



SolarPower  
Europe



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# NC RfG 2.0: Industry Call for Clarification on Aggregation Concept and Compliance Scheme

## Joint industry statement

Our organisations, representing certification bodies and manufacturers of electricity generation equipment, welcome the ACER Recommendation to review the [Network Code on Requirements of Generators \(NC RfG\)](#). The review of the NC RfG aims for significant improvements for harmonising the grid connection requirements at EU level and making them future proof.

Indeed, the clarification and harmonisation of electricity network connection requirements is essential if we want to accelerate the energy transition and avoid unnecessary costs to businesses and consumers.

Nevertheless, **lack of clarity on two very essential points – namely the aggregation clarifications applicable to all PGMs and the way to certify that the equipment is compliant with the rules – will significantly hinder the completion of the internal energy market and even limit investments.**

With this in mind, and to help build an affordable, decarbonised electricity system, we recommend ACER and the Commission to:

- 1. Modify recital 11 with two main objectives: clarify the issue with synchronous technology regarding units and modules; and, clarify the ambiguity for the aggregation rules of non-synchronously connected power generating units into a PPM or ESM.**
- 2. Impose a clear timeline and responsibility to propose a compliance scheme as well as opening certification schemes and requirements as a door opener for enhanced compliance in the European power system.**

Detailed explanations and amendment proposals can be found in the annexes.

Signed:



**COGEN EUROPE - The European Association for the Promotion of Cogeneration**



**EUGINE - European Engine Power Plants Association**



**EUROPGEN - The voice of the generating set industry**



**EUTurbines - European Association of Gas and Steam Turbine Manufacturers**



**SolarPower Europe**



**VAZ e.V. - Verband akkreditierter Zertifizierungsgesellschaften e.V. - on behalf of EFAC - European Federation of Associations of Certification Bodies**



**Wind Europe**

# ANNEX 1- Detailed explanations

## 1. Recital 11:

### Further clarify the definition of “synchronous power-generating module” and the issue with “aggregation of similar technologies of non-synchronous power-generating units”

Within the text proposed by ACER in Article 2(9) and Recital 11, there is still scope for ambiguity in defining how synchronous power generating modules are identified from the synchronous generating units within a facility. For non-synchronous generating units, the current draft proposes that only units of similar technology, or those forming an economic unit, are compounded (ie aggregated) into a PPM. However economic unit is not defined on the code. This is disincentivising for co-location of different technologies. In both cases these uncertainties leave it unclear as to how the compounded capacity for the purposes of defining the compliance requirements is determined.

#### *For Synchronous PGMs:*

We understand that ACER’s position is that it is down to each relevant system operator to determine the question as to whether a synchronous machine can be operated independently of others, or not, within a facility. From our experience, this lack of definition leads to different interpretation of the text in different member states. This results in a market barrier where the same synchronous power generating unit cannot be sold into identical applications in different member states because of different interpretations of the compliance requirements.

Hence manufacturers face a challenging landscape and are required to fulfil different classifications of requirements across Member States for the same power generating unit.

For the sake of clarity, and to avoid different national interpretations and different technical requirements imposed upon a machine of the same size in different member states, we recommend clarifying how the independent operation of a synchronous machine can be established (as suggested in Annex 2 below).

#### *For non-synchronous PGMs / PPM:*

During the Grid Connection European Stakeholder Committee meeting on 27 June 2024, ACER expanded on its understanding of the various and possible configurations of power generating units within a single facility, ie behind a single connection point. We understand that ACER’s intention is to leave the decision on the compounding of non-synchronous generating units into power park modules to the discretion of the agreement between generation owner and the system operator. Whilst this approach has its attractions, there is still no harmonized understanding of how this will be interpreted in different member states and by the different systems operators. This lack of clarity will continue to present risks to manufacturers and developers.

The RfG legal text should clearly state that the asset developer has the flexibility to install units of any technology and of any capacity behind a single connection point as long as the asset exports power and complies with grid code requirements at the connection point based on what is agreed in the contract between the developer and the system operator.

In addition, the harmonisation rules presented at the June 2024 GC ESC meeting on Slide 25 of the ACER presentation remain unclear, both in the Network Code and on the slide itself. While ACER's presentation and the examples shared at the meeting are welcome as a 1<sup>st</sup> step to clarify Recital (11) of NC RfG 2.0 regarding the aggregation of PPMs, it is still unclear how these will be applied under RfG 2.0 or as guidance in member states for developers and system operators. Good examples that ACER and the EC could adopt at the EU level include the TSO in Finland, which has already developed guidance for connecting such systems, and the TSO in Denmark, which is redefining requirements to account for aggregation at the same connection point. This lack of clarity, harmonisation and guidance at EU level means that generators in each member state will encounter different versions of these requirements and variations in the calculation of maximum capacity, depending on the system operator(s).

## 2. Compliance Schemes:

Impose a clear timeline and responsibility to propose a compliance scheme and propose certification schemes and requirements as a door opener for enhanced compliance in the European power system rules

Neither NC RfG 1.0 nor NC RfG 2.0 provide a binding time schedule to implement compliance assessment measures on a national level. As an outcome, even today, 8 years after publication of the RfG 1.0, many Member States still do not provide any compliance assessment measures. For the industry, this regulatory loophole is an incalculable risk, as it means that the commissioning of PGMs is linked to undefined preconditions and needs to be negotiated on a case-to-case-basis. Hence, we propose to provide a simple but binding regulatory framework – similar to that established for the implementation of technical requirements of the RfG.

Furthermore, we see an unnecessary limitation to the provision of equipment certificates in the new Article 43a (1) (a). This article requires that “equipment certificates shall demonstrate the conformity with the relevant technical requirements under this Regulation as of the national implementation.”

As a consequence, the conformity assessment must be done exclusively according to the national/local grid code provisions. This contradicts the [recommendations of the Expert Group on Harmonization of Equipment Certificate Acceptance at European Level and Product Family Grouping \(EG HCF\)](#) from 2023. This expert group was asked to provide measures to support the acceptance and accelerate the availability of Equipment Certificates throughout Europe while leveling the efforts for all stakeholder involved.

As a result of the EG HCF, different schemes for defining the certification requirements have been elaborated, including the certification with respect to EN standards as well as the so-called “capability certification”. It must be stressed that the latter has just been introduced by the international IECRE standard OD 009. Therefore, IECRE OD 009 is the only available international grid code compliance certification scheme – next to national ones in Spain and

Germany. It is, hence, the only available internationally standardised scheme to be addressed by RSOs within their Compliance Scheme in the context of ENC implementation. However, IECRE OD 009 explicitly excludes national grid code certification. Both generic schemes and certification requirements, EN standards and OD 009, will enable the industry to serve several markets with only one initial certificate that can be further applied for PGM compliance.

The text amendments we propose are based on the EG HCF final report, which was widely accepted. In the report, it is demonstrated how such generic equipment certificates, which themselves will not provide a conformity statement with respect to a single national grid code, will nevertheless provide a substantial and cost-efficient basis for a subsequent demonstration of compliance on the PGM level with respect to specific national regulations.

Hence, we encourage the Commission and ACER to include the amendment proposed to open the door to enhanced certification schemes and requirements. Only this will accelerate the availability of respective certificates throughout Europe and raise the level of compliance in the European power systems.

## ANNEX 2- Amendment Proposals

<i>ACER Recommendation</i>	<i>Amendment</i>
<a href="#">Recital 11</a>	
<p>(11) 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. An installation containing a set of synchronous machines that cannot be operated independently from each other, such as combined-cycle gas turbine installation, should be assessed on the whole capacity of that installation.</p> <p>Non-synchronously connected power-generating units of the same underlying technology, where they are collected together to form an economic unit and</p>	<p>(11) 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 <del>of a generating facility</del> that normally run indivisibly. An installation containing a set of synchronous machines that cannot be operated independently from each other, <del>such as combined-cycle gas turbine installation</del>, should be assessed on the whole capacity of that installation. <b>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.</b> Non-synchronously connected power-generating units of <del>the same any</del> underlying technology, where they are collected together to form an economic unit and where they have a single connection point should be assessed on <b>their aggregated maximum agreed export capacity as agreed between system operator and asset owner.</b> Moreover, to</p>

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<p>where they have a single connection point should be assessed on their aggregated capacity. Moreover, to ensure an appropriate harmonisation or rules for mass-market products, capacities of units of different underlying technology, for instance, photovoltaic, electricity storage, combined heat and power installations, or V2G electric vehicles, should not necessarily be aggregated for the purpose of the determination of significance unless so agreed between the relevant system operator and the power-generating facility owner, or determined by other appropriate means, where an agreement is not required. Also, when V2G electric vehicles and associated V2G electric vehicle supply equipment are connected to a V2G electrical charging park their capacities should not be aggregated for the purpose of the determination of significance. Electricity storage integrated to a power-generating module used solely for the purpose of meeting the respective requirements of this Regulation should be considered as part of such module while its capacity should not count towards the power-generating module capacity.</p>	<p>ensure an appropriate harmonisation or rules for mass-market products, capacities of units of different underlying technology, for instance, photovoltaic, electricity storage, combined heat and power installations, or V2G electric vehicles, <del>should not necessarily be</del> <b>can be</b> aggregated for the purpose of the determination of significance <b>unless</b> so agreed between the relevant system operator and the, power-generating facility owner, or determined by other appropriate means, where an agreement is not required. Also, when V2G electric vehicles and associated V2G electric vehicle supply equipment are connected to a V2G electrical charging park their capacities should not be aggregated for the purpose of the determination of significance. Electricity storage integrated to a power-generating module, used solely for the purpose of meeting the respective requirements of this Regulation should be considered as part of such module while its capacity should not count towards the power-generating module capacity.</p>
<p><a href="#">Article 7 (10)</a></p>	
	<p><b>10. The relevant system operator or TSO shall submit a proposal for a compliance scheme, for approval by the designated entity within two years from the entry into force of this Regulation. The Member State may provide for a shorter time period. In this case, the Member State shall communicate the shorter time period to the European Union Agency for the Cooperation of Energy Regulators (ACER).</b></p>
<p><a href="#">Article 43a (4)</a></p>	
	<p><b>4. Not withholding the provision of Article 43a (1) (a) RSOs may accept equipment certificates that provide a statement of conformity with respect to certification requirements others than the</b></p>

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	<p>requirements at national level implemented under this Regulation according to the provisions of Article 7 (1), if these requirements are based on or linked to international standards. 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 requirements at national level implemented under this Regulation.</p>