

Grid Code	Connection	
D4	01.12.2020	Version1.0

Connection of a Power Generating Module to the transmission system

1. Introduction

- 1.1 These Terms and Conditions are based on the Electricity Act no. 65/2003 with subsequent amendments and Regulation No. 1040/2005 on the implementation of the Electricity Act.
- 1.2 These Terms and Conditions outline the requirements necessary for the acquisition of a *Power Generating Module Connection Agreement*. Furthermore, these terms define the criteria that should be used as the basis for enforcing the 'exclusion clause' outlined in Article 9 of the Electricity Act (Icelandic version) which states that *new customers may be denied access to the transmission system on grounds pertaining to the transmission capacity, security and quality of the system*.
- 1.3 These Terms and Conditions have been approved by the National Energy Authority, in accordance with paragraph 6, Article 9 of the Electricity Act.

2. Definitions

The following definitions apply in these Terms and Conditions:

- 2.1 A *Power Generating Module Connection Agreement* is an agreement between a transmission company and a production company, for the connection of a Power Generating Module to the transmission system, the transmission of electricity, its measurement or other services related to the electricity delivery point.
- 2.2 *Preparatory Negotiations*, on a connection agreement, are negotiations on a connection agreement which may, at the request of the developer of the Power Generating Module, commence without the fulfilment of all the conditions required, before the completion of a connection agreement, cf. Article 5.2.
- 2.3 A *Power Generating Module* is a manmade structure used to produce electricity.

Reference is made to the definitions of the Electricity Act no. 65/2003 as well as any regulations subsequently issued (based on the Act), the applicable laws related to general conditions according to Article 4 and Landsnet's valid Grid Codes.

3. General

- 3.1 Landsnet's role and obligations are outlined in Chapter III of Electricity Act no. 65/2003:
The transmission system operator shall develop the transmission system in an economic manner, taking into account security, efficiency, reliability of supply and the quality of electricity in accordance with Article 9 of the Electricity Act. The operation of the transmission system includes connecting customers to the transmission system on request, provided that they fulfil the technical conditions required and provided also that they pay a connection fee according to the provisions of a tariff. The technical requirements for production units can be found in D.1.
- 3.2 Landsnet's system plan, submitted annually to the National Energy Authority, shall outline any plans for the development of the transmission system, cf. Article 9 a. in Electricity Act no. 65/2003 (Icelandic version). The system plan shall include a scheduled, long-term, 10-year development plan and a three-year construction and development plan which shall describe predetermined investments as well as the strategy and timeframe for their execution. The system plan shall be based on realistic scenarios for the development of electricity production and consumption. The statutory consultation process of the Electricity Act, regarding network development plan procedures, is an important aspect of developing a system plan. Feedback on the plan and information from Landsnet's current and potential

This Grid Code is an unofficial translation of the Icelandic draft version of Grid Code D4. If there will be any discrepancy the Icelandic draft version is always valid.

Grid Code	Connection	
D4	01.12.2020	Version. 1.0

customers regarding changes in electricity production or consumption are also an important factor in developing a successful plan.

- 3.3 This Grid Code outlines the general conditions that must be met to begin negotiations on a connection agreement for a Power Generating Module. Furthermore, this Grid Code defines the appropriate criteria for the enforcement of the 'exclusion clause' outlined in the Electricity Act (Article 9) which states that *new customers may be denied access to the transmission system on grounds pertaining to the transmission capacity, security and quality of the system.*

4. General requirements

- 4.1 Requirements pertaining to the Master Plan Act No. 48/2011.

- 4.1.1 Negotiations on a connection agreement can commence immediately if a Power Generating Module intends to utilise a power plant option that falls outside the provisions outlined in Article III of the Master Plan Act No. 48/2011.
- 4.1.2 Power Generating Modules that do not fall outside the provisions outlined in Article III of Act No. 48/2011 must utilise a power plant option within the 'energy utilisation' category, as defined by Act No. 48/2011, to begin negotiations.

- 4.2 Requirements pertaining to Environmental Impact Assessment Act No. 106/2000

Negotiations on a connection agreement can only be initiated if the construction of the proposed Power Generating Module falls under Article 4.2.1 or 4.2.2 below:

- 4.2.1 All construction projects that fall under category A in Annex 1 of Environmental Impact Assessment Act No. 106/2000 are subject to environmental impact assessment (EIA), in accordance with Article 5 of Act No. 106/2000. Projects that fall under category B and C in Annex 1 (Icelandic version) can have an extensive environmental impact and are therefore assessed on an individual basis, in accordance with Article 11 of Act No. 106/2000.

4.2.2

Confirmation as to the status of projects categorised as B or C; whether they are subject to assessment (pursuant to Annex 1 of Act No. 106/2000), must be made available, cf. Article 6. Projects categorised as 'exempt from assessment' subsequently fulfil the requirements outlined in Article 4.2, and connection agreement negotiations can therefore be initiated. The conditions of Article 4.2.1 above apply to projects that are subsequently categorised as 'subject to assessment'.

- 4.3 Conditions pertaining to land use and the utilisation of natural resources within potential construction sites and affected areas.

The following conditions must be fulfilled for connection agreement negotiations to begin:

- 4.3.1 Official confirmation from a lawyer/solicitor that the developer has secured ownership or utilisation rights of the necessary land, land quality, water rights, geothermal rights or other energy sources, as applicable, facilities and other rights of

Grid Code	Connection
D4	01.12.2020 Version. 1.0

the landowner or occupier that are necessary for the completion of the Power Generating Module. This applies to both private and public land.

4.3.2 The official confirmation referred to in Article 4.3.1 above shall include a list of contracts entered into by the Developer, to support the requirements outlined above.

4.4 Conditions pertaining to development plans in accordance with the Icelandic Planning Act No. 123/2010

Negotiations on a connection agreement can only begin if the proposed Power Generating Module's operations do not conflict with the approved land use in the proposed construction area, in accordance with current development plans.

5. Contract arrangements and authorised deviations

5.1 Formal negotiations on a connection agreement can commence once the conditions of items 4.1 - 4.4 above have been met. Formal negotiations begin with a written agreement, where negotiation arrangements, procedures and an estimated timeframe are described in detail.

5.2

Preparatory Negotiations on a connection agreement may be initiated, at the request of the developer of the proposed production unit, even if the conditions of items 4.2 - 4.4 have not been met. Preparatory Negotiations do not give the developer any special rights if the exception clause in Article 9 of the Electricity Act is enforced, before the conditions outlined in items 4.2 - 4.4 have been met and the connection agreement has been signed.

5.3 A developer requesting Preparatory Negotiations, based on Article 5.2, shall guarantee any costs incurred by Landsnet as a result of these negotiations and shall reimburse Landsnet for accrued costs if a connection agreement is not reached. Any agreement on Preparatory Negotiations on a connection agreement should, as far as possible, state the scope and composition of the costs that may be incurred by the developer if a connection agreement is not completed.

6. Enforcement of the exclusion clause outlined in Article 9 of the Electricity Act

6.1 If Landsnet foresees a situation where the enforcement of the 'exclusion clause' outlined in Article 9 of the Electricity Act is appropriate, then they shall notify any stakeholders in writing.

6.2 In the event of the enforcement of the exclusion clause, in accordance with Article 9 of the Electricity Act, then all proposed projects under consideration by Landsnet shall meet the conditions outlined in Article 4 above.

6.3 The developer of the proposed Power Generating Module must submit the following:

Grid Code	Connection
D4	01.12.2020 Version. 1.0

- 6.3.1 A detailed third-party assessment (carried out by consulting engineers or other appropriate consultants) on the capacity of the energy source utilised by the Power Generating Module.
- 6.3.2 Operating plans that accurately analyse the confirmed potential capacity of the power plant, including the following:
- i. Estimates that show estimated production over different periods (including seasonal fluctuations if applicable), as accurately as possible.
 - ii. A statement describing how the electricity will be sold: if the electricity will be sold on the market or sold in advance, in which case the duration of any agreement and any other relevant aspects that could potentially affect the operation of the electricity transmission system must be reported
 - iii. The proposed location of load versus production in Landsnet's transmission system should be given, wherever possible.
- 6.3.3 Information on other items connected with the operation of the proposed Power Generating Module deemed applicable by Landsnet when considering different producers.

Grid Code	Connection	
D4	01.12.2020	Version. 1.0

- 6.4 In the event of the enforcement of the exclusion clause, in accordance with Article 9 of the Electricity Act, then the Power Generating Module connection considered by Landsnet to be the most feasible option, shall be given priority. The feasibility of the connection shall be assessed using the same methodology used to assess the need for customer-specific investment costs in a new connection (see methodology and examples in Grid Code D3). The expected income from the relevant Power Generating Module during the period that Landsnet expects limitations to the transmission capacity in the electricity transmission system to last shall be included in the assessment.

The connection with the highest cash flow, less investment costs, shall be given priority when connecting to the transmission system. The assessment of joint ventures with other Power Generating Modules, which could alter the prioritisation of connections, is permissible.

Costs associated with the demolition of older power plants (if applicable), should also be included, as well as depreciation costs. The project's effect on transmission losses should also be estimated whenever possible. Details should also be provided on project's return on equity and the return on the total capital of the project, in accordance with the provisions of Article 8. of Regulation no. 870/2016 on system plans for the development of the electricity transmission system.

Power Generating Modules should be assessed to identify potential cost differences, in connection with the maintenance of adequate transmission system security, security of supply and quality, when appropriate. This should include costs related to any necessary equipment required to prevent any operational problems in the transmission system, e.g. due to frequency, voltage, or harmonics.

The objective is to utilise the available limited capacity as well as possible.

The developer must also undergo a financial due diligence review in connection with a project where the exclusion clause in Article 9 of the Electricity Act has been enforced.

- 6.5 Landsnet's decision to deny new parties access to the transmission system, on the basis of Article 9 of the Electricity Act, shall be explained and given in writing. A timeframe for potential changes to the system, to facilitate the connection of the Power Generating Module in question, should also be given whenever possible.