
CUSC AMENDMENT PANEL Environmental Standing Group Interim Report to the Panel

1. Introduction

This Standing Group was established in response to an Ofgem letter of the 15 April to consider the issues raised by the assessment of carbon costs and provide a body of work in relation to carbon cost assessments that would serve as guidance and advice to future modification assessment working groups. Further to this initial letter, Ofgem issued its final guidance in a [letter](#) of 30 June.

Given the cross-industry need to consider these issues, the CUSC Panel, through the chair, invited other Code Panels to join the Standing group, with the aim that a pan-industry discussion of these issues may help to avoid duplication of development work and provide a more consistent approach to carbon costing across the industry.

2. Scope and Objectives

The scope and objectives of the Standing Group are set out in the terms of reference contained in Appendix 1. In summary, the objective of the group is to establish common principles and guidance on the treatment of carbon costs under the current industry code objectives. In doing this, the group should identify the implications of Ofgem's guidance and develop practical examples of carbon cost assessment using past and present code modifications.

3. Work to Date

Once the terms of reference were agreed, the group has undertaken the following :

1. Consideration of:
 - The implications of Ofgem's guidance under the current code objectives
 - Carbon and environmental costs within the energy supply chain;
2. Development of:
 - A set of practical examples of carbon cost assessments
 - Guidance and, if appropriate, common principles for carbon cost assessment

To date the group has reached step two of this work and is developing practical examples of carbon assessment.

A short description of our work in each area is set out below:

The implications of Ofgem's guidance under the current code objectives

The group has reviewed the implications of Ofgem's guidance of 30th June 2008. The guidance indicates that carbon costs be considered under the 'efficient and economic operation' code objective. We noted that this reference refers primarily to the BSC and to the 'operation' of the networks.

Given that carbon costs are economic costs, the group's discussion indicates it may also be appropriate to consider the assessment of carbon costs under other code and licence objectives that cover the activities of the [network] licensee. The BSC, CUSC and UNC all have an objective that covers a very broad category which refers to the 'efficient discharge by the licensee of obligations imposed on it by the relevant licence'.

The group considered that it may be possible to consider the impact of carbon costs under this broader code objective and, in doing so, take into account carbon costs that are not directly related to a tight definition of 'operation' of the system. For example, the carbon cost benefits derived from the early connection of renewable generation are not necessarily linked explicitly to the subsequent 'operation' of the system. Instead, the early connection of renewable generation can be considered to be more closely associated to system access and the co-ordinated planning and construction of the system rather than the subsequent operation of the system.

Carbon and environmental costs within the energy supply chain

To better understand how the costs of carbon are treated within the energy supply chain the group has reviewed some current environmental regulatory requirements and funding mechanisms. These include ROCs, the EU ETS and other mechanisms such as Renewable Energy Guarantees of Origin.

The group has identified that carbon is already priced into a number of energy costs, in particular via the EU ETS. In such cases a carbon cost can be identified and costed, but caution is required when summing these costs with other economic costs to avoid double counting the carbon costs element.

The group has also reviewed Schedule 9 of the Electricity Act which contains certain environmental duties applicable to National Grid Electricity Transmission. These duties refer primarily to duties to comply with, for example, other environmental legislation and are not pertinent to a carbon cost assessment.

Development of a set of practical examples of carbon cost assessments

The group is assessing a number of examples of carbon cost assessment. These are:

- Advancement of connection of renewable generation (as part of CAP164);
- Changes to Grid Code minimum standards currently being developed for Reactive Power and 'Rated MWs';
- Several example code changes illustrating assessments for:

- potential changes in the operation of Gas Transmission Compressors;
- potential impacts of smart metering
- potential impacts of micro-generation
- potential impacts resulting from a change to transmission losses.

The first and second of these are live changes currently undergoing or about to undergo parallel assessment under the relevant code. The others are examples based on current, recent or anticipated changes to the codes or framework.

Our work on these examples has highlighted the likely complexity of some of these assessments and the need to ensure that assessments focus on an appropriate and relevant level of detail and forecasting. Any assessment will need to establish a 'baseline' level of carbon emissions and then consider how this is changed as a result of the proposal. From this the carbon cost can then be calculated. Overall, it is clear to the group that any assessment of carbon costs will be as complex as any other assessment of costs resulting from a code change and, in the same way, will be subject to uncertainty and highly dependent on the assumptions used in the calculation of any cost or cost range.

Development of guidance and common principles for carbon cost assessment

During our work we have identified a number of analytical building blocks which we expect will form a set of guidance and principles for the assessment of carbon costs. In addition, we expect the assessment examples to help illustrate the type of impacts which may need to be considered as part of any assessment.

Despite the existence of some common principles and general assessment techniques, our work on assessment examples has highlighted that the assessment of carbon costs will be as complex as any other assessment of costs resulting from a code change. In particular, given the complex nature of some of the carbon impacts and broader economic costs there are risks of double counting either the carbon benefit, in particular as part of a broader economic assessment.

4. Ongoing work

Once the group has finalised the illustrative cost assessment examples, we expect to move on to drafting a final report, which will include our final conclusions, guidance and any recommendations.

5. Interim conclusions

In advance of our guidance document and final report, a summary of points that can already be drawn from our work are set out below. These points are intended to reflect the group's discussion and are not intended to anticipate the group's final conclusions on these issues:

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- Based on Ofgem's final guidance, the assessment of carbon costs envisaged by Ofgem as part of the change assessment process is achievable.
 - A broader assessment than that envisaged by Ofgem under the 'network operation' code objective may be achievable by using the more general code objective that refers to efficient discharge of the [network] licensee's activities.
 - Whilst we have developed a number of practical examples and have identified some general principles, the assessment of proposed changes will vary on a case-by-case basis.
 - A large body of standard data and conversion factors exists, particularly on the DEFRA website, which will assist in preparing standard guidance.
 - The assessment of carbon costs will be as complex as any other forecast cost benefit calculation and, as with all forecast, will be significantly affected by the assumptions made as part of the calculation. These assumptions will need to be transparently set out for each assessment to ensure industry consultation on the assessment is full and effective.

Appendix 1 – Terms of Reference

CUSC AMENDMENT PANEL Environmental Standing Group Terms of Reference

Introduction

1. The CUSC Amendment Panel has agreed to establish the Environmental Standing Group to consider the implications of Ofgem's open letter dated the 15th April 2008, which sets out proposed guidance on environmental issues and the code objectives.
2. Prior to the first meeting of the Standing Group Ofgem published their final clarification and guidance on the treatment of carbon costs under the current industry code objectives. Consequently, the Standing Group will now take the letter dated the 30th June into consideration.
3. This paper outlines the working arrangements and Terms of Reference for the group.
4. The CUSC Panel has formally invited representatives from other Panels and Committees within the industry. This includes the BSC, DCUSA, Distribution Code, Grid Code, STC and UNC.

Governance

5. The Environmental Group is established as Standing Group under the CUSC Amendment Panel and shall act in accordance with Section 8.18 of the CUSC. The Environmental Group shall have regard for Core Industry Documents, other key Industry documentation and Ofgem's published clarification and guidance on the treatment of carbon costs under the current industry code objectives.

Membership

6. The Environmental Group shall comprise a suitable and appropriate cross section of experience and expertise from across the industry:
- Chair Duncan Burt
 - Technical Secretary Richard Dunn
 - National Grid representative Pat Hynes
 - Dipen Gadhia Ofgem
 - Graham Mitchell n.power
 - Bill Gunshon DCUSA Panel
 - Paul Mott EDF and CUSC Panel Member
 - Paul Jones E.ON and CUSC Panel Member
 - Barbara Vest AEP, CUSC and Grid Code Panel Member
 - Dave Wilkerson Centrica and CUSC Alternative Panel Member
 - Garth Graham Scottish and Southern Energy and CUSC Panel Member
 - Tim Davis UNC Panel Chair
 - David Jones Elexon BSC
 - Peter Roberts Distribution Code Panel
or Keith Hodson
7. Environmental Group members were nominated by CUSC Parties and Panels/ Committees within the industry.

Meeting Administration

8. The frequency of Environmental Group meetings shall be defined as necessary by the Environmental Group chair to meet the scope, objectives and time-scales as defined by the Amendment Panel.
9. National Grid will provide technical secretary resource to the Environmental Group and handle administrative arrangements such as venue, agenda and minutes etc.
10. The Environmental Group will have a dedicated page under the CUSC section of the National Grid UK website. This will enable Environmental Group information such as minutes and presentations etc to be available to a wider audience.

Scope and Objectives

11. The objective of the Environmental Group is to establish common principles and guidance across the industry to implement Ofgem clarification and guidance on the treatment of carbon costs under the current industry code objectives.
12. In addition to the objective above the Standing Group shall consider and report on the following specific issues:
 - Identify the implications of Ofgem's guidance,
 - Identify issues and propose solutions within the existing framework,
 - Develop practical examples based on past and present code modifications,
 - Develop common guidance and principles, where possible, that can be presented to the industry Panels and Committees
 - Provide suggestions on how the guidance can be developed further to assist in the forthcoming Governance Review
13. The Standing Group shall prepare a final report to the Amendments Panel responding to the matter set out in the Terms of Reference and a copy will be issued to Code bodies including the BSC, DCUSA, Distribution Code, Grid Code, STC and UNC. A copy will be made available to the Authority.
14. It should be noted that, in accordance with Section 8 of the CUSC, the Environmental Group as a standing group under the Amendment Panel, cannot itself propose a modification to the CUSC.