafter "companies subject to transitional scheme") and JEPX of the result of the determination of relevance to transitional scheme as a basis for the settlement of expenses for the transitional scheme.
- 5. When the companies subject to transitional scheme are integrated into one company, the Organization shall continuously manage each registered time in plans subject to transitional scheme corresponding to the companies subject to transitional scheme before the integration.

Article 4 Deleted

(Update of plans subject to transitional scheme for revised rule of cross-regional interconnection lines)

Article 5

- 1. The Organization shall receive updated plans (hereinafter "updated plans") from the companies subject to transitional scheme only when it reduces the value in the plans subject to transitional scheme as provided in the Network Codes.
- 2. When the Organization received the updated plans, it shall update the values in the plans subject to transitional scheme to the values in such updated plans.
- 3. When the updated plans were not submitted before the update deadline defined in the Network Codes, the Organization shall update the plans subject to transitional scheme by converting the cross-section of values in the plan to the cross-section in 30-minute unit.
- 4. The Organization shall receive updated plans subject to transitional scheme at appropriate times.

(Succession of plans subject to transitional scheme)

Article 6

1. When the Organization confirmed that members who are generation companies and other installation companies of power generation facilities (including companies planning to install power generation facilities) who have not secured energy supplied companies corresponding to plans subject to transitional scheme (hereinafter "energy supplied companies") (hereinafter refer to those generation companies and other installation companies as "generation companies whose energy supply is undetermined") have secured their energy supplied companies, and when the Organization received notices of intention to succeed plans subject to transitional scheme as defined in the Network Codes, the Organization may have such energy supplied companies succeed the whole or part of the plans subject to transitional

scheme owned by such generation companies whose energy supply is undetermined.

2. When the Organization had the energy supplied companies succeed the plans subject to transitional scheme based on the preceding paragraph, the Organization shall register the time of the plans subject to transitional scheme of the energy supplied companies upon confirmation of the succession of the plans.

(Handling when an energy supplied company is not secured for the generation companies whose energy supply is undetermined)

Article 7

When the Organization could not confirm that the energy supplied company is secured regarding the plans subject to transitional scheme received from the generation companies whose energy supply is undetermined before March 1 two years before the year when the subject date of the transitional scheme belongs, it shall revoke the registration of such a plan.

Article 8 Deleted

(Confirmation of plans subject to transitional scheme)

- 1. The Organization confirms the utilizing situation of transitional scheme in the procedures specified in each following item.
- i. The Organization receives information on the past bid result relevant to the plans subject to transitional scheme (hereinafter "bid result of transitional scheme") from JEPX.
- ii. The Organization confirms the utilizing situation of transitional scheme by comparing the plans subject to transitional scheme and bid results of transitional scheme.
- iii. The Organization will conduct a hearing from the companies subject to transitional scheme, if necessary, such as cases where a gaps between the plans subject to transitional scheme and the bid results of transitional scheme are significant. Upon such a hearing, the Organization may request submission of information on updates and progress of plans subject to transitional scheme, agreements, and other necessary materials from the companies subject to the transitional scheme according to necessity.
- iv. If the Organization considers that the utilizing situation of transitional scheme is not reasonable in the preceding each item, it will request a revision of future plan subject to transitional scheme or bid contents to the companies subject to the transitional scheme.
- v. When the Organization issues instructions or advice to the companies subject to the transitional scheme based on Paragraph 1 of Article 179, it will notify JEPX such instructions or advice. This will also apply to the case when the companies subject to the transitional scheme complied with the instruction or advice, and the Organization recognized the reasonability of the utilizing situation of transitional scheme.
- 2. The Organization examines the reasonability of plans subject to transitional scheme of the generation companies whose energy supply is undetermined in the procedure specified in each of the following items
- i. The Organization receives plans on the development of power plants complying with the Ordinance of the Ministry of Economy, Trade and Industry, plans on power trading and

other material recognized as necessary by the Organization submitted based on the plans subject to transitional scheme of the generation companies whose energy supply is determined and the Network Codes (hereinafter "relevant plans, etc. subject to transitional scheme") from the generation companies whose energy supply is undetermined, and confirms the contents of the relevant plans, etc. subject to transitional scheme and the actual situation of securing the energy supplied companies.

- ii. The Organization conducts a hearing regarding the reasonability of plans subject to transitional scheme from generation companies whose energy supply is undetermined owning the plans subject to transitional scheme, when it recognizes the necessity of such a hearing, such as in a case where there are discrepancies in the contents of the relevant plans, etc. subject to transitional scheme, situation of securing of the energy supplied companies and plans subject to transitional scheme. Upon such a hearing, the Organization may require submission of information on updates and progress of plans subject to transitional scheme and agreements from the generation companies whose energy supply is undetermined according to the necessity.
- iii. When the Organization considers that the plan subject to transitional scheme of the generation companies whose energy supply is undetermined is not reasonable in the preceding each item, or when the generation companies whose energy supply is undetermined could not secure the energy supplied companies, and the Organization considers it necessary, it shall require the such generation companies whose energy supply is undetermined to revise the future plans subject to transitional scheme.

Supplementary Provision (March 30, 2018)

(Effective Date)

These Rules shall be effective from the date of April 1, 2018, or the date of approval by the Ministry of Economy, Trade and Industry, whichever comes later.

Supplementary Provisions (as of June 29, 2018)

(Enforcement date)

Article 1

These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry. Provided that rules from Article 2 to 4 of supplementary provisions shall be effective from October 1, 2018.

(Confirmation of the result of control of the increase or suppression of output from the power generators)

Article 2

1. The Organization will be informed from the members who are general transmission and distribution companies of a result of coordination of the increase or suppression of output

from the power generators due to maintenance work plan of transmission facilities among persons who submitted power generation plans, according to provisions of the Network Codes, upon coordination of the scheduled outage plans of cross-regional interconnection networks (excluding interconnection lines, hereinafter, the same shall apply).

2. The Organization may seek information on the details of coordination and other necessary information from the persons who submitted power generation plans when the Organization deems it necessary after confirming the result of coordination of the increase or suppression of output from the power generators among the persons.

(Handling of failure of coordination of the increase or suppression of output from the power generators)

Article 3

- 1. When the coordination of the increase or suppression of output from the power generators according to Paragraph 1 of the preceding Article resulted in failure, and when the Organization decided that re- coordination of the increase or suppression of output from the power generators is necessary, the Organization will request the re- coordination from the persons who submitted power generation plans whose coordination was failed and inform the members who are general transmission and distribution companies of such re- coordination.
- 2. The Organization shall be informed of a result of re- coordination of the increase or suppression of output from the power generators from the persons who submitted power generation plans and who was requested re- coordination according to provisions of the Network Codes.
- 3. When the re- coordination of the increase or suppression of output from the power generators among persons who submitted power generation plans was failed, the Organization shall decide the increase or suppression of output from the power generators among such persons by dividing the total amount of increase or suppression of output from the power generators necessary for the scheduled outage plan by the rated capacity ratio (at the sending-end) of power generators that were subjected to the coordination along with such scheduled outage plan (hereinafter, "prorated energy restriction according to installed capacity") and notify such persons.
- 4. The Organization will inform the members who are general transmission and distribution companies of the result of re- coordination and the defined increase or suppression of output from the power generators.

(Information sharing of scheduled outage plans of cross-regional interconnection network accompanied by increase or suppression of power generation) Article 4

Article 4 The Organization will

The Organization will be informed from the members who are general transmission and distribution companies of the situation of information sharing among such members and persons who submitted power generation plans regarding scheduled outage plans of cross-regional interconnection network accompanied by increase or suppression of power generation of the third fiscal year according to provisions of the Network Codes.

Supplementary Provisions (as of April 1, 2019)

(Enforcement date)

These Rules shall be effective from April 1, 2019 or the date of approval by the Minister of Economy, Trade and Industry, whichever comes later.

Supplementary Provisions (as of July 1, 2019)

(Enforcement date)

Article 1

- 1. These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry.
- 2. Notwithstanding the preceding paragraph; the provisions of the Articles 32-2 through 32-46, 35, and 179; as well as Article 3 of the Supplementary Provisions shall be enforced from July 1 of 2019 to March 31, 2021 defined by a resolution adopted by the board of directors of the Organization (after the date when approved by the Minister of Economy, Trade and Industry).

Article 2 Deleted

Article 3 Deleted

Supplementary Provisions (as of March 30, 2020)

(Enforcement date)

Article 1

These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry.

(Managing specified cost allocation plans) Article 2.

- 1. The Organization shall accept applications pertaining to rights subject to price differential adjustments based on specified cost allocation (hereinafter referred to as "Price Differential Adjustment Right") from persons who may be eligible for price differential adjustments based on specified cost allocation for reinforcement work on or measures to expand the operational capacity of the Tohoku-Tokyo Interconnection Line (hereinafter referred to in this Article as "Persons Eligible for Price Differential Adjustments").
- 2. Where an application as provided for in the preceding paragraph is accepted from a Person Eligible for Price Differential Adjustments, the Organization shall examine the validity of the contents thereof.
- 3. Where the contents of an accepted application are deemed to be appropriate as a result of an examination conducted in accordance with the preceding paragraph, the Organization

shall grant a Price Differential Adjustment Right to the applicant and provide the applicant with a notification thereof.

- 4. Upon granting the right as provided for in the preceding paragraph, the Organization shall register and manage a plan that could be subject to price differential adjustments based on specified cost allocation (hereinafter referred to as "Specified Cost Allocation Plan") and notify the wholesale electricity exchange of such Specified Cost Allocation Plan.
- 5. The Organization shall, pursuant to the provisions of Article 4 hereof, conduct an assessment to determine whether a Specified Cost Allocation Plan will be subject to a price differential adjustment based on specified cost allocation (hereinafter referred to as "Specified Cost Allocation Assessment") and set forth and manage items subject to price differential adjustments based on specified cost allocation in accordance with the results of such assessment.
- 6. The Organization shall notify the results of a Specified Cost Allocation Assessment, as values constituting the basis of price differential adjustments based on specified cost allocation, to persons with Specified Cost Allocation Plans to whom the right as provided for in paragraph 3 hereof has been granted (hereinafter referred to as "Persons Subject to Specified Cost Allocation Plans") and the wholesale electricity exchange.

(Updating specified burden sharing plans)

Article 3.

- 1. The Organization shall, from time to time, accept a plan to be updated (hereinafter referred to as "Updated Specified Cost Allocation Plan") as submitted by a Person Subject to a Specified Cost Allocation Plan pursuant to the provisions of the Network Codes only in cases where the value of a Specified Cost Allocation Plan is to be reduced.
- 2. Where an Updated Specified Cost Allocation Plan is accepted, the Organization shall update the value of the Specified Cost Allocation Plan with the value of the Updated Specified Cost Allocation Plan.
- 3. Where an Updated Specified Cost Allocation Plan is not submitted by the deadline for updating the Specified Cost Allocation Plan as prescribed in the Network Codes, the Organization shall carry out an update by converting values registered in paragraph 4 of Article 2 hereof into values expressed in thirty-minute increments.

(Transitional measures assessment and Specified Cost Allocation Assessment) Article 4.

- 1. The Organization shall conduct a transitional measures assessment and Specified Cost Allocation Assessment (hereinafter referred to as "Assessments of Transitional Measures") at 15:00 on the day two (2) days prior to the date subject to transitional measures and a price differential adjustment based on specified cost allocation. Provided, however, that Assessments of Transitional Measures shall be conducted on a case-by-case basis where there has been a change in available capacity between 15:00 on the day two (2) days prior to the date subject to transitional measures and a price differential adjustment based on specified cost allocation of the day two (2) days prior to the date subject to transitional measures and a price differential adjustment based on specified cost allocation and the commencement of spot trading on the preceding day.
- 2. In conducting Assessments of Transitional Measures, the Organization shall receive a notification of the amount of indirect power transmission rights granted by the wholesale

electricity exchange (hereinafter referred to as "amount of indirect power transmission rights granted") by 12:00 on the day two (2) days prior to the date subject to transitional measures and a price differential adjustment based on specified cost allocation. Where the amount of indirect transmission rights granted by the wholesale electricity exchange has been reduced as a result of the Assessments of Transitional Measures, the Organization shall receive a notification of the reduced amount of indirect transmission rights granted.

- 3. For Assessments of Transitional Measures, the Organization shall, in accordance with the assessment results for each of the following items, indicate matters as prescribed in each item as being subject to transitional measures and a price differential adjustment based on specified cost allocation. Provided, however, that, where the sum of the value of the transitional plan and the value of the Specified Cost Allocation Plan as reduced in item ii for each interconnection line exceeds the value equal to the amount of available capacity for each interconnection line less the value of the reduced amount of indirect transmission rights granted as notified in paragraph 2 hereof, the value of such Specified Cost Allocation Plan updated to reflect the reduced value shall be indicated as being subject to a price differential adjustment based on specified cost allocation.
 - i. If the sum of the value of the transitional plan and the value of the Specified Cost Allocation Plan for each interconnection line does not exceed the value equal to the amount of available capacity for each interconnection line less the value of the reduced amount of indirect transmission rights: All transitional plans and Specified Cost Allocation Plans;
 - ii. If the sum of the value of the transitional plan and the value of a Specified Cost Allocation Plan for each interconnection line exceeds the value equal to the amount of available capacity for each interconnection line less the value of the reduced amount of indirect transmission rights: The transitional plan and Specified Cost Allocation Plan has been updated to reflect the reduced value of the applicable transitional plan.

(Reducing process)

Article 5.

- 1. In a case coming under item ii of paragraph 3 of the preceding Article, the Organization shall reduce the value of the transitional plan until the sum of the value of the transitional plan and the value of the Specified Cost Allocation Plan for each interconnection line is equal to the value of the available capacity for each interconnection line less the value of the amount of indirect transmission rights granted (provided, however, that, if this value is negative, this value shall be zero).
- 2. In a case coming under the proviso in paragraph 3 of the preceding Article, the Organization shall reduce the value of the Specified Cost Allocation Plan until the sum of the value of the transitional plan and the value of the Specified Cost Allocation Plan for each interconnection line is equal to the value of the available capacity for each interconnection line.
- 3. The Organization shall reduce value in each case in the reverse chronological order of the registration times for the corresponding transitional plans; provided, however, that transitional plans with the same registration time should be treated as being of the same rank in order.
- 4. The Organization shall reduce a Specified Cost Allocation Plan with all Specified Cost

Allocation Plans treated as being of the same rank in order.

5. The Organization shall calculate the amount of the reduction for transitional plans of the same rank in order and Specified Cost Allocation Plans of the same rank in order proportionally in accordance with the planned values for the transitional plans and Specified Cost Allocation Plans prior to reduction. The amount of the reduction for transitional plans and Specified Cost Allocation Plans shall be rounded up to the nearest kilowatt in the calculation thereof.

(Confirming Specified Cost Allocation Plans)

Article 6. The Organization shall confirm the state of the use of price differential adjustments based on Specified Cost Allocation Plans through procedures as enumerated in the following items:

- (i) The Organization shall receive the results of bidding pertaining to Specified Cost Allocation Plans as submitted by the wholesale electricity exchange (hereinafter referred to as "Specified Cost Allocation Bidding Results").
- (ii) The Organization shall confirm the state of the use of price differential adjustments through specified cost allocation by checking the Specified Cost Allocation Bidding Results with the Specified Cost Allocation Plan.
- (iii) Where the discrepancy between the Specified Cost Allocation Plan and the Specified Cost Allocation Bidding Results is large or where it is otherwise deemed necessary, the Organization shall ask the Person Subject to a Specified Cost Allocation Plan to provide a reason for the foregoing. The Organization may ask the Person Subject to a Specified Cost Allocation Plan to submit a progress report on the updating of the Specified Cost Allocation Plan, written agreements, and other necessary materials.
- (iv) Where the state of the use of price differential adjustments through specified cost allocation is deemed to be improper pursuant to the preceding items, the Organization shall ask the Person Subject to a Specified Cost Allocation Plan to review its future Specified Cost Allocation Plan or bidding contents.
- (v) Where the Organization has issued guidance or recommendations under paragraph 1 of Article 179 hereof to a Person Subject to a Specified Cost Allocation Plan on the grounds that the state of the use of price differential adjustments based on specified cost allocation is improper, the Organization shall notify the wholesale electricity exchange of the fact thereof. The same shall apply even if it is confirmed that the Person Subject to a Specified Cost Allocation Plan has complied with the guidance or recommendations and undertaken appropriate actions accordingly.

(Calculation of the capacity contract price for capacity resources subject to transitional measures)

Article 7.

1. In calculating the amount of an agreement for securing capacity, the Organization shall use the amount calculated in accordance with a formula outlined in Table 1 in connection with power sources enumerated in the following items as constructed prior to the end of fiscal year 2010 (hereinafter referred to as "capacity resources subject to transitional measures") as the amount of the agreement for securing capacity:

- (i) Power source with an expected capacity of 1,000 kilowatts or more coming under any of(a) through (d) of item (i) of paragraph 1 of Article 15-4 of the Network Codes;
- (ii) Power source with an expected capacity of 1,000 kilowatts or more coming under (a) or (b) of item (ii) of paragraph 1 of Article 15-4 of the Network Codes (except in cases in which multiple power sources are combined).
- 2. Deduction rate in the Appendix 1 below shall be decreased at a fixed rate in each year of capacity auction and shall be abolished upon implementation of a capacity auction of the delivery year of 2030.

Appendix 1 Calculation method of the capacity contract price for capacity resources subject to transitional measures

Calculation method of the capacity	Capacity contract price = Capacity contract amount x
contract price for capacity resources	(1 - deduction rate*1) x contract price
subject to transitional measures	

(*1) The rate will be defined by the Organization.

Supplementary Provisions (as of July 8, 2020)

(Enforcement date)

Article 1

1. These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry.

- 2. Notwithstanding the preceding paragraph, the provisions of Articles 72, 74-2, 75 through 89, 94, 96, and 97 hereof and Article 3 of the Supplementary provisions (as of April 28, 2015) shall be effective from the date of approval by the Minister of Economy, Trade and Industry or the date on which changes related to the adoption of a collective study process for generator interconnections by a general transmission and distribution company have been approved by the Minister of Economy, Trade and Industry, whichever is later.
- 3. Notwithstanding paragraph 1 hereof, the provisions of Articles 2, 107, and 133-3 hereof shall be effective from April 1, 2021, or the date of approval by the Minister of Economy, Trade and Industry, whichever is later.

Supplementary Provisions (as of April 16, 2021)

(Enforcement date)

Article 1

These Rules shall be effective from the date of approval by the Minister of Economy, Trade and Industry.

(Preparatory actions related to operations pertaining to the Act of Partial Revision of the Electricity Business Act and Other Acts for Establishing Resilient and Sustainable Electricity Supply Systems)

Article 2.

The Organization shall, even before the effective date of the Act of Partial Revision of the Electricity Business Act and Other Acts for Establishing Resilient and Sustainable Electricity Supply Systems (Act No. 49 of 2020), secure officers and employees, design operations, develop systems, and otherwise take preparatory actions necessary for the implementation of operations to be undertaken by the Organization pursuant to the provisions of the Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources by Electricity Utilities (Act No. 108 of 2011), as amended under Article 3 of the Act of Partial Revision of the Electricity Business Act and Other Acts for Establishing Resilient and Sustainable Electricity Supply Systems.

(Transitional measures related to the solicitation process for network interconnections in replacement projects)

Article 3.

- 1. A project for which the applicability of replacement is determined at the time of the enforcement of these Operational Rules shall be notified to members constituting general transmission and distribution companies in regional service areas where power generation facilities to be replaced are located except where a project is one for which a determination has already been made as to the applicability of replacement.
- 2. Notwithstanding the provisions of the amended Operational Rules, any projects for which the solicitation process for network interconnections in replacement projects has commenced as of the enforcement of these Operational Rules shall continue to remain applicable.

 $(Calculating the disaster assistance \ contribution)$

Article 4.

The amount of the disaster assistance contribution contributed by members constituting general transmission and distribution companies and the reserve standard for the disaster assistance contribution as prescribed in paragraph 1 of Article 176-8 hereof shall be calculated based on the amount notified by the national government until fiscal year 2025.