

CUSC Amendment Proposal Form**CAP: 189****Title of Amendment Proposal:**

Standard Gas Insulated Switchgear Ownership Boundaries

Description of the Proposed Amendment (*mandatory by proposer*):

CAP189 is raised following a recommendation of the joint Grid Code/ CUSC Gas Insulated Switchgear Working Group, whose report was presented to the May 2010 CUSC Amendments Panel meeting. The Working Group sought to clarify a number of issues identified relating to Gas Insulated Switchgear (GIS) assets. CAP189 specifically seeks to modify the CUSC such that a User requesting a connection to the National Electricity Transmission System, via a GIS substation, will be able to elect one of the following standard ownership boundaries and construction options:

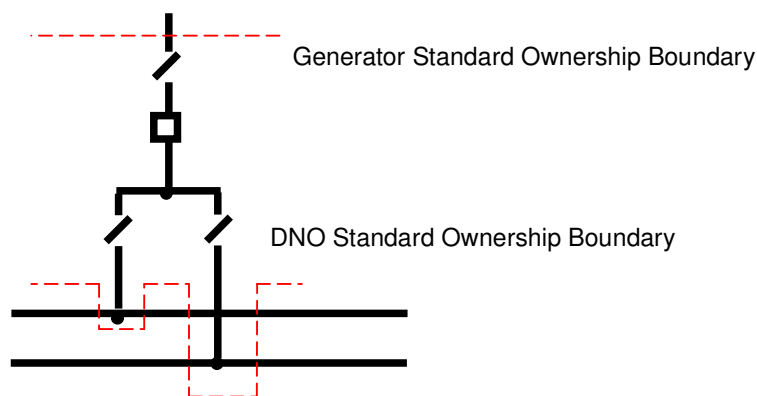
1. Generator Standard Boundary
2. DNO Standard Boundary – User builds all the GIS assets
3. DNO Standard Boundary – User builds their own assets only

The boundary description is intended to reflect the boundary that Generator and DNO Users would typically choose, but the recommendation will allow any User to choose either boundary.

The Generator Standard Boundary is the boundary at which Generators will typically elect to connect and the Working Group concluded this should be at the interface between the cable box socket and plug on the Users' circuit, as shown in the diagram below. The commercial terms in relation to Interruption Payments of a connection at such a boundary will be consistent with those currently made within the Scottish Power Transmission Region, namely that Interruption Payments are not made for loss of access resulting from faults or maintenance on the generator GIS bay.

The DNO Standard Boundary is the boundary which DNOs will typically select, based on the current definition in CUSC 2.12.1(e)(ii) which will result in the busbars of the GIS assets being owned by multiple parties. At GIS switchboards, where a single DNO interfaces with a Transmission Owner (TO) the boundary would be that at which the TO connects to the DNO assets.

For the avoidance of doubt, Generators will be free to select the DNO Standard Boundary and vice versa.



The proposed Generator Standard Boundary is currently available as a non-standard ownership boundary; the proposal effectively codifies this arrangement as a standard form.

The principle would be maintained that the electrical boundary is at the same point as the ownership boundary. Consequently, overall ownership and control of the generator bay will move to the Transmission Owner under the Generator Standard Boundary, although the Generator (or DNO) will be able to operate the bay circuit breaker on the basis of switching agreements as recorded in the Site Responsibility Schedule.

Options for Construction

Under the Generator Standard Boundary, the TO would construct all the GIS assets.

The GIS Working Group concluded that there are two effective options for the construction of GIS assets under the DNO Standard Boundary arrangement. The first is where the responsibility for the construction of the bay remains with the User. In this option the User has the choice to contract either with National Grid's unlicensed business or any other party (in reality limited to the GIS manufacturer) to install the User bay, thus, maintaining the ability for competition in construction. The second option is a self build arrangement under which the majority GIS asset owner would construct all the GIS assets on site and on completion the relevant assets would be transferred to the other party such that the enduring ownership boundary is at the DNO Standard Boundary. The majority GIS asset owner could be either the TO or the User.

The Connection Application Form within the CUSC would be amended to allow a User to nominate which standard ownership boundary and construction approach would be preferred if the use of GIS technology were required.

Description of Issue or Defect that Proposed Amendment seeks to Address *(mandatory by proposer):*

Within the CUSC, the existing standard ownership boundary for GIS assets cannot be applied to the currently available GIS assets. Ownership boundaries are therefore determined and specified on a site by site project specific basis. Due to the nature of GIS equipment (i.e. integrated, sealed and modular) it is difficult to identify a construction and on going operational ownership boundary for all User connections at GIS substations. Site specific arrangements lead to construction and operational procedural complexity.

There is no recognised international standard for compatibility between GIS equipment manufactured by different GIS manufacturers which has a direct impact upon competition for the procurement and maintenance of the User's GIS bay equipment. It is not feasible to interface together GIS equipment from different manufacturers.

The GIS Working Group concluded that there is currently a limited amount of competition for construction of GIS bays since Users only have the choice of constructing the GIS bays themselves or, in the case of a generation connection, asking National Grid to do this via the Alliance Partners as unlicensed work. The Working Group noted that if the user chose to construct the GIS bay itself, they would need to contract with the same manufacturer directly. As indicated above, the use of another manufacturer's GIS equipment is not feasible.

The Working Group concluded that competition in the maintenance of User GIS bays is limited with inherent complexities to gain market entry including access to transmission substations, safety management and the specialised nature and equipment required and therefore a significant proportion of such maintenance is performed by National Grid's unlicensed business. That withstanding, the Working Group concluded that alternative service providers have been developing such capability and resources levels in order to partake in the maintenance of GIS transmission assets, and therefore the effectiveness of competition will increase.

Impact on the CUSC *(this should be given where possible):*

Changes are proposed to the following sections of the CUSC:

- Section 2: Connection
- Section 11: Definitions
- Standard Exhibit F for the Connection Application Form

Impact on Core Industry Documentation *(this should be given where possible):*

There are no impacts identified from CAP189 on Core Industry Documentation.

Impact on Computer Systems and Processes used by CUSC Parties *(this should be given where possible):*

None identified.

Details of any Related Modifications to Other Industry Codes *(where known):*

None identified

Justification for Proposed Amendment with Reference to Applicable CUSC Objectives**
(mandatory by proposer):

The Proposed Amendment would better meet both Applicable CUSC Objectives:

- (a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this license;

National Grid has a range of statutory duties and licence obligations which include ensuring the efficient, economic and co-ordinated operation of the National Electricity Transmission System. The proposed amendment better facilitates objective (a) the efficient discharge by transmission licensees of this obligation as site specific construction and operational procedures and contractual arrangements would no longer be inherently required for connections at GIS substations.

- (b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.

With regard to objective (b), implementation of CAP189 would further facilitate competition in the construction, operation and maintenance of User owned GIS assets and therefore facilitates Transmission Owners, Generators, DNOs and directly connected users connecting at a GIS substation, in the future.

Details of Proposer: Organisation's Name:	National Grid Electricity Transmission plc
Capacity in which the Amendment is being proposed: (i.e. CUSC Party, BSC Party or "National Consumer Council")	CUSC Party
Details of Proposer's Representative: Name: Organisation: Telephone Number: Email Address:	Tom Ireland National Grid Electricity Transmission 01926 65 6152 Thomas.ireland@uk.ngrid.com
Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address:	David Smith National Grid Electricity Transmission 01926 65 5534 David.m.smith@uk.ngrid.com
Attachments (Yes/No): Yes If Yes, Title and No. of pages of each Attachment:	
The latest version of the Gas Insulated Switchgear Working Group Report is available on National Grid's website at: http://www.nationalgrid.com/NR/rdonlyres/FED4D50E-4469-4D7F-B08F-F08DE47C0800/41152/GasInsulatedSwitchgearWorkingGroupReport.pdf	

Notes:

- Those wishing to propose an Amendment to the CUSC should do so by filling in this "Amendment Proposal Form" that is based on the provisions contained in Section 8.15 of the CUSC. The form seeks to ascertain details about the Amendment Proposal so that the Amendments Panel can determine more clearly whether the proposal should be considered by a Working Group or go straight to wider National Grid Consultation.
- The Panel Secretary will check that the form has been completed, in accordance with the requirements of the CUSC, prior to submitting it to the Panel. If the Panel Secretary accepts the Amendment Proposal form as complete, then he will write back to the Proposer informing him of the reference number for the Amendment Proposal and the date on which the Proposal will be considered by the Panel. If, in the opinion of the Panel Secretary, the form fails to provide the information required in the CUSC, then he may reject the Proposal. The Panel Secretary will inform the Proposer of the rejection and report the matter to the Panel at their next meeting. The Panel can reverse the Panel Secretary's decision and if this happens the Panel Secretary will inform the Proposer.

The completed form should be returned to:

Bali Virk
Commercial
National Grid
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Or via e-mail to: Bali.Virk@uk.ngrid.com

(Participants submitting this form by email will need to send a statement to the effect that the proposer acknowledges that on acceptance of the proposal for consideration by the Amendments Panel, a proposer which is not a CUSC Party shall grant a licence in accordance with Paragraph 8.15.7 of the CUSC. A Proposer that is a CUSC Party shall be deemed to have granted this Licence).

3. Applicable CUSC Objectives** - These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1. Reference should be made to this section when considering a proposed amendment.