

Research RES LEGAL – Grid issues

Country: Ireland

1. Overview

Overview of grid issues	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.
Connection to the grid	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. 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
Use of the grid	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.
Grid expansion	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.
Statutory provisions	<ul style="list-style-type: none"> • ERA (Electricity Regulation Act 1999) last amended by S.I. No. 513 of 2011 (Electricity Regulation Act 1999 (Public Service Obligations) (Amendment) Order 2011.S.I. No. 445/2000 (European Communities (Internal Market in Electricity) Regulations, 2000) • S.I. No. 147/2011 (European Communities (Renewable Energy) Regulations, 2011)CER/04/381 (Direction on Resuming Connection Offers to Wind Generators) • 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)

2. Basic information on legal sources

Name of legal source (original language)	Electricity Regulation Act 1999 (ERA)	Statutory Instrument No. 445/2000 – European Communities (Internal Market in Electricity) Regulations, 2000	Statutory Instrument No. 147/2011 - European Communities (Renewable Energy) Regulations, 2011
Name of legal source (full name)			
Name (English)			
Abbreviated form	ERA	S.I. No. 445/2000	S.I. No. 147/2011
Entry into force	11.07.1999	20.12.2000	01.04.2011
Last amended on	11.10.2011		
Future amendments	Annually		
Purpose	General law regulating the energy market.	This regulation includes provisions to regulate the energy market.	This regulation transposes European Directive 2009/28/EC into Irish law.
Relation to renewable energy	Section 39 of the 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.
Link to full text of legal source (original language)	http://www.irishstatutebook.ie/1999/en/act/pub/0023/index.html	http://www.irishstatutebook.ie/2000/en/si/0445.html#parti	http://www.attorneygeneral.ie/es/2011/B28381.pdf
Link to full text of legal source (English)			

Name of legal source (original language)	CER/04/381 – Direction on Resuming Connection Offers to Wind Generators	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
Name of legal source (full name)			
Name (English)			
Abbreviated form	CER/04/381	CER/05/049	CER/08/260
Entry into force	23.12.2004	06.04.2005	16.12.2008
Last amended on			
Future amendments			
Purpose	This CER direction abolishes the grid connection procedure applicable until 2004 and introduces the so-called Group Processing Approach for wind power plants.	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.
Relation to renewable energy	This decision introduces the group processing approach to the connection of wind power plants.	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.
Link to full text of legal source (original language)	http://www.cer.ie/GetAttachment.aspx?id=dab4d3f3-354d-465d-908f-23f0f7df2b3a	http://www.cer.ie/GetAttachment.aspx?id=2c308364-7459-4bdd-943a-6e5de23a749f	http://www.cer.ie/GetAttachment.aspx?id=54270766-56dc-4ddf-b0a1-d3be66a23df1
Link to full text of legal source (English)			

Name of legal source (original language)	CER/09/099 – Treatment of Small, Renewable and Low Carbon Generators outside the Group Processing Approach		
---	--	--	--

Name of legal source (full name)			
Name (English)			
Abbreviated form	CER/09/099		
Entry into force	24.07.2009		
Last amended on			
Future amendments			
Purpose	This decision document specifies the situations in which small renewable energy systems may be processed outside the Group Processing Approach.		
Relation to renewable energy	In accordance with this decision, small renewable energy systems may be treated outside the Group Processing Approach if they meet certain requirements.		
Link to full text of legal source (original language)	http://www.cer.ie/GetAttachment.aspx?id=eda74811-2364-4ec4-865e-7c3d84023114		
Link to full text of legal source (English)			

3. Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Department of Communications, Energy and Natural Resources (DCENR)	http://www.dcenr.gov.ie/		+353 167 82 000	
Sustainable Energy Authority of Ireland (SEAI)	http://www.sei.ie/		+353 1 808 21 00	renewables(at)reio.ie
EirGrid – transmission system operator	http://www.eirgrid.com/		+353 167 717 00	info(at)eirgrid.com
ESB Networks – distribution system operator	http://www.esb.ie/esbnetworks/en/home/index.jsp		+353 21 49 47 260	esbnetworks(at)esb.ie
Commission for Energy Regulation (CER)	http://www.cer.ie/en/renewables-overview.aspx		+353 140 008 00	Info(at)cer.ie
Renewable Energy Information Office (REIO)	http://www.seai.ie/Renewables/REIO/		+ 353 023 884 21 93	renewables@reio.ie
The Association of Irish Energy Agencies (AIEA)	http://www.aiea.ie/home		+353 52 7443090	info@aiea.ie
Irish Wind Energy Association (IWEA)	http://www.iwea.com/		+353 45 899341	office@iwea.com

4. Connection to the grid

Abbreviated form of legal sources	<ul style="list-style-type: none">• ERA• CER/04/381• CER/05/049• CER/08/260• CER/09/099	
Overview	<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>Entitled party. The entities entitled are the system operators (4 CER/05/049).</p> <p>Obligated party. 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>	
Procedure	Procedure	<p>The connection process for renewable energy systems usually comprises the following steps:</p> <ul style="list-style-type: none">• The system operator applies to the grid operator for connection.• The grid operator makes a connection offer.• The system operator must accept the offer within 50 working days.• Group Processing Approach: The connection application joins the application queue. Applications are processed and systems are connected in groups.• Small-scale systems: Small systems are treated outside the Group Processing Approach if they meet certain requirements. <p>The currently applicable procedure is defined in the ERA and in a decision by the regulatory authority (CER/08/260).</p>
	Deadlines	<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</p>

		<p>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> <p>A system operator must accept the grid operator's connection offer within 50 working days (7.5 CER/08/260).</p>
	Obligation to provide information	
Priority to renewable energy (qualitative criteria)	() Priority to renewable energy (x) Non-discrimination	<ul style="list-style-type: none"> • Non-discriminatory connection. 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. • Group Processing Approach. 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). • Processing outside the Group Processing Approach: 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).
Capacity limits (quantitative criteria)	<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). 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>	
Funding		
	State	
	Consumers	

	Grid operator	
	System operator	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	

5. Use of the grid

Abbreviated form of legal sources	<ul style="list-style-type: none"> • ERA • S.I. No. 147/2011 • CER/05/049 	
Overview	<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>Entitled party. The entities entitled are the system operators (4 CER/05/049).</p> <p>Obligated party. 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>	
Procedure	Procedure	<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>
	Deadlines	The period of entitlement to use of the grid is defined in the grid use agreement between the system operator and the grid operator.
	Obligation to provide information	
Priority to renewable energy (qualitative criteria)	(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.
Grid stability		
Funding		
	State	
	Consumers	
	Grid operator	
	System operator	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).

	Distribution mechanism	
--	------------------------	--

6. Grid expansion

Abbreviated form of legal source	<ul style="list-style-type: none"> • ERA • S.I. No. 445/2000 	
Overview	<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>Obligated party. The obligated entities are the grid operators (Sec. 8 (1), Sec. 22 (2) S.I. No. 445/2000).</p>	
Procedure	Procedure	The system operators are not entitled to the development of the grid.
	Enforcement of claims	
	Deadlines	
	Obligation to provide information	
Incentives for grid expansion		
Funding		
	State	
	Consumers	
	Grid operator	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.
	System operator	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.
	Distribution mechanism	

<p>Grid studies</p>	<p>The 2008 All-Island Grid Study comprised of four work streams (Renewable Energy Resource Assessment, High Level Assessment of Suitable Generation Portfolios for the All-Island System in 2020, Wind Variability Management Studies, and Analysis of Impacts and Benefits) is available at: http://www.dcenr.gov.ie/Energy/North-South+Co-operation+in+the+Energy+Sector/All+Island+Electricity+Grid+Study.htm</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: www.eirgrid.com/media/Grid%2025.pdf.</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: www.eirgrid.com/aboutus/publications/transmissionforecaststatement2011-2017/</p>
----------------------------	---