## 30 March 2011

## First report from Ofgem on monitoring the 'Connect and Manage' electricity grid access regime

In August 2010, Government introduced framework changes to implement enduring 'Connect and Manage'. Enduring 'Connect and Manage' builds on the prior 'Interim Connect and Manage' ('ICM') regime that Ofgem introduced in May 2009<sup>1</sup>. Both the interim and enduring arrangements were aimed at improving access to the electricity transmission network. The enduring regime was fully implemented on 11 February 2011. By this date all of the users that had benefitted from earlier connection under the ICM regime received connection offers under the enduring Connect and Manage regime.

The Government's July 2010 conclusions document<sup>2</sup>, set out Government's expectation that Ofgem, with the support of National Grid Electricity Transmission plc (NGET) and others where appropriate, should monitor the impact of enduring Connect and Manage. In producing this report, we have taken account of the information that DECC considers will help to monitor and evaluate the impact of the access reforms. It is possible that the format and content of these reports may need to change over time, to reflect new information and market, policy and regulatory developments.

This is the first of the half yearly reports that we have been asked to provide and is for the period August 2010 to March 2011. Importantly, this covers the period of transition from ICM to the enduring regime. During this transitional period, NGET was required to amend certain existing agreements, to reflect earlier dates already identified under ICM within new Connect and Manage agreements. At this early stage, few projects have actually connected or become operational, either under the interim or enduring regime. It is therefore too early to draw any strong conclusions about the impact of the new regime.

## Background

Following consultation on models for improving grid access<sup>3</sup>, in August 2010 Government introduced enduring Connect and Manage. Under this access regime, all new generation is able to apply for a connection date based on the time taken to complete a project's 'enabling works', ie ahead of the completion of wider reinforcements. Any resultant constraint costs are socialised across all consumers, along with constraint costs more widely. The cost of wider works required on the network is also spread across all consumers.

Enduring Connect and Manage followed the ICM arrangements which Ofgem introduced in 2009. Ofgem introduced ICM on a temporary basis, with the aim of accelerating the connection of new generation by extending the principle of 'over selling'. We noted that, in the transition to the British Electricity Trading and Transmission Arrangements (BETTA) in 2005, certain generators had benefitted from the policy of over selling transmission capacity<sup>4</sup>. To avoid undue discrimination, we considered it appropriate to extend this principle, for an interim period.

We recognised that this approach could give rise to significant increases in the volume and costs of constraint. However, we expected that the impact on costs would be small in the

<sup>&</sup>lt;sup>1</sup>http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/TAR/Documents1/20090508%20derogations%20interi m.pdf

<sup>&</sup>lt;sup>2</sup>http://www.decc.gov.uk/assets/decc/consultations/improving%20grid%20access/251-govt-response-gridaccess.pdf <sup>3</sup>http://www.decc.gov.uk/assets/decc/consultations/improving%20grid%20access/1 20100303161452 e @@ co

<sup>&</sup>lt;sup>4</sup> In the transition to BETTA, Ofgem granted a derogation to NGET and SP Transmission Limited from the requirement to comply with the Security and Quality of Supply Standard (SOSS) planning criteria over the circuits which form the transmission boundary between Scotland and England and Wales ('the Cheviot boundary'). The effect of this derogation was that additional generation was able to connect to the system ahead of the reinforcement of that boundary need to achieve compliance of the SQSS - ie, 'over selling' of transmission capacity.

short term. The Enduring Connect and Manage regime introduced by Government in August 2010 replaced ICM.

In carrying out our monitoring role of enduring Connect and Manage, DECC has asked us to provide a published report to the Secretary of State on the following:

- Impact on connections by generator type and region
- Developers' confidence in the new arrangements
- Costs and benefits to consumers of the new arrangements
- Progress and costs of delivering the wider necessary grid reinforcements.

We set out below a summary of the available evidence in each of these areas for the period from August 2010 to March 2011.

## Impact on connections by generation type and region

DECC has indicted that this area of reporting might consider a number of aspects including, for example, average connection times, the extent of earlier connection dates, total projects connected and those seeking connection. We have included information on these areas in the tables set out in annex 1 to this letter, using data provided to us by NGET.

In summary, as at 11 February 2011, NGET had completed the transition from ICM to enduring Connect and Manage by making offers to a total of 73 generation projects in GB. Of these, 65 (approximately 25.2GW) had already accepted or had been offered earlier connection dates under the ICM arrangements. The dates now offered to these 65 projects match the dates offered under ICM, as required under the enduring arrangements. The 73 projects also includes 8 other projects in GB (ie parties that had not already accepted an ICM offer), totalling around 2.5GW. Please see table 1 in annex 1.

The data provided by NGET relies on assumptions. However, it would appear to show that the connection dates that these projects have been offered under ICM and enduring Connect and Manage is, on average, three to five years earlier than it would have been under the regime that operated before the introduction of interim and enduring Connect and Manage<sup>5</sup>.

A further 6.2GW offshore and 750MW onshore is currently seeking connection in GB under the enduring Connect and Manage regime. NGET is not yet at the stage of making formal offers for connection to these projects. We expect to have further information from NGET on these for our next report.

It is worth noting that in a number of the areas in which new generation is seeking to connect, the transmission network is near or at maximum capacity. This is particularly true in certain parts of the network in the north of Scotland. Therefore, for any further projects seeking connection in these areas, the 'enabling works' will involve much deeper network reinforcement, which will affect the time in which they can be connected.

#### Developers' confidence in the new arrangements

You will I am sure appreciate that it is difficult to report with accuracy on developers' 'confidence' in the new arrangements. However, we can provide an overview of stakeholders' views based on the responses to DECC's transmission access consultation and in relation to Project TransmiT<sup>6</sup> (our independent review of transmission charging and

<sup>&</sup>lt;sup>5</sup> Note NGET's 'invest and connect' date is only an estimate of the date the projects would have. Even prior to ICM the transmission licensees were optimising the queue for connections, to facilitate earlier connection where possible by identifying spare capacity.

http://www.ofgem.gov.uk/Networks/Trans/PT/Pages/ProjectTransmiT.aspx

associated connections arrangements) and RIIO-T1<sup>7</sup> (the new regulatory framework under which we will set the next network business price controls).

We understand that respondents to DECC's consultation on the introduction of enduring Connect and Manage were largely in favour of the Connect and Manage regime. We are not aware of any comprehensive review of stakeholder views since the implementation of the new regime and note that the fact that the new arrangements are still bedding down will make it difficult to assess stakeholder views at this stage. We also note the views expressed by a number of market participants through Project TransmiT that developers continue to be concerned with other related grid connection issues, including the financial liabilities for securing access to the system (known as 'user commitment') and ensuring timey deliver of enabling works under Connect and Manage. We are seeking to address these concerns under Project TransmiT.

## Costs and benefits to consumers of the new arrangements

DECC has asked us to include analysis on the levels of constraints and constraint costs, focusing on outturn costs. At this early stage in the new regime, NGET has indicated that only a very small amount of generation that has been offered earlier connection has actually connected, and it has as yet identified no outturn constraints costs.

However, we note that NGET has written to DECC and Ofgem, highlighting the expected high costs of the enduring Connect and Manage arrangements. NGET's letter of 24 March 2011 sets out that the incremental constraints costs for GB could be in the range of  $\pm 300$ m- $\pm 1$ bn up to 2017/18<sup>8</sup>. Whilst NGET expects costs to be at the lower end of this range, we note this still represents significant increase in costs, which are not expected to be fully offset by the potential carbon benefits<sup>9</sup>.

## Progress and costs of delivering the necessary wider grid investments

As you will be aware, we have approved funding for a significant amount of network investment over the coming years.

In January 2011<sup>10</sup> we announced a £95 million investment package over the next two years to increase the capacity of Scotland's transmission networks. This is the next stage in funding the major programme of extra investment in the period to 2020 being developed by the transmission companies to help meet carbon targets. This funding for critical investments is over and above £3.8 billion of investment already approved under the current electricity price control. It also follows on from the decision announced in January 2010<sup>11</sup> to fund an initial tranche of investment, totalling £319 million, by the transmission companies in their current price control (2007-2013).

For 2012/13 when there will be a roll-over of the current price control, we will continue to consider additional funding requirements under this framework. This includes the extension by a further year of the funding of projects approved in January 2010. This would result in a total increase in funding under this framework of a further £140 million<sup>12</sup>. We will also be looking at requests for funding projects that would commence their

 <sup>&</sup>lt;sup>7</sup> <u>http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=28&refer=Networks/Trans/PriceControls/RIIO-T1/ConRes</u>
 <sup>8</sup> NGET's range identifies £300m incremental constraint costs associated with connecting up to c.17GW under its

<sup>&</sup>lt;sup>8</sup> NGET's range identifies £300m incremental constraint costs associated with connecting up to c.17GW under its 'gone green scenario'. At the higher end of the range, the forecast of £1bn is associated with connecting up to 44GW, based on the current contracted position.

<sup>&</sup>lt;sup>9</sup> We expect analysis on carbon benefits to be included in the self derogation reports that the TOs will produce, and which we expect to be available on NGET's website in the coming weeks.

<sup>&</sup>lt;sup>10</sup>http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/InvestmentIncentives/Document <u>s1/Jan11 TII OpenLetter FINAL%20(2).pdf</u>
<sup>11</sup>http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/TAR/Documents1/100118 TOincentives final propos

<sup>&</sup>lt;sup>11</sup>http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/TAR/Documents1/100118 TOincentives final propos als FINAL.pdf

<sup>&</sup>lt;sup>12</sup>Based on the original submissions from the transmission companies (but could change subject to further submissions from the transmission companies).

construction in 2012/13. In the coming months we will continue to work closely with the transmission owners to assess and make timely decisions on further funding requirements for critical transmission investment projects.

Of the £95 million authorised in January 2011, more than £80 million of the funding will be spent by NGET and SP Transmission Ltd on a package of projects to increase the amount of electricity that can flow between the transmission networks of England and Scotland. This will help the export of renewable electricity from Scotland.

Scottish Hydro-Electric Transmission Ltd will spend a further £11.5 million on upgrading its network to connect generation in the north of Scotland. We also allowed NGET to spend £1 million on initial development work on a proposed new power cable linking Pembroke and Wylfa in Wales. This link may be required to accommodate new nuclear generation in north Wales and offshore wind generation in the Irish Sea.

In addition, we continue to consider any requests from the transmission companies for making adjustments to funding provided under the 'Transmission Investment for Renewable Generation' (TIRG) initiative. We recently provided and consulted on additional funding for both of the Scottish transmission owners in relation to additional pre-construction costs for Beauly Denny<sup>13</sup>. This additional funding builds on the original approval for this line which we granted in 2004. You will be aware that construction of the Beauly Denny line itself is still awaiting resolution of residual planning issues and you should note that the level of constraints costs will be materially affected by delays to the completion of the Beauly Denny line.

Attached at annex 2 is a map of identified transmission reinforcements as well as a bar chart showing the level of funding approved and identified up to 2012/13.

<sup>13</sup>More information available here:

http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/TIRG/Documents1/280111 Beauly %20Denny%20IAE%2009-10%20Determination%20FINAL.pdf and here: http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/TIRG/Documents1/SPTL%20BD%20IAE%20Final%20for%20publication.pdf

## Annex 1: Impact on connections by generation type and region

The tables below provide information on the 'ICM' and 'Additional Connect and Manage' projects:

- 'ICM' refers to those transitional projects that were offered earlier connection under ICM (65 projects, 25.2GW), and have subsequently transitioned to enduring Connect and Manage.
- The 'additional Connect and Manage' projects are those that did not have an ICM offer and have been made connection offers under the new enduring Connect and Manage regime (8 projects, 2.5GW).

Region		ICM	Additional Connect and Manage	Totals
E&W	Number	17	2	19
	MW	15,985	752	16,737
	Average reduction in connection date <sup>14</sup>	5 years	0 years	-
Scotland	Number	48	6	54
	MW	9,277	1,730	11,007
	Average reduction in connection date	5½ years	4 years	-
Totals	Number	65	8	73
	MW	25,262	2,482	27,744
	Average reduction in connection date	5 years	3 years	-

#### Table 1: connection offers Aug 2010-Mar 2011

<sup>&</sup>lt;sup>14</sup> This is the average difference between the estimated date for connection in an offer made under 'invest and connect' and ICM or enduring Connect and Manage.

Transmission Owner	Fuel Type	ІСМ	Additional Connect and Manage	Total (MW) <sup>15</sup>
NGET	Offshore wind	11,353	752	12,105
	Onshore wind	200	0	200
	Other <sup>16</sup>	4,432	0	4,432
	Total (MW)	15,985	752	16,737
SPTL	Offshore wind	4,065	0	4,065
	Onshore wind	846	0	846
	Other	27	1,650	1,677
	Total (MW)	4,938	1,650	6,588
SHETL	Offshore wind	3,575	0	3,575
	Onshore wind	708	72	780
	Other	56	8	64
	Total (MW)	4,339	80	4,419
All TOs	Offshore wind	18,993	752	19,754
	Onshore wind	1,754	72	1,826
	Other	4,515	1,658	6,173
	Total (MW)	25,262	2,482	27,744

Table 2: Breakdown by Transmission Owner, generation type and MW

 $<sup>^{\</sup>rm 15}$  Totals may not sum exactly due to rounding of figures.  $^{\rm 16}$  This includes Combined Cycle Gas Turbine (CCGT), Biomass , hydro and clean coal.

# Annex 2: Progress and costs of delivering the necessary wider grid investments





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Date of decision on funding