

ELENIA

TERMS OF CONNECTION

FOR HIGH-VOLTAGE DISTRIBUTION NETWORKS

SJLE 2026

recommended by Finnish Energy

The Energy Authority has confirmed the following
terms of connection for use by the distribution system operator.
Effective from 1 January 2027.

1. APPLICATION AND DEFINITIONS OF THE TERMS OF CONNECTION

1.1. In these terms, *a high-voltage distribution network* is a local or regional electricity network or line with a nominal voltage of at least 110 kilovolts, which is not a connection network for electricity generation or a connection cable, which does not cross the national border.

1.2. *A distribution system operator of a high-voltage distribution network (DSO)* is a body or establishment in possession of a high-voltage distribution network and engaged in licensed operations thereof.

1.3. These terms of connection of a high-voltage distribution network (SJLE 2026) are appended to a connection contract concerning the connection of an electricity network or electrical installation (for example place of electricity use or electricity generation and/or energy storage) to a high-voltage distribution network.

1.4. The DSO may also apply these terms to a connection contract concerning the connection of a place of electricity use or generation to an electricity distribution network with a nominal voltage exceeding 36 kV if agreed upon in the connection contract.

1.5. The DSO and the connecting party may agree otherwise on these terms.

1.6. The connecting party is obliged to ensure with those connecting to their electricity network either directly or indirectly that their electricity networks and their connecting electrical installations also meet the requirements of these terms of connection and other possible instructions and requirements related to the implementation of the connection.

1.7. With the *connection contract*, the connecting party and the DSO agree on the electricity distribution connection between the connecting party's electricity network or electrical installation and the DSO's electricity network.

1.8. The connection contract may also be concluded as a *flexible connection agreement* in accordance with the Electricity Market Act, provided that the conditions of the Electricity Market Act are met. In such a case, in addition to the matters specified in section 1.7, the contract shall include provisions on limitations to the guaranteed capacity at the point of connection or on the control by the distribution system operator of the electricity withdrawal or injection to the grid. Furthermore, a flexible connection agreement shall specify the maximum values for fixed electricity injection to the grid and withdrawal from the grid, as well as the capacity for flexible additional feed-in and off-take, the validity period of the flexible connection agreement, and the estimated date for granting connection of the full requested fixed capacity.

1.9. *A connection cable* referred to in these terms means an integrated whole consisting of an electric line and other electrical equipment and installations used for connection to the electricity network, by means of which the connecting party's site of electricity consumption, power plant complex, or one or more interconnected electricity storage facilities are connected to the electricity network.

1.10. *A connection* means the right of the connecting party to become connected to the high-voltage distribution network in the place specified in the connection contract, as well as the interface between the electrical installations of the contracting parties. The size of the connection with respect to electricity consumption and generation (the maximum power that can be taken from the DSO's network and fed into the DSO's network) is specified in accordance with the connection capacity agreed in the connection contract.

1.11. A *connection network for electricity generation* means an electricity network through which two or more separate power plant units are connected to the electricity network via a common connection and, where applicable, a standby supply connection, and which is under the control of one or more electricity producers or electricity storage operators using that network, or an undertaking exercising control over one or more of such parties.

1.12. A *power plant unit* means a power plant located within a defined land area or a defined part of a sea area, two or more power plants forming a single functional entity, or one or more power plants together with one or more energy storages connected to them, forming a single functional entity.

1.13. *The system responsible party* means the transmission system operator that the electricity market authority has appointed for having system responsibility.

1.14. *Electrical equipment* means the following items that require electricity for functioning or that are intended for the generation, transmission or measurement of electricity: finished equipment, installation materials, a combination of equipment made available on the market as a single functional unit and components or sub-assemblies that are intended for incorporation into equipment by the end user.

1.15. *Electrical installation* means a fixed installation or other similar functional unit consisting of electrical equipment and any other equipment, materials and structures, including *electricity generation installations* that can be used for generating electricity and that operate in parallel with the distribution network and *energy storages*.

1.16. These terms may also be applied in stand-by supply connections that are only used temporarily in disturbance or distribution outage situations, regardless of the voltage level.

1.17. The central provisions on the electricity market and the network service have been laid down in the Electricity Market Act, the Act on the Surveillance of the Electricity and Gas Market as well as in the decrees issued by virtue of these Acts.

2. CONNECTING TO THE ELECTRICITY NETWORK

2.1. *The point of connection* means a point (boundary of property) between the electrical installations of the high-voltage distribution network and the connecting party, unless otherwise agreed. The point of connection is specified in the connection contract.

2.2. The DSO connects the connecting party's electrical installations to its network once the connection contract is valid and the connecting party assures that the connection and their electrical installations meet the individually agreed requirements referred to in these terms. Any changes to be made to the time of connection (e.g. due to changes to the connecting party's construction schedule) shall be agreed with the other party in good time.

2.3. If before the time of connection, the contracting party becomes aware of a fact that prevents the connection at the agreed time, the other contracting party must be notified of this with immediate effect.

2.4. The prerequisite for using the connection is that the electricity transmission at the connection point and the management of reactive power balance have been agreed between the connecting party and the DSO.

2.5. It must be possible to disconnect the connection cable from the high-voltage distribution network in the way agreed in the connection contract. When the connected line is connected to a double circuit line, the disconnecting switches at the connection must be equipped with earthing switches on the side of the high-voltage distribution network in order to maintain safety.

2.6. Connection of electrical installations

2.6.1. A demand facility to be connected to the Finnish electricity system must meet the Grid Code and Operational Performance specifications for consumption valid at any given time, set by the system responsible party.

2.6.2. A production facility to be connected to the Finnish electricity system must meet the Grid Code and Operational Performance specifications for power generating facilities valid at any given time, set by the system responsible party.

2.6.3. An energy storage to be connected to the Finnish electricity system must meet the Grid Code and Operational Performance specifications for energy storages valid at any given time, set by the system responsible party.

2.6.4. The point of reference where the Grid Code and Operational Performance specifications must be met is defined according to the system responsible party's Grid Code and Operational Performance specifications valid at any given time.

2.6.5. A production plant connecting along at least a 110-kV line must be equipped with disconnecting relays that separate the production plant from the electricity network during the de-energised intermediate period of a high-speed autoreclosure. The protective relays in the core line must be equipped with synchrocheck.

2.6.6. If a flexible connection agreement has been agreed, the connecting party shall install in the connection a power control system that has been deemed to be reliable. The DSO may require the connecting party to test the power control system. The connecting party shall replace the power control system with a new one if it becomes obsolete or defective.

2.6.7. The connecting party is responsible for verifying the Grid Code and Operational Performance specifications and the implementation of protection.

2.7. The DSO is entitled to set justified technical requirements for voltage regulation under normal operating conditions and for the production and/or consumption of reactive power.

2.8. If the connecting party's electricity network or the connecting party's electricity network together with other electricity networks forms an electricity network of parallel operation with a high-voltage distribution network, the connecting party shall agree on the parallel operation of the networks and on any measures and costs arising from it with the DSO before starting parallel operation. The parallel operation of networks or the terms of island operation shall always be agreed separately.

2.9. If the connecting party intends to make additions or changes to its own electricity network or to an electricity network or electrical installations directly or indirectly connected to the connecting party's network, the connecting party shall contact the DSO in advance in order to determine the network impacts, and where applicable, to implement any required changes or additions to the high-voltage distribution network. The changes must comply with the requirements applicable to connections in force at the time. The changes shall be agreed separately with the DSO.

3. OPERATING REQUIREMENTS OF ELECTRICAL EQUIPMENT

3.1. Main principles

3.1.1. The contracting parties are responsible for ensuring that the electrical installations under their control comply with the requirements set out in the legislation in force, the provisions issued thereunder, and the regulations issued by the authorities.

3.1.2. In order to guarantee the quality of electricity and its security of supply, the contracting parties' electrical installations must meet the applicable standards, the generally accepted recommendations, the technical requirements concerning connection published by the DSO and the requirements of the system responsible party. This also applies to the electrical installations of other parties connected either directly or indirectly to the electrical installations and networks of the connecting party and the DSO.

3.1.3. The contracting parties are responsible for the electrical safety, functioning, condition and operation of the electrical installations under their control.

3.1.4. The contracting parties shall maintain and operate their electrical installations so that the electricity distribution or the operation of the electricity system will not be disturbed unnecessarily and there are no adverse effects or disturbances exceeding the limits of generally agreed standards or recommendations to other parties connecting to the network.

3.1.5. Standby supply required by fault and maintenance situations shall be agreed separately, if needed.

3.1.6. Power lines with a nominal voltage of at least 110 kV must be equipped with shielding wires. The power lines must be built and maintained with tree safety in accordance with the Electricity Market Act. The phases of overhead lines shall be transposed according to the system responsible party's instructions. The connecting party shall ensure the compatibility of the technical implementation of the transposition together with the DSO and the system responsible party.

3.2. Planning and provision of information

3.2.1. The connecting party must provide the implementation plans for the connection to the DSO for review well in advance of starting the implementation, so that the technical compatibility and electrical safety of the connection can be verified. The connecting party is responsible for the safe and compliant implementation of its electrical installations.

3.2.2. The DSO shall provide the connecting party with the necessary information for the planning of the connection.

3.2.3. The connecting party shall provide the DSO with the necessary information about the electrical equipment and systems to be connected and the mode of operation of the electricity network. In addition, the connecting party shall provide the DSO and/or the system responsible party with information required by the system responsible party.

3.2.4. In the planning stage of the connection or when changing an existing connection, the connecting party and the DSO shall agree in advance on the control, monitoring and metering solutions for delivering and metering the electricity transmitted at the point of connection.

3.2.5. If the metering equipment is located elsewhere than in the DSO's facility, the connecting party shall reserve sufficient space for the metering equipment for the necessary metering, the necessary auxiliary power supply and the instrument transformers with wirings and connections for communication purposes.

3.2.6. The DSO is entitled to have access, without delay and free of charge, to the metering equipment located in the connecting party's premises and to the electrical installations of the connecting party, by means of which the switch position of the high-voltage distribution network can be changed. If the electrical

installation possessed by the DSO is located in the connecting party's premises or area, the connecting party is required to ensure that the DSO can immediately, free of charge, and in the manner agreed by the contracting parties, enter the space where the electrical equipment installation is located, in order to carry out, e.g., maintenance, inspection, fault diagnosis or repair work, regardless of the time of day.

3.2.7. The connecting party must reserve sufficient premises for the necessary remote operation and control devices required by the DSO and/or the system responsible party.

3.2.8. When connecting to a high-voltage distribution network, the connecting party shall be responsible for the safe connection of their electrical installations, the compliance with the laws and regulations concerning the building of the installations, the necessary touch and dangerous voltage clarifications and the actions required by them.

3.2.9. The contracting parties shall agree on the location and building of electrical installations and power lines required for electricity distribution in the premises and land and water areas owned or occupied by the connecting party.

3.2.10. The connection cable must have a valid project authorisation granted by the authorities.

3.3. Protection of electricity networks and electrical installations

3.3.1. The protection of the connecting party's electrical installations and any electrical installations connected to them either directly or indirectly and the high-voltage distribution network must operate uniformly and selectively. Both parties are responsible for the operating condition of the protective equipment and for the appropriate nature of protection and for specifying the settings. The DSO shall, where necessary, provide technical information and instructions for coordinating the protection for the connecting party's electrical installations and any electrical installations directly or indirectly connected to them, as well as the high-voltage distribution network. If cable sections are connected to the electricity network or connection takes place to a resonant earthed 110-kV electricity network, the protection of the electrical equipment shall be agreed on separately.

3.3.2. The protection of the connecting party's electrical installations and of any electrical installations directly or indirectly connected to them must be compatible with the protection of the system responsible party's electricity network. If necessary, the system responsible party shall provide technical information about coordinating the protection for the connection and the transmission grid. In terms of the protection, factors having an impact on the protection described in the system responsible party's relay protection application instructions must be taken into account in the planning of the electrical installations.

3.3.3. The connecting party must ensure that exceptional voltage or frequency or the loss of voltage will not damage the equipment of the connecting party or a third party. The connecting party must equip their electrical installations with over- and undervoltage protection and, when the electrical installation so requires, also with frequency protection. When setting the protection, any Grid Code and Operational Performance specifications set by the system responsible party shall be taken into account.

3.4. Disturbances and faults in the electricity network

3.4.1. When planning and operating their installations, the connecting party shall prepare for short-term voltage dips, loss of voltage and the impacts of reconnections caused by faults in the electricity network. The connecting party shall prepare for the fact that the disturbances may affect the electrical installations of other parties directly or indirectly connected to the connecting party's electricity network.

3.5. Monitoring the fulfilment of the terms of connection

3.5.1. The DSO is entitled to inspect the connecting party's electrical installations and any changes to be made to them at a later date before the commissioning and, for justified reasons, also at a later date. Correspondingly, the connecting party is entitled to inspect the electrical installations of the high-voltage distribution network in terms of the connection.

3.5.2. If it is found that the connecting party's electrical installations do not comply with the requirements specified in the connection contract and/or in these terms, the connecting party shall provide the DSO with an account of the impact of the deficiencies on the connection's operation and a plan of the measures to be taken to correct the deficiencies, and a timetable for carrying out the corrections.

3.5.3. The connecting party shall be obliged to limit the flexible additional feed-in and off-take capacity agreed in the flexible connection agreement in the manner required by the DSO, if the connecting party's power control system does not operate as agreed or if the connecting party otherwise fails to comply with the terms of the flexible connection agreement.

3.5.4. After the modification work has been completed, the connecting party and the DSO shall jointly verify that the connection complies with the requirements specified in the connection contract and/or in these terms.

3.5.5. The connecting party is responsible, both technically and financially, for the account referred to in section 3.5.2 and for the related and any subsequent measures.

3.5.6. If the deficiencies in the connection affect or may clearly affect the operation of the electrical system, the DSO is entitled to interrupt the use of the connection, limit the operation of the connection or impose obligations on the operation of the connection until the deficiencies have been corrected.

4. AGREEMENT AND RESPONSIBILITIES

4.1. Conclusion of the connection contract and the connection fee

4.1.1. The connection contract shall be concluded between the contracting parties to be valid until further notice.

4.1.2. The connection contract and any amendments to it shall be made in writing.

4.1.3. The connection contract consists of the individually agreed contractual terms and these terms of connection. In the interpretation of the contract, the documents shall be taken into account in the following order:
1) the connection contract with its appendices, and
2) the terms of connection (these terms).

4.1.4. The connecting party shall pay the DSO a connection fee in accordance with the effective connection fee principles. The amount of the connection fee is determined in the connection contract. It must be stated in the connection contract whether the connection fee or a part thereof will be refunded when the contract is terminated.

4.1.5. The connection fee is specific to the connection in question.

4.1.6. The costs of any modification work carried out on the connection shall be agreed in accordance with the grounds for payment agreed in the connection contract.

4.1.7. The parallel operation of networks or the terms of island operation shall always be agreed separately.

4.1.8. The practical implementation and terms of reactive power supply shall be agreed separately.

4.2. Delay in making the connection

4.2.1. If the connection is delayed for reasons attributable to the DSO, the connecting party is entitled to a penalty for delay if it has been agreed separately. There is no right to the penalty for delay if the DSO shows that the delay is caused by an obstacle beyond their control and that they cannot reasonably be expected to have taken it into account when concluding the contract and that has consequences which they could not have reasonably avoided or overcome.

4.2.2. The connecting party is entitled to compensation for damage that they suffer due to a delay attributable to the DSO unless the DSO shows that the delay is caused by an obstacle beyond their control and that they cannot reasonably be expected to have taken it into account when concluding the contract and the consequences of which they could not have reasonably avoided or overcome. Any penalty for delay that will be or has been paid shall be taken into account as a reducing factor in the compensation for damage. However, the maximum amount of compensation for damages shall be the amount of the connection fee unless the DSO has been guilty of deliberateness or gross negligence.

4.2.3. If the delay is attributable to one whose assistance the DSO has relied on in fulfilling the contractual obligations, the DSO is exempted from the obligation to pay compensation for damage only if the one mentioned above is exempt from responsibility in accordance with the previous section.

4.2.4. The connecting party is entitled to receive compensation for indirect damage only if the delay is attributable to the DSO's gross negligence or deliberateness.

4.2.5. Indirect damage means:
1) loss of earnings incurred by the connecting party because of the delay or the consequent actions;
2) damage caused by an obligation, which is based on some other agreement;
3) major loss of utility when this loss does not result in direct financial damage or other comparable substantial impairment; and
4) other damage of a similar nature that is difficult to foresee.

4.2.6. If the connecting party notifies the DSO of a delay attributable to itself at such a late date that the DSO has already started the work related to the connection, the connecting party shall pay to the DSO the costs caused by the measures that were necessary due to the delay

and for the measures that had to be taken but have now become useless, based on an account given by the distribution system operator.

4.3. Maintaining the connection

4.3.1. If the connecting party wishes to keep the connection contract valid even when there is no valid contract concerning the network service, they must compensate the DSO for the costs of maintaining the connection on the basis of a separate contract.

4.3.2. By failing to conclude a contract for maintaining a connection, the connecting party shall be deemed to be in material breach of contractual obligations. This also applies to the material negligence to pay the fees pertaining to the above-mentioned contract.

4.4. Amending the contract and providing information

4.4.1. The contracting parties may jointly agree to make changes to an individual connection contract.

4.4.2. When the electricity use or production changes, the connection size (contracted capacity) or structure of the connection defined in the connection contract may be changed. A new connection contract or a separate contract that is subject to these terms of connection shall be concluded on the changing of the connection size. The connecting party shall pay the DSO the costs arising from the impacts of changing the connection.

4.4.3. The DSO shall also have the right to reduce the agreed connection capacity to correspond to the actual electricity need if the DSO can demonstrate that the actual use of the connection has, over a period of at least 12 months, materially deviated from what was agreed and the connecting party has not provided a justified reason for such deviation within a reasonable time limit set by the DSO, which shall be at least one month. If the connecting party has not provided a justified reason for the deviation, the DSO shall, in accordance with section 4.4.8, notify the connecting party of how and from which date forward the connection size will be changed and the justification for this change. The change may enter into force no earlier than three months from when the notification was sent.

4.4.4. If the connection contract was concluded before the DSO adopted these terms of connection (SJLE 2026) and the DSO has reduced the connection size in accordance with section 4.4.3, the connecting party shall, for a period of 36 months from the first reduction of the connection size, have the right, if the connecting party's actual electricity distribution needs increase, to increase the connection size to the level prior to the reduction without an additional connection fee.

4.4.5. The connecting party shall provide information about the changes at a sufficiently early stage in order to establish the network impacts and to implement any changes needed in the high-voltage distribution network and agree with the DSO on the measures and compensation for the costs incurred.

4.4.6. The DSO is entitled to amend the contract terms if the change is based on legislative changes, a decision by the authorities or a change in the terms set by the system responsible party which the DSO has been unable to take into account when concluding the connection contract.

4.4.7. The DSO is entitled to change the terms of contract, if there is a special reason for the change, owing to an essential change in the circumstances, revision of outdated contractual or pricing arrangements, or implementation of measures necessary for energy conservation.

4.4.8. The DSO shall send to the connecting party a notification of how and from which date the terms of contract will change and the reason for the change.

4.5. Transfer and termination of contract

4.5.1. The contracting parties may transfer their mutual connection contract to a third party with the other contracting party's written consent.

4.5.2. The connecting party may terminate the contract only if the electricity sale contracts and the separate contracts on electricity network service relating to the relevant place of electricity use or electricity generation are not in force.

4.5.3. The DSO may revoke the connection contract with immediate effect if:
1) the connecting party has materially breached its obligations based on the connection contract and the breach of contract has not been corrected within the reasonable time notified by the DSO in writing; or
2) the connecting party is declared bankrupt, and the bankruptcy estate does not commit at least to the maintenance contract.

4.5.4. In addition to what is stated in section 4.5.3, the DSO shall have the right to terminate the connection contract if the individually agreed conditions relating to the construction and commissioning of the connection are not fulfilled and the breach of contract has not been corrected within a reasonable time set by the DSO. In the event of termination of the contract under this clause, the connection fee shall not be refunded.

4.5.5. The connecting party shall not be subject to international sanctions imposed by legislation or by authorities. If, during

the term of the contract, it is found that the connecting party is subject to such international sanctions imposed by legislation or by authorities, the DSO shall, at its discretion and without liability for compensation, have the right to immediately terminate the connection contract. The DSO shall also be entitled to require the connecting party to compensate for any damages incurred by the DSO as a result.

4.5.6. The DSO shall return the refundable connection fee to the connecting party.

4.5.6.1. In accordance with the general provisions on set-off, the DSO has the right to set off its overdue receivables from the connecting party with the refundable connection fee and to deduct from the amount of the connection fee to be refunded the costs of dismantling the connection cable, as well as the costs caused by the possible dismantling of the electrical equipment that is unnecessary from the point of view of other connecting parties and by the disconnection of the connecting party from the network.

4.6. Settlement of disputes

4.6.1. Any disputes arising from the connection contract shall be settled primarily in the district court where the connection is located unless otherwise agreed.

4.6.2. A connecting party shall have the right to submit disputes arising from the interpretation of this connection contract to the Energy Market Disputes Board for consideration.