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Promoting choice and value for all gas and electricity customers

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Date: 2 July 2010

Dear Alison

B6 boundary: Derogation from standard condition C17 of the Electricity Transmission Licence (Transmission system security standard and quality of supply)

This letter sets out the Authority's reasons for granting derogation to National Grid Electricity Transmission plc ("NGET") from the requirement contained within paragraph 1 of standard licence condition C17 ("SLC C17") of the Electricity Transmission Licence. SLC C17 requires the Transmission Licensee to plan and develop its transmission system and to co-ordinate and direct the flow of electricity onto and over the transmission system, in accordance with the National Electricity Transmission System Security and Quality of Supply Standard ("NETS SQSS")¹.

In accordance with the principles of interim 'connect and manage', the derogation attached to this letter will partly facilitate the connection of the 'first tranche' of generation seeking earlier connection behind the "Cheviot"² (or "B6") transmission system boundary between Scotland and England. The 'first tranche' of generation is those generators first identified by the transmission licensees as being able and willing to connect early under the interim connect and manage arrangements. We expect to receive further derogation requests in relation to additional tranches that have been identified and offered earlier connection.

The connection of the first tranche is also dependent on the decision Ofgem has made to grant derogations to SP Transmission Limited ("SPT") in relation to the Cheviot boundary and to Scottish Hydro-Electric Limited (SHETL) in relation to the "B1"³ boundary in the north of Scotland and relevant circuits in Kintyre⁴. Those letters and derogations are issued on the same date as this letter and are available on our website⁵. In combination, these decisions remove the obstacles to the connection of the first tranche of generation which arise because of the NETS SQSS.

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¹ The current version of the NETS SQSS is version 2. It is intended that this derogation will apply to any subsequent versions of the NETS SQSS subject to the terms of this letter and associated Direction.

²The circuits between Eccles and Stella West, Strathaven and Harker and relevant 132kV circuits from Galashiels. ³ The 275kV circuits between Beauly and Blackhillock, the 275kV circuits between Foyers and Blackhillock, the 132kV circuits between Fort Augustus and Errochty, and the two super grid transformers (SGTs) at Keith. ⁴The relevant circuits in Kintyre are the 132kV double circuit and single circuit lines between Inverary and Sloy,

the 132kV double circuit and single circuit and single circuit lines between inverary and Sioy, the 132kV double circuit between Inverary and Carradale, the 132kV double circuit between Inverary and Taynuilt. <u>⁵http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Pages/Traccrw.aspx</u>

Background

In the transition to the British Electricity Trading and Transmission Arrangements ("BETTA") in 2005, the Authority granted SPT and NGET derogations⁶ from the requirement to comply with the criteria for the design of the main interconnected transmission system set out in paragraphs 4.1 to 4.13 of the NETS SQSS (the "BETTA derogation"). The BETTA derogation applied to the Cheviot boundary. It enabled the connection of certain generators in Scotland, ahead of reinforcement of the Cheviot boundary to increase its capability.

In March 2009⁷, we issued a consultation on a proposed approach to use derogations from the NETS SQSS to facilitate earlier connection of generation to the transmission and distribution systems in GB. We set out in that consultation that the practical effect of the BETTA derogation is that transmission capacity is effectively "oversold" in Scotland, in that the total amount of rights to access the system which have been sold to generators exceeds the current physical capacity of the transmission system, in particular at the Cheviot boundary. We noted that this clearly benefits those generators in Scotland that have access to these rights as they are able to sell their output or receive compensation (through constraint payments) if their output is restricted due to insufficient transmission capacity.

We set out that the practical effect of that decision is that generators who were connected to the system prior to BETTA, or had made an application to connect before 1 January 2005, enjoy substantial benefits through being able to access the system, compared with generators who have sought connection since that date. We set out our view that, whilst the BETTA derogation remains in place, if we are to avoid undue discrimination, we would need to extend the principle of over-selling for an interim period, until new, enduring access reforms are implemented.

We noted that we could not rule out the need to revisit this approach and the principle of overselling in general if, for example, there was a delay to enduring access reforms or other unforeseen developments. We set out that in such circumstances we would be mindful of the need to avoid undue discrimination and would need to consider the issue of overselling in general. We noted that this could require remedies which would affect all generators in areas of over-selling, rather than solely focusing on generators who have connected or plan to connect to the transmission or distribution networks from a particular point of time.

The majority of respondents to our consultation supported our proposed approach. In May 2009⁸, we set out our decision to adopt an interim 'connect and manage' ("ICM") approach to accelerate the connection of new generation in advance of transmission system reinforcement, and ahead of the enduring transmission access reforms. We set out that, to avoid undue discrimination, we would extend the principle allowing over-selling to apply to other generators in comparable situations (ie those generators whose connection date is delayed as a result of the need to complete reinforcement of the wider transmission system). We also set out, for the avoidance of doubt, that the principle did not apply to those generators whose connection date is delayed as a result of there being no physical connection to the contiguous GB transmission system.

In addition, we set out that we considered that it was appropriate that the issue of how to deal with the costs associated with this approach should be considered separately, but that in any case we expected the costs to be relatively modest for a number of reasons,

⁶ <u>http://epr.ofgem.gov.uk/</u>

⁷<u>http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/Derogation%20letter%2019%20Marc</u> h%2009.pdf

⁸<u>http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/20090508%20derogations%20interim.pdf</u>

including that this was intended to be a short term measure. We made clear that we would keep the costs under review.

Following our May 2009 decision, the transmission licensees identified generators that could potentially benefit from ICM. Subsequently, NGET and Scottish distribution network operators ("DNOs") made offers to (and entered into agreements with) transmission and distribution generators seeking to advance their connection dates, subject to relevant derogations being granted by Ofgem.

In parallel with our work on ICM, and in light of our concerns about the proposed enduring grid access models then being developed by industry, the Authority recommended that the Secretary of State use his powers under the Energy Act 2008 to facilitate reform of the transmission access arrangements⁹. Subsequently, before the May 2010 general election, the then Government announced that it intended to introduce an enduring connect and manage regime. If this approach is implemented as currently proposed, it would, amongst other things enable transmission licensees, in certain circumstances, to 'self derogate' from the requirements of the NETS SQSS to facilitate earlier connection, and the costs associated with this approach will be spread across all users of the system. This approach would replace the interim connect and manage approach that we announced in May 2009.

Request for derogation

In accordance with the principles of ICM, NGET, SP Distribution Limited ("SPD") and Scottish Hydro-Electric Power Distribution Limited ("SHEPD") have entered into connection agreements with a number of generators in Scotland to advance their connection dates ahead of reinforcement of the wider transmission system. We understand that the agreements of these generators are conditional upon, amongst other things, Ofgem granting derogation from the requirement to comply with the NETS SQSS.

The transmission licensees have identified the extent of the technical non-compliance with the NETS SQSS which would arise from the first tranche of proposed early-connecting generation, which is comprised of approximately 750MW of renewable generation seeking connection to the transmission and distribution systems in Scotland.

Facilitating this earlier connection is dependent on, amongst other things:

- 1. Ofgem granting further derogation in relation to the Cheviot boundary between Scotland and England, and
- 2. Ofgem granting derogation in relation to the B1 transmission boundary and relevant Kintyre circuits.

We are issuing separately our decision to grant derogation to SPT in relation to Cheviot, and to SHETL in relation to B1 and Kintyre.

This letter is in relation to derogation for NGET from the requirements set out in chapter 4 of the NETS SQSS in relation to the B6 boundary.

NGET has carried out analysis on the costs and benefits that would be associated with the connection of this first tranche of generation. This analysis is available on NGET's website¹⁰.

NGET's analysis estimates the incremental costs (increasing constraints costs) and benefits (carbon savings) overall associated with the earlier connection of this first tranche of generation. The results from NGET's 'business as usual' or best view scenario are set out in the table below. For the avoidance of doubt, the numbers below are indicative and are therefore subject to change. The numbers are also forecasts which may diverge from actual experience. The numbers may also overstate the adverse impact of the derogation if

⁹<u>http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/Miliband%20-%20250609.PDF</u>
¹⁰<u>http://www.nationalgrid.com/uk/Electricity/Codes/gbsqsscode/DocLibrary/</u>

the connection of the additional generation results in favourable changes to wholesale electricity prices which are passed through to end-consumers.

The business as usual scenario NGET has used assumes amongst other things the realisation of NGET's best view of the likely generation background over the period, and the ability of NGET to secure contracts and actions to manage constraints. For more detail on the approach adopted by NGET, please see the full report on NGET's website.

	2010/11	2011/12	2012/13	2013/14	2014/15	TOTAL (£M)
Additional constraints (£m)	17.99	32.65	24.56	21.95	32.13	129
Carbon savings* (£m)	8.28	14.37	17.34	21.84	20.91	83
Constraints minus carbon	9.71	18.28	7.22	0.11	11.22	46
NPV** of additional constraints (£m)						116.2

Table 1: Summary of NGET's results for tranche 1

* NGET's cost benefit analysis sets out that it has followed DEFRA's latest guidance in calculating the carbon savings.

**Net Present Value (NPV) to 2009, the same year DECC used for its analysis on connect and manage, using 3.5% discount rate as per DECC's documents.

Ofgem's views

We have considered information provided by NGET and SPT in making our decision on derogation for the B6 boundary.

We note that SPT has:

- identified a number of generators that could connect ahead of reinforcement of the B6 transmission boundary, as envisaged under ICM, and
- provided information to NEGT on the Cheviot boundary capabilities (and the incremental impact on the existing non-compliance of connecting certain additional generation) to inform NGET's analysis.

We note that NGET has:

- provided Ofgem with analysis of the incremental impact of connecting the first tranche that could connect ahead of reinforcement, identifying the expected costs (which amount to increased constraint costs) and benefits (carbon savings)
- indicated in that analysis that there are increased costs overall of connecting the first tranche of generation identified, since the carbon benefits would not offset the increased constraint costs
- confirmed that it will be able to continue to operate the system in accordance with the requirements of chapter 5 of the NETS SQSS (system operation), ie it can maintain compliance with chapter 5 of the NETS SQSS (system operation)
- identified measures to maintain system operability, and committed to keep these under review to ensure that these are procured efficiently.

We have considered this derogation request in accordance with our principal objective and general duties, and in light of the information that has been provided to us. We have considered those factors set out in our Guidance on licence derogation requests¹¹ and the principles set out in our May 2009 decision on ICM, in particular in relation to non-discrimination. Subject to a number of conditions, we have decided to grant further derogation to NGET from the NETS SQSS in relation to the Cheviot boundary for the following reasons:

- NGET and SPT have already previously identified the planned reinforcement works to achieve compliance, and we expect SPT and NGET to meet the milestones which are a condition of the existing derogation¹²
- these reinforcements were assessed under TPCR4, and further works to restore compliance will be considered in the context of TPCR5, and
- although NGET's analysis indicates that there are increased costs overall of connecting the first tranche of generation identified, it has identified operational measures to manage the system, and measures (including intertrip and measures such as contracts) to minimise costs.

We consider that granting further derogation for the Cheviot boundary is consistent with the ICM approach we consulted on in March 2009 before reaching our decision in May 2009. We noted then that we understood the approach would result in increased constraint costs, and that we would keep costs under review.

We are concerned by the level of incremental constraints costs which is forecast to arise as a result of this derogation, which reinforces our more general concerns about the potential adverse impact of a connect and manage regime. However, for the reasons set out above in connection with our May 2009 decision, we consider that it is appropriate to grant this derogation. We will continue to monitor the level of constraints costs which arise as a result of the application of the connect and manage approach and expect NGET and SPT to do the same. We expect to be kept informed of changes to the overall generation background in the area, which may result in us revisiting this derogation and considering what, if any, conditions it may be appropriate to apply to generation connecting in the area (both existing and future).

For the avoidance of doubt, this derogation is granted on the basis of the impacts NGET has identified associated solely with the first tranche of generation connecting under ICM, and is subject to the conditions set out below. We expect further derogation would be required to facilitate earlier connection of additional generation, and will consider future requests as these are submitted.

As noted above, the implementation of DECC's proposed enduring connect and manage regime will replace the interim connect and manage approach that we adopted in May 2009. We do not expect that the implementation of enduring connect and manage would have an impact on this decision but we note that, as with any derogation, we will keep our decision under review. As previously noted, we cannot rule out the need to review our approach if there are significant delays to enduring access reform, or other unforeseen circumstances.

Conditionality

The derogation is conditional upon:

i. the derogation for the Cheviot boundary remaining in effect¹³

¹¹<u>http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=14&refer=Networks/Techn/TechStandds/Derogtn</u> <u>s</u>. We issued additional guidance in January 2009 which is available here:

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=15&refer=Networks/Techn/TechStandds/Derogtns ¹² The existing derogation is conditional upon increase in transfer capacity to 2.8GW by December 2010, and to 3.3GW by November 2011.

- ii. the transmission licensees (where relevant in conjunction with relevant distribution licensees) facilitating the connection of the first tranche of generation in the timescales currently anticipated, or similar generation with similar impacts. For the avoidance of doubt, should the licensees identify changes to the generation background that would affect significantly the extent of the non-compliance identified in the context of this derogation, and/or the impacts NGET has identified, we expect the relevant licensee to seek additional derogation if appropriate;
- NGET providing to Ofgem six months after the date this derogation is granted (and every 6 months thereafter) a report on the impact of the derogation. NGET's report shall set out:
 - a. the operational measures NGET is taking to manage the system in the areas to which derogation applies;
 - b. the commercial actions NGET is taking in this regard;
 - c. the incremental costs and benefits related to the generation connecting early under this derogation, arising in the preceding 6 month period; and
 - d. as above, forecast for the following 12 month period;
- iv. NGET continuing to be able to operate the system in accordance with the requirements of chapter 5 of the NETS SQSS. We note that NGET has not identified the need for derogation against chapter 5 of the NETS SQSS and assesses that it can manage the system. We also note that NGET is required by its licence to procure balancing measures efficiently, and by the Electricity Act to operate the system efficiently;
- v. NGET (and where relevant, distribution licensees) having in place appropriate (and efficient) measures to mitigate the impacts of the non-compliance; and
- vi. if appropriate, transmission licensees seeking further derogation in relation to subsequent tranches, identifying the further incremental impacts.
- vii. NGET and SPT keeping the implications of the derogation on constraints costs under review and informing Ofgem of changes to the overall generation background in the area, which may result in us revisiting this derogation and considering what, if any, conditions it may be appropriate to apply to generation connecting in the area (both existing and future).

Decision

The Authority has decided to grant NGET derogation from paragraphs 4.1-4.13 of the NETS SQSS in relation to the B6 boundary.

For the avoidance of doubt, this decision does not replace the existing derogation, which remains in effect until April 2012. However, this derogation does remove certain of the conditions set out in the existing derogation, where these have expired or are no longer relevant¹⁴.

¹³ Both the derogation granted in 2005 (and renewed in 2007) and the further derogation granted on the same date as this derogation.

¹⁴ The existing derogation is conditional upon NGET reporting to Ofgem on the outcome of the review of the NETS SQSS on the treatment of wind generation by April 2008. That date has passed, and we are content that the ongoing NETS SQSS review process is sufficiently transparent that we can remove this requirement. We also note that the existing derogation is conditional upon NGET proposing NETS SQSS governance arrangements. We continue to consider this is an issue to be addressed, but consider it can be separated from the Cheviot derogation.

Attached to this letter is a copy of the Direction for the purposes of the derogation.

This letter constitutes notice for the purposes of section 49A of the Electricity Act 1989 in relation to the Direction.

Yours sincerely

Shotas

Stuart Cook Senior Partner Transmission and Governance

Direction issued to National Grid Electricity Transmission plc by the Gas and Electricity Markets Authority pursuant to paragraph 4 of standard condition C17 (Transmission system security standard and quality of service) of the electricity transmission licence

- 1. This Direction is issued by the Gas and Electricity Markets Authority ("the Authority") pursuant to paragraph 4 of standard condition ("SLC") C17 of the electricity transmission licence ("the Licence") granted or treated as granted under section 6(1)(b) of the Electricity Act 1989 ("the Act") to National Grid Electricity Transmission plc ("the Licensee").
- 2. Paragraph 4 of SLC C17 of the Licence provides that the Authority may issue directions relieving the Licensee of its obligations under paragraph 1 of SLC C17 of the Licence in respect of such parts of the Licensee's transmission system and to such extent as may be specified in the directions.
- 3. Subject to paragraph 4 of this Direction, the Authority hereby directs, pursuant to paragraph 4 of SLC C17 of the Licence, that the Licensee is relieved of its obligations under paragraph 1 of SLC C17 of the Licence with respect to each connection point in column 1 of the tables in the schedules to this Direction for the corresponding period in column 3 of the tables, from the corresponding obligation to comply with the criteria of the National Electricity Transmission System Security and Quality of Supply Standard ("NETS SQSS")¹⁵ set out in column 2 of the tables.
- 4. This derogation is conditional upon:
 - a. the derogation for the Cheviot boundary remaining in effect¹⁶
 - b. the transmission licensees (where relevant in conjunction with relevant distribution licensees) facilitating the connection of the first tranche of generation in the timescales currently anticipated, or similar generation with similar impacts. For the avoidance of doubt, should the licensees identify changes to the generation background that would significantly affect the extent of the non-compliance identified in the context of this derogation, and/or the impacts NGET has identified, we expect the relevant licensee to seek additional derogation if appropriate;
 - c. NGET providing to Ofgem six months after the date this derogation is granted (and every 6 months thereafter) a report on the impact of the derogation. NGET's report shall set out:
 - the operational measures NGET is taking to manage the system in the areas to which derogation applies;
 - o the commercial actions NGET is taking;
 - the incremental costs and benefits related to the generation connecting early under this derogation, arising in the preceeding 6 month period; and
 - o as above, forecast for the following 12 month period;
 - d. NGET continuing to be able to operate the system in accordance with the requirements of chapter 5 of the NETS SQSS. We note that NGET has not identified the need for derogation against chapter 5 of the NETS SQSS and assesses that it can manage the system. We also note that NGET is required by its licence to procure balancing measures efficiently, and by the Electricity Act to operate the system efficiently;
 - e. NGET (and where relevant, distribution licensees) having in place appropriate (and efficient) measures to mitigate the impacts of the non-compliance;

¹⁵ The current version of the NETS SQSS is version 2. It is intended that this derogation will apply to any subsequent versions of the NETS SQSS subject to the terms of this Direction.

¹⁶ Both the derogation 2007 (which renewed the 2005 derogation) and the further derogation granted on the same date as this derogation.

- f. if appropriate, transmission licensees seeking further derogation in relation to subsequent tranches, identifying the further incremental impacts; and
- g. NGET and SPT keeping the implications of the derogation on constraints costs under review and informing Ofgem of changes to the overall generation background in the area, which may result in us revisiting this derogation and considering what, if any, conditions it may be appropriate to apply to generation connecting in the area (both existing and future).
- 5. This Direction shall have immediate effect and shall remain in effect until such time as the Authority shall revoke or vary the Direction in writing upon reasonable notice.

Dated: 2 July 2010

SIGNED on behalf of the Authority by

Studios

Stuart Cook Senior Partner Authorised for that purpose by the Gas and Electricity Markets Authority

<u>SCHEDULE</u>

TABLE – Relief Granted in respect of Connection Points on the Licensee's Transmission System

1 PART OF THE	2 NATURE OF	3 DEROGATION	4 DETAILED DESCRIPTION OF RELIEF GRANTED			
TRANSMISSION SYSTEM FOR WHICH RELIEF IS GIVEN	RELIEF	PERIOD	ISSUE	INTERIM SOLUTION	LONG TERM SOLUTION	
Cheviot Boundary transmission circuits • Eccles – Stella West • Strathaven – Harker • Relevant 132kV circuits from Galashiels	National Electricity Transmission System Security and Quality of Supply Standard ("NETS SQSS") Design of Main Interconnected Transmission System Criteria Paragraphs 4.1 – 4.13	Indefinite, subject to conditions set out in paragraph 4 of this direction	Unacceptable overloading of remaining circuits (under Planned Transfer plus appropriate Interconnection Allowance conditions)	Application of pre- fault constraints to generation in Scotland to permit compliance with NETS SQSS Section 5 (Operational Standards).	 Transmission system reinforcement works: On the Cheviot boundary circuits to increase transfer capacity from Scotland to England to 2.8GW. These works are planned for completion by end December 2010. Reconductoring of the Heysham ring and upgrade of the existing 275kV route between Stella West and Norton to 400kV to increase transfer capacity from Scotland to England to 3.3GW. These works are planned for completion by end October 2011. Further work is required to fully address the identified compliance issues and detailed proposals have not yet been developed. The Licensee will investigate and expects to bring forward proposals as part of the next price control review. 	