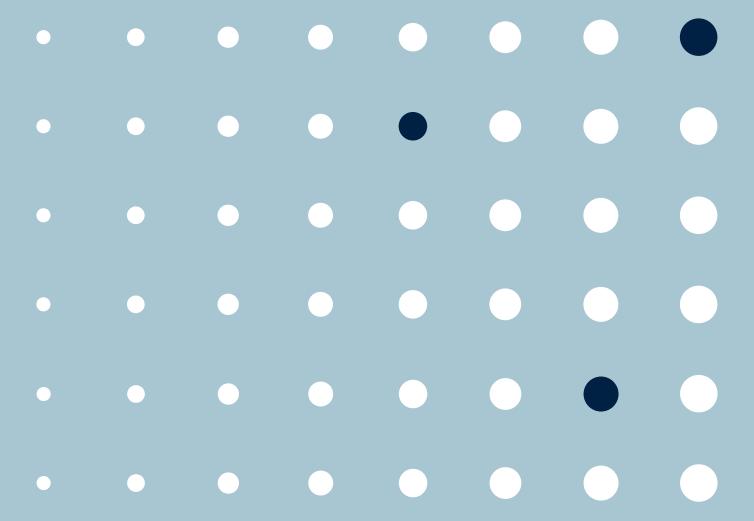
Process for Documentation of Compliance with Grid Connection Requirements for the Medium and High Voltage Grid:

Demand facilities



Demand Facilities Providing Ancillary Services

(Customers delivering ancillary services to Energinet and other services e.g. grid connection with limited use)

When connecting a demand facility to the electricity grid, you must go through the following documentation process.



You initiate the technical documentation approval process by submitting the relevant appendices for the facility type to driftdok@cerius-radius.dk. This is the email address you must use for all documentation submissions throughout the entire process.

It is important to test and ensure proper documentation for your facility well in advance to ensure a smooth grid connection process. We recommend that you begin preparing your documentation as early as possible. Typically, the time from submission of the first complete documentation to the issuance of an Interim Operational Notification (ION) increases with the size of the facility — both due to the increased volume and complexity of documentation.

For facilities up to 3 MW, you as the facility owner should expect a minimum of one month from the submission of the first complete documentation to the issuance of the ION. For facilities over 3 MW, you should expect at least two months.

Remember to update the documentation during the process if the facility's electrical characteristics change.

Interim Operational Notification (ION)

An ION grants the facility owner the right to operate the demand facility and consume electricity using the grid connection for a limited period. The main purpose must be testing and verification.

ION requires that:

- The settlement meter is installed
- The High voltage interconnection agreement between the DSO and the Customer is signed
- You have completed and received approval for Appendix 1, as well as documentation of compliance with power quality requirements
 if the DSO has made this a condition of approval
- Protection and information exchange:
 - o Setup must be approved and operational
 - o The DSO's communication equipment must be operational and online

Once ION is granted:

• It is important to begin operation and testing of your facility, as the Final Operational Notification (FON) will only be issued once compliance with requirements has been verified.

Final Operational Notification (FON)

A FON grants the facility owner the right to operate the demand facility using the grid connection.

FON requires that:

- Functionality tests of the facility must be approved, including verification of correct response in relation to ancillary services to Energinet and other services e.g. grid connection with limited use
- If the ION was issued on the condition that verifying measurements must be carried out to assess compliance with power quality
 requirements, such measurements and accompanying documentation must be received and reviewed by the DSO. If the assessment
 concludes that the requirements are not met, the facility owner must implement mitigating measures to ensure compliance
- If relevant, verification of the simulation model is required

Demand Facilities Not Providing Ancillary Services

When connecting a demand facility to the electricity grid, you must go through the following documentation process.



You initiate the technical documentation approval process by submitting the relevant appendices for the facility to **driftdok@cerius-radius.dk**. This is the email address you must use for all documentation submissions throughout the entire process.

It is important to test and ensure proper documentation for your facility well in advance to ensure a smooth grid connection process. We recommend that you begin preparing your documentation as early as possible. Typically, the time from submission of the first complete documentation to the issuance of an ION increases with the size of the facility — both due to the increased volume and complexity of documentation.

For facilities up to 3 MW, you as the facility owner should expect a minimum of one month from the submission of the first complete documentation to the issuance of the ION. For facilities over 3 MW, you should expect at least two months.

Remember to update the documentation during the process if the facility's electrical characteristics change.

Interim Operational Notification (ION)

An ION grants the facility owner the right to operate the demand facility and consume electricity using the grid connection for a limited period. The main purpose must be testing and verification.

ION requires that:

- The settlement meter is installed
- · The High voltage interconnection agreement between the DSO and the Customer is signed
- The following technical documentation is reviewed and approved:
 - o Facility description
 - o Power quality, if the DSO has made compliance with power quality documentation a condition of approval
 - o Relay protection system must be approved and operational

For relevant facilities, a simulation model must be submitted to the relevant parties.

Final Operational Notification (FON)

A FON grants the facility owner the right to operate the demand facility using the grid connection.

FON requires that:

- If the ION was issued on the condition that verifying measurements must be carried out to assess compliance with power quality requirements, such measurements and documentation must be received and reviewed by the DSO. If the assessment concludes that the requirements are not met, the facility owner must implement mitigating measures to ensure compliance
- If relevant, verification of the approved simulation model is required

Important Considerations – Applicable to All Processes

You can help ensure a smooth process by paying special attention to the following points, which apply across all documentation processes.

Documentation requirements

Documentation must be complete and adequate before it will be reviewed. The minimum processing time for reviewing complete documentation is one month. "Complete" means the documentation is of sufficient quality to be assessed — further revisions may be required if compliance with requirements is not evident.

Always ensure that all fields are filled in and that references to documentation and page numbers are correct and included.

Your ION is Temporary – Apply for Exemption if Needed

If your facility requires an ION (Interim Operational Notification), it is generally issued for a temporary period by agreement.

For facilities that cannot demonstrate compliance with requirements within the validity period of the ION, an extension or exemption must be requested before expiry by submitting:

- Identification of the facility
- Reason for missing documentation
- A detailed plan for performing the required tests

Contact info

All communication related to documentation for EON, ION, and FON must be sent to the DSO at: driftdok@cerius-radius.dk

Guidelines and Appendices

Grid connection rules:

<u>Grid connection (energinet.dk)</u>

Technical requirements and guidelines, including appendices:

<u>Demand – Technical Requirements and Guidelines</u> | Elnet (bottom of page)