Arrangements for gas and electricity supply and gas shipping credit cover

Consultation Document

Executive summary

This document opens a consultation process about the costs to which parties in the gas and electricity markets are exposed when a gas or electricity supplier or a gas shipper fails. It considers whether the current arrangements are an appropriate way to manage the risk of failure and minimise the overall cost of potential and actual failure. The document identifies those areas that Ofgem understands are of particular concern to the industry and outlines the issues that should be addressed as part of any proposed solution.

Ofgem's aim in the context of the failure of a gas or electricity supplier or a gas shipper is to protect customers from:

- actual or threatened disconnection that industry codes and agreements permit when a supplier or shipper does not maintain adequate levels of credit cover or pay invoices on time; and
- higher than necessary costs resulting from inefficient arrangements for minimising the cost of potential or actual failure.

Following the failure of Independent Energy in September 2000 Innogy bought the business from the receiver and agreed to pay all post-receivership debts. However, debts incurred before receivership were in many cases not fully recovered. The failure of Enron in November 2001 again 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, making consultation on the issue a priority.

This document explains the current arrangements for credit cover in gas transportation, electricity transmission and electricity distribution and in gas and electricity energy balancing. It goes on to discuss the areas where Ofgem believes that regulatory intervention is appropriate by considering, amongst other things, where parties have obligations under licence conditions or industry codes.

The document then discusses the advantages and disadvantages of different approaches to providing credit cover by considering issues such as whether Letters of Credit or cash might provide better protection for customers than Approved Credit Ratings. It also considers whether it might be appropriate to use price controls to deal with some or all

of the bad debt arising from a supplier or shipper failure. The document emphasises that whatever arrangements are put in place, customers ultimately pay the cost of providing credit cover.

This document invites comments on:

- Ofgem's view that the arrangements for credit cover in gas balancing should be more closely aligned with those in the electricity Balancing and Settlement Code, including limiting the types of credit cover to Letters of Credit from approved banks or cash;

- Ofgem's view that the current arrangements for providing credit cover as protection from bad debt for gas transportation, electricity transmission and electricity distribution are no longer appropriate and that possible alternatives are:

  - only Letters of Credit or cash should be accepted as credit cover for gas transportation, electricity transmission and electricity distribution;

  - 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 (Transco, the National Grid Company (NGC) and Distribution Companies). This change would be accompanied by incentives on Network Operators 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 Letters of Credit or cash with the ability, in certain defined circumstances and subject to appropriate incentives, to deal with any remaining bad debt as part of Network Operators' price controls.

- Ofgem's view that 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;

- Ofgem's view that Transco's Code Credit Rules for gas transportation should be brought within its Network Code (NWC) Modification Procedure; and

- Ofgem's 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.

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1. Introduction

Purpose of this document

1.1 This document opens a consultation process about the costs to which parties in the gas and electricity markets are exposed when a gas or electricity supplier or a gas shipper fails. It considers whether the current arrangements are an appropriate way to manage the risk of failure and minimise the overall cost of potential and actual failure. Details of the various licensed activities and relevant industry processes are described in Appendix 1.

1.2 At the moment industry codes, contracts and agreements permit a variety of different ways to protect parties from the risk of bad debt in the event that a supplier or shipper fails. These include:

- an Approved Credit Rating (ACR) from a recognised credit rating agency;
- a Parent Company Guarantee (PCG) or other guarantee from a company that has an ACR;
- a Letter of Credit (LoC) from a bank with a specified minimum ACR;
- cash deposited in an escrow account;
- bonds; and
- advance payment.

1.3 This document examines these arrangements and discusses their effectiveness. It identifies those areas that Ofgem understands are of particular concern to the industry and outlines the issues that should be addressed as part of any proposed solution.

Context

1.4 On 8 September 2000 Independent Energy (a gas and electricity supplier) went into receivership following severe problems registering and billing its customers. At the time of its receivership Independent Energy had approximately 240,000 electricity customers and 80,000 gas customers. Ofgem's priority during

Independent Energy's failure was to ensure that all customers continued to be supplied with gas and electricity. Further details about the Independent Energy failure are set out in Appendix 2.

1.5 Innogy bought Independent Energy's business from the receiver and agreed to pay all post-receivership debts. However, debts incurred before receivership were in many cases not fully recovered. The failure therefore raised the issue of the adequacy of the mechanisms for managing the financial risk resulting from supplier or shipper failure.

1.6 As a result of Independent Energy's failure Ofgem established a Supplier/Shipper Failure Project. The aim of the project is to examine a number of issues concerning the failure of a gas or electricity supplier or a gas shipper. Further details of the project can be found on Ofgem's website[1].

1.7 In March 2001 Ofgem published a Guidance Document on the arrangements for dealing with a supplier or shipper failure[2]. This was followed in June 2001 by a consultation about the future of the bond and levy arrangements in both electricity and gas[3].

1.8 On 4 December 2001 Enron Direct Limited (a gas and electricity supplier with approximately 12,000 gas sites and 183,000 electricity sites) went into administration following problems with its parent company in the USA. Further details about the Enron failure are set out in Appendix 2.

Rationale

1.9 The failures of Independent Energy and Enron have shown that industry parties may default on:

- bi-lateral contracts with other parties; and
- payments due under various industry codes and agreements.

1.10 When this happens, counter-parties may be exposed to bad debt. In some instances, customers may be threatened with disconnection. Ofgem considers

[1] At www.ofgem.gov.uk/projects/supplierfail_index.htm
[2] "Supplier of Last Resort – Guidance on current arrangements" Ofgem 27/01
[3] " Supplier of Last Resort – Security cover and levies. A consultation document" Ofgem 40/01

that this threat is undesirable. The cost of failure is eventually borne by some or all customers. In some cases industry codes allow bad debt to be spread across all customers. In other cases, Ofgem has had a role in deciding how the debt should be dealt with (see Appendix 2 for further details). In addition, customers also pay towards the cost of credit cover that has been provided by their own supplier.

1.11 Ofgem also has a role in considering changes to most industry codes and agreements. In the light of events with Independent Energy and Enron it is therefore appropriate for us to consider whether the current arrangements provide adequate protection, at an appropriate cost, for customers and industry participants.

1.12 Ofgem considers that it is appropriate to consult on whether there may be more effective ways to deal with the bad debt that arises when a supplier or shipper fails.

Structure of this document

1.13 Chapter 2 explains the regulatory and legal framework relevant to the consideration of credit cover issues. It also explains the current governance arrangements for industry codes and agreements.

Chapter 3 describes the current arrangements for providing credit cover for gas transportation, electricity transmission and electricity distribution charges.

Chapter 4 describes the current arrangements for providing credit cover for gas and electricity system balancing charges.

Chapter 5 describes the framework within which Ofgem has considered the issues raised by the current credit cover arrangements.

Chapter 6 discusses the advantages and disadvantages of different types of credit cover and possible alternatives to the arrangements currently in force. It also compares the enforcement mechanisms available to electricity Distribution Companies with those in other parts of the industry. The Chapter highlights those areas that will require further debate once a new framework for credit cover has been agreed.

Chapter 7 discusses whether Transco's Code Credit Rules for gas transportation should be subject to a formal modification procedure.

Chapter 8 invites views on the issues discussed.

Appendix 1 describes the various licensed activities and industry processes that are relevant to the consideration of the effect of a supplier or shipper failure.

Appendix 2 explains the background to and the impact of the failures of Independent Energy and Enron.

Appendix 3 outlines the Standard Licence Conditions and other requirements that are relevant to consideration of the impact of bad debt following a supplier or shipper failure.

Appendix 4 explains the different types of credit cover that are accepted by industry parties. It also provides an outline of the procedure involved in obtaining a credit rating.

1.14 There are a number of other issues that have an impact on the allocation of credit risk and measures to manage it. These include:

- the impact of invoicing cycles on the amount of credit cover required. Chapters 3 and 4 describe the different invoicing cycles used by industry parties at the moment. These typically issue invoices in arrears and allow a certain length of time for payment and chasing overdue amounts. Credit cover is provided for much of this time, taking account of the fact that customers are using gas and electricity for which they may not yet have paid. Reduction of the time between customers using supply and suppliers being billed could reduce the credit cover required, although revising billing systems would cost money;

- the escalation procedures that can be used to enforce credit cover requirements. Chapters 3 and 4 briefly describe the processes by which credit cover is enforced. While some requirements are strictly enforced (such as those in the BSC), others are not. This may lead to distortions in

behaviour by suppliers or shippers since they may have incentives to pay some bills before others;

- mis-matches throughout the industry caused by different timings of payment terms. The mis-match can affect the working capital needs (and therefore the cost) of suppliers. Convergence of terms would make operating more predictable for them;

- credit cover for indebtedness that arises around the time that a supplier or shipper goes into receivership or administration or equivalent. Although Ofgem has the power to appoint a Supplier of Last Resort to take over responsibility for supplying the failed supplier's customers, there may be a delay in the appointment where there is little or no advance warning of failure. In addition, administration or receivership may be delayed until a buyer has been found for a failing company during which time debts may not be paid and credit cover is therefore rapidly used up;

- whether there are more appropriate ways to calculate the level of credit cover required. For instance if minimum credit levels are proposed for indebtedness there may also be a need to pursue more accurate ways of calculating the actual level of indebtedness; and

- removing completely the ability of Network Operators to de-energise customers as a way of enforcing credit cover or invoicing requirements.

1.15 These issues are not considered in detail in this document. Ofgem proposes that they should be examined in more detail when the future framework for managing bad debt is established. Nevertheless it would be helpful to receive initial views on these subjects and others that may be relevant.

1.16 Other issues not covered in this document are:

- bad debt in the wholesale market arising from the failure of an electricity supplier in Scotland. Ofgem has recently consulted[4] on proposals for a

[4] "The Development of British Electricity Trading and Transmission Arrangements (BETTA) A consultation paper" Ofgem 74/01

GB-wide electricity market, based on the New Electricity Trading Arrangements (NETA) which were successfully introduced last year for England and Wales. We anticipate that the final arrangements for credit cover within such a market will be similar to those in England and Wales at the time any changes are introduced (currently expected to be in April 2004);

- gas transporters other than Transco; and
- credit requirements in the Power Exchanges. These are regulated by the Financial Services Authority.

1.17 Responses should be sent by Tuesday 7 May 2002 to:

Fran Gillon
Head of Supplier Failure and Licensing
Ofgem
9 Millbank
London
SW1P 3GE

or by e-mail to Fran.gillon@Ofgem.gov.uk

1.18 Where paper copies of a response are sent, it would be helpful if responses could also be sent electronically. It is open to respondents to mark all or part of their responses as confidential. However, we would prefer it if, as far as possible, responses were provided in a form that can be placed in the Ofgem library and on our website.

1.19 Ofgem proposes to hold an industry workshop on 12 April 2002 to discuss the issues raised in this document. Further details will be announced as soon as possible.

1.20 If you have any queries about this consultation then Fran Gillon (tel: 020 7901 7283) or James Richardson (Tel: 020 7901 7027) will be pleased to help.

2. Regulatory and legal framework

2.1 This section explains the regulatory and legal framework relevant to the consideration of credit issues in the gas and electricity sectors. It also explains the governance arrangements for the relevant industry codes and agreements.

Regulatory framework

The Gas and Electricity Markets Authority

2.2 The principal objective of the Gas and Electricity Markets Authority ("the Authority") in carrying out its functions is to protect the interests of consumers, wherever appropriate by promoting effective competition[5]. The Authority must carry out its functions in the manner it considers is best calculated to further that principal objective having regard to, amongst other things:

- the need to secure that, so far as it is economical to meet them, demands for gas and electricity are met;
- the need to secure that licensees can finance their activities which are the subject of obligations under the Utilities Act or, as the case may be, the Gas Act 1986 or the Electricity Act 1989[6];
- the interests of particular customer groups such as the disabled or chronically sick; and
- the promotion of efficiency and economy by licensees.

Legal framework

2.3 On 1 October 2001 new standard licence conditions were introduced for all gas and electricity licensees. The conditions that are particularly relevant to this consultation are explained in Appendix 3.

[5] Gas Act 1986 s4 and Electricity Act 1989 s3 (as amended by the Utilities Act 2000)
[6] However Ofgem does not consider that any check it could perform on a potential licensee at the time its application is being considered will provide continuing comfort about its financial viability once the licensee commences operations.

Governance arrangements

Industry codes and agreements

2.4 A number of industry codes and agreements require signatories to provide credit cover. These include:

- Transco's Code Credit Rules for gas transportation;
- the Connection Use of System Code (CUSC) between the NGC and users of its transmission system;
- Distribution Companies' Use of System Agreements (DUoSA);
- gas energy balancing rules (part of Transco's Network Code (NWC)); and
- electricity energy balancing rules (part of the Balancing and Settlement Code (BSC)).

Chapter 3 explains in more detail the credit cover requirements for gas transportation, electricity transmission and electricity distribution. Chapter 4 explains in more detail the credit cover requirements for gas and electricity balancing.

Modification processes

Industry codes

2.5 Each code has its own modification rules or amendment procedures. These set out the process by which changes to the code can be made. Although there are differences between the processes the following basic principles apply to all of them:

- the codes represent 'living' documents that can be changed to accommodate market developments and improvements in operational procedures;
- the codes should operate in line with key objectives concerning the efficient discharge of a licensee's duties; and

- a modification proposal can only be made by signatories to the particular code. For the BSC and CUSC this role has been expanded to include customers, represented by energywatch.

2.6 Modification Panels have been established under Transco's NWC, the BSC and CUSC. The relevant Panels meet every month to decide what process each modification should follow. Each Panel may decide to send the proposal to a workgroup of industry members to develop and discuss it in more detail or it may be sent directly to the industry for consultation. The BSC modification process includes requirements to produce specific pieces of work including definition and assessment reports.

2.7 After consultation a final report is sent to Ofgem for it to decide whether the modification proposal should be implemented. Ofgem's decision is based on whether the proposed modification will 'better facilitate' the licensee's relevant or applicable objectives.

2.8 Transco's transportation Code Credit Rules are contained in an ancillary document outside the NWC[7]. As such Transco may make amendments without consultation with affected parties. There is no right of appeal to Ofgem if a shipper does not agree with the proposed change.

Electricity Distribution Use of System Agreement

2.9 The contractual framework that governs the relationship between electricity distribution and supply businesses for use of the network is the DUoSA. This incorporates the requirements to provide security cover[8] in a recognised form. Clauses and terms of DUoSAs can be modified at the request of either party, subject to a right of appeal to the Authority. In general it is desirable to adopt consistent terms across the industry and, where appropriate, Distribution Companies discuss collective modifications within the framework of the Electricity Association.

[7] NWC Section V paragraph 3.1.3
[8] The relevent section of the DUoSA is Schedule 1

3. Current arrangements for transportation, transmission and distribution credit cover

3.1 This chapter explains the current credit cover arrangements for gas transportation, electricity transmission and electricity distribution charges in terms of the types of credit cover that are acceptable, how a company's credit limit is determined and what debt recovery/escalation processes exist.

Gas transportation

3.2 Gas shippers must pay Transco for transportation charges. The rules governing credit cover are in Transco's Code Credit Rules.

Acceptable types of credit cover

3.3 Shippers must provide credit cover in the form of:

- an unsecured credit limit (if they or their parent company have an ACR);
- a secured credit limit; or
- prepayment of charges.

These are described in more detail in Appendix 4**.**

Credit Limit

3.4 Transco gives a shipper a Code Credit Limit before it starts trading. The Code Credit Limit is the maximum amount of indebtedness that Transco will extend to a shipper for its transportation charges during its invoicing cycle. The Code Credit Limit is set at 85 per cent of a shipper's peak trading requirement (or estimated peak indebtedness).

Invoicing cycle

3.5 Transco issues transportation invoices on a monthly basis and provides up to 63 days' credit to shippers.

Debt recovery/escalation process

3.6 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.

3.7 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.

3.8 Transco's ultimate sanction is to issue a termination notice. The notice specifies a date from which the shipper will no longer be a party to Transco's NWC (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. Customers 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").

3.9 Similar escalation procedures exist following non-payment of a transportation invoice. 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.

Electricity transmission charges

3.10 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.

Acceptable types of credit cover

3.11 NGC requires each user to hold an ACR or to provide an approved alternative. These requirements are explained in more detail in Appendix 4.

Credit Limit

3.12 Transmission system users have to provide credit cover sufficient to meet 10 per cent of their total forecast TNUoS demand charge. This is required for the duration of the period between initial and final reconciliation.

3.13 Throughout the year a supplier pays NGC monthly demand charges. These charges are based on a supplier's forecast of its total demand (for both half-hourly and non half-hourly metered demand) during the Triad[9] for each demand zone. Suppliers submit their Triad demand forecasts in the November before the financial year to which they relate. Suppliers can vary their Triad demand forecasts (and hence vary their monthly demand charges) on a quarterly basis during the course of the year.

Invoicing cycle

3.14 Reconciliation between the amounts paid based on forecasting with the actual metered amounts takes place after the settlement data is received. NGC produces either a credit note (if the user has overpaid) or an invoice (if the user has underpaid). The invoice has to be paid within 30 days.

[9] The Triad are the three settlement periods of highest transmission system demand, namely the half hour settlement period of System Peak Demand and the two half hour settlements periods of next highest demand, which are separated from the System Peak Demand and from each other by at least 10 clear days, between November and February inclusive.

Debt recovery/escalation process

3.15 NGC keeps each user's security cover under review and notifies it if the security cover is more or less than the amount required. NGC has a debt recovery procedure in place that is initiated if a user fails to pay an invoice. Late payment of invoices can result in additional interest charges being levied. In addition, non-payment of any invoices is a breach of the terms of CUSC and could result in disconnection of customers.

Electricity distribution charges

3.16 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).

3.17 The MRA does not permit a supplier to receive any services for a metering point unless a DUoSA is "in full force and effect"[10]. However if a supplier does not have such an agreement the MRA deems that its terms and conditions exist[11] from the time a Distribution Company starts to provide services to the supplier.

Acceptable types of credit cover

3.18 The DUoSA states that suppliers must hold and maintain an ACR or an alternative form of credit cover. These are explained in more detail in Appendix 4.

Credit Limit

3.19 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. Disputes can be referred to Ofgem for determination.

[10] MRA V7.1 paragraph 2.3.1
[11] MRA V7.1 paragraph 2.4

The invoicing cycle

3.20 Distribution Companies issue invoices monthly in arrears. Payment is due within 21 days.

Debt recovery/escalation process

3.21 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. If any amount due or owing is unpaid after seven working days following receipt of the notice the Distribution Company may take steps to de-energise the supplier's customers[12].

[12] The procedure for de-energisation is set out in clause 10 of the DUoSA.

4. Current arrangements for energy balancing credit cover

4.1 This chapter explains the current credit cover arrangements in the gas and electricity industries for energy balancing. Further details about system balancing are in Appendix 1.

Gas energy balancing

4.2 Transco's Energy Balancing Credit Rules (part of its NWC) set out the form and level of credit cover to be provided by shippers.

4.3 Shippers have appointed Transco to implement and manage third party credit risk on their behalf although Transco is financially neutral to energy balancing activity.

4.4 When a shipper signs Transco's NWC it becomes responsible for the financial implications of balancing its daily gas flows into and out of Transco's network. This responsibility includes the assumption of a share of the credit risk associated with other shippers' energy balancing activity because unpaid charges are apportioned ("smeared") between all shippers. All shippers may therefore face the costs associated with Transco buying and selling gas to maintain residual system balance.

4.5 The Energy Balancing Credit Committee (EBCC) represents shippers' interests and advises Transco on gas balancing credit issues, including whether to terminate a shipper from the NWC.

Acceptable types of credit cover

4.6 Credit cover can be provided in the form of:

- an investment grade credit rating;
- a guarantee from a company with an investment grade credit rating, often represented by a PCG; or
- security provided by the shipper (for example a LoC).

Details about the acceptable types of credit cover can be found in Appendix 4.

Credit Limit

4.7 All shippers are required to provide security to support their energy balancing activity, with the exception of those shippers who have an investment grade credit rating and those with an expected level of energy balancing indebtedness below £50,000.

Invoicing cycle

4.8 Transco issues energy balancing invoices on a monthly basis. The invoicing cycle operates in a similar way to transportation invoicing but allows up to 74 days' credit.

Debt recovery/escalation process

4.9 If a shipper's energy balancing debt rises above its secured credit limit, Transco will begin cash call procedures to reduce the shipper's indebtedness.

Cash Call Procedures

4.10 If the shipper's outstanding debt is greater than 85 per cent of its secured credit limit Transco will issue a Cash Call Notice. If the shipper does not pay or appeal the amount of the Cash Call Notice within one working day, Transco will issue a Failure to Pay Cash Call Notice. Ofgem is notified when this happens. The shipper must pay this Notice within a further three working days otherwise Transco may issue a termination notice (following direction from the EBCC).

4.11 When a Failure to Pay Cash Call Notice has been issued Transco will not pay, and can withhold payment for, any energy balancing invoices for the shipper.

Energy balancing invoice

4.12 Similar escalation procedures exist following non-payment of an energy balancing invoice. If a shipper does not pay the net invoice amount in full on the due date, Transco may issue a notice requiring payment within five business days. Transco notifies Ofgem if an energy balancing invoice has not been paid. If full payment is not received by close of business five business days later, Transco may issue a notice of termination (after reference to the EBCC).

4.13 Although Transco cannot call upon any guarantee or realise and apply any security following a Failure to Pay Cash Call Notice, it may do so for an overdue energy balancing invoice.

Termination from Network Code

4.14 A termination notice specifies a date from which the shipper will no longer be a party to Transco's NWC (although the shipper will remain liable for any debts that were accrued before termination). This means that from the effective date of termination the shipper can no longer input gas into the system. However customers will continue to use gas and Transco remains under an obligation to balance the entire system. It 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 would have to be smeared across the remaining shipping community.

Electricity energy balancing

Balancing and Settlement Code (BSC)

4.15 The electricity balancing mechanism has been designed to allow NGC to match system-wide imbalances between electricity generation and consumption and adjust local and bulk power flows to ensure the security of the transmission network. In the BSC energy balancing credit cover is used to provide cover for liabilities between the actual and contractual positions of Trading Parties.

Acceptable types of credit cover

4.16 BSC Trading Parties must provide either:

- a LoC; and/or
- cash (which is credited to a reserve account).

ACRs and PCGs are not accepted as appropriate forms of credit cover. Further details are in Appendix 4.

Credit Limit

4.17 The BSC does not require Parties to provide any given level of credit cover but monitors a Party's indebtedness against the level of cover it has provided. An estimation procedure is used to calculate potential indebtedness for each Trading Party. Each half -hour calculation is summed to obtain a 29 day credit period value of indebtedness. This 29 day period reflects the timescales between a particular settlement day and the payment day on which funds transfer takes place.

4.18 A Trading Party's credit cover at any time is the sum of the maximum undrawn amount of any LoC plus any cash in the reserve account, less the sum of any amounts that have become due for repayment.

The invoicing cycle

4.19 Energy balancing invoices are issued daily and credit cover is required to cover imbalance charges over a 29 day period. All Trading Parties are required to provide credit cover against their potential liabilities for the whole 29 day settlement process. The expectation is that by the end of this period all funds will be cleared.

4.20 Although the requirement for credit cover is 29 days, there are provisions for an additional six day period to allow parties to resolve matters such as administrative errors or to increase borrowing facilities.

Debt recovery/escalation process

4.21 The Funds Administration Agent (FAA) receives payment under the settlement process. The FAA can draw on various reserves (in the following order) to clear the relevant account:

- an Elexon borrowing account;
- cash lodged as credit cover;
- a LoC; or

- scale down what is paid if, after the application of the previous steps, sufficient funds have not been provided.

4.22 The Settlement Administration Agency pursues the defaulting Party for the money and informs Elexon if the money is not paid.

4.23 When a Trading Party's Credit Cover Percentage[13] exceeds 80 per cent the Party is required, by the end of the next banking day, to reduce its Credit Cover Percentage below 75 per cent[14]. This may be achieved either by increasing the Credit Cover provided, or by reducing indebtedness (for example by notifying contracts for the purchase of energy). If a Party fails to reduce its indebtedness, the market is notified. If it fails persistently to rectify the situation, its rights under the BSC may be suspended followed by expulsion from the Code.

4.24 If the Credit Cover Percentage exceeds 90 per cent any previously notified contract volumes for subsequent Settlement Periods that are for the sale of energy by the Party are rejected and new notifications for the sale of energy are refused. These actions will prevent a Party from further increasing (though not decreasing) its indebtedness through continued trading. However a supplier may still increase its indebtedness by continuing to take physical demand.

CUSC

4.25 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.

Acceptable types of credit cover

4.26 Each user of NGC's transmission system who is required to pay BSUoS charges is required to provide security cover in the form of an ACR or an alternative form of security cover set out in the CUSC. Further details are in Appendix 4.

[13] Its indebtedness expressed as a percentage of the credit cover.
[14] Subject to determining that there is no known error in the calculation.

Credit limit

4.27 Suppliers must provide sufficient cover to meet 32 days' BSUoS charges. NGC uses historical data to assess the amount of security cover required.

Invoicing cycle

4.28 BSUoS charges are levied on a daily basis and all BSC signatories are liable to pay them. Users are invoiced for each settlement day. The daily balancing services charge is published on NGC's website. NGC notifies a user of its liability for that day once it has received data from the initial volume allocation run (25 to 26 days after the day in question). Invoices have to be paid within three days (payment is therefore due within 29 days of when the liability arose).

Debt recovery/escalation process

4.29 NGC monitors security cover for BSUoS on a daily basis and notifies a user if the security amount is more or less than required.

4.30 NGC initiates a debt recovery procedure if a user fails to pay an invoice. Late payment of invoices can result in additional interest charges being levied. In addition, non-payment of any invoices is a breach of the terms of CUSC and could lead to disconnection of customers.

5. Ofgem's framework

5.1 This chapter explains the framework 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.

Ofgem's aim

5.2 In the context of the failure of a gas or electricity supplier or a gas shipper, Ofgem considers that its aim should be to protect customers from:

- actual or threatened disconnection that industry codes and agreements currently permit when a supplier or shipper does not maintain adequate levels of credit cover or pay invoices on time (see Chapters 3 and 4); and
- higher than necessary costs resulting from inefficient arrangements for minimising the cost of potential or actual failure.

Background

5.3 Ofgem's primary objective is to protect the interests of customers, wherever appropriate by promoting effective competition. Gas and electricity supply and gas shipping are now fully contestable and competition is well developed. It is in the nature of competitive markets that some participants will fail. Although Ofgem carries out some checks on licence applicants, it does not consider that any check it could perform on a potential licensee at the time of application will provide continuing comfort about financial viability once the licensee commences operations. Nor can Ofgem guarantee that customers of a failed supplier will not have to pay more for their gas and electricity once they have been transferred to another supplier either by a trade sale or by the appointment of a Supplier of Last Resort. Any discussion about how best to protect customers' interests must therefore be in the context of the fact that suppliers will enter and exit the competitive supply and shipping markets.

5.4 Ofgem considers that it is generally accepted that counter-party risk is a normal feature of contestable markets. The way in which companies manage that risk is normally a commercial decision for them. In some instances a company may

decide that the risk of default is too great to trade with a counter-party, it may increase the price payable to reflect the risk or it may ask for payment in advance.

5.5 However gas and electricity Network Operators are obliged to offer non-discriminatory terms to suppliers and shippers; they in turn are required by various industry codes and agreements to provide credit cover to counter-parties. This avoids the inclusion of a "risk premium" in pricing and allows non-discrimination rules to exist and be enforced. Bi-lateral contracts (such as those between electricity suppliers and generators) also typically require some form of cover.

5.6 Ofgem has therefore considered whether all or part of the gas and electricity markets are sufficiently different from other markets to justify regulatory intervention in (and therefore the potential distortion of) commercial relationships. There are two main areas where, in the absence of regulatory intervention, Ofgem believes that the optimum outcome may not be achieved:

- social and economic issues; and
- the operation of market mechanisms.

Social and economic issues

5.7 Ofgem believes that the gas and electricity markets differ from other competitive markets in a number of ways. Both gas and electricity can be used by customers without the specific consent of the supplier (for instance when a customer moves into a property and uses gas or electricity without signing a contract). In addition the provision of credit cover enables gas and electricity to be supplied to customers even though they may not yet have paid for it (for instance if they pay quarterly in arrears).

5.8 Unlike physical commodities, once gas or electricity have been consumed it is not possible to take action to recover them. Under current codes and agreements one way for Network Operators to try to enforce invoice payment or credit cover requirements is to threaten to disconnect customers and to carry out this threat if payment or credit cover is not forthcoming (see Chapters 3 and 4).

Ofgem considers that in this context actual or threatened disconnection is not an appropriate way to protect customers or to enforce industry codes and agreements.

5.9 Apart from the fact that a customer may have already paid the supplier for the gas or electricity used, disconnection (or the threat of it) obviously causes inconvenience to all customer groups. However some customer groups may be targeted for disconnection before others. Disconnection of all a supplier's customers is impractical in anything other than a protracted timescale and it is therefore likely that those consuming large volumes would be disconnected first, with serious economic consequences for them.

5.10 Ofgem considers that it is therefore appropriate for regulation to provide different mechanisms for dealing with risk in the gas and electricity industries compared to other sectors of the economy.

5.11 If a supplier goes into receivership or administration (or equivalent), mechanisms and procedures exist that allow Ofgem to appoint a Supplier of Last Resort. When implemented, this has the effect of capping industry losses arising from the failure. Ofgem has explained when and how it would use these powers[15]. Ofgem considers that, if implemented, the changes discussed in this document will mean that threatening to disconnect a failed supplier's customers in such circumstances will be unnecessary.

Market mechanisms and other issues

5.12 Regulatory intervention may also be justified if it provides a way to take account of other issues that industry parties might not have an incentive to consider. These issues include:

- the ability to allocate costs between customer groups;
- the impact on the competitive supply market; and
- the overall efficiency of the energy industry.

[15] "Supplier of Last Resort – Guidance on current arrangements" Ofgem 27/01

Customer groups

5.13 It is important to recognise that customers eventually bear the cost of any arrangements for dealing with the bad debt of a failed supplier or shipper. The potential benefit to customers of different arrangements to those currently in operation therefore has to be considered against the likely effect on prices payable by them. It is also necessary to consider whether requirements should be cost-reflective so that customers of less credit-worthy suppliers pay more, or whether all customers should ultimately pay for the bad debt (for instance through smearing or through the operation of price controls).

The competitive supply market

5.14 A number of issues must be taken into account when considering whether changes to the existing arrangements will better help 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 one's own default.

5.15 Making the gas and electricity markets easier to enter (through lower costs and/or less exposure to risk) can bring benefits for customers since competitive pressures can drive down prices.

Overall efficiency

Aligning the gas and electricity markets

5.16 Ofgem considers that, wherever it is appropriate to do so, the requirements for credit cover (or other ways in which the cost of potential or actual failure can be reduced) should be aligned in the gas and electricity industries. There should also be appropriate sanctions available 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 gas and electricity. 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 (such as gas transportation, electricity transmission and electricity distribution).

5.17 Streamlining these processes may make it easier for new entrants to familiarise themselves with the market rules and therefore to enter the market. In addition there is an increasing move to dual fuel by many industry participants. Differences in gas and electricity may therefore lead to confusion for those parties that are required to provide the credit cover and those that have to enforce it.

Reducing the regulatory burden on licensees

5.18 Ofgem considers that wherever appropriate the regulatory burden on licensees should be reduced. It may sometimes be necessary to require compliance through licence conditions but enforcement or dispute resolution by Ofgem should be seen as a last resort after other mechanisms have failed. We consider that industry codes and agreements that deal with credit cover and invoice payment should provide robust enforcement mechanisms in the event of default.

Transparency for making changes to credit cover requirements

5.19 Ofgem considers that a proper modification process is essential for changes to the credit cover requirements of all industry codes. This ensures that all participants have the opportunity to make their views known and that the reasons behind proposed changes can be fully debated.

5.20 Ofgem does not consider that the current arrangements for changes to Transco's Code Credit Rules (for gas transportation credit cover) meet this requirement. This is discussed in more detail in Chapter 7.

Where is regulatory intervention appropriate?

5.21 Taking the above issues into account, Ofgem has considered where regulatory intervention is justified to ensure that the provisions for credit cover are appropriate.

Gas and electricity wholesale markets

5.22 The risks faced by the counter-parties to bi-lateral contracts for gas and electricity can be summarised as:

- gas producers face a risk that shippers they sell gas to will not pay them;
- shippers are exposed to a failed shipper continuing to trade at the National Balancing Point (NBP)[16]; and
- electricity generators face a risk that Trading Parties they sell to will not pay them.

5.23 Many companies have their own risk analysis procedures that determine whether to trade with other industry parties. If they decide to trade then they can decide what, if any, contractual terms are required to reduce the risk of bad debt. In addition, or as an alternative, to credit cover they may agree measures such as the right of offset (where the debt owed by A to B is reduced by the debt owed by B to A).

5.24 Independent Energy and Enron's failures have demonstrated the potential scale of counter-party indebtedness across the gas and electricity industries (see Appendix 2). However the failures did not result in a "domino effect" of serial failure.

5.25 Ofgem considers that since parties are free to decide whether to trade with each other, the way risk is dealt with should be a matter for them to agree.

Gas transportation, electricity transmission and electricity distribution

5.26 The credit cover arrangements for gas transportation, electricity transmission and electricity distribution are described in Chapter 3. Relevant standard licence conditions are outlined in Appendix 3.

[16] A modification has been proposed that limits exposure to energy balancing costs and proposes that in the event that a shipper's NWC is terminated all its sale trades at the NBP will be rendered null and void. Any counter-party to such trade with a terminated shipper will be obliged to source gas matching that trade from another seller or purchase gas from the system.

5.27 Gas transporters, electricity transmitters and electricity distributors are obliged by their licences to offer terms for use of their networks and therefore to accept exposure to risk. In addition Ofgem has a role in changing the codes and agreements governing these activities. For both these reasons Ofgem considers that this is an appropriate area for regulatory intervention.

Gas and electricity balancing

5.28 The credit cover requirements for gas and electricity balancing are described in Chapter 4. Relevant standard licence conditions are outlined in Appendix 3. Ofgem has a role in determining proposed modifications to industry codes and can enforce compliance with licence conditions. Ofgem therefore considers that this is an appropriate area for regulatory intervention.

Gas and electricity retail markets

5.29 Gas and electricity suppliers that are permitted by their licences to supply domestic customers must, when requested by a domestic customer, offer a supply. If the customer accepts the terms offered the supplier must, other than in specific circumstances, supply the customer.

5.30 Suppliers that are permitted by their licences to supply only non-domestic customers do not have the same licence obligation. They are therefore free to negotiate their own terms (including any requirements for a deposit or credit cover) with their customers.

5.31 Ofgem considers that these arrangements do not require additional regulatory involvement.

6. Discussion

6.1 This chapter:

- summarises the current arrangements for dealing with the bad debt arising from the failure of a gas or electricity supplier or a gas shipper;
- discusses the issues raised by the current arrangements;
- discusses the advantages and disadvantages of alternative arrangements that could be introduced;
- discusses whether the credit cover arrangements for gas balancing should be aligned with those in the BSC by allowing only LoCs and cash;
- discusses whether the current enforcement mechanisms for Distribution Companies are appropriate; and
- notes that other changes will probably be required to reinforce new credit cover arrangements but that these should be debated more fully once those arrangements are clearer.

6.2 Where Ofgem has information about the current level of credit cover or the estimated cost of different arrangements, this is specified in the text. However Ofgem particularly welcomes views on the potential cost of the issues discussed in this chapter. In some areas there appears to be over-provision of credit cover at the moment. Ofgem's view is that any calculations should take this into account in order to make fair comparisons.

Summary of current arrangements

6.3 There are a number of types of credit cover currently in use in the gas and electricity industries. The following table provides a summary; further details are in Appendix 4.

Types of credit cover

	Gas transportation	Gas energy balancing	Electricity Distribution Companies	NGC	BSC
Approved Credit Rating	√	√	√	√	X
Parent Company Guarantee	√	√	√	√	X
Other guarantee	√	√	√	√	X
Letter of Credit	√	√	√	√	√
Advance payment	√	X	X	X	X
Cash (in an escrow or deposit account)	√	√	√	√	√
Bond	√	√	X	X	X

6.4 Ofgem understands that the total amount of cover currently provided for shipper indebtedness in gas transportation is approximately £812m. Of this, £175m is provided by ACRs, £361m by PCGs, £115m by LoCs, £1m by cash and £160m by prepayment[17].

6.5 In addition Ofgem understands that around £180m credit cover is currently provided for gas balancing indebtedness. Of this, around 10 per cent (£18m) is provided by ACRs.

6.6 Ofgem estimates that the total amount of credit cover required by electricity distributors is £528m. Currently nearly all the credit cover[18] is provided by companies using ACRs.

[17] The prepayment figure is the amount per month.
[18] Ofgem estimates around 95 – 99%.

6.7 Ofgem understands that total credit cover in the BSC (ie cash or LoCs only) is around £500m of which around £40m (8 per cent) is cash. Given the levels of electricity traded through the balancing mechanism the total amount of cover seems to be an over-provision.

6.8 Ofgem estimates that the total credit cover provided for TNUoS charges is around £48m of which around £0.3m is cash or LoCs.

Issues raised by the current arrangements

Approved Credit Ratings (ACRs) and Parent Company Guarantees (PCGs)

6.9 The cost of credit is directly related to the borrower's creditworthiness. In general, the stronger a borrower's perceived creditworthiness, the lower is its cost of credit. Banks and other lenders (including bond investors) use a number of analytical techniques and benchmarks to assess creditworthiness. These benchmarks include formalised credit ratings published by specialist credit rating agencies (see Appendix 4). These ratings reflect the agencies' overall assessment of a large number of indicators of financial and business strength, and fall into two broad categories: "investment grade" and "speculative". Under those industry codes and agreements that utilise ACRs/PCGs, investment grade ratings from many of the leading agencies are accepted. Companies that seek credit ratings incur initial and recurring costs, including fees payable to the rating agencies. To maintain their ratings, companies must conduct their businesses within a number of significant financial and operating constraints.

6.10 Where ACRs/PCGs are accepted a supplier that has an ACR/PCG is given an unsecured credit limit based on its credit rating. For instance Transco's Code Credit Rules for transportation allow it to provide a maximum unsecured aggregate credit exposure of £250m to a company (or group of related companies) with the highest credit rating (Aaa)[19]. Transco's NWC Energy Balancing Credit Rules allow a company with a credit rating of Baa1[20] a maximum aggregate secured credit limit of £15m; a company with a credit

[19] Transco: Credit Risk Management Booklet "Restrictions on Credit Exposure"
[20] Based on Moody's Investors Service or equivalent rating agency

rating of Baa3 (the lowest investment grade rating) would have a credit limit of £2.5m[21].

6.11 Ofgem does not believe that ACRs/PCGs are an acceptable form of credit cover in gas or electricity for two reasons:

- they do not necessarily provide any money in the event that the party defaults; and
- they introduce a cross-subsidy from those companies that do not have an ACR/PCG to those that do.

6.12 Although the risk of default by a company with an ACR is low it is not zero (see Appendix 4). In the event that the company loses its investment grade credit rating or goes into receivership or liquidation (or equivalent)[22], counter-parties that relied solely on the ACR/PCG may not receive full payment of the debts owed to them by the defaulting company. Where suppliers or shippers have ACRs/PCGs a Network Operator therefore has exposure to default by that company.

6.13 In a credit cover regime where both ACRs/PCGs and LoCs/cash are permitted a cross subsidy is introduced from those companies that do not have ACRs to those companies that do. For parties that hold ACRs the cost of default may be borne by the whole industry through smearing of unpaid charges or by pass through of bad debt. These charges will ultimately be passed on to customers. However if a supplier or shipper does not have an ACR the cost of providing a LoC/cash is borne by the company itself and therefore only by its customers.

Letters of credit or cash

6.14 In circumstances where a supplier does not have an ACR/PCG, or has one but chooses not to rely on it, or is operating in a code where it cannot be used (such as the BSC), it can provide a LoC or cash in an escrow account as credit cover. In the event that it defaults on payments, its counter-parties can call on the security provided to cover the debt. Codes and agreements usually specify the

[21] Energy Balancing Credit Rules sections 4.1 and 4.2
[22] These events trigger default under a number of industry codes and agreements.

circumstances in which such collateral can be called upon, although it is normally a matter of discretion for the Network Operators whether to do so.

6.15 LoCs and cash could therefore be considered a more appropriate way of providing credit cover. Providing the level of indebtedness has been accurately calculated and there are robust mechanisms for enforcing credit cover requirements, Network Operators should be able to recover most of the debt by calling on the LoC or cash provided by the failing party. In addition the cost of a LoC or borrowing cash varies depending on a party's credit-worthiness. The lower cost of default of highly credit-worthy companies is reflected in the lower cost to them of a LoC or cash. The cost is borne by the supplier's customers; customers of less credit-worthy suppliers (or their shippers) pay more than those of more credit-worthy companies.

6.16 However, use of LoCs and cash reduces the individual and overall capacity to borrow because companies' debt capacity (ie the amount of additional credit that banks will extend) is reduced.

6.17 Ofgem understands that the commission charged for providing a LoC for a company with an "A" credit rating is around 0.5 per cent of the total cover provided plus an establishment fee; for a company with a "BBB" rating the cost increases to around 0.7 per cent plus an establishment fee.

6.18 Ofgem understands that in present market conditions short term advances for working capital purposes are priced at 0.4 - 0.6 per cent over the London Interbank Offered Rate (LIBOR) for funds of equivalent maturity. At present this would result in a total cost of 5.0 – 5.5 per cent. This would be partially offset by interest earned by the supplier or shipper on the cash in its escrow account.

6.19 Ofgem's view is that it is unlikely that smaller companies would be disadvantaged by a move to a regime that accepted only LoCs or cash. They are less likely to have an ACR now and would therefore have to provide a LoC or cash even under the current rules. Those companies that currently use ACRs/PCGs would face the additional cost of providing LoCs or cash. However they would pay less than smaller companies (because they are likely to have higher credit ratings). Larger companies would benefit because they would no longer be exposed to the bad debt of other large companies. In addition it is

possible that the total amount of credit cover in some areas is not a true reflection of the actual level required, but rather is the total amount of credit extended to companies that have ACRs/PCGs.

6.20 In the BSC the rules for drawing down credit cover (and for topping it up again) are clear and are strictly applied with market privileges being withdrawn if a credit limit is breached. However in other areas where LoCs or cash are accepted they are often not drawn on. One explanation for this is that if the Network Operator draws down cash deposits/LoCs to pay bills that are past their due date it reduces the cover available for charges incurred but not yet due for payment and for charges yet to be incurred. The Network Operator therefore has an incentive to vigorously pursue payment of overdue bills, collecting whatever is possible, while leaving the credit cover intact to reduce exposure in the event of insolvency.

Estimated costs

6.21 Ofgem recognises that the figures used above are only approximate. In addition some of the amounts refer to the credit cover *required* and some refer to the amount *provided*; these may not necessarily be the same.

6.22 However it is possible to work out some annual costs in order to compare possible alternatives to the current arrangements. For example, to provide LoCs or cash in an escrow account as credit cover for £528m of DUoS charges could cost between £3 – 4m, depending on the credit ratings of electricity suppliers. Provision of LoCs or cash in an escrow account as credit cover for £812m gas transportation charges could cost between £5 - 6m. However the current amount secured by ACRs/PCGs is £536m[23]; provision of LoCs or cash in an escrow account as credit cover for this amount would cost between £3 - 4m.

6.23 The cost should be considered in the context of recent failures. For example Independent Energy owed approximately £19m to Distribution Companies; Enron's total exposure for gas transportation, electricity transmission and electricity distribution was around £16m but, after deducting expected payments, the estimated bad debt is likely to be £4 – 8m.

[23] £175m provided by ACRs and £361m provided by PCGs.

Possible alternative arrangements

6.24 This section describes some of the alternative arrangements that could be introduced to provide recovery of a failed supplier or shipper's bad debt. It is important to remember that however the risk is allocated, the cost will eventually be paid by some or all customers.

Pass through the price control of Network Operators

6.25 The way in which Network Operators' bad debt resulting from the failures of Independent Energy and Enron was dealt with is explained in Appendix 2. This section discusses the advantages and disadvantages of formalising that arrangement so that all or some of the debt arising from a supplier or shipper failure could be passed through Network Operators' price control and would ultimately be paid by customers.

6.26 Who should properly bear the cost of any default is an important issue in any discussion about the pass through of debt. This includes consideration of whether allocating the cost to a particular party can be justified if there are cheaper alternatives.

6.27 The cost of providing cover for bad debt can be allocated between parties in a variety of ways:

- suppliers could bear all the cost;
- Network Operators could bear all the cost; or
- cost could be allocated between suppliers and Network Operators.

6.28 The advantages and disadvantages of each approach are discussed below.

Suppliers bear all the cost

6.29 In order for suppliers to bear all the cost of default, LoCs and cash (or the equivalent) must be compulsory (since if a supplier relies on an ACR the Network Operator bears the cost of default). The advantages and disadvantages of cash and LoCs have been discussed above.

Network Operators bear all the cost

6.30 In this instance no credit cover is provided - all the costs of the defaulting party are borne by the Network Operators. However, the transmission and distribution price controls do not include an allowance for bad debt. Placing all the cost on Network Operators might increase business risk (and therefore their cost of capital) unless it is transferred to customers through the price control.

6.31 The advantage of this approach is that it is simple to administer. It is likely to cost less than other schemes because no collateral is required and there is more certainty for the Network Operators that costs will be covered.

6.32 However, this approach would require incentives on the Network Operators to ensure that they actively pursued outstanding debts and took appropriate action when they were not paid. This could be achieved by drawing up rules that would, for instance, only allow pass through of debts on a sliding scale depending on their age, but there is a danger that such a scheme could become overly bureaucratic.

6.33 This approach would also require incentives on suppliers and shippers to pay their bills promptly. This could be achieved by strict rules that restricted or prevented a supplier or shipper from registering new sites if bills were not paid in a specified time. In addition, interest could be charged on overdue invoices. However this might not be sufficient incentive on a supplier or shipper that was in difficulty anyway.

6.34 The additional advantage of this approach is that part of a supplier's borrowing facility is not tied up providing credit cover that might not be used (for instance if no supplier defaulted or if the overall level of cover was set at a level that was too high).

6.35 Costs to the industry would be reduced immediately because smaller suppliers would no longer have to provide LoCs or cash. In addition the credit constraint level for those (normally large) suppliers that previously relied on ACRs could be removed.

6.36 One disadvantage is that all customers would be likely to pay something towards the cost of default. A further disadvantage is that there would be a time

lag between the time the supplier defaulted and when the cost was passed through.

Using a combination of LoC/cash and price control

6.37 An alternative to passing through all the cost of default would be to require LoCs for most of the credit cover, with provision for pass through in certain circumstances where there was insufficient security. This could, for example, provide cover for the debts accrued before a trade sale or the appointment of a Supplier of Last Resort.

6.38 Advantages of this approach are that customers would pay (at least in part) a cost-reflective price for the creditworthiness of their supplier while providing reassurance to industry parties that they would not be exposed to post-receivership/administration debt accrued before either a trade sale or the appointment of a SoLR. A disadvantage is that all customers would probably have to pay some of the costs of supplier failure. In addition any delay in a trade sale or the appointment of a Supplier of Last Resort could lead to extra costs being passed on to customers once the level of cover provided by the LoC or cash had been reached.

Mutualisation

6.39 Another approach might be to mutualise the risk through an industry-wide collective scheme. This might take a number of forms, including a mutual insurance pool (in which members share all losses in proportion to their underwritten risks) or an independently administered compensation fund. An advantage of this approach is that the risk of default is shared between all suppliers or shippers thereby lowering the overall cost. Another advantage would be that the total amount insured could be set at less than the total amount of industry indebtedness (based on the industry exposure to Independent Energy and Enron (see Appendix 2) a figure of, say, £60m might be sufficient); if that total was exceeded (for instance if a very large supplier failed) the additional costs could be passed through the price control to allow the Network Operators to recover their costs.

6.40 If this approach was followed rules would have to be specified that apportioned the cost of the insurance to the parties that present the greatest risk, otherwise the creditworthy parties would be providing a cross-subsidy to less creditworthy parties. Premiums would be based on an assessment of risk, however it is not necessarily clear how this would be achieved in practice. Counter-parties facing exposure to debt could call on the insurance at a certain level. Although this might have the effect of increasing the premium payable, this would reflect the increased riskiness of that party. There would be an administration cost for running the scheme and enforcing payment.

Credit Pool

6.41 One solution to the problem of cross subsidy might be to provide two "Credit Pools" – one for suppliers providing ACR/PCGs and the other for those with LoCs/cash. If suppliers and shippers holding ACRs/PCGs were willing to bear the cost of one of the others defaulting then there would be no cross-subsidy.

6.42 There are drawbacks to this approach. The criteria for such Pools would be difficult to agree – highly rated parties would have an incentive to exclude lower rated ones. In addition, in the event that one of the ACR/PCG parties got into financial distress there would be an incentive on the other members of that Credit Pool to leave and join the LoC Pool instead so that they were no longer exposed to the risk of default. Alternatively they might expel the distressed member who would then have to provide a LoC or cash at a time when it would be difficult to obtain.

Commercial insurance

6.43 Another alternative to ACR/PCGs and cash/LoCs would be commercial credit insurance. This might be purchased by Network Operators who would pass the premiums on to suppliers and shippers as part of, or as a supplement to, Use of System charges. Alternatively suppliers themselves could purchase the cover. In either case, the insurer would pay the debts of a defaulting supplier. An advantage of this scheme would be that customers of higher risk suppliers would pay more. However all parties would need the same type of cover so that it was clear when it could be called on. In addition it is not clear how this arrangement could be enforced effectively.

6.44 Overall, Ofgem's view is that the options of Mutualisation, a Credit Pool or Commercial Insurance are less likely to offer the certainty provided by price control pass through, LoCs, cash or a combination of these. In addition they may be more complex to organise and could be more expensive.

Gas balancing

6.45 The current credit cover requirements for gas and electricity balancing are described in Chapter 4. The main difference between the two systems is that the BSC only accepts LoCs or cash as a form of credit cover; in gas ACRs/PCGs are acceptable as well.

6.46 Ofgem considers that the different rules in gas and electricity could lead to a distortion of the incentive to balance a portfolio. For instance if a shipper that relies on an ACR is out of balance it would not face any penalties until it reached its Cash Call Limit (85 per cent of its Secured Limit). For a company with the lowest investment grade rating of Baa3 this could be as much as £2.125m[24]. For a company in difficulty there is no incentive to pay off any debts and no cash may be available to reduce the indebtedness, thereby exposing other shippers to the risk of default. By comparison, the provision of LoCs or cash under the BSC provides a means for Elexon to recover money from a supplier that is out of balance. Claims on a LoC/cash may affect a supplier's credit-worthiness and there is therefore an incentive to either balance its portfolio or pay outstanding charges quickly. Even if a failing supplier is unable or unwilling to balance, the LoC/cash still provides a measure of protection for other Trading Parties.

6.47 There are a number of reasons why gas shippers and electricity suppliers should have similar incentives to balance their portfolios:

- system safety – Transco and NGC are under an obligation to balance the gas and electricity systems to ensure system safety and a predictable supply for customers;

[24] 85% x £2.5m – see paragraph 6.10

- if credit cover only applies to imbalance, in theory a shipper that was always in balance would not have to provide any cover, thus providing an incentive to reduce its costs; and

- potential "abuse" of the balancing mechanism by shippers that use it solely or mainly for sourcing gas would be avoided.

6.48 Ofgem does not consider that the current provisions for credit cover in gas balancing are as effective as they could be. Ofgem considers that the gas credit cover provisions should be aligned more closely with those in electricity including the abolition of ACR/PCGs as acceptable forms of credit cover.

Distribution Companies' enforcement mechanisms

6.49 Chapter 3 explains how Distribution Companies can enforce their DUoSAs. Ofgem does not consider that the threat to de-energise customers is appropriate in circumstances where a supplier has failed to maintain sufficient credit cover or has not paid its invoices when they have fallen due.

6.50 Electricity suppliers must comply with the Master Registration Agreement (MRA) (see Appendix 3) which requires a DUoSA to be in full force and effect. Distribution Companies have suggested that they may therefore be able to prevent suppliers registering new customers in certain circumstances where they believe that the DUoSA is not in full force and effect (and that consequently the supplier is not complying with the MRA). However, there is no distinct provision in the DUoSA to prevent new registrations. The deeming of a DUoSA by the MRA in certain circumstances may also lead to anomalies.

6.51 In contrast there are clear rules that Transco follows to suspend the registration of new customers when a gas shipper's indebtedness reaches certain levels (see Chapter 3). BSC Trading Parties also face a variety of penalties if their indebtedness breaches defined parameters (see Chapter 4).

6.52 Ofgem considers that the rules for Distribution Companies should be clarified so that all parties know the circumstances in which they can restrict or prevent the registration of new customers when a supplier has reached certain levels of indebtedness. This would potentially help to keep the level of indebtedness

under control and would additionally protect customers from being switched to a supplier that might be in financial difficulty and could potentially fail.

6.53 Ofgem therefore proposes that work should be undertaken to identify where clearer rules are required to ensure consistent enforcement of the provision of credit cover and terms for payment of invoices.

Other changes

6.54 A number of other issues affect the cost of providing credit cover. While Ofgem welcomes views on these it proposes that a full debate should be postponed until the overall framework for credit cover is clearer.

6.55 The issues include:

- the impact of invoicing cycles on the amount of credit cover required. Chapters 3 and 4 describe the different invoicing cycles used by industry parties at the moment. These typically issue invoices in arrears and allow a certain length of time for payment and chasing overdue amounts. Credit cover is provided for much of this time, taking account of the fact that customers are using gas and electricity for which they may not yet have paid. Reduction of the time between customers using supply and suppliers being billed could reduce the credit cover required, although revising billing systems would cost money;

- the escalation procedures that can be used to enforce credit cover requirements. Chapters 3 and 4 briefly describe the processes by which credit cover is enforced. While some requirements are strictly enforced (such as those in the BSC), others are not. This may lead to distortions in behaviour by suppliers or shippers since they may have incentives to pay some bills before others;

- mis-matches throughout the industry caused by different timings of payment terms. The mis-match can affect the working capital needs (and therefore the cost) of suppliers. Convergence of terms would make operating more predictable for them;

- credit cover for indebtedness that arises around the time that a supplier or shipper goes into receivership or administration or equivalent. Although Ofgem has the power to appoint a Supplier of Last Resort to take over responsibility for supplying the failed supplier's customers, there may be a delay in the appointment where there is little or no advance warning of failure. In addition, administration or receivership may be delayed until a buyer has been found for a failing company during which time debts may not be paid and credit cover is therefore rapidly used up;

- whether there are more appropriate ways to calculate the level of credit cover required. For instance if minimum credit levels are proposed for indebtedness there may also be a need to pursue more accurate ways of calculating the actual level of indebtedness; and

- removing completely the ability of Network Operators to de-energise customers as a way of enforcing credit cover or invoicing requirements.

7. Transco's Code Credit Rules

7.1 Transco's Code Credit Rules govern, amongst other things, the level and type of credit cover that it requires for its transportation costs. The Code Credit Rules are ancillary to Transco's NWC and, as such, are not subject to the normal modification process.

7.2 Network Operators are obliged to operate efficient and economic systems that secure or facilitate effective competition (see Appendix 3). Ofgem considers that an open and transparent modification process for all industry codes and agreements is essential to ensure that proposed changes can be fully debated by industry parties.

7.3 Ofgem's view is that it is therefore inappropriate for Transco's Code Credit Rules to fall outside a formal modification process and they should be brought within the NWC Modification procedures.

8. Summary - views invited on specific issues

8.1 Following the discussions in the previous sections, comments are invited on:

- Ofgem's view that the arrangements for credit cover in gas balancing should be more closely aligned with those in the electricity Balancing and Settlement Code, including limiting the types of credit cover to Letters of Credit from approved banks or cash;

- Ofgem's view that the current arrangements for providing credit cover as protection from bad debt for gas transportation, electricity transmission and electricity distribution are no longer appropriate and that possible alternatives are:

  - only Letters of Credit or cash should be accepted as credit cover for gas transportation, electricity transmission and electricity distribution;

  - the requirements for credit cover should be removed altogether and all bad debt resulting from supplier or shipper failure should be addressed within the price control framework for Network Operators (Transco, the National Grid Company (NGC) and Distribution Companies). This change would be accompanied by incentives on Network Operators 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 Letters of Credit or cash with the ability, in certain defined circumstances and subject to appropriate incentives, to deal with any remaining bad debt as part of Network Operators' price controls.

Ofgem is particularly interested in respondents' views on the cost of these options, bearing in mind that there may currently be over-provision of credit cover in some sections of the industry.

- Ofgem's view that work should be undertaken to identify where clearer enforcement rules are required to try to ensure consistency in the provision for credit cover and the payment of invoices;

- Ofgem's view that Transco's Code Credit Rules for gas transportation should be brought within its Network Code (NWC) Modification Procedure; and

- Ofgem's 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.

Appendix 1 Overview of the gas and electricity industries

1.1 This Appendix describes the various licensed activities and industry processes that are relevant to the consideration of the effect of a gas or electricity supplier or gas shipper failure.

Gas industry

Transco

1.2 Transco provides transportation services to the gas market and is the largest Gas Transporter in Great Britain. It owns, operates and maintains the National Transmission System (NTS).

1.3 There are also a number of independent Gas Transporters that operate small lower pressure networks (fed from Transco's network). As Transco has an effective monopoly in gas transportation, Ofgem price controls its revenues.

1.4 All Gas Transporters are required by their licence to produce a Network Code that defines the respective obligations of gas shippers and the Network Operator. Transco's Network Code sets out the contractual terms for capacity rights and energy balancing. It provides shippers with incentives to balance their total input of gas to Transco's system with the aggregate offtake of gas by their suppliers' customers.

How the system is balanced

1.5 For gas to be transported safely through Transco's integrated pipeline system, shippers must be able to ship gas through any entry point and make arrangements for the exit of that gas elsewhere. These gas inputs and offtakes must be in balance by the end of each gas day. Each shipper is responsible on a daily basis for controlling how much gas it inputs into the pipeline system and for monitoring its suppliers' customers' offtakes. If there is a difference in aggregate between the inputs made by shippers and offtakes taken by customers Transco buys and/or sells gas to maintain overall system balance. Whilst Transco has incentives to balance efficiently, Transco's balancing costs are

recovered from out of balance shippers through cash-out prices that are determined in the on the day commodity market (OCM).

Shippers

1.6 A gas shipper is licensed to arrange with a transporter for gas to be introduced into, conveyed and taken out of the pipeline system. The shipper buys gas from producers, sells it to suppliers and arranges for the transporter to transport the gas to customers. Shippers must balance their input and customer offtake each day. They can also store gas with a storage operator to help manage the balance between its supplies and customers' demand. Shippers usually purchase gas from producers and transportation capacity from Transco. Shippers may have contracts to ship gas for a number of suppliers, although many suppliers have their own shipper.

1.7 Before shipping across a network a shipper has to sign the transporter's Network Code.

Gas suppliers

1.8 At the moment there are 93 licensed gas suppliers of which 35 can supply domestic customers. Gas suppliers that sell gas to domestic customers have additional licence conditions to those that only sell gas to non-domestic customers. All suppliers with a licence that permits them to supply domestic customers are required, except in certain circumstances, to supply gas in the areas covered by their licences to any domestic customer who requests a supply at premises connected to the system.

Electricity industry

National Grid Company

1.9 The National Grid Company (NGC) owns, operates and maintains the high voltage transmission system in England and Wales. NGC holds the sole transmission licence in England and Wales. It also undertakes longer-term development of and investment in the transmission system.

How the system is balanced

1.10 NETA is the mechanism through which wholesale electricity is traded in England & Wales. Generators and suppliers contract with each other in order to meet electricity demand across the system from up to a year or more ahead of real time.

1.11 Generators and suppliers will submit an initial physical notification to NGC stating their expected operating levels throughout the day by 11am the day before trading. A final physical notification relating to operating levels in a particular half hour is then submitted 3½ hours before that half hour (gate closure).

1.12 From 3½ hours though to real time NGC operates the balancing mechanism, accepting bids and offers from generators and suppliers in order to match supply and demand (energy balancing) and to maintain the quality and security of supply (system balancing). The balancing mechanism provides a means for NGC to adjust the level of generation of individual generators or the demand of individual suppliers so that the system is in balance.

1.13 Generators and suppliers notify the system operator (NGC) of the levels at which they wish to operate. The level of operation is usually related to the overall contractual position of the generators and suppliers. A generator may be able to increase or decrease its level of generation and a supplier may be able to increase or decrease its level of demand. When generators and suppliers notify NGC of their operating levels they may also submit offers and bids that indicate a deviation from the level of operation. NGC may accept these offers and bids in order to balance its transmission system.

1.14 NGC operates the balancing mechanism after gate closure by matching system-wide imbalances between generation and demand, adjusting power flows to ensure the security of its system and placing generators in a position to deliver other balancing services that may be needed for system balancing. NGC recoups the costs it incurs in balancing the system through Balancing Services Use of System (BSUoS) charges.

Distribution Companies

1.15 At the moment there are fourteen licensed electricity distribution businesses in Great Britain (twelve in England and Wales, and two in Scotland). Each is owned and operated by a Distribution Network Operator (DNO). These networks are largely passive networks that facilitate the transfer of energy from Grid Supply Points (GSP) on the national grid to end users connected at differing voltages to distribution networks. Each DNO has a specified authorised area, referring to the network(s) it owns, in which it distributes electricity.

1.16 DNOs charge electricity suppliers operating within each authorised area for using the network. These charges are known as distribution use of system (DUoS) charges. They are regulated by price controls and are reviewed periodically by Ofgem.

Electricity suppliers

1.17 At the moment there are 59 licensed electricity suppliers (of which 27 can supply domestic customers). Electricity suppliers that sell electricity to domestic customers have additional licence conditions to those that only sell gas to non-domestic customers. All suppliers with a licence that permits them to supply domestic customers are required, except in certain circumstances, to supply electricity in the areas covered by their licences to any domestic customer who requests a supply at premises connected to the system.

Elexon

1.16 Elexon Limited is the Balancing and Settlement Code Company; it manages the electricity trading arrangements in England and Wales. Elexon procures, manages and operates services and systems that enable the balancing and imbalance settlement of the wholesale electricity market.

Industry codes and agreements

1.18 Various codes and agreements govern how industry parties must interact with each other. They include requirements for credit cover. The codes relevant to this document are:

- Gas Transporters' Network Codes (NWC)

  A Network Code (NWC) is a contractual agreement that forms the basis of the arrangements between a Gas Transporter and the shippers whose gas its transports. A transporter's licence requires it to define and operate a mechanism to control changes to its NWC[25]; these are called the Code Modification Rules. The rules enable shippers and the transporter to make proposals for changes to the NWC, 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.

  Transco's NWC has two ancillary codes that are relevant to this document – the Energy Balancing Credit Rules and the Credit Code Rules.

- the Balancing and Settlement Code (BSC)

  This must be signed by all parties that trade in electricity including electricity suppliers and generators.

- the Connection Use of System Code (CUSC).

  The Connection Use of System Code (CUSC) is a multi-party contract between NGC and users of its transmission system. It provides for connection to and use of NGC's system. NGC is obliged by its licence to produce, maintain and comply with a connection and use of system code[26].

[25] Standard Licence Condition 9 Network Code
[26] Standard Licence Condition C7F Connection and Use of System Code

- electricity industry agreements such as:

  - the Distribution Use of System Agreement (DUoSA). A contractual agreement between a Distribution Company and an electricity supplier. The DUoSA has relatively standard terms and conditions for the provision of use of system services, including credit cover requirements; and

  - the Master Registration Agreement (MRA). A multi-party agreement between licensed electricity suppliers, licensed distribution businesses, Elexon Limited, Scottish Electricity Settlements Limited and the Master Registration Agreement Service Company (MRASCo). The agreement provides the overall legal framework for activities associated with meter registration when customers switch supply from one company to another.

Appendix 2 Case studies - Independent Energy and Enron

2.1 This Appendix explains the background to and the impact of the failures of Independent Energy and Enron.

Independent Energy UK Limited

Background

2.2 Independent Energy UK Limited (IE) was the holder of gas and electricity supply licences and a gas shipping licence. It supplied approximately 320,000 domestic and non-domestic customers and employed over 200 staff.

2.3 IE was incorporated in 1995, and became active in the non-domestic electricity market in 1998. As the domestic electricity market was deregulated between October 1998 and April 1999 the company continued to expand. The company also became active in the gas market, and acquired York Gas Limited, a domestic gas supplier.

2.4 During 2000 IE experienced electricity billing and debt recovery problems. On 8 September 2000 KPMG were appointed as administrative receivers to IE.

2.5 On 14 September 2000 Innogy Holdings plc acquired the major supply business assets of IE for £10m.

Ofgem's involvement

2.6 In May 2000 a special licence condition was introduced into IE's electricity supply licence. The special licence condition prevented the company from marketing to or attempting to register any new domestic electricity customers until it could meet specified standards for billing customers. The special licence condition remained in IE's electricity supply licence until the company's failure.

Key Milestones

March 1995	Independent Energy UK Limited (IE) incorporated
March 1996	Independent Energy Holdings plc formed
May 1996	Shares begin trading on the Alternative Investment Market (AIM) in London
November 1999	Shares fully quoted on the London Stock Exchange
March 2000	£99m raised from US shareholders
March 2000	Shares trade at £37.50 each, valuing the company at £1.4bn
May 2000	Special licence condition specifying standards for billing introduced into IE's electricity supply licence
14 June 2000	Shares fall on the London Stock Exchange after the company admits ongoing billing delays
8 September 2000	KPMG appointed as administrative receivers to IE
14 September 2000	Innogy purchase IE's supply assets for £10m

Industry Exposure

2.7 Amongst other debts, Independent Energy owed approximately £19m to Distribution Companies.

Enron

Background

2.8 Enron Corporation, the ultimate holding company of the Enron group of companies was formed as a gas pipeline business in July 1985 following the merger of two US companies, Houston Natural Gas and InterNorth.

2.9 Enron Europe Limited was the holding company for the European group of Enron companies. Enron Direct Limited and Enron Gas and Petrochemicals Trading Limited each hold a gas supply licence, an electricity supply licence and a gas shipper licence. Enron Capital and Trade Resources Limited holds a gas supply and a gas shipper licence.

2.10 Enron Direct Limited supplied gas to approximately 12,000 non-domestic sites and electricity to approximately 149,000 non-domestic sites and 34,000 domestic sites.

2.11 On 29 November 2001 PricewaterhouseCoopers were appointed administrators to Enron Europe Limited, Enron Gas and Petrochemicals Trading Limited and Enron Capital and Trade Resources Limited. On 4 December 2001 PricewaterhouseCoopers were appointed administrators to Enron Direct Limited.

Key Milestones

July 1985	Houston Natural Gas and InterNorth merge to form Enron, a gas pipeline business
1989	Enron begins trading gas commodities
1994	Enron commences electricity trading
November 1999	EnronOnline launched, the first global platform for commodity trading
September 2000	Company's peak stock market valuation of $66bn
16 October 2001	Enron Corporation unveils 3rd quarter losses of $618m
22 October 2001	Enron Corporation announces United States Securities and Exchange Commission (SEC) request for information regarding certain related party transactions
23 October 2001	Enron Corporation considers issuing additional stock because of shortfalls from partnership investments
31 October 2001	SEC launches formal investigation
8 November 2001	Enron Corporation announces that it is to restate earnings for 1997 – 2001
1 November 2001	Credit rating agency Standard and Poor's lowers the long-term corporate credit rating of Enron Corporation from BBB+ to BBB
9 November 2001	Dynegy and Enron announce merger agreement. Standard and Poor's lowers Enron ratings from BBB to BBB-
Late November 2001	Enron Corporation shares continue to fall, dipping below $1
28 November 2001	Enron announces notification from Dynegy of proposed merger termination Enron Corporation ratings cut by Standard and Poor's from BBB- to B-
29 November 2001	PricewaterhouseCoopers appointed administrator to Enron Europe Ltd
30 November 2001	Standard and Poor's lowers Enron Corporation credit rating from B- to CC
2 December 2001	Enron Corporation files for Chapter 11 bankruptcy protection from its creditors
3 December 2001	Standard and Poor's lowers Enron Corporation credit rating to D
4 December 2001	Enron Direct Ltd put into administration. Centrica purchase certain assets and liabilities of Enron Direct Ltd for £96.4m

Industry Exposure

2.12 Amongst other debts, Enron's total exposure for gas transportation, electricity transmission and electricity distribution was £16m but, after deducting expected payments, the estimated bad debt is likely to be around £4 – 8m.

2.13 Ofgem is currently considering how the bad debts that Transco and the electricity Distribution Companies may suffer as a result of the events at Enron should be treated for price control purposes.

Appendix 3 Standard Licence Conditions

3.1 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 gas 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/gas-electricity.htm).

Gas Supply Licence

Condition 32 Duty to Supply Domestic Customers

3.2 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 Shipper Licence

Condition 3 General Obligations in Respect of Use of Relevant Transporter's Pipe-Line System

3.3 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 pipe-line system, the safe, economic and efficient balancing of its system, or the due functioning of the arrangements provided for in its Network Code.

Gas Transporter Licence

Condition 4D Conduct of Transportation Business

3.4 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

3.5 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)

3.6 Gas transporters must, in their authorised area, develop and maintain an efficient and economical pipe-line system for the conveyance of gas.

Gas Act 1986 Section 9(1A)

3.7 Gas transporters must facilitate competition in the supply of gas.

Electricity Supply Licence

Condition 9 Compliance with CUSC

3.8 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

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

Condition 20 The Master Registration Agreement

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

Condition 32 Duty to Supply Domestic Customers

3.11 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

3.12 In the provision of use of system the distribution licensee shall not discriminate between any persons or class or classes of persons.

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

3.13 On application made by any person the distribution licensee shall offer to enter into an agreement for use of system.

Condition 4C Functions of the Authority

3.14 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

3.15 The distribution 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

3.16 The distribution licensee must be a party to the BSC Framework Agreement and comply with the BSC.

Condition 14 The Master Registration Agreement

3.17 The licensee must be a party to and comply with the provisions of the Master Registration Agreement.

Condition 26 Compliance with CUSC

3.18 The licensee must be a party to the CUSC Framework Agreement and comply with the CUSC.

Electricity Transmission Licence

Condition 7 Licensee's Grid Code

3.19 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 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

3.20 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

3.21 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

3.22 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

3.23 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

3.27 The licensee must be a party to the BSC Framework Agreement and comply with the BSC.

Condition 19 Compliance with CUSC

3.28 The licensee must be a party to the CUSC Framework Agreement and comply with the CUSC.

Appendix 4 Acceptable types of credit cover

4.1 This Appendix explains the different types of credit cover that are accepted by industry parties. It also provides an outline of the procedure involved for obtaining a credit rating.

Gas transportation (Transco)

4.2 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.

NGC – TNUoS and BSUoS

4.3 NGC currently accepts the following:

Short term debt rating

- An Approved Credit Rating of not less than A1 by Standard and Poor's Corporation 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 rating group) or not less than Baa3 (Moody's Investors Services) or an equivalent rating from these or other reputable agencies approved by NGC.

4.4 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 a company that holds an Approved Credit Rating;
- a letter of credit;
- cash in an escrow account.

Electricity Distribution Companies

4.5 The credit cover provisions are set out in Schedule 1 of the DUoSA. Suppliers must hold an approved credit rating[27]. 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
- money in an escrow account.

Gas energy balancing

Energy Balancing Credit Rules

4.6 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;

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

- 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;

  - 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.

4.7 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 (or less if agreed by the shipper).

4.8 A modification[28] has recently been proposed that would apply to credit ratings used for both transportation and energy. It is proposed that where the credit rating of a guarantor (or any other body providing surety) is revised downwards to a speculative grade Transco could reduce the Secured Credit Limit and Code Credit Limit immediately and apply escalation processes.

[28] Modification 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'

BSC

4.9 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.

Credit Ratings

4.10 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.

4.11 A credit rating is the 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 credit worthiness or to specific financial obligations (for example company bonds).

4.12 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.

Credit Rating Agencies

4.13 Two of the main credit rating agencies are Standard and Poor's and Moody's, with minimum investment grade categories of BBB– and Baa3 respectively.

Rating Surveillance and Review

4.14 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's[29]:

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.

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.

[29] 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

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.

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

The following table broadly compares the 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

4.15 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