

**TERMS AND CONDITIONS OF  
THE MAIN GRID SERVICE  
KVPE2025**

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## 1 APPLICATION OF THE TERMS AND CONDITIONS OF THE MAIN GRID SERVICE

These terms and conditions (Terms and Conditions of the Main Grid Service, KVPE2025) apply to the transmission of electricity in the main grid and form an integral part of the Main Grid Contract (the Agreement) between the Customer and Fingrid (the Contractual Parties and separately the Contractual Party).

These Terms and Conditions of the Main Grid Service will remain in effect until further notice and will be updated as necessary when circumstances change. The guidelines, technical conditions and Fingrid's contact details referred to in the Terms and Conditions of the Main Grid Service are published on Fingrid's website.

## 2 DEFINITIONS

**Energy storage:** A functional entity consisting of devices, machinery, and structures the end-use of electricity to a time after its storage.

**Hybrid power generating facility:** A power generating facility where plant sections of different types, such as facilities with different primary energy sources (solar, wind, hydro) or grid energy storage systems, are connected to a single connection point, and the active or reactive power supplied to the connection point, is controlled by a single, central controller.

**Electrical installation:** General term for electrical installations connected to the electricity grid; covers energy storages, power generating facilities and demand facilities.

**Grid energy storage system:** A unit or an economic ensemble of units capable of storing electricity, which is connected to the network through power electronics, and which also has a single connection point to a transmission system, a distribution system, a closed distribution system, an HVDC system or a real estate's electricity network.

**Power generating facility:** A facility built for power generation, capable of supplying electric power to the connection point. A power generating facility is built around one or more power generating units and includes, depending on the form of power generation, the equipment and systems required for the production of energy, the power generating facility level control and automation system, the internal electricity network of the power generating facility, the generator, step-up and house load transformers, and other auxiliary equipment of the power generating facility. The term "power generating facility" also covers power generating entities consisting of Type A and/or Type B power generating facilities (as per the grid code specification) that utilise the same technology (a power park module or a synchronous module) and are connected to the same licensed electricity grid's connection point. Power generating facilities utilizing the same technology, connected to the same main grid connection point, do not form a power generating entity if they have their own connection points to the licensed electricity grid.

## 3 DEVELOPMENT OF THE MAIN GRID

Fingrid develops the main grid and transmission connections to other integrated electricity networks on the basis of projected transmission needs in accordance with European electricity network dimensioning principles and planning practices. Fingrid's

obligation to develop the main grid is based on the Electricity Market Act, Fingrid's network licence, and the European Union's electricity market legislation.

Fingrid's 400 kV main grid will be developed in accordance with common European dimensioning principles, while the rest of Fingrid's electricity network will primarily be developed on the basis of national criteria. The starting points for main grid development are customers' future needs, maintaining system security, promoting the operation of electricity markets, cost-effectiveness, and managing the ageing of the grid.

The scope of the main grid may change as the electricity network develops. Fingrid names the main grid in accordance with the main grid specifications. If a part of the electricity grid that was previously part of the main grid no longer meets the criteria, Fingrid may sell the transmission line in question or include it in its own high-voltage distribution network. Fingrid shall provide the Customer with information about any significant changes to the main grid that will affect the Customer as soon as possible. Similarly, Fingrid may buy parts of the network that meet main grid criteria and integrate them into the main grid.

A ten-year plan for the development of Finland's main grid is published at two-year intervals. The main grid development plan will be used as the basis for Finland's part in planning the pan-European electricity network. In order to facilitate the creation of the main grid development plan, the Customer shall, at Fingrid's request, submit both its plans for the development of the high-voltage electricity network and the electricity consumption and production forecasts for its main grid connection points. Fingrid shall undertake to maintain the confidentiality of confidential information and to comply with the non-disclosure obligation in Section 76 of the Electricity Market Act.

## **4 CUSTOMER'S MAIN GRID CONNECTION POINTS**

The Customer's main grid connection points will be planned in cooperation with the Customer. A connection agreement will be signed for new main grid connection points, specifying the rights, responsibilities and obligations of the Contractual Parties, as well as the limits of ownership.

Fingrid's general connection terms (YLE), which are a part of the connection agreement, specify the general technical requirements for electrical installations connected to the grid. A power generating facility that is connected to the electricity network must also meet the grid code specifications for power generating facilities (VJV), an demand facility or distribution network that is connected to the electricity network must meet the grid code specifications for demand connections (KJV), and a grid energy storage system that is connected to the electricity network must meet the grid code specifications for grid energy storage systems (SJV). These terms, conditions and requirements also apply to any of the Customer's electrical installations that are connected to the electricity network to the extent that is specified in the requirements.

In the event that the main grid has to be reinforced due to direct or indirect imports or exports of electricity at the Customer's existing or new main grid connection points, an exceptional increase in electricity production or consumption, or for any other reason, compensation for these costs shall be agreed on separately between the Contractual Parties.

## **5 SYSTEM RESPONSIBILITY**

### **5.1 Scope of system responsibility**

Fingrid is the transmission system operator responsible for the Finnish electricity system in accordance with the Electricity Market Act and the Decree on the Responsibility of the Transmission System Operator.

### **5.2 Customers connected to the Customer's electricity network**

If the Customer has customers that are directly or indirectly connected to its electricity network, the Customer must work with them to ensure that their electricity networks and related electrical installations comply with Fingrid's general connection terms (YLE), and that these customers comply with the conditions and instructions issued by Fingrid as the transmission system operator responsible for the main grid, any other conditions and instructions required by the Agreement, and any other official instructions issued as part of legislation.

### **5.3 Management of the power system**

Fingrid maintains and operates the main grid and its transmission connections to other electricity networks in accordance with the principles agreed on with other transmission system operators and the conditions of the network licence granted by the Electricity Market Authority.

The status of the electricity system is monitored by Fingrid's power control system, which contains information about the electrical installations connected to the electricity system to the extent that is necessary for Fingrid to maintain the level of system security that is required by its responsibility for the system. Information shall be exchanged and maintained in accordance with Fingrid's *Guidelines for Real-time Data Exchange*. Real-time data must be available to Fingrid before a new connection is deployed.

The Customer must provide Fingrid with the contact details that are necessary for the electricity system's operation. The relevant network operator must have up-to-date information about the status of the Customer's electrical installations and the ability and authority to carry out any necessary operative and control measures relating to the Customer's electrical installations at the request of Fingrid's Main Grid Control Centre. These operative and control measures may include changing the active or reactive power of electrical equipment, changing the mode of operation of voltage regulation or active power regulation, or disconnecting equipment from the electricity network. The exact requirements are dictated by the current terms and conditions of the main grid and connection agreements (YLE, VJV, SJV, KJV). The relevant operator must be available 24 hours a day, all year round. Fingrid must be informed immediately if these contact details change.

The Customer shall note the obligations contained in, for example, COMMISSION REGULATION (EU) 2017/2196 on the establishment of a network code on electricity emergency and restoration, and shall comply with the applicable obligations and measures of the Network Code and Fingrid's instructions.

### **5.4 Reporting on maintenance and testing**

At least every five years, the Customer shall use Fingrid's e-services to report on any maintenance that the Customer has carried out in networks of at least 110 kV that are connected to the main grid without protective equipment, including the maintenance of trees growing along and in the vicinity of transmission lines.

The Customer shall, in accordance with Fingrid's instructions, report on the implementation and results of the functionality tests (such as remote control capability) that are specified in Fingrid's general connection terms and technical system requirements.

## **5.5 Electricity market information**

Fingrid publishes electricity market information in accordance with its statutory obligations and the Decree on the publication of electricity market information. The Customer shall itself comply with, and ensure that third parties connected to the Customer's electricity network comply with, all legal obligations relating to the publication of electricity market information.

## **6 QUALITY OF MAIN GRID SERVICE, RESTRICTIONS AND OUTAGES**

### **6.1 Voltage and frequency variations in electricity transmission**

The electricity quality report administered by Fingrid defines the electricity quality factors that apply to the main grid. The Customer must be prepared for fluctuations in electricity quality at 110 kV connection points and dimension its electrical installations to withstand the voltage and frequency fluctuations specified in the report. The Customer is obliged to comply with the limits specified in the report for feeding higher-frequency currents into the main grid at its connection points. If the Customer needs uninterrupted electricity or higher-than-average electricity quality, the Customer must ensure this with the aid of its own systems.

### **6.2 Faults and incidents**

Fingrid is responsible for dealing with serious disturbances throughout the electricity system and restoring the system to normal operation. The Contractual Parties shall comply with the principles set out in Fingrid's *General guidelines for resolving serious disturbances in the power system*. In order to develop this cooperation, the Customer must submit its own current instructions concerning major disturbances in the main grid to Fingrid in digital format.

The Contractual Parties must inform each other as soon as possible of any faults and disturbances that will affect the operation of the transmission system, and shall initiate isolation and security measures at the site of a disturbance as soon as it occurs.

In the event of a fault or disturbance in the electricity network, the Contractual Parties have the right to disconnect their electrical equipment from the electricity network without prior warning in order to avoid personal injury.

If faults or deficiencies affecting use of the electricity system or electrical equipment connected to the electricity network are detected and their elimination is substantially delayed, Fingrid has the right to limit or suspend the Customer's main grid service.

When separately requested by Fingrid, the Customer or another party designated by the Customer must notify Fingrid's Main Grid Control Centre of any disturbances in power generating facilities, demand facilities and energy storage that are directly or indirectly connected to the Customer's electricity network, as well as the estimated duration of the disturbance.

If the frequency of the network falls, automatic under-frequency load shedding will disconnect consumption to prevent a major disturbance in the electrical system in accordance with the Network Code on Electricity Emergency and Restoration (COMMISSION REGULATION (EU) 2017/2196). The Customer must implement load

shedding as specified in the Fingrid document *Implementation of automatic under- and over-frequency protection schemes in Finland (Automaattisten ali- ja ylitaajuus-suojausjärjestelmien toteutus Suomessa)*. The document forms part of Fingrid's contingency plan.

### **6.3 Maintenance, repairs and modifications to the main grid**

The Contractual Parties shall cooperate in planning arrangements for transmission outages and their implementation. The aim is to minimise any inconvenience caused to the Contractual Parties by transmission outages. The Contractual Parties shall provide each other with the contact details of the transmission outage planning and switching supervisors. Each Contractual Party shall be responsible for its own transmission outage costs.

Fingrid coordinates and maintains the main grid transmission outage plan. This plan will collate all transmission outages affecting the main grid and its use. Fingrid shall provide the Customer with the current year's transmission outage plans by the end of January.

Fingrid may update this plan for justified reasons that support the safe and efficient use of the main grid, such as reasons related to security of supply, occupational safety or scheduling. If any changes or new requirements will materially affect the Customer's operations, the Customer will be given the opportunity to express their views before the change is confirmed.

Fingrid shall inform its Customers of any transmission outages that will affect them at least three weeks before the outage occurs. In urgent situations or exceptional circumstances, a shorter notice period may be given.

By the end of November, the Contractual Parties must inform each other of the preliminary requirements for transmission outages and exceptional operating situations in their electricity networks with a nominal voltage of at least 110 kV that will affect use of the main grid in the following calendar year. The Contractual Parties shall immediately inform each other of any known changes to transmission outages and exceptional operating situations.

The Customer shall inform, or oblige the electricity producer to inform, Fingrid of the maintenance intervals for any power generating facilities of more than 10 MW that are directly or indirectly connected to its electricity network. Fingrid is also entitled to receive data on smaller power generation units upon request. Maintenance dates for the following calendar year shall be communicated annually by the end of November. The Customer shall immediately inform Fingrid of any changes to the notified maintenance times.

Upon separate request, the Customer shall notify Fingrid of production plans for power generating facilities that are directly or indirectly connected to its electricity network, excluding power generating units considered part of energy storage, such as pump storage power generating facilities. Upon Fingrid's request, Customers (excluding distribution system operators) must also submit their consumption plans for demand facilities of more than 10 MW and their charging and discharging plans for energy storages of more than 10 MW. As of 1 January 2027, distribution system operators must, upon Fingrid's request, submit consumption plans for demand facilities of more than 10 MW charging and discharging plans for energy storages of more than 10 MW that are directly or indirectly connected to their electricity network.

Fingrid has the right to limit or suspend main grid service due to maintenance, repairs, modifications, inspections, testing or other similar measures being carried out in its electricity network. In such cases, Fingrid shall take into account the Customer's

needs when determining the timing of outages and will endeavour to provide the main grid service with substitute connections whenever possible.

In addition to the aforementioned schedules, European legislation and network regulations may affect the planning of some transmission outages. If such legislation or regulations require different plans, the legislation/regulations will be followed.

## **6.4 Ending open supply**

The Customer must have an open electricity supplier. The Customer must give notice of a new supplier or a change in their existing open supplier at least fourteen (14) days before the expiry of the open supplier's contract. If the Customer's open supply contract is expiring and Fingrid has not received notification of the new open supplier at least fourteen (14) days before the expiry of the open supply contract, Fingrid is entitled to suspend the Customer's main grid service with immediate effect. If Fingrid incurs costs due to the absence of an open electricity supplier, the Customer is obliged to compensate Fingrid for these costs.

## **6.5 Failure to comply with contractual obligations**

Fingrid is entitled to suspend the Customer's electricity transmission if the Customer is in material default of its payment obligations to Fingrid or otherwise materially fails to meet its contractual obligations.

## **6.6 Restrictions on the use, production and transmission of electricity**

In the event of a threat to the functionality of the electricity system, Fingrid (as the system operator responsible for the system) is entitled to restrict its Customers' direct or indirect use of electricity, production of electricity and import or export of electricity, taking into account any vital social functions, orders issued by the authorities, plans and obligations for the management of electricity shortages and resolution of major disturbances, and prevailing circumstances.

Fingrid's guidelines for stakeholders on the *Management of electricity shortages in the power system of Finland* shall be followed if there is a threat of electricity shortages. In order to develop and coordinate these guidelines, the Customer shall submit its current power limitation plan to Fingrid in digital format.

In the event of overproduction, Fingrid may limit the Customer's own electricity production and any production connected to the Customer's network if the security of the electricity system is under threat. The guidelines for stakeholders on the *Management of electricity overproduction in the power system of Finland* shall be followed in the event of overproduction.

# **7 REACTIVE POWER AND REACTIVE POWER RESERVES**

## **7.1 Use of reactive power**

Fingrid supplies and receives reactive power on an hourly basis through each of the Customer's main grid connection points without any separate compensation in accordance with a separately defined reactive power window. The supply and invoicing of reactive power is based on the *Guidelines for the supply of reactive power and maintenance of reactive power reserves*. Fingrid's obligations to supply reactive power are in force during normal operation of the main grid.

The Customer's average hourly input and output reactive power is monitored at each main grid connection point. If the reactive power usage of a particular connection point is exceeded, Fingrid is entitled to charge the Customer responsible for that



connection point for the excess in accordance with Appendix 2, *Main Grid Service Pricing*.

Fingrid will use its e-services to report to the Customer on the use of reactive power per main grid connection point.

## 7.2 The capacity of reactive power reserves and its maintenance

Power generating facilities with a rated capacity of more than 10 MW or a voltage level of at least 110 kV at the connection point must support the electrical system's voltage with reactive power reserves. The specification and maintenance of the capacity of these reactive power reserves is based on the *Guidelines for the supply of reactive power and maintenance of reactive power reserves*.

The capacity of reactive power reserves and its maintenance is an obligation that is based on the current grid code specifications for power generating facilities (VJV) and grid energy storage systems (SJV). No compensation will therefore be paid for the maintenance and provision of this capacity.

## 8 METERING

### 8.1 Organising metering

Fingrid is responsible for measuring the electricity transmitted through main grid connection points, and for organising and maintaining any necessary metering. Metering may be located either at a main grid connection point or, if metering cannot reasonably be arranged directly at the connection point, elsewhere in the Customer's or Fingrid's network.

The Customer shall immediately notify Fingrid of any network or power generating facility construction projects, connection changes or faults that will require a change in metering, the adjustment of meter readings or the provision of calculated meter readings.

### 8.2 Metering locations elsewhere than at main grid connection points

If metering is carried out in the Customer's electricity network, the Market Time Unit-specific transmission and transformer losses between the main grid connection point and the metering point will be included in Fingrid's power balance. If metering is carried out in Fingrid's electricity network at a point other than the Customer's main grid connection point, the losses will be included in the Customer's power balance.

Fingrid will use the equations below to calculate the 15-minute losses between the Customer's main grid connection point and the metering point using transmission and transformer constants and metered 15-minute Market Time Units:

*Transmission losses*

$P_h = \left(\frac{P}{U}\right)^2 R$ , where  $P$  is the transmission energy and 115 kV is the calculation voltage.

*Transformer losses*

$P_h = \left(\frac{P}{S_N}\right)^2 P_k + P_0$ , where  $P$  is the transformer energy.

On the basis of the metering location, Fingrid will invoice or credit the Customer for calculated 15-minute internal electricity losses twice a year. Losses will not be

invoiced or reimbursed if the amount to be reimbursed is less than one hundred and fifty euros (EUR 150).

The Customer is responsible for the accuracy and up-to-dateness of the transformer data provided. In the event of significant errors in reported transformer data, the Contractual Parties shall agree on a longer period of retrospective correction.

The price for loss energy shall be the daily Market Time Unit price in the Finnish bidding zone. The Contractual Parties shall separately agree on the implementation of a new basis for specifying the price of loss energy.

### **8.3 Quality requirements for metering**

Metering equipment and its installation is governed by the current public code of conduct on centralised information exchange services for the electricity retail market, which is generally applicable to metering in the electricity retail market.

The Contractual Parties are, without delay, obliged to inform each other of any defects in metering equipment and any other errors exceeding the values permitted by applicable standards, and to take immediate measures to eliminate the said defects and errors.

### **8.4 Space reservations for metering equipment**

If metering equipment is located elsewhere than in Fingrid's premises, the Customer shall reserve sufficient space for equipment to measure the electricity transmitted through its connection points, either at its own substations or at third-party substations connected to its electricity network, and shall make arrangements for instrument transformers, including all the necessary wiring and connections, and a redundant auxiliary power supply. The Customer shall provide representatives of Fingrid or its service provider with free-of-charge access to this substation.

### **8.5 The Customer's electricity network constitutes its own metering area in the imbalance settlement**

An electricity network behind the Customer's main grid connection point forms a separate metering area from the main grid in the imbalance settlement.

The Customer shall be responsible for handling the duties of the party responsible for maintaining a metering grid area, including the imbalance settlement for the grid metering area and the related exchange of information, unless the electricity network that lies behind the main grid connection point is a distribution network belonging to a distribution system operator with a network licence for a nominal voltage of less than 110 kV. In this case, the imbalance settlement and information exchange will be handled by Datahub, the centralised information exchange unit for the electricity retail market.

The Customer may authorise a third party to carry out the aforementioned duties of the party responsible for maintaining a metering grid area. The party responsible for maintaining a metering grid area must have the competence to handle the imbalance settlement and related information exchange in accordance with the Government Decree on electricity supply settlements and metering. If the party responsible for maintaining a metering grid area is a party other than the licensed network operator or the balance responsible party, the duties and responsibilities of the party responsible for maintaining a metering grid area shall be agreed on in a separate agreement with Fingrid.

After the closing of the imbalance settlement, any errors between Fingrid's and the Customer's counterparty networks will be corrected monetarily at the cost of the difference.

## **9 REPORTS CONCERNING THE CUSTOMER'S ELECTRICITY NETWORK**

### **9.1 Production reports**

The Customer shall provide Fingrid net production data for power generating facilities connected directly or indirectly via its electricity grid and that are charged generation capacity fee or energy-fee for power generating facilities with short operational times according to the Main Grid Pricing (Appendix 2). The data shall be provided in 15-minute time series on the working day following the operating day. The conditions of section 9.3 apply to pump storage power generating facilities and other power plants considered part of energy storages, notwithstanding this.

Fingrid can use the production data from power generating facilities that has been submitted for the imbalance settlement to check and correct main grid invoicing. The Customer's production notifications must be sent in the manner specified in the code of conduct on centralised information exchange services for the electricity retail market. The production data for power generating facilities must be approved by the third working day after the end of the invoicing period at the latest.

The net production of a power generating facility is determined by subtracting the metered house load (as per the Ministry of Trade and Industry's Decree of 11 April 2003 (309/2003) or its replacement) from gross production. Upon request, the Customer shall provide Fingrid with the metering and calculation principles used to determine the house load.

Upon request, the Customer shall provide Fingrid with the previous year's figures for total electricity production and house loads for each of its own power generating facilities and each power generating facility that is directly or indirectly connected to its electricity network, in accordance with the notifications made as electricity tax-liable parties under the Excise Duty Act. The Customer is responsible for the accuracy and up-to-dateness of the power generating facility data provided.

Corrections to production notifications may be made retrospectively for a maximum period of three (3) years. No corrections shall be made if the amount to be compensated is less than one hundred and fifty euros (EUR 150).

### **9.2 Net electrical power reports**

The Customer shall use Fingrid's e-services to report and maintain the net electrical power data for power generating facilities connected directly or indirectly via its electricity grid and that are charged generation capacity fee or energy-fee for power generating facilities with short operational times according to the Main Grid Pricing (Appendix 2). The conditions of section 9.3 apply to pump storage power generating facilities and other power plants considered part of energy storages, notwithstanding this.

"Net electrical power" refers to the upper limit, that is, the maximum net electrical power that a power generating facility can produce for at least one hour under normal operating conditions. The net electrical power of a power generating facility is determined by subtracting the hourly metered house load (as per the Ministry of Trade and Industry's Decree of 11 April 2003 (309/2003) or its replacement) from gross power. Upon request, the Customer shall provide Fingrid with the metering and calculation principles used to determine the house load. The power generating facility's machinery and equipment (such as boilers and, in the case of industrial

plants, production processes) must also be taken into account when determining net electrical power.

The Customer is responsible for the accuracy and up-to-dateness of the electrical power data provided. Appendix 3 shall be updated to reflect any changes in the net electrical power of the Customer's own power generating facilities or any power generating facilities connected to or via its electricity network, or if a new power generating facility is commissioned or an existing power generating facility is decommissioned. The updated values will take effect from the beginning of the calendar month following the update.

### **9.3 Power and energy reports for energy storages**

The Customer shall use Fingrid's e-services to report and maintain the rated capacities for energy storages connected directly or indirectly via its electricity grid and that are charged generation capacity fee for energy storages according to the Main Grid Pricing (Appendix 2). The rated capacities for grid energy storage systems in production mode and demand mode are determined in accordance with the grid code specifications for grid energy storage systems (SJV) and for pump storage power generating facilities in accordance with the grid code specification for power generating facilities (VJV) and for demand facilities (KJV).

The Customer is responsible for the accuracy and up-to-dateness of the rated capacity data provided. Appendix 3 shall be updated to reflect any changes in the rated capacities of the Customer's own energy storages or any energy storage connected to or via its electricity network, or if a new energy storage is commissioned or an existing energy storage is decommissioned. The updated values will take effect from the beginning of the calendar month following the update.

The Customer shall provide Fingrid with the previous day's charging and discharging data for energy storages connected directly or indirectly via its electricity grid and that are charged generation capacity fee for energy storages according to the Main Grid Pricing (Appendix 2). The data shall be provided in 15-minute time series on the working day following the operating day. For main grid invoicing purposes, the data must be approved by the third working day after the end of the invoicing period at the latest. The Customer's notifications must be sent in the manner specified in the code of conduct on centralised information exchange services for the electricity retail market.

### **9.4 Power and energy notifications for hybrid power generating facilities**

The Customer shall use Fingrid's e-services to report and maintain the rated capacities for hybrid power generating facilities connected directly or indirectly via its electricity grid and that are charged generation capacity fee according to the Main Grid Pricing (Appendix 2).

This data must be separately provided for power generating components and grid energy storage components. The rated capacities in production mode and demand mode are determined in accordance with the grid code specifications for grid energy storage systems (SJV) and power generating facilities (VJV).

Appendix 3 shall be updated to reflect any changes in the net electrical power of the Customer's own hybrid power generating facilities or any power generating facilities connected to or via its electricity network, or if a new hybrid power generating facility is commissioned or an existing power generating facility is decommissioned. The updated values will take effect from the beginning of the calendar month following the update.

The Customer shall provide Fingrid with the previous day's net production data and charging and discharging data for hybrid power generating facilities connected directly or indirectly via its electricity grid and that are charged generation capacity fee according to the Main Grid Pricing (Appendix 2). The data shall be provided in 15-minute time series on the working day following the operating day. For main grid invoicing purposes, the data must be approved by the third working day after the end of the invoicing period at the latest. The Customer's notifications must be sent in the manner specified in the code of conduct on centralised information exchange services for the electricity retail market.

## **9.5 Consumption and exchange point metering**

Fingrid may request the Customer to provide consumption and exchange point data for invoicing purposes during backup supply or switching in exceptional circumstances. If the Customer has the necessary metering data available, the Customer must send it to Fingrid as 15-minute time series in the manner specified in the code of conduct on centralised information exchange services for the electricity retail market. Invoicing data will otherwise be estimated on the basis of other available data.

## **10 FEES AND HOW THEY ARE DETERMINED**

The Customer pays for transmission of electricity in the main grid in accordance with the Agreement as per the monthly invoice sent by Fingrid. The fees and pricing principles are specified in Appendix 2 (Main Grid Service Pricing). The measurements used as a basis for the Customer's fees are specified in Appendix 3 to the Agreement.

### **10.1 Netting**

If the Customer has several connection points at the same set of main grid switchgear, the amount of energy used as the basis for main grid input and output fees will be the net sum of the metered amounts of active and reactive energy at these connection points.

The metered energy figures for different customers with connection points at the same set of main grid switchgear can likewise be added up. This procedure requires the customers and Fingrid to conclude a separate netting agreement that complies with Fingrid's contractual model. The netting agreement will specify which meter data will be aggregated and designate a single Customer to whom the credit will be allocated. The aforementioned customer will be the responsible party and will make the distributions between the contractual parties of the netting agreement. The distribution basis will be applied from the beginning of the month following the signing of the netting agreement. The netting of reactive energy and average hourly reactive power will be approved in a similar manner.

If the security of the Customer's electricity network requires ring operation and it is connected to the main grid, hourly energy data at the Customer's main grid connection points can be added up accordingly. This procedure requires the Customer and Fingrid to conclude a separate netting agreement that complies with Fingrid's contractual model, and it must also be possible to reliably determine the electrical energy to be netted through metering in all situations. The netting of reactive power and average hourly reactive power will be approved in a similar manner.

Netting will not be carried out in the event of a fault or during any maintenance or modifications to the main grid that affect the switchgear in question.

## 10.2 Electricity tax and related guarantees

Electricity tax consists of an energy tax, a strategic stockpile fee and any other statutory charges. As the network operator, Fingrid collects electricity tax from customers who are liable to pay electricity tax, but are not registered electricity producers or network licence holders.

Fingrid is responsible for paying the electricity tax of any tax-liable customers who are connected to Fingrid's electricity network. As security for this payment obligation, which is not connected to the operation of the main grid, tax-liable Customers are required to provide a guarantee for their electricity tax, which may be a bank guarantee or an *On First Demand* pledged account as specified in the guarantee model published by Fingrid. The guarantee must cover an amount equal to three (3) months of the Customer's estimated electricity tax, including VAT. Unless the Customer has payment defaults, Fingrid will not require a guarantee if the guarantee would be less than EUR 100,000.

The Customer shall provide Fingrid with the said guarantee by the date that the Agreement comes into force. The Customer shall be liable for all fees and expenses related to the said guarantees. Fingrid shall be entitled to use the guarantee to cover any outstanding receivables from the Customer, accrued interest on arrears, and reasonable collection costs. Fingrid is entitled to use the guarantee even if the Customer disputes its use. If Fingrid uses a bank guarantee or pledged account, either in whole or in part, to cover its receivables and the contractual relationship then continues, Fingrid has the right to require the Customer to replenish the guarantee to an amount equal to the original amount.

The provider of a bank guarantee must be a bank approved by Fingrid. The bank guarantee must be valid until further notice. If the bank terminates a valid bank guarantee, the Customer must provide a new guarantee. The replacement guarantee must be valid before the expiry of the terminated bank guarantee.

In order to supply electricity in tax class II, the Customer must provide Fingrid with a written declaration of belonging to that tax class. If the Customer's electricity use is divided between tax classes I and II, the Customer shall send metered energy data for tax class I in the manner specified in the code of conduct on centralised information exchange services for the electricity retail market. Monthly data that is used in invoicing must be submitted and approved by the third working day of the month after the end of the invoicing period at the latest.

If a tax-liable Customer who does not have an electricity network licence or is not registered as an electricity producer transfers electricity through the electricity network to an electricity user with a network licence, a tax-exempt grid energy storage operator or an electricity producer, this transfer of electricity must be reported in the manner specified in the code of conduct on centralised information exchange services for the electricity retail market. 15-minute interval average power meter data that is used in invoicing must be submitted and approved by the third working day of the month after the end of the invoicing period at the latest.

## 10.3 Value-added tax and other indirect taxes and charges

In addition to the fees specified in this Agreement, the Customer shall pay Fingrid the applicable value-added tax, plus any other indirect taxes and charges imposed on Fingrid by the authorities for electricity transmission as specified in this Agreement.

## **10.4 Correcting an invoice**

If a metering error of more than two (2) per cent is found to have been caused by metering equipment or any other reason, the Contractual Party affected by the error has the right to request correction of the main grid invoice. The adjustment shall be determined on the basis of available metering data and, if necessary, by an external expert commissioned by the Contractual Party requesting the adjustment. If the correction is justified, the Contractual Party responsible for the error shall bear the costs.

Fingrid and the Customer shall agree on a longer period of retroactive adjustment with a maximum period of three (3) years. If the time when the metering error occurred cannot be reliably determined, no adjustment shall be made for a period of longer than six (6) months without a specific reason. "Specific reasons" include any official charges and taxes included in an invoice. In this case, the adjustment shall apply to the entire invoice and not just the section relating to official charges and taxes. No corrections shall be made if the amount to be compensated is less than one hundred and fifty euros (EUR 150). In addition to the correction of the invoice, neither Contractual Party shall be liable under this Agreement to reimburse the other for any interest or other costs incurred as the result of a metering error.

## **11 TERMS OF PAYMENT**

### **11.1 Period of payment**

The Customer shall pay the sums governed by this Agreement on a monthly basis in accordance with the invoice sent by Fingrid. The term of payment is fourteen days. The due date shall be marked on the invoice.

If the Customer is responsible for a delay in invoicing, the payment period will be reduced accordingly. If invoicing is delayed for more than fourteen (14) days for reasons attributable to the Customer, the Customer shall pay interest on arrears on the excess period in accordance with Section 10.3.

### **11.2 Complaints**

The Customer must submit any complaints about an invoice in writing and without delay. Fingrid shall inspect the invoice and, if necessary, send a corrected invoice to the Customer without delay. Unless otherwise agreed upon between the Contractual Parties, making a complaint does not exempt the Customer from their obligation to pay by the due date.

### **11.3 Interest on arrears**

If the Customer's payment is delayed and there are no significant errors in the invoice, the Customer shall pay Fingrid the annualised interest on arrears specified in the invoice, from the due date to the date of receipt of payment. The annual interest on arrears is the reference rate of interest in accordance with the current Interest Act.

### **11.4 Failure to pay**

If the Customer has not paid an invoice by the due date, Fingrid shall send the Customer a written payment reminder.

If Fingrid does not receive payment within one week of the payment reminder, Fingrid has the right to send the Customer a written warning of the suspension of electricity transmission. Fingrid also has the right to send a warning to the Customer if the Customer has repeatedly failed to pay invoices by the due date.

The written warning shall indicate the date when transmission of electricity will be suspended in accordance with the Agreement. The warning will be sent to the Customer at least two (2) weeks before the transmission of electricity is due to be suspended in accordance with the Agreement.

Fingrid has the right to suspend the transmission of electricity under the Agreement at the time specified in the warning. However, this suspension shall not be enforced if Fingrid has received payment from the Customer with interest on arrears by the suspension date, and the Customer has provided Fingrid with a guarantee equivalent to at least three (3) months of main grid invoicing, a bank guarantee as specified in Section 9.2, or at least three (3) months' of advance payments within two (2) weeks of the warning. The guarantee procedure will be waived if the Customer makes their payments on time for the next twelve (12) months.

Fingrid shall be entitled to use the guarantee to cover any outstanding receivables from the Customer, accrued interest on arrears, and reasonable collection costs. If Fingrid uses a bank guarantee or pledged account, either in whole or in part, to cover its receivables and the contractual relationship then continues, Fingrid has the right to require the Customer to replenish the guarantee to an amount equal to the original amount.

Fingrid does not pay interest on advance payments or bear the costs of a bank guarantee.

In addition, Fingrid shall be entitled to demand that the Customer pay monthly fees in advance if the Customer has repeatedly paid its invoices after the due date or if the Customer has payment defaults in its credit record, has been forced to undergo corporate restructuring, or has been made bankrupt. Such a requirement may be made for up to one (1) year at a time.

## **12 REVIEWS OF FEES AND CONDITIONS**

### **12.1 Measures taken by public authorities**

Any changes that directly and materially affect Fingrid's costs, and which could not be taken into consideration when the Agreement was made and are not offset on the basis of Section 9, shall have the effect of increasing or decreasing the fees according to their impacts. Such changes include taxes, public levies, obligations arising from national or European legislation, other measures taken by the authorities, and other changes affecting the transmission of electricity as referred to in this Agreement for the aforementioned reasons.

### **12.2 Elimination of disparity**

If reasons out of the Contractual Parties' control lead to an evident disparity in the performance of their contractual obligations, the Contractual Parties shall negotiate on the adjustment of fees or other terms of the Agreement, and agree on a solution to eliminate the disparity. Such reasons include changes in financial or commercial circumstances, legislative amendments, measures implemented by the authorities, or other reasons that could not have reasonably been taken into account when drawing up this Agreement.

## **13 DAMAGES**

### **13.1 General requirements**

The Customer's electrical installations must comply with Fingrid's general connection terms as specified in Section 3. If electricity is not transmitted in accordance with the



Agreement or connection agreement, the Customer is entitled to compensation for any personal injury or damage to property that is caused to the Customer in Finland subject to the terms and conditions specified below. The Customer's own liability for damages is specified in Section 12.4.

### **13.2 Liability for damages to the Customer**

Fingrid shall be liable to compensate the Customer for any personal injury or damage to property that is caused by Fingrid or one of Fingrid's subcontractors through more than minor negligence if the damage is caused by voltage or frequency fluctuations that deviate from Fingrid's general connection terms, repeated outages, or an individual outage caused by failure to comply with the development obligations specified in the Electricity Market Act. However, no liability for damages shall arise if the Customer's electrical installations do not comply with the connection agreement and this has contributed to the damage, or if the Customer could otherwise have been expected to take precautions to prevent or limit the damage caused by the outage or disturbance by means of protective equipment, guidance or other arrangements.

Fingrid is not liable for any damage to property that is caused by an individual outage in the transmission of electricity or for any damage to property that is caused by disturbances in electricity networks owned by others.

Unless otherwise specified in Section 12.3, Fingrid shall not be liable for any lost profit, lost production, damage to raw materials, costs of restarting production, costs of compensatory arrangements for transmission services arising from outages, damage to the equipment of the Customer's customers, damages awarded against or paid by the Customer, or any other consequential damages as described above.

Fingrid's total annual liability for all damages to Customers under this Section shall not exceed a total of twelve million euros (EUR 12,000,000) per calendar year. Claims for damages may only be made for the year in question. Compensation for each year will be paid either in the following January or immediately after the total amount of annual compensation to be paid is known. If the total annual amount of compensation exceeds twelve million euros (EUR 12,000,000), all compensation will be reduced proportionally.

### **13.3 Liability for damages to a Customer's customer**

If the Customer has statutory liability for damages, Fingrid will pay the Customer for any damages awarded to a customer of the Customer in connection with an incident as specified in Section 12.2. If the Customer's customer is an electricity user connected to the distribution network, in the event of an incident as specified in Section 12.2, damages shall be based on the network service terms and conditions given by the Finnish Energy that were in force on the date when the Agreement was concluded. A customer of the Customer who is connected to a high-voltage distribution network will not be compensated for consequential damages. Fingrid's liability for damages does not apply to standard compensation for power outages.

Any compensation governed by this Section shall be payable provided that the amount of compensation payable per Customer and per incident exceeds one thousand euros (EUR 1,000), and the Customer has promptly notified Fingrid of the damage in writing and has agreed on both the grounds for and amount of compensation with Fingrid prior to payment. However, no liability for damages shall arise if the Customer or the Customer's customer could have been expected to take precautions to prevent or limit any damage caused by an outage or disturbance by means of protective equipment, guidance or other arrangements.

If the damage specified in this paragraph has been caused to an electricity user whose electricity is transmitted by a party other than the Customer directly connected to the main grid, the principles set out in this Section shall apply with the necessary changes.

Fingrid's total annual liability for all damages to Customers under this Section shall not exceed a total of two million euros (EUR 2,000,000) per calendar year. Claims for damages may only be made for the year in question. Compensation for each year will be paid either in the following January or immediately after the total amount of annual compensation to be paid is known. If the total annual amount of compensation exceeds two million euros (EUR 2,000,000), all compensation will be reduced proportionally. Any compensation to be paid to a customer of the Customer will be determined and paid by the Customer.

### **13.4 The Customer's liability for damages**

The Customer shall be liable to compensate Fingrid for any personal injury or damage to property that is caused by the Customer or one of the Customer's customers through more than minor negligence if the damage is caused by voltage or frequency fluctuations that deviate from Fingrid's recommendations. However, no liability for damages shall arise if Fingrid could have been expected to take precautions to prevent or limit the damage caused by the outage or disturbance by means of protective equipment, guidance or other arrangements.

The Customer is not liable for any damage caused by transmission outages. The Customer shall not be liable for any lost profit, lost production, damage to raw materials, costs of restarting production, costs of compensatory arrangements for transmission services arising from outages, damage to the equipment of Fingrid's Customers, damages awarded against or paid by Fingrid, or any other consequential damages as described above.

The Customer's total annual liability for all damages under this Section shall not exceed a total of five hundred thousand euros (EUR 500,000) per calendar year.

### **13.5 Other responsibilities**

Fingrid is not liable for damages other than those specified in Sections 12.2 and 12.3. The Customer is not liable for any damages other than those specified in Section 12.4.

## **14 FORCE MAJEURE**

Fingrid has the right to restrict or suspend the Customer's electricity transmission immediately in the event of force majeure.

Force majeure is an event that Fingrid could not have prevented with reasonable care and that renders Fingrid's transmission of electricity under the Agreement impossible or fundamentally complicates it, or makes it financially or otherwise unreasonable.

Cases of force majeure include war, internal unrest, sabotage, explosions, fire, exceptional and unpredictable weather conditions, general interruptions in traffic, strikes or stoppages among a key employee group, lock-outs ordered by an employer organisation, measures implemented by the authorities, inadequate production capacity, or other reasons with equally significant and unusual consequences. Force majeure also includes disturbances in power generation caused by the aforementioned reasons, and damage to power generation or transmission systems that could not have been prepared for using the principles that are generally applied to European electricity systems or through legislation or other official requirements.

Fingrid shall notify the Customer of the onset and cessation of force majeure without delay.