

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')**.

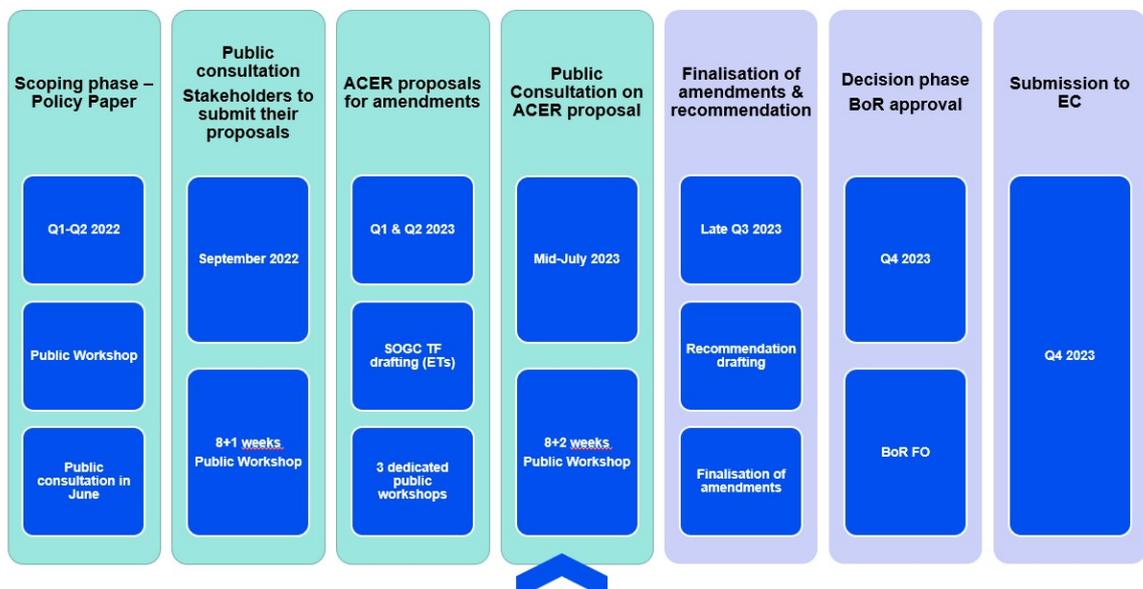
For draft amendments concerning Network Code on Demand Connection ('NC DC'), please go to the respective form: [NC DC](#).

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:

E.ON

* Contact person:

[REDACTED]

* Contact person's email address:

[REDACTED]

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

[REDACTED]

Germany

* 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:

E.ON's distribution system operator

* 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	3

Please upload figures or tables if necessary

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Select file to upload **4**

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

587c182c-f8da-4d91-b835-55cf0a678cab/Grid_Forming_Reasoning_E.ON.pdf

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.

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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.

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)		
(s1)		
(s2)		
(4)	Does the contract have to be concluded at the time of entry into force and should only the delivery of the main components take place within the 2 years, or should the contract only be concluded within the period?	2. For the purposes of this Regulation, a power-generating module shall be considered existing if on the date of entry into force of this Regulation: (a) it is already connected to the network ; or (b) the power-generating facility owner has concluded a final and binding contract for the purchase of the main generating plant by two years after the entry into force of the Regulation.
(5)		
(6)		
(7)		
(8)		
(9)	It is state of the art that power park modules are aggregated such as wind an pv, when they are operating at one grid connection Point.	Non-synchronously connected power-generating units of the same underlying technology, for instance, Wind and PV, where they are collected together to form an economic unit and where they have a single connection point should be assessed on their aggregated capacity. The significance of power-generating modules

	Only those modules that are connected to one common network interconnection point should be grouped together.	should be based on their size and their effect on the overall system. Synchronous machines should be classed on the machine size and include all the components of a generating facility that normally run indivisibly but are operating at one grid connection point.
(10)		
(**)		
(11)		
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(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)		
Article 2(17)		
Article 2(18)		
Article 2(19)		
Article 2(20)		
Article 2(21)		
Article 2(22)		
Article 2(23)		
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Article 2(25)		
Article 2(26)		
Article 2(27)		
Article 2(28)		
Article 2(29)		
Article 2(30)		
Article 2(31)		
Article 2(32)		
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Article 2(34)		
Article 2(35)		
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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)		
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Article 2(68)		
Article 2(69)		
Article 2(70)		
Article 2(71)		
Article 2(72)		
Article 2(73)		
Article 2(74)		
Article 2(75)		

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

	Text amendment proposal (if applicable)
New definition	

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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		
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

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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>13.2 (c): It must be ensured that with possibly increasing numbers of grid forming converters anti islanding schemes can trigger a separation.</p> <p>13.2 (d): This requirement interferes with concepts for backup power systems of relevant system operators. With this requirement, it cannot be guaranteed that backup power systems of relevant system operators can operate stably. It must be ensured that PGMs and backup power systems do not operate simultaneously. The maximum time that allows for stable operation of backup power systems is 5 seconds for 51.5 Hz – 52.5 Hz. An increase to 10 seconds would result in the need to re-engineer our systems and significant costs.</p>	<p>13.2 (c): Protection schemes, other than anti-islanding schemes and those specifically referred to in paragraph b(iv) shall not jeopardize frequency-ride-through performance specified in paragraph (b).</p> <p>13.2 (d): the power-generating module shall be capable of remaining connected to the network and operate at the frequency between 51.5 Hz – 52.5 Hz for 5 seconds.</p>
Article 13(3)	<p>13.3 (g) The DSO with the relevant TSO shall define the framework condition for the use of this function - not the other way around.</p>	<p>13.3 (g) The RSO in coordination with the TSO shall define the framework conditions for the use of this function.</p>
Article 13(4)		
Article 13(5)		

Article 13(6)		
Article 13(7)		
Article 13(8)		
Article 13(9)		
Article 13(10)	<p>Art. 13 (10) + 14 + 15 + 17 (2) b + 18 + 19</p>	<p>The power park module shall be capable of providing reactive power automatically by voltage control mode, reactive power control mode, power factor control mode or active power-related power factor control mode, as specified by the relevant system operator, in coordination with the relevant TSO and with the power park module owner.</p>
Article 13(11)	<p>13.11 (a) Storages should also be able to block LFSM-U functionalities in order to avoid possible problems with high voltages caused by LFSM-U mode itself.</p>	<p>13.11 (a) An electricity storage module shall be capable of activating the provision of active power frequency response from the current active power input or output automatically up to the maximum capacity according to the indicative Figure YY. The electricity storage module shall be able to receive and react on an external signal allowing the relevant system operator to block active power LFSM-U mode in real-time. The TSO/RSO in coordination with the relevant TSO shall define the framework conditions for the use of this function. The relevant TSO shall specify a frequency threshold and a droop setting.</p>
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	

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[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)		
Article 13a(4)		
Article 13a(5)		
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	13a (12) Type EV2 electric vehicles and associated V2G electric vehicle supply equipment shall fulfil the following additional requirements in relation to voltage stability: (a) with regard to reactive power capability, the relevant system operator shall have the right to specify the capability of a type EV2 electric vehicles and associated V2G electric vehicle supply equipment to supply and absorb reactive power.

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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)		
Article 14(4)		
Article 14(5)	<p>14.5 (d)(v)</p> <p>Trilateral agreement are highly unpractical. Any agreements or contracts should be made solely between the facility owner and the relevant system operator. The communication protocol has to be set by the relevant system operator. Any data exchange to the TSO has to be agreed between the relevant system operator and the relevant TSO.</p>	<p>14.5 (d)(v)</p> <p>The facilities for quality of supply and dynamic system behaviour monitoring shall include arrangements for the power-generating facility owner and the relevant system operator to access the information. The communications protocols for recorded data shall be given by the relevant system operator.</p>

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

	Text amendment proposal (if applicable)
New provision	

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[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)	<p>14a(3b)</p> <p>Asymmetrical errors in the transmission grid have hardly any effect on the subordinate voltage levels. Corresponding requirements should therefore be defined by the relevant system operator.</p>	<p>14a(3b)</p> <p>fault-ride-through capabilities in case of asymmetrical faults shall be specified by the relevant system operator.</p>
Article 14a(4)		
Article 14a(5)	<p>14a(5c)</p> <p>The grid security management of the grid operator ensures local grid security, the prerequisite is that a frequency control (active power adjustment) brings any benefit at all. Suggestion iii and iv to exchange.</p>	<p>14a(5c)</p> <p>(c) the electrical charging park owner shall organise its protection and control devices in accordance with the following priority ranking (from highest to lowest):</p> <p>(i) network and EV3 electric vehicles and associated V2G electric vehicle supply equipment protection;</p> <p>(ii) synthetic inertia, if applicable;</p> <p>(iii) power restriction;</p> <p>(iv) frequency control (active power adjustment) and</p> <p>(v) power gradient constraint;</p>
Article 14a(6)		
Article 14a(7)		

Article 14a(8)	see attachment "Grid Forming Reasoning E.ON".	14a (8) Type EV3 electric vehicles and associated V2G electric vehicle supply equipment shall comply with Article Y(7) in implementing Article Y(6) and Y(8).
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Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New provision	

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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	

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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	

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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		

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

	Text amendment proposal (if applicable)
New provision	

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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)	Unclear what articles are valid.	Type B synchronous power-generating modules shall fulfil the requirements listed in Articles 13 and Article 14, except for Article 13(2)(b) and Article 13(8).
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

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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)	18.2 (b) Figure 7 Retention of the current control areas, because network technology required.	18.2 (b) Figure 7 Maintaining the current boundary line at 0,41 Q /P (consumption lead).

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

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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)	unclear what articles are valid.	Type D synchronous power-generating modules shall fulfil the requirements laid down in Articles 13, 14, 15, 16, 17 and 18, except for Articles 13(2)(b), 13(6), 13(7), 13(8), 14(2), 15(3) and 17(2).
Article 19(2)		
Article 19(3)	Lots of power generating facilities are connected to the distribution network (110 kV). Therefore the TSO should set the parameters, but any agreement or contract with the facility owner should be made by the relevant system operator.	The relevant system operator and the power-generating facility owner shall enter into an agreement regarding technical capabilities of the power-generating module to aid angular stability under fault conditions.
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)	A PPM can't detect whether the voltage drop is caused by a disturbance in distribution network (to which most of the PPMs are connected to) or in the overlaying transmission network.	The power park module shall be capable of staying connected to the network and continuing to operate stably after the power system has been disturbed by faults according to a voltage-against-time-profile in line with Figure 3 at the connection point and with the set points in Tables X.2.1 and X.2.2.
Article Y(2)		
Article Y(3)		
Article Y(4)		
Article Y(5)	see attachment "Grid Forming Reasoning E.ON".	Subject to paragraph 7 type A power park modules shall be capable of providing grid forming capability at the connection point.
Article Y(6)	see attachment "Grid Forming Reasoning E.ON".	By way of derogation exemption from Article 4 (21), a power park module shall be considered existing if (a) it is already connected to the network on the date of entry into force of this Regulation; or (b) the power-generating facility owner has concluded a final and binding contract for the purchase of the main generating plant by three years after the entry into force of the Regulation.
		The member state or the entity designated by the member state shall set out a formal process

Article Y(7)	see attachment "Grid Forming Reasoning E.ON".	<p>of whether, and under what conditions, grid forming is to be implemented. The process shall consider any necessary adaptations of the system operators' networks and take into account their operating and maintenance procedures. The process shall include a cost-benefit analysis and set out a timeline of necessary actions in a "roadmap." The member state, or designated entity, shall publish any such roadmap within two years of entry into force of this Regulation.</p>
Article Y(8)	see attachment "Grid Forming Reasoning E.ON".	<p>Where grid forming capability is required by this Regulation a power park module shall be capable of providing grid forming capability at the connection point as listed below.</p> <p>[(d) The power park module shall have the capability to activate or deactivate grid-forming mode.]-->delete</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

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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)	see attachment "Grid Forming Reasoning E.ON".	<p>1. Type B power park modules shall:</p> <p>(a) fulfil the requirements laid down in Article 13, Article 14, except for Article 13(2)(b) and Article 13(8).</p> <p>(b) comply with Article Y(6), and (8) where the Type B power park modules is either directly connected to:</p> <ul style="list-style-type: none"> - a busbar of a substation which is itself connected at 110kV or higher voltage, or - a feeder dedicated to one or more power park modules which is connected to that substation; <p>(c) additionally comply with Article Y(7) in implementing Article Y(6) and Y(8) where the Type B power park module is connected to a substation or feeder other than as described in paragraph 1(b) above.</p>
		<p>2. Type B power park modules shall fulfil the following additional requirements in relation to voltage stability:</p> <p>(a) with regard to reactive power capability, the relevant system operator shall have the right to specify the capability of a power park module to supply and absorb reactive power;</p>

Article 20(2)

see attachment "Grid Forming Reasoning E.ON".

(b) Where paragraph 1(b) does not apply, and for the duration explicitly stated in the roadmap defined by Article Y.7, the relevant system operator in coordination with the relevant TSO shall have the right to specify that a power park module be capable of providing fast fault current at the connection point in case of symmetrical (3-phase) faults, under the following conditions:

(i) the power park module shall be capable of activating the supply of fast fault current either by:

- ensuring the supply of the fast fault current at the connection point, or
- measuring voltage deviations at the terminals of the individual units of the power park module and providing a fast fault current at the terminals of these units;

(ii) the relevant system operator in coordination with the relevant TSO shall specify:

- how and when a voltage deviation is to be determined as well as the end of the voltage deviation,
- the characteristics of the fast fault current, including the time domain for measuring the voltage deviation and fast fault current, for which current and voltage may be measured differently from the method specified in Article 2,
- the timing and accuracy of the fast fault current, which may include several stages during a fault and after its clearance;

		<p>(iii) with regard to the supply of fast fault current in case of asymmetrical (1-phase or 2-phase) faults, the relevant system operator in coordination with the relevant TSO shall have the right to specify a requirement for asymmetrical current injection.</p>
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

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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)
<p>Article 21(1)</p>	<p>see attachment "Grid Forming Reasoning E.ON".</p> <p>The Art. 21(d)(ii) requirement should be anchored in Art. 13 and give the grid operator the right to apply the various procedures of reactive power modes for all generation plants.</p>	<p>1. Type C power park modules shall</p> <p>(a) fulfil the requirements listed in Article 13, Article 14, Article 15 and Article 20, except for Article 13(2)(b), Article 13(6), Article 13(8) and Article 20(2)(a), unless referred to otherwise in point (v) of paragraph 3(d).</p> <p>(b) comply with Article Y(6), and (8) where the Type C power park modules is either directly connected to</p> <ul style="list-style-type: none"> - a busbar of a substation which is itself connected at 110kV or higher voltage, or - to a feeder dedicated to one or more power park modules connected to that substation; <p>(c) additionally comply with Article Y(7) in implementing Article Y(6) and Y(8) where the Type C power park module is connected to a substation or feeder other than as described in paragraph 1(b) above.</p> <p>(d) Where paragraph 1(b) does not apply, and for the duration explicitly stated in the roadmap defined by Article Y.7, the relevant system operator in coordination with the relevant TSO shall have the right to specify that a power park module be capable of providing fast fault current at the connection point in case of symmetrical (3-phase) faults, under the conditions listed in Article 20.2(b)(i), (ii) and(iii)</p>

Article 21(2) [deleted]		
Article 21(2)	<p>21.2 (b) Figure 8</p> <p>Retention of the current control areas, because network technology required.</p>	<p>21.2 (b) Figure 8</p> <p>Maintaining the current boundary line at 0,41 Q/P (consumption lead).</p>
Article 21(3)		
Article 21(4)		

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

	Text amendment proposal (if applicable)
New provision	

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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)	<p>Lots of PPM are connected to the distribution network (110 kV). Therefore the TSO should set the parameters, but any agreement or contract with the facility owner should be made by the relevant system operator.</p>	<p>The relevant system operator shall have the right to request and approve the tuning of the power oscillation damping by the power-generating facility owner to damp the inter-area oscillation mode based on frequency ranges specified by the relevant TSO in coordination with adjacent TSO or TSOs. The relevant system operator shall have the right to request the tuning of the power oscillation damping by power-generating facility owner to damp the local oscillation mode, in which the power park modules is oscillating against the grid.</p> <p>The proposed power oscillation damping control shall be approved by the relevant system operator.</p>

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

	Text amendment proposal (if applicable)
New provision	

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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	

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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		
Article 30		
Article 30a [new]		
Article 30b [new]		
Article 31		
Article 32		
Article 33		
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	

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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		
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		
Article 59		

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

	Text amendment proposal (if applicable)
New article	

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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	

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[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	

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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	

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Other additional provisions

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

	Text amendment proposal (if applicable)
Other new provisions	Abbreviations for voltage limits and time periods are not specified, please specify.

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Background Documents

[NC_RfG_ACER_draft_amendments_for_PC_2023_E_07.docx](#)

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