

Electricity

Grid issues in Portugal

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 Portugal

Further information

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- **Portal das Energias Renováveis (PER) – Information Portal on Renewable Energy**

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- **Entidade Reguladora dos Serviços Energéticos (ERSE) – Energy Services Regulatory Authority**

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- **Rede Eléctrica Nacional, S.A. (REN) – Concession holder of the National Electricity Transmission Grid (RNT)**

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- **EDP Distribuição – Main Distribution System Operator**

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Summary of grid issues

Connection to the grid	Operators of renewable energy plants are contractually entitled against the grid operator to the connection of their plants to the grid. The grid operator is obliged to enter into a contract on the connection of a plant without discriminating against certain plant operators ("obligation to enter into a contract").
Use of the grid	Plant operators are contractually entitled against the grid operator to the transmission of electricity. The grid operator is obliged to conclude a contract on the use of the grid without discriminating against certain plant operators.
Grid development	As a rule, plant operators are not entitled to development of the grid. Yet, the grid operator has the general obligation to develop his grid and prepare a Transmission Grid Development and Investment Plan (PDIRT).
Statutory provisions	<ul style="list-style-type: none"> ■ DL 29/2006 (Decreto-Lei n.º 29/2006 de 15 de Fevereiro) on the organisation of the national electricity grid system, in conjunction with its amending acts DL 104/2010 (Decreto-Lei n.º 104/2010 de 29 de Setembro) and DL 215-A/2012 (Decreto-Lei n.º 215-A/2012 de 08 de Outubro). ■ DL 172/2006 (Decreto-Lei n.º 172/2006 de 23 de Agosto) on the principles governing the organisation and operation of the national electricity grid system as set by DL 29/2006, in conjunction with its amending act DL 215-B/2012 (Decreto-Lei n.º 215-B/2012 de 8 de Outubro). ■ DL 363/2007 (Decreto-lei n.º 363/2007 de 02 de Novembro) on the legal framework of the electricity produced by very small power systems (microproduction units), in conjunction with its amending act Law 67-A/2007 (Lei n.º 67-A/2007 de 31 de Dezembro), DL 118-A/2010 (Decreto-Lei 118-A/2010 de 25 de Outubro), and DL 25/2013 (Decreto-Lei 25/2013 de 19 de Fevereiro). ■ DL 34/2011 (Decreto-Lei n.º 34/2011 de 8 de Março) on renewable energy production in small power plants (miniproduction units) and its amending act DL 25/2013 (Decreto-Lei 25/2013 de 19 de Fevereiro). Ordinance 178/2011 (Portaria n.º 178/2011 de 29 de Abril) sets the fees for the registration of miniproduction units.

Connection to the grid

Operators of renewable energy plants are contractually entitled against the grid operator to connection of their plants to the grid. The grid operator is obligated to enter into a contract on connection to the grid ("obligation to enter into a contract", DL 118-A/2010 and articles 5 and 6 DL 34/2011).

Entitled party. The persons entitled are the plant operators (articles 5 and 6 DL 34/2011).

Obligated party. The companies obligated are the grid operators, namely the Transmission System Operator (Rede Eléctrica Nacional, S.A. - REN) and the Distribution System Operator (mainly EDP Distribuição).

Basic information on legal sources



DL 363/2007

DL 34/2011

Procedure

Process flow	<p>The operators of renewable energy plants are contractually entitled against the grid operator to connection of their plants to the grid. The grid operator is obligated to enter into a contract on connection to the grid ("obligation to enter into a contract").</p> <p>There are two possible procedures for grid connection: Request for Prior Information – PIP (art. 10 DL 312/2001 as amended by DL 118-A/2010) and contest (art. 14 DL 312/2001 as amended by DL 33-A/2005). By submitting a Request for Prior Information (Pedido de Informação Prévia), RES-E producers can find out if the grid has sufficient capacity to import their electricity. Public tenders are initiated by the government.</p> <p>The operators of microproduction and miniproduction units may use simplified procedures, described in articles 13 and 14 DL 363/2007 amended by DL 118-A/2010 and articles 15 and 16 DL 34/2011, respectively. Microproduction units shall be registered at the Registration System for Microproduction (SRM) and Miniproduction units shall be registered at the Registration System for Miniproduction (SRMini). Both registries are managed by the DGEG (article 7 DL 363/2007 and article 7 DL 34/2011).</p>
Deadlines	<p>Plants must be fully connected within 24 months after the grid operator's consent to connect them (Licence of Establishment). Operators of renewable energy plants may request an extension of the above-mentioned deadlines. Microproduction units are connected within 10 days after the grid operator is informed of the conclusion of the purchase contract (art. 19 DL 363/2007 amended by DL 118-A/2010). Miniproduction units are connected after the exploitation certificate is issued and within 10 days after the grid operator is informed of the conclusion of the purchase contract (art. 21 DL 34/2011).</p>
Obligation to inform	<p>The operators of microproduction units shall provide all the information requested by the DGEG, the supplier and the grid operator (art. 6 DL 34/2011).</p>

Priority to renewable energy

-  **Priority to renewable energy**
-  **Non-discrimination**

As a rule, connection to the grid shall be granted according to the principle of non-discrimination. Besides priority shall be given to electricity produced from renewable energy sources, except for hydro plants with an installed capacity exceeding 30 MW (Art. 33W of DL 172/2006 amended by DL 215-B/2012). The obligation to purchase all electricity produced under the Special Regime

in the period it benefits from the FiT (art. 55 of DL 172/2006 amended by DL 215-B/2012) creates favourable conditions for the deployment of RES technologies.

Capacity limits (quantitative criteria)

The grid operators are obliged to comply with the following criteria and regulations when allocating grid capacity (art. 6 par. 2 DL 312/2001):

- Plan for the expansion of the electricity grid in accordance with art. 7 DL 312/2001
- Investment plan in accordance with art. 8 DL 312/2001
- Characteristics of the grid in question in accordance with art. 9 DL 312/2001

As regards miniproduction units, the grid operator may deny registration of new entrants when the total power injection into a grid substation exceeds the limit of 20% of the substation's capacity (art. 4 DL 34/2011).

Distribution of costs

Plant operator	<p>The plant operator whose plant is to be connected to the grid shall establish an additional connection to the grid. This additional connection is deemed a part of the entire grid; yet, the plant operator shall bear the full costs. If an operator of renewable energy plant intends to establish a connection to the grid and there is no capacity available, the plant operator shall wait for the grid to be upgraded or participate in the costs of the grid reinforcement.</p> <p>The operators of renewable-energy-based miniproduction units shall bear the costs of connection to the grid (art. 6 DL 34/2011). The operator of microproduction units shall also bear the costs of connection to the grid (art. 6 DL 363/2007).</p>
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Grid development

General development of the grid. Plant operators are not entitled to grid development. However, the grid operator has the general obligation to develop his grid (Art. 30 DL 29/2006).

Entitled party. Although RES-E producers are entitled against the grid operator to the connection of their plants, they are not entitled to the development of the grid.

Obligated party. The grid operator is not legally required to develop the grid. However, he has the general obligation to develop his grid (Art. 30 DL 29/2006)

Basic information on legal sources

DL 29/2006

Distribution of costs

Consumers	The regulator includes the costs of already implemented grid upgrades in the charges to be paid by the final consumers. In other words, grid development costs are included a posteriori.
Grid operator	In general, the grid operator shall bear the cost of a grid development (art. 6 par. 2, art. 7 and art. 8 DL 312/2001).
Distribution mechanism	Investment costs are taken into consideration when setting the tariff for the use of the grid. Article 6 (2) of DL 312/2001

Grid studies

The National Transmission Grid Development and Investment Plan (PDIRT) for the period 2012-2017, was available for public consultation from March to April 2011. It can be downloaded from the Transmission System Operator's website. After public consultation, the final version was sent to the Directorate General for Energy and Geology at the Ministry of Economy, Innovation and Development.

The final version of the PDIRT 2012-2017 can be downloaded at:

<http://www.centrodeinformacao.ren.pt/PT/publicacoes/Paginas/PlanoInvestimentoRNT.aspx>

Use of the grid

Operators of renewable energy plants are contractually entitled against the grid operator to the transmission of electricity. The grid operator is obligated to enter into a contract on use of the grid ("obligation to enter into a contract", art. 4 DL 312/2001 as amended by DL 118-A/2010 and art. 5 DL 312/2001).

Entitled party. The persons entitled are the plant operators (art. 4 DL 312/2001 and articles 5 and 6 DL 34/2011).

Obligated party. The companies obligated are the grid operators (art. 5 DL 312/2001), namely the Transmission System Operator (Rede Eléctrica Nacional, S.A. - REN) and the Distribution System Operator (mainly EDP Distribuição).



Basic information on legal sources

DL 29/2006

Procedure

Process flow	Operators of renewable energy plants are contractually entitled against the grid operator to the transmission of electricity. The grid operator is obligated to enter into a contract on use of the grid ("obligation to enter into a contract", art. 4 DL 312/2001 as amended by DL 118-A/2010 and art. 5 DL 312/2001).
Deadlines	Deadlines maybe specified in the contractual terms.

Priority to renewable energy

-  **Priority to renewable energy**
-  **Non-discrimination**

As a rule, use of the grid shall be granted according to the principle of non-discrimination. Besides, priority shall be given to electricity produced from renewable energy sources, except for hydro plants with an installed capacity exceeding 30 MW (Art. 33W of DL 172/2006 amended by DL 215-B/2012). Grid operators are obliged to purchase and transmit all electricity from renewable sources offered by RES-E producers.

Curtailement

Capacity limits may be imposed only if the maximum capacity of the grid is reached. In this case, the grid operator shall make the implementation of the grid expansion and the investment plan a priority. Unless the plan has already been implemented, the plant operator and the grid operator may conclude an agreement on limited electricity imports. The operators of renewable-energy-based miniproduction units may export to the grid up to 50% of the amount originally contracted with the Supplier (DL 34/2011).

Distribution of costs

Others	The electricity suppliers bear the costs for the use of the grid (art. 44 par. 2 DL 29/2006).
Distribution mechanism	The costs are included in the charges for the use of the transmission and distribution grids (art. 6 DL 312/2001).