

DNO Queue Entry Requirements for Generation Schemes

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Distribution

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Distribution Network Operator Queue Entry Requirements for Generation Schemes

Introduction

The Ofgem and DESNZ Connections Action Plan (CAP) published in November 2023 set out actions on parties to speed up connections to the electricity network across Great Britain.

CAP Action 3.1 - Raise entry requirements, sets out an action on networks to “Identify, assess and bring forward recommendations to strengthen entry requirements further”. Through the ENA Strategic Connections Group, the network companies have progressed this action and from extensive engagement with industry, through working groups, webinars and consultation, Distribution Network Operators (DNO) have now progressed with making changes to entry requirements for generation projects.

This document provides guidance to Generators on the new entry requirements required for Generators (1 MW and above) applying for connections to distribution networks. These new guidelines will ensure that all applications are sufficiently complete and competent to allow for swift progression of the project from application through to quotation. By adhering to these guidelines Generators can help reduce congestion in the connections queue, allowing networks to prioritise projects that are ready for immediate implementation.

Purpose and Objective

The primary objective of these requirements is to streamline the application process by rejecting unclear or speculative applications that lack sufficient detail. This approach aims to prioritise projects that are progressing and have a higher likelihood of successful completion. By doing so, network companies can reduce congestion in the connections queue and ensure that resources are allocated to projects that are well-prepared and viable.

The updated entry requirements set out in this document have been included into the new EREC G99 Standard Application Form (SAF) and will come into effect for all eligible applications received by a DNO on or after 01st January 2025.

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Where the new requirements can be found.

The new entry requirements are referenced in the G99 Standard Application Form (SAF).

Part 1 of the SAF requires the Generator to attach new and enhanced details:

- A letter of authority (LoA) and a Heads of Terms (HoT).
- A site layout plan which clearly shows all land relevant to the application detailed in the HoT with asset location.
- A detailed engineering design plan which clearly shows all land in the HoT.
- Single line diagram of any on-site existing or proposed electrical plant.
- A preliminary project timeline.

Note that:

LoAs and HoTs are both required for an application. The Letter of Authority may reference larger parcels of land for the developer at a higher level and could be used for several applications including Budget Estimates. The Heads of Terms is unique and specific to a single application. The Red Line Boundary must be incorporated into the Heads of Terms.

The site layout plan with asset layout may be provided along with a more detailed engineering design plan, or both documents may be combined.

Please ensure that any technical information provided to the DNO is consistent with the required formatting and / or software.

1.0 Heads of Terms

This section provides guidance on the preparation of Heads of Terms (“HoTs”) for generation projects.

A HoTs outlines the key terms agreed by the parties that shall be included in the lease or transfer of the freehold if entered into. In this instance, the HoTs does not need to be legally binding. Any subsequent purchase or lease of the land is subject to contract. Where the application for connection consists of multiple landowners, a HoT is required for each landowner.

For the purpose of applying for a new generation connection, a HoTs is required where the Generator is not the current landowner or leaseholder, or the Generator is acting for a party that is not the current landowner or leaseholder. If the Generator is, or is applying on behalf of the current freeholder / leaseholder, evidence of this will be required.

Minimum content of the Heads of Terms

The HoTs must **include** the following:

- **Parties:** names and where applicable, company numbers and contact details of the parties involved (as a minimum this shall be the Landowner, the Generator and their associated organisations with a description of their relation to the Landowner and/or the Generator as applicable (e.g. ‘Primary Contractor to the Generator’ / ‘ICP’/ ‘Agent for the Generator’) and which align with the letter of authority).
- **Description of the Land:** detailed description of location of the site. The HoTs must include a red line boundary plan of the site.
- **Term:** length of the term of any lease.
- **Use:** permitted use of the land.
- **Conditions:** any conditions that the transaction is subject to, such as board approval or obtaining planning consent.

The Heads of Terms must be signed by authorised signatories for both the Current Landowner and the Generator.

The Generator’s solicitor (including in-house solicitors where applicable) must also provide written confirmation that the HoTs apply to the entirety of the site that is the subject of the application.

Evidence required:

A **single pdf document** containing all of the following:

- HoTs signed by both the landowner and the Generator which includes the minimum content detailed above,
- Red line boundary plan illustrating the site in its entirety that is the subject of the application, and
- Written confirmation from the Generator’s solicitor that the HoTs and red line boundary plan relate to the entirety of the site that is the subject of the application.

An illustrative example HoT is shown in Appendix 1.

2.0 Site Drawing Requirements

Accurate and detailed site drawings must be included as part of the connection application.

Drawings must include, as a minimum:

- For both the site layout plan and the detailed engineering plan:
- the technology positioning/siting is clearly shown **within the site boundary** and **consistent with the minimum acreage** for the size of the site in line with the Energy Land Density tables contained within the NESO's Letter of Authority Guidance for Onshore Transmission Connection Applications¹.
- For the detailed engineering plan:
 - The **site address and grid coordinates** should be present on the diagram.
 - **Title and Legend:** Clearly state the purpose of the diagram and explain any symbols, colours, and abbreviations used. This ensures that the diagram is easily understandable.
 - **Site Boundaries:** The Red Line Boundary should be clearly marked, with accurate measurements provided. This delineates the extent of the site.
 - **Key Infrastructure:** Include the locations of generation units, substations, transformers, and access roads. This provides a comprehensive overview of the site's infrastructure.
 - **Connection Points:** Show where the site wishes to connect to the Distribution Network Operator (DNO) network. This is essential for planning the integration of the site into the existing network.
 - **Scale and Orientation:** Indicate the scale used in the diagram and show the orientation of the site. This provides context and helps in visualising the site layout. Please check with relevant DNO for scale size.
 - **Annotations and Notes:** Provide additional information and relevant notes to explain specific parts of the site. This adds clarity and detail to the diagram.

Example:

- An illustrative example site drawing is shown in Appendix 2.

¹ NESO's Letter of Authority Guidance for Onshore Transmission Connection Applications:
<https://www.neso.energy/industry-information/connections/your-connections-journey#Essential-application-resources>

3.0 Single Line Diagram

An accurate and detailed single line diagram is mandatory for the application process. The diagram must include, as a minimum:

- The **Supply Point** clearly indicating how you would like your system to be connected to the DNO's network;
- The **generation equipment** showing all the generation equipment, **included in Part 4 of the SAF**, such as solar panels, wind turbines, or other generation units;
- The **protection devices** including details of all protection devices and the switchgear that it will operate;
- The location and type of **meters** used for measuring electricity imported from and exported to the DNO's network;
- An outline the **cabling** between all generating units and the associated plant and equipment, including their ratings;
- The **earthing arrangements** showing the earthing system to ensure safety and compliance with regulations;
- The **switchgear** including switchgear used to control the flow of electricity within the system.
- Any **transformers** including their impedances and ratings;
- **Load Details**: Provide information on the loads connected to the system, if applicable

Example:

- An illustrative example single line diagram is shown in Appendix 3.

4.0 Preliminary Project Timeline

A requested connection date must be included as part of the connection application, and it is expected that prior to application a Generator / Customer will have undertaken reasonable preliminary steps to review and ensure that the requested date is both viable and realistic considering the timescale to construct the generation facility.

A comprehensive project plan shall provide a project lifecycle structure, including timelines, milestones, resources, budget and risk management. It shall ensure all aspects of the project are well-planned and coordinated

For clarity: DNOs are not requesting that detailed planning documents are submitted as part of the application; and early engagement with the DNO, especially ahead of the application, is a key part of the development of these plans.

The application must include a defined requested connection date and a number of key dates that demonstrate a clear and realistic journey to that date.

Based on all of the background for the preliminary project plan works, the Generator should be able to demonstrate the preliminary viability of the requested connection date by providing clear and realistic interim dates / timescales that include:

- Type of planning process the Generator expects to follow
- The need for Environmental Impact Assessments
- The need for Third Party Land Rights
- Assumptions on Equipment Lead Times
- The Anticipated Offer Acceptance Date
- The Anticipated “Gate 2” Compliance Declaration Date
- The anticipated Planning Consent Submittal Date
- The anticipated Planning Consent Approval Date
- The date the Generator expects to Finalise Financial Closure
- The date by which the Generator expects to provide full instruction to the DNO/ICP to proceed with detailed design and construction works
- The date the Generator expects to place the order for the main generation plant
- The date the Generator expects to start site construction
- The date the Generator expects construction works to complete
- The date the Generator expects to commence commissioning works

We require these to be dates that build to the final connection date. Dates need to be realistic and achievable. Statements such as “as soon as possible” are not acceptable.

This initial or preliminary Project Timeline should be based on the premise that the Transmission Impact Assessment will not introduce Transmission lead constraint to the project programme.

If beneficial, commentary can be added to each element of the timeline and is and is essential if the date would otherwise seem unrealistic

Template:

- A template for the provision of the project timeline is available to provide further support. See Appendix 4.

5.0 Mandatory Completion of G99 SAF Part 4

EREC G99 SAF Part 4 is a critical component of the application. It includes the provision of detailed technical data for the different types of power generating modules. Providing such data at the connection application stage means that there is a record of the equipment that the Generator is seeking to install. This means that the DNO has the information they need to design a safe and efficient connection to their distribution network which helps in planning the integration of the generating unit into the existing distribution network. This information is also used to provide the basis for demonstrating compliance with the necessary technical and safety standards.

6.0 Allowable and Disallowable Changes

DNOs have signed up to follow the ENA 'Allowable Change Good Practice Guide' which provides a high-level overview of what constitutes allowable and disallowable changes to a connection request. For more detailed information and further nuances, customers should refer to the ENA's 'Fair and Effective Management of DNO Connection Queues: Treatment of Requests to Change Connection Applications Good Practice Guide'. Example Allowable and Disallowable changes below, but please refer to the Overall Principles in the guide.

Allowable Changes:

- **Minor Technology Changes:** Changing the make or model of equipment of the same technology type. This allows for flexibility in selecting equipment without altering the overall project scope.
- **Meter Arrangements:** Altering meter arrangements downstream of the Point of Connection (PoC) without changing overall capacity. This provides flexibility in managing metering without impacting the project's capacity.
- **Capacity Decrease:** Reducing capacity without changing the PoC. This allows for adjustments in project size without affecting the connection point.
- **Point of Supply (PoS) Location:** Moving the PoS within the original premises boundary without changing the PoC. This provides flexibility in site layout without impacting the connection point.

Disallowable Changes:

- **Major Technology Changes:** Switching from one generation technology type to another. This significantly alters the project scope and requires a new application.
- **Capacity Increase:** Any increase in capacity, even if the PoC remains unchanged. This impacts the project's scale and requires a new application.
- **PoS Location Outside Premises:** Moving the PoS outside the original premises boundary. This changes the connection point and requires a new application.
- **Fundamental Operational Changes:** Changes that significantly alter the operational profile, such as switching from 'import only' to 'import and export.' This impacts the project's operation and requires a new application.

- **Change of Premises:** Significant changes to the red line boundary submitted at application stage requires a new application.

For more detailed information on allowable and disallowable changes, including specific scenarios and the impact on queue position, please refer to the ENA Allowable Change Good Practice Guide. Please note if there are any questions on this guidance a please speak to your relevant DNO.

Appendices

Appendix 1. Heads of Terms Example.

Heads of Terms for Green Energy Connection Project

Date: 14 November 2024

Parties:

1. **Landowner:** John Smith

Contact details: john.smith@example.com, 01234 567890

2. **Generator:** Joe Bloggs Ltd.

Contact details: Jane Doe, jane.doe@joebloggs.com, 07876 543210

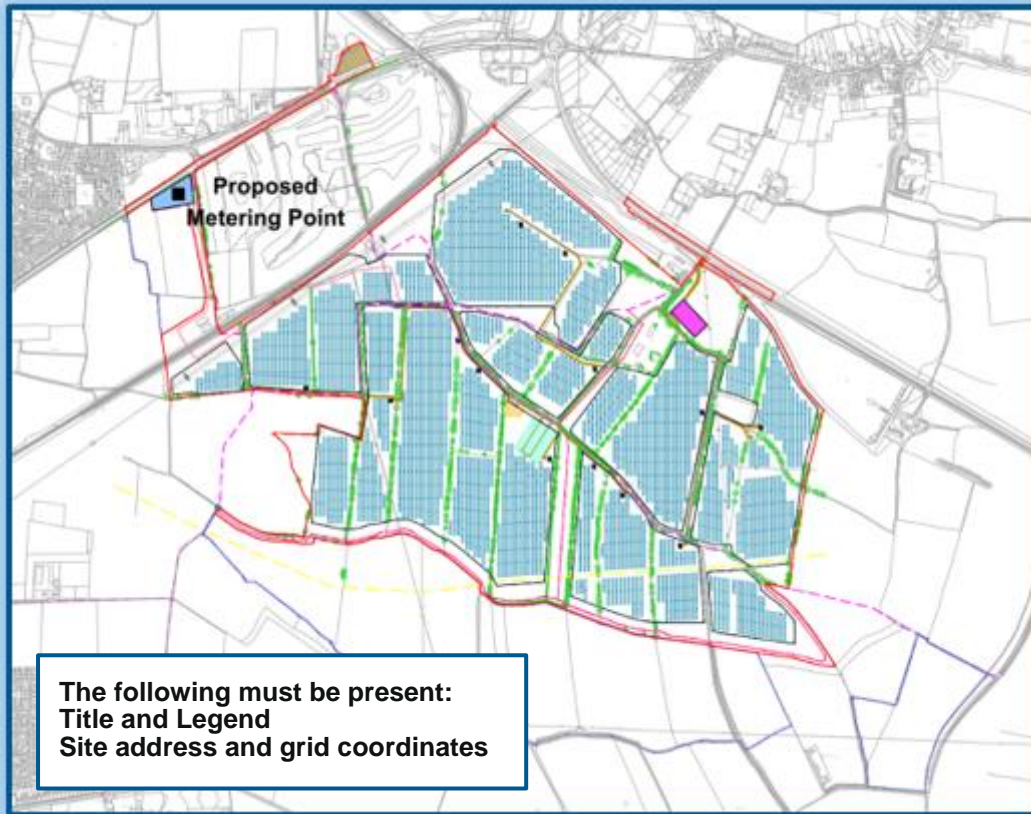
Key Terms:

1. **Framework for Negotiations:** The Landowner agrees to negotiate exclusively with Joe Bloggs Ltd. for a period of 6 months from the date of this agreement. The negotiations will cover the terms of the lease of the land, including price, duration, and any conditions precedent.
2. **Land Details:** The land in question is located at 123 Green Lane, Eco Town, UK, and covers an area of 50 acres. The land is identified by the red line boundary map attached to this document.
3. **Use of Land:** The land in question will be used to build a Solar Farm.
4. **Duration:** the Leasehold will be for a period of 30 years.
5. **Conditions:** Subject to board approval, planning consent, and satisfactory due diligence.

Name	Role	Signature	Date
John Smith	Landowner		
Jane Doe	Generator		

Red Line Boundary

The land in question is located at 123 Green Lane, Eco Town, UK, and covers an area of 50 acres.

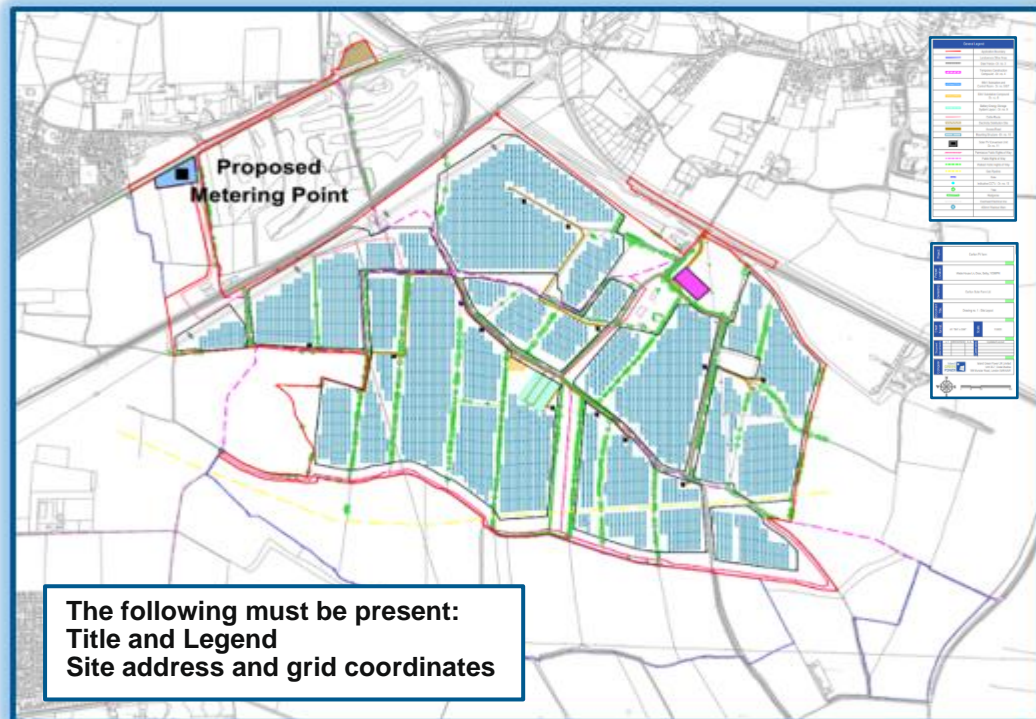


Written Confirmation:

I confirm that the Heads of Terms attached are in connection with the land illustrated in the red line boundary plan attached and cover the entirety of the site that is the subject of an application for a connection to the electricity distribution network of [please insert].

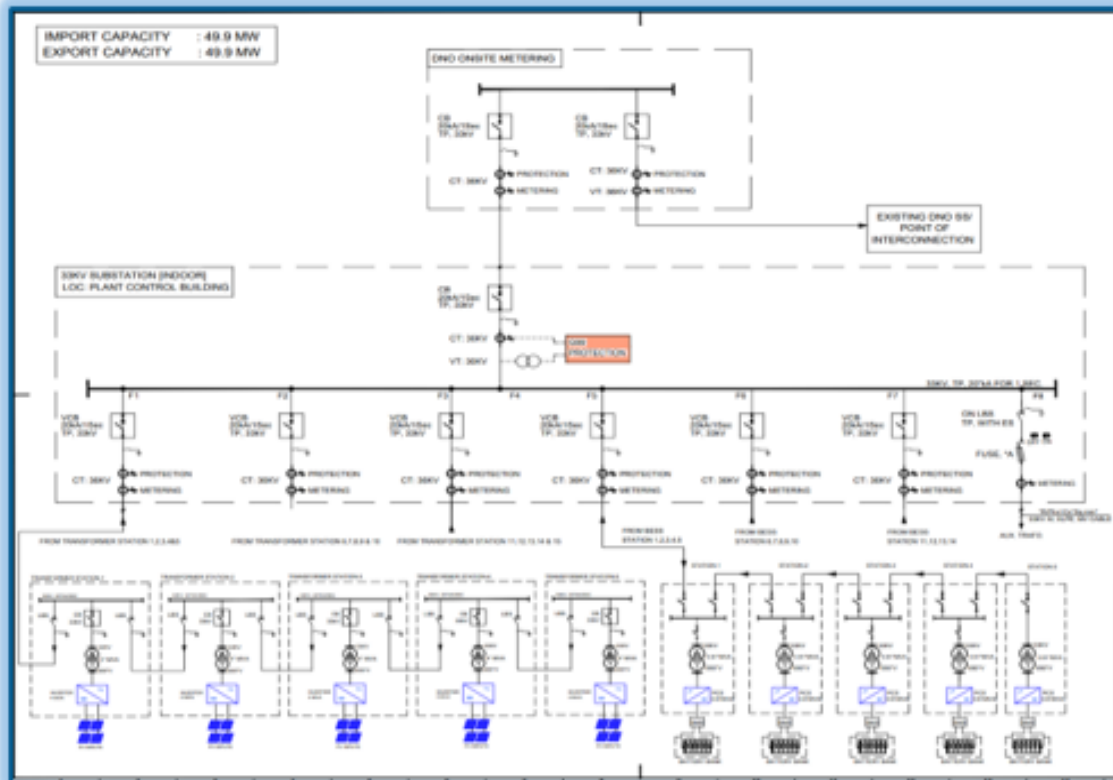
Name	Role	Solicitor's Firm/employer	SRA ID number	Signature	Date
M Brown	Generator's solicitor (SRA Regulated)				

Appendix 2. Example Site Layout Plan:



1. **Title and Legend:**
 - Title: Clearly state the purpose of the diagram.
 - Legend: Explain symbols, colours, and abbreviations used in the diagram.
2. **Site Boundaries:**
 - Red Line Boundary: Clearly marked to show the extent of the site.
 - Dimensions: Accurate measurements of the site boundaries.
3. **Key Infrastructure:**
 - Generation Units: Locations and types of generation units (e.g., wind turbines, solar panels).
 - Substations and Transformers: Placement of substations, transformers, and other electrical equipment.
 - Access Roads: Routes for construction and maintenance access.
4. **Proposed Connections to DNO Network:**
 - Existing Infrastructure: Nearby substations, power lines, and other relevant infrastructure.
 - Connection Points: Where the site will connect to the DNO network.
5. **Scale and Orientation:**
 - Scale: Indicate the scale used in the diagram.
 - North Arrow: Show the orientation of the site.
6. **Annotations and Notes:**
 - Detailed Annotations: Provide additional information about specific parts of the site.
 - Notes: Any relevant notes that help explain the diagram

Appendix 3. Example Single Line Diagram:

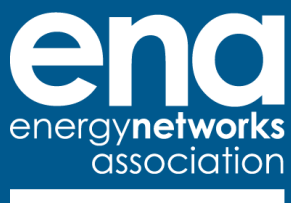


1. **Supply Point:** Clearly indicate how the projects system will connect to the DNO's network.
2. **Generation Equipment:** Show all generation sources, **including the Part 4 detail submitted in the SAF**, such as solar panels, wind turbines, or other distributed generation units.
3. **Protection Devices:** Include details of all protection devices like circuit breakers and fuses.
4. **Meters:** Display the location and type of meters used for measuring electricity generation and consumption.
5. **Cabling and Wiring:** Outline the cabling and wiring between all components, including theratings of the componants. Please provide the size/length and type of cables where possible.
6. **Earthing Arrangements:** Show the earthing system to ensure safety and compliance with regulations.
7. **Switchgear:** Include any switchgear used to control the flow of electricity within the system.
8. **Transformers:** Please include the transformer impedances.
9. **Load Details:** Provide information on the loads connected to the system, if applicable

Appendix 4. Preliminary Project Timeline Template:

Background Questions	Yes / No	Comments
Do you expect / anticipate the project to be subject to an EIA (Environmental Impact Assessment)?		
Do you expect / anticipate the project to have significant Third-Party Land Rights that will need to be secured beyond the site boundary?		
Are you planning to follow a Development Consent Order (DCO) based planning methodology		
Planned Dates	Date	Comments
Anticipated Acceptance Date *		
Anticipated "Gate 2" Compliance Declaration Date		
Planning Consent Submitted		
Planning Consent Secured		
Detailed Construction Programme Provided		
Financial Close (for full project)		
If different to Financial Close – Date at which Full Financial Release for DNO / ICP to proceed with Contestable Works		
Main Generating Plant Procurement		
Site Construction Commencement		
Main Construction Works Completed		
Commissioning Works Commenced		
Planned Energisation / Connection Date		
Planning Assumptions	Months	Comments
Assumption for Main Generating Plant Lead Time (order to site delivery)		
Assumption for DNO Connection Works Lead Time (Financial Release to Energisation)		

* Anticipated Acceptance Date should be no earlier than 3 months from the application date and no later than 6 or 9 months (depending on the specific DNO acceptance period)



Energy Networks Association

4 More London Riverside

London SE1 2AU

t. +44 (0)20 4599 7700

w. energynetworks.org

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Registered office: 4 More London Riverside, London, SE1 2AU