

ACER draft amendments to the Network Code on Requirements for Generators

Fields marked with * are mandatory.

Introduction

This consultation aims to present ACER's draft amendments to the Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a **Network Code on Requirements for Grid Connection of Generators** ('NC RfG').

For draft amendments concerning Network Code on Demand Connection ('NC DC'), please go to the respective form: [NC DC](#).

Responses to this consultation should be submitted by 25 September 2023.

Background

Important developments in the policies of decarbonisation of the European Union (EU) energy and transport sectors have taken place since the inception of the development of the first European Grid Connection Network Codes (GC NCs) in 2012.

In the framework of the Grid Connection European Stakeholder Committee (GC ESC), the European Commission proposed for ACER to initiate the process towards the amendment of the existing GC NCs in September 2022. The amendment process, as presented to the GC ESC is outlined in the Figure below:



Following the scoping phase, ACER published the Policy Paper on the revision of the network code on requirements for grid connection of generators and the network code on demand connection in September 2022. The Policy Paper aimed to transparently indicate to stakeholders the key policy areas in which amendments were to be expected.

[Access the ACER Policy Paper on the revision of the NC RfG and NC DC.](#)

As a next step, ACER launched the Public Consultation to gather stakeholders' views and concrete amendment proposals regarding the GC NCs. The stakeholders could submit their inputs by 21 November 2022.

[Access the results of the Public Consultation on the amendments to the grid connection network codes.](#)

Additionally, in the preparation of the draft amendment proposals, ACER organised three dedicated public workshops, namely:

- [electromobility, power-to-gas demand units and heat-pumps](#) (held on 17 April 2023);
- [rate of change of frequency and grid forming capabilities](#) (held on 10 May 2023); and
- [electricity storage](#) (held on 11 May 2023).

After the evaluation of stakeholders' inputs, ACER has formulated its own proposal for the amendments of the GC NCs which is subject to this public consultation.

Stakeholder's details

ACER is highly committed in processing personal data in a lawful way.

Find out more how we process your data: <https://www.acer.europa.eu/the-agency/about-acer/data-protection>

* Name of the stakeholder:

EDP

* Contact person:

[REDACTED]

* Contact person's email address:

[REDACTED]

* Country of the stakeholder's headquarters or main country of operation:

Portugal

* Type of the stakeholder:

- ☐ Generator (including association)
- ☐ Consumer (including association)
- ☐ Transmission system operator (including association)
- ☐ Distribution system operator (including association)
- ☐ Manufacturers (including association)
- ☐ Academia/research institution
- ☐ Regulatory authority
- ☒ Other (please, elaborate)

Please, elaborate on your answer above, if necessary:

Vertically integrated utility

* Do you consent to the publication of the stakeholder's name?

- ☒ Yes
- ☐ No

* Do you consent to the publication of provided answers?

- ☒ Yes
- ☐ No (please, note that your answer, without your name and organization, may be shared with the EU institutions and national authorities)

Instructions

Stakeholders are invited to submit their comments to the NC RfG articles amended by ACER in three mandatory steps:

1. by downloading the ACER draft amendments in the Word file provided below. The file can also be accessed on the right panel of the consultation form under the Background Documents;
2. by commenting on the ACER's draft amendments through this online consultation form and adding their alternative text proposals to the table, if any; and
3. by uploading the alternative amendment proposals to the **entire NC RfG** using the Track Changes mode in the ACER draft amendments file downloaded from **Step 1**.

Where the stakeholder does not have any comments regarding the amendments, the relevant cells in the consultation form can be left blank.

The mandatory steps for submitting the comments are listed below.

Step 1

Please see ACER's draft amendments in the Word file provided below. The file can also be accessed on the right panel of the consultation form under the Background Documents.

[Download ACER draft amendments to the NC RfG here](#)

Step 2

Kindly note that this consultation form follows the structure of the NC RfG amended legal text provided by ACER in Step 1.

The paragraph numbering in the form reflects paragraph numbers in the amended legal text. Nevertheless, stakeholders can comment on the deleted paragraphs/articles/titles, which are marked as [deleted]. New articles and titles are marked as [new].

Please use this form to comment on ACER draft amendments and/or to provide an alternative text proposal. The instructions are the following:

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below.

 Includes new articles

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 1	1	2
Article 3		
Article 4		
Article 4a [new]		
Article 5		
Article 6		
Article 7		
Article 8		
Article 9		
Article 10		
Article 11		
Article 12		

Please write your amendment proposals, if any, in the table below.

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

 The maximum file size is 1 MB

Select file to upload

1. Leave comments on the ACER draft amendment proposals.
 2. Propose (if any) alternative wording of the relevant provision, as you provided in the Word file.
 3. Provide (if any) your proposals for adding new provisions to the relevant section of the NC RfG, as you provided in the Word file.
 4. Upload figures or tables if necessary; text inputs should be provided directly in the consultation form.
-

Step 3

Where the stakeholder would like to propose an alternative amendment to the **entire NC RfG**, please upload the Word file (**downloaded from Step 1**) containing all your alternative amendment proposals in the Track Changes mode to the next **FILE UPLOAD** section and rename it with your stakeholder's name ("ACER_draft_RfG_stakeholder_name"). You can also upload your justification documents, where applicable.

In case the file size exceeds the 1MB limit, which is a consultation tool limit, kindly send the document to the functional mailbox shown on the right panel of the consultation form. Please rename the file with your stakeholder's name as indicated above and send it with the subject "ACER draft RfG legal text [stakeholder name]". Note that only submissions sent within the consultation deadline will be considered.

To facilitate the process, please, make sure that the **alternative text proposals provided in this consultation form are consistent**, to the extent possible, **with those in the Word file** you are uploading, taking into account the character limitations of each cell (max 5000 characters).

FILE UPLOAD

Please upload your file here

The maximum file size is 1 MB

Only files of the type pdf,doc,docx,odt,txt,rtf are allowed

Kindly note that in case the file size exceeds 1MB, the file can be sent to the functional mailbox shown on the right panel of the consultation form under Contact. Please ensure that the file name and email subject are consistent with the instructions in Step 3.

Please also upload any other document (i.e. **justifications**) below, if relevant.

Please upload your file

The maximum file size is 1 MB

Please upload your file

The maximum file size is 1 MB

Please upload your file

The maximum file size is 1 MB

Due to the significant length of this survey:

- you have the possibility to edit your answer after submission. When clicking on "Submit" button, you will be given a Contribution ID which you can then use to access your answers and edit them, if necessary.
- we kindly suggest that you download the entire survey as .pdf (link on the right), prepare your answers and then upload them at once in the EU Survey Tool, to avoid a session timeout on submission.

The maximum length of each cell is 5000 characters. This is the maximum technical limit set by the EUsurvey tool, which cannot be increased.

Whereas Section

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Numbers in the first column correspond to the recitals of the amended version of NC RfG Whereas section, including new recitals

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
(1)		
(2)		
(3)	Please specify if this concerns front of the meter storage only, or also behind the meter in a consumer (for instance, an industrial site with a battery installed)	
(s1)		
(s2)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
	<p>"A review of the requirements for type A PGMs is in any case required. In this regard, it is necessary to determine which requirements applicable to type B PGMs may also be necessary for type A PGMs in terms of system security. The following candidate requirements were identified by the Expert Group "Baseline for Type A PGMs" 24:</p> <p>a) Fault Ride Through (FRT), b) Post Fault Active Power Recovery (PFAPR),</p>	

(**)	<p>and</p> <p>c) Active Power Control (APC).</p> <p>The review of the requirements for type A PGMs, namely for power between [250kW; 1MW [or connected with MV grid, should also consider:</p> <p>Measures:</p> <p>MV/LV Voltage (kV)</p> <p>MV/LV Current (A)</p> <p>Active Power (MW)</p> <p>Reactive Power (MVar)</p> <p>Frequency (Hz)</p> <p>Command acknowledge</p> <p>Injection Power Limit Acknowledge - "Plim active ack."</p> <p>Binary Inputs:</p> <p>Circuit breaker state</p> <p>Protection start (aggregated)</p> <p>Protection trip (aggregated)</p> <p>Communication failure</p> <p>Commands:</p> <p>Live Line Work Conditions</p> <p>Grid disconnection / Permission to connect</p> <p>Network Injection Power Limit"</p>	
(11)		
(12)		
(13)		
(14)		
(15)		

(16)	<p>"This is an important principle which unfortunately is not followed in this grid code nor is it followed in the national decisions for non exhaustive requirements. As a consequence power generator modules are often required to test for different national non-exhaustive requirements in different countries thus creating an unneeded barrier and complicating the compliance checking for the relevant system operator.</p> <p>I would suggest that this principle should be highlighted in the comments to the RfG."</p>	<p>Due to its cross-border impact, this Regulation must aim at the same frequency-related requirements for all voltage levels, at least within a synchronous area , such as the synchronous areas of Continental Europe, Ireland-Northern Ireland and Nordic and the power systems of Lithuania, Latvia and Estonia, together referred to as 'Baltic' .</p>
(17)		
(x)		
(18)	<p>"It should be stated that this fault clearing time is for Transmission networks only. In distribution fault clearing times may be longer.</p> <p>A comment should be made on this otherwise the false idea of fault clearing times of 150ms on distribution may be propagated."</p>	<p>However, given that the most common fault clearing time in Europe, for transmission networks, is currently 150 milliseconds it leaves scope for the entity, as designated by the Member State to approve the requirements of this Regulation, to verify that a longer requirement is necessary before approving it.</p>
(19)		
(**)		
(20)		
(21)		
(22)		
(**)		
(23)		
(24)		
(25)		

(**)	It is a definition that should apply only to new generation, not generation already connected.	"Rapidly increasing penetration of dispersed generation and converted-based technologies into European networks has presented new challenges in ensuring overall system security. To the extent that an adequate contribution to the dynamically transforming system depends partly on advanced capabilities, new power-generating modules should be able to support the system robustness by fulfilling appropriate grid-forming and rate-of-change-of-frequency withstand requirements. "
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New recital	

Definitions (Article 2)

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new definitions

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 2(1)		
Article 2(2)		
Article 2(3)		
Article 2(4)		
Article 2(5)		
Article 2(6)		
Article 2(7)		
Article 2(8)		
Article 2(9)		
Article 2(10)		
Article 2(10a)		
Article 2(11)		
Article 2(12)		
Article 2(13)		
Article 2(14)		
Article 2(15)		

Article 2(16)	<p>This can have a huge impact in some Member States. For instance, in Portugal the installed capacity can be much higher than the maximum power allowed to be injected in the network (for instance in self-consumption facilities). Taking into account that this can be a barrier to the development of large self-consumption projects, the current definition must be maintained.</p>	<p>maximum capacity' or 'Pmax' means the maximum continuous active power which a power-generating module can produce, less any demand or losses associated solely with facilitating the operation of that power-generating module and not fed into the network as specified in the connection agreement or as agreed between the relevant system operator and the power-generating facility owner, or determined by other appropriate means, where an agreement is not required;</p>
Article 2(17)		
Article 2(18)		
Article 2(19)		
Article 2(20)		
Article 2(21)		
Article 2(22)		
Article 2(23)		
Article 2(24)		
Article 2(25)		
Article 2(26)		
Article 2(27)		
Article 2(28)		
Article 2(29)		
Article 2(30)		
Article 2(31)		
Article 2(32)		
Article 2(33)		
Article 2(34)		

Article 2(35)		
Article 2(36)		
Article 2(37)		
Article 2(38)		
Article 2(39)		
Article 2(40)		
Article 2(41)		
Article 2(42)		
Article 2(43)		
Article 2(44)		
Article 2(45)		
Article 2(46)		
Article 2(47)		
Article 2(48)		
Article 2(49)		
Article 2(50)		
Article 2(51)		
Article 2(52)		
Article 2(53)		
Article 2(54)		
Article 2(55)		
Article 2(56)		
Article 2(57)		
Article 2(58)		
Article 2(59)		
Article 2(60)		
Article 2(61)		
Article 2(62)		
Article 2(63)		

Article 2(64)		
Article 2(65)		
Article 2(66)		
Article 2(67)		
Article 2(68)		
Article 2(69)		
Article 2(70)		
Article 2(71)		
Article 2(72)		
Article 2(73)	Is there an objective justification for not having this as "... where one or more...", such as the case for the V2G electrical charging park?	
Article 2(74)		
Article 2(75)	In many cases, the entity that legally owns the installation does not have the expertise to operate it, to which purpose an operator (a CPO, for instance) is responsible for securing all technical requirements in regards to the electrical installation.	'Electrical charging park owner' means a natural or legal entity owning or operating a V1G or V2G electrical charging park.

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New definition	

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE I - General provisions

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new articles

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 1		
Article 3		
Article 4	<p>4.3 It should include DSOs.</p>	<p>4.3 "Following a public consultation in accordance with Article 10 and in order to address significant factual changes in circumstances, such as the evolution of system requirements including penetration of renewable energy sources, smart grids, distributed generation or demand response, the relevant system operators (DSOs or TSOs) may propose to the regulatory authority concerned, or where applicable, to the Member State to extend the application of this Regulation to existing power-generating modules. For that purpose, the relevant system operators (DSOs or TSOs) shall carry out a sound and transparent quantitative cost-benefit analysis shall be carried out, in accordance with Articles 38 and 39. "</p>

Article 4a [new]	<p>4a.2 It should include DSOs.</p> <p>4a.2(d) Seems to suggest that any conservation investment that requires the replacement of some component is deemed as a “significant or substantial modernization”, even if no technical or other relevant metric changes. The obligation for the PGM to comply with the NC in these cases seems excessive.</p>	<p>4a.2 ... In the proposal, TSO or DSO can propose additional criteria defining a significant modernisation.</p>
Article 5	<p>5.2(b) Proposals for defining thresholds between types of power-generating modules shall be subject to approval by the relevant regulatory authority or, where applicable, the Member State. In developing the proposals, the TSO shall coordinate with relevant DSOs and conduct a public consultation.</p>	
Article 6		
Article 7		
Article 8		
Article 9		
Article 10		

Article 11	<p>Since 2016, when this code was approved, the EU DSO Entity was formed. Given its important role with stakeholders, EU DSO Entity involvement in the public consultation process would be very beneficial.</p>	<p>The European Union Agency for the Cooperation of Energy Regulators (ACERthe Agency), in close cooperation with the European Network of Transmission System Operators for Electricity (ENTSO for Electricity) and the EU DSO Entity, shall organise stakeholder involvement regarding the requirements for grid connection of power-generating facilities, and other aspects of the implementation of this Regulation. This shall include regular meetings with stakeholders to identify problems and propose improvements notably related to the requirements for grid connection of power-generating facilities.</p>
Article 12		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE II CHAPTER 1 - General Requirements

General requirements for type A power-generating modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new paragraphs

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 13(1)		
Article 13(2)	<p>table 2</p> <p>"The individual TSO decision on this topic goes against the spirit of paragraph (16) of the recital. It is not defensible that for a synchronous area each country should have a different frequency withstand criterion. The diverse requirements in each country create an artificial barrier and entail various MS conformity checking by the equipment suppliers.</p> <p>Other values might be adopted given that they are uniform for a synchronous area. ENTSO-E should play an important part in bringing together the TSOs to define these criteria for each synchronous area."</p> <p>(d)</p> <p>"As a matter of form this requirement should be in the table as are all other frequency requirements.</p> <p>However, the need for this requirement does not seem to have been adequately justified by ENTSO-E. Until it is, this should be eliminated"</p>	
Article 13(3)		
Article 13(4)		
Article 13(5)		

Article 13(6)		
Article 13(7)		
Article 13(8)		
Article 13(9)	<p>It is not clear the entity that will decide on the autonomous settings for reconnection as well as recognize that some member states may already have national regulation on this topic. This code should clarify that.</p> <p>(f) The 4% setting for voltage mismatch may be small. Usually, higher values are employed.</p>	<p>Within the capability defined in paragraph (7), the default settings for an autonomous connection, unless otherwise specified by the relevant system operator, shall be as follows:</p>
Article 13(10)		
Article 13(11)		
Article 13(12)		
Article 13(13)		
Article 13(14)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

[NEW] General requirements for type EV1 and EV2 V2G electric vehicles and associated V2G electric vehicle supply equipment

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 13a(1)		
Article 13a(2)		
Article 13a(3)	No voltage requirements were set for autonomous reconnection which is dangerous as the LV network may be experiencing low voltages and the EV charging station will only worsen this. Therefore, a voltage setting should be included in the requirements.	add new line c: Voltage between 90%Vrated and 110Vrated.
Article 13a(4)	No voltage requirements were set for autonomous reconnection which is dangerous as the LV network may be experiencing low voltages and the EV charging station will only worsen this. Therefore, a voltage setting should be included in the requirements.	add new line c: Voltage between 90%Vrated and 110Vrated.
Article 13a(5)	(f) EVs and EVSE may differ on how fast the switch from consumption to generation and vice versa can be done... In addition to the “technically feasible” criteria, it may also be relevant to acknowledge that such switch must take into consideration the safe utilization and conservation of the components associated (EV battery and EVSE).	(f) Switching from consumption to generation and vice versa should be as fast as technically feasible, safeguarding the integrity and conservation of associated components.
Article 13a(6)		
Article 13a(7)		
Article 13a(8)		
Article 13a(9)		

Article 13a(10)		
Article 13a(11)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

General requirements for type B power-generating modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 14(1)		
Article 14(2)[deleted]		
Article 14(2)		
Article 14(3)	<p>(b)</p> <p>"This regulation should strive for having uniform requirements on this subject so to facilitate all conformity checking processes and remove unduly barriers to cross border equipment sales.</p> <p>Suggestion: Mandate ENTSO-E to reach a decision on this subject."</p>	
Article 14(4)	Should include DSOs	<p>(a)</p> <p>the use of autonomous connection function shall be subject to prior authorisation by the relevant system operator and to the reconnection conditions specified by the relevant system operator (DSOs or TSOs);</p>
Article 14(5)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

[NEW] Requirements for type EV3 electric vehicles and associated V2G electric vehicle supply equipment and V2G electrical charging parks

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 14a(1)		
Article 14a(2)		
Article 14a(3)		
Article 14a(4)	<p>(b)</p> <p>As it will depend on prior authorization, should there be an indication of a timeline for such authorization to be granted. Ideally, such information should become available to the charging point installer/operator through the course of the grid connection request.</p>	<p>(b)</p> <p>installation of automatic reconnection systems shall be subject both to prior authorisation by the relevant system operator, which should inform the operator of the charging point of the expected timeline of approval, and to the reconnection conditions specified by the relevant TSO</p>
Article 14a(5)		
Article 14a(6)		
Article 14a(7)		
Article 14a(8)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

General requirements for type C power-generating modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 15(1)		
Article 15(2)		
Article 15(3)[deleted]		
Article 15(3)		
Article 15(4)		
Article 15(5)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

General requirements for type D power-generating modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 16(1)		
Article 16(2)		
Article 16(3)		
Article 16(4)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE II CHAPTER 2 - Requirements for synchronous power-generating modules

[NEW] Requirements for type A synchronous power-generating modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article X	<p>"A review of the requirements for type A PGMs is in any case required. In this regard, it is necessary to determine which requirements applicable to type B PGMs may also be necessary for type A PGMs in terms of system security. The following candidate requirements were identified by the Expert Group "Baseline for Type A PGMs" 24:</p> <p>a) Fault Ride Through (FRT), b) Post Fault Active Power Recovery (PFAPR), and c) Active Power Control (APC).</p> <p>The review of the requirements for type A PGMs, namely for power between [250kW; 1MW [or connected with MV grid, should also consider:</p> <p>Measures: MV/LV Voltage (kV) MV/LV Current (A) Active Power (MW) Reactive Power (MVar) Frequency (Hz) Command acknowledge Injection Power Limit Acknowledge - "Plim active ack."</p> <p>Binary Inputs:</p>	

	<p>Circuit breaker state</p> <p>Protection start (aggregated)</p> <p>Protection trip (aggregated)</p> <p>Communication failure</p> <p>Commands:</p> <p>Live Line Work Conditions</p> <p>Grid disconnection / Permission to connect</p> <p>Network Injection Power Limit"</p>	
--	--	--

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Requirements for type B synchronous power-generating modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 17(1)		
Article 17(2)		
Article 17(3)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Requirements for type C synchronous power-generating modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 18(1)		
Article 18(2)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Requirements for type D synchronous power-generating modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new paragraphs

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 19(1)		
Article 19(2)		
Article 19(3)		
Article 19(4)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE II CHAPTER 3 - Requirements for power park modules

[NEW] Requirements for type A power park modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article Y(1)		
Article Y(2)		
Article Y(3)		
Article Y(4)		
Article Y(5)		
Article Y(6)		
Article Y(7)		
Article Y(8)	<p>(d)</p> <p>With the number of type A power park modules forecasted for the network it would be operationally impossible to manually activate or deactivate the grid forming mode. Therefore, it is important that this functionality could be remotely activated or deactivated.</p>	<p>(d) The power park module shall have the capability to activate or deactivate grid-forming mode. The relevant system operator shall have the capability of remotely activate or deactivate this mode.</p>

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Requirements for type B power park modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new paragraphs

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 20(1)		
Article 20(2)		
Article 20(3)		
Article 20(4)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Requirements for type C power park modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new paragraphs

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 21(1)		
Article 21(2) [deleted]		
Article 21(2)		
Article 21(3)		
Article 21(4)	(a) "This is not coherent with paragraph (16) of the recital and can create distortions between countries. ENTSO-E should be mandated to present a proposal for synthetic inertia requirements for all synchronous areas."	

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

Requirements for type D power park modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new paragraphs

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 22(1)		
Article 22(2)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE II CHAPTER 4 - Requirements for offshore power park modules

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 23		
Article 24		
Article 25		
Article 26		
Article 27		
Article 28		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE III - Operational notification procedure for connection

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new articles

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 29	<p>29.3</p> <p>This is very important. However, it should also be applicable to existing power generation facilities as it does not entail any added costs.</p>	<p>29.3</p> <p>The power-generating facility owner, independent of the year of entry into service, shall notify the relevant system operator or the competent authority of the Member State about the permanent decommissioning of a power-generating module in accordance with national legislation</p>
Article 30	<p>30.2(f)</p> <p>This requirement is excessive considering that the EV3 type begins at 40kW, and can be a barrier. So must be eliminated</p>	delete 30.2(f)
Article 30a [new]		
Article 30b [new]	<p>30b.1</p> <p>In many cases, the entity that legally owns the installation does not have the expertise to operate it, to which purpose an operator (a CPO, for instance) is responsible for securing all technical requirements in regards to the electrical installation.</p>	<p>For the purpose of operational notification for connection of each new type EV3 V2G electric vehicle supply equipment, a supply equipment document ('SED') shall be provided by the electrical charging park owner or operator to the relevant system operator and shall include a statement of compliance.</p>
Article 31		
Article 32		

Article 33	The procedures defined for type D should also be applicable for types B and C as it facilitates the connection of generating stations.	The operational notification procedure for connection of each new type B, C and D power-generating module shall comprise
Article 34		
Article 35		
Article 36		
Article 37		
Article 38		
Article 39		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE IV - Compliance

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 40		
Article 41	<p>"There is no definition on what actions should the relevant system operator carry out if the generation station is proven to no longer comply with the code and does not rectify the situation in the agreed deadlines.</p> <p>This is important as the generation station owner does not have an incentive to rectify the source of the noncompliance."</p>	
Article 42		
Article 43		
Article 44		
Article 45		
Article 46		
Article 47		
Article 48		
Article 49		
Article 50		
Article 51		
Article 52		
Article 53		
Article 54		
Article 55		
Article 56		
Article 57		
Article 58		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE V - Derogations

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 60		
Article 61		
Article 62		
Article 63		
Article 64		
Article 65		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

[DELETED] TITLE VI - Transitional arrangements for emerging technologies

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Title VI [deleted]		

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 70a [new]		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

TITLE VII - Final provisions

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new articles

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 71		
Article 71a [new]		
Article 72		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Other additional provisions

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
Other new provisions	

Please upload figures or tables if necessary

The maximum file size is 1 MB

Background Documents

[NC_RfG_ACER_draft_amendments_for_PC_2023_E_07.docx](#)

Contact

acer-ele-2022-015@acer.europa.eu