
Consultation Paper

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Regulating Water, Energy and Energy Safety in the Public Interest
Executive Summary

Commission Regulation (EU) 2016/631 Requirements for Generators (RfG)\(^1\) of 14 April 2016 is one of a suite of European network codes and guidelines that have been developed following implementation of the European Third Energy Package. The RfG outlines tasks and responsibilities for National Regulatory Authorities, generation owners, network operators and system operators.

The RfG allows generators, or power-generating modules’ (PGMs)\(^2\), to seek derogations from the requirements of the RfG. This consultation paper sets out the CER’s proposed criteria that should be applied when a derogation from one or more provisions of the RfG is considered.

Derogation requests from Power generating facility owners or prospective owners are to be filed with the relevant System Operator (DSO or TSO). Additionally relevant System Operators can also file requests for a derogation from the RfG with the Regulatory Authority for classes of power generating modules connected or to be connected to their network. The RfG gives the CER the role of reviewing, and making decisions on, all RfG derogation requests in Ireland.

The CER is required to consult upon the criteria to be used when assessing derogation requests and this paper outlines (in section 2.1) the proposed criteria that the CER would use when assessing derogation requests. Taking into account the CER’s duties under the required legislation and the requirements of the RfG, the CER proposes that the following criteria be applied when a derogation from one or more provisions of the RfG is considered:

- The Impact on the Electricity System of Non-compliance;
- The Reason for Non-compliance/Technical Limitation;
- The Level of Non-compliance and Efforts Made to Improve/Achieve/Maximise Compliance;
- The Costs Involved to Achieve Compliance;
- The Impact on the interests of consumers/other Parties;
- The Potential for Discriminating Treatment of Existing PGMs;
- The Effect on Cross-border Trade;
- The Cost-benefit Analysis Pursuant to Requirements of the RfG Article 39;

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\(^2\) A ‘Power-generating module’ is defined in the RfG as either a ‘synchronous power-generating module’ or a ‘power park module’. A ‘synchronous power generating module’ means an indivisible set of installations which can generate electrical energy such that the frequency of the generated voltage, the generator speed and the frequency of network voltage are in constant ratio and thus in synchronism. A ‘power park module’ means a unit or ensemble of units generating electricity which is either non-synchronously connected to the network or connected through power electronics, and that also has a single connection point to the transmission system, distribution system including closed distribution system or HVDC system.
The Required Duration of Derogation.

Existing Power generating modules are not subject to the requirements of the RfG except where a type C or D PGM is modified to the extent where its connection agreement has to be substantially revised. In addition the National Regulatory Authority may decide, following an application by the TSO to require compliance by an existing PGM.

The CER welcomes comments on the proposed criteria to assess an application for a derogation pursuant to Articles 62 and 63 of the RfG. The CER will consider the submissions it receives prior to making a final decision. In summary the CER asks the following questions:

1. Do you agree with the CER’s proposed RfG criteria for derogations assessment and that they properly reflect the requirements set out in the RfG?

2. Are there other derogation criteria the CER should consider in relation to compliance of PGMs to the RfG?

3. Are there any other issues the CER should consider in relation to this matter?

Following the public consultation the CER will notify the European Commission of the CER’s decision and will publish its decision on the RfG derogation assessment criteria on the CER’s website.

Responses to the consultation should be sent to rfg@cer.ie by 17.00 Friday, 10th March 2017.
Public Impact Statement

The RfG should help make it easier and more efficient to operate the electricity system, by introducing a common, clear set of requirements which every new generator connecting to the electricity network across Europe will need to meet. The swift completion of a fully functioning and interconnected internal energy market in Europe is crucial to maintaining security of energy supply, increasing competitiveness and ensuring that all consumers can purchase energy at affordable prices.

The RfG should also assist the creation of a pan-European market for generation technology, by increasing the commonality of generator requirements. This should help improve competition between manufacturers and make it cheaper to build PGM technology, thus reducing costs for consumers.

Together, the network codes will facilitate the achievement of the three objectives of the Third Package:

- The secure operation of European power systems;
- The integration of large volumes of low carbon generation; and
- The creation of a single European electricity market.
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Glossary of Terms and Abbreviations

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<thead>
<tr>
<th>Abbreviation or Term</th>
<th>Definition or Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSO</td>
<td>Transmission System Operator</td>
</tr>
<tr>
<td>DSO</td>
<td>Distribution System Operator</td>
</tr>
<tr>
<td>PGM</td>
<td>Power-generating modules</td>
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</tbody>
</table>
1 Introduction

1.1 Commission for Energy Regulation

The CER is Ireland’s independent energy and water regulator. The CER was established in 1999 and now has a wide range of economic, customer protection and safety responsibilities in energy. The CER is also the regulator of Ireland's public water and wastewater system.

Further information on the CER’s role and relevant legislation can be found in here.

1.2 Background

The European network codes intend to deliver a harmonised set of rules for the operation of the gas and electricity sector in Europe. Commission Regulation (EU) 2016/631 of 14 April 2016 (RfG) is one of a suite of European Electricity network codes and guidelines that have been developed following implementation of the Third Package.\(^3\) This consultation paper is driven by the Requirements for Grid Connection of Generators network code, which specifies the technical connection requirements that new generators must adhere to. There are seven other European Electricity network codes:

- Demand Connection Code network code (DCC) – specifies the technical connection requirements that new distribution networks connecting to the transmission system, new demand users connecting to the transmission system and new customers wanting to provide demand side response services, must adhere to;

- High Voltage Direct Current network code (HVDC) – specifies the technical connection requirements that new long distance DC connections, new links between different synchronous areas (e.g. interconnectors) and new DC-connected generation (e.g. offshore wind farms) must adhere to;

- Transmission System Operation Guideline (SOGL) – specifies the requirements for assessing the adequacy and operational security of the interconnected power system and for planning outages required by TSO’s and grid users when they have cross borders impacts on power flows;

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• Emergency and Restoration network code (ER) – deals with the procedures and remedial actions to be applied in the Emergency, Blackout and Restoration states;

• Electricity Balancing Guideline (EB) – defines the roles and responsibilities of TSOs and market participants in balancing electricity networks, and will drive harmonisation of balancing markets across Europe;

• Capacity Allocation and Congestion Management network code (CACM) – specifies the requirements for operating pan-European day ahead and intraday markets, and sets out the processes for determining how capacity is calculated, congestion is managed and the criteria and process for reviewing bidding zones;

• Forward Capacity Allocation network code (FCA) – specifies the requirements for calculating and buying capacity in forward markets (before day ahead). It also sets rules for hedging price risk between bidding zones in these markets.

The RfG entered into force on 17 May 2016. The RfG is one of three regulations related to grid connection that specify the requirements that apply to power-generating facilities seeking to connect to the electricity network (at transmission or distribution level). The RfG sets out the technical requirements that will apply to the majority of new generation connections (for any power generating module greater than 800W) and does not apply to existing generators. Existing Power generating modules (PGM) are not subject to the requirements of the RfG except where a type C or D PGM is modified to the extent where its connection agreement has to be substantially revised. In addition the National Regulatory Authority may decide, following an application by the TSO to require compliance by an existing PGM.

The RfG will apply to all generators with a maximum generating capacity above 800W (Type A, B, C & D), the below table details the PGM classes for Ireland and Northern Ireland:

<table>
<thead>
<tr>
<th>Type A</th>
<th>Type B</th>
<th>Type C</th>
<th>Type D</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8kW – 0.09 MW</td>
<td>0.1 – 4.99 MW</td>
<td>5 – 9.99 MW</td>
<td>10 MW &lt;</td>
</tr>
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</table>

The RfG allows PGMs and relevant system operators to seek derogations from the CER from one or more of the provisions of the RfG. The RfG contains articles that describe the process for derogating from the RfG. Derogation requests from Power generation facility owners or prospective owners are to be filed with the relevant System Operator.

4 See Article 4 of the RfG
5 A ‘Power-generating module’ is defined in the RfG as either a ‘synchronous power-generating module’ or a ‘power park module’. A ‘synchronous power generating module’ means an indivisible set of installations which can generate electrical energy such that the frequency of the generated voltage, the generator speed and the frequency of network voltage are in constant ratio and thus in synchronism. A ‘power park module’ means a unit or ensemble of units generating electricity which is either non-synchronously connected to the network or connected through power electronics, and that also has a single connection point to the transmission system, distribution system including closed distribution system or HVDC system.
6 Articles 60-65 of RfG
(DSO or TSO). Additionally relevant System Operators can also file requests for a derogation from the RfG with the Regulatory Authority for classes of power generating modules connected or to be connected to their network. The RfG gives the CER the role of reviewing, and making decisions on the RfG derogation requests. At the end of the implementation phase, the CER may review and if necessary revise and refine the criteria to assess derogation requests under the RfG. The RfG provides for the revision and modification of the criteria, at most once a year.

The CER has nine months from the date of entry into force to consult and decide upon the criteria that the CER will use to assess derogation applications. The CER notes that the full implementation of the requirements of the RfG will entail changes to Grid Code requirements, connection contracts etc for new generators, which the TSO and DSO are currently assessing. As this process is still ongoing the CER has developed and is proposing derogation criteria that aim to cover the high level assessments that will need to be undertaken when reviewing derogation requests. The full suite of implementation processes and requirements for the RfG are required to be in place by 17 May 2018.

This consultation paper requests comments on the CER’s proposed criteria for granting derogations pursuant to Articles 62 and 63 of the RfG.

1.3 Related documents

- [Network Code on Requirements for Generators](#)

1.4 Structure of this paper

This consultation paper is structured as follows:

- **Section 1**, introduction and background.
- **Section 2**, provides an overview of the proposed RfG derogation criteria.
- **Section 3**, outlines conclusions and next steps.

1.5 Responding to this Consultation

The deadline for submitting responses to the CER regarding the criteria for granting derogations pursuant to Articles 62 and 63 of the RfG is 17.00 Friday, 10th March 2017. Responses to this consultation should be sent to [rfg@cer.ie](mailto:rfg@cer.ie) at the CER.

In this paper the CER is consulting on the criteria that the CER should use to assess derogation requests under the RfG. The CER is not consulting or amending the criteria used to assess the Grid and Distribution Codes derogations.

Moreover, please note that the CER intends to publish all responses received unless it is marked confidential. Where your responses includes confidential information please put it in a separate annex where possible.
2 Criteria for Derogation

2.1 Proposed Criteria for Derogation Request

Power-generating facility owners, or prospective owners, in accordance with the RfG, may request a derogation to one or several requirements of the RfG for PGMs within their facilities. A request for a derogation should be submitted to the relevant System Operator. The CER will seek the view of the relevant System Operator(s) before reviewing an application for a derogation. Taking into account the CER’s duties under the required legislation and the requirements of the RfG, the CER proposes that the following criteria be applied when a derogation from one or more provisions of the RfG is considered:

1. **The Impact on the Electricity System of Non-compliance**
   The applicant has demonstrated that the derogation request will not have adverse effects on the electricity network system.

2. **The Reason for Non-compliance/Technical Limitation**
   The reason for non-compliance provided by the applicant is plausible.

3. **The Level of Non-compliance and Efforts Made to Improve/Achieve/Maximise Compliance**
   The applicant has showed that the applicant has investigated all solutions to non-compliance and has made reasonable efforts to maximise compliance.

4. **The Costs Involved to Achieve Compliance**
   The applicant has evidenced the materiality of the issue and demonstrated that the cost involved to achieve compliance is material and sufficiently high to justify a derogation.

5. **The Impact on the interests of consumers/other Parties**
   The applicant has proved that the derogation request will not have negative impact on the interest of consumers (e.g. competition, sustainable development, health and safety and other affected parties).

6. **The Potential for Discriminating Treatment of Existing PGMs**
   The applicant has confirmed with the relevant system operator that none of the other existing power-generating facility owners have already demonstrated that it is possible to comply with the relevant provision of the RfG.

7. **The Effect on Cross-border Trade**
   The applicant has demonstrated that the requested derogation would have no adverse effect on cross-border trade.
8. **The Cost-benefit Analysis Pursuant to Requirements of the RfG Article 39**

The applicant has presented a robust, economic case that supports the application for a derogation.

9. **The Required Duration of Derogation**

The applicant has demonstrated that the requested derogation time period is appropriate.
3 Conclusion & Next Steps

The CER welcomes comments on the proposed criteria to assess an application for a derogation pursuant to Articles 62 and 63 of the RfG. The CER will consider the submissions it receives prior to making a final decision. In summary the CER asks the following questions:

1. Do you agree with the CER’s proposed RfG criteria for assessment of derogations and that they properly reflect the requirements set out in the RfG?
2. Are there other derogation criteria the CER should consider in relation to compliance of PGMs to the RfG?
3. Are there any other issues the CER should consider in relation to this matter?

Following the public consultation the CER will notify the European Commission of the CER’s decision and will publish its decision on the RfG derogation assessment criteria on the CER’s website.

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