

## Research RES LEGAL – Grid issues

### Country: Ireland

#### 1. Overview of grid issues

<b>Overview of grid regulations</b>	In Ireland, access of electricity from renewable sources to the grid is subject to the provisions of Statutory Instrument 147 of 2011 and direction from the Commission for Energy Regulation (CER). The Gate 3 process provides a level of priority connection for RES. However, renewable energy systems are connected according to a special procedure ("Group Processing Approach"), which aims to increase the reliability of the connection procedure for the system operators. The rollout and implementation of Gate 3 by the regulator, TSO and DSO is designed to ensure that Ireland can reach its 40% RESE target.
<b>Connection to the grid</b>	<p>Under the Group Processing Approach ('Gate') connection capacity has been reserved for renewable generation, including enough to specifically meet the 40% RES-E target in the context of the overall target addressed to Ireland under Directive 2009/28/EC. To date, there have been three 'Gates.' Gate 1 was finalised in December 2004 and processed applications equating to 373 MW of renewable capacity. Gate 2 processed applications equating up to 1300 MW and in 2008, the Commission for Energy Regulation approved Gate 3, which provides for 3900 MW of new additional renewable generation.</p> <p>There is also a policy that aims to facilitate renewables by providing for grid connections outside the gate process for certain small, renewable, low carbon generators</p>
<b>Use of the grid</b>	Under SI 147 of 2011 the transmission system operator and distribution system operator shall ensure that electricity generated from renewable sources may be transmitted and distributed. Moreover, electricity from renewable sources shall be given priority dispatch unless this poses a risk to the security and stability of the grid.
<b>Grid expansion</b>	The grid operators are generally obliged to operate and develop the grids in accordance with the applicable legislation.. The base transmission network is planned and controlled by the TSO. The costs of the base transmission and distribution network are recovered through tariffs imposed on the use of users of both the transmission and distribution system, by all users including generators.
<b>Statutory provisions</b>	<ul style="list-style-type: none"> <li>• ERA (Electricity Regulation Act 1999)</li> <li>• S.I. No. 445/2000 (European Communities (Internal Market in Electricity) Regulations, 2000)</li> <li>• S.I. No. 147/2011 (European Communities (Renewable Energy) Regulations, 2011)</li> <li>• CER/04/381 (Direction on Resuming Connection Offers to Wind Generators)</li> <li>• CER/05/049 (Group Processing Approach for Renewable Generator Connection Applications. Connection and Pricing Rules. Direction to System Operators)</li> <li>• CER/08/260 (Criteria for Gate 3 Renewable Generators Offers &amp; Related Matters. Direction to the System Operators)</li> <li>• CER/09/099 (Treatment of Small, Renewable and Low Carbon Generators outside the Group Processing Approach)</li> </ul>

## 2. Basic information on legal sources

<b>Name of legal source (original language)</b>			
<b>Full name</b>	Electricity Regulation Act 1999 (ERA)	S.I. No. 445/2000 – European Communities (Internal Market in Electricity) Regulations, 2000	S.I. No. 147/2011 – European Communities (Renewable Energy) Regulations, 2011
<b>Abbreviated form</b>	ERA	S.I. No. 445/2000	S.I. No. 147/2011
<b>Entry into force</b>	11.07.1999	20.12.2000	01.04.2011
<b>Last amended on</b>	09.06.2010		
<b>Future amendments</b>			
<b>Purpose</b>	This act establishes general provisions to regulate the energy market.	This regulation includes provisions to regulate the energy market.	This regulation transposes European Directive 2009/28/EC into Irish law.
<b>Relevance for renewable energy</b>	Section 39 ERA constitutes the legal basis for the support schemes for renewable energy.	It also applies to the use of the grid by electricity from renewable sources.	This regulation applies to renewable energy only.
<b>Link to full text of legal source (original language)</b>	<a href="http://www.irishstatutebook.ie/1999/en/act/pub/0023/index.html">http://www.irishstatutebook.ie/1999/en/act/pub/0023/index.html</a>	<a href="http://www.irishstatutebook.ie/2000/en/si/0445.html#parti">http://www.irishstatutebook.ie/2000/en/si/0445.html#parti</a>	<a href="http://www.attorneygeneral.ie/esi/2011/B28381.pdf">http://www.attorneygeneral.ie/esi/2011/B28381.pdf</a>

<b>Name of legal source (original language)</b>	
<b>Full name</b>	CER/04/381 – Direction on Resuming Connection Offers to Wind Generators
<b>Abbreviated form</b>	CER/04/381
<b>Entry into force</b>	23.12.2004
<b>Last amended on</b>	
<b>Future amendments</b>	
<b>Purpose</b>	This CER direction abolishes the grid connection procedure applicable until 2004 and introduces the so-called Group Processing Approach for wind power plants.
<b>Relevance for renewable energy</b>	This decision introduces the group processing approach to the connection of wind power plants.
<b>Link to full text of legal source (original language)</b>	<a href="http://www.cer.ie/GetAttachment.aspx?id=dab4d3f3-354d-465d-908f-23f0f7df2b3a">http://www.cer.ie/GetAttachment.aspx?id=dab4d3f3-354d-465d-908f-23f0f7df2b3a</a>
<b>Link to full text of legal source (English)</b>	

<b>Name of legal source (original language)</b>			
<b>Full name</b>	CER/05/049 - Group Processing Approach for Renewable Generator Connection Applications. Connection and Pricing Rules. Direction to System Operators	CER/08/260 – Criteria for Gate 3 Renewable Generators Offers & Related Matters. Direction to the System Operators	CER/09/099 – Treatment of Small, Renewable and Low Carbon Generators outside the Group Processing Approach
<b>Abbreviated form</b>	CER/05/049	CER/08/260	CER/09/099
<b>Entry into force</b>	06.04.2005	16.12.2008	24.07.2009
<b>Last amended on</b>			
<b>Future amendments</b>			
<b>Purpose</b>	This direction includes implementing regulations for the Group Processing Approach to the connection of renewable energy systems.	This direction specifies rules to implement the latest round of connection offers ("Gate 3") issued under the Group Processing Approach.	This decision document specifies the situations in which small renewable energy systems may be processed outside the Group Processing Approach.
<b>Relevance for renewable energy</b>	This direction applies to the connection of renewable energy systems only.	This direction sets out rules for the connection process for renewable energy systems under Gate 3.	In accordance with this decision, small renewable energy systems may be treated outside the Group Processing Approach if they meet certain requirements.
<b>Link to full text of legal source (original language)</b>	<a href="http://www.cer.ie/GetAttachment.aspx?id=2c308364-7459-4bdd-943a-6e5de23a749f">http://www.cer.ie/GetAttachment.aspx?id=2c308364-7459-4bdd-943a-6e5de23a749f</a>	<a href="http://www.cer.ie/GetAttachment.aspx?id=54270766-56dc-4ddf-b0a1-d3be66a23df1">http://www.cer.ie/GetAttachment.aspx?id=54270766-56dc-4ddf-b0a1-d3be66a23df1</a>	<a href="http://www.cer.ie/GetAttachment.aspx?id=eda74811-2364-4ec4-865e-7c3d84023114">http://www.cer.ie/GetAttachment.aspx?id=eda74811-2364-4ec4-865e-7c3d84023114</a>

### 3. Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
<b>Department of Communications, Energy and Natural Resources (DCENR)</b>	<a href="http://www.dcenr.gov.ie/">http://www.dcenr.gov.ie/</a>		+353 167 82 000	customer.service@dcenr.gov.ie
<b>Sustainable Energy Authority of Ireland (SEAI)</b>	<a href="http://www.seai.ie/">http://www.seai.ie/</a>		+353 1 8082100	Info@seai.ie
<b>EirGrid – transmission system operator</b>	<a href="http://www.eirgrid.com/">http://www.eirgrid.com/</a>		+353 167 717 00	info(at)eirgrid.com
<b>ESB Networks – distribution system operator</b>	<a href="http://www.esb.ie/esbnetworks/home/index.jsp">http://www.esb.ie/esbnetworks/home/index.jsp</a>		+353 21 49 47 260	esbnetworks(at)esb.ie
<b>Commission for Energy Regulation (CER) – regulatory authority for energy</b>	<a href="http://www.cer.ie/en/renewables-overview.aspx">http://www.cer.ie/en/renewables-overview.aspx</a>		+353 1 40 00 8 00	Info(at)cer.ie

#### 4. Connection to the grid

<p><b>Legal source</b></p>	<ul style="list-style-type: none"> <li>• ERA</li> <li>• CER/04/381</li> <li>• CER/05/049</li> <li>• CER/08/260</li> <li>• CER/09/099</li> </ul>
<p><b>Overview</b></p>	<p>The Irish grid operators are obliged to provide a connection offer to every operator of a (renewable) energy system if the system operator has applied for such a connection (Sec. 34 (1) ERA). A system operator's contractual claim for connection arises when the connection agreement is concluded.</p> <p><b>Entitled party.</b> The entities entitled are the system operators (4 CER/05/049).</p> <p><b>Obligated party.</b> The parties obligated to establish connection are the grid operators (distribution/transmission system operator) (Sec. 34 (1) ERA).</p> <p>Since 2004, renewable energy systems have been connected within the so-called Group Processing Approach according to a decision by the Irish regulatory authority CER (CER/04/381, Section 4 of CER/05/049). Under this approach, grid connection applications are processed in groups, through a series of so-called "Gates", and systems are connected in groups as well. The current iteration, Gate 3, is processing applications equating to 3,900 MW of renewable capacity. Small systems (in general below 5 MW; wind energy systems below 0.5 MW) may be treated outside the Group Processing Approach if their connection is in the public interest and the regulatory authority agrees to grant exemption (4.4 CER/05/049, CER/09/099).</p>
<p><b>Procedure</b></p>	<p><b>Procedure</b></p> <p>The connection process for renewable energy systems usually comprises the following steps:</p> <ul style="list-style-type: none"> <li>• The system operator applies to the grid operator for connection.</li> <li>• The grid operator makes a connection offer.</li> <li>• The system operator must accept the offer within 50 working days.</li> <li>• Group Processing Approach: The connection application joins the application queue. Applications are processed and systems are connected in groups.</li> <li>• Small-scale systems: Small systems are treated outside the Group Processing Approach if they meet certain requirements.</li> </ul> <p>The currently applicable procedure is defined in the ERA and in a decision by the regulatory authority (CER/08/260).</p>
	<p><b>Deadlines</b></p> <p>The grid connection offer shall specify a term for connection or a deadline by which the system shall be connected to the grid (CER/04/319, 4.2. CER/05/049). Offers for connection to the transmission grid may include "milestones" which the system operator has to achieve within the period from the connection agreement to the establishment of connection (4.2. CER/05/049). The possibility to define milestones does not exist for offers for connection to the distribution grid.</p>

		A system operator must accept the grid operator's connection offer within 50 working days (7.5 CER/08/260).
	<b>Obligation to provide information</b>	
<b>Priority to renewable energy (qualitative criteria)</b>	( ) Priority to renewable energy ( x ) Non-discrimination	<ul style="list-style-type: none"> <li>• <b>Non-discriminatory connection.</b> The grid operator is obliged to connect renewable energy systems without discriminating between any persons or classes of persons (Sec. 34 (8) ERA). The regulatory authority may decide that the connection of renewable energy systems shall be given priority (Sec. 9 (5) (e) ERA). So far, the regulatory authority has not taken such a decision.</li> <li>• <b>Group Processing Approach.</b> However, renewable energy systems are connected under the so-called Group Processing Approach (GPA). The GPA aims to speed up the connection of renewable energy systems by providing standardised procedural steps, and to increase connection security. This procedure was especially designed for RES energy systems (1 CER /05/049).</li> <li>• <b>Processing outside the Group Processing Approach:</b> Small systems may be treated outside the GPA. In general, this rule applies where systems have a capacity of up to 5 MW (wind energy systems are considered small if they have a capacity of up to 0.5 MW), connection is in the public interest, a connection can be established faster outside the GPA, and the regulatory authority has granted exemption from the GPA (4.4 CER/05/049, CER/09/099).</li> </ul>
<b>Capacity limits (quantitative criteria)</b>	<p>The total capacity of newly connected systems is limited, as the Gates have a planned maximum size. Gate 3 (current iteration) provides for connection offers for 3900 MW of renewable capacity. This capacity will be sufficient to reach Ireland's renewable target of 40% of electricity consumption from renewable sources by 2020 (4.4 CER/08/260).</p> <p>It should be noted that the applicants for Gate 3 have already been selected. New applications will be processed only when all connection offers under Gate 3 have expired (50 working days after the connection offer was sent to the applicant) and Gate 3 can thus provide additional connection capacity, or when a new selection process ("Gate 4") is initiated (5.13, 7.5 CER/08/260).</p> <p>The maximum gate capacity does not apply where small systems are processed outside the GPA.</p>	
<b>Funding</b>		
	<b>State</b>	
	<b>Consumers</b>	
	<b>Grid operator</b>	
	<b>System operator</b>	The system operators are to bear the costs of connecting their systems to the grid (Sec. 34 (2) (d) ERA in conjunction with 4.8 2) CER/05/049).

	Distribution mechanism	
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## 5. Use of the grid

<b>Legal source</b>	<ul style="list-style-type: none"> <li>• ERA</li> <li>• S.I. No. 147/2011</li> <li>• CER/05/049</li> </ul>	
<b>Overview</b>	<p>The Irish grid operators are obliged to provide an offer for use to every operator of a (renewable) energy system if the system operator has applied for use of the grid (Sec. 34 (1) ERA). A system operator's contractual claim for use of the grid arises when the grid use agreement is concluded.</p> <p><b>Entitled party.</b> The entities entitled are the system operators (4 CER/05/049).</p> <p><b>Obligated party.</b> The entity obligated is the grid operator (Sec. 34 (1) ERA).</p> <p>In accordance with Sec. 9 (5) (e) ERA and Sec. 4 (1) (a), (b) S.I. No. 147/2011, renewable energy shall be given priority dispatch.</p>	
<b>Procedure</b>	<b>Procedure</b>	<p>In order to be able to use the grid, a system operator shall apply to the grid operator for use of the grid (Sec. 34 (1) ERA). The grid operators are obliged by law to make an offer for use of the grid (Sec. 34 (1) ERA). Where a system operator accepts this offer, this operator is contractually entitled against the other party to use the grid.</p> <p>Connection to and use of the grid are usually covered by a single agreement.</p>
	<b>Deadlines</b>	The period of entitlement to use of the grid is defined in the grid use agreement between the system operator and the grid operator.
	<b>Obligation to provide information</b>	
<b>Priority to renewable energy (qualitative criteria)</b>	( x ) Priority to renewable energy ( ) Non-discrimination	According to Sec. 9 (5) (e) ERA and Sec. 4 (1) (a), (b) S.I. No. 147/2011, renewable energy shall be given priority dispatch unless giving priority to renewable energy poses a risk to the security and stability of the grid.
<b>Grid stability</b>		
<b>Funding</b>		
	<b>State</b>	
	<b>Consumers</b>	
	<b>Grid operator</b>	
	<b>System operator</b>	The costs arising from the use of the grid are borne by the system operators, who have to pay service charges (34 (4) ERA in conjunction with 4.8 (5) CER/05/049).
	<b>Distribution mechanism</b>	

## 6. Grid expansion

<b>Legal source</b>	<ul style="list-style-type: none"> <li>• ERA</li> <li>• S.I. Nr. 445/2000</li> </ul>	
<b>Overview</b>	<p>The Irish grid operators are generally obliged to operate and develop the grid system (Sec. 8 (1), Sec. 22 (2) S.I. No. 445/2000). However, this obligation does not confer to individual system operators the right to demand from the grid operator that he should expand or develop his grid to connect a given system to the grid or to export the electricity produced by a given system to the grid.</p> <p>As far as connection to the grid is concerned, the grid operator shall bear the so-called „deep costs“, i.e. the costs related to a development of the grid which is required to connect additional renewable energy systems to the grid.</p> <p><b>Obligated party.</b> The obligated entities are the grid operators (Sec. 8 (1), Sec. 22 (2) S.I. No. 445/2000).</p>	
<b>Procedure for system operators</b>	<b>Procedure</b>	The system operators are not entitled to the development of the grid.
	<b>Enforcement of claims</b>	
	<b>Deadlines</b>	
	<b>Obligation to provide information</b>	
<b>Incentives for grid expansion</b>		
<b>Funding</b>		
	<b>State</b>	
	<b>Consumers</b>	
	<b>Grid operator</b>	The grid operator shall bear the costs arising from grid development works required to connect additional renewable energy systems to the grid and to ensure the proper operation of the grid.
	<b>System operator</b>	The system operators do not bear any development costs. This means that Ireland employs a shallow-cost model, i.e. the system operators bear only the connection costs and, if necessary, the costs of establishing a direct connection between a system and the nearest available grid connection point. They need not cover any other costs.
	<b>Distribution mechanism</b>	

<p><b>Grid studies</b></p>	<p>The 2008 All-Island Grid Study</p> <p>The Irish transmission system operator EirGrid published the "Grid 25-Report", which was officially acknowledged by the Irish government and provides an overview of which reinforcement works to the Irish transmission grid are required to meet the national renewable target of 40% by 2020: <a href="http://www.eirgrid.com/media/Grid%2025.pdf">http://www.eirgrid.com/media/Grid%2025.pdf</a>.</p> <p>According to Sec. 38 ERA and Condition 7 of its licence, the Irish TSO is obliged to publish a so-called "Transmission Forecast Statement", which analyses how the transmission grid will develop during the next seven years and describes the reinforcement works to be implemented:  <a href="http://www.eirgrid.com/aboutus/publications/transmissionforecaststatement2011-2017/">http://www.eirgrid.com/aboutus/publications/transmissionforecaststatement2011-2017/</a></p>
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