AGR NETWORKS LTD

Distributed Generation (DG) & Network Adoption Connection Guide

Issued in accordance with Standard Licence Condition (SLC) 25A

1. Introduction

AGR Networks Ltd ("AGRN") is an Independent Distribution Network Operator (IDNO) licensed to own and operate electricity distribution networks in Great Britain. This Guide is published to comply with SLC 25A and explains how:

- Distributed generation (DG) can connect to AGRN's network (**Option 1**), and
- Developers/ICPs can construct a network from a DNO-provided Point of Connection (PoC) for AGRN to adopt (**Option 2**).

The Guide ensures AGRN provides transparent, non-discriminatory access to its distribution system.

2. Scope of this Guide

This Guide applies to:

- All forms of distributed generation
- All contestable network assets constructed by ICPs for adoption by AGRN
- New connections, modifications, export increases, and network extensions
- All voltage levels (LV, HV, EHV)

This guide must be read together with industry codes, including:

- ENA G81 and Appendices (mandatory for ICPs)
- ENA G99 (generator compliance)
- Relevant DNO interface requirements
- AGRN's technical & design standards

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3. Two Connection Routes

AGRN provides two primary pathways:

OPTION 1 — DG connecting directly to AGRN's network

This follows the traditional SLC25A "Distributed Generation Connection Process".

3.1 Step-by-Step Process for DG Applicants

1 — Initial Enquiry

Applicant provides:

- Generation type, capacity, location
- Voltage level
- Export/import requirements
- Site layout
- High-level programme

AGRN replies with feasibility guidance and next steps.

2 — Formal Application

Applicant submits full technical design:

- Single Line Diagram (SLD)
- Generator characteristics (fault contribution, ratings)
- Protection scheme & G99 documentation
- Cable routes / layouts
- Anticipated export profiles
- Metering arrangements
- Studies (if available)

3 — Network Impact Assessment

AGR performs:

- Load flow analysis
- Voltage, thermal, fault level checks
- Harmonics & power quality study
- Protection coordination
- Assessment of reinforcement needs

4 — Connection Offer

Offer includes:

- Connection point & voltage
- Required AGR works
- Required customer works
- Costs & payment schedule

- Programme & dependencies
- Technical conditions
- Ongoing DUoS basis

Offer validity period referenced.

5 — Acceptance & Contracting

To progress:

- Applicant accepts the Connection Offer
- Construction & Connection Agreement executed
- Any adoption agreements (if ICP-built) completed
- Payment of initial charges

6 — Construction

Works may be:

- **Contestable** (ICP)
- **Non-contestable** (DNO)

AGRN inspects contestable construction to ensure compliance with approved design and G81/G99.

7 — Commissioning & Witness Testing

Before energisation:

- Protection tests
- G99 commissioning
- Interface checks
- Compliance verification

AGRN will not energise until all compliance criteria are met.

8 — Post-Connection

The generator must:

- Maintain equipment
- Operate within export limits
- Comply with the Connection Agreement
- Notify AGRN of modifications

AGRN may audit the site periodically.

OPTION 2 — Developer/ICP with DNO Point of Connection (PoC) seeking AGRN adoption

This reflects the workflow in the **Full Project Lifecycle** document and integrates AGRN's **Design Approval Form** process and ICP compliance obligations deriving from G81 and the **ICP Document Checklist** .

This option applies when:

- The **developer already holds a confirmed PoC from the DNO**, and
- Wishes AGRN to adopt the contestable network assets built by an ICP.

4. Option 2: Full Process Overview

4.1 Step 1 — Initial Enquiry

Developer/ICP provides:

- PoC letter from DNO or National Grid
- Load profile / capacity details
- Proposed network routing
- Site address & programme

AGRN logs the project and assigns a reference number (per lifecycle).

4.2 Step 2 — Feasibility Review

AGRN reviews:

- PoC suitability
- Proposed adoption routes
- Voltage levels and asset types
- Compliance implications
- Commercial viability

AGRN issues preliminary adoption guidance.

4.3 Step 3 — Commercial Offer

AGRN issues an Adoption Offer including:

- DUoS structure
- Indicative asset value
- Adoption conditions
- Responsibilities and liabilities
- Design submission requirements
- Compliance expectations (G81 + AGRN standards)

Upon acceptance, AGRN becomes the intended adopting IDNO.

4.4 Step 4 — Bilateral Connection Agreement (BCA)

AGR coordinates with the DNO to:

- Establish, or
- Novate

the Bilateral Connection Agreement covering the adopted assets.
(This is a necessary regulatory step prior to energisation.)

4.5 Step 5 — ICP Appointment

Developer appoints an ICP responsible for:

- Full design
- Construction
- Testing
- As-built documentation

The ICP must comply with G81 and relevant DNO documents listed in the **ICP Document Checklist**.

4.6 Step 6 — Design Submission to AGRN

The ICP submits a full design pack using AGRN's **Design Approval Form** including:

- Network topology
- Protection & control
- Earthing design
- Cable/civil route design
- Substation layouts
- Metering arrangements
- Interface with DNO
- Network studies
- Compliance matrix (G81 / AGRN standards)

4.7 Step 7 — AGRN Design Review

AGRN reviews the design against:

- ENA G81
- DNO interface standards
- Electrical safety & compliance
- AGRN technical requirements
- Health, Safety & Environmental requirements

AGRN may issue:

- **Approved**
- **Amendments Required**

per section 3 of the Design Approval Form.

4.8 Step 8 — Submission to DNO

AGRN approves the submission of the **AGRN-approved design** to the DNO by the ICP for interface approval.
(Required for energisation at the PoC.)

4.9 Step 9 — Land Rights & Legal Agreements

Before construction:

- Heads of Terms for leases/easements
- Wayleaves for cable routes
- Consents for substation sites
- Adoption Agreement
- Construction Agreement

All must be completed **before energisation**.

4.10 Step 10 — Construction & AGRN Monitoring

ICP undertakes construction.
AGRN conducts:

- Site inspections
- Audits for G81 compliance
- Verification that construction matches the **approved design**

As required in the approval form notes:
AGRN reserves right to audit construction.

4.11 Step 11 — Adoption Readiness

ICP submits:

- As-built drawings
- Test reports
- Cable test certificates
- Protection test sheets
- G81 compliance evidence

AGRN performs final inspections.

4.12 Step 12 — Network Adoption & Energisation

When all legal and technical conditions are satisfied:

- AGRN formally adopts the assets
- DNO energises the PoC
- AGRN becomes responsible for operation, maintenance & DUoS billing

Energisation **cannot** occur before adoption criteria and legal requirements are fully satisfied.

5. Design Standards & ICP Responsibilities

The ICP must design **both**:

1. The **AGRN adoption network**, and
2. The **DNO interface works**,

to standards no less than G81 and the full suite of documents referenced in the **ICP Document Checklist**.

This includes:

- DNO jointing manuals
- Underground cable installation standards
- Safety documents
- LV/HV operational procedures
- UKPN/EPN/SPN engineering recommendations

- Overhead line manuals (where applicable)

These are **mandatory** for contestable work under G81.

6. AGRN Design Approval Requirements

Designs must be submitted using AGRN's Design Approval Form and must include all items listed in Section 2 of the form:

- Full design pack with document references
- Compliance matrices
- Network modelling
- Protection studies
- Earthing studies
- DNO interface details
- Substation layouts
- Cable route civil designs
- Metering diagrams

AGRN's design review categories:

- Network topology
- Protection & control
- Earthing
- Civil route design
- Substation layout
- Metering
- DNO/TSO interface
- Studies
- Compliance with ENA & G81
- H&S / environmental compliance

All must be marked **Approved** before construction begins.

7. Dispute Resolution

If disagreements arise between:

- Applicant and AGRN
- ICP and AGRN
- Developer and AGRN

Issues should first be escalated internally.
If unresolved, parties may escalate to **Ofgem**, who hold ultimate authority.

8. Contact Details

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