

**Arrangements for gas and electricity
network operator credit cover**

Conclusions and proposals

February 2003 06/03

Summary

Ofgem's¹ principal objectives under the Gas Act 1986 and Electricity Act 1989² are to protect the interests of consumers, wherever appropriate, by promoting effective competition. Gas and electricity supply and gas shipping are now fully contestable. Competition is established and continues to develop. It is the nature of competitive markets that some participants will fail while others prosper.

The failure of some high-profile energy suppliers raised the issue of whether the current mechanisms for managing the financial risk resulting from a gas or electricity supplier or gas shipper failure are appropriate. In March 2002 Ofgem published a consultation document³ (the "consultation document") opening a consultation process about the appropriate arrangements for covering credit risk and mitigating costs, to which parties in the gas and electricity markets are exposed when a gas or electricity supplier or a gas shipper fails.

The consultation document stated that, having regard to its statutory duties, Ofgem's aim in the context of a gas or electricity supplier or gas shipper failure is to ensure continuity and security of supply and to protect consumers from:

- the risk of actual or threatened disconnection where the various industry codes and agreements permit a network operator to take action against a supplier or a shipper who is in breach of its obligations by, for example, not maintaining adequate levels of credit cover or paying invoices on time; and
- higher than necessary costs resulting from inefficient arrangements for minimising the cost of potential or actual failure.

The responses to the consultation document are considered in this conclusions and proposals document. In addition, this document sets out Ofgem's proposals for credit cover arrangements in the regulated areas of the gas and electricity industry.

Having considered responses to the consultation document and, for the reasons set out in this document, Ofgem has concluded that credit cover arrangements do need to be reformed and this is best progressed by the industry at working level through appropriate reforms, including amongst other things, modifications to industry codes. Ofgem has no power to propose

¹ Ofgem is the Office of the Gas and Electricity Markets Authority. The terms "Ofgem" and "the Authority" are used interchangeably in this document.

² Ofgem's principal objectives are set out in Appendix 1

³ Arrangements for gas and electricity supply and gas shipping credit cover. Consultation document 24/02

modifications to these documents. However, the Authority must decide on code modifications (and determinations) that come before it, each on its own merits and having regard to the relevant criteria. Accordingly, nothing in this document can be allowed to prejudice current and future decisions by the Authority.

The principles that Ofgem will have regard to when discharging its functions in relation to credit issues are as follows:-

- **Incentives need to be placed upon the Network Operators (NWOs) to manage debt efficiently;**
- **The credit arrangements must not be unduly discriminatory, or prevent the promotion of competition;**
- **The credit arrangements should provide a secure and stable business environment, and;**
- **Ofgem should take measures to protect consumers from loss of supply, in the event of a supplier or shipper's failure to maintain adequate levels of cover or default on payments due.**

These principles also set down its preferred approach to the management of credit risk going forward.

The background to the development of these principles and the implications for their implementation are covered in this document. In summary, Ofgem considers that gas balancing credit cover arrangements should be brought into line with electricity, where all credit cover is maintained with either cash or Letters of Credit (LoCs). This is covered in more detail in Chapter 7.

Ofgem has also concluded that, in general, exclusive use of cash and LoCs would not be appropriate for securing credit cover for gas and electricity transportation for a number of reasons, including the relatively predictable nature of the exposure. However, Ofgem does consider that the credit cover arrangements for gas and electricity transportation should be modified such that they conform to best commercial practice in comparable competitive industries. To facilitate this, Ofgem proposes that further work be carried out in conjunction with the industry to establish best practice guidelines.

The document also covers a number of supplementary issues that have been raised, either in response to the consultation document or in modification proposals to industry codes raised since the publication of that document.

Ofgem invites views on the content of this document and especially on the proposals for further work to establish best practice guidelines.

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1. Introduction

Purpose of this document

1.1. In March 2002, Ofgem⁴ published a document⁵ ("the consultation document") opening a consultation process about the appropriate arrangements for covering credit risk and mitigating costs to which parties in the gas and electricity markets are exposed when a gas or electricity supplier or a gas shipper fails. This document:

- considers the responses to the consultation document;
- sets out Ofgem's thoughts on the possible development of credit cover arrangements contained in industry codes, for example, Transco's Network Code ("NC"), the Connection and Use of System Code ("CUSC"), and certain other agreements between gas and electricity participants, including those in Scotland;
- explains Ofgem's views on an appropriate framework for credit arrangements as regards gas and electricity transportation companies⁶;
- sets out Ofgem's views on a number of supplementary issues that have been raised in response to the consultation document; and
- invites views on the proposals for further work.

Background

1.2. The consultation document explained the legal and regulatory framework that supports the credit cover arrangements currently in place in respect of gas and electricity, described those arrangements and discussed whether they remained

⁴ Ofgem is the Office of the Gas and Electricity Markets Authority. The terms "Ofgem" and "the Authority" are used interchangeably in this document.

⁵ Arrangements for gas and electricity supply and gas shipping credit cover. Consultation document 24/02

⁶ The term 'gas and electricity transportation' is used in this document to include transmission and distribution and relevant connections to those systems. The term 'gas and electricity transportation companies' includes Distribution Network Operators and Independent Gas Transporters.

an appropriate way to manage the risk of failure and minimise the overall cost of potential and actual failure. The consultation document identified those areas that Ofgem understand to be of particular concern to the industry and outlined the issues that should be addressed as part of any proposed solution.

1.3. The consultation document invited comments on alternative arrangements, particularly Ofgem's preliminary view that:

- the arrangements for credit cover in gas balancing should be more closely aligned with those in the BSC, including limiting the types of credit cover to Letters of Credit (LoCs) from approved banks or cash;
- the current arrangements for providing credit cover as protection from bad debt for gas and electricity transportation are no longer appropriate and that possible alternatives included:
 - only LoCs or cash should be accepted as credit cover for gas transportation, electricity transmission and electricity distribution; or
 - the requirements for credit cover should be removed altogether and all bad debts resulting from supplier or shipper failure should be addressed within the price control framework for network operators (NWOs). This change would be accompanied by incentives on NWOs to minimise their exposure to bad debt and by incentives on suppliers/shippers to pay promptly; or
 - a combination of these measures whereby some credit cover is provided by LoCs or cash with the ability, in certain defined circumstances and subject to appropriate incentives, to deal with any remaining bad debt as part of NWOs price controls.
- work should be undertaken to identify where clearer enforcement rules are required to try to ensure consistency in the provision of credit cover and the payment of invoices;
- Transco's Code Credit Rules for gas transportation should be brought within its Network Code Modification Procedure; and

- additional changes (for example to invoicing cycles and the timing of payment terms) may be needed but that these should be further debated when the credit cover framework has been clarified.
- 1.4. Ofgem received forty-one responses to the consultation document. Non-confidential responses can be viewed on Ofgem's website⁷ and are also available from Ofgem's library.
- 1.5. On 12 April 2002, Ofgem held an open seminar to discuss the issues raised by the current credit cover arrangements. Non-confidential documents relating to the seminar are also on the Ofgem website. In addition to the seminar, Ofgem has held a number of meetings with parties interested in credit cover issues. On 26 June 2002, Ofgem discussed the issues raised by the consultation document at the Distribution Commercial Group meeting.

Current and future modification proposals to the industry codes or determinations

- 1.6. Ofgem has considered carefully respondents' views to the consultation document and has concluded, for the reasons set out in this document, that the matter of reforming credit cover arrangements is best progressed by the industry at a working level through appropriate reforms, including among other things, proposed modifications to the various industry codes. Ofgem itself does not have any powers to propose modifications to the industry codes. Ofgem must decide on code modifications (and determinations) that come before it, each on its own merits and having regard to the relevant criteria. Accordingly, nothing in this document can be allowed to prejudice future decisions by the Authority.
- 1.7. Ofgem considers that it is helpful to share with participants the principles to which it considers it appropriate to have regard when considering credit issues and its preferred approach to the management of credit risk going forward.

⁷ <http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=supplyshipperfailure>

Ofgem's framework

- 1.8. The regulatory framework within which Ofgem has considered the issues surrounding the allocation of risk arising from shipper and supplier failure and ways in which the cost of that risk can be minimised were explained in the consultation document. For ease of reference, this is reproduced at Appendix 1 of this document.

Structure of the document

- 1.9. Chapter 2 details the rationale for developing more consistent and, where necessary, more robust credit arrangements. Chapter 3 outlines the background to the conclusions. Chapter 4 contains a summary of the main points raised by the April seminar and the consultation document along with points raised about individual modification proposals to Transco's NC and the CUSC under consideration. Chapter 5 outlines the principles that Ofgem will apply to any decision or determination in this area and its preferred approach to the management of credit risk going forward. Chapters 6, 7 and 8 highlight Ofgem's views on the likely implications for specific areas of the credit arrangements. Chapter 9 indicates the way forward.

Views Invited

- 1.10. Ofgem would welcome views on the proposals for further work, as set out in Chapter 9, which include a seminar to consider the development of guidelines for credit cover arrangements. Respondents are free to mark their replies as confidential although we would prefer, as far as possible, to be able to place responses to this paper in the Ofgem library and publish them on the Ofgem website. Responses should be submitted by 11 April 2003, addressed to:

Nick Simpson

Director of Industry Code Development

Ofgem, 9 Millbank, London, SW1P 3GE

Electronic responses may be sent to industrycodes@ofgem.gov.uk

- 1.11. If you wish to discuss any aspect of this document, please contact any of the following people who will be pleased to help: Jonathan Dixon (Tel: 020 7901 7354, jonathan.dixon@ofgem.gov.uk); David Edward (Tel: 020 7901 7435, david.edward@ofgem.gov.uk) or Fran Gillon (Tel: 020 7901 7283, fran.gillon@ofgem.gov.uk).
- 1.12. In addition to considering written responses, Ofgem will be hosting an open seminar on 25 April 2003 to stimulate further debate in respect of its proposals to establish best commercial practice guidelines for gas and electricity credit cover arrangements. If you would like to attend this seminar, then please contact Jill Worship (020 7901 7467, Jill.worship@ofgem.gov.uk).

2. Rationale

Introduction

- 2.1. The principal objectives and general duties of the Gas and Electricity Markets Authority ("the Authority") are set out in section 4AA of the Gas Act 1986 and section 3A of the Electricity Act 1989 respectively. In summary, these provisions require the Authority in carrying out its functions in the respective Acts to protect the interests of consumers, wherever appropriate, by promoting effective competition.
- 2.2. The Authority should carry out those functions in a manner it considers best calculated to further the principal objectives by having regard to:
 - the need to secure that, so far as it is economical to meet them, all reasonable demands for gas and electricity are met; and
 - the need to secure that licensees can finance their activities.
- 2.3. The Authority in performing its duties shall have regard to the interests of particular consumer groups such as (but without limitation to) the disabled or chronically sick.
- 2.4. The Authority shall also carry out its functions in a manner it considers is best calculated to promote efficiency and economy by licensees in the use of gas and electricity and securing a diverse and long-term energy supply.
- 2.5. Gas and electricity supply and gas shipping are now fully contestable. Competition is established and continues to develop. It is in the nature of competitive markets that some participant businesses will fail. Any discussion about how best to protect consumers' interests directly or indirectly must therefore occur in the context of the expectation that businesses will enter and exit the competitive supply and shipping markets.
- 2.6. The Government has expressed its intention to reform the electricity transportation and trading arrangements so that they operate on a GB-wide basis, by means of primary legislation. Whilst these changes will affect the contractual

arrangements in Scotland the principles set out in this document will be taken into account in any determination or decision relating to credit issues made by the Authority both before, as well as after, the implementation of the Electricity (Trading and Transmission) Bill.

Issues

- 2.7. The failure of Independent Energy in September 2000 and the failure of Enron (Europe) in December 2001 raised the issue of whether the current mechanisms for managing the financial risk resulting from supplier or shipper failure are appropriate. More recently, the sale of TXU Europe's supply business following its financial difficulties further brought these issues into focus. A number of related issues have also arisen, and these are addressed in this document.
- 2.8. For the avoidance of doubt, as the consultation document made clear, Ofgem has not considered any issues about credit cover in competitive bi-lateral agreements where industry parties are free to take their own commercial decisions about who they trade with and the level and type of cover required. The discussion in this document is limited to those aspects within Ofgem's regulatory scope⁸.

Effectiveness of current arrangements

- 2.9. In Ofgem's view, the primary issue is whether the credit risk management activities undertaken in relation to transportation and energy balancing are appropriately codified, structured and carried out as effectively and efficiently as they could be.

Balance between ongoing cost and effect of failure

- 2.10. A second issue is whether the management of credit in the regulated activities is achieving an appropriate balance between participants protecting themselves

⁸ In Scotland, credit cover arrangements are currently a matter for bilateral agreement. However, as part of a consultation on the reform of the trading and transmission arrangements in GB (including Scotland), Ofgem/DTI have issued a consultation on the introduction of a BSC to apply across the whole of GB (The Balancing and Settlement Code Under BETTA: Ofgem/DTI Consultation on a BSC to apply throughout GB, Ofgem/DTI, December 2002, 80/02). Under BETTA, it is proposed that the England & Wales BSC is used as the basis for developing the trading arrangements to apply across GB. All Ofgem/DTI BETTA consultations are available on the

from the effects of company failures, for example, by using cash collateral (the cost of mitigation then falls on those parties causing the perceived risk) and keeping the costs of that protection to the minimum.

Consistency

- 2.11. The extent to which credit exposures should be secured and the forms of collateral appropriate for that purpose is at the heart of an appropriate balance between ongoing cost and effect of failure. There would seem to be room for improvement in current arrangements, which display an inconsistency of approach to risk management in apparently similar situations. The converse also appears true – that similar credit arrangements are, in some cases, applied to very different credit risk situations.

Effect on consumers

- 2.12. A third issue is whether the disconnection or the threat of the disconnection of consumers (irrespective of whether they are categorised as domestic or non-domestic) is an appropriate means of enforcement where that supplier/shipper fails to make payments due or fails to provide sufficient credit cover.

Ex-ante allowance or pass through of costs

- 2.13. A fourth issue is whether it is more appropriate for NWOs to have an ex-ante allowance for bad debt in any future price control. This would have the effect of requiring NWO shareholders to bear the cost of any bad debt over and above the allowance and incentivise efficient management of credit exposures. However, such an arrangement could create a strong incentive for the NWOs, left to their own devices, to take a disproportionately cautious view on unsecured credit, which in turn may lead to precipitous actions in the event of default.
- 2.14. Alternatively, NWOs could have no ex-ante allowance for bad debt and operate in an environment where, providing they could show they had acted in a reasonable, efficient and effective way and the bad debt was material, they could

expect ex-post recovery, through allowed future revenue, of a proportion or all of the bad debt, on a case by case basis.

Impact on continuity and security of supply

- 2.15. Appropriate credit cover arrangements are a necessary and important feature of gas and electricity transportation. Such arrangements help to facilitate stability and confidence in commercial and market mechanisms and in consequence help to deliver continuity and security of supply.
- 2.16. Ofgem considers continuity and security of supply to be of paramount importance in protecting the interests of consumers. Ofgem will therefore consider the impact of any proposed changes in relation to credit, with regard to the need to maintain continuity and security of gas and electricity supplies, and its statutory duties more generally.

Objectives

- 2.17. In the context of credit arrangements, Ofgem having regard to its statutory duties, considers that the management and control of credit risk should as far as possible emulate best commercial practice in comparable competitive industries, taking into account the nature of gas and electricity supply. In this way Ofgem considers that the costs of mitigating exposure to failure relative to the costs of impact of failure can be efficiently balanced. In addition, recognising that some businesses will fail, Ofgem regards the maintenance of a stable business environment as an important element in both reducing ongoing costs and costs arising from individual company failures. Overall, the costs of mitigating credit risk in the regulated framework should not be any greater than is necessary.
- 2.18. In the context of the failure of a gas or electricity supplier or a gas shipper, Ofgem is concerned to ensure that consumers (regardless of categorisation) continue to be supplied with gas or electricity provided that they have complied with their own obligations. To achieve this, Ofgem may take steps to protect consumers from unnecessary supply disruption. Where appropriate, this may occur through the use of the Supplier of Last Resort (SoLR) process, by which those consumers may be transferred to another supplier. Ofgem has stated that while it will use its SoLR powers (where appropriate), it prefers to see a market

based resolution to these problems, for example, consumers being transferred by way of trade sale (e.g. Centrica's purchase of Enron Direct's consumers or Powergen's purchase of TXU consumers), or by consumer initiated transfer.

Policies

Key Options

2.19. The consultation document set out some alternatives to the current arrangements and asked for views. Outlined below are the key options for change that have been considered by Ofgem in the light of the responses to the consultation document.

- **Bring gas balancing credit cover arrangements into line with electricity by requiring cash or LoCs**

This would mean moving from the current situation where gas balancing credit exposures are in some cases wholly or partially unsecured, relying on approved credit ratings (ACRs) assigned to counter-parties or their parent companies by the major credit rating agencies, to making full collateralisation with cash or LoCs mandatory.

- **Requiring cash or LoCs for transportation credit cover**

This option would mean changing the credit cover arrangements for users of both gas and electricity transportation networks that hold ACRs or are supported by qualified Parent Company Guarantees (PCGs) to making full collateralisation with cash or LoCs mandatory (as above).

- **Removal of the requirement for credit cover for transportation and move to arrangements where NWOs would be incentivised to effectively control bad debt. Any incurred bad debt arising would be 'passed through' in the NWO price control, subject to it being efficiently incurred**

This option would mean radically changing the credit cover arrangements for both gas and electricity transportation by removing any requirement on suppliers/shippers to provide collateral and passing through any bad debt arising from failures in the price control, ex-post. In removing the overall

cost of providing collateral against bad debt, the sanctions against parties building up debt would have to be timely and effective. The incentives on NWOs to manage the debt would also need to be very effective.

- **A combination of cash or LoCs and 'pass through' for transportation credit cover**

This option would provide some collateral for bad debt but still have a lower ongoing cost than providing full cash and LoC cover.

- **Requiring comparable commercial arrangements for transportation credit cover**

This option would mean modifying the current credit cover arrangements for both gas and electricity transportation so that they fell into line with arrangements that are used in comparable competitive industries whilst taking into account of the nature of gas and electricity supply. The process and the criteria by which the level and type of credit cover required in any particular case would be established must not be unduly discriminatory.

- **Mutualisation of risk**

A way of achieving efficient management of credit could be by means of 'mutualisation of risk'. A number of methods were discussed in the consultation document and responses which range from a NWO operated compulsory levy scheme for a separate bad debt fund, to an optional non-discriminatory mutual insurance arrangement. This option would take time to develop but could provide a secure and cost effective solution. Chapter 9 outlines how this issue may be taken forward.

Principles

2.20. In this document Ofgem is setting down principles that it will have regard to (to the extent appropriate) in relation to credit issues that come before it. These principles also describe Ofgem's preferred approach to the management of credit risk going forward. These principles are as follows:-

- **Incentives need to be placed upon the NWOs to manage debt efficiently**

There are two ways that incentives can be placed on NWOs. First, an ex-ante approach where an allowance is made in the price control for bad debt. Second, where no explicit ex-ante allowance is made, the NWO has to demonstrate to Ofgem that it has managed the debt appropriately (for example by requiring appropriate collateral and acting efficiently in billing and collecting debts) before being able to claim for an exceptional bad debt event. The latter is the approach Ofgem has operated informally in relation to incurred bad debts in the past.

- **Arrangements must not be discriminatory, or prevent the promotion of competition**

Having incentivised the NWOs to manage their debt efficiently, it would be natural for them to seek to reduce their exposure. However, counter-parties are likely to look to Ofgem to ensure that the rules and their implementation do not unduly discriminate, nor act as barriers to competition. In assessing this, Ofgem would, having regard to its statutory duties take into account comparable competitive commercial arrangements (taking account of the nature of gas and electricity supply). When considering whether the arrangements utilised by the parties reflect current best practice in debt management the parties would need to provide Ofgem with supporting evidence to demonstrate this.

- **Credit arrangements should provide as secure and stable business environment as is reasonable**

The arrangements should not themselves exacerbate or otherwise increase the threat to continuity and security of supply from financial failure. Therefore, they should be designed to moderate the impact of financial failure and should not increase the risk that it will occur.

Prices in the gas and electricity balancing mechanisms are potentially volatile, with the likelihood of participants' accruing substantial debt at the same time as experiencing a credit crisis. Although the gas and electricity balancing credit is managed on behalf of the shipping/supplier community, all of the default credit risk falls upon it. This might give rise to systemic

risks. Ofgem is therefore of the view that gas and electricity balancing credit exposures should be fully secured by means of cash or LoCs.

- **Ofgem should take measures to protect consumers from loss of supply in the event of a shipper or supplier's failure to maintain adequate levels of cover or default on payments due**

Ofgem considers that where a shipper or supplier is failing or in financial difficulties, its counter-party must have regard to the importance of ensuring continuity and security of supply to end consumers (regardless of categorisation) when deciding how it should proceed in terms of managing its credit exposure. Many of the issues raised by such a case are a matter for commercial judgement with no regulatory implications. However, any decision to disconnect, de-energise or isolate that shipper or supplier, if permissible under the contract or codes, must not jeopardise continuation of supply to that company's downstream consumers.

Ofgem recognises that the industry codes permit disconnection, isolation or de-energisation of an end user (within the meaning of the codes) in prescribed and narrow circumstances following dispute escalation as set out in the industry codes. However, this must be balanced against the need to ensure that all reasonable demands for electricity or gas are met and must have regard to the interest of consumers (not simply the commercial relationship in question).

Except in the very limited circumstances where safety is compromised or the consumer is in breach of its contractual obligations, Ofgem does not consider it acceptable for an NWO to threaten to disrupt or interrupt supply to the customers of a shipper or supplier who is in payment or credit default to that NWO. Ofgem accepts that where a consumer has failed to comply with its obligations or there are issues of safety, there may be occasion where a degree of supply interruption is unavoidable. This should however be a last resort action.

Ofgem expects licensees to act with full regard to their statutory and licence duties to ensure that end consumers do not suffer any supply interruption because of a contractual dispute between a NWO and its counter-party. In

such a situation, Ofgem considers that supply should be continued. Where necessary and appropriate, Ofgem will use its statutory powers, including the provisions for appointing a SoLR to protect consumers. Where, in a SoLR situation, continuity of supply is endangered, Ofgem may act to prevent supply interruption by invoking a SoLR process where it considers it appropriate to do so.

Implementation

- 2.21. This document develops these principles and discusses the resulting implications for the various business areas. Ofgem considers that whilst these issues are complex and further work is necessary, there is general consensus that credit arrangements should be reviewed.

Further Work

- 2.22. An area that needs particular development is establishing guidelines for credit management that, insofar as is possible having regard to the nature of gas and electricity supply, emulate the best commercial practice in comparable competitive industries. Therefore, Ofgem proposes to undertake further work with the industry to this end. This is explored further in Chapter 9.
- 2.23. If there is broad industry support for developing 'mutualisation of risk' arrangements, Ofgem is willing to facilitate a working group in order to establish how such arrangements could operate and how they may be brought into effect.

3. Background

The existing credit cover and debt management arrangements

- 3.1. Existing credit cover and debt management arrangements were described in the consultation document. For ease of reference they are reproduced in Appendices 3 and 4 to this document.

The role of the Regulator

- 3.2. This section explains the context within which Ofgem has considered the issues surrounding the allocation of risk arising from a supplier or shipper failure and ways in which the cost of that risk can be minimised. The regulatory framework within which licensees, industry agreements and Ofgem itself operate is outlined in Appendix 1.
- 3.3. In summary, the principal objectives of the Authority under the Gas Act 1986 and Electricity Act 1989, are to protect the interests of consumers, wherever appropriate, by promoting effective competition. In the context of the failure of gas or electricity suppliers or gas shippers and having regard to its statutory duties, Ofgem aims to:
- Minimise as far as practicable the actual or threatened disconnection of consumers, resulting from their suppliers' failure to pay rather than their own;
 - Protect consumers from the costs of inefficient security against potential or actual failure, and;
 - Protect responsible industry participants and their consumers from the costs of other parties' failure.

Gas and electricity industry background

- 3.4. Gas and electricity supply and gas shipping are now fully contestable and competition is established and developing. It is the nature of competitive markets that some participants will fail while others prosper.
- 3.5. Ofgem considers that it is generally accepted that counter-party risk is a normal feature of contestable markets and the way in which companies manage and mitigate that risk is normally a commercial decision for them. In some instances, a company may decide that the risk of default warrants an increase in price or request for payment in advance. If the risk of default is perceived to be sufficiently great, the company may refuse to trade at all. Where competition is sufficiently developed, credit cover arrangements are entirely a matter for the parties involved.
- 3.6. However, in their monopoly activities, the gas and electricity NWOs are obliged to offer a service to shippers and suppliers, and on non-discriminatory terms. In particular, some parties are required by various industry codes and agreements to provide credit cover to counter-parties. Consequently, Ofgem do not consider it reasonable or appropriate to allow credit cover requirements to be left entirely to commercial negotiation. The relevant arrangements are described in Appendix 2.

Existing mechanisms for change

Industry Codes

- 3.7. The gas transportation and distribution networks, the England and Wales electricity transmission network, and the gas and electricity balancing arrangements are covered by industry codes. These codes are multilateral agreements with defined governance procedures that include the ability to modify the arrangements, subject to consultation procedures and Ofgem's approval after considering all the relevant information.
- 3.8. Ofgem is not able to propose modifications to the codes. Proposals for change can only be put forward by defined groups, including parties to the codes.

Therefore any future changes to the codes, including the credit arrangements contained therein, rely on relevant parties proposing modifications. Proposals are discussed, developed and consulted upon by interested parties against the relevant objectives applicable to each code.

Distribution Companies' Use of System Agreements

- 3.9. The electricity Distribution Companies' Use of System Agreements ("DUoSAs") are bi-lateral agreements between Distribution Network Operators ("DNOs") and Users (usually suppliers) and are not subject to a formal, codified, governance process or a change mechanism. As a result they can only be changed by mutual agreement between the parties. Where the two parties cannot reach agreement, the dispute may be referred to Ofgem for determination.
- 3.10. The determination of a dispute arising out of a DUoSA may lead to widespread change in the terms generally applying to such agreements. This might happen because, in the light of a particular determination, subsisting arrangements are considered in some cases to discriminate, and therefore require change. More generally, DNOs and their customers may seek to initiate change to bring their arrangements into line with those established by the new arrangements.
- 3.11. As is currently the case, Ofgem will publish and make clear the reasons for its determination for any individual case and ensure that the context of the individual case is clearly explained. This should assist all DNOs and their customers to assess whether any change is necessary or desirable to their own arrangements. It must be recognised, however, that there may be a range of appropriate and not unduly discriminatory arrangements that may be applied in any given case.

Regulatory intervention

- 3.12. Mechanisms and procedures already exist that allow Ofgem to appoint a SoLR in certain circumstances. If implemented, this has the effect of providing a transparent framework for managing the transfer of consumers to another supplier and, to a degree, managing industry losses arising from the failure of a gas or electricity supplier.

- 3.13. Subject to its objectives and duties under the Gas Act 1986 or Electricity Act 1989, regulatory intervention by Ofgem, such as licence modifications or other steps, may also be justified in regard to issues that industry parties may not otherwise have an incentive to address. These issues include (without limitation):
- the allocation of costs between consumer groups;
 - the impact on the competitive supply market; and
 - the overall efficiency of the gas and electricity industry.
- 3.14. A number of issues must be taken into account when considering whether changes to the existing credit arrangements will further facilitate competition by lowering barriers to entry while at the same time maintaining confidence in the efficient operation of the gas and electricity markets. These include:-
- the rules for dealing with bad debt should not distort competition;
 - the effect on other parties of exposure to a failed party's bad debt; and
 - the effect of a requirement to provide credit cover against the risk of default.
- 3.15. Reducing barriers to entry (through reduced working capital requirements and/or less exposure to risk) can bring benefits for consumers since competitive pressures can drive down prices.

Aligning the gas and electricity markets

- 3.16. Ofgem considers that, wherever it is appropriate to do so, the same framework should be needed in the gas and electricity industries in order to determine the requirements for credit cover (or other ways in which the cost of potential or actual failure can be reduced). There should also be appropriate arrangements to ensure that parties are not incentivised to increase other parties' exposure to risk. This does not necessarily mean that requirements should be the same throughout the gas and electricity industries. It may be more appropriate to align the requirements between similar processes, for instance in areas where

the exposure to risk is similar because of the way in which industry processes operate.

4. Consultation responses

- 4.1. This chapter summarises the views expressed and issues raised in the responses to the consultation document and subsequent meetings about credit cover.

Credit arrangements in gas and electricity transportation

- 4.2. Respondents made the following points on the subject of credit and risk management arrangements for gas and electricity transportation.

Views in favour of using PCGs and ACRs as transportation credit cover.

- 4.3. In summary, those in favour of taking account of PCGs and ACRs made the following points:
- One respondent considered that a move to cash and Letters of Credit would penalise medium-sized companies who ship large volumes under PCGs but who have high cost of funds and so would be financially exposed by having to post a large LoC. Smaller shippers on the other hand may benefit competitively by a switch to LoCs from ACRs. Hence, BBB rated companies should have to provide cash or LoCs but for those rated higher, ACRs and PCGs should suffice. This would achieve risk reduction without increasing the cost of security coverage.
 - It was suggested that a move to cash and LoCs would result in capital lying idle in deposit/escrow accounts that otherwise would be used for investment capital and would be too expensive for the industry overall and ultimately would lead to higher prices for consumers.
 - On the subject of recent, well-publicised company failures, one respondent suggested that ACRs are still effective and that Ofgem has overreacted to the Independent Energy and Enron collapses. Transco is still required by its licence to keep an investment grade credit rating. In addition, respondents considered that there may be a limitation on banks' appetites for the provision of LoCs following the impact of Enron.

- It was suggested that a move to the provision of LoCs as means of providing credit for transportation would have discriminatory effects in that it was unlikely that a company without an approved credit rating would be able to secure a LoC and would therefore need to provide cash. This discriminates against niche players and in favour of large vertically integrated companies.

Views against using ACRs and PCGs as transportation credit cover.

4.4. Those against the view that ACRs and PCGs should be accepted as credit cover for gas and electricity transportation made the following points:

- Respondents noted that the provision of cash or LoCs afforded more adequate protection against bad debt in that ACRs/PCGs do not necessarily provide any funds in the event that a party defaults.
- Once cash or LoCs have been drawn upon for non-payment it is impossible to draw upon it again in the event of later supplier failure of the defaulting company. As a mode of security cover, cash or LoCs should only be used in the event of supplier failure.
- One respondent in favour added a proviso that if LoCs were to be used, then they should conform to an industry standard wording.
- Respondents not in favour commented that a move to the provision of cash and LoCs would not constitute a barrier to entry because the majority of small suppliers/shippers under current arrangements need to provide cash or LoCs anyway.

Pass through of costs arising from supplier or shipper failures

4.5. In summary, those of the view that for NWOs, the requirements for credit cover should be removed and supplier or shipper failure should be dealt with as part of the price controls (subject to incentives), made the following points:

- These respondents suggested that NWOs should be acknowledged as low risk businesses that are obliged to do business with suppliers and should be protected by the price control arrangements.

- It was the view of one respondent that pass through of costs provided the most cost-effective credit security arrangement. It minimises the cost to the end user in that it is cheaper to cover shortfalls following supplier/shipper failure via the price control rather than require all parties to put in place cover which may not be necessary.
- Respondents also suggested that it was preferable for transportation debts to be covered by the price control rather than the current arrangements which create a smearing effect.
- One respondent suggested that 100% pass through should be permitted save where debts have been outstanding for more than 2 months or if they are subject to legal proceedings.
- One common theme among those in favour was that pass through would only be a tenable position if incentives to manage the debt position remained in place, that is that pass through should be conditional on the NWO demonstrating reasonable behaviour.
- It was suggested that NWOs would need to be provided with clear guidelines on the pre-conditions for them to secure 100% pass through and that if pass through were to be scaled back, NWOs should know in advance by what mechanism this scaling would be applied.
- Respondents noted that clear timescales for recovery would have to be set out in advance because in circumstances involving the failure of a large supplier, this supplier having a large market share may take longer to find a buyer or to have a SoLR appointed. To ensure the operator remains in business it would be imperative in those circumstances that pass through is received in a timely way.

4.6. Few respondents were wholly opposed to debt recovery via the price control. Of those respondents that were opposed the points made were:

- that pass through was not efficient because it smeared the cost among participants. They considered that NWOs should minimise the risk of

indebtedness but that any debt arising should be borne by the shareholders of the NWO.

- It was noted that with no credit cover requirements, users with low financial status would be placed on the same financial footing as robust users and may then place an undue financial burden on them.
- One respondent commented that recovery of bad debt via the price control reduces the incentives on the NWOs to manage their risk and any incentives introduced would mean expansion of regulation into a sphere best governed by commercial arrangements.

Combinations of measures

4.7. Most respondents were in favour of a combination of these measures.

- Respondents commented that in order to maintain incentives, there should only be a residual recovery of bad debt via the price control.
- Of those in favour, it was a common response that there should be a combination of cash and LoCs as well as recovery via the price control. One respondent considered that the availability at the outset of an appropriate level of cash would address short term financial problems and allow time for pass through to take effect.
- It was suggested that the most appropriate measures would involve a combination of ACRs, LoCs and credit insurance.

Mutualisation of risk

4.8. The possibility of mutualising risk prompted the following comments in favour:

- Respondents suggested that it was worthy of further consideration as to its feasibility.
- It was suggested that this method would reduce the level of credit cover required by the industry as a whole and so reduce costs.

- On specific comparative arrangements, it was suggested that there should be a central fund for the entire system like the ABTA bond in the travel industry.

4.9. Those who did not support this form of cover as an option made the following points:

- Respondents noted that it was difficult to set up and to manage in that it would be difficult to allocate risk premia to parties without an ACR and it would be difficult to estimate the level of contribution of new entrants. This would result in high administrative costs.
- Some respondents considered that Ofgem would not favour this approach.
- It was suggested that the likelihood of implementing this mechanism within a sensible timeframe was remote.

Credit pools

4.10. There was a suggestion that a 'bad debt' account be established for both Transco and NGC, whereby any losses up to the amount of the account is allocated to all shippers through the cost of service rate process. Amounts above this would be absorbed by Transco or NGC as the case may be. The author suggested that this would provide the right type of incentive to manage the exposure.

4.11. It was suggested that this solution would result in more efficient use of capital and would provide greater security for network operators and other likely creditors

4.12. Respondents against this mechanism put forward the following views:

- It would be complex to establish and would suffer from high administrative costs.
- This mechanism would be susceptible to gaming which would necessitate a high degree of regulatory oversight to monitor the system and settle disputes.

Commercial insurance

4.13. Some energy companies have utilised commercial insurance, on an individual basis, to cover credit risk. Those in favour of this as an option made the following points:

- Respondents suggested that it constitutes the best way to manage the risk to end consumers because of lower costs.
- It was suggested that parties should devise arrangements in keeping with the commercial world. The cost of insurance could then form part of the operating expenditure calculations under the price control for the NWO.
- On the cost issue, it was noted that commercial insurance can provide a low cost, efficient method which could remedy the anti-competitive aspects of the current arrangements.
- One respondent suggested that credit insurance should be assigned to the NWOs and the premium should be paid by the supplier.

4.14. Those not in favour of commercial insurance as an option made the following points:

- Respondents suggested that commercial insurance was not a practical option. There are high excess and low maximum cover levels and experience has shown that cover tends to be withdrawn against certain suppliers as soon as the perceived risk of that business failing increases.
- It was noted that there were significant cost implications for companies without a proven track record and this might create a barrier to entry.
- One respondent suggested that such arrangements are likely to be complex with possible difficulties in renewing insurance cover at reasonable cost in the event of a significant claim having been made.
- There was concern about the danger of claims being excluded for technical reasons.

- It was suggested that this type of cover is only available to cover the risk of insolvency and therefore excludes other breaches of the industry codes.

Credit arrangements in energy balancing

- 4.15. Respondents have made representations both to the consultation document and the specific Modification Proposal 572: “The provision of Letters of Credit for energy balancing credit cover” that proposed that Transco should change its energy balancing credit cover arrangements to utilise only cash or Letters of Credit from approved banks. This would effectively align the arrangements in gas with those already existing in electricity.

Views in favour of using ACRs and PCGs as security for gas energy balancing

- 4.16. It was stated that the proposal could result in the use of LoCs from banks whose creditworthiness may be no greater (and, potentially less) than the company that would be providing an ACR or PCG. This could concentrate risk into certain areas of banking and may lead to doubts as to the effectiveness of cover.
- 4.17. With regard to cost, respondents stated that the modification proposal would increase industry costs with no corresponding increase in security. Also that costs associated with the maintenance of an ACR should be taken into account.
- 4.18. The point was also made that the use of cash or LoCs as security would tie-up working capital and lead to over securitisation of the market.
- 4.19. Some respondents felt that other changes may need to be made, for instance to the settlement cycles before implementing a proposal such as Modification Proposal 572.

Views against using ACRs and PCGs as security for gas energy balancing

- 4.20. Some respondents suggested that the alignment of the credit arrangements in Transco’s Network Code and those in the BSC would be beneficial.
- 4.21. The primary reason given for supporting the exclusion of ACRs and PCGs as a means of securing credit was that recent events had proved that this method was

insufficiently robust, leaving competitor shippers to shoulder the cost of major company failures. These problems were not experienced by energy balancing parties in electricity.

- 4.22. Respondents noted that this approach would appropriately focus the cost of covering risk on those parties that caused it, in as much as the cost of the provision of LoCs was likely to be linked to the assessment that the bank would make of the risk of default.
- 4.23. It was also stated that the cost of provision of LoCs was not as high as some parties had claimed and would certainly not be unduly onerous to parties who would have otherwise secured their debt by means of an ACR or PCG.

Consistency and clarity in enforcement rules

- 4.24. Respondents made the following points on the consistency and clarity of the credit, billing and payment rules.

Transco's enforcement rules

- 4.25. Several respondents supported further work to identify where greater clarity and consistency may be achieved, though few gave further details.
- 4.26. Transco's suggested improvements were as follows:
- Consistent with contracts within the electricity industry a shipper of SoLR could be allowed a period of 14 days following appointment of SoLR in order to allow the new gas shipper time to source security.
 - The introduction of a designated time period between termination/insolvency and revocation of licence and appointment of a SoLR would further mitigate risk of bad debt.
 - Currently under the Network Code, Transco cannot call upon security held until invoices become overdue and therefore at the point of insolvency security cannot be utilized to secure collection in respect of unbilled or non-overdue debt. All invoices should become immediately payable upon insolvency to ensure that recovery of any potential bad debt is maximised.

- Currently the only contractual option in the event of non-payment where there is no security in place is to terminate. Consideration should be given to the imposition of sanctions that prevent new supply point registrations and entry capacity booking as a lever to induce payment in the case of an invoice becoming overdue. This would reduce the likelihood of a termination and introduces a further protective mechanism for recovery of monies.
- Consistent with contracts within the electricity industry consideration should be given to building reconciliations based on previous historic charge information into credit calculations. Currently credit limits are calculated excluding reconciliation charges however inclusion of these charges would give more accurate credit forecasts, further reducing potential credit exposures.
- The publication of a default on industry wide websites has proven to be effective in electricity industry as a threat to rectify credit breaches. This could be utilised as a further sanction between 85% notice and termination, introducing a further protective mechanism.
- Currently the Network Code states that, in the event of a change in rating of a shipper, Transco give 30 days notice of a reduction in credit limit. Immediate reduction in credit limits in line with downgradings in independent ratings affords greater protection.

- 4.27. One respondent suggested that better enforcement could be achieved either through incentives (and disincentives) or the application of new rules. They suggested that given the success of deregulation in Britain, incentives to modify behaviour are appropriate, rather than the reduced flexibility of further rules.
- 4.28. They commented that marketplace participants should have the ability to make choices and should reap the benefits of wise choices and equally suffer the consequences of bad decisions. Adding that credit exposures can and are being managed with utilisation of all the correct credit tools both by the shippers and the market operators

- 4.29. One respondent stated that the threat of disconnection is a powerful tool in ensuring that network companies are not left with significant liabilities, and is consistent with the practice in other markets where non-payment usually results in discontinuing the provision of a service. Removal of the ability to threaten disconnection would increase the potential risk to distribution companies of continued non-payment.
- 4.30. There was also a suggestion that Ofgem should impose a new condition within the standard licence conditions that prevents financially weak suppliers from registering new customers and hence exacerbating the size of the potential bad debt.
- 4.31. Others stated that changing the existing arrangements for credit cover represents a sub-optimal solution to any concerns that Ofgem has regarding the threat of disconnection of consumers.
- 4.32. energywatch strongly believes that actual or threatened disconnection is an inappropriate way to protect consumers or to enforce industry codes and agreements.

The Connection and Use of System Code

- 4.33. Under the current CUSC arrangements, in the event that a user fails to provide adequate security cover, NGC can declare an event of default and, having given 48 hours notice of this event of default, may de-energise all of the user's equipment which is the subject of a bilateral agreement with that user or may instruct the operator of a distribution system to de-energise such user's equipment. Prior to de-energisation, the CUSC provides for the user to refer the matter to the CUSC dispute resolution procedure.
- 4.34. NGC commented that the threat of disconnection is often the only mechanism available to NWOs to enforce credit policy or payment of charges. However, NGC also suggested that the threat of disconnection or de-energisation is one that is both undesirable and, in many cases, impractical.
- 4.35. NGC considered that further work should be undertaken to identify more appropriate enforcement rules such as provision within the BSC to block

contract notifications, provision within contracts for suspending meter registrations, public listing of users in default, and acceleration of licence revocation and appointment of a SoLR.

Distribution Network Operators

- 4.36. The contractual arrangements between electricity suppliers and Distribution Companies for use of the network are governed by the DUoSA. Electricity suppliers are obliged by their licence to sign the Master Registration Agreement (MRA).
- 4.37. The MRA does not permit a supplier to receive any services for a metering point unless a DUoSA is “in full force and effect”. However if a supplier does not have such an agreement the MRA deems that its terms and conditions exist from the time a Distribution Company starts to provide services to the supplier.
- 4.38. Distribution Companies issue invoices monthly in arrears. Payment is due within 14 days.
- 4.39. Distribution Companies may, in certain circumstances where they think that a supplier is not complying with the MRA, be able to prevent it registering new customers. Additionally they can enforce the provisions of the DUoSA by serving a notice of termination of the contract on the defaulting electricity supplier. The DUoSA allows, or purports to allow, in circumstances where any amount due or owing is unpaid after seven working days following receipt of the notice, the Distribution Company to take steps to de-energise the supplier’s customers.
- 4.40. Distribution Companies’ views on enforcement can be summarised as follows:
- Interest should be payable on overdue amounts and the process by which registrations can be stopped required clarification.
 - Clarification is required on the process by which the credit limit in the DUoSA can be reviewed.

- There should be an escalation process when suppliers fail to increase cover to the required level and/or do not pay invoices on time, including a “partial SoLR”
- That compliance with DUoSA should be a licence obligation.

Other issues raised in responses

- 4.41. A number of respondents indicated that the credit arrangements should be considered as a whole, as they have been in this consultation, and not piecemeal by making changes to the overall approach by means of individual modifications to the industry codes and by determinations on disputes.
- 4.42. There was no general consensus on whether billing cycles should be treated as part of the current consideration of credit cover or whether this should be given further consideration.
- 4.43. Some respondents commented that prepayment should be an option for DUoS charges.
- 4.44. It was suggested that deposits should be adequate to cover the worst case scenario of supplier failure. One respondent commented that the requirement to provide LoCs equal to 60 days DUoS should be increased to 90 days to cover outstanding debts plus new debts that accrue.
- 4.45. One respondent in favour of LoCs as a means of security cover considered that a national model form of the terms of credit or cash deposits would avoid duplication of effort and aid suppliers operating nationally.

Bringing Transco’s Code Credit Rules into the Network Code modification procedure

- 4.46. In the consultation document, Ofgem proposed that Transco’s Code Credit Rules for gas transportation should be brought within its NC Modification Procedures. Respondents made the following points on the modification arrangements for Transco’s Code Credit Rules.

- 4.47. Eleven respondents provided specific comment on this proposal, nine of which supported it. The given reasons were primarily in terms of making the rules subject to transparent and robust governance, though it was also suggested that this would ensure that the rules are further consistent with those applicable in electricity.
- 4.48. One respondent objected to the 'piecemeal approach' being taken to Network Code governance. It did not support the proposal and considered that it should not be progressed without further consultation with the industry. It went on to state that if the change were to be implemented, some assurance from Ofgem would be required that decisions on any proposed modifications in this area would be dealt with in a timely manner.
- 4.49. Transco also objected to the proposal, stating that approximately 70% of the terms of Transco's Code Credit Rules are contained within the NC. Transco does not support moves to make subject to consent any further terms on the grounds that it removes Transco's flexibility to respond to external influences and sudden economic climate changes in a timely manner without industry wide consultation.

Additional changes that may be needed to invoicing cycles and payment terms

- 4.50. In the consultation document, Ofgem indicated its view that additional changes (for example to invoicing cycles and the timing of payment terms) may be needed but that these should be further debated when the credit cover framework has been clarified.
- 4.51. Ten respondents commented on this proposal, four of which specifically indicated support for consideration of additional changes. These indicated the need to assess issues including systems impact and effects on supplier cash flow, and it was suggested that this should be done using cost benefit analysis. Of these respondents, one suggested that consideration should be undertaken as part of the current review.
- 4.52. Whilst it did not comment on when discussion on changes should occur, Transco agreed that these, specifically shortening timescales, might offer greater

protection against increasing levels of debt. However it suggested that the costs of systems changes for all parties must be weighed against potential benefits.

- 4.53. A further four respondents gave support for additional changes. Suggested changes included reduction of settlement cycles and implementation of more efficient payment mechanisms, on the basis that these give rise to one of the most significant credit risks for trading parties, and that changes would make security cover arrangements more workable. Conversely, in its response Elexon stated that it would be difficult and costly for the invoicing cycle under the BSC to be reduced.

5. Ofgem's views - principles underlying the arrangements for credit cover

Introduction

- 5.1. There is a range of contractual arrangements in gas and electricity transportation where credit arrangements are appropriate for Ofgem to consider. In summary, these are in relation to the transmission, distribution, connection and balancing arrangements of the network monopolies. Through this consultation process, Ofgem has been considering the principles that may assist in resolving the issues highlighted in Chapter 2. These principles are set out below and developed in more detail in the following chapters. Having regard to its statutory duties, Ofgem will, where it is appropriate to do so, be guided by these principles in its overall stance on credit cover and credit issues generally, and in taking decisions on whether a code modification proposal⁹ meets the relevant objectives of that code or on determinations. These principles also describe its preferred approach to the management of credit risk going forward.

Incentives need to be placed upon the NWOs to manage debt efficiently

- 5.2. Broadly, there are two ways in which the NWOs can be incentivised to manage debt efficiently. First, an ex-ante allowance can be made at the time of setting a price control. For example, this could be a fixed percentage of allowed revenue. In this way, expected costs of bad debt are treated as any other cost, and the NWOs are then incentivised to manage that efficiently. This approach was used by Ofgem, and its predecessors, when setting the 1997-2002 gas transportation price control, and all supply price controls.
- 5.3. Alternatively, no explicit ex-ante allowance is made at the time of setting a price control. NWOs would therefore be exposed to the full costs of bad debt.

⁹ For the purposes of this document, the term 'modification proposal' includes Amendment Proposals to CUSC

However, it seems reasonable that they be allowed to recover all or a proportion of any losses incurred as a result of bad debt, provided that they had acted efficiently. This can either be through ad hoc adjustments following a significant event, or “logged up” and taken into account at the time of the next price control review. For example, the DNOs were allowed to recover most of the bad debt costs resulting from the failure of Independent Energy and Enron. This approach would incentivise the NWOs, provided there is no expectation of automatic pass-through. This is the approach Ofgem has operated informally in relation to incurred bad debts.

- 5.4. In either of these approaches, there are arrangements for immediate consideration of exceptional costs arising from a significant failure. This could be a formal re-opening of a price control.

Arrangements must not be discriminatory, or prevent the promotion of effective competition

- 5.5. In order to determine whether NWOs are acting efficiently, it is necessary to consider the terms and conditions of connection and/or access to the transportation networks. Counter-parties will generally look to Ofgem to prevent the NWOs inappropriately changing terms and conditions to their detriment.
- 5.6. As to what terms and conditions ought to apply to credit arrangements, Ofgem looks, amongst other things, to the competitive market for guidance. There, credit cover does vary by the type of counter-party.
- 5.7. Both the Competition Act 1998, in so far as a company’s conduct restricts, distorts or prevents competition, and the NWO licences prohibit discrimination. This does not mean that all counter-parties must be treated the same. Appropriate variation of credit terms by the NWOs between its counter-parties need not be unduly discriminatory per se, provided any variation can be objectively justified. To do so, Ofgem would expect, among other things, for the NWO to demonstrate that it applied to each counter-party the same criteria for assessing the level of credit cover required. The criteria themselves would have to be transparent and consistently applied and should not, amongst other things, discriminate between the type or class of counter-party without clear objective

justification. Such an approach therefore recognises that different counter-parties may be required to maintain different levels of credit cover according to the degree of credit risk they represent. The amount of credit that any given NWO should make available to each class, the extent to which this should be secured, and the means by which it may be secured to that extent, should have regard, among other things, to the innate characteristics of the NWO (in particular, the consequences for it of loss) and to the characteristics of exposure (in particular, size and duration). A system that achieves this would not, in Ofgem's view, be unduly discriminatory, provided that it is not used anti-competitively.

- 5.8. In general, payment terms for transactions between participants in the gas and electricity markets allow credit to be taken. Protection of the resulting exposures should reflect an appropriate assessment of the counter-parties capacity to meet their liabilities and thus take into account the size and duration of the exposure, counter-parties' relative credit strengths and other relevant factors.
- 5.9. NWOs should be able to manage their credit risks efficiently, in line with best commercial practice in comparable competitive industries, in a way that is not unduly discriminatory and facilitates competition. Consistent with this principle, for example, Ofgem would not necessarily consider suspension of new customer registrations, in appropriate cases, to be in breach of the NWO's duty to facilitate competition in supply. Nevertheless, such a course of action would need to be objectively justified by reference to the relevant facts and circumstances of any given case.

Credit arrangements should provide as secure and stable business environment as is reasonable

- 5.10. Ofgem considers security and continuity of supply to be of paramount importance in protecting the interests of consumers. Where a company does fail, it is important that this does not cause a "domino effect" leading to supply disruption. Robust credit arrangements are a vital tool to assist in this process. In situations where there is a combination of:

- exposure to risk being managed on behalf of others;

- a potentially volatile debt; and
- where the scale of potential debt is directly linked to the creditworthiness of the counter-party (with a failing company, energy balancing performance is likely to deteriorate),

there are strong arguments for cash or equivalent security. A number of cleared exchange markets require cash, or equivalent, for participants as a pre-requisite for trading. These observations would lead Ofgem to consider that a move towards cash, or equivalent, being required for gas balancing credit cover, as already required for electricity balancing would be reasonable and appropriate.

- 5.11. The rate at which gas and electricity balancing debt can build up is significantly faster than the rate at which transportation and connection debt can build up. The collapse of a major supplier may accrue balancing costs at the rate of millions of pounds a day. It is possible that this debt, when smeared across all participants, as it currently is in gas, could cause the failure of further companies. This risk is not present to the same degree in the electricity industry because cash or LoC arrangements cover energy balancing exposures. Again, as above, avoidance of this domino effect would lead Ofgem to consider that a move towards requiring cash, or equivalent, for gas balancing, thereby bringing the gas arrangements into line with the electricity arrangements would be reasonable and appropriate.
- 5.12. A wish to see, to the extent reasonable, a stable business environment also leads to consideration of the speed at which a company's creditworthiness can decline. The use of ACRs as a determinant of whether a counter-party must secure the credit it takes, whether in the balancing mechanisms or for connection or use of system charges, can cause severe liquidity problems for a company when its rating is downgraded. Such rating 'triggers' have been criticised for the role they have played in a number of recent failures, exacerbating the difficulties faced by the company without improving the position of the counter-parties. Measures that allow NWOs to act precipitously will undermine the incentive for those NWOs to manage the debt in an orderly way by anticipating downgrades rather than reacting to them. Escalation arrangements should not include as an early step, demands for cash or LoCs.

Ofgem should take measures to protect consumers from loss of supply, in the event of a shipper or supplier's failure to maintain adequate levels of credit cover or default on payments due

- 5.13. The consultation document stated that Ofgem's aim is to protect consumers from actual or threatened disconnection, where a supplier or shipper does not maintain adequate levels of credit cover or pay invoices on time.
- 5.14. The Gas Act 1986, the Electricity Act 1989 and various industry codes all recognise that there may be limited situations where physical supply may be interrupted or disconnected, de-energised or isolated. In general, the right to disconnect is primarily a means to ensure safety and security, though some NWOs also have a contractual obligation (by virtue of industry codes such as the CUSC) to disconnect, de-energise or isolate consumers in certain circumstances. Disconnection may prevent further debts accruing. However, it does not provide a means of obtaining monies owed and is almost certain to damage the defaulting business. Above all it jeopardises continuity and security of supply to consumers, including to those who continue to meet their obligations.
- 5.15. Accordingly, Ofgem does not regard disconnections, de-energisations or isolations as a reasonable means of enforcing the credit and debt arrangements of industry parties. This should only be considered after all other avenues have been explored and a reasonable period of notice has been given to the consumer to enable them to switch to another supplier.
- 5.16. Subject to the considerations discussed in the paragraphs above, Ofgem would expect NWOs to use all means generally available to them at law to enforce their rights and remedies, in order to mitigate losses arising from shipper or supplier failure. The specific enforcement measures taken, and the speed with which a dispute is escalated in any particular case will be a matter for the affected NWOs to judge for themselves in the light of relevant best practice guidelines. Certain enforcement measures may have consequences for the ability of a shipper or supplier to continue to comply with its licence or trade

lawfully. In particular, the serving of a Statutory Demand which is not stayed, set aside or satisfied or the grant of an order under the Insolvency Act 1986 may entitle the Authority to serve a notice of revocation of licence on the defaulting licensee and appoint a SoLR. These arrangements provide for the orderly transfer of affected consumers to another supplier in such a way as to minimise the risk to continuity and security of supply, in circumstances where a market solution cannot be relied upon to achieve that objective. The Authority's powers in this regard are discretionary and the Authority will act in a manner it considers best calculated to discharge its statutory duties having regard to the facts and circumstances of the particular case.

- 5.17. These options are of course a last resort and it is envisaged that the operation of efficient credit cover arrangements, as discussed elsewhere in this document will reduce the likelihood for such action being necessary.

6. Ofgem's views - the implications for future decisions

Introduction

- 6.1. The principles outlined in the previous chapter set the guidance framework for Ofgem's future decisions on credit-related issues such as industry code modification proposals and determinations. Without fettering its discretion, and having regard to its statutory duties, Ofgem sets out in this chapter how these principles may impact on any decisions and determinations for distinct areas of the credit arrangements.

Creditworthiness assessment

- 6.2. It is Ofgem's view that the present methods of creditworthiness assessment appear to lack consistency across all NWOs and in some cases a clear rationale. For example, Transco has used arrangements where credit ratings of varying levels equate to differing amounts of acceptable unsecured credit. NGC's CUSC distinguishes between a credit rating of A- or higher (for long term debt by Standard and Poor's)(which have unlimited credit) and those rated below A- (which have none). NGC has the option to relax these requirements, although the basis upon which they do this has not been codified.
- 6.3. Whilst the rating agencies provide an important and independent assessment of the capacity of companies to discharge their liabilities, the agencies' ratings are designed primarily to serve investors in companies' debt obligations. Credit ratings should not therefore be relied upon as the sole method of assessing all counter-party risk. Moreover, if used in so-called ratings triggers, their use can cause or increase systemic risk. Accordingly, Ofgem is of the view that credit ratings are not necessarily the only criteria by which counter-party risk should be assessed for credit cover purposes. Ofgem would encourage parties to develop and propose more sophisticated assessment techniques, for instance that take into account the company's payment record, its performance, its fundamental characteristics and the relative size and duration of the exposure. These

assessment techniques, which could be characterised by the term “credit scoring”, could, for instance, be developed by a new working group, using experience from other commercial competitive sectors.

- 6.4. Such scoring techniques might be used to determine how much unsecured credit a NWO would provide to any particular counter-party, and which of a range of acceptable collateral would be required for additional tranches of exposure.
- 6.5. Ofgem also considers that the entity that has the primary debt is the most important in a risk assessment. PCGs and the parent company’s relative credit strength that are associated with them only have a secondary, albeit important role as one – but not in all cases the most appropriate – form of collateral for exposures that are not supported by the primary debtor’s credit quality.

Range of methods to secure credit cover

- 6.6. Having established the creditworthiness of the company, the range of measures to be utilised to secure credit cover could be broadened, for example, encompassing pre-payment, part payment, credit allowances for prompt payment, escrow accounts, LoCs, credit insurance and mutualisation. Combinations of these could also be acceptable. In assessing the options regard should be had to the importance of continuity and security of supply.
- 6.7. In essence, Ofgem considers that more could be done to develop secure and lower cost arrangements to mitigate and secure credit exposures. Within reasonable bounds, the most creditworthy companies are likely to merit substantial unsecured credit limits; less creditworthy companies should expect to provide collateral security for exposures in excess of commensurately lower limits. Ofgem does not consider that the use of a single ACR to establish unlimited credit is likely to be reasonable or acceptable, especially as the loss of that rating could mean a substantial cash-call. Nor does it consider that the exclusive use of cash or LoCs for any purpose other than securing gas and electricity energy balancing credit cover, is likely to be reasonable or appropriate for the reasons given in the previous chapter.

- 6.8. As new arrangements are developed they should, where appropriate, be codified within the relevant industry codes or agreements. Whilst any decision on a code modification will be assessed against the relevant objectives, Ofgem considers that these principles form a useful basis for change and without fettering its discretion, that successful change proposals are likely to be consistent with the principles set out above.

Mutualisation

- 6.9. In the consultation document, Ofgem suggested that mutualisation of credit risk may be a way forward. A number of respondents, whilst recognising the difficulties, thought that this option should be considered further. Ofgem still holds this view and would be willing to facilitate the industry to achieve such an approach if this gained broad support as a viable way forward.

Undue discrimination

- 6.10. It is important that NWOs are able to demonstrate that any differentiation between creditors is objectively justified, both in relation to contractual provisions and to conduct. The issues raised by this are potentially complex and will need to be examined in the light of all relevant statutory and regulatory provisions, including those of the Competition Act 1998. Codification, following the necessary consultative procedures, will assist with this, but Ofgem will still need to consider the operation of any reform to credit in practice, in view of the importance of ensuring that conduct as well as contractual arrangements are not unduly discriminatory. External advice on best practice should assist, as will evidence that the steps taken in any particular case were reasonable.

Incentives

- 6.11. It is important that NWOs are appropriately incentivised to deliver effective credit cover management, both to keep costs no higher than necessary and to ensure they are appropriately focused on the companies presenting risk and on mitigating that risk.

- 6.12. The incentives that act on NWOs arise from their exposure to any bad debt not being 'passed through' to consumers by means of a price control review. Ofgem's position, as indicated above, is only to pass through incurred bad debt losses (or a proportion) where (and to the extent that) it can be shown that the NWO has complied with the principles set out in this document (including using credit cover arrangements that conform with best commercial practice in comparable competitive industries, taking account of the nature of gas and electricity issues) and guidance issued by Ofgem.
- 6.13. In certain circumstances the NWO may be inclined to operate in the most secure mode available, in the extreme, utilising cash only. However, Ofgem is unlikely to approve such changes or determine disputes that would support an all cash approach for all circumstances, as this could create barriers to entry. Nevertheless, there are other measures that the NWO can take to mitigate risk and these could include more frequent and reliable billing, encouraging part-payment and more active debt management and constant monitoring of risk.
- 6.14. In addition, NWOs might want to codify changes that establish a range of measures that meet Ofgem's criteria of being comparable to similar situations in competitive industries. The codification process will bring a greater degree of certainty as to what credit arrangements are going to be acceptable in the event of a determination on 'pass through'. It would also have the effect of allowing new entrants to assess the cost and make preparations for entry.

Pass through of bad debt

- 6.15. If a NWO fails to recover debts due to it because the debtor has failed, Ofgem will consider whether affected NWOs can recover all or a proportion of their realised losses by making the appropriate adjustments to price controls on a case-by-case basis at the subsequent price control review. This judgement would be based on a comparative analysis of how all similarly affected companies have fared (if applicable), and will always be dependent on the company being able to clearly identify the losses and demonstrate that it has complied with the principles set out in this document (including using credit cover arrangements that conform with best commercial practice in comparable

competitive industries, taking account of the nature of gas and electricity issues) and any guidance given by Ofgem.

- 6.16. In exceptional circumstances, and subject to the same criteria, where the financial stability of an NWO is threatened by irrecoverable debt, Ofgem would, after assessment of the information presented, consider making an immediate adjustment to the prevailing price control as an income adjustment.

Disconnections as a means of enforcement

- 6.17. As discussed in Chapters 2 and 5, Ofgem does not regard disconnection, de-energisation or isolation of consumers as a reasonable means of enforcing the credit and debt arrangements and this should only be considered after all other avenues have been explored and a reasonable period of notice has been given to the consumer to enable them to switch to another supplier.

7. Ofgem's views – implications for gas credit arrangements

Transco's entry capacity credit cover

- 7.1. As noted above, Ofgem has made it clear that it does not consider that it would be appropriate to allow monopolies, such as Transco, to automatically recover any bad debts through raising transportation charges. In this respect, in determining any application for an Income Adjusting Event (IAE) or an adjustment in a subsequent price control review, Ofgem will have regard to the credit arrangements put in place by Transco and the extent to which these have been efficiently managed. In particular, Ofgem has made clear that it would need to consider whether the credit arrangements were reasonable and commercial in nature having regard to other credit arrangements adopted in comparable competitive industries, for example, long-term contracts within the gas and electricity sectors. Until this was demonstrated, it would therefore be Transco, and not its customers, that carries the risk of shipper default with respect to entry capacity.
- 7.2. In this context, Ofgem considers that Transco could give consideration to a credit management approach that is based upon a regular review of the value of a shipper's entry capacity rights against the value at which those rights were originally sold to the shipper. This would represent a move away from Transco's current approach that is based upon a credit assessment in the 12 month period prior to the date on which the capacity rights are activated. In other words, Transco could make an assessment of the value that could be recovered from the sale of the capacity, in the event that the shipper that owned the capacity defaulted and was terminated. Where the value of the capacity was lower than the original sale value then Transco could make additional margin calls on the capacity.
- 7.3. The degree and nature of the credit requirements that Transco applies in these circumstances would be a matter for it to establish after considering the context of each credit situation. However, as noted above, Transco should secure

additional commitments where necessary that are similar to those applied in comparable competitive situations.

- 7.4. Ofgem does not consider that debts associated with transportation capacity are prone to rapid escalation. As such they need not be secured any differently from normal debt arising from the use of services or facilities.

Transco's daily capacity and commodity arrangements

- 7.5. Under the provisions of Transco's network code the costs of its entry capacity buy-back actions and the revenue from sales of daily firm system entry capacity, interruptible entry capacity, and overrun charges are addressed via capacity neutrality arrangements. These arrangements provide that the net costs and revenues associated with buy-backs, overruns and daily capacity sales are recovered on the basis of an individual shipper's end of day firm entry capacity holdings. In some circumstances this may result in payments being made to shippers whereas, depending on the extent of buy-back costs, shippers may in other circumstances have to make payments to Transco.
- 7.6. Network code **Modification Proposal 595**, '*Revision to the process for recovering unpaid capacity and commodity invoices*' has been raised which seeks to limit Transco's ability to recover any bad debts, including those relating to capacity neutrality, from defaulting or terminated shippers. The proposal specifies that where a shipper is in default and/or is terminated and Transco does not have sufficient credit cover in place then it must make an application to Ofgem. The proposal then provides that Ofgem will provide a direction on the amount that Transco may recover and the means by which it is to be recovered.
- 7.7. The modification is currently being consulted upon. Ofgem will decide on this when it receives the final modification report. At this stage it is not clear what the detailed impacts will be on the ability of Transco to pass through bad debt.

Gas balancing credit cover

- 7.8. Gas balancing debt has a number of characteristics that distinguish it from transportation debt. In this context the key differences are that gas balancing debt can escalate very quickly (and is likely to do so at the time of a company's

financial crisis), and that the debt is managed on behalf of the competitive community on whom the costs of an individual failure will therefore fall.

- 7.9. The electricity trading arrangements under the BSC, where the electricity balancing debt has been fully secured by cash and LoCs, have proved robust to the failures of Enron and TXU, despite the complex financial structures employed by these companies.
- 7.10. Ofgem has carefully considered the representations and has concluded that the gas balancing arrangements could benefit from being entirely secured by cash or LoCs.
- 7.11. Respondents have noted that some parent companies have higher credit ratings than the minimum credit rating likely to be required by a bank providing a LoC. As banking and energy companies are in distinct and separate sectors of the economy, it is unlikely that the difficulties or even failure of an energy company will be simultaneous with that of the bank providing the LoC. This is in contrast to the situation with PCG's, where it is likely that the parent and subsidiary will be in the same or related industries and may face financial difficulties at the same time. This has been borne out in recent events.
- 7.12. **Modification Proposal 572**¹⁰ seeks to require all shippers to provide security to support their energy balancing activity, namely LoCs from approved banks with an "Aa3" (Moody's Investor Services) or higher credit rating, or cash. Ofgem has received the Final Modification Report and at time of writing, is still considering its decision on whether to accept the proposal. Transco is currently consulting on the appropriate legal drafting to be used in the event of an Ofgem decision to accept.
- 7.13. **Modification Proposal 596**¹¹ has been put forward that would have the effect, if accepted, of placing the risk of any residual bad debt on Transco where the arrangements, by means of forecasting error or other cause, did not provide sufficient cover. If Modification 596 were implemented, Transco would only be

¹⁰ Transco Network Code Modification Proposal 572: "The provision of Letters of Credit for energy balancing credit cover"

¹¹ Transco Network Code Modification Proposal 596: "Revision to the process for recovering unpaid energy balancing charges invoices"

able to pass this debt through to shippers with Ofgem's approval. Ofgem has not come to a decision on this matter and will await the final modification report and consultation responses.

Escalation of credit cover measures in gas

- 7.14. **Modification 521**¹², which was implemented in March 2002, allowed Transco to act immediately to secure credit cover once a company had been downgraded below investment grade. This modification applied to both gas balancing and transportation debt. If gas balancing credit is to be fully covered by cash and LoCs the effect of Modification 521 only applies to gas transportation debt. It may be that this modification is no longer in keeping with the principle of limiting precipitous actions.
- 7.15. **Modification Proposal 598**¹³ has been put forward, which would extend the provisions of Modification 521. It seeks to give Transco the right to issue notice of an immediate revision to a user's credit security should there be any downward revision of a credit rating, either published or privately obtained, of the user, guarantor or any other security provider.
- 7.16. Additionally, the proposal seeks to give Transco the right to review, and if appropriate, require the user to revise immediately, its level of credit security in the event it is necessary to make a demand on any existing instrument of security provided by the user.
- 7.17. Consequently, in both circumstances, rather than waiting for 30 days for remedial measures to take effect, Transco would be able to review, and require a user to take action immediately following a revision of its Secured Credit Limit or Code Credit Limit.
- 7.18. Ofgem has not yet come to a decision in this proposal. However, without fettering its discretion as regards this proposal, it seems that this modification is

¹² Transco Network Code Modification Proposal 521: "Where a guarantor is downgraded to any speculative rating, removal of the notice period required for the revision of a User's Secured Credit Limit and Code Credit Limit"

¹³ Transco Network Code Modification proposal 598: 'Revision of Notice Period in the Event of a Users Credit Rating being Downgraded'

no longer in keeping with the principle of limiting precipitous actions set out in this document.

Bringing Transco's Code Credit Rules into the Network Code modification procedure

- 7.19. Ofgem considers that an open and transparent modification process for all industry codes and agreements is essential in order that proposed changes can be fully debated by industry parties. This would ensure that all options and implications are fully explored, provide accountability and add value to the decision making process more generally. Ofgem therefore remains of the view that it is inappropriate for Transco's Code Credit Rules to fall outside a formal modification process and they should be brought within the NC Modification procedures.
- 7.20. Ofgem does not think that this will inhibit any party's ability to respond appropriately to external influences in a timely manner, specifically because the ability to do so could itself form a sensible condition within the rules. Bringing the credit rules fully within the scope of NC would simply provide a means for the industry as a whole to influence the nature of those rules, not the ability to operate flexibly within them.
- 7.21. Whilst the consultation document referred only to Transco's Code Credit Rules, Ofgem considers that this rationale should also apply to Transco's Energy Balancing Credit Rules, which also sit outside of the NC Modification procedures. Again, this should not in itself diminish the role of the Energy Balancing Credit Committee.

8. Ofgem's views – implications for electricity credit arrangements

Electricity energy balancing

- 8.1. Ofgem consider, without fettering its discretion as regards any modification proposals, that the energy balancing credit cover arrangements broadly conform to the principles set out in Chapter 5. However, it is open to parties to the BSC to raise a modification proposal at any time, where they think that improvements could be made.

NGC's credit cover arrangements for CUSC

- 8.2. Again, without fettering its discretion as regards any modification proposals or determinations, Ofgem considers that one of the deficiencies of the current arrangements is highlighted by the mechanical assessment of risk applied to DNOs under the CUSC. The requirement for DNOs to maintain a long-term credit rating of at least A- (Standard & Poor's)(A3 Moody's) or use cash or LoCs seems inappropriate in the light of the on-going regulatory financial ring fencing within which the Licensed DNOs have to operate. Ofgem considers that appropriate assessment of creditworthiness would differentiate between CUSC parties in a way that is efficient and cost effective whilst not being unduly discriminatory. **Amendment Proposal CAP24**¹⁴ (which was approved by the Authority on 27 January 2003) recognises such relevant factors.
- 8.3. Having regard to its statutory duties and the principles outlined in chapter 5, and without fettering its discretion, Ofgem does not at present consider that NGC's **Amendment Proposal CAP18**¹⁵ to move exclusively to cash and LoCs would better facilitate the relevant objectives. Ofgem is intending to come to a final decision on the proposal shortly.

¹⁴ CUSC Amendment Proposal CAP24 "Modification of defined term NGC Credit Rating"

¹⁵ CUSC Amendment proposal CAP18 "Credit Cover Requirements for Use of System Charges"

- 8.4. Ofgem additionally considers that NGC should undertake a review of the credit arrangements for connection to and use of its transmission system. In undertaking this review, NGC should consider the principles set out in Chapter 5 of this document.

Electricity distribution connection and use of system charges

Distribution connection charges

- 8.5. Currently, distribution connections and reinforcement costs are subject to bi-lateral agreements and currently, are almost exclusively financed by the users at the time of build (i.e. “deep connections”¹⁶). As a result, there are virtually no credit issues associated with distribution connections. However, a number of options are currently under consideration as part of the work to further facilitate Distributed Generation¹⁷. These include the potential for shallow connection charges, which, for example, could be paid on an annualised basis. These options are being consulted on and were mentioned in the letter from Callum McCarthy to the DNO’s on 13 January 2003, and included in the document ‘Distributed Generation: A Review of Progress’.
- 8.6. If implemented, these proposals could make the recovery of connection costs vulnerable to the commercial failure of a generator. Ofgem expects DNO’s to take appropriate measures to protect themselves against any such credit risk, in line with the principles set out in Chapter 5.

Distribution Use of System (DUoS) charges

- 8.7. The credit cover arrangements for which DUoSAs presently provide are, in Ofgem’s view, not generally consistent with the principles set out in this document. Ofgem therefore considers that it is now appropriate to review credit cover arrangements for DUoS charges, with a view to aligning them with these principles. Chapter 9 discusses a framework for carrying out this review.

¹⁶ The term “deep connection” is explained in the letter and document referred to lower in paragraph 8.5

¹⁷ Distributed Generation: A Review of Progress – Ofgem 02/03

9. The way forward

- 9.1. This document sets out Ofgem's views on a number of issues that impact on the credit arrangements for gas and electricity in the regulated area. These are put forward both as high-level principles and as implications for decisions that may have to be made in specific circumstances. Some changes to industry codes and agreements are likely to be needed to give full effect to these principles.
- 9.2. As indicated in this document, whilst this opportunity has been taken to explore the wider area of credit issues across both gas and electricity, actual change in these areas is likely to be made in two distinct ways:
- first, as a result of modifications to industry codes or by determinations of disputes; and
 - second, as a result of changed behaviour of participants responding to incentive signals or Ofgem's guidance.
- 9.3. With regard to the first mechanism for change, due consideration has been given to all consultation responses whether they have been in the context of modification proposals or the main consultation.
- 9.4. Parties to the industry codes are, of course, able to raise new modifications in the light of this document (or for any other reason) which will be consulted on and considered in the normal way. Similarly, parties to bilateral agreements, such as DUoSAs, can modify their provisions by mutual agreement, in default of which the matter can be referred to Ofgem for determination.
- 9.5. Ofgem considers that industry parties are also best placed to identify best practice in comparable competitive industries and develop their own credit cover arrangements accordingly. However, in order to increase regulatory certainty in the context of potential pass through of bad debt, Ofgem proposes to work with the industry in order to establish mutually agreed best practice guidelines. These should set out, as far as is reasonably practicable, the kind of efficient arrangements that NWO's would need to demonstrate to Ofgem in order for incurred bad debts to be considered for pass-through at the time of the next price control.

9.6. Several respondents suggested that the feasibility of a mutualised approach to credit risk was worthy of further consideration. Ofgem notes that respondents in favour of such an approach think it would have the effect of reducing the level of credit cover required by the gas and electricity industries as a whole, and therefore reduce costs. However, it was also recognised in responses that such a solution may be difficult to establish and could not be implemented in the near term. Nevertheless, before rejecting such an approach, it seems sensible to explore further whether feasible proposals could be brought forward that would command a broad measure of support. Ofgem is therefore willing to work with the industry to explore such a solution.

9.7. In addition to considering written responses, Ofgem will be hosting an open seminar on 25 April 2003 to seek views and stimulate debate in respect of the proposals raised in this document and in particular the following:-

- the formation of one or more industry-wide work-groups to establish best commercial practice guidelines with reference to comparable competitive industries, taking into account the nature of gas and electricity transportation and all relevant regulatory and legal issues, in the following areas:-
 - identification and assessment of credit exposures;
 - protection of credit exposures;
 - payment terms;
 - billing and collection procedures;
 - remedies for payment default;
- the composition and Terms of Reference for the work-groups, together with any expressions of interest in participating; and
- the viability of establishing a 'mutualisation' solution, either as part of, or separate to the work on establishing best practice guidelines.

9.8. It is Ofgem's firm intention to draw up and publish the criteria that it will use to assess any application for acceptance of an income adjustment or other

modification of a NWO's price control condition for the purpose of recovering specific incurred bad debt losses. Ofgem expects the output from the process described in paragraph 9.7 above to inform these criteria. Ofgem will aim to publish its criteria shortly after the conclusion of the process. In the interests of avoiding unnecessary uncertainty it is desirable that the work is completed as soon as practicable. Being mindful that there are implementation issues associated with the development of the guidance and criteria, due account should be taken of the notice necessary.

Appendix 1 The regulatory framework

Introduction

- 1.1 This section summarises the current regulatory framework of the gas and electricity industries. It summarises the current legislative, licensing and regulatory regimes and describes the relationship between the Gas Act 1986, the Electricity Act 1989, licences and industry agreements.

The Gas 1986

- 1.2 The Gas Act 1986 provides the framework for the functions of the Gas and Electricity Markets Authority and sets out the licensing regime in relation to the supply, shipping and transportation of gas. Extracts are detailed below.

Section 4AA The principal objective and general duties of the Secretary of State and the Authority

- (1) The principal objective of the Secretary of State and the Gas and Electricity Markets Authority (in this Act referred to as “the Authority”) in carrying out their respective functions under this Part is to protect the interests of consumers in relation to gas conveyed through pipes, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas so conveyed.
- (2) The Secretary of State and the Authority shall carry out those functions in the manner which he or it considers is best calculated to further the principal objective, having regard to—
- (a) the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met; and
 - (b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part or the Utilities Act 2000.

(3) In performing that duty, the Secretary of State or the Authority shall have regard to the interests of—

- (a) individuals who are disabled or chronically sick;
- (b) individuals of pensionable age;
- (c) individuals with low incomes; and
- (d) individuals residing in rural areas;

but that is not to be taken as implying that regard may not be had to the interests of other descriptions of consumer.

(4) The Secretary of State and the Authority may, in carrying out any function under this Part, have regard to—

- (a) the interests of consumers in relation to electricity conveyed by distribution systems (within the meaning of the Electricity Act 1989); and
- (b) any interests of consumers in relation to—
 - (i) telecommunication services and telecommunication apparatus (within the meaning of the Telecommunications Act 1984); or
 - (ii) water services or sewerage services (within the meaning of the Water Industry Act 1991),

which are affected by the carrying out of that function.

(5) Subject to subsection (2), the Secretary of State and the Authority shall carry out their respective functions under this Part in the manner which he or it considers is best calculated—

- (a) to promote efficiency and economy on the part of persons authorised by licences or exemptions to carry on any activity, and the efficient use of gas conveyed through pipes;

- (b) to protect the public from dangers arising from the conveyance of gas through pipes or from the use of gas conveyed through pipes; and
- (c) to secure a diverse and viable long-term energy supply,

and shall have regard, in carrying out those functions, to the effect on the environment of activities connected with the conveyance of gas through pipes.

(6) In this section “consumers” includes both existing and future consumers.

(7) In this section and sections 4AB and 4A, references to functions of the Secretary of State or the Authority under this Part include a reference to functions under the Utilities Act 2000 which relate to gas conveyed through pipes.

(8) In this Part, unless the context otherwise requires,—

“exemption” means an exemption granted under section 6A;

“licence” means a licence under section 7 or 7A and “licence holder” shall be construed accordingly.

Section 9

- 1.3 Section 9 of the Gas Act places a duty on holders of Transporters licences, among other things, to develop and maintain an efficient and economical pipeline system for the conveyance of gas. Under Section 9(2), it shall also be the duty of a gas transporter to avoid any undue preference or discrimination.

The Electricity Act 1989 (the “Electricity Act”)

- 1.4 The Electricity Act (as amended by the Utilities Act 2000) provides, among other things, the framework for the functions of the Authority and sets out the licensing regime in relation to the supply, distribution, generation and transmission of electricity. Extracts are detailed below.

3A The principal objective and general duties of the Secretary of State and the Authority

- (1) The principal objective of the Secretary of State and the Gas and Electricity Markets Authority (in this Act referred to as “the Authority”) in carrying out their respective functions under this Part is to protect the interests of consumers in relation to electricity conveyed by distribution systems, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission, distribution or supply of electricity.
- (2) The Secretary of State and the Authority shall carry out those functions in the manner which he or it considers is best calculated to further the principal objective, having regard to—
 - (a) the need to secure that all reasonable demands for electricity are met; and
 - (b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part or the Utilities Act 2000.
- (3) In performing that duty, the Secretary of State or the Authority shall have regard to the interests of—
 - (a) individuals who are disabled or chronically sick;
 - (b) individuals of pensionable age;
 - (c) individuals with low incomes; and
 - (d) individuals residing in rural areas;

but that is not to be taken as implying that regard may not be had to the interests of other descriptions of consumer.
- (4) The Secretary of State and the Authority may, in carrying out any function under this Part, have regard to—

(a) the interests of consumers in relation to gas conveyed through pipes (within the meaning of the Gas Act 1986); and

(b) any interests of consumers in relation to—

(i) telecommunication services and telecommunication apparatus (within the meaning of the Telecommunications Act 1984); or

(ii) water services or sewerage services (within the meaning of the Water Industry Act 1991),

which are affected by the carrying out of that function.

(5) Subject to subsection (2), the Secretary of State and the Authority shall carry out their respective functions under this Part in the manner which he or it considers is best calculated—

(a) to promote efficiency and economy on the part of persons authorised by licences or exemptions to transmit, distribute or supply electricity and the efficient use of electricity conveyed by distribution systems;

(b) to protect the public from dangers arising from the generation, transmission, distribution or supply of electricity; and

(c) to secure a diverse and viable long-term energy supply,

and shall, in carrying out those functions, have regard to the effect on the environment of activities connected with the generation, transmission, distribution or supply of electricity.

(6) In this section “consumers” includes both existing and future consumers.

(7) In this section and sections 3B and 3C, references to functions of the Secretary of State or the Authority under this Part include a reference to functions under the Utilities Act 2000 which relate to electricity conveyed by distribution systems.

(8) In this Part, unless the context otherwise requires—

“exemption” means an exemption granted under section 5;

“licence” means a licence under section 6 and “licence holder” shall be construed accordingly.]

Section 9

- 1.5 Under section 9 of the Electricity Act, holders of Transmission or Distribution Licences are under a duty to develop and maintain an efficient, co-ordinated and economical system of electricity transmission/distribution and to facilitate competition in the supply and generation of electricity.

Gas Transportation licence

- 1.6 Holders of a Gas Transportation licence are obligated under Standard Condition 9 of their licence to prepare and maintain a document referred to as the Network Code, and rules by which that Network Code can be modified. In order to convey gas on a transporters pipeline system, gas shippers must become a signatory to, and comply with, the relevant Network Code, Industry Codes and agreements.

Electricity Generation Licence

- 1.7 Standard Condition 9 of the Electricity Generation licence requires the licensee to be party to the BSC Framework Agreement and comply with the BSC. Generation licensees are also required to be party to the CUSC Framework Agreement and comply with the CUSC.

Electricity Transmission Licence

- 1.8 Supplementary Standard Condition C7F of the Electricity Transmission licence, of which the National Grid Company (NGC) is the sole possessor in England and Wales, requires the licensee to produce, maintain and comply with a connection and use of system code (CUSC). NGC is also obligated by Supplementary Standard Condition C3 of this licence to have in force a Balancing and Settlement Code.

Electricity Distribution licence

- 1.9 Holders of an Electricity Distribution licence are required by Standard Condition 10 of that licence to be a party to, and comply with, the Balancing and Settlement Code. They also need to sign DUoSAs with suppliers supplying electricity in their distribution services area.

Electricity Supply licence

- 1.10 If the holder of an Electricity Supply licence wishes to supply, or offer to supply, electricity to any premises in England and Wales, under Standard Condition 10, they shall become party to, and comply with, the Balancing and Settlement Code. They also need to sign DUoSAs with the relevant distribution businesses.

The Balancing and Settlement Code (BSC)

- 1.11 The BSC's scope is defined in general terms in the Electricity Transmission, Generation and Supply licences. The BSC is a code that sets out the rules for the Balancing Mechanism and the electricity energy imbalance settlement process.
- 1.12 The BSC sets down the arrangements in respect of:
- making, accepting and settling offers and bids to increase or decrease electricity delivered to, or taken off, the total system (NGC's transmission system and the distribution systems) to assist NGC in balancing the system; and
 - determining and settling imbalances and certain other costs associated with operating and balancing the transmission system.
- 1.13 A BSC Panel has been created and charged with overseeing the management, modification and implementation of the BSC rules, as specified in Section B of the BSC. The Panel has twelve representatives made up from industry members, consumer representatives, independent members and NGC. The Authority appoints the Chairman of the Panel.
- 1.14 The Balancing and Settlement Code Company (ELEXON) supports the BSC Panel. The primary purpose of ELEXON is to provide or procure a range of

operational and administrative services (both directly and through contracts with service providers) and to implement the provisions of the BSC and modifications to it.

- 1.15 The details of the modification procedures are contained in Section F of the BSC. They are designed to ensure that the process is as efficient as possible whilst ensuring that as many parties as possible can propose modifications and have the opportunity to comment on modification proposals.

The Connection and Use of System Code (CUSC)

- 1.16 NGC is required under Supplementary Standard Condition C7F of the Transmission Licence to prepare the CUSC. The CUSC, sets out the principal rights and obligations in relation to connection to and/or use of the Transmission System and relating to the provision of certain balancing services.
- 1.17 A CUSC Panel has been charged with overseeing the CUSC amendment process as specified in Section 8 of the CUSC. The Panel has representatives made up from industry members, consumer representatives, independent members and NGC. The Chairman of the Panel is appointed by NGC and must be a senior employee of NGC. NGC is responsible for implementing or supervising the implementation of Approved Amendments (modifications) as outlined in paragraph 8.2.3.3 of the CUSC.

The Gas Transporters' Network Codes

- 1.18 A Network Code (NC) is a contractual agreement that forms the basis of the arrangements between a Gas Transporter and the shippers whose gas it transports. A transporter's licence requires it to define and operate a mechanism to control changes to its Code; these are called the Code Modification Rules. The rules enable shippers and the transporter to make proposals for changes to the NC, for shippers and others to make representations to the proposed changes and for the transporter to consider those changes before asking the Authority to enact them.
- 1.19 Transco's NC has two ancillary codes that are relevant to this document – the Energy Balancing Credit Rules and the Credit Code Rules.

- 1.20 Whilst Ofgem cannot initiate any modifications, it is required to approve or reject all modifications to the Code, according to defined criteria and its statutory duties. Essentially, the criterion is the better facilitation of the relevant objectives of that Code, as set out in the licence.

The Distribution Use of System Agreement

- 1.21 The Distribution Use of System Agreement (DUoSA) is a bi-lateral contractual agreement between a DNO and an electricity supplier. DUoSAs are based on standard terms and conditions for the provision and use of system services, including credit cover requirements, although clauses and terms of DUoSA's can be modified at the request of either party, subject to a right of appeal to the Authority.

Appendix 2 Standard licence conditions relevant to credit cover and bad debt

- 2.1 This appendix outlines the Standard Licence Conditions and other requirements that are relevant to consideration of the impact of bad debt following a gas or electricity supplier or shipper failure. The conditions are summarised here but full text of each condition can be found on the DTI's website (at <http://www.dti.gov.uk/energy/licences>).

Gas Suppliers Licence

Condition 22A Restriction of Revocation: Securing Continuity of Supply

- 2.2 In preparation for a restriction of revocation of its licence, the gas supplier remains obligated to make arrangements for securing continuity of supply for its customers, in particular by endeavouring to select alternative suppliers who will offer comparable services at lowest cost, and giving its customers reasonable notice of those arrangements.

Condition 29 Supplier of Last Resort

- 2.3 This condition requires gas suppliers, by notice, to supply gas to the customers of another supplier upon revocation of that other suppliers licence (the last resort supply direction).

Condition 32 Duty to Supply Domestic Customers

- 2.4 Gas suppliers that are permitted by their licences to supply domestic customers must, except in certain specified circumstances, following a request from a domestic customer, offer to enter into a domestic supply contract and supply gas when the customers accepts the contract's terms.

Gas Shippers Licence

Condition 3 General Obligations in Respect of Use of Relevant Transporter's Pipeline System

- 2.5 Licensed gas shippers must not knowingly or recklessly pursue any course of conduct which is likely to prejudice the safe and efficient operation of the relevant transporter's pipeline system, the safe, economic and efficient balancing of its system, or the due functioning of the arrangements provided for in its Network Code.

Gas Transporters Licence

Condition 4D Conduct of Transportation Business

- 2.6 The transportation licensee must conduct its business in the manner best calculated to secure that no gas supplier or shipper obtains any unfair commercial advantage.

Condition 4E Requirement to Enter into Transportation Arrangements in Conformity with Network Code

- 2.7 The transportation licensee shall only enter into transportation arrangements which are in conformity with any relevant provisions in the Network Code.

Gas Transporters – other requirements

Gas Act 1986 Section 9(1)(a)

- 2.8 This states that it shall be the duty of a gas transporter as respects each authorised area of his to develop and maintain an efficient and economical pipeline system for the conveyance of gas.

Gas Act 1986 Section 9(1A)

- 2.9 This states that it shall also be the duty of a gas transporter to facilitate competition in the supply of gas.

Electricity Supply Licence

Condition 9 Compliance with CUSC

- 2.10 Licensed electricity suppliers must be a party to the CUSC Framework Agreement and comply with the CUSC.

Condition 10 Balancing and Settlement Code and NETA Implementation

- 2.11 Licensed electricity suppliers must be a party to the BSC Framework Agreement and comply with the BSC.

Condition 20 The Master Registration Agreement

- 2.12 Licensed electricity suppliers must become a party to and comply with the provisions of the Master Registration Agreement.

Condition 22A Restriction of Revocation: Securing Continuity of Supply

- 2.13 In preparation for a restriction of revocation of its licence, the electricity supplier remain obligated to make arrangements for securing continuity of supply for its customers, in particular by endeavouring to select alternative suppliers who will offer comparable services at lowest cost, and giving its customers reasonable notice of those arrangements.

Condition 29 Supplier of Last Resort

- 2.14 This condition requires electricity suppliers, by notice, to supply electricity to the customers of another supplier upon revocation of that other suppliers licence (the last resort supply direction).

Condition 32 Duty to Supply Domestic Customers

- 2.15 Electricity suppliers that are permitted by their licences to supply domestic customers must, except in certain specified circumstances, following a request from a domestic customer, offer to enter into a domestic supply contract and supply electricity when the customers accepts the contract's terms.

Electricity Distribution Licence

Condition 4A Non-Discrimination in the Provision of Use of System and Connection to the System

- 2.16 The distribution licence holder, in carrying out of works for the purpose of connection to its distribution system or in providing for the modification to or retention of an existing connection to its distribution system shall not discriminate between any persons or classes of persons.

Condition 4B Requirement to Offer Terms for Use of System and Connection

- 2.17 Where an application is made by any person for a connection to the licensee's distribution system the licensee shall offer terms for making the connection.

Condition 4C Functions of the Authority

- 2.18 If either party to a Use of System agreement proposes to vary the contractual terms the Authority may, at the request of that party, settle any dispute relating to the variation in such a manner as appears to the Authority to be reasonable.

Condition 9 Distribution Code

- 2.19 The licensee shall, in consultation with authorised electricity operators liable to be materially affected, prepare and at all times have in force and implement and comply with a Distribution Code. The Code is designed to permit the development, maintenance and operation of an efficient, co-ordinated and economical system for the distribution of electricity and to facilitate competition in the generation and supply of electricity.

Condition 10 Balancing and Settlement Code and NETA Implementation

- 2.20 The licensee shall be a party to the BSC Framework Agreement and comply with the BSC.

Condition 14 The Master Registration Agreement

- 2.21 The licensee shall be a party to and comply with the provisions of the Master Registration Agreement

Condition 26 Compliance with CUSC

- 2.22 The licensee shall be a party to the CUSC Framework Agreement and comply with the CUSC

Electricity Transmission Licence

Condition 7 Licensee's Grid Code

- 2.23 The licensee shall, in consultation with authorised electricity operators liable to be materially affected, prepare and at all times have in force and implement and comply with the Grid Code. The Grid Code is designed to permit the development, maintenance and operation of an efficient, co-ordinated and economical system for the transmission of electricity and to facilitate competition in the generation and supply of electricity.

Condition C7C (England and Wales) Non-Discrimination and Condition D8A (Scotland) Non-Discrimination in the Provision of Use of System and Connection to System

- 2.24 The licensee shall not discriminate between any persons or classes of persons in the provision of its use of system or in the carrying out of works for the purpose of connection to its transmission system.

Condition C7D (England and Wales) and D8B(Scotland) Requirement to Offer Terms

- 2.25 On application made by any authorised electricity operator in the case of an application for use of system or any other person in the case of an application for connection the licensee shall offer to enter into the CUSC Framework Agreement (England and Wales)/an agreement for use of system (Scotland).

Condition C7E (England and Wales) and D8C (Scotland) Functions of the Authority

- 2.26 The Authority may settle disputes that arise in a number of areas covered by use of system agreements.

Condition C7F Connection and Use of System Code

- 2.27 The licensee must establish arrangements for connection and use of system which are calculated to facilitate effective competition in the generation and supply of electricity (England and Wales).

Electricity Generation

Condition 9 Balancing and Settlement Code and NETA Implementation

- 2.28 The licensee shall be a party to the BSC Framework Agreement and comply with the BSC.

Condition 19 Compliance with CUSC

- 2.29 The licensee shall be a party to the CUSC Framework Agreement and comply with the CUSC.

Appendix 3 Current credit cover arrangements (excluding energy balancing)

- 3.1 Chapter 3 of the March 2002 consultation document outlined the current credit cover arrangements for gas transportation and electricity transmission and distribution charges in England and Wales. It set out the types of credit cover that are acceptable, how a company's credit limit is determined and what debt recovery/escalation processes exist. It also noted that the arrangements in Scotland are based on bi-lateral agreements with the Network Operators. This appendix provides a summary of those points, as relevant to discussion in this paper.

Gas transportation (Transco) –current range of credit cover options

- 3.2 A shipper may select the basis upon which it provides the required credit from the following options:-
- an unsecured credit limit based on the shipper's credit rating. Transco will only allow this option for shippers that have an investment grade rating from an approved rating agency;
 - a secured credit limit. This is usually a guarantee from the shipper's parent company (providing the guarantor has an investment grade rating) or a guarantee issued by an acceptable financial institution or a Letter of Credit; and
 - prepayment in advance of one calendar month's estimated charges.

Gas transportation (Transco) – current escalation arrangements

- 3.3 Transco monitors a shipper's transportation indebtedness against its Code Credit Limit. Formal notification is sent to the shipper when its indebtedness reaches 70 per cent of its Code Credit Limit. This is designed to act as warning that its indebtedness may rise to its credit limit. A further formal notification is sent to the shipper when it reaches 85 per cent of the Code Credit Limit. Transco may ask for payment on account (usually within two business days) to ensure that

indebtedness remains within the agreed limit. Alternatively Transco may review the shipper's Code Credit Limit.

- 3.4 If a shipper's indebtedness remains above 85 per cent of its Code Credit Limit Transco may apply sanctions to the shipper. If this happens the shipper cannot take on any new supply points or book entry capacity. These sanctions remain in place until the shipper's indebtedness is reduced to less than 85 per cent of its Code Credit Limit.
- 3.5 Transco's ultimate sanction for insufficient credit cover is to issue a termination notice. The notice specifies a date from which the shipper will no longer be a party to Transco's NC (although the shipper will remain liable for any debts that were accrued before termination). This also has implications for energy balancing since, from the effective date of termination, the shipper can no longer input gas into the system. Consumers will continue to use gas and Transco remains under an obligation to balance the entire system. Transco will therefore have to buy gas in order to do this (since the shipper cannot do so). As Transco remains financially neutral for energy balancing purposes the cost of this gas has to be paid by other shippers (a process known as "smearing").
- 3.6 If a shipper does not pay the net invoice amount in full on the due date, Transco notifies the shipper that it may issue a termination notice if the outstanding amount is not paid in full within five business days. Transco notifies Ofgem if a transportation invoice has not been paid. Transco can call upon any guarantee or realise and apply any security for an unpaid invoice.

Gas transmission (Transco) – current capacity arrangements

- 3.7 Transco has offered firm monthly system entry capacity rights to its National Transmission System (NTS) for sale via six monthly auctions since September 1999. Transco also releases firm and interruptible capacity on a daily basis. In January 2003, following Ofgem's acceptance of network code modification proposal 500, 'Long term capacity allocation', Transco released quarterly system entry capacity rights via long-term entry capacity allocations up to 15 years in advance of the time of use.

- 3.8 Transco's credit arrangements for the entry capacity regime provide that it will include within a shipper's calculated indebtedness the liabilities associated with the following 12 months of entry capacity holdings. Under the arrangements, Transco would be able to reject bids for capacity rights where a shipper's credit exposure was in excess of 85 per cent of their credit limits.
- 3.9 Under the provisions of its Gas Transporters licence, Transco is provided funding for the period April 2002 to 2007 to cover the efficient level of operating and capital expenditure required to provided agreed baseline levels of NTS entry capacity known as the Transmission Asset Owner (TO) output measures. Under its System Operator (SO) incentives Transco is obligated to offer for sale 90 per cent of the TO output measures through a series of long and shorter term allocations.
- 3.10 Transco's licence provides that following the termination of a shipper, Transco would be required to re-offer for sale any entry capacity that it previously had an obligation under its licence to make available. Should Transco fail to recover the full amount owed by the shipper, it would be able to apply to Ofgem for an Income Adjusting Event (IAE). If Ofgem accepted such an application, Transco could be permitted to increase transportation charges to recover the shortfall. However, in the absence of approval, Transco would be exposed to the full value of any such cost or expense.
- 3.11 In modifying Transco's licence, Ofgem has made clear its view that it does not believe that it would be appropriate to allow monopolies, such as Transco, to automatically recover any bad debts through raising transportation charges. In this respect, in determining any application for an IAE, Ofgem will have regard to the credit arrangements put in place by Transco and the extent to which these have been effectively managed. In particular, Ofgem has made clear that it would need to consider whether the credit arrangements were reasonable and commercial in nature having regard to other credit arrangements adopted within the gas and electricity sectors. Until this was demonstrated, it would therefore be Transco, and not its customers, that carries the risk of shipper default with respect to entry capacity.

Gas transportation connections

- 3.12 Gas transportation connections are subject to bi-lateral agreements and are generally financed by the users at the time of build. As a result, there are at present no credit issues associated with gas transportation connections.

Electricity Transmission and connection charges (NGC) – current range of credit cover options

Connection charges

- 3.13 Users of the transmission system are subject to bi-lateral connection agreements and under these are liable to pay the transmission company for the connection assets or connection charges. For NGC, where the user has not purchased the connection asset outright, the user provides security cover equating to a sum called the Termination Amount that reflects a declining connection asset value over its lifetime. NGC undertakes to use reasonable endeavours to re-use assets relinquished by the user, and adjust the Termination Amount accordingly.
- 3.14 For NGC, credit cover must be provided for the Termination Amount and this would need to comply with the Connection and Use of System Code (CUSC), currently requiring an ACR of A- (S&P) or better, or Cash or LoCs.

Transmission charges

- 3.15 Electricity transmission charges reflect the cost of installing, operating and maintaining the transmission system. These charges are known as Transmission Network Use of System (TNUoS) charges. NGC requires security cover for TNUoS charges. The credit terms are set out in CUSC and are subject to a formal amendment process. NGC recovers the cost of balancing its system through the Balancing Services Use of System (BSUoS) charges based on users' energy taken from or supplied to the NGC system in each half-hour settlement period. NGC currently accepts the following:

Short term debt rating

- An Approved Credit Rating of not less than A1 by Standard and Poor's or a rating not less than P1 by Moody's Investor Services.

Long term debt rating

- An Approved Credit Rating of not less than BBB- (Standard & Poor's) or not less than Baa3 (Moody's Investor Services) or an equivalent rating from these or other reputable agencies approved by NGC.

3.16 If the user does not have an approved credit rating alternative security cover is required. This can be:-

- a qualifying guarantee in favour of NGC that is provided by an entity that holds an Approved Credit Rating;
- a letter of credit, or;
- cash in an escrow account.

Electricity Distribution Companies

3.17 The credit cover provisions are set out in Schedule 1 of the DUoSA. Suppliers must hold an approved credit rating¹⁸. If a supplier does not hold, or ceases to hold, an approved credit rating it can provide alternative forms of cover:

- a Qualifying Guarantee in a form agreed between the parties;
- a Letter of Credit from an institution that holds an Approved Credit Rating;
or
- cash in an escrow account.

3.18 In general the level of credit cover should be sufficient to meet the greater of the aggregate amount reasonably anticipated for 60 days' DUoS charges and £1,000. The amount of credit cover is reviewed every six months although there are provisions for amending credit cover levels in the interim. Either party to a DUoSA can refer disputes to Ofgem for determination.

¹⁸ BBB- using Standard & Poor's or Duff & Phelps rating services, or Baa3 using Moody's Investor Services

Appendix 4 Current energy balancing credit cover arrangements

- 4.1 Chapter 4 of the consultation document outlined the current credit cover arrangements for gas and electricity balancing, noting that electricity balancing arrangements in Scotland are subject to bi-lateral agreements. This appendix provides a summary of those points, as relevant to discussion in this paper.

Gas energy balancing (Transco/EBCC) – current range of credit cover options

- 4.2 Under the Energy Balancing Credit Rules the following types of credit cover are acceptable:
- an investment grade Approved Credit Rating from a reputable agency;
 - Security by Eligible Guarantor
 - Shippers are able to provide a guarantee from an eligible guarantor with a credit rating of investment grade or above from a reputable agency;
 - Other Security
 - Other security can be in the form of:
 - an escrow or other appropriate deposit for an amount that is either part or all of the Secured Credit Limit;
 - a guarantee or irrevocable standby letter of credit, issued by a UK branch of a financial institution with a long term credit rating of not less than Aa3 (Moody's Investor Services);
 - bonds (with a maximum remaining term of 12 months) issued by a UK financial institution with a long term credit of A or above or acceptable Treasury bills with a maximum remaining term of 12 months; or
 - other security which both Transco and the Energy Balancing Credit Committee deem to be acceptable.

- 4.3 Transco may, under certain circumstances, revise a shipper's Secured Credit Limit (for measuring energy balancing debt) or a shipper's Code Credit Limit (for measuring transportation debt) by giving not less than 30 days notice (or less if agreed by the shipper) except where the downgrade is to a speculative grade where the revision can be immediate.

Electricity energy balancing (BSCCo) – current range of credit cover options

- 4.4 A BSC Trading Party can provide either:

- a Letter of Credit; and/or
- cash (which is credited to a reserve account).
- ACRs and PCGs are not accepted.

A trading party may alter the amounts provided as credit cover between different letters of credit and/or by way of the letter of credit and cash, provided that the amount of credit cover is not thereby reduced. A Trading Party may reduce the amount of its credit cover. To do so the Trading Party must first notify the Energy Contract Volume Aggregation Agent (ECVAA) that it wants to do so. After a ten-day waiting period the ECVAA will determine a "minimum eligible amount" and notify the Trading Party of this amount. The Trading Party may then reduce the aggregate amounts of letters of credit and cash provided for credit cover to not less than the minimum eligible amount.

Appendix 5 Credit Ratings

- 5.1 Specialist credit rating agencies assign rating grades to organisations by assessing the degree of credit risk. These credit ratings are regularly reviewed and amended if necessary. The credit rating categories that represent the lowest risk are classified as 'investment grade' credit ratings. This indicates suitability for a wide range of investors. Ratings that represent higher risk are classified as 'speculative', indicating suitability only for limited types of investor.
- 5.2 A credit rating is a credit rating agency's opinion of the creditworthiness of an organisation. It is an opinion of the organisation's ability and willingness to meet its financial obligations and is based on relevant risk factors. Credit ratings can be applied to an organisation's general creditworthiness or to specific financial obligations (for example company bonds).
- 5.3 Credit ratings are generally based on a number of factors, including information provided by the organisation being rated and information from other sources that the rating agency considers reliable. Credit ratings are generally only given when there is adequate information available to form a credible opinion, and only after relevant quantitative, qualitative and legal analyses are carried out.

Rating Surveillance and Review

- 5.4 Credit ratings are monitored by rating agencies as an ongoing exercise. Sometimes it may be necessary for the rating agency to change a credit rating. This may have an adverse effect on the organisation if it is subject to a downgrade. The problems for the organisation may be greater where the credit rating falls below 'investment grade' into the 'speculative' category.

Credit Rating Definitions

The table below gives the 'Long-term Credit Ratings' provided by the agency Standard and Poor's¹:

CREDIT RATING	CATEGORY DEFINITION
AAA	The highest rating assigned by Standard and Poor's. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.
AA	An obligation rated 'AA' differs from the highest rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.
A	An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.
BBB	An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment to the obligation.
BB	An obligation rated 'BB' is less vulnerable to non-payment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions that could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.
B	An obligation rated 'B' is more vulnerable to non-payment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.
CCC	An obligation rated 'CCC' is currently vulnerable to non-payment, and is dependent upon favourable business, financial and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.
CC	An obligation rated 'CC' is currently highly vulnerable to non-payment.
C	The 'C' rating may be used to cover a situation where a bankruptcy petition has been filed or similar action has been taken but payments on this obligation are being continued.
D	The 'D' rating, unlike other ratings, is not prospective; rather, it is used only where a default has actually occurred – not where a default is only expected.
Plus (+) or minus (-):	The ratings from 'AA' to 'CCC' may be modified by the addition of a plus or minus sign to show relative standing within the major categories.

¹ Standard and Poor's Corporate Ratings Criteria, Internet version
www.standardpoor.com/ResourceCenter/RatingsCriteria/CorporateFinance/2001CorporateRatingsCriteria.html
 Used with permission from sandp.com, a web site Standard and Poor's

- 5.5 Obligations rated 'BB', 'B', 'CCC', 'CC', and 'C' are regarded as having significant speculative characteristics. 'BB' indicates the least degree of speculation and 'C' the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.
- 5.6 It is possible to correlate historic incidence of default with the rating grades held by the defaulting issuers at various times before the default occurred. As the rating agencies aim to maintain consistency in their ratings over time, such correlation may be used to predict the probability of default in any given time-frame associated with each rating grade. Both Standard & Poor's and Moody's publish historical data series showing cumulative default rates over time for the universe of issuers rated by them. In general, the implicit probabilities of default for each grade of their respective rating scales are broadly similar.

Credit ratings – probability of default

Credit Rating	Average Cumulative Five-Year Probability Of Default (%)
AAA	0.12
AA	0.29
A	0.57
BBB	2.23
BB+	7.1
BB	10.0
BB -	17.7
B+	21.5
B	30.8
B -	38.3
CCC	54.65

Source: Standard & Poor's Ratings Performance 2000

Comparison of Standard & Poor's and Moody's Credit Ratings

The following table broadly compares the long-term credit ratings of two of the main credit rating agencies.

Moody's	Standard & Poor's
Aaa	AAA
Aa	AA
A	A
Baa	BBB
Ba	BB
B	B
Caa	CCC
Ca	CC
C	C

Appendix 6 List of Respondents

BG Group

Bizz Energy

BP Gas Marketing

British Energy

British Gas (Centrica)

Chevron Texaco

Cinergy

Corus Group

Deeside Power Development Company

Department of Trade and Industry

Dynergy

East Midlands Electricity

Electricity Association (Distribution Commercial Group)

Electricity Direct

Elexon

Energy Balancing Credit Committee

Energywatch

EnMO

Exxon Mobil

Goldman Sachs

GPU Power Networks

Green Energy (UK)

Innogy

Logica EPFAL

London Electricity

Maverick Energy

NGC

Norsk Hydro

Powergen

Scottish Power

Scottish & Southern Energy

Seaboard

Shell Gas Direct

Total Fina Elf

Transco

TXU Europe

United Utilities

Utility Link

V-is-on Gas

West Power Distribution

YEDL/NEDL