

Bringing energy to your door



Raising Entry Requirements for **Embedded Generation**

Update on the work of the SCG IQM&QE Subgroup

Stay connected...











www.enwl.co.uk



Welcome



AGENDA



- Background & Timeline
- G99 SAF Part 4
- Connection Date and Project Plan
- Site Drawing and SLD
- Land Readiness
- Allowable Changes
- Next Steps
- Q&A

The Background and Timeline





Why are the Networks looking at this



- Ofgem and DESNZ issued the Connections Action Plan (CAP) in November 2023
- This challenged the (then) ESO, TOs and DNOs to review and address a number of areas in the connections journey
- Section 3.1 of the Plan was set to look at "raising the entry requirements" with the intent to reduce speculative and duplicate connection contracts and to reduce the number of unviable projects entering the connection queue
- Ofgem established the Connections Delivery Board (CDB) to ensure timely and effective implementation, provide governance and monitor impact
- The action was allocated to one of the ENA SCG Working Groups to look at, consider options and deliver a proposal

Timeline



- SCG Group took first proposal to CDB on 25/04/24, where the proposal was sanctioned
- The SCG Group took the proposal to CPAG on 09/05/24, for stakeholder review
- A hybrid workshop was held with external stakeholders (facilitated by CPAG) on 04/06/24
- CDB updated on the input from CPAG and the Stakeholder Workshop, 27/06/24
- Changes sent to EU Network Code Group for review, 04/09/24
- SCG Group took Implementation changes to CDB 26/09/24, approved
- EU Network Code Group reviewed proposals with Distribution Energy Resources Technical Forum Group 30/09/24
- Changes to be published November 2024
- Changes to be implemented for new applications from January 2024

What is the proposal...



- 1 to include SAF Part 4 into the mandatory information required at application
- 2 to provide supporting information to the Connection Date requested in the application
- 3 to provide guidance on a minimum, consistent standard for the Site Location Drawing provided with the application
- 4 to evidence land readiness at application *NEW*

G99 SAF PART 4





Importance of Part 4 in the G99 Application Form



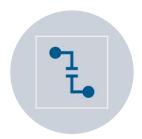


1. Detailed Technical Data:

Provides essential technical specifications for different types of power generating modules, systems.



2. Ensures Compliance: Ensures that the power generating module meets the necessary technical and safety standards before synchronization with the grid.



3. Facilitates Connection

Design: Helps the Distribution Network Operator (DNO) design a safe and efficient connection to the grid.



4. Critical for Approval: Required for the DNO to approve the connection and proceed with the integration of the generating unit into the network.

Part 4 – The Relevant Sections



Part 4a: Synchronous Power Generating Modules

Part 4b: Power Park Module model data: Fixed speed induction Generating Units

Part 4c: Power Park Module model data: Doubly fed induction Generating Units

Part 4d: Power Park Module model data: Series inverter connected Generating Units

Part 4e: Power Park Module model data: Electricity Storage plant

Part 4f: Transformer information

Connection Date & Project Plan





Project Plan Criteria



Project viability Study:

• This step involves analysing whether the project is practical and achievable. It includes technical, financial, and operational assessments to ensure the project can be successfully completed.

Project :Plan Development

- This is a comprehensive plan that outlines the entire project lifecycle. It includes:
- Timelines: Specific dates for project phases and completion.
- **Milestones**: Key points or achievements throughout the project.
- Resources: Materials, equipment, and personnel needed.
- Budget: Detailed financial plan covering all project costs.

Risk Management Plan:

• Identifying potential risks that could impact the project and developing strategies to mitigate these risks ensures the project stays on track and within budget.

Resource Allocation:

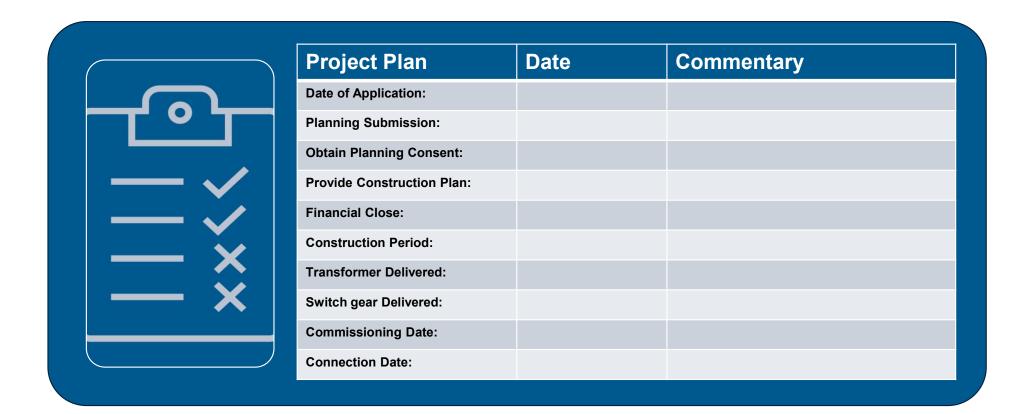
• This involves assigning specific tasks and responsibilities to team members, ensuring that all necessary resources are available and efficiently used.

Regulatory Compliance:

• Demonstrating compliance with all relevant regulations is crucial. This includes identifying all regulatory requirements and ensuring the project plan addresses them.



Project Plan Key Dates



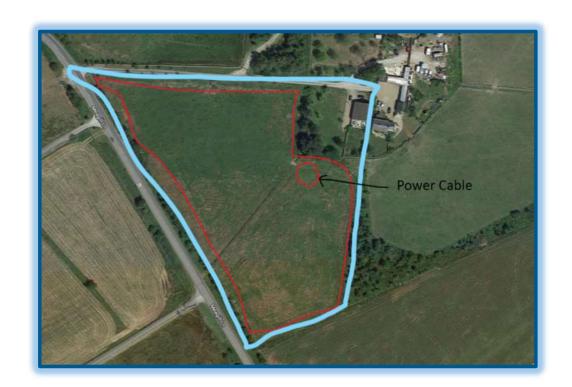
Site Drawing & SLD





energynetworks association

Site Diagram - Current standard



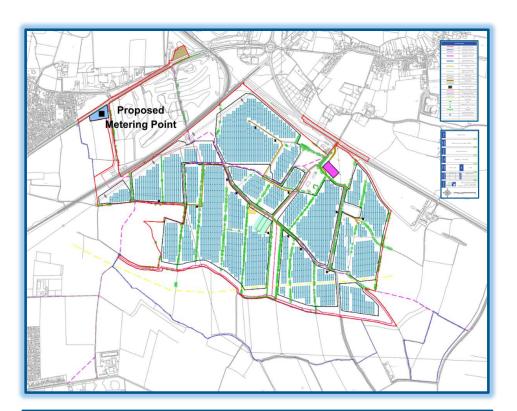
The picture to the left is an example of a site diagram received at the application stage.

There was no site address, no title, no grid coordinates or legend...

It's not helpful when trying to progress the application.

Site Diagram-Improved Standard





The technology positioning/siting is clearly shown within the site boundary. The site address and grid coordinates should be present on the diagram.

1.Title and Legend:

- 1. Title: Clearly state the purpose of the diagram.
- 2. Legend: Explain symbols, colours, and abbreviations used in the diagram.

2.Site Boundaries:

- 1. 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).
- 2. Substations and Transformers: Placement of substations, transformers, and other electrical equipment.
- 3. Access Roads: Routes for construction and maintenance access.

4. Proposed Connections to DNO Network:

- Existing Infrastructure: Nearby substations, power lines, and other relevant infrastructure.
- 2. Connection Points: Where the site will connect to the DNO network.

5.Topographical Features:

- Land Features: Elevation changes, bodies of water, and other significant land features.
- 2. Environmental Considerations: Protected areas, wildlife habitats, and other environmental factors.

6.Scale and Orientation:

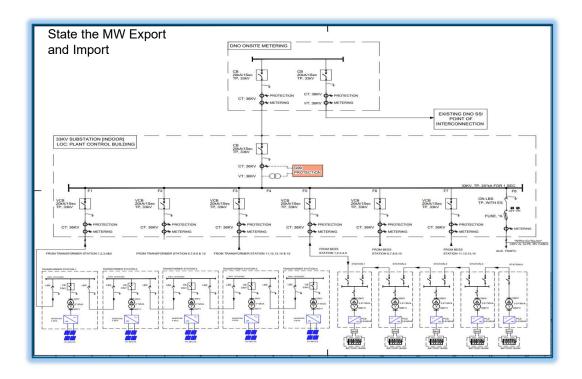
- 1. Scale: Indicate the scale used in the diagram.
- 2. North Arrow: Show the orientation of the site.

7. Annotations and Notes:

- Detailed Annotations: Provide additional information about specific parts of the site.
- 2. Notes: Any relevant notes that help explain the diagram



Single line diagram



- **1.Supply Point**: Clearly indicate how your 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 their ratings.
- **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.Load Details**: Provide information on the loads connected to the system, if applicable

Land Readiness





Evidence required at Distribution application



Heads of Terms: (the current proposal)

Heads of Terms (HoT):

An agreement between existing landowner and the applicant, outlining key terms, conditions and timescales for the applicant to purchase or enter into a lease for the land (including securing an Option for that purpose).

Applicability:

Applicant is or acting on behalf of existing Freeholder / Leaseholder:

 Heads of Terms not required subject to evidence of proof of title or lease.

Applicant is or acting on behalf of a party who is neither the Freeholder or Leaseholder:

Heads of Terms required.

Key Points:

Scope: Required for each parcel of land if owned by multiple landowners.

Signatories: Current landowner(s) and the Applicant.

•Framework: Establishes terms and timescales for future negotiations.

 Requires the land stated in application to be sold or leased to the Applicant in timescales appropriate to meet Gate 2 conditions.

Support: Letter from Applicant's solicitor confirming representation and site relevance.

Legal Status: Agreement to agree

Evidence required at Distribution application



Option: (the initial proposal)

Option:

A legal agreement between existing landowner and the applicant, exercisable for at least 36 months (from application), enabling purchase or lease of the land for the connection. Any lease would be for a minimum of 20 years.

Applicability:

Applicant is or acting on behalf of existing Freeholder / Leaseholder:

 Option not required subject to evidence of proof of title or lease (with a minimum 20 years).

Applicant is or acting on behalf of a party who is neither the Freeholder or Leaseholder:

Option is required.

Key Points:

Scope: Required for each parcel of land if owned by multiple landowners.

Signatories: Current landowner(s) and the Applicant.

•Framework:

 Enables purchase or lease (minimum 20 years) of the land stated in application within 36 months of application.

Support: Letter from Applicant's solicitor confirming representation and site relevance.

Legal Status: Exercisable by the Applicant.

Allowable Change





Allowable vs. Disallowable Changes



Allowable Changes:

Minor Technology Changes: Changing the make or model of the same technology type (e.g., wind turbine Type 'X' to Type 'Y').

Meter Arrangements: Altering meter arrangements downstream of the Point of Connection (PoC) without changing overall capacity.

Capacity Decrease: Reducing capacity without changing the PoC.

Point of Supply (PoS) Location: Moving the PoS within the original premises boundary without changing the PoC

Disallowable Changes

Major Technology Changes: Switching from one generation technology type to another (e.g., wind to diesel).

Capacity Increase: Any increase in capacity, even if the PoC remains unchanged.

PoS Location Outside Premises: Moving the PoS outside the original premises boundary.

Fundamental Operational Changes: Changes that significantly alter the operational profile (e.g., from 'import' only to 'import and export').

NEXT STEPS





Next steps – consultation on the below 3 questions.



Which option on land requirements do you feel is most appropriate to be requested at the	ne
application stage?	

Option A, which involves a heads of terms agreement accompanied by a letter of authority.

Option B, which is a 36-month option agreement for the land requirement.

- ☐ If Option A, at what stage of the connections process do you feel DNOs should align with the TMO4+ land requirements? (i.e. upon acceptance, within 6 months of acceptance, within a year of acceptance or another time)
- ☐ Is there any additional requirements which the Strategic Connections Group have not considered, which could be requested at application to evidence a project is not speculative?

All Responses to be sent to energynetworks.org by 11th November.

