

**Recommendations for best practice  
guidelines for gas and electricity network  
operator credit cover**

**Consultation Document**

September 2004      226/04

# Summary

Gas and electricity supply and gas shipping are now fully contestable. Competition is established and continues to develop. It is the nature of competitive markets that some participants will fail while others prosper.

The failure of some high-profile energy suppliers called into question the effectiveness of the current mechanisms for managing the financial risk posed to their respective markets and to the consumer as a result of the failure of a gas or electricity supplier or gas shipper. In February 2003 Ofgem<sup>1</sup> published a conclusions and proposals document<sup>2</sup> which concluded the high level principles that should be applied and that further detailed work needed to be undertaken on credit cover arrangements for transportation. It also concluded that industry parties were best placed to identify best practice in comparable industries and to develop their own credit cover arrangements accordingly.

This consultation document sets out the recommendations of the four industry workgroups (the 'Workgroups') formed to identify best practice in comparable industries and develop best practice guidelines for gas and electricity network operator credit cover arrangements. It also sets out Ofgem's views on the mechanism and criteria for the pass through of bad debt for gas and electricity network operators.

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<sup>1</sup> Ofgem is the Office of the Gas and Electricity Markets Authority. The terms 'Ofgem' and 'the Authority' are used interchangeably in this document

<sup>2</sup> Arrangements for gas and electricity network operator credit cover. Conclusions and proposals document 06/03. [http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/1836\\_14feb03.pdf](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/1836_14feb03.pdf)

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# 1. Introduction

1.1. Ofgem and participants in the gas and electricity markets have a shared concern that the various credit cover arrangements in regulated areas of the industry which are designed to mitigate risk of exposure to bad debt have not been consistent and/or appropriate. This document is the third in a series and includes considerations of detailed work that has been undertaken by the Workgroups, and makes proposals for taking the work forward.

## ***Previous work***

1.2. In March 2002, Ofgem published a consultation document<sup>3</sup> that opened a consultation process regarding the appropriate arrangements for covering credit risk and mitigating costs to which parties in the gas and electricity markets are exposed, when a gas or electricity supplier or a gas shipper fails.

1.3. In February 2003, Ofgem published its Conclusions and Proposals<sup>4</sup> following that consultation. In the document, Ofgem set out its conclusions that:

- Gas balancing credit cover should be secured on a cash or Letter of Credit ('LoC') basis, in line with those arrangements in the electricity Balancing and Settlement Code ('BSC');
- Existing credit cover arrangements for all NWO transportation and metering charges (including capacity, commodity, connection and use of system) need to be reformed to bring them into line with best commercial practice in comparable competitive industries; and
- These objectives could be progressed by the industry through appropriate governance mechanisms, including modifications to industry codes and agreements.

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<sup>3</sup> 'Arrangements for gas and electricity supply and gas shipping credit cover', a consultation document, 24/02.

<sup>4</sup> 'Arrangements for gas and electricity network operator credit cover – conclusions and proposals', February 2003, 06/03.

1.4. The 2003 document also stated that when considering proposals to modify codes and disputes referred to the Authority under industry agreements, Ofgem would have regard to the following principles:

- Incentives need to be placed on Network Operators ('NWO') to manage debt efficiently;
- Credit arrangements must not be unduly discriminatory, nor prevent the promotion of competition;
- Credit arrangements should provide a secure and stable business environment; and
- Ofgem should take measures to protect consumers from loss of supply in the event of a supplier's or shipper's failure to maintain adequate levels of cover or default on payments due.

1.5. Ofgem also concluded that:

- No ex-ante allowance should be made for bad debt when setting future price controls, thus exposing NWOs to the full cost of incurred losses. Nevertheless, it is reasonable that NWOs be allowed to recover all or a proportion of incurred bad debt losses if they have acted efficiently; and
- Ofgem should work with the industry to establish mutually agreed best practice guidelines, which should set out the kind of efficient arrangements NWOs would need to demonstrate in order for incurred bad debt losses to be considered for pass-through under network price controls.

1.6. In April 2003, Ofgem held a public seminar at which its conclusions and proposals were presented and discussed. There was general support for Ofgem's proposal to establish a number of industry workgroups to take this work forward. The four Workgroups were formed, to consider:

- Identification and assessment of credit exposures;
- Protection of credit exposures;

- Payment terms and billing and collection procedures; and
  - Remedies for payment default.
- 1.7. Membership of the Workgroups comprised representatives of all segments of the gas and electricity industries, plus external advisors and Ofgem observers. Each was chaired by an industry representative. The chairmen, together with Exxon Mobil (as a representative of the gas shipper community) and BizzEnergy (as a representative of the small supplier community) sat on the steering group, which was chaired by Ofgem.
- 1.8. Each of the Workgroups has presented its report and these have been reviewed by the steering group. Chapter 4 summarises the reports of the Workgroups. The summary has been discussed and agreed by the steering group. Ofgem has also received dissenting views from a number of NWOs and from smaller suppliers which are summarised in Chapter 5.

### ***The Role of the Regulator***

- 1.9. This section outlines the regulatory framework of credit cover within which market participants, licensees and Ofgem operate.
- 1.10. Ofgem's principal objective under the Gas Act 1986 and Electricity Act 1989 is to protect the interests of consumers, wherever appropriate by promoting effective competition. In the context of the failure of gas or electricity suppliers or gas shippers and having regard to its statutory duties, Ofgem aims to:
- Minimise as far as practicable the actual or threatened disconnection of consumers, resulting from their supplier's failure to pay;
  - Protect consumers from the costs of inefficient security against potential or actual failure; and
  - Protect responsible industry participants and their consumers from the costs of another party's failure.

## ***Gas and electricity industry background***

- 1.11. Gas and electricity supply and gas shipping are now fully contestable and competition is established and developing. It is the nature of competitive markets that some participants will fail.
- 1.12. Ofgem considers that it is generally accepted that counter-party risk is a normal feature of contestable markets and the way in which companies manage and mitigate that risk is normally a commercial decision for them. In some instances a company may decide that the risk of default warrants an increase in price or a request for payment in advance. If the risk of default is perceived to be sufficiently great, the company may refuse to trade without advance payment. Where competition is sufficiently developed, credit cover arrangements are entirely a matter for the parties involved.
- 1.13. However, in their monopoly activities, the gas and electricity NWOs are obliged to offer a service to shippers and suppliers on non-discriminatory terms. In particular, NWOs can be required by various industry codes and agreements to extend credit to counterparties. Consequently, Ofgem does not consider it reasonable or appropriate to allow credit cover requirements to be left entirely to commercial negotiation. The applicable licence conditions are set out in Appendix 4.

## ***Existing mechanisms for change – Industry Codes***

- 1.14. The gas transportation and distribution networks, the electricity transmission networks, and the gas and electricity balancing arrangements are governed by industry codes. These codes are multilateral agreements with defined governance procedures that include mechanisms to modify the arrangements, subject to consultation procedures and Ofgem's approval after all the relevant information has been considered.
- 1.15. Ofgem is not able to propose modifications<sup>5</sup> to the codes. Proposals for change can only be submitted by defined groups, including parties to the codes. Therefore any changes to the codes, including the credit arrangements contained

therein, rely on relevant parties proposing modifications. Proposals are evaluated, developed and consulted upon by interested parties against the relevant objectives applicable to each code. However, the Authority must decide on code modifications (and determinations) that come before it, each on their own merits and having regard to the relevant criteria. Accordingly, nothing in this document can prejudice current and future decisions by the Authority or be taken to fetter the discretion of the Authority in any way.

## ***Existing mechanisms for change - Distribution Companies' Use of System Agreements***

- 1.16. The electricity Distribution Companies' Use of System Agreements ('DUoSAs') are bi-lateral agreements between Distribution Network Operators ('DNOs') and Users (usually suppliers) and are not subject to a formal, codified, governance processes or a change mechanism. As a result they can only be changed by the mutual agreement of the parties. Where the two parties cannot reach agreement, the dispute may be referred to Ofgem for determination.
- 1.17. The determination of a dispute arising out of a DUoSA may lead to widespread change in the terms applying generally to such agreements. This might happen because, in the light of a particular determination, some existing arrangements are considered to discriminate, and therefore require alteration. More generally, DNOs and their counterparties may seek to initiate change to bring their arrangements into line with those established by the new arrangements.
- 1.18. Ofgem publishes determinations, which set out detailed reasoning for the decisions reached. This may assist all DNOs and their counterparties to assess whether any change is necessary or desirable to their own arrangements. It must be recognised, however, that there may be a range of alternative arrangements that may be objectively justifiable under the principles of effective credit management and tailored to individual circumstances.

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<sup>5</sup> The terms modification and amendment are used interchangeably in this document.

## ***Regulatory intervention***

- 1.19. Mechanisms and procedures already exist that allow Ofgem to appoint a Supplier of Last Resort ('SoLR') in certain circumstances. If implemented, this has the effect of providing a transparent framework for managing the transfer of consumers from one supplier to another and, to a degree, managing industry losses arising from the failure of a gas or electricity supplier. Nevertheless, these arrangements would not provide protection for debts incurred prior to insolvency.
- 1.20. In the discharge of its objectives and duties under the Gas Act 1986 or Electricity Act 1989, regulatory intervention by Ofgem, such as licence modifications or other steps, may also be justified in relation to issues that industry parties may not otherwise have an incentive to address. These issues include but are not limited to:
- The allocation of costs between consumer groups;
  - The impact on the competitive supply market; and
  - The overall efficiency of the gas and electricity industry.
- 1.21. A number of issues must be taken into account when considering whether changes to the existing credit arrangements will further facilitate competition by lowering barriers to entry but without simultaneously undermining confidence in the efficient operation of the gas and electricity markets. These include:
- The rules for dealing with bad debt should not distort competition;
  - The effect on other parties of exposure to a failed party's bad debt; and
  - The effect of a requirement to provide credit cover against the risk of default.
- 1.22. Reducing barriers to entry (through reduced working capital requirements and/or less exposure to risk) can bring benefits to consumers since competitive pressures can drive down prices.

## ***Aligning the gas and electricity markets***

- 1.23. Ofgem considers that, to the extent that it is appropriate, the same framework should be adopted in both the gas and electricity industries in order to determine the requirements for credit cover (or other ways in which the cost of potential or actual failure can be reduced). There should also be appropriate arrangements to ensure that parties are not under an incentive to increase other parties' exposure to risk. This does not necessarily mean that requirements should be the same throughout the gas and electricity industries. It may be more appropriate to align the requirements between similar processes, for instance in areas where the exposure to risk is similar because of the way in which industry processes operate.

### ***Structure of this document***

- 1.24. Chapter 2 sets out an Impact Assessment relevant to the consideration of credit cover issues in the regulated areas of the gas and electricity industries.

Chapter 3 outlines the proposed timetable for completion of best practice guidelines for credit cover arrangements and their implementation within industry procedures.

Chapter 4 sets out the conclusions and recommendations of the Workgroups on best practice guidelines for credit cover arrangements.

Chapter 5 presents other views on best practice guidelines, including dissenting views on the Workgroups' proposals detailed in chapter 4 and alternative options.

Chapter 6 contains Ofgem's views on the proposals for best practice guidelines detailed in chapters 4 and 5 and, where Ofgem disagrees, sets out its counter proposals. The chapter also highlights those areas that Ofgem considers should be subject to further development.

Chapter 7 describes the criteria for the future recovery of bad debt by NWOs in the event of a market failure.

Chapter 8 summarises the areas identified within this document as requiring further development.

Appendix 1 details existing gas and electricity industry payment and billing terms and procedures.

Appendix 2 contains the Workgroups' views on the advantages and disadvantages of changing electricity industry non-half-hourly and half-hourly billing frequencies.

Appendix 3 sets out the Workgroups' views on mutual insurance.

Appendix 4 contains the standard licence conditions relevant to credit cover and bad debt.

1.25. Responses to this document should be sent by 26 November 2004 to:

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London  
SW1P 3GE

or by email to [Nick.Simpson@Ofgem.gov.uk](mailto:Nick.Simpson@Ofgem.gov.uk)

1.26. Where paper copies of responses 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, it would be appreciated if, as far as possible, responses were provided in a form that can be placed in the Ofgem library and on the Ofgem website.

1.27. If you have any queries about this consultation please contact David Edward (tel: 020 7901 7435) or Bryony Sheldon (tel: 020 7901 7174).

## 2. Impact Assessment

### *Objective*

- 2.1. The objective of this work is to facilitate the establishment of transparent, fair and cost effective arrangements for protection against credit risk in the regulated areas of the gas and electricity industries.

### *Overview of key issues*

- 2.2. A detailed review of existing arrangements can be found in Ofgem's March 2002<sup>6</sup> and February 2003<sup>7</sup> consultation documents.
- 2.3. This work addresses industry participants' concerns that the current arrangements are based more on historical activity and less on analysis of the appropriate arrangements for the prevailing circumstances and climate and that this has led to inconsistency. This situation could be either costing parties more than necessary or leaving parties exposed to credit risk where they should not be. There is a particular concern that existing arrangements do not adequately address the risk of default by the largest users of the networks and, as a result, are a source of systemic risk.
- 2.4. This document addresses four areas of NWO credit activity and seeks to establish guidelines that should, as far as is reasonably practical, conform to best commercial practice in comparable competitive industries. The key issues addressed for consistency and appropriateness are:
- Setting unsecured credit limits;
  - Reaction to credit rating downgrades and other measurable deteriorations in creditworthiness;
  - Credit scoring;
  - Establishing value at risk;

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<sup>6</sup> 'Arrangements for gas and electricity supply and gas shipping credit cover', a consultation document,

- Protection of credit exposure;
- Management of a counterparty approaching its credit limit;
- Remedies for default on credit cover;
- Payment and billing terms; and
- Remedies for payment default.

2.5. The Workgroups have established a set of proposals that in their view reflect best commercial practice in comparable competitive industries. Nevertheless, other parties have expressed dissenting views. In this document, Ofgem expresses views on the extent to which the Workgroups' and other parties' views on best practice conform to the high level principles set out in Ofgem's February 2003 document.

### ***Options***

2.6. Following the conclusion of the best commercial practice guidelines, the options will be:

#### **Modification of NWO credit cover arrangements in bring them in line with the best practice guidelines**

- Among the issues to be considered in seeking to effect the options via the modification process is that the NWO credit arrangements are contained in different governance structures. Ofgem has no powers to initiate changes; it is only able to give indications of its current thinking where changes are brought forward which require final decisions or determinations by Ofgem. Even so, Ofgem cannot fetter its discretion in determining any of the matters described in this document.
- Ofgem's thinking on the application of any bad debt pass through criteria, in the event of supplier or shipper default, will almost certainly influence changes.

## **Status Quo**

- This option accepts the current situation, with all its inconsistencies, inefficiencies and anomalies.

## ***Risks and unintended consequences***

- 2.7. The risk of not addressing the issues identified include prolonging a situation where parties incur unnecessary costs, new shippers and suppliers face barriers to entry, NWOs face inappropriate credit risk and consumers potentially face systemic risk.
- 2.8. Unintended consequences arising from failure to address adequately these issues could also adversely affect the competitiveness of the gas and electricity markets.

## ***Competition***

- 2.9. The probability of new suppliers, shippers and NWOs facing undue barriers to entry is high in the area of credit cover arrangements. Therefore, failure to address inconsistencies and inappropriate arrangements could have a significant and detrimental effect on competition.

## ***Costs and Benefits***

- 2.10. The costs and benefits of implementing the changes suggested in this document have not been fully quantified. This is partially because of lack of data. However, it is recognised there are likely to be costs resulting from additional collateral requirements, plus those associated with drafting and discussion of changes to codes and agreements. There will also be costs arising from systems and procedures changes, especially where automated systems are in place.
- 2.11. The principal benefit is to better align risk protection with exposures presented by users of network systems. This can be expected to reduce risks to consumers, NWOs and other system users of failure.
- 2.12. Coupled with visibility and clarity of objective arrangements, which may make it easier for new entrants to familiarise themselves with market rules, the reduction in risk of exposure to bad debt could serve to reduce barriers to entry and

thereby facilitate competition. This can bring benefits to consumers through competitive pressures driving down prices.

- 2.13. ***Ofgem welcomes responses identifying the costs and benefits of putting in place a comprehensive set of guidelines.***

#### ***Environment***

- 2.14. The changes suggested in this document should have no impact on the environment.

#### ***Security of Supply***

- 2.15. The changes suggested in this document should have minimal impact on security of supply, although there could be a possible benefit from reduction in systemic risk of failure.

#### ***Distributional effects including 'social impacts'***

- 2.16. Some small suppliers specialise in particular types of commercial consumer and so competitive effects provide downward pressure on prices for those consumers. Where these proposals impact on this type of supplier, bringing them into line with a more consistent risk/credit cover arrangement there is the potential for costs to rise. Nevertheless, it is not envisaged that the impact will be significant on any class of consumer.

#### ***Review and compliance***

- 2.17. Ofgem envisages that the industry agreed best practice guidelines will be incorporated into the relevant industry codes and agreements. Changes to industry codes or Use of System Agreements will need to be initiated by the relevant parties as Ofgem cannot propose modifications. Signatories to industry codes or agreements are bound by terms and conditions of the codes or bilateral agreements. It is expected that industry parties will have an incentive to initiate changes in accordance with the best practice guidelines.
- 2.18. In the event of a default, a NWO's eligibility for pass through of costs under network price controls will depend on self-certification of compliance with the

best practice guidelines. Ofgem will have the ability to audit any NWO's claim for losses incurred, including in respect of compliance.

- 2.19. The success of the new credit arrangements will depend on the degree of consistency and appropriateness of the credit arrangements put in place across the gas and electricity sectors.

### ***Conclusion***

- 2.20. It is widely recognised that the improved mechanisms for better management of financial risk in the gas and electricity industries are required. While the costs and benefits of the two options (adopting best practice guidelines or the status quo) have not been quantified, it is apparent that the first option will be more beneficial.

## 3. Timetable

3.1. Ofgem recognises that further work is required in order for the new arrangements discussed within this document to become fully effective. Some of this work, such as presentation of the concluded best practice guidelines and bad debt pass through criteria, will be undertaken by Ofgem. Other matters, such as the raising of modifications to industry codes to give effect to the arrangements, will have to be undertaken by industry participants themselves.

3.2. In order to arrive at a complete set of arrangements, a number of individual pieces of work are identified within this document (summarised in chapter 8) as requiring further development. Whilst some will fall exclusively within Ofgem's remit, Ofgem considers that the majority could be carried out by industry in parallel with this consultation process. Therefore, Ofgem intends to adopt the following timetable:

- Responses to this document received 26 November 2004;
- In the interim, Ofgem and industry development work on, and resolution of, issues identified in this document;
- Publication of the final best practice guidelines and bad debt pass through criteria, January 2005;
- Modification procedures of industry codes enacted by code signatories to achieve implementation of arrangements by April 2005.

3.3 Ofgem recognises that, dependent on the grant of the necessary consent by the Authority, the Health and Safety Executive and the Secretary of State for Trade and Industry, the sale of one or more of Transco plc's local gas Distribution Networks would result in fundamental change to the structure of the gas industry. However, Ofgem envisages that arrangements developed to facilitate such a sale, which are also currently intended to be implemented in April 2005, will be reflective of best practice guidelines and underlying general principles for credit cover arrangements.

## 4. Workgroups' proposals for best practice guidelines

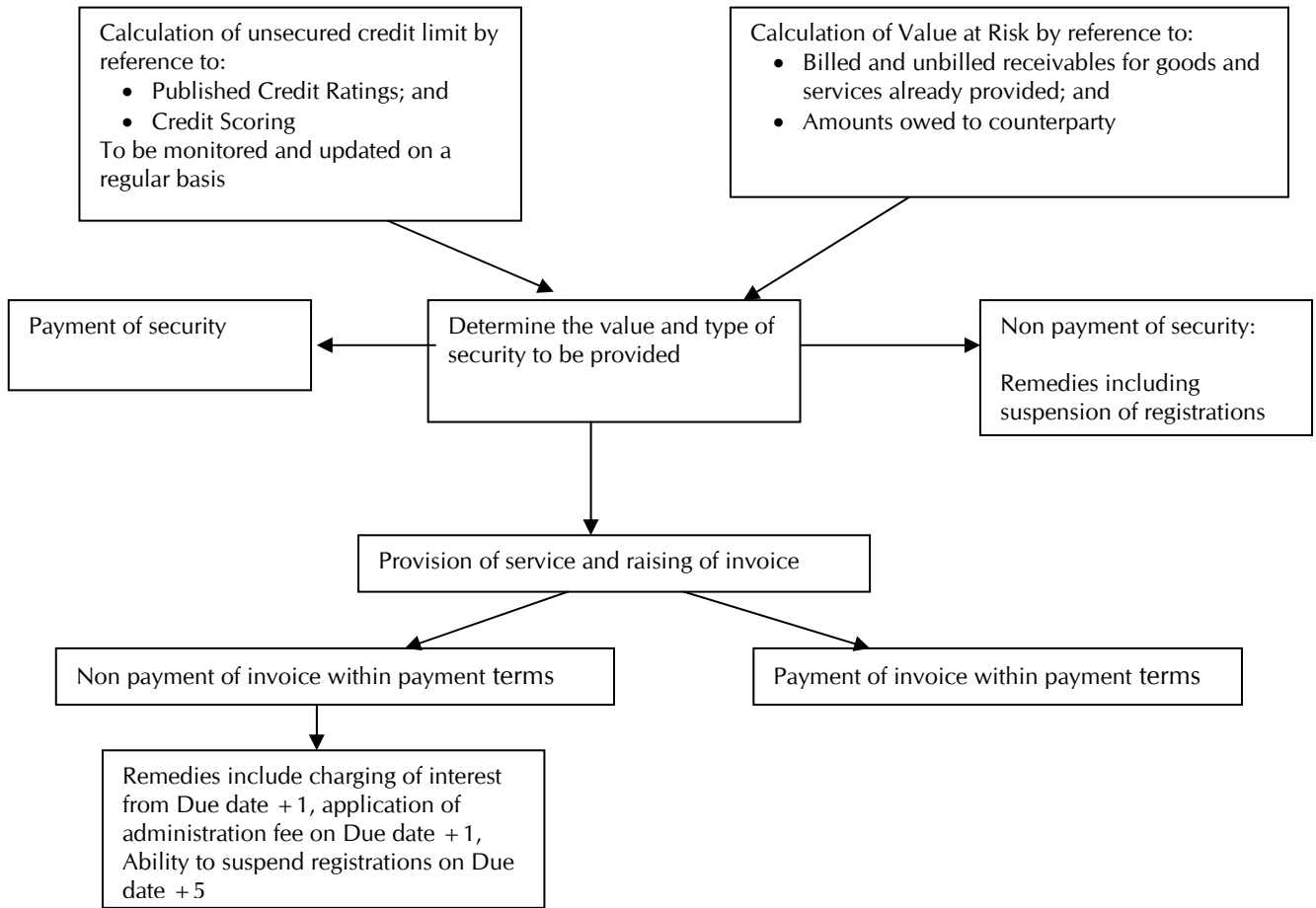
4.1. Following publication of the conclusions and proposals document in February 2003 and the open seminar hosted by Ofgem on 25 April 2003, the four industry Workgroups were formed to develop best practice credit cover guidelines for the gas and electricity industry. The work strands considered by the Workgroups included:

- Identification and assessment of credit exposure;
- Protection of credit exposure;
- Payment and billing terms; and
- Remedies for payment default.

The remainder of this chapter contains the views and recommendations of the Workgroups. The steering group has approved the contents of this chapter.

4.2. **The views and recommendations of the Workgroups are published for the purposes of consultation, and should not be read as representing Ofgem opinion.**

## Overview diagram of the proposed guidelines



- 4.3. The recommendations of the Workgroups set out in this chapter are limited to best practice credit arrangements for short term transportation or transmission charges. The credit arrangements for Long Term connections and entry and exit capacity charges are also undergoing a process of review.

## ***Workgroups' consideration of identification and assessment of credit exposure***

### ***Approach to setting unsecured credit limits***

- 4.4. Traditionally, before affording counterparties unsecured credit, the relevant commercial codes have required counterparties to have a published Approved Credit Rating ('ACR'), or to provide a guarantee from a parent or affiliate that has a published ACR, generally referred to as a Parent Company Guarantee ('PCG').

This approach excludes counterparties which can not provide a PCG, or do not have a published ACR, but who may be sufficiently creditworthy to merit a degree of unsecured credit.

- 4.5. Credit scoring has the potential to bridge the gap between those counterparties that have investment grade credit ratings and those which do not, as well as providing some granularity through which investment graded entities could be differentiated. Whilst acknowledging the potential shortcomings of credit scoring – particularly as regards the availability and reliability of relevant information – the Workgroups recognised that a more complete picture of a counterparty’s creditworthiness can be developed through the application of supplemental credit scoring techniques.
- 4.6. An alternative approach to the NWOs undertaking credit scoring to assess the creditworthiness of counterparties that are unable to provide a PCG, or do not have a published ACR, is to utilise a suitable third party product which generates credit limits for medium and small companies. The use of a third party credit product has the benefit of providing a greater degree of transparency than in-house credit scoring, is more objective and is independent of NWOs. However, it should be borne in mind that a number of these products are new and, as a result, there is as yet only limited experience of their validity. The merits of using an in-house credit scoring methodology as opposed to a third party credit scoring product are currently being further evaluated by the Workgroups.
- 4.7. It was the recommendation of the Workgroups that until such work is completed and conclusions are drawn, the use of in-house credit scoring techniques should be used.
- 4.8. Credit limits will be based on the outcome of the credit scoring process, including recognition of acceptable credit ratings. The limit will be applied to the contracting party or, subject to the conditions listed below, an affiliated credit support provider.
  - The credit support provider must offer a guarantee which is legally enforceable in Great Britain (‘GB’). The counterparty may be required to provide reasonable counsel’s opinion of enforceability, particularly if the guarantors are not GB based.

- The guarantor entity will be subject to the same credit scoring process as the buyer, and must also be willing to provide information to facilitate the completion of this process.
- The country of residence of the guarantor must have a sovereign credit rating of at least A awarded by Moody's or Standard and Poors. If the rating agencies differ, the lower rating will apply.

4.9. The proposed approach to calculating the unsecured credit limit is set out below and covers situations where the credit cycle is 12 months or less.

**Table 1 – Basis of determining range of unsecured credit**

Classification	Moody's	Standard & Poor; Fitch	Range of unsecured credit limits expressed as percentage of NWO's maximum credit limit	
			Minimum	Maximum
Investment grade – top	Aaa	AAA	100%	100%
Investment grade – high	Aa1	AA +	59%	100%
	Aa2	AA	53%	100%
	Aa3	AA-	36%	100%
Investment grade – medium	A1	A +	26%	100%
	A2	A	23%	75%
	A3	A -	13%	75%
Investment grade – low	Baa1	BBB +	9%	12.5%
	Baa2	BBB	0%	12.2%
	Baa3	BBB-	0%	6.5%
Speculative ('junk')	Ba1	BB +	0%	6.5%
Speculative ('junk')	Ba2	BB	0%	6.5%
Speculative ('junk')	Ba3	BB-	0%	6.5%
Speculative ('junk')	B1	B +	0%	6.5%
Speculative ('junk')	B2	B	0%	6.5%
Speculative ('junk')	B3	B-	0%	6.5%
Speculative ('junk')	Caa – C	CCC	0%	6.5%
No credit rating	n/a	n/a	0%	6.5%

4.10. The range of the unsecured credit limit offered for each credit rating was derived by direct reference to the one year default probabilities. Consequently, as the credit cycles for short term transportation charges are typically between two and three months, the range of the unsecured credit limit in Table 1 implies a degree of conservatism. This conservatism may, to some extent, be addressed by some

smoothing of the transition between rating grades, notwithstanding the fact that this is not evidenced by historic default probability data.

- 4.11. For the purposes of these guidelines, only credit ratings issued by three agencies – Moodys, Standard & Poor and Fitch – are deemed acceptable. Both publicly available and specially commissioned ratings are acceptable, although in the latter case provided these are reviewed at least annually. Where credit ratings produced by the various agencies differ, NWOs should apply the lowest assigned rating in determining the credit limit for the entity concerned.
- 4.12. The Workgroups considered that the risk appetite and the level of credit risk that NWOs are willing/able to bear will differ and therefore concluded that it would be inappropriate to quote credit limits in terms of fixed £m amounts; rather, they are stated as a proportion of the NWO's maximum credit limit. The maximum credit limit is defined as that which a NWO would give to its best AAA-rated counterparty.
- 4.13. In setting the NWO's maximum credit limit, the Workgroups suggested it is reasonable to use the Regulatory Asset Value ('RAV') of the NWO as a basis of this calculation. The Workgroups considered it may be impractical for a universally accepted formula, based on the RAV, to be devised for calculating the maximum credit limit. Therefore, it was suggested that NWOs should provide, on request by Ofgem, all information deemed necessary to describe the methodology employed when determining the maximum credit limit, assessing counterparties and to justify the credit limits set there under.
- 4.14. This approach was considered to be more effective than the present (generalised) situation on two grounds:
  - Differentiation between different investment grades. The current approach under, for instance, the electricity Connection and Use of System Code ('CUSC') and DUoSA is to provide unlimited credit to any counterparty with an investment grade credit rating of Baa3 or above. This was considered less effective as it does not take account of the varying creditworthiness of entities with different investment grade ratings, in particular the higher probability of default at the lower end of

the rating scale. Accordingly, the above table distinguishes between different credit ratings based on relative probabilities of default; and

- Counterparties which are not able to provide a PCG or do not have a published ACR may be sufficiently credit worthy to merit being afforded a degree of unsecured credit, something which is not possible under the current arrangements.

### ***Workgroups' consideration of reaction to rating downgrades***

- 4.15. The Workgroups considered that an important factor in minimising exposure to bad debts has been the ability of NWOs to react, either immediately or within a 30-day timescale, to material changes in the creditworthiness of counterparties. Therefore, it is proposed that upon any change in credit rating or significant market event, a NWO should revise the unsecured credit limit made available to the counterparty on one working days notice, with the change being effected immediately.

### ***Supplemental credit scoring***

- 4.16. In considering credit scoring techniques, the Workgroups had specific regard to the following issues:
- 4.17. *The relevance and reliability of information and the cost of obtaining and processing that information.* The Workgroups recognised that in many instances the desired information may simply not be available, either because it does not exist or because it is not disclosed by the (actual or potential) counterparty.
- 4.18. *Payment history.* Payments made by the counterparty represent the most readily available data (from the perspective of the NWO) in assessing creditworthiness but do not guarantee future performance. The Workgroups considered that an assessment of payment history should only take account of a counterparty's payment record against contractual terms over the last three months.
- 4.19. There has been some debate as to the reliability of payment history. On the one hand, it has been suggested that suppliers may attempt to 'disguise' their actual creditworthiness by paying certain creditors preferentially, resulting in different payment histories with different NWOs. On the other hand, it is recognised that

payment history is a classic credit signal adopted in commercial companies. Likewise, emphasis on recent payment history usefully augments historic financial information that may be out-of-date.

- 4.20. The Workgroups recognised that although payment history is not a guarantee of future payment performance, it should be regarded as significant. They considered a poor payment history a significant indicator of future payment performance, and whilst a good performance history is no guarantee of good future performance it is nevertheless not irrelevant. The Workgroups considered this especially true of small suppliers where a good payment history is evidence of a willingness and ability to settle invoices in accordance with contractual terms by effectively and successfully managing cash flow.
- 4.21. *Subjectivity.* It was recognised that, in any best practice methodology for credit scoring in comparable industries, qualitative factors will generally account for a significant proportion of the overall score, up to 40 per cent in some of the examples reviewed by the Workgroups. Likewise, judgement commonly has to be applied in interpreting quantitative data. In order to make the proposed credit scoring approach as transparent as possible, the Workgroups suggested that the weighting of the explicitly subjective ('market information') element be 10 per cent, with quantitative assessment accounting for the other 90 per cent.
- 4.22. The quantitative assessment would comprise consideration of:
- Accounting ratios based on audited financial information;
  - Verifiable non-public financial information (eg including accountants' reports commissioned by the potential counterparty but made available to the NWO); and
  - Payment history within the last three months.
- 4.23. The Workgroups did not propose that the 90 per cent weighting should be allocated between individual components of the quantitative assessment; this would be decided according to the judgement of NWO's credit risk managers. Further, it is proposed that in order to set credit limits (within the relevant range) for unrated companies, the only factor that should be considered is payment history.

- 4.24. As an example of how judgement might be applied in respect of accounting ratios, greater value would be placed on ratios based on audited accounts that had been published or otherwise made available within, say, three months of the financial year-end as compared with accounts that had been submitted only on or after the Companies House filing deadline. Likewise, the qualification of an auditor's opinion on the going concern basis would be considered more serious than a 'technical' qualification, eg non-disclosure of directors' remuneration.
- 4.25. In assessing the qualitative component, the Workgroups suggested that an NWO should consider the following sources of market information:
- Adverse press comment on financial standing;
  - Announced negative watch / potential downgrade from rating agencies;
  - Qualified auditor's letter (if qualification affects quality of financial standing);
  - Unusual share price or bond yield performance;
  - Adverse management announcements, such as material earnings warnings, significant write offs etc;
  - County Court judgements; and
  - Directors' involvement in insolvencies.
- 4.26. The Workgroups acknowledged that restricting the qualitative component to 10 per cent would potentially limit the exercise of professional judgement by credit risk managers and recognises that a higher qualitative weighting could be justified in light of the above list of information sources.
- 4.27. NWOs would be expected to maintain up-to-date credit scores. The inclusion of the most recent three months' credit history necessarily requires that element to be reviewed monthly; information relating to the other areas will only be updated periodically.

- 4.28. It will be at the NWO's discretion as to whether they perform assessments in-house or engage the assistance of professional agencies and proprietary software models when undertaking credit scoring.
- 4.29. The Workgroups acknowledged that these proposals are made in light of some accepted difficulties in carrying out credit scoring in practice where reliable and relevant information is often not readily available, particularly for start-up or small energy suppliers. For instance, were credit assessments for such companies to be based on business plans, assessment of management strength, etc, this could give rise to issues of subjectivity and confidentiality.
- 4.30. The exact amount of unsecured credit afforded to a counterparty will depend upon the results of the supplementary credit scoring such that:

*Unsecured credit limit = (Minimum percentage of credit limit for given classification + (percentage range for given classification - percentage credit score)) x NWO's maximum credit limit*

Where:

- Minimum percentage of credit limit for given classification is sourced from Table 1;
- Percentage range for given classification is sourced from Table 1; and
- Credit score is calculated as described in paragraphs 4.16 – 4.29.

- 4.31. A worked example of this approach is set out below.

As an example of how this credit scoring will input into determining the unsecured limit, the credit limit afforded to a counterparty with an A1 (Moody's) credit rating and a credit score of 80 per cent would be calculated as follows:

*26% + ((100% - 26%) x 80%) = 85.2% of the NWO's maximum credit limit*

### ***Value at risk***

- 4.32. Credit limits are applied to the value at risk ('VAR') from trading with a counterparty.

4.33. For the purposes of these guidelines, VAR in respect of use of system charges is defined as:

$$\text{VAR} = \text{Exposure} - \text{Amounts owed to counterparty}$$

Where:

- Exposure comprises billed and unbilled receivables for goods and services already provided (ie the credit cycle, which is currently a maximum of 67 days for electricity and 63 days for gas<sup>8,9</sup>); and
- Amounts owed to counterparty (a) include billed and unbilled goods and services received by the NWO and (b) can be legally offset under the relevant contracts<sup>10</sup> (ie enforceable in the event of administration or liquidation).

4.34. This definition prudently assumes that default will happen on the ‘worst possible’ day, ie when exposure is at its greatest, and that nil recovery from liquidation is achieved.

4.35. More sophisticated definitions of VAR exist, eg taking account of the expected values of the above components. These have, however, been discounted for the purposes of these guidelines on the grounds that:

- Calculating the probability distribution, other than through crude approximation, would likely be prohibitively expensive and even best endeavours forecasts can be wildly inaccurate; and

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<sup>8</sup> The respective credit cycles comprise:

	Electricity	Gas
Services consumed	up to 31 days	up to 31 days
Services invoiced	+22 days	+20 days
Invoices payment due date	+14 days	+12 days
Credit cycle	up to 67 days	up to 63 days

<sup>9</sup> Note that, in practice, NWOs cannot terminate supply or stop providing services at, say, day 67; therefore, real credit exposure is likely to be of longer period, eg an additional 30 days, being the earliest date at which DUoSA could be terminated.

<sup>10</sup> Apparently opportunities for such offsetting are not very common in practice, eg at present the DUoSA and Network Code do not permit this when evaluating cover. Bi-lateral agreements would have to be amended and there could be some resistance to this.

- Based on the material reviewed, there appears to be limited consensus as to the approach to be adopted.

### ***Workgroups' consideration of protection of credit exposure***

4.36. It was proposed that the following tools should be available to counterparties to allow them to cover their exposure. It would be for each counterparty to determine which, how many, and in what percentage they are used, placing the makeup of the 'basket' within the control of the counterparty. Tools which a counterparty might choose to include within this basket include:

- LoC or equivalent bank guarantee from bank with a long term debt rating of not less than A by Standard & Poors or Moodys;
- Cash deposit/prepayment (payment made before the delivery of the service);
- Advance payment (payment made after the delivery of the service but before contract settlement);
- ESCROW;
- Performance bond (provided by an insurance company, not a bank);
- Independent security;
- Bi-lateral insurance; and,
- mutualisation of credit risk (further details included in paragraphs 4.85 – 4.87)

4.37. In addition to the above, fixed/floating debentures were investigated but it was the Workgroups' view that, owing to complexity of structure and the uncertainty of payout, a NWO should not be obliged to accept such a tool.

4.38. The NWO will rate the tools according to the effectiveness with which risk is transferred and the conditionality of the instrument. The way in which these

tools are rated must be bound by objective criteria and the Workgroups considered that:

- A tool providing cash on demand should be rated at full value (ie 100 per cent);
- A tool that has conditionality but provides cash in a timely fashion could be rated at up to full value; and
- Where the tool is an insurance product, the insurer should be of a good rating in order for the tool to be rated at full value.

4.39. *Independent security covers security from unrelated entities (ie a credit support provider outside the ownership structure of the buyer and which has no formal or informal control of security provider by buyer, its parent company or its affiliated companies; as such independent security would not normally include parent or affiliate company guarantees).*

4.40. Independent security valued at 100 per cent of face value may be accepted subject to the following conditions:

- Credit support must be from an entity with a long term debt rating of not less than A by Standard & Poors or Moodys;
- Credit support shall be legally enforceable in the UK. This may require the entity to provide reasonably acceptable counsel's opinion;
- The entity providing support must have a registered office in the UK; and
- The country of residence of the support provider must have a sovereign credit rating of A or better.

#### ***Management of a counterparty approaching its upper limit of security***

4.41. The Workgroups discussed a range of possible alternatives to manage a counterparty approaching its upper limit of security. These included cash calling, disconnecting existing customers and preventing the registration of new customers etc. The Workgroups recognised that licence obligations can be seen as a barrier to normal commercial relationships. It also re-affirmed that nothing

should be put in place which would require over securitisation. The following recommendations emerged from these discussions:

- Ofgem should look to create a licence obligation to have a DUoSA for electricity suppliers or the relevant Use of System Agreement for gas suppliers and shippers. Some distributors would also like a general 'good behaviour' clause to be included in licences which hold a licensee in breach of its licence should it contravene security cover provisions. It is recognised that this would require modification of all Supply licences which may not be practicable or supported by Ofgem; and
- The Workgroups agreed that limited action could be taken by NWOs prior to a breach of security cover (and that doing otherwise could lead to over-securitisation). It was noted that a situation could arise immediately prior to a counterparty settling invoices in accordance with contractual terms in which a counterparty may be approaching or have reached 100 per cent of its credit limit. It was the Workgroups' view that, in such situations, posting additional security may not necessarily be the most appropriate response, as this could result in over-securitisation. In such situations NWOs should closely monitor their counterparty's indebtedness and only at 100 per cent should rapid measures, as outlined in the following section, be introduced. However, the Workgroups considered that it would be prudent for a NWO to issue a warning when a counterparty approaches 95 per cent of its credit limit.

4.42. It was the view of the Workgroups that if a counterparty experiences an increased/decreased level of trade with the NWO, a reassessment of its credit cover required may be necessary.

### ***Remedy for default - Credit Cover***

4.43. The following principles were agreed to manage situations where a party has been requested to vary the level of lodged credit either through indebtedness being in excess of 100 per cent of credit cover or through a reassessment of cover required:

- NWOs should test each party's indebtedness every day. If in excess of 100 per cent of credit cover (unsecured credit and security posted), the party should be cashcalled one business day after surpassing 100 per cent of credit cover, with payment due 2 business days later (24 hours to dispute, either cancelled or has to be paid next day). The cashcall will be sufficient to bring indebtedness down to 80 per cent. If no payment is received, Ofgem should be informed;
- In situations where a reassessment of cover deems that the counterparty should increase the level of cover posted, the party should be given one month to respond to any such request;
- If such requests are not complied with then the ultimate sanction of that party being unable to register any more customers and all new registrations being suspended should be imposed; and
- NGC does not have recourse to suspending registrations. If parties fail to comply with credit requests under the CUSC, action must be taken by Ofgem to enforce licence compliance. Following failure of the processes outlined above, Ofgem should issue enforcement notices, which, if unobserved, should be followed up by fines and licence revocation.

## ***Workgroups' consideration of payment and billing terms***

### ***Availability of data for billing processes***

- 4.44. Work was undertaken to review whether it would be possible to reduce the amount of credit taken by industry participants by accelerating the timescales along which data is made available for billing and bills are posted. This area was only reviewed at a high level as the Workgroups considered this issue lay at the extreme of its terms of reference.
- 4.45. The conclusions reached were that the likely costs of changing complex and often interdependent industry IT systems, to facilitate such an improvement, would not be justified by the benefits likely to emerge from such a development.

The timescales associated with introducing a significant change were also a factor in this recommendation.

- 4.46. Consideration was given to whether it might be possible to improve the quality of data on which invoicing is based. It was thought that two ways this might be achieved could be by reducing the amount of estimated/forecasted data used in the process or by improving data quality. Either of these steps could reduce the number of disputes and thus facilitate improvements to the overall billing and collection process.
- 4.47. The Workgroups concluded that the likely costs of changing industry IT systems and the processes associated with them, in order to reduce the amount of estimated/forecast data, would not be justified by the benefits likely to emerge from such developments. Indeed, it was thought that any such changes may result in delays to the billing process whilst actual data was awaited.

### ***Billing Frequency***

- 4.48. The possibility of increasing or reducing the billing frequency was considered by the Workgroups. Existing practice is shown at Appendix 1 and the considerations of the Workgroups as to the advantages and disadvantages of changing electricity industry non-half-hourly ('NHH') and half-hourly ('HH') processes can be found at Appendix 2.
- 4.49. Increasing the frequency of billing has the benefit of reducing the amount of credit provided, but the associated drawback of this is that:
- In order for this to be achieved it is likely that more forecast or estimated data would be required;
  - Administrative costs of all parties would increase due to the increased volume of invoices and payments generated; and
  - Financing costs of industry participants would increase because of the increased cash requirement and a counter-balance would be required.
- 4.50. Any move towards more frequent billing would impact on a number of areas. An example of the impact on a DNO, its suppliers and associated industry

systems of moving to fortnightly billing has been worked through to evaluate such a move. These impacts may include:

- DNO working capital requirements would reduce from the existing 60 days to an average of 45 days (assuming no other changes made in the billing / payment cycle). Supplier working capital requirements would increase by an equivalent level. Cost of capital for suppliers is more than for DNOs, therefore industry costs would increase overall (15 days DUoS @ additional cost of capital). Assuming annual DUoS of £230m and a 3 per cent difference in cost of capital, this would equate to a cost increase of £0.3m in each DNO area;
- The cost of invoice production, validation, payment generation and payment processing would increase. An additional 13 'cycles' annually at a cost of £50k to industry participants in a DNO area would cost £0.65m; and
- Industry systems would need to be amended. The cost this would entail is difficult to estimate, but the cost of changing systems to accommodate revised structure of charges requirements was estimated at between £0.5m and £4m per DNO in the Regulatory Impact Assessment of Ofgem's Structure of electricity distribution charges: Initial conclusions document, June 2003. Costs to accommodate more frequent billing were thought to be towards the lower end of this range. In addition, national systems would require amendment, whilst administration costs would also increase.

4.51. An increase in billing frequency would reduce the credit exposure of NWOs and thus enable credit cover requirements to be reduced. However, using the example above, the savings accruing to suppliers are unlikely to outweigh the cost of working capital increase resulting from the more frequent payment cycle.

4.52. The end result of these changes would be a significant capital cost and increase in operating costs which would need to be recovered from consumers.

4.53. The Workgroups concluded that the economic benefits of being required to post reduced levels of credit cover as a result of an increase in the frequency of

billing would be outweighed by increased operating costs. It was therefore concluded that existing billing frequencies should be retained.

### ***Payment Terms***

- 4.54. Payment terms were reviewed across the industry and existing practice is summarised at Appendix 1. It was the consideration of the Workgroups that payment terms are not entirely consistent across all sectors, but these differences appear to exist for good commercial reasons.
- 4.55. Any variation to existing terms would impact on the cash flow position of market participants and because of this would be difficult to gain agreement to in isolation. Any change would need to be part of a wider package which re-balanced any cashflow deterioration/improvement.
- 4.56. A further factor considered was the ability of market participants to validate invoices and process payments more expeditiously than is possible under the current processes. It was felt that this may not be possible, and that if it were costs would increase as a result. However the Workgroups considered that a move to e-billing would help with the validation process.
- 4.57. It was concluded that existing payment terms should continue, but all payments should be via electronic or cleared funds.

### ***Workgroups' consideration of remedies for payment default***

#### ***Follow-up Process***

- 4.58. It was felt that an elaborate follow-up process was neither warranted nor would one be effective. Given the highly structured industries in which they operate and the relatively small numbers of market participants, members of the Workgroups were of the opinion that a very short follow-up process was required. This would be supplemented by a rapid move to effective remedies for non-payment.
- 4.59. Whilst the Workgroups recognised the importance of following the strict guidelines below, it was felt there should be some scope for companies to

diverge although companies should be prepared to both explain and justify these actions.

**Table 3 Follow-up guidelines**

Number of days after default	Action suggested
Day 0	Invoice due date
Day + 1	Interest and admin fee trigger
Day + 1	NWO to issue a formal request as to statement of position and how default is to be remedied
Day + 3	Formal supplier response is required
Day + 5	Ability to suspend all registrations and commence SoLR process

The notice of default should be issued to the notified contract manager of the counterparty's staff. This notice of default and associated response should be copied to Ofgem – the Workgroup stated that it is expected that Ofgem would take an active role in the process.

- 4.60. Commercial experience suggests that initiating pre due date contact to ensure payment is 'on its way' can be extremely useful. The Workgroups suggested that NWOs might wish to selectively call counterparties at due date -3 to prompt payment. If payment is not made by the due date + 1 telephone plus fax/e-mail contact should be made by the NWO with the counterparty by 12.00 noon on that day. This would enable genuine payment errors to be rectified that day. Interest becomes chargeable from due day + 1, if no payment is made, in line with current agreements.
- 4.61. This recommendation reflects the view of the Workgroups that if deliberate late payment to achieve cash flow benefit is adequately penalised, the only reason for non-payment will be where a market participant is experiencing financial problems. The Workgroups considered that enabling the existence of such problems to become apparent as soon as possible would benefit both industry and consumers. The Workgroups further considered that these recommendations would allow any problems with payments going astray to be resolved promptly, causing a minimum administrative burden and that whilst these recommendations should be codified into industry standard agreements, companies should retain the commercial freedom to introduce other steps should they deem these to be effective.

### ***Disputes***

- 4.62. Whilst the processes for dealing with disputes are well documented within existing industry processes and standard agreements, the practical application of these processes appears to differ across industry sectors.
- 4.63. The Workgroups recommended no changes to existing processes, but suggested that the rules be applied promptly and with support from Ofgem where required.

### ***Interest on late payments***

- 4.64. Interest on late payments is currently charged at either 3 per cent or 4 per cent above base rate. Neither of these rates is considered to be sufficiently penal to deter late payment as the rate charged may be close to the cost of borrowing for some industry participants. In addition, as no minimum charge currently exists, it may be uneconomic to raise invoices for smaller amounts.
- 4.65. It was recommended that a penal interest rate should be charged on late payments. The interest charge should encourage the debtor to pay on time (ie companies can avoid these extra costs by paying both according to terms and on time). A penal interest rate of Bank of England base rate plus 8 per cent was recommended as it is deemed high enough to prevent companies from gaming the system and it is also consistent with the Late Payment of Commercial Debts (Interest) Act 1998. Until payment is received interest will be compounded on a daily basis.
- 4.66. Likewise, the Workgroups considered that NWOs should be expected to pay credits on time. It was recommended that the same interest rates apply to late credits from the date on which the credit falls due, to the actual date of payment. In practice NWOs may issue a credit note to counterparties who have overpaid which are then subsequently used by the counterparty to offset a later invoice. Late payment interest should not apply once the credit note is issued or where a counterparty has opted to offset a later invoice with a credit.
- 4.67. It should be noted that the application of interest from the due day was not universally agreed by all members of the Workgroups. Two alternative approaches were also suggested displaying the following characteristics:

- Interest due only from due day + 2 to allow for genuine payment omissions; or
  - Use of tiered interest rates, for example, base rate + 4 per cent up to due day + 2 and base rate + 8 per cent thereafter.
- 4.68. It should be noted that NWOs were not in favour of these alternative approaches due to the costs of upgrading systems and the possibility of counterparties taking advantage of two days low cost credit.
- 4.69. In addition to the penal interest rate it was recommended that an administration/compensation charge be levied in line with the Late Payment of Commercial Debts (Interest) Act 1998. More detail on this can be found at [www.payontime.co.uk](http://www.payontime.co.uk). Debts of between £100 and £999.99, £40 compensation; from £1,000 to £9999.99, £70 compensation; £10,000 and above, £100 compensation. The follow-up and remedies applied to non-payment of interest should align with those applied to the original service invoice.
- 4.70. The Workgroups identified that there are a number of different invoices which counterparties within the gas and electricity industry could expect to receive each month. There are four in gas - commodity, LDZ capacity, NTS capacity and reconciliation, whilst in electricity there are two - Non half-hourly and half-hourly. However, the Workgroups considered that the administration charge and interest charge should be levied on the total of each individual invoice (or schedule of invoices in terms of half-hourly invoicing), less any notified bona-fide dispute (each time a payment becomes overdue).
- 4.71. The Workgroups recommended that NWOs should be given discretion to waive penalty interest and / or fixed charges provided there is no undue discrimination.
- 4.72. Interest payments should also be applied to late payments of credits relating to shippers. For example, under the Network Code, credits should be paid back to shippers where there is no netting off agreement in place. If these are not paid back on the due date, interest should be paid on the amount owed to the shipper for the period which the credit has been owed to them. A standard interest rate was recommended for application throughout.

### ***Codification of Procedure***

- 4.73. Given that NWOs would be required to demonstrate to Ofgem that all reasonable efforts had been taken to mitigate potential losses, the Workgroups considered that any such remedies for payment default solution should be transparent to all parties, 'rule based' and properly codified; requiring revised procedures to be incorporated into revised industry codes / industry agreements. Whilst the Workgroups recognise the importance of following these procedures, some commercial freedom should be allowed, allowing companies' scope to diverge where they are able to both explain and justify any such divergence.

### ***Ofgem involvement***

- 4.74. In the event of any counterparty's potential failure, the Workgroups agreed that Ofgem should be expected to take an 'active' role in reinforcing their obligations and adding support to the general escalation process. The Workgroups propose that any notices of default and associated responses should be copied to Ofgem.
- 4.75. Similarly, NGC does not have recourse to suspending registrations. If parties fail to comply with credit requests under the CUSC, action must be taken by Ofgem to enforce licence compliance (ie issuing of enforcement notices, which, if unobserved, should be followed up by fines and licence revocation).

### ***Implementation***

- 4.76. Implementation of the above guidelines would require modifications to be effected to the relevant licences and codes.
- 4.77. As part of the implementation process all current parties operating in the energy market should ensure they are compliant with the new guidelines on day one. Ofgem could/should consider making it a short-term licence requirement, provided there is sufficient lead time to recruit additional resources, changes systems and process, etc, as required.

## ***Workgroups' consideration of other matters***

### ***Initial unsecured credit limit for all counterparties***

- 4.78. On 3 September 2003 a group of small suppliers wrote to Ofgem expressing concern that credit cover requirements could lead to an undue barrier to entry and that the risks presented to the NWOs by small suppliers are not material. They therefore proposed to provide small suppliers (or, in effect, all counterparties) with a 'free' credit limit, with Ofgem guaranteeing pass through for any bad debts incurred as a result. This proposal was made with a view to overcoming the apparent lack of creditworthiness of start-up or small energy suppliers. The group of small suppliers estimates that small suppliers (defined as those without a credit rating) account for around 1.5 per cent of the total power supplied in the UK. It is argued that with a potential risk of around 3 months' debt, the gross potential exposure to NWOs if all small suppliers failed in a year is 0.375 per cent of their turnover. Allowing for an allowance of, for example, 50 per cent for sums recovered by a receiver, the net shortfall would be 0.1875 per cent of turnover.
- 4.79. The letter sets out that under this 'worst-case' scenario, automatic pass through of these sums in regulated charges would raise end user prices by 0.075 per cent. In a more realistic case, where only 10 per cent of suppliers fail in any one year, the rise in end user prices is 0.0075 per cent. The group of small suppliers considers that this is not a material risk to the industry, when weighed against the benefits of the downward influence on end user prices that having effective competition brings.
- 4.80. The Workgroups' view is that the provision of unsecured credit to parties that cannot demonstrate their creditworthiness is inconsistent with credit risk management best practice in any industry; accordingly, it does not form part of these proposed guidelines.
- 4.81. However, the Workgroups acknowledge that free credit limits were applied in the gas industry for 2 -3 years following the introduction of Transco's Network Code in 1996 and that this contributed to some degree to the development of the market at that time.

4.82. The small suppliers believe that the materiality of any credit failure and its impact on the NWOs and the market should be a key element of the consideration of its treatment. Large infrequent failures may be significantly more material than smaller failures and this should be recognised in any credit methodology.

***Recovery of incremental costs incurred by NWOs***

4.83. NWOs are looking to Ofgem to address the recovery of any incremental costs incurred by NWOs as a result of complying with the new arrangements. Costs are likely to increase as a consequence of employing credit scoring techniques (either in-house or by use of a third party product).

***Further scaling of NWO’s maximum unsecured credit limit***

4.84. It has been suggested that it may be appropriate that for weaker credit counterparties the NWO’s maximum unsecured credit limit is further scaled according to the size of the counterparty based on most recent financial information provided. The scaling will only be applied to unrated counterparties or those with BBB credit ratings or lower. For an affected party the NWO’s maximum unsecured credit limit will be capped by a percentage of its shareholder’s net worth as reported in its own or its guarantor’s audited balance sheet not more than 30 months prior to the credit assessment date.

Rating	Maximum credit limit capped by percentage of shareholders’ funds:
Aaa - A / AAA – A	Limit not applied
Baa1 / BBB +	20%
Baa2 / BBB	15%
Baa3 / BBB-	10%
Lower rating or unrated	5%

***Mutualisation***

4.85. A significant amount of time has been spent looking into the issue of mutual insurance. Insurance could be taken out voluntarily by one or more industry groupings, each one creating enough critical mass to make ‘self insurance’ a viable proposition.

- 4.86. This is a complex area and whilst the Workgroups believe there is potential for a mutual insurance offering to be added to the 'basket', more preparatory work is required. Please see Appendix 3.
- 4.87. To develop this concept it is further recommended that Ofgem considers the issues surrounding mutual insurance and identify the economic benefits that are likely to result. This could be achieved with a feasibility study, which will require some industry funding as there is a need for insurance specialists, rather than industry credit specialists, to take this forward.

### ***Summary of Recommendations from the Workgroups***

- 4.88. The main recommendations of the industry Workgroups are for NWOs to determine the level of any unsecured credit limit afforded to counterparties by reference to published credit ratings and also by undertaking an element of credit scoring. The Workgroups have concluded that mutual insurance could yield economic benefits to some participants and recommend a feasibility study be undertaken. The industry Workgroups consider that billing frequencies should be retained as an increase in the frequency will increase costs to all parties and change the relative cashflow of industry participants. A short follow up process for non payment of invoices was recommended which includes the application of interest and administration charges in instances where payment is not in accordance with contractual agreement.
- 4.89. ***Ofgem invites views on the Workgroups' recommended best practice credit cover guidelines.***

## 5. Other views on best practice guidelines

### *Identification and assessment of credit exposure*

5.1. Dissenting NWOs consider that the proposed arrangements for identification and assessment of credit risk and monitoring and collateralisation of exposures are unnecessarily complex, would be administratively costly, would not benefit market participants (and may disadvantage some) compared to present arrangements, would increase scope for discrimination, and may not be consistent with best commercial practice in comparable competitive industries. There was a recommendation for a simpler approach:

- Exposures arising from late payment should be collateralised in the ratio 2:1 (collateral of value equivalent to two days charges for every day a payment is late), together with a penalty interest charge; and
- New entrants should be required to post a fixed security deposit (of, say, £10,000) to be held until a payment record is established.

5.2. Dissenting small suppliers consider that the Workgroups' recommended arrangements will be severely disadvantageous to them. In particular, they would result in a substantial (two to threefold) increase in the amount of collateral needed, compared to the arrangements that, in practice, they generally enjoy with NWOs at present, severely eroding margins and constraining growth. They are less concerned about administrative complexity, as they are already obliged by their own financial constraints to maintain tight control over their exposures, and accordingly have appropriate systems in place. They recommend alternative arrangements for 'small' (especially start-up new entrant) suppliers under which:

- Small suppliers would be accorded an Ofgem stipulated minimum level of unsecured credit; and
- All bad debt losses arising in respect of such suppliers should be automatically passed through allowed NWO revenues.

## ***Protection of credit exposures***

- 5.3. There was a suggestion from a small NWO that all counterparties who demonstrate a consistently good payment record should be accorded unsecured credit sufficient for their usage needs.
- 5.4. Another member of the Workgroups urged that clear guidelines should be agreed for making credit assessments for unrated companies. Their proposal would allow unrated suppliers increasing access to 10 per cent of maximum credit limit as payment performance is demonstrated over a period of 5 years. In addition, unrated suppliers would be able to apply for up to a further 10 per cent by providing suitable financial information for a credit risk assessment.

## ***Other views***

- 5.5. Both dissenting NWOs and dissenting small suppliers thought there should be automatic pass-through of 100 per cent of all incurred bad debt losses.
- 5.6. They also considered that Ofgem should take a pro-active role in ensuring that counterparties experiencing financial difficulties are prevented from increasing market exposures, through firm regulatory action, including where appropriate licence revocation.

## 6. Ofgem's views on best practice guidelines

- 6.1. As discussed in chapter 2, the objective of this work is to facilitate the establishment of transparent, fair and cost effective arrangements for protection against credit risk in the regulated areas of the gas and electricity industry. In assessing the merits of such arrangements Ofgem will have regard to its underlying principles for credit cover arrangements (the 'principles') as set out in chapter 1.
- 6.2. Ofgem considers that the Workgroups' recommendations (the 'proposals') are broadly consistent with its credit cover principles and should be supported. Nevertheless, there are a number of elements which Ofgem does not consider compatible.
- 6.3. Ofgem considers that the alternative proposals put forward by dissenting NWOs and small suppliers are, with one exception, inconsistent with Ofgem's principles and cannot be supported.
- 6.4. A degree of uncertainty persists as to the effects of implementing the proposals on individual companies. Nevertheless, Ofgem considers that the implementation of the Workgroups' proposals could give rise to the material adverse effects suggested by some unrated suppliers. They would also have similar effects on other suppliers and shippers with weak investment grade ratings, who are not at present generally required to provide collateral.

### ***Identification and assessment of credit exposure***

- 6.5. The proposals of the Workgroups were intended to provide a mechanism through which each NWO's maximum unsecured credit limit could be determined. Although some progress has been made towards this goal, Ofgem considers that some aspects of the proposals could lead to inconsistent practice and encourage risk aversion, which, in the absence of competitive pressure, could result in uneconomic behaviour.
- 6.6. The Workgroups' proposals seek to distinguish between strong and weak investment grade rated counterparties by scaling credit limits between 100 per cent and 0 per cent of the maximum according to the relative change in implicit

default probabilities, notwithstanding that these probabilities change by only very small absolute amounts across the range (from 0.0 per cent to <0.5 per cent). Though a considerable improvement on present arrangements, this would unduly discriminate against weaker counterparties, who are demonstrably able to attract unsecured long-term debt capital but would not qualify for unsecured short-term credit limits. As such Ofgem considers that the proposals do not put forward a satisfactory method of linking individual credit limits to default probability.

- 6.7. Ofgem also does not consider that the proposals suggest a satisfactory framework through which the VAR can be measured. The proposals recommend VAR for Use of System ('UoS') charges are based on the theoretical peak exposure arising during a billing cycle (equivalent to 60-70 days' charges). Average actual exposures are lower (equivalent to 30-45 days' charges). The proposal implicitly assumes that the probability of default varies over a payment cycle and is at its greatest immediately before the oldest outstanding invoice falls due for payment. Whilst this view may appear to be plausible it does not take sufficient account of the range of potential counterparties and the effect of their various billing cycles on the cash flow of the business. If such arrangements were put in place this could lead to uneconomic over-collateralisation and result in discrimination against counterparties making prompt payment.

***Ofgem suggestion***

- 6.8. NWOs should set maximum credit limits based on the impact a loss of the size in question would have on the NWO's financial position. To avoid undue variation between companies (eg from differing capital structures), this should be based on RAV or turnover. Ofgem would welcome views on the factor to be applied in determining the size of each NWO's maximum limit for counterparties of maximum creditworthiness, but is currently of the view that it should be set at 2 per cent of RAV which has the effect of decreasing the level of overall unsecured credit.
- 6.9. Using a fixed benchmark for setting maximum credit limits should not impact on the differing risk appetites of NWOs as these arrangements are concerned with reflecting competitive best practice with a view to the pass through criteria. NWOs who have a higher risk appetite would be unfettered. Those who seek

less risk may not obtain full pass through in the event of a failure and also may be subject to objections and disputes from counterparties.

- 6.10. It has been asserted that NWOs could have their own credit ratings adversely affected by these guidelines. Ofgem has the view that if there were any adverse impact on NWOs' own ratings it could only be as a result of them having previously held undue security relative to that reasonable in an equivalent competitive environment. Ofgem does not intend that the overall risk profile of NWOs should change in any significant way.
- 6.11. Individual counterparty limits should be set using credit ratings (or, for unrated counterparties, another transparent and objective methodology). The basis of scaling is for further consideration, but should be less steeply progressive than the Workgroups' recommendations propose. In particular, it seems inappropriate to treat creditworthy but unrated (because small) counterparties as presenting the same degree of risk as those with weak speculative grade ratings. One possibility, which has the merit of simplicity, would be to adopt the same basic weightings as are to be applied under the 'Basel II' rules for determining bank capital adequacy. These are in the ratio 1 : 2.5 : 5 : 7.5, for, respectively, AAA/AA, A, BBB/BB/Unrated, and below BB. These would imply maximum limits of, respectively, 100 per cent, 40 per cent, 20 per cent and 13-1/3 per cent of the NWO's maximum credit limit for a single counterparty. Although the wide banding is to a degree arbitrary, the overall shape of these weightings is broadly consistent with implicit default probabilities. The incidence effects of a move to these weightings would be most severe for A and BBB rated counterparties, but does not seem disproportionate. TXU Europe was rated BBB until a matter of days before entering administration. Had it been required to collateralise more of its exposures, it might have adopted less aggressive trading strategies and avoided collapse. Ofgem currently favours this overall approach but welcomes views from the industry.
- 6.12. Ofgem agrees that where ratings agencies have a difference of view across a boundary, the lower rating should apply.
- 6.13. Ofgem considers that NWOs may wish to make further assessment of companies to differentiate creditworthiness within the lower two bands. Ofgem would

welcome more work on this aspect as this would provide more consistency across different NWOs.

- 6.14. Where counterparties wish to aggregate their credit position or use group ratings, Ofgem consider this is appropriate, providing the arrangements are robust and unconditional.

### **Unrated companies**

- 6.15. One proposal for the treatment of unrated companies, offered by a member of the Workgroups, sets out to use a combination of the payment record of the company and evidence that it is prepared to submit to the NWO on its financial health.

- 6.16. For the element associated with payment record (which Ofgem accepts may not provide a robust positive indicator of health, but typically provides a reliable negative indicator) the proposal would set an increasing allowance, climbing at 2 per cent per year to a maximum of 10 per cent after five years of perfect payment record. Any underperformance would return the company to the 0 per cent position.

- 6.17. To obtain a further allowance of 10 per cent, bringing the total possible allowance to 20 per cent, equivalent to the top of the band in which unrated companies are placed on the Basel II scale, the company would have to provide suitable financial information to satisfy objective tests that the NWO would apply.

- 6.18. Ofgem currently favours this approach but welcomes detailed comment from the industry.

### **Value at Risk**

- 6.19. Ofgem suggests that the VAR for UoS charges should be measured as the value of billed but unpaid charges, augmented by an amount equal to charges for a further fifteen days' usage (based on the same daily rate implicit in billed charges), as this would provide a rough proxy for the time-weighted average of such charges arising within a billing cycle. Although not a standard definition of VAR (in that no account is taken of the probability of actual loss, as distinct from

the probability of default), Ofgem considers there would be little additional benefit from a more sophisticated approach.

- 6.20. In addition to the above views on the Workgroups' recommendations for short-term transportation or transmission charges, Ofgem considers that the VAR for exposures arising under long-term connection and capacity contracts should be based on payments billed but unpaid plus the difference (if any) between the recoverable value of the reversionary interest held by the NWO in the contracted capacity, and the contract value. For gas entry, this will be guided by market resale values. An estimation method will need to be devised for NGC post-vesting connections and DNO generation connections.
- 6.21. Ofgem wishes to highlight the importance of distinguishing between credit risk in this context (the risk that the counterparty will default) and the risk of stranding (the risk that unused capacity will not find a market). In general, stranding risk in the gas and electricity sectors is borne by consumers, or by shareholders in exchange for super-returns. Ofgem considers that in light of this there is little justification for the present practice of treating VAR as equivalent to the full pay-out value of a long-term contract.
- 6.22. An approach is to treat VAR under long term capacity and connection contracts where there is no market price discovery, as equivalent to, say, 12 months worth of payments, on the basis that this would be a reasonable period within which to re-expose capacity to the market with the intention that a new agreement be concluded in relation to it, when such capacity becomes available by reason of a counterparty's withdrawal. Such an approach would reflect current practice under Transco's Network Code Credit Rules.
- 6.23. Ofgem considers that a better approach would be for NWOs to make reasonable VAR calculations, based on a dynamic assessment of VAR given demands for new connections and/or their assessment of the likelihood of being able to re-use assets and/or of their recoverable value, provided these are based on reasonable central assumptions backed by objective assessment of all relevant evidence.
- 6.24. Ofgem seeks views on the most appropriate method of determining VAR for long-term connections and capacity agreements.

## ***Protection of credit exposures***

- 6.25. Following the calculation of a counterparty's unsecured credit limit, Ofgem considers that the party should have an initial period of one month in which to provide credit cover to secure any additional credit exposure.

### ***The tools available***

- 6.26. Ofgem considers the range of tools that would be available to counterparties to allow them to cover their exposure, as proposed by the Workgroups, is largely consistent with its principles enunciated in the February 2003 document. In this, Ofgem indicated that more could be done to develop secure and cost effective arrangements to mitigate and secure credit exposures. The document suggested that the range of measures utilised to secure credit cover could be broadened to encompass, for example, pre-payment, part payment, credit allowances for prompt payment, escrow accounts, LoCs, credit insurance and mutualisation, or combinations of these.
- 6.27. Given that they would not necessarily provide any money in the event that a party defaults, Ofgem also accepts the Workgroups' recommendation that NWOs should not be obliged to accept fixed/floating debentures as credit cover. Additionally, Ofgem notes that the Workgroups' recommendations conform with its view that the exclusive use of cash or LoCs for any purpose other than securing gas and electricity energy balancing credit cover is unlikely to be reasonable or appropriate.<sup>11</sup>
- 6.28. The ability of parties to determine which, and to what extent, the various techniques should contribute to the 'basket' used should enable companies to tailor their cover in a manner best suited to their operations.
- 6.29. Whilst counterparties should control the makeup of their 'basket', Ofgem considers it appropriate to enable NWOs to rate the credit cover tools to ensure that appropriate cover is in place. However, given that in certain circumstances NWOs may be inclined to operate in the most secure mode available, such

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<sup>11</sup> In line with the above, and consistent with its view expressed in the last document, Ofgem approved the modification of Transco's Network Code to give effect to Modification 0572 'the provision of Letters of

ratings must be determined in accordance with genuinely clear, objective and appropriate criteria, judged against the effectiveness with which the risk is transferred and the conditionality of the instrument. Where conducted in an appropriate manner, such rating should not unduly fetter companies' ability to manage cover efficiently.

- 6.30. In view of the above, Ofgem would anticipate the development and maintenance of a full set of criteria to be applied by NWOs when rating credit cover tools. Therefore, in addition to the criteria proposed by the Workgroups, Ofgem would also expect clarity on circumstances where NWOs could reasonably rate tools at less than 100 per cent. In such circumstances Ofgem would assume that residual exposure would simply be secured by an alternate instrument.
- 6.31. In addition to the above, Ofgem welcomes the significant work that has been undertaken to investigate the viability of mutual insurance as a credit cover tool, and notes the recommendation of the Workgroups to undertake a feasibility study. If such an approach is sufficiently supported, Ofgem would be willing to facilitate further work by industry parties.

### ***Implementation of the arrangements***

- 6.32. It is Ofgem's view that the implementation of the credit cover arrangements should be cost-reflective. Changing the arrangements in the manner proposed is likely to create additional costs for some companies that currently rely on ACRs/PCGs. However, the lower likelihood of default of more creditworthy companies should be reflected by means of a lower cost of securing credit cover. Also the arrangements would be likely to result in less creditworthy counterparties paying more. This may impact the competitive position of such suppliers providing an incentive to improve their creditworthiness. The proposed changes should therefore reduce the overall risk of the system which in time should benefit consumers through lower prices.
- 6.33. Though proportionately costs of provision of credit cover may be greater for small suppliers than for large, under Ofgem's proposed arrangements outlined

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Credit for energy balancing credit cover', which was implemented with effect from 1 August 2003.

above small suppliers may have access to previously unavailable unsecured credit. Ofgem also considers it unlikely that smaller companies would be further disadvantaged by these proposals, as current provisions already require them to provide secured credit cover.

6.34. Whilst there may be a cost to consumers through pass-through of costs of provision of additional credit cover, Ofgem considers that the proposals offer a corresponding reduction in the risk of exposure to bad debt in the event of a failure. As indicated in the February 2003 consultation, increasing incentives to market entry (through lower costs and/or less exposure to risk) can bring benefits for consumers since competitive pressures can drive prices down.

6.35. Ofgem considers it appropriate to strike a balance between NWO incentives to reduce risk against the resulting increase in counterparty (and therefore consumer) costs. The February 2003 consultation document stated that, having regard to its statutory duties, Ofgem's aim in the context of a gas or electricity supplier or gas shipper failure is to:

- Ensure continuity and security of supply; and
- Protect consumers from unnecessarily high costs resulting from inefficient arrangements for minimising the cost of potential or actual failure.

6.36. The promotion of objectivity in the implementation of the credit cover arrangements will be an important contributory factor in the successful operation of the new provisions. Ofgem considers the following areas suitable for industry standardisation:

- Wording;
- Measurement of risk transfer; and
- Measurement of conditionality.

It is Ofgem's view that these standardisation measures will enable companies to arrange credit cover more efficiently by minimising subjectivity, although there will need to be scope for assessing the suitability of alternate proposals (eg variant wording).

6.37. Alignment of credit cover provisions for similar processes in electricity and gas will also be important to the successful implementation of the provisions. In addition to facilitating increasing moves to dual fuel by industry participants, it is Ofgem's view that streamlining the processes may make it easier for new entrants to familiarise themselves with the market rules and therefore to enter the market. Conversely, differences in gas and electricity may lead to confusion for those parties providing the credit cover and those enforcing it.

***Management of when a Company gets near its upper limit of security or exceeds it but does not breach***

6.38. As discussed by the Workgroups, Ofgem recognises that regulatory obligations may restrict normal commercial relationships in some circumstances. However, Ofgem does not consider the proposed reliance on a regulatory body to enforce contractual terms constitutes best commercial practice.

6.39. It remains appropriate that where contractual arrangements are entered into, it should primarily be for the parties to that contract to enforce its terms. Therefore, as credit cover arrangements are encompassed in contracts between industry participants (to which Ofgem is not a party), it is for relevant NWOs (through incentives) to enforce them. Ofgem does not believe that the proposed licence amendments mentioned in 4.41 would provide NWOs with any additional ability to enforce credit cover terms. Moreover, they might actually serve to reduce NWOs' incentives to do so, through promoting reliance on Ofgem intervention.

6.40. In addition to issues identified regarding its ability to introduce the suggested licence obligations, Ofgem considers that licence enforcement would, in most cases, be both a disproportionate and impractical remedy and would be inconsistent with the second and fourth credit cover principles detailed at 1.4.

6.41. In terms of management of counterparties approaching their upper limit of security, prior to breach of the limit, Ofgem concurs with the view of the Workgroups that calling for additional security may not necessarily be the most appropriate response, as this could lead to over-securitisation.

- 6.42. Ofgem recognises the ability of cash call arrangements to provide a security 'buffer' zone to NWOs in the event the credit limit is subsequently breached. In the event of a potential failure, such arrangements may offer early warning and provide the relevant NWO with an opportunity to consider the circumstances and to take action, thereby potentially reducing exposure. However, in situations (such as transmission and transportation) where debt is likely to escalate at a steady rate, the benefits of such arrangements would probably be unlikely to outweigh the associated costs of over-securitisation.
- 6.43. Whilst appreciating the desire to avoid over securitisation, Ofgem considers it appropriate for NWOs to take limited action prior to a breach of security cover. However, whilst they may prevent further debt accruing, Ofgem remains of the view that in such circumstances, where a counterparty is not in default, disconnection of existing customers and/or inhibiting registration of new customers would not constitute reasonable measures.
- 6.44. With the above in mind, Ofgem agrees that NWOs should closely monitor counterparty indebtedness. However, whilst supporting the intent of the Workgroups' recommendations, Ofgem considers that it would be appropriate for the issue of warning notices to be standard practice, thereby providing consistency and objectivity in arrangements. Furthermore, in order for the information to be of more practical benefit to recipients, Ofgem questions whether notices should be issued at an earlier point in time, for example when counterparties reach 90 per cent of their credit limits. Finally, Ofgem agrees that should a counterparty experience a material change in its level of trade, a reassessment of required credit cover may be necessary.

#### ***Remedy for default – credit cover***

- 6.45. Ofgem considers that the guidelines suggested by the Workgroups are broadly acceptable. Ofgem agrees that:
- It is reasonable for NWOs to assess indebtedness every day;
  - If a party is in excess of 100 per cent credit cover (unsecured credit and security posted), they should be cash-called on the following business

day, with payment due after two business days (including 24 hours to dispute the cash-call);

- The cash-call should be sufficient to bring indebtedness down to 80 per cent; and
- Ofgem should be informed if payment is not received.

6.46. However, Ofgem does not agree that in all cases where there is a reassessment of the amount of credit cover required that a party should be allowed one month to comply, as there may be circumstances where a faster response is necessary.

6.47. In circumstances where the reassessment of a party's credit scoring or credit rating has led to a revision in its unsecured credit limit and consequently to the need for increased cover to be posted, Ofgem considers that the applicable notice period should be two business days. On the other hand, where there is a reassessment of the forecast indebtedness, one month should be allowed. This is on the basis that a reasonable time period should be allowed for forecasting changes compared with information concerning the creditworthiness of a party.

6.48. Where a counterparty does not comply with a request to increase the level of its credit cover, and is therefore in default, Ofgem agrees that the proposed suspension of customer registrations would be reasonable. Additionally, Ofgem considers that NWOs should have the ability to publish details of defaulting parties (so called 'naming and shaming') when they have failed to comply with a request to increase the level of their credit cover. Going forward, Ofgem considers such sanctions suitable for industry standardisation, for instance timing, including the issue of any warning notice.

6.49. As regards the Workgroups' recommendations on the application of high interest rates on late payments, Ofgem agrees that it would provide a strong incentive for prompt payment. Nevertheless, Ofgem considers that the level of interest rate must be limited to such that is not excessive. Also Ofgem considers that it is proper for administrative charges arising to be charged to parties.

6.50. Whilst recognising that NGC does not have recourse to suspend registrations, the Workgroups' recommendations on enforcement of credit requests under the

CUSC (that Ofgem should immediately enforce licence compliance) are not consistent with Ofgem's thinking on this issue.

- 6.51. Although the Authority may have the ability to take enforcement action, and ultimately revoke a licence in the event that the licensee fails to comply with an enforcement notice, its application (immediate or otherwise) may not be the most appropriate or timely response in each case. Similarly, in circumstances where a counterparty is facing financial difficulties, the ability to issue fines is unlikely to be of practical benefit.
- 6.52. The ability of the Authority to serve a notice of revocation of licence on a defaulting licensee and appoint a SoLR may also arise from the serving of a Statutory Demand by a party to the contract, which is not stayed, set aside, or satisfied or the grant of an order under the Insolvency Act 1986. Whilst this is potentially a protracted process, it may offer quicker resolution than enforcement of the CUSC licence condition.
- 6.53. In such situations, where a company is proven unable to meet its financial obligations, these arrangements provide for the orderly transfer of affected consumers to another supplier in such a way as to minimise the risk to continuity and security of supply, in circumstances where a market solution cannot be relied upon to achieve that objective. However, as stated in previous consultations, Ofgem considers these options to be a last resort and that the operation of efficient credit cover arrangements should reduce the likelihood for such action being necessary.
- 6.54. Although the recommended introduction of licence obligations discussed at 4.41 would enable it to act, in addition to reiterating the views expressed on this issue in the previous section, Ofgem notes that the above provisos for intervention would not be satisfied. Ofgem therefore considers that the proposed regulatory intervention would not be appropriate.
- 6.55. In view of the above, it is appropriate that Ofgem involvement be limited to the receipt of reports of incidences of default as further involvement could serve to increase regulatory uncertainty, therefore being counter-productive to stability and security of supply. Furthermore, where companies make commercial

decisions to meet obligations tardily, Ofgem involvement could provide opportunity to introduce further delays.

- 6.56. Subject to the above, Ofgem would expect NWOs to also use all means generally available to them at law to enforce their rights and remedies in order to mitigate losses arising from shipper or supplier default. However, as previously discussed, Ofgem does not regard disconnection, de-energisation or isolation of consumers as reasonable means of enforcing credit and debt arrangements. As with the proposed regulatory intervention discussed above, whilst these may prevent further debt accruing, they do not enable its reduction, but will damage the defaulting business, increasing the risk that financial failure will occur, and thereby the risk to continuity and security of supply.
- 6.57. Moreover, apart from the fact that a consumer may already have paid for the gas or electricity used, disconnection (or the threat of it) obviously causes inconvenience to all consumer groups. However, as disconnection of all a supplier's customers is impractical in anything other than a protracted timescale it is likely that those consuming large volumes would be disconnected first, with serious economic consequences for them.
- 6.58. The appropriate emphasis should therefore be for NWOs to incentivise counterparties to meet their obligations and to serve Statutory Demands where they are unable to do so, which are likely to result in trade sales or the application of the SoLR process. The disconnection, de-energisation or isolation of consumers should consequently only be considered after all other routes have been investigated and a reasonable period of notice has been given to the consumer to enable them to switch to another supplier.

## ***Payment and billing terms***

### ***Availability of data for billing processes***

- 6.59. Ofgem agrees with the Workgroups' recommendation that compulsory changes to existing arrangements are not required. Whilst supporting the aspiration to improve data quality, including through use of actual data, Ofgem recognises that the prospective benefits are unlikely to justify the anticipated financial costs. Furthermore, Ofgem notes that delays to billing processes as a result of waiting

for actual data would increase NWO exposure and consequently the amount of credit cover required to be taken.

### ***Billing frequency***

6.60. As above, Ofgem considers that potential benefits arising from change are unlikely to outweigh the negative impacts identified by the Workgroups. Therefore, Ofgem also agrees that revisions should not be required to existing billing frequencies.

### ***Payment terms***

6.61. Ofgem considers that the Workgroups' recommendations are broadly consistent with its principles, and agrees that:

- A move to e-billing would help the validation process;
- Changes should not be required to existing payment terms; and
- All payments should be via electronic or cleared funds.

6.62. It is recognised that differences in payment terms are currently considered to exist for good commercial reasons. Consistent with the Workgroups' comments however, as and when market developments provide opportunity, the potential benefits of harmonisation of industry payment terms should be considered.

6.63. In addition, Ofgem considers it appropriate that NWOs should have rights of set off under codes.

### ***Remedies for payment default***

6.64. Ofgem maintains that the effectiveness of the existing remedies for default are variable; in some cases Ofgem considers they provide insufficient incentives to effectively encourage prompt payment, whilst in others the default provisions are overly restrictive.

6.65. The Workgroups devised the follow-up guideline sanctions set out at 4.59 on an ascending scale of severity ranging from the application of administrative fees and high interest rates for late payments, through to formal requests for position

statements and ending with the ability to suspend all registrations and the commencement of the SoLR process.

- 6.66. Ofgem agrees with the Workgroups' suggestions to incentivise prompt payment including interest charges and administrative charges, from due day + 1. The charges should not be excessive. Such measures accord with the principle that credit arrangements should provide a secure and stable business environment. Ofgem concurs that if deliberate late payment to achieve a cash flow benefit is adequately dealt with, genuine instances of a market participant experiencing financial problems will become more readily determinable.
- 6.67. With regard to the Workgroups' recommendation that NWOs should be given the discretion to waive the proposed high interest, Ofgem is of the view that this would be inappropriate in that it would be contrary to the principle that arrangements must not be discriminatory. Ofgem considers that any incentivising measures should operate in a transparent and non-discriminatory manner.
- 6.68. Ofgem agrees with the Workgroups' view that any remedies for payment default should be transparent to all parties, rule-based and properly codified. Ofgem further considers that this requires revised procedures to be incorporated into the industry codes and agreements. In this context, Ofgem notes the absence of any formal governance mechanism of the electricity distribution sector through which any proposed changes to the credit regime could be introduced, albeit that the electricity distribution industry is actively considering governance issues.
- 6.69. Remedies for default should be all those available generally at law, together with a right to suspend registration of (inward) transfers. This will require contractual/code reforms. Consideration needs to be given to whether, and if so by what means, this or an equivalent remedy should also be available to electricity transmission licensees and to Transco (in respect of NTS charges).

## 7. Bad debt pass through criteria

- 7.1. In the cases of supplier failure that have occurred to date, Ofgem has allowed affected NWOs to recover a major proportion of their losses according to an assessment of how efficiently they had managed their exposure to the defaulting counterparty, by way of a mid-period adjustment to the price control term. In particular, in the Independent Electricity case Ofgem had regard to the age of debts due but unpaid at the date of insolvency.
- 7.2. More recently, Ofgem has adopted and published interim arrangements (pending adoption of the industry wide reforms expected to result from the industry Workgroups process), based on the principle that NWOs should be able to recover, through future allowed revenues, incurred bad debt losses equal to the amount of all charges, whether or not billed, that are not yet due for payment at the date of insolvency (net of subsequent recoveries including relief for uncollectible VAT), together with all or a proportion of charges billed and overdue according to the efficiency with which the NWO had managed this exposure. Charges arising after the date of insolvency are not similarly protected; NWOs are expected to obtain appropriate protections from the administrator/administrative receiver/liquidator, and would in any event have the protection of paragraph 99, Schedule B1, Insolvency Act 1986 (as amended).
- 7.3. In devising appropriate criteria for future application, regard should be had to the following:
- Ofgem's credit cover principles, set out in chapter 1;
  - The need for a transparent and straightforward approach that relies to no greater extent than is necessary on subjective judgement;
  - The need for a degree of flexibility, to encourage NWOs to deal effectively and pragmatically with counterparties experiencing difficulty, rather than a 'box-ticking' approach based on rigid application of detailed rules which might encourage gaming; and
  - The need to minimise company and Ofgem resources required to reach a determination.

7.4. In line with these considerations, Ofgem has developed the following criteria:

- Companies must have implemented credit control, billing and collection procedures in line with the best practice guidelines, in order to be eligible for pass through;
- In the event of a default, companies claiming pass through need to provide self-certification of compliance with the best practice guidelines and of the amount of loss incurred, which may be subject to audit by Ofgem;
- Companies demonstrating compliance with or able satisfactorily to explain departure from the guidelines will be able to recover all bad debt losses arising in respect of charges not due for payment at the date of the relevant counterparty's insolvency, net of any recoveries;
- Such companies will also be able to recover a proportion of bad debt losses arising in respect of charges overdue for payment at the date of the relevant counterparty's insolvency, net of any recoveries (which would be offset proportionately against all outstanding balances), depending on the age of the outstanding receivable. The amount recoverable would be equal to the value of outstanding balances subject to bona fide dispute (plus or minus the value of any reconciliation adjustments subsequently made), together with a proportion of the value of all undisputed balances (up to a maximum of 100 per cent) that varies inversely with the age of the balance, as set out below. The overall recoverable amount would be reduced for any other recoveries.

No. of business days past due	Percentage of face value recoverable
0 – 15	100
16 – 20	90
21 – 25	80
26 – 30	70
31 – 35	60
36 – 40	50
41 – 45	35
46 – 50	20
> 50	5

- 7.5. The certainty of full recovery of amounts not yet due for payment at the date of insolvency should encourage the development of arrangements that are economic and proportionate to the extent of risk being run, avoiding undue risk aversion and thus prevent over-collateralisation. This should assist new entry, and facilitate the development of competition.
- 7.6. Together with the proposals for setting, monitoring and securing credit limits, the approach should also assist in addressing the major concentrations of risk with potentially systemic effects (eg TXU Europe) while not over reacting to the failure of small suppliers/shippers, which occurs with relatively higher (but still low) frequency but gives rise to substantially lower incidence of loss.
- 7.7. There is an issue as to whether resultant price control adjustments should be made mid-period, or 'logged up' and taken into account in setting the next control.
- 7.8. In contrast to re-opening a prevailing price control in order to make income adjustments, it would be administratively less onerous if adjustments are only made at the start of the following price control period. This would increase certainty on the timing of recovery and also reduce the risk that subsequent adjustments have to be made to reflect future recoveries from other sources. On the other hand, absent roll up of interest, this would increase the cost to companies of financing the loss. Whilst this would strengthen the incentive companies face to mitigate their losses, it would have a variable impact according to when in a price control period the loss is incurred.
- 7.9. In addition to meeting the aims set out above, this approach should incentivise NWOs to ensure bills are collected promptly, and should thus reduce the overall amount of credit taken, minimising aggregate exposures. This should also reveal suppliers/shippers facing genuine difficulty (as distinct from those who can but do not pay) at an earlier stage, enabling action to be taken to prevent the exposures they represent growing.
- 7.10. On the other hand, automatic recovery under the price control (enabled through introduction of a new licence condition) would avoid the above issues associated with logging up. Therefore, the delay between the incidence of default and recovery could be made transparent and would likely be lessened.

However, this approach would likely result in over recovery, requiring later reimbursement by NWOs.

- 7.11. In recognising that these options present both merits and shortcomings, Ofgem currently favours adjustments being made at the start of the following price control period. In this case, the adjustment would include an allowance for the cost of funding the loss pending recovery.

## 8. Next Steps

8.1. In addition to seeking respondents' views, this paper identifies the need for further work in the following areas:

- Development of a standard set of credit scoring methods for establishing unsecured credit limits for companies that are within lower bands;
- Development of criteria to be applied by NWOs to rate the effectiveness of credit cover tools;
- Standardisation of the wording, measurement of risk transfer and measurement of conditionality of credit cover tools;
- Standardisation and codification of all remedies for default; and
- Dependent on the level of industry support, further investigation of the viability of mutual insurance as a credit cover tool.

8.2. Given the thorough analysis undertaken by the Workgroups already, it is Ofgem's aspiration that the majority of outstanding work may be concluded quickly. Subsequently, and following consideration of responses to this document, Ofgem will publish the resulting industry best practice guidelines and accompanying pass through criteria in January 2005.

8.3. It is recognised that changes to industry codes and agreements are likely to be needed to give effect to the determined best practice. Whilst accepting that the timing and progression of changes will to an extent be dictated by the codes and/or agreements involved, Ofgem considers that arrangements consistent with best practice and Ofgem's underlying credit cover principles should be implemented by April 2005. Although it is recognised that this presents a challenging timeframe, Ofgem considers that this is desirable in order to maintain the momentum, and attain the benefits, of the significant and valuable work undertaken to date. In order to take this work forward, Ofgem welcomes views on how the finalised arrangements should be implemented, including on the above proposed timetable.

## Appendix 1 Payment and billing terms - Procedure comparison matrix

NWO	Invoice in Advance or Arrears	Based on forecast, estimated or actual data	Billing Frequency	Payment Methods	Payment Terms	Codification of Procedures	Timescales of Follow-up process	Interest on Late Payments	Payment during Disputes	Allowed Security Cover
Electricity Transmission TNUoS	One day to one month in advance (invoice 1 <sup>st</sup> of month for relevant month)	Customer estimated data. Initial reconciliation at year end and final reconciliation at year end + 14 months.	Monthly	Electronic Payment	15 Days	CUSC defines payment dates and terms and events of default.	Phone D + 1  Event of default D + 7  Anything else is customer / situation specific	Base Rate + 4%	Payments must be made during a dispute	None within year. 10% of annual charge up to Final Reconciliation.
Electricity Transmission BSUoS	28 days in arrears	Actual SF settlement data, reconciled once RF received	Daily	Direct Debit	3 days	CUSC defines payment dates and terms and events of default.	Phone D + 1  Event of default D + 7  Anything else is customer / situation specific	Base Rate + 4%	Payments must be made during a dispute	Average 32 days cover – reviewed twice yearly
Electricity Transmission	Current Month  TUoS - Mid-month of current month  - credit (15) – 15 days  Transmission Connected (TRA) – subject to	TuoS - initial estimate (1/12 of EAC). Aligned to actual (based on Triad Demands) in month 12  TRA – similar to above	Monthly	Electronic (CHAPS, BACS)	TUoS – 14 days, TRA - 21 days	Individual Commercial Contracts	As for DNO, though for TRA accounts escalation would be via Contracts Manager	TUoS - Base Rate + 3%  TRA – subject to Contract Terms	Disputes do not arise due to prior agreement of values	TUoS – 60 days charges  TRA – subject to contract terms

NWO	Invoice in Advance or Arrears	Based on forecast, estimated or actual data	Billing Frequency	Payment Methods	Payment Terms	Codification of Procedures	Timescales of Follow-up process	Interest on Late Payments	Payment during Disputes	Allowed Security Cover
	individual contracts - mostly at end of current month  - credit 1 - 30 days									
Gas Transportation	All invoices billed in arrears apart from Energy Balancing which is 2 months in arrears (eg November billed in January)	Based on meter reads or actuals.  There is a Commodity invoices that is billed on a forecast from information supplied by the Shipper.	Monthly	Payments are made by BACS or CHAPS although a few Shippers still pay by cheque.	LDZ Cap  NTS Cap  RGTA Cap on 20th  All other invoices 12 days after the issue date.	Billed in accordance with Network Code	1 <sup>st</sup> default letter sent at PDD+1 plus a telephone call. 2 <sup>nd</sup> default letter sent PDD+8, passed to Debt Recovery PDD+15	Base Rate + 3%. Invoiced once a month in line with Network Code	Shipper only allowed to withhold disputed amount, if found to be invalid interest will be charged for the overdue period at base rate +3%	63 days cover and reviewed yearly.
DNO SuperCustomer	Data received 21 days after settlement date .Therefore 1 <sup>st</sup> day of the month can be invoiced 53 days later, & last day of month approximately 22 days late	Billing is based on aggregated data received & therefore can be a combination of estimates & actuals refined to a higher proportion of actuals by RF –when data should be based on 97 % AA's	Monthly	Electronic-BACS /CHAPS & Cheque	14 days	Billed in accordance with the UoS agreement	D + 14 phone supplier  D + 15 if no indication of payment receipt date. Legal letter sent  D + 22 issue statutory demand  D + 43 initiate winding up	Base Rate + 3%	Payment due within 14 days . No requirement to pay during a 'designated' dispute	Average 60 days cover – reviewed twice yearly

NWO	Invoice in Advance or Arrears	Based on forecast, estimated or actual data	Billing Frequency	Payment Methods	Payment Terms	Codification of Procedures	Timescales of Follow-up process	Interest on Late Payments	Payment during Disputes	Allowed Security Cover
							procedures			
DNO – Half Hourly	Billed approximately 7 days after final settlement day of the month.  .Therefore 1 <sup>st</sup> day of the month can be invoiced 38 days later, & last day of month approximately 8 days late	Based on combination of Half Hourly readings & estimated consumption received from DC. Refined by replacement readings from DC . can be received over a 2 year period	Monthly	Electronic-BACS /CHAPS & Cheque	14 days	Billed in accordance with the UoS agreement	D + 14 phone supplier  D + 15 if no indication of payment receipt date. Legal letter sent  D + 22 issue statutory demand  D + 43 initiate winding up procedures	Base Rate + 3%	Payment due within 14 days . No requirement to pay during a ‘designated’ dispute	Average 60 days cover – reviewed twice yearly
DNO	33 to 53 days in arrears.  HH Invoicing is generally 33-35 days in arrears, dependant on receipt of HH data from HHDC. Data should be submitted within 3 days of the meter reading, as per UoS.A.	HH Invoicing – largely based on actual data. Estimated only used when the HHDC fails to provide actual readings or where no data is provided and data is substituted.  NHH Invoicing – based on the EAC & AA process ie estimated (EAC) where the NHHDC fails to take an actual reading and then revised when an actual reading (AA) is	Monthly for both HH and NHH.	Electronic Funds Transfer.  Cheque for less than £1000.00	14 calendar days.	UoS.A.  Provides for :  Billing and Payment obligations.  Late Payment Penalty.	D -5 make contact with customer.  D + 1 contact customer requesting payment in 3 days  D + 4 internal letter before action issued  D + 9 external solicitor letter before action issued, requesting	Base rate plus 3%	Principle of ‘pay now, dispute later’.  UoS.A allows for designated disputes where there is an error in data used or an arithmetic error in calculation. Principle being that the	60 days charges. Calculated twice annually in April and October. Subject to a minimum of £1,000. Reviewed monthly in accordance with clause 2.1, increase/decrease in cover requested for large difference between cover required and held.

NWO	Invoice in Advance or Arrears	Based on forecast, estimated or actual data	Billing Frequency	Payment Methods	Payment Terms	Codification of Procedures	Timescales of Follow-up process	Interest on Late Payments	Payment during Disputes	Allowed Security Cover
	NHH aka Supercustomer Invoicing – occurs around 23 days after the last settlement day of the previous billing period.	obtained. This process takes place over a 14-month reconciliation period and up to 2 years if a dispute final run is authorised by the Trading Disputes Committee.					<p>payment in 48 hours</p> <p>D + 11 summons issued</p> <p>For persistent late payers the above process is accelerated ***</p>		<p>proportion of undisputed amount should be paid and balance should be resolved between the parties within 20 working days.</p>	<p>Can be satisfied by:</p> <p>An approved credit rating</p> <p>Qualifying Guarantee</p> <p>Letter of Credit</p> <p>Cash (Escrow Account)</p>
<b>DNO</b>	<p>Arrears –</p> <p>S/Cust at Day +17 working days (c24 days)</p> <p>- credit is from 24 - 55 days.</p> <p>HH at day +3 working days (say 6 days)</p> <p>credit is from 6 – 37 days.</p> <p>Metering at 15<sup>th</sup> of month, plus billing time</p> <p>credit is (10) – 21</p>	Estimated, then actual reconciliation with updated settlement runs	Monthly	Electronic (CHAPS, BACS) or Cheque <£1k – some cheques received for >£1k	14 days	Use of System Agreement includes procedures up to not payment of invoice and Interest on late payments, plus Credit Cover requirements	<p>Weekly Summaries issued to Suppliers</p> <p>Due date – 3 - Personal Contact to confirm payment in hand</p> <p>Due Date +1 – personal contact to obtain payment date</p> <p>Due Date + 7 - escalate to Income Manager</p> <p>Due date +14 – escalate to Asset</p>	Base Rate + 3%	UoSA provides detailed dispute procedure, requiring payment of 'reasonable' amount and alignment when resolved – impractical and we invoke a requirement to pay during a 'designated' dispute unless new reading submitted in 14 days (as	60 days charges

NWO	Invoice in Advance or Arrears	Based on forecast, estimated or actual data	Billing Frequency	Payment Methods	Payment Terms	Codification of Procedures	Timescales of Follow-up process	Interest on Late Payments	Payment during Disputes	Allowed Security Cover
	days  Unmetered Supplies – first of following month – credit – 2-33 days						Owners  Due Date + 21 – request meeting  Due date + 28 – invoke Breach options		Supplier HHDC is at fault)	
DNO SuperCustomer	SF Data received approx. 21 days after settlement date. As Data is billed in first week of a month earliest data would be approx. 6 weeks in arrears. (eg Invoice in early Sep will have SC data for mid July to mid August).	Billing is based on aggregated data received so will include actual readings and estimates. % of estimates should be replaced by actuals as later settlement runs are produced.	Monthly	Most payments are made by BACS or CHAPS although a few Suppliers still pay by cheque.	14 days	Billed in accordance with the UoS agreement	Situation specific although the follow up would start with initial phone calls leading up to statutory demands.	Base Rate + 3%. Calculated manually and applied to persistent late payers.	Payment due within 14 days of date of invoice. Any disputes should be raised within 14 days. Payment could be delayed until dispute is resolved although if 'unfounded', interest could be applied.	Approx. 60 days cover and reviewed twice a year.
DNO Half Hourly	Billed approximately 5 working days after final settlement day of the month. Earliest data would be approx. 4 weeks in arrears. (eg Invoice in early Sep will have	Based on combination of Half Hourly readings & estimated consumption received from DC. Reserve the right to input own estimates for 'missing consumption'.	Monthly	Most payments are made by BACS or CHAPS although a few Suppliers still pay by	14 days	Billed in accordance with the UoS agreement	Situation specific although the follow up would start with initial phone calls leading up to statutory demands.	Base Rate + 3%. Calculated manually and applied to persistent late payers.	Payment due within 14 days of date of invoice. No requirement to pay for particular MPANS if legitimate	Approx. 60 days cover and reviewed twice a year.

NWO	Invoice in Advance or Arrears	Based on forecast, estimated or actual data	Billing Frequency	Payment Methods	Payment Terms	Codification of Procedures	Timescales of Follow-up process	Interest on Late Payments	Payment during Disputes	Allowed Security Cover
	data for month of Aug).			cheque.					disputes have been raised.	
DNO SuperCustomer	SF Data received approx. 21 days after settlement date. As Data is billed on 1st working day in the month earliest data would be approx. 6 weeks in arrears. (eg Invoice in early Sep will have SC data for mid July to mid August).	Billing is based on aggregated data received so will include actual readings and estimates. % of estimates should be replaced by actuals as later settlement runs are produced.	Monthly	Most payments are made by BACS or CHAPS although a few Suppliers still pay by cheque.	14 days	Billed in accordance with the UoS agreement	Situation specific although the follow up would start with initial phone calls leading up to statutory demands.	Base Rate + 3%. If used, these invoices would be calculated manually. As yet, Late Payment Invoices have not been used.	Payment due within 14 days of date of invoice. Any disputes should be raised within 14 days. Payment could be delayed until dispute is resolved although if 'unfounded', interest could be applied.	Approx. 60 days cover and reviewed twice a year.
DNO Half Hourly	Billed approximately 3 - 8 working days after final settlement day of the month once most data for the previous month has been received. Earliest data would be approx. 4 weeks in arrears. (eg Invoice in early Sep will have data	Billing is based on aggregated data received so will include actual readings and estimates. % of estimates should be replaced by actuals as later settlement runs are produced.	Twice Monthly	Most payments are made by BACS or CHAPS although a few Suppliers still pay by cheque.	14 days	Billed in accordance with the UoS agreement	Situation specific although the follow up would start with initial phone calls leading up to statutory demands.	Base Rate + 3%. If used, these invoices would be calculated manually. As yet, Late Payment Invoices have not been used.	Payment due within 14 days of date of invoice. No requirement to pay for particular MPANS if legitimate disputes have been raised.	Approx. 60 days cover and reviewed twice a year.

NWO	Invoice in Advance or Arrears	Based on forecast, estimated or actual data	Billing Frequency	Payment Methods	Payment Terms	Codification of Procedures	Timescales of Follow-up process	Interest on Late Payments	Payment during Disputes	Allowed Security Cover
	for month of Aug). A second follow up run is made approx. mid month.									
DNO SuperCustomer	SF Data received approx. 21 days after settlement date. Settlement runs are billed separately once all the data for that particular month have been received.	Billing is based on aggregated data received so will include actual readings and estimates. % of estimates should be replaced by actuals as later settlement runs are produced.	One settlement run per type per month (ie 4 = SF, R1, R2, R3, RF)	Most payments are made by BACS or CHAPS although a few Suppliers still pay by cheque.	14 days	Billed in accordance with the UoS agreement	Situation specific although the follow up would start with initial phone calls leading up to statutory demands.	Base Rate + 3%. If used, these invoices would be calculated manually. As yet, Late Payment Invoices have not been used.	Payment due within 14 days of date of invoice. Any disputes should be raised within 14 days. Payment could be delayed until dispute is resolved although if 'unfounded', interest could be applied.	Approx. 60 days cover and reviewed twice a year.
DNO Half Hourly	MPANS will be billed in whole months once all the data has arrived. This is normally within 5 days of the previous month end although will be produced as	Based on combination of Half Hourly readings & estimated consumption received from DC. Reserve the right to input own estimates for individual 'missing consumption' in order to invoice whole months.	Monthly	Most payments are made by BACS or CHAPS although a few Suppliers still pay by	14 days	Billed in accordance with the UoS agreement	Situation specific although the follow up would start with initial phone calls leading up to statutory demands.	Base Rate + 3%. If used, these invoices would be calculated manually. As yet, Late Payment Invoices have	Payment due within 14 days of date of invoice. No requirement to pay for particular MPANS if legitimate	Approx. 60 days cover and reviewed twice a year.

NWO	Invoice in Advance or Arrears	Based on forecast, estimated or actual data	Billing Frequency	Payment Methods	Payment Terms	Codification of Procedures	Timescales of Follow-up process	Interest on Late Payments	Payment during Disputes	Allowed Security Cover
	and when the data is received.			cheque.				not been used.	disputes have been raised.	
Electricity Transmission Connections	Monthly for typically 40 year finance and maintenance charge.	Actual data set at start of each year.	Monthly	Electronic Payment	15 Days	CUSC defines payment dates and terms and events of default.	Phone D + 1 Event of default D + 7  Anything else is customer / situation specific	Base Rate + 4%	Payments must be made during a dispute	Net value of connection assets + 12 months charge

# Appendix 2 Payment and billing terms NHH and HH DUoS Bill Frequency

## NHH DUoS Bill Frequency

	DAILY	WEEKLY	MONTHLY
<b>ADVANTAGE</b>	<ol style="list-style-type: none"> <li>(Distributor). Cash flow may be improved as billing occurs the day after receipt of SF data (15 w/d after settlement date).</li> <li>(Distributor). Due to a smaller billing period, data is billed closer to data receipt compared to the weekly or monthly billing option.</li> <li>(Distributor). Invoices are much smaller in terms of £, reducing the impact if there is a delay in receipt of payment.</li> <li>(Supplier). Even less credit cover required (compared to weekly billing) due to more frequent billing.</li> </ol>	<ol style="list-style-type: none"> <li>(Distributor). Cash flow may be improved as billing occurs a week after receipt of SF data (15 w/d after settlement date).</li> <li>(Distributor). Due to a smaller billing period, data is billed closer to data receipt than the monthly billing option.</li> <li>(Distributor). Invoices are smaller in terms of £, reducing impact of if there is a delay in receipt of payment.</li> <li>(Supplier). Less credit cover required due to more frequent billing.</li> </ol>	<ol style="list-style-type: none"> <li>(Distributor &amp; Supplier). This is the current process and has been the accepted billing frequency for many years.</li> <li>(Distributor). One NWO produces only a small no. of invoices each month helping debt follow-up, (this is probably true of other DNOs).</li> <li>(Distributor). Allocation of payments is simple.</li> </ol>
<b>DISADVANTAGE</b>	<ol style="list-style-type: none"> <li>(Distributor/Supplier). Requires a change to the current process that will involve development of the billing/validation systems at cost to the DNO/Supplier.</li> <li>(Distributor/Supplier). Even greater no. of invoices produced compared to weekly option (x30 when compared to monthly option).</li> <li>(Distributor). Debt follow-up is made more complex as more invoices have to be validated and passed for payment.</li> <li>(Distributor). Dependent on the method used for invoice calculation (ie estimation), reconciliation of daily charges may be required if true charges are calculated using the monthly billing option.</li> <li>(Supplier). Cash flow may deteriorate as billing occurs the day after receipt of SF data (15 w/d after settlement date).</li> </ol>	<ol style="list-style-type: none"> <li>(Distributor/Supplier). Requires a change to the current process that will involve development of the billing/validation systems at cost to the DNO/Supplier.</li> <li>(Distributor/Supplier). Increased number of invoices produced (x4 when compared to monthly option).</li> <li>(Distributor). Debt follow-up is made more complex as more invoices have to be validated and passed for payment.</li> <li>(Distributor). Dependent on the method used for invoice calculation (eg estimation), reconciliation of weekly charges may be required if true charges are calculated using the monthly billing option.</li> <li>(Supplier). Cash flow may deteriorate as billing occurs the day after receipt of SF data (15 w/d after settlement date).</li> </ol>	<ol style="list-style-type: none"> <li>(Distributor). Due to the billing calendar, some data is not billed until 4 weeks after receipt.</li> <li>(Distributor). Large sums of cash are invoiced per bill, thus, delay in receipt of payment (due to dispute or any other reason) could have cash flow implications.</li> <li>(Supplier). Validation of the charges is a difficult job since a whole month's charges are billed in one go.</li> <li>(Supplier). Dependent on the supplier's market share, very large amounts of credit cover are required.</li> </ol>

## HH DUoS Bill Frequency

	DAILY	WEEKLY	MONTHLY
<b>ADVANTAGES</b>	<ol style="list-style-type: none"> <li>1. (Distributor). Billing occurs daily rather than billing weekly or monthly.</li> <li>2. (Distributor). Risk to DNO of suppliers' that go into administration is reduced (less unbilled debt).</li> <li>3. (Supplier). Even less credit cover required (compared to weekly option) due to more frequent billing.</li> </ol>	<ol style="list-style-type: none"> <li>1. (Distributor). Billing occurs weekly rather than billing daily or monthly.</li> <li>2. (Distributor). Risk to DNO of suppliers' that go into administration is reduced. (Less unbilled debt).</li> <li>3. (Supplier). Less credit cover required due to more frequent billing.</li> </ol>	<ol style="list-style-type: none"> <li>1. (Distributor &amp; Supplier). For one NWO, only a few thousand invoices per month are produced.</li> <li>2. (Distributor &amp; Supplier). Charges are aligned to calendar months. This is convenient and matches NHH bill frequency.</li> </ol>
<b>DISADVANTAGES</b>	<ol style="list-style-type: none"> <li>1. (Distributor &amp; Supplier). 30 times the number of invoices are created in comparison with the monthly option.</li> <li>2. (Distributor &amp; Supplier). Updates to the billing system must be applied promptly otherwise bills could be issued to the wrong supplier.</li> <li>3. (Distributor). Other activities such as data validation and invoice comparisons could be hindered due to the increased workload.</li> <li>4. (Distributor). Debt follow-up is made very difficult due to the increased volume of invoices.</li> <li>5. (Distributor). Capacity billing modules are designed for monthly billing cycles thus; a change to daily billing may require further system development at cost to DNO.</li> <li>6. (Distributor &amp; Supplier). Dependent on the method used for invoice calculation (eg estimation), reconciliation of daily charges may be required if true charges are calculated using the monthly billing option.</li> </ol>	<ol style="list-style-type: none"> <li>1. (Distributor &amp; Supplier). 4 times the number of invoices are created in comparison with the monthly option.</li> <li>2. (Distributor &amp; Supplier). Dependent on the method used for invoice calculation (eg estimation), reconciliation of weekly charges may be required if true charges are calculated using the monthly billing option.</li> <li>3. (Distributor). Capacity billing modules are designed for monthly billing cycles thus; a change to weekly billing may require further system development at cost to DNO.</li> <li>4. (Distributor). Debt follow-up is made more complex due to the increased volume of invoices.</li> </ol>	<ol style="list-style-type: none"> <li>1. (Supplier). Dependent on the supplier's market share, a large amount of credit cover is required.</li> <li>2. (Distributor). A dispute on one item of the invoice could delay payment of the whole invoice. Cash flow could be affected.</li> </ol>

## Appendix 3 The Workgroups' views on mutual insurance

There are many shades and versions of insurance available to the industry but the two we looked at were between counterparties and mutuals based on pools. It was felt that if a mutual was undertaken; one or two insurance pools would be set up, one covering non-rated parties and the others the rated parties. In the first instance attention would be focused on constructing the non-rated pool. By having one or two pools, each group would be mutually covering Companies in a relatively similar risk group. It could be envisaged that the 1st group would hold secure non-rated parties; the second would hold the Rated Companies. Alternatively, the first holding secure non rated Parties and Parties at the lower end of the Ratings and the other, Companies at the higher end of the Ratings. Each Party in a group would be prepared to cover the rest of the group according to its share in the mutual structure and would accept liability up to that limit. Shares would be purchased and would have a value (possibly set by the mutual managers on an agreed basis) and could be sold back to the mutual as it is envisaged the matching liability would be reduced by the departure of the selling member. Should losses be declared the mutual pays up to the overall maximum, and then a stop loss policy should apply. Members would be required to top up any shortfall based on an agreed calculation of their share.

Participants would provide capital into the fund in line with the credit support they required. An additional premium would be due, to cover the level of usage. The fund would be structured as a mutual with profits declared but retained taken as a reserve against future losses.

There are two possible types of fund. In the first, the supplier buys credit insurance with the limit set by the Mutual's underwriter or in the second the supplier buys a surety bond to issue to supplier in lieu of LoC or cash. It is likely that the risk to the fund would be capped through a reinsurance product. It was anticipated that a mutual fund would significantly reduce the amount of capital employed in providing credit support, potentially by as much as 75 %.

However it was also noted that a mutual fund would only work if sufficient industry participants took shares and became members, to achieve critical mass. Members would need to accept the concept of mutuality, ie sharing losses, but this is controlled

by both members and risk being vetted according to an agreed and robust process so the mutual would not support mavericks. Insurance would not cover 100 % of the risk and as such only provided partial risk transfer, albeit up to 90 % should be possible. (However, it should be noted that a surety option would support 100 % by issuing guarantees to the full value of the required collateral).

# Appendix 4 Standard licence conditions

## relevant to credit cover and bad debt

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

### **Gas Suppliers Licence**

#### *Condition 22A Restriction of Revocation: Securing Continuity of Supply*

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

#### *Condition 29 Supplier of Last Resort*

This condition requires gas suppliers, following a direction from Ofgem, to supply gas to the customers of another supplier upon revocation of that other suppliers licence (the last resort supply direction).

#### *Condition 32 Duty to Supply Domestic Customers*

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 customer accepts the contract's terms.

### **Gas Shippers Licence**

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

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

### **Gas Transporters Licence**

#### *Condition 4D Conduct of Transportation Business*

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*

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)*

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

*Gas Act 1986 Section 9(1A)*

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

**Electricity Supply Licence**

*Condition 9 Compliance with CUSC*

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*

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

*Condition 20 The Master Registration Agreement*

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

*Condition 22A Restriction of Revocation: Securing Continuity of Supply*

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

*Condition 29 Supplier of Last Resort*

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

*Condition 32 Duty to Supply Domestic Customers*

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 customer accepts the contract's terms.

### **Electricity Distribution Licence**

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

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

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

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

#### *Condition 4C Functions of the Authority*

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*

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

#### *Condition 10 Balancing and Settlement Code and NETA Implementation*

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

#### *Condition 14 The Master Registration Agreement*

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

#### *Condition 26 Compliance with CUSC*

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

### **Electricity Transmission Licence**

#### *Condition 7 Licensee's Grid Code*

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*

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*

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*

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*

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*

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

*Condition 19 Compliance with CUSC*

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