

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:

EUGINE – the European Engine Power Plants Association

* Contact person:

[REDACTED]

* Contact person's email address:

[REDACTED]

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

Belgium

* 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:

* 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

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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

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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.

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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.

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)		
(s1)		
(s2)		
(4)		
(5)		
(6)		
(7)		
(8)		

(9)	<p>With the existing text, the case of a synchronous machine which can be operated independently of others is left ambiguous – further wording changes are needed, as proposed.</p> <p>The word “INDIVIDUAL” is key here – it is essential to include wording that clarifies that the classification of a synchronous machine should be based on the INDIVIDUAL machine capacity where they can be operated independently, and not on the whole capacity of the installation, and neither on the aggregation of multiple synchronous power generating units.</p>	<p>(9) The significance of power-generating modules 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. Therefore, an installation containing a set of synchronous machines that can be operated independently from each other, such as diesel or gas reciprocating engine-driven synchronous generating units, should be assessed on the individual machine size and not the whole capacity of that installation. An installation containing a set of synchronous machines that cannot be operated independently from each other, such as a combined-cycle gas turbine installation, should be assessed on the whole capacity of that installation.</p>
(10)		
(**)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(x)		
(18)		
(19)		
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(20)		
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(23)		
(24)		
(25)		
(**)		
(26)	This will clarify the importance of compliance schemes and the general contents.	(26) Appropriate and proportionate compliance testing should be introduced so that system operators can ensure operational security. Setting up procedures for operational notification and compliance schemes including tests, simulations and the application of certificates will promote standardised grid connection and non-discriminatory access to the European market for manufacturers and project developers.
(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)	It is important to clarify that a SPGM can be an individual machine/unit in the case where it can be operated independently of other machines /units.	‘synchronous power-generating module’ means an individual machine which can be operated independently from others, or an indivisible set of machines which cannot be operated independently from each other and can generate electrical energy such that the frequency of the generated voltage, the generator speed and the frequency of network voltage are in a constant ratio and thus in synchronism;
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)		
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)	<p>This is to clarify that any authorised certifier issuing an equipment certificate shall hold a valid accreditation according to the accreditation standard on product certification, i.e. ISO/IEC 17065.</p> <p>It is also introducing the option for issuing equipment certificates "and/or" PGMD as not all authorised certifiers may issue both conformity statements but only one of these.</p>	<p>'authorised certifier' means an entity that issues equipment certificates and/or power-generating module documents and is accredited according to the relevant internationally recognized standard given by the national affiliate of the European cooperation for Accreditation ('EA'), established in accordance with Regulation (EC) No 765/2008 of the European Parliament and of the Council;</p>
Article 2(47)	<p>A change in the definition of "equipment certificate" is needed to align all concepts and refer to the correct documentation.</p>	<p>'equipment certificate' means a document issued by an authorised certifier based on a certification scheme according to the relevant internationally recognized standard for equipment used by a power-generating module, demand unit, distribution system, demand facility or HVDC system. The equipment certificate provides a statement of conformity demonstrating that specified requirements as defined on national or other level are fulfilled by the equipment. For the purpose of replacing specific parts of the compliance process, the equipment certificate may include simulation models that have been validated against actual test results;</p>
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)		
Article 2(74)		
Article 2(75)		

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

	Text amendment proposal (if applicable)
New definition	<p>(76) 'power generating unit' or 'PGU' means an aggregation of components converting a primary source of energy into electricity at the unit's terminals, which is synchronously connected to a network or which is either non-synchronously connected to a network or connected through power electronics.</p> <p>(77) 'component' means any hardware element or software element having an impact on the electrical characteristics and /or operation of a power generating unit or a power-generating module.</p> <p>(78) 'power generating unit family' or 'PGU family' means a group of PGUs from the same manufacturer with equivalent characteristics to the representative unit which has undergone conformance tests (tested unit) in terms of electrical performance. PGU family members may differ in power and voltage from the representative unit. The extent of the PGU family will be defined within the compliance scheme.</p> <p>(79) 'Component family' means a group of components from the same manufacturer with equivalent characteristics to the representative component which has undergone conformance tests (tested component), in terms of electrical performance. The extent of the component family will be defined within the compliance scheme.</p> <p>(80) 'Component family' means a group of components from the same manufacturer with equivalent characteristics to the representative component which has undergone conformance tests (tested component), in terms of electrical performance. The extent of the component family will be defined within the compliance scheme.</p> <p>(81) 'Power Generating Unit Family Certificate' or 'PGU Family Certificate' means a document issued by an authorised certifier for a PGU Family based on the analysis of a representative unit. The PGU Family Certificate provides a statement of conformity demonstrating that specified requirements as defined on national level or in a</p>

relevant standard are fulfilled by the PGU Family. For the purpose of replacing specific parts of the compliance process, the PGU Family Certificate may include simulation models that have been verified against actual test results and represent the whole PGU Family.

(82) 'compliance scheme' means a compliance verification programme provided by the relevant system operator which shall specify all evaluation and assessment measures to be taken, e.g. equipment certificates, tests, technical documentation and/or simulations, aimed to demonstrate the compliance of a PGM with the specified requirements during the operational notification process. The compliance scheme shall provide detailed information on the specified requirements or provide unambiguous references to relevant technical documents and standards. The compliance scheme should refer to applicable international or European standards if available. The compliance scheme may specify the format of the statement of compliance as well as further procedural information for embedding the statement of compliance in the operational notification process. Where equipment certificates are applied within the compliance scheme the scheme shall include or provide a reference to a certification scheme. The applied equipment certificates must be valid for the specific equipment installed within the PGM for which a connection request has been made.

(83) 'specified requirements' are provisions on power generating units, power generating modules or their components and which need to be fulfilled.

(84) 'Statement of conformity' means an attestation based on a conformity assessment that the fulfilment of specified requirements has been successfully demonstrated. The statement of conformity is provided in the equipment certificate.

Please upload figures or tables if necessary

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

Includes new articles

	Comment on the ACER draft amendments	Alt
Article 1		
Article 3		
Article 4		
Article 4a [new]		
Article 5		
Article 6		
Article 7	<p>7(2)(f) - IGDs are documents created by ENTSO-E without outside stakeholder involvement and are not open for public consultation (at least at a level that would allow externals to influence the content in a meaningful way). A change in the IGD process could help with this issue and ease both their development and acceptance. Until then, it would be arbitrary to put IGDs on the same level as standards or legislative acts.</p> <p>7(10) NEW - As discussed with ENTSO-E in the context of the EG HCF, there is a need to state the responsibility of the RSO to provide a compliance scheme. The new article helps to explain what is needed.</p>	<p>(f) · sta rel</p> <p>10. sut sch cer wit Re shc cor Eu En shc sch ma</p>
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	

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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

Includes new paragraphs

	Comment on the ACER draft amendments	
Article 13(1)		
Article 13(2)	<p>13(2)(b)(i) - Some types of SPGMs may have issues complying with the requirement, so it should be stated that it will be accepted within its technical capability. The actual capability must be informed to the RSO.</p> <p>13(2)(d) - Operation outside the 47-52 Hz range is not considered for the design of SPGMs; the EN 60034-1 does not conceive operation up to 52.5 Hz, so possible rework with both synchronous generator manufacturer and general auxiliaries manufacturers would be needed. Therefore, this point should be deleted.</p>	<p>13 (2) mod capa and to th</p> <ul style="list-style-type: none"> • • • <p>If du</p> <p>g. cc</p> <p>gene</p> <p>requ</p> <p>acce</p> <p>prov</p> <p>shall</p> <p>sec.</p> <p>13 (2)</p>
	<p>13(3)(g) - As commented by EUGINE in the first public consultation, the response time requirement of “less or equal to 8 seconds for an active power setpoint change of 45% maximum power” cannot be achieved by gas reciprocating engine-driven synchronous power-generating units. For further information, please see our statement published already in 2019: https://www.eugine.eu/wp-content/uploads/2022/04/EUGINE_TF_CNC_2019-01-10_LFSM-O_-_Industry_statement.pdf</p> <p>If the current draft text is adopted into legal text, this will effectively exclude some products /technologies from the market, which is not acceptable. It is acknowledged that there is a caveat stating that, “If the response time is greater than stated above, the power-generating facility owner shall justify the delay, providing technical evidence to the relevant TSO”. In our experience, however, this will not be enough to prevent some technologies being excluded.</p> <p>As way of example, there is a similar statement</p>	

Article 13(3)	<p>already in the IGD on LFSM-O, but there are some countries enforcing the response time without any possibility of deviation, or poorly defined processes to obtain a derogation.</p> <p>EUGINE therefore requests ACER to reconsider this response time and introduce an allowance for gas reciprocating engine-driven synchronous generating units. We would also urge ACER to engage with EUGINE and other industry associations for further consultation on this issue before publishing a final draft.</p> <p>For consideration, an amendment has been included in EN50549-2 Edition 1.1, based on agreement and input from manufacturers, which it is proposed that NC RfG should adopt: “The following response times are considered technically feasible for specific generating technologies. – For PV and battery inverters below 1 s for ΔP of 100 % Pmax. – For wind turbines 2 s for $\Delta P < 50$ % Pmax. – For combustion engines, gas turbines, fuel cells below 2 MW 66% /min for a 100% change. – For combustion engines, gas turbines, fuel cells above 2 MW 20% /min for a 100% change.”</p>	<p>13(3)(g) - The response time, T_{resp} in Figure XX, for active power decrease in case of increasing frequency, shall be as described below:</p> <p>(i) For PV and battery inverters less than or equal to 1 s for ΔP of 100% Pmax. (ii) For wind turbines less than or equal to 2 s for ΔP of 50% Pmax. (iii) For combustion engines, gas turbines, fuel cells below 2 MW, less than or equal to 60 s for ΔP of 66% Pmax. (iv) For combustion engines, gas turbines, fuel cells above 2 MW, less than or equal to 60s for ΔP of 20% Pmax.</p> <p>If the response time is greater than stated above, the power-generating facility owner shall justify the delay, providing technical evidence to the relevant TSO.</p>
Article 13(4)		
Article 13(5)		
Article 13(6)		
Article 13(7)		
Article 13(8)		
Article 13(9)		

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	

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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	

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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)	It is proposed to copy the text and Fig of 14 (3) (c) here as 14 (2) (b), as this requirement can be applied at voltage connection levels greater or equal to 110 kV.	Please see the NEW proposed point below.
Article 14(3)	<p>14 (3) (b) - According to EN 50549-2 article 4.5.3.1 “The requirements apply to all kinds of faults (1ph, 2ph and 3ph)”; this proposal shall align this and will guarantee that a TSO does not create a more stringent profile than that defined for symmetrical faults.</p> <p>14 (3) (c) - Alignment of the Figure X “High voltage-ride-through profile of a power-generating module” with EN50549-2 Figure 8: 125% Un for 100ms 120% Un for 5s 115% Un for 60s</p> <p>The high-voltage ride-through profile should NOT exceed EN 50549-2 (Section 4.5.4) which is the European standard applicable to Type B. The proposal is to change Figure X by Figure 8 of the EN 50549-2.</p>	<p>14 (3) (b) - fault-ride-through capabilities in case of asymmetrical faults shall be specified by each TSO but will stay within the limits defined for symmetrical faults according to 14(3)(a).</p> <p>14 (3) (c) - Figure X2 (see below)</p>
Article 14(4)		
Article 14(5)		

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

	Text amendment proposal (if applicable)
New provision	<p>14 (2) (b) NEW - The power-generating module shall be capable of operating stably without disconnecting from the network, if none of the phase-to-phase voltages exceeds the voltage-against-time-profile defined in Figure X at the connection point. The relevant system operator, in coordination with the relevant TSO, shall define higher longer times for operation, if it is required to preserve or to restore system security.</p> <p>Figure X High voltage-ride-through profile of a power-generating module</p> <p>The diagram represents the higher limit of a voltage-against-time profile of the voltage at the connection point, before, during and after a fault. U_{ref} is the maximum voltage specified in paragraph 2.</p>

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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)		
Article 14a(4)		
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	

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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	

Please upload figures or tables if necessary

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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)		
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)		

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 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	

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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)		

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 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	

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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)
Article 21(1)		
Article 21(2) [deleted]		
Article 21(2)		
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)		

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	<p>The proposed modification of paragraph 2 brings in the compliance scheme topic and the fact that it needs to be applied.</p> <p>New paragraphs ensure that an acceptance of equipment certificates is facilitated by a clear specification by the RSO on:</p> <p>a) respectively accepted certification schemes and</p> <p>b) respectively accepted specified requirements, e. g. grid codes, from other member states, on which the conformity assessment is performed.</p>	<p>2. The relevant system operator shall clarify and make publicly available the details of the operational notification procedure, which shall include the compliance scheme.</p> <p>3. The compliance scheme shall address the use of equipment certificates of PGUs and components.</p> <p>4. The compliance scheme should refer to applicable international or European standards, if available.</p>
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	<p>A new article (see below) should be inserted under Chapter 1, after Art. 43, to provide a detailed and harmonised framework on equipment certificates.</p> <p>Following the conclusions of its final report, the Expert Group Harmonization of Certification and product Family grouping is convinced that the clarifications provided in this new article will promote the provision and application of equipment certificates into the notification process and will, thus, reduce the struggle many Member States are facing today due to unclear definitions and knowledge of formal requirements. Especially, a clear obligation to the RSO to specify what certification programmes and requirements the RSO is willing to accept will considerably help to deploy certificates in the overall process.</p>	
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	<p>Article ZZ [after Article 43]</p> <p>Common Provisions on Equipment Certificates</p> <p>1. In the case that the compliance scheme specified by the RSO provides for the use of equipment certificates issued by an authorised certifier in the context of Title III and/or Title IV, the equipment certificates shall comply with the following provisions:</p> <p>a) Any equipment certificate shall be based on the certification scheme as specified in the compliance scheme.</p> <p>b) The equipment certificates are classified into PGU certificates, component certificates and PGM certificates. The equipment certificates shall demonstrate the conformity with the specified requirements as defined in the compliance scheme by applying the respective evaluation and assessment measures according to the certification scheme</p> <p>c) Specified requirements referred to within equipment certificates may be defined by the requirements as set out in Title II, provided by a national implementation under this Regulation, by relevant internationally recognized European standards and/or alternative schemes that may also be applicable.</p> <p>2. RSOs shall accept equipment certificates issued by authorized certifiers of any Member States whose accreditation is given by the respective national affiliate of the European cooperation for Accreditation ('EA').</p> <p>3. RSOs may accept equipment certificates that provide a statement of conformity with respect to specified requirements others than the requirements at national level implemented under this Regulation according to the provisions of Article 7 (1), i.e. the RSOs' national grid codes. In such case, the RSO shall specify the acceptance conditions within the compliance scheme, as well as which additional information needs to be provided in order to demonstrate the compliance of the equipment with the established</p>

	<p>requirements at national level implemented under this Regulation.</p> <p>4. The compliance scheme defined by the RSO may define as eligible those equipment certificates where the statement of conformity covers only selected specified requirements (e.g. FRT, LFSM, etc.). These will be used within the compliance scheme required by the RSO.</p> <p>5. RSOs may accept equipment certificates for PGU and/or components which belong to a family to the extent defined within the compliance scheme, required by each RSO, under which the assessed PGU and/or component is certified. This subset of PGUs and/or components shall comply with the definition for PGU family, if not otherwise defined in the compliance scheme.</p>
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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

	Comment on the ACER draft amendments	
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

	Comment on the ACER draft amendments	A
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	

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Background Documents

[NC_RfG_ACER_draft_amendments_for_PC_2023_E_07.docx](#)

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