AEMC

RULE CHANGE

Australian Energy Market Commission

OPTIONS PAPER

National Electricity Amendment (Retailer-Distributor Credit Support Requirements) Rule 2015

National Gas Amendment (Retailer-Distributor Credit Support Requirements) Rule 2015

Rule Proponent(s)

AGL

22 October 2015

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About the AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

Executive Summary

This options paper has been prepared by the Australian Energy Market Commission (AEMC or Commission) to facilitate consultation on:

- the consolidated rule change request which proposes changes to the retailer-distributor credit support requirements (set out in Chapter 6B) and the retailer insolvency cost pass-through provisions (set out in Chapter 6) of the National Electricity Rules (NER);[1] and
- the consolidated rule change request which proposes changes to retailer-distributor credit support requirements and the retailer insolvency cost pass-through provisions (set out in Part 21, Division 4) of the National Gas Rules (NGR).[2]

These rules relate to the management of risks faced by distributors and their customers, associated with retailer default and raise complex issues that have not been previously examined by the Commission. Further, changes to these rules have the potential to materially financially impact various stakeholders. As such, the Commission considers that there is value in adding an extra stage of consultation to the standard rule making process prior to the publication of the draft determination.

The options paper

The purpose of this options paper is to seek stakeholders' views on a number of alternative potential options identified and modelled in relation to mechanisms to manage the risks faced by distributors and their customers, associated with retailer default, and then to assess the consolidated rule change requests (collectively referred to as the rule change requests) taking into account stakeholder submissions on the various potential options. This will assist the Commission in determining a solution to the problems raised by the rule change requests that will contribute to the promotion of the National Electricity Objective (NEO) and National Gas Objective (NGO), respectively and would be applicable in those jurisdictions which have adopted the National Energy Customer Framework.

To date the Commission has developed principles related to managing the risks and costs associated with managing retailer default and considered the mechanisms currently available to retailers and distributors to manage retailer default.

1 The Council of Australian Governments Energy Council (COAG Energy Council) submitted a rule change request on 20 March 2014 related to the retailer-insolvency cost pass-through provisions in the NER. This rule change request was consolidated with the rule change request submitted by AGL on 19 January 2015 related to the retailer-distributor credit support requirements in the NER.

2 Jemena submitted a rule change request on 25 September 2015 related to the retailer-insolvency cost pass-through provisions in the NGR. This rule change request was consolidated with the rule change request submitted by AGL on 19 January 2015 related to the retailer-distributor credit support requirements in the NGR.

The Commission has identified a number of potential options to address the problems raised, and wishes to seek stakeholder input on the various options set out.

While specific changes were proposed in the rule change requests, the Commission has concluded that there would be merit in considering a broader range of options that also have the potential to contribute to the achievement of the NEO or NGO.

Potential options for consideration

The consultation paper published by the Commission on 28 May 2015 defined the problems raised by the rule change requests[3] that needed to be addressed. Stakeholders broadly accepted the problems as they were articulated.

The Commission has developed options to address the problems identified. In support of this task, the AEMC has engaged KPMG to undertake a review of credit support requirements in various international jurisdictions. Further, the AEMC has engaged Promontory Financial Group to prepare a report examining and modelling options for an efficient regime to manage retailer default. Both of the consultant's reports are available on the AEMC website.

The following options to address the risks faced by distributors and their customers, and costs associated with managing retailer default, in the context of collecting unpaid network use of system charges, have been developed and modelled:

1. **Option 1: retain the existing arrangements -** the existing arrangements for both the credit support requirements and the cost pass-through provisions would remain as currently set out in the NER and NGR;

2. **Option 2: strengthen the existing arrangements -** variations to the current credit support requirements and cost-pass through provisions, including but not limited to, the AGL proposal, the COAG Energy Council proposal and the Jemena proposal;

3. **Option 3: establish a retailer default fund -** the establishment of a fund, available to distributors in the event of a retailer default which is funded by retailers based on a set formula prescribed in the NER and NGR; and

4. **Option 4: introduce a liquidity support scheme -** a liquidity instrument to be held by the distributor to be used to address cash-flow issues arising from a retailer default. Under this option the costs associated with the liquidity support scheme could be paid by the distributor or collected from the retailers based on a set formula prescribed in the NER and NGR.

3 Although the consultation paper sought stakeholders' comments on the retailer insolvency cost pass-through provisions generally, the consultation paper did not seek stakeholders submissions' on the Jemena rule change request which had not yet been submitted at the time the consultation paper was published.

Prior to making a draft rule determination in respect of the rule change requests, the Commission is seeking stakeholder views on these options and any other matters raised in this paper. Submissions are due by 26 November 2015.

Contents

1 Introduction

This chapter provides a summary of the rule change requests and sets out the Commission's approach to the options paper.

1.1 Rule change requests

1.1.1 Retailer-distributor credit support requirements

On 19 January 2015, AGL submitted two rule change requests to the AEMC. The rule change requests seek to amend the retailer-distributor credit support requirements in the NER and NGR.

Under the current retailer-distributor credit support requirements in the NER and NGR, credit support may be requested by a distributor when a retailer's network charges liability exceeds its credit allowance. The determination of the credit allowance is a function of both the distributor's annual network charges and the retailer's credit rating, with a higher credit rating equating to a higher credit allowance. A retailer's network charges liability generally increases as its market share increases. The current arrangements are discussed in more detail in section 2.1 of this paper.

AGL proposes the same changes to the retailer-distributor credit support requirements under both the NER and the NGR. Under AGL's proposed rules, no credit support would be required from retailers with an Standard & Poor's (S&P) (or equivalent) credit rating of BBB- or better, irrespective of the size of the retailer's market share. For a retailer rated below BBB-, credit support would be determined so that the distributor's risk-weighted exposure to the retailer's default (the effective loss) would be the same as if that retailer was rated BBB-. Refer to AGL's rule change requests for an example of the effective loss calculation.[4]

Under the proposal, credit support levels are based on a percentage of the retailer's total network charges liability and have been determined to equate the value at risk to a distributor for a retailer rated below BBB- to the amount that would be at risk if the retailer was rated BBB-. AGL proposed to specifically include the percentages in its proposed rules.

The calculation of the retailer's network charges liability would be the same under AGL's proposal and under the current NER and NGR provisions.

Rationale for AGL's rule change requests

In its rule change requests, AGL provides its rationale for the proposed changes to the NER and NGR. AGL's main concern stems from the level of the maximum credit allowance and the change in the level from 33.33 per cent to 25 per cent that was made

4 AGL rule change requests, p.9

between the time of the second exposure draft and the final version of the instruments making up the National Energy Customer Framework (NECF) coming into effect. AGL is of the view that the change was made to increase levels of credit support overall in light of the global financial crisis and increases in the wholesale price of electricity, while maintaining the level of credit support required for retailers rated below investment grade. According to AGL, this was done in part to prevent barriers to entry and increase competition. AGL claims that the current credit support requirements result in a shift of the burden of credit support from low-rated retailers to high-rated retailers and does not reflect the true risk faced by distributors.

AGL puts forward several arguments for why the current credit support requirements under both the NER and NGR are flawed, including that:

- the concept of a maximum credit allowance is arbitrary and not well established;
- credit ratings already incorporate efficient and dynamic measures of risk and so the impacts of the global financial crisis and wholesale electricity price fluctuations are accounted for and any further adjustments are not necessary;
- credit support may be a barrier to entry and limit competition if large amounts of credit support are required from new entrants but it does not in and of itself, promote competition and there are other more efficient mechanisms available to promote competition;
- large retailers cannot cross-subsidise smaller retailers under the scheme as credit support can only be drawn on in relation to the retailer who provided the credit support. Consequently, a distributor's exposure to the risk of default from lower-rated retailers is not reduced by requiring increased credit support from higher-rated retailers;
- the relative cost of the misalignment of risks under the existing arrangements is material with the estimated costs of the difference between the existing and proposed arrangement including:
  - direct costs well in excess of $4 million per annum (representing two per cent of the value of the guarantees);
  - facility commitment fees well in excess of $3.1 million per annum (representing roughly one and a half per cent of the value of the guarantee); and
  - a reduction in funds available for re-investment in the electricity and gas markets of between $250 and $450 million.[5]

5 AGL rule change requests, p.8

AGL's assessment of the proposed rule

AGL provides, in terms of both the NEO and the NGO, that the rule change requests will:

- promote efficient investment in the electricity and gas markets by freeing up capital that is currently inefficiently tied up servicing poorly targeted policy;
- better align a retailer's contribution to credit support with their level of credit risk, encouraging them to make prudent decisions with respect to their payment practices and reducing risk overall, which will promote reliability of supply; and
- reduce costs to retailers of providing retail services, which will result in lower prices for consumers.[6]

1.1.2 Retailer insolvency cost pass-through rule change request for the NER

On 20 March 2014, the COAG Energy Council submitted a rule change request to the AEMC to amend the retailer insolvency cost pass-through provisions in the NER. The rule change request seeks to amend the NER to allow a distributor to recover its foregone revenue, in the form of distribution network charges which are unpaid as a result of a retailer becoming insolvent.

If made, the effect of the proposed rule would be to allow a distributor to recover its charges, following the insolvency of a retailer, from the distributor's customer base. To achieve full recovery by the distributor, the rule change request proposes two key amendments:

- the insertion of a new and separate limb within the current definition of a positive change event to include the occurrence of a retailer insolvency event. This would allow for costs arising from a retailer insolvency event to be passed through to customers without being subject to a materiality threshold; and
- the insertion of a new definition for retailer insolvency costs, which would specifically include foregone revenue of distributors as a result of a retailer insolvency event. This would allow distributors to use the cost pass-through mechanism to recover unpaid revenue, and not just the relevant additional costs incurred, following the occurrence of such an event.

COAG Energy Council's rationale

The COAG Energy Council has stated that both limbs of its proposed rule are necessary to correct inadvertent omissions made in the previous drafting of amendments to the NER.

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6 AGL rule change requests, p. 12 & 13

The COAG Energy Council considers that the current provisions of the NER limit the ability of a distributor to manage the commercial risk associated with retailers:

- under the NER, the distributors have a mandatory obligation to provide service when they are requested[7], thereby unable to withhold, or otherwise restrict, the supply of these services to retailers that might be perceived as being a commercial risk;
- as the revenue derived from retail services is subject to economic regulation, distributors may not make adjustments to the prices charged for those services to account for any higher risk in dealing with retailers that are perceived to have a higher risk of default; and
- the ability of distributors to manage the risk through the requirement of credit support from retailers is limited by the regulation of these arrangements under the NER.

1.1.3 Retailer insolvency cost pass-through provisions in the NGR

On 25 September 2015, Jemena Gas Networks (Jemena) submitted a rule change request to the AEMC.[8] The rule change request seeks to amend the retailer insolvency cost pass-through provisions in the NGR to allow a distributor to recover its foregone revenue in the event of retailer insolvency. The proposed changes would bring the retailer insolvency cost pass-through provisions in the NGR in line with the changes proposed by the COAG Energy Council related to the retailer insolvency cost pass-through provisions in the NER (discussed above).

In particular, Jemena has proposed amendments to Rule 531 of the NGR to:

- clarify that the pass-through amount includes both foregone revenue and the cost impacts of retailer insolvency; and
- the Australian Energy Regulator (AER) approved pass-through amount is to be reflected in variations to one or more reference tariffs through the reference tariff variation mechanism pursuant to the distributor's access arrangement regardless of whether or not the access arrangement contemplates or is inconsistent with the pass-through mechanism prescribed in the NGR.[9]

Jemena's Rationale

Jemena has stated that the proposed rule is necessary to correct inadvertent omissions made when the retailer insolvency cost-pass through provisions were originally included in the NER and NGR - in the case of the NGR, when the provisions were adopted as part of the NECF.

7 Rule 6.1.3 of the NER

8 Jemena's rule change request can be found on the AEMC website at:

9 Jemena rule change request, p. 3 & 4

Jemena indicates that the arrangements for gas distributors and electricity distributors are sufficiently similar for comparable pass-through rules to apply. In particular, like electricity distributors, gas distributors:

- are required to offer customer connection services; and
- have no ability to make fully independent decisions to manage the risk of counter party default.[10]

Although the NER and NGR retailer insolvency cost pass-through provisions were subject to the same COAG Energy Council initial policy, the COAG Energy Council rule change request only relates to the NER. As such, due to the similarities between electricity and gas distributors, Jemena has submitted its rule change request to align any changes made to the NER provisions with the NGR provisions, where appropriate.

Jemena's assessment of the proposed rule

Jemena claims that the key benefit of the proposed rule is to provide clarity to ensure that foregone revenue resulting from retailer insolvency may be recovered. This clarity would result in increased confidence on the part of customers, distributors and associated financial institutions. According to Jemena, this would result in downward pressure on network tariffs.[11]

Further, Jemena indicates that the proposed retailer insolvency cost pass-through provisions are in line with the general regulatory framework which aims to ensure network revenue covers the efficient cost of providing reference services.

1.2 Consolidation of the rule change requests

The Commission consolidated the COAG Energy Council's retailer insolvency cost pass-through rule change request (ERC0172) with AGL's rule change request related to the amendments to the NER.[12] They will be treated as one rule change request for the purposes of Part 7 of the National Electricity Law (NEL).

The Commission has consolidated Jemena's retailer insolvency cost pass-through rule change request (GRC0035) with AGL's rule change request related to the amendments to the NGR.[13] They will be treated as one rule change request for the purposes of Part 3 of the National Gas Law (NGL).

The issues raised in Jemena's rule change request are generally similar to those related to the COAG Energy Council's rule change request. As a result, the Commission has

10 Jemena rule change request, p. 3

11 See Jemena's rule change request for Jemena's discussion of the benefits and costs and potential impacts on affected parties at p.5

12 The consolidation was approved pursuant to section 93 of the National Electricity Law.

13 The consolidation was approved pursuant to section 300 of the National Gas Law (NGL)

determined that it was not necessary to publish a separate consultation paper in relation to this rule change request.

However, the Commission has published an information notice that sets out the rule change request and seeks stakeholders input in relation to issues particular to gas distributors that should be taken into account when the Commission considers the rule change request.

Should stakeholders be of the view that there are issues that arise in relation to the retailer insolvency cost pass-through rule change request related to the NGR that have not been specifically raised in this process to date, stakeholders are encouraged to include those issues in their submission to the information notice or as part of their submission on this options paper.

Both consolidated rule change requests will be examined together in a single process to facilitate consultation and analysis of the interrelated issues.

1.3 Purpose of the options paper

Under the Commission's standard process, the Commission would make draft rule determinations on the rule change requests following an initial round of consultation with stakeholders.[14]

However, for the purpose of these rule change requests, the Commission has determined it is appropriate to add an extra stage to the standard rule making process. The decision to publish an options paper prior to making draft rule determinations was informed by the following considerations:

- The issues raised are complex, have not been previously considered by the Commission and any changes to the rules could result in a material financial impact to stakeholders.
- The issue surrounding the management of retailer default have elicited a wide range of views from stakeholders.
- There are a range of possible options available to address the issues related to retailer default.

The purpose of this options paper is to

- test stakeholders' views on the alternative options identified, and
- pose questions for stakeholders to address so that the Commission can gain a better understanding of the merits of each of the proposed options.

14 On May 28, 2015, the Commission published notice under section 95 of the NEL and section 303 of the NGL setting out its decision to commence the rule change process for the rule change requests. The notices were accompanied by a consultation paper that was prepared to facilitate public consultation on the rule change requests. The consultation paper is available on the AEMC website.

1.4 Remainder of the rule change process

The remainder of the rule change process set out in the NEL and NGL involves, at a minimum:

- publication of a draft rule determination;
- at least six weeks of public consultation on the draft rule determination; and
- publication of the final rule determination within six weeks of the close of public consultation on the draft rule determination.

In addition to these steps, the Commission will consider holding a public forum or forums prior to the publication of the final determination.

Table 1.1 Indicative Timetable

Milestone	Timetable
Publication of consultation paper	28 May 2015
Publication of options paper	22 October 2015
Close of submissions on options paper	26 November 2015
Publication of draft determinations (and draft rules, if applicable)	18 February 2016
Close of submissions on draft determinations	31 March 2016
Publication of final determinations (and final rules, if applicable)	12 May 2016

1.5 Structure of the options paper

The remainder of this options paper is structured as follows:

- Chapter 2 sets out the current arrangements related to the retailer-distributor credit support requirements and the retailer insolvency cost pass-through provisions.
- Chapter 3 discusses the assessment framework for assessing the rule change requests.
- Chapter 4 discusses a set of proposed options including commentary on the various options.
- Chapter 5 outlines the process for making submissions.

2 Current arrangements

2.1 Retailer-distributor credit support requirements

The credit support requirements are laid out in Chapter 6B of the NER for electricity participants and Part 21, Division 4 of the NGR for gas participants and are substantively the same.

Under the current requirements, credit support may be requested by a distributor when the retailer's network charges liability (billed, but unpaid, and unbilled charges over the outstanding period) exceeds its credit allowance. The determination of the credit allowance is a function of both the distributor's annual network charges and the retailer's credit rating, with a higher credit rating equating to a higher credit allowance, and, all else being equal, a lower level of credit support. For any given credit rating, as a retailer's market share increases, all else being equal, its network charges liability increases, and the amount of credit support that may be required in excess of its credit allowance would increase.

Under the current credit support rules, credit support is calculated as follows:

> Credit Support = Network Charges Liability – Retailer's Credit Allowance
>
> Where:
>
> Retailer's Credit Allowance = Credit Allowance % x Maximum Credit Allowance
>
> Maximum Credit Allowance = 25 % of the Distributor's Total Annual Network Charges

Each element that is required for the calculation of the amount of credit support required is described below:

Maximum credit allowance: under the current credit support requirements the maximum credit allowance is set at 25 per cent of a distributor's total annual network charges.[15]

Retailer's credit allowance: this is set as a percentage of a distributor's maximum credit allowance and is based on the retailer's credit rating. The higher the retailer's credit rating, the higher its credit allowance and the lower the level of its credit support, all else being equal. The percentages are specifically set out in the NER and NGR.

15 A distributor's total annual network charges are reported to and published by the Australian Energy Regulator (AER).

Network charges liability: is the sum of the retailer's average billed, but unpaid, and unbilled network charges for each customer class.[16] For each customer class, this is based on the average network charges over the number of days' outstanding taking into account:

- how often the meters are read (eg. monthly versus quarterly);
- how often the distributor bills the retailer (eg. monthly or as otherwise agreed between the retailer and distributor); and
- the length of time taken to prepare the invoice and the time the retailer has to pay the invoice.[17]

The higher the number of days outstanding, the higher the retailer's network charges liability, and all else being equal, the more credit support that may be required.

Amount of credit support required: the extent to which the network charges liability exceeds the retailer's credit allowance determines the amount, if any, of credit support that the retailer would be required to provide if requested by the distributor.

2.2 Credit support when a retailer default occurs

In the event of a retailer default, a distributor that holds credit support may call on the credit support to the lesser of the total amount of credit support held or the total amount of network charges outstanding from the retailer. If the amount of credit support held by the distributor is less than the total of the network charges outstanding, the distributor will have to pursue other mechanisms - such as the corporate insolvency process, the overs and unders process or the cost pass-through process[18] - to collect the remainder of the outstanding charges.

Under the current framework, the possibility exists that the distributor may be unable to collect some or all of the outstanding network charges (also referred to as the foregone revenue) resulting from retailer default. This may be the result of the uncollected amount not being greater than the materiality threshold associated with the cost pass-through provisions, the AER disallowing the foregone revenue amount or the distributor not being able to collect the foregone revenue through the corporate insolvency process, among other possible reasons why the distributor may not be able to collect the foregone revenue.

16 A customer class is defined as those shared customers of the distributor and retailer for which the maximum days outstanding is the same.

17 Average outstanding network charges are calculated in accordance with the formula set out in the NER at 6B.B2.3 and the NGR at Part 21 section 517.

18 See sections 4.2.3 and 4.3.4 of this options paper for a discussion of the corporate insolvency process and overs and under process

2.3 Retailer insolvency cost pass-through provisions

The cost pass-through provisions applicable to electricity distributors are set out in Chapter 6 of the NER. In particular, the NER defines a retailer insolvency event as a positive pass-through event. For a positive pass-through event, the distributor may apply to the AER to pass the costs associated with the event through to its customers. The distributor must make the application to the AER within 90 business days of the event occurring and provide information such as:

- the details of the event;
- the date on which the event occurred;
- the eligible pass-through amount and the amount of the eligible pass-through amount the distributor is claiming (if different than the eligible amount);
- the amount the distributor is proposing to pass-through to customers in each regulatory year;
- the actual and likely increase in costs from the event;
- the amount of credit support that the distributor was entitled to under the credit support arrangements;
- the amount of credit support held by the distributor; and
- any amount the distributor is likely to receive through the corporate insolvency process.[19]

Under the current provisions of the NER, the positive cost pass-through amount must exceed one per cent of the distributor's annual revenue requirement to qualify for positive pass-through treatment.

The cost pass-through provisions for retailer insolvency events that are applicable to gas distributors are set out in Part 21, Rule 531 of the NGR. Generally, the retailer insolvency cost pass-through provisions in the NGR operate similarly to those in the NER with one exception; namely, the NGR does not require the costs associated with a retailer insolvency event to exceed one per cent of the distributor's annual revenue requirement to qualify for pass-through treatment.

With the exception of rule 531 however, the cost pass-through process for gas distributors is not set out in the NGR. The details of any cost pass-through mechanism are set out in the distributor's access arrangements as approved by the AER. Rule 97(1)(c) of the NGR provides that a reference tariff variation mechanism in an access arrangement can include a cost pass-through for a defined event. Cost pass-through will therefore be achieved by variations to the reference tariff in the access

19 NER Rule 6.6.1(c)

arrangement. The nature of the events that can be passed through must be set out in the access arrangement, together with the mechanism for reference tariff variation.

The AER in its *Access arrangement guideline* states that a reference tariff variation mechanism for a cost pass-through event in a gas distributor's access arrangement should establish a materiality test so that the possible effects of the mechanism on the administrative costs of the AER, the service provider and users can be taken into consideration. In some access arrangements, this materiality test is referred to as an administrative threshold and is "1% of the smoothed revenue requirements specified in the final decision in the years of the access arrangement period that the costs are incurred".

Although rule 531 of the NGR sets out more detail of the cost pass-through process for retailer insolvency events, the recovery of the cost pass-through amount is still through the reference tariff variation mechanism. Therefore the other requirements in the access arrangements for reference tariff variation (including any materiality threshold) would apply to any cost pass-through of retailer insolvency costs, unless there is a provision in the NGR which specifically provides that the materiality threshold will not apply to reference tariff variations for retailer insolvency cost pass-through events, and that this provision prevails over any inconsistent provision in an access arrangement.

For both electricity and gas distributors, the AER will assess any application associated with a cost pass-through event and approve the amount (if any) that may be passed through to customers and the regulatory years in which the amount will be collected.

2.4 Retailer insolvency cost pass-through provisions when a default occurs

If a retailer default occurs as per the definition of a retailer insolvency event and the distributor is unable to collect the costs associated with the event through credit support, it may be able to collect those outstanding costs with a cost pass-through. As indicated previously, the distributor must apply to the AER within 90 days of the event occurring for approval of the cost pass-through. The AER then has 40 business days to make a decision on the pass-through application including the amount of the cost pass-through and the length of time that the distributor will have to collect the amount from customers.

Under current practice, if the pass-through application is approved, the distributor incorporates the approved cost pass-through amount into its next annual pricing proposal. Once this pricing proposal is approved by the AER, the distributor is able to begin collecting the cost pass-through amount from the beginning of the regulatory year to which this pricing proposal applies.

Therefore, the time it takes for a distributor to start recovering the cost pass-through amount will depend on the timing of the retailer insolvency event in relation to when the annual pricing proposal for the next regulatory year is prepared and submitted. For example, Figure 2.1 and Figure 2.2 demonstrate how the timing of the retailer insolvency event impacts when the distributor may start collecting the pass-through amount. In both examples, retailer default occurs in Year 1, but the timing differs. Default occurs earlier in Figure 2.1 than in Figure 2.2.

Figure 2.1 Example 1: collection of pass-through amount

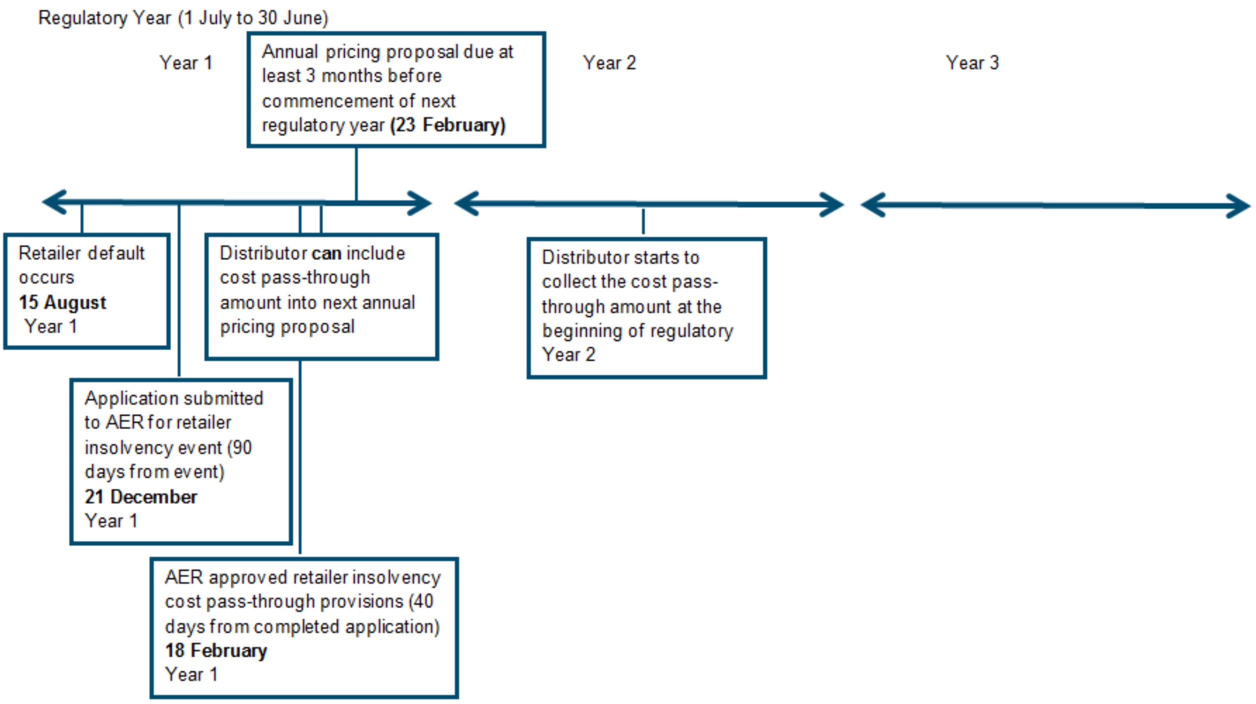
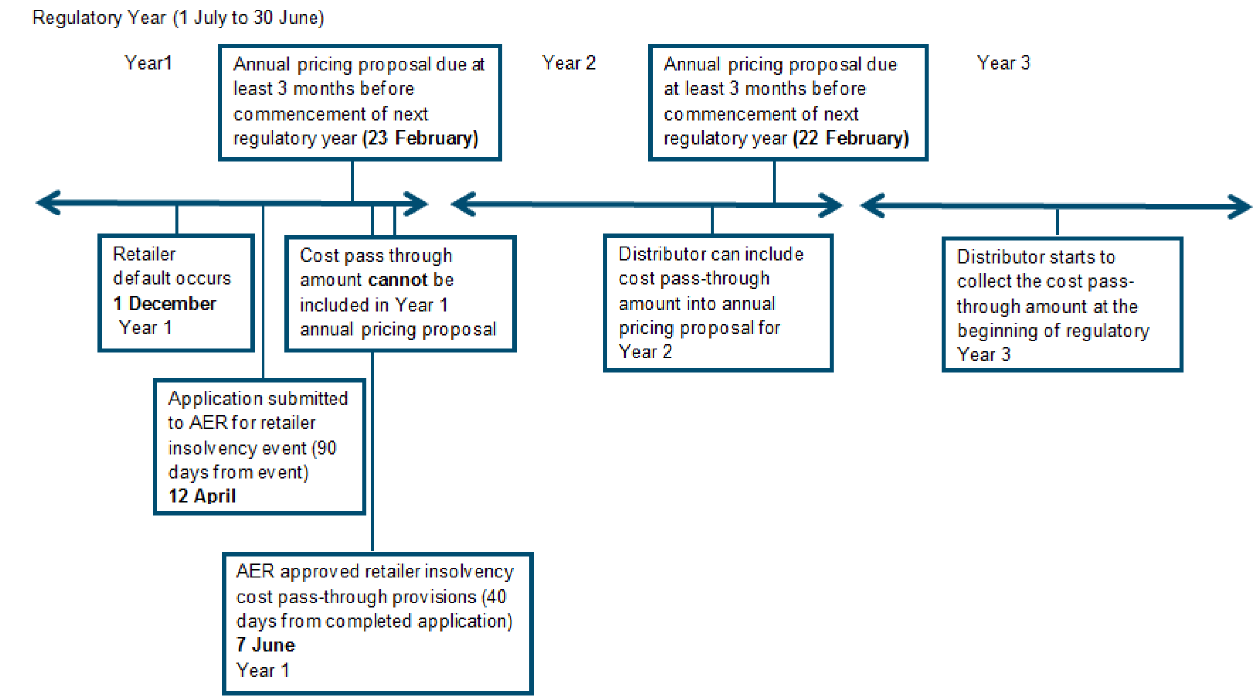


Figure 2.2 Example 2: collection of pass-through amount



In Figure 2.1, retailer default occurs sufficiently early in Year 1 to allow the distributor to incorporate the approved pass-through amount into the pricing proposal for Year 2. In contrast, in Figure 2.2 retailer default occurs sufficiently later in Year 1, such that - due to the time needed to have the cost-pass through application approved - the distributor is only able to incorporate the cost pass-through amount into the annual pricing proposal for Year 3.

As these stylised examples illustrate, the time it takes for a distributor to start recovering the cost pass-through amount can vary substantially - from less than 12 months to almost 2 years - depending on when a retailer default occurs.

3 Assessment Framework

This chapter sets out the Commission's proposed framework for assessing the rule change requests.

3.1 NEO and NGO assessment

The Commission's assessment of the rule change requests must consider whether the proposed rules are likely to contribute to the achievement of the NEO and the NGO.

The NEO[20] is:

> “to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to -
>
> (a) price, quality, safety, reliability and security of supply of electricity; and
>
> (b) the reliability, safety and security of the national electricity system.”

The NGO[21] is:

> “to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.”

Based on its assessment to date, the Commission considers that the relevant aspects of the NEO and NGL for the rule change requests are the "efficient operation" of electricity or gas services with respect to price and reliability.[22]

3.2 Assessment approach

The issues raised in the rule change requests will be considered by examining the risks faced by distributors and their customers, associated with retailer default and how the costs associated with managing these risks, including the possible recovery of a distributor's foregone revenue, could be allocated to parties in order to best promote the NEO and NGO.

The rule change requests alter the mechanisms that help to manage the risk of retailer default. As noted in the consultation paper, the proposed approach is to develop a set

20 As set out under section 7 of the NEL

21 As set out under section 23 of the NGL

22 While there are implications for retailers, there are no changes proposed to the National Energy Retail Rules (NERR) so the rules do not have to contribute to the National Energy Retailer Objective (NERO). Any impact on the retail markets is considered in the context of the "long term interests of consumers."

of principles that should be taken into consideration when designing an effective rule for managing the risk of retailer default. The rule change requests will be examined in light of these underlying principles, rather than just examining the impacts of the specific requests. The principles will guide the development of a rule that is in the long term interests of consumers. The range of possible rules is referred to collectively as 'a rule to manage the risk of retailer default'.

3.3 Principles for an effective rule to manage the risk of retailer default

The rule change requests have two impacts:

- the direct impact on a distributor's revenue and cash flows from a retailer defaulting; and
- the costs incurred by retailers and distributors to manage the risk of retailer default and insolvency.

A rule to manage the risk of retailer default will affect how and which market participants bear the responsibility and costs of managing the revenue and cash flow risks to the distributor and its customers from retailer default.

The credit support requirements may reduce the exposure of a distributor to revenue and cash flow risk in the event of a retailer default, by allowing a distributor to call on credit support (where it is provided). Some of the remaining exposure to revenue and cash flow risk may eventually rest with customers:

- if the distributor's revenue determination is by way of a revenue cap, then the revenue foregone as a result of a retailer default, may be recovered from all customers through the overs and unders process;
- if any additional costs are incurred by the distributor as a result of the retailer default, and the size of these costs are greater than the materiality threshold which applies to electricity distributors, these may be recovered from customers through the cost pass-through provisions.

The costs incurred by the distributor are shared by all customers in the distribution area, while the costs incurred by the retailer are shared only by that retailer's customers. In the absence of rules to mitigate the risk of retailer default, the expected long term cost to a distributor's customers from retailer default is based on the likelihood of default and the loss in the event of default, which is based on the size of each retailer's outstanding network charges.

In the presence of efficient and effective risk-mitigation rules, the long-term expected costs to a distributor's customers would depend on the costs of implementing and operating rules to manage the risk of retailer default, as well as any residual expected loss in the event of retailer default (in the event that the rule does not eliminate the risk to distributors and their customers from retailer default).

If a distributor is unable to recover foregone revenues and reasonable costs incurred as a result of a retailer default, then this risk may be reflected in the regulated rate of return. This is because distributors are unable to price differentiate between retailers on the basis of each retailer's credit risk profile. If a rule to manage the risk of retailer default enables the distribution business to recover foregone revenues and reasonable costs incurred as a result of a retailer default, then the risks faced by the distribution business are reduced. The risks faced by the distribution business should be reflected in the regulated rate of return, as specified in the rate of return objective and the revenue and pricing principles.

In its consultation paper, the Commission set out principles to guide the development and assessment of an effective rule for managing the risk of retailer default. Generally, stakeholders appear to mostly be in agreement with the principles set out by the Commission in the consultation paper. However, stakeholders identified further issues that they felt the Commission should consider in applying those principles. The Commission will discuss stakeholder submissions relative to the principles and application of the principles in more detail in its draft rule determinations.

The principles, as set out in the consultation paper, are:

- the rule allocates appropriate risks to the parties that have the information, ability and incentives to best manage each risk in order to minimise the long-term costs to consumers;
- the rule takes into account the risk of retailer default and the impact of default;
- the rule takes into account the trade-off between flexibility and regulatory certainty;
- the rule takes into account the potential impact on barriers to entry and competition for retail businesses; and
- the rule takes into account the impact on customers from changes in network revenue as a result of the revenue and pricing principles.

3.4 Research and analysis

The assessment of the rule change requests to date has required broad consideration of the issues raised.

The AEMC has engaged consultants to undertake analysis in support of the assessment of the rule change requests. The consultants engaged, and their scope of analysis, were:

- **KPMG:** a review of credit support arrangements in other international electricity and gas markets and other regulated industries in Australia. This consultancy was undertaken to provide the Commission and stakeholders with an understanding of the design and operation of other credit support mechanisms and how they may apply in the Australian context;

- **Promontory Financial Group:** an assessment of principles to be examined in adopting an effective rule to manage the risk of retailer default, design and consideration of options for a rule to manage the risk of retailer default and modelling of the costs and benefits of the options.

Based on the analysis undertaken by Promontory, and the principles outlined in the consultation paper, the following mechanism design principles were put forward to develop the options for a rule to manage retailer default:

- **Stability:** the rule should minimise potential financial contagion from a retailer default to its distributor;

- **Efficiency:** the rule should efficiently allocate the risks and costs to parties in order to minimise the long-term costs to consumers;

- **Incentives:** the rule should provide appropriate incentives to minimise the probability and impacts of retailer default;

- **Revenue and pricing principles:** the rule should take account of any change in network revenue resulting from the option adopted and the application of the revenue and principle principles; and

- **Competition:** the rule should consider any unintended or unwarranted impacts on barriers to entry for retail businesses.

It is acknowledged that in designing and determining any rule to manage the risk faced by distributors and their customers of retailer default, the Commission may have to balance the various principles that underpin the NEO or NGO.

4 Options for a rule to manage the risk of retailer default

In the rule change requests, a number of changes were proposed to the retailer-distributor credit support requirements and the retailer insolvency cost pass-through provisions. In addition to the proposed changes, the Commission considers that there may also be other options to manage the risk faced by distributors and their customers of retailer default that have the potential to contribute to the NEO or NGO.

This chapter discusses the options to be explored that may address the problems identified in the rule change requests.

4.1 Overview of the options

The following options to address the risks and costs associated with managing retailer default, in the context of collecting unpaid network use of system charges, have been developed and modelled[23]:

1. **Option 1: retain the existing arrangements -** the existing arrangements for both the credit support requirements and the cost pass-through provisions would remain as currently set out in the NER and NGR;

2. **Option 2: strengthen the existing arrangements -** variations to the current credit support requirements and cost pass-through provisions, including but not limited to one or more of, the AGL proposal, the COAG Energy Council proposal and the Jemena proposal;

3. **Option 3: establish a retailer default fund -** the establishment of a fund, available to distributors in the event of a retailer default, which is funded by retailers based on a set formula prescribed in the NER and NGR; and

4. **Option 4: introduce a liquidity support scheme -** a liquidity instrument to be held by the distributor to be used to address cash-flow issues arising from a retailer default. Under this option, the costs associated with the liquidity support scheme could be paid by the distributor or collected from the retailers based on a set formula prescribed in the NER and NGR.

Each of these options is set out in more detail below, after a discussion of the general framework used to model the revenue and cash flow implications of each option.

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23 See Promontory, 2015, *Principles and Options for Managing Retailer Default Risk*, Promontory Australasia, 22 October 20015 [insert weblink]

4.2 Framework for modelling of options

As part of its report, Promontory modelled the four broad options being considered. The analytical framework on which the distributors and their customers modelling are based is summarised below, followed by the key results of that modelling.

The modelling framework examines the revenue and cash flow implications of the various options on , as well as the ongoing post-retailer default costs that would flow through to customers. The modelling is based on information such as the number of customers and size of network revenues and is representative of existing electricity and gas networks. The modelling framework examines eleven representative electricity networks and eight representative gas networks. The electricity networks are labelled E1 to E11, while the eight gas networks are labelled G1 to G8 in the tables and figures below.

The key model inputs and assumptions include:

- **distributor revenue:** the relevant component of revenue for each distributor (i.e. a distributor's total annual retail charges (TARC)) is a key input in all of the options and is used to estimate items such as a retailers network charges liability (NCL) and a distributors current assets;
- **shared customers:** shared customer data is used to estimate each retailer's market share within a network which, in turn, allows the allocation of each distributor's TARC to the relevant retailers that operate in the distributor's network. From this, the NCL for each retailer is calculated. A shared customer is a customer of both the retailer and the distributor;
- **credit worthiness:** credit ratings and Dun & Bradstreet dynamic risk scores for retailers are used to determine the amount of credit support required under options 1 and 2, and for the allocation of costs under options 3 and 4. The credit ratings of distributors were used to determine the costs associated with option 4, the liquidity support scheme.

4.2.1 Ongoing costs for retailers

For each of the options, the annual ongoing risk management costs for each retailer in a network are estimated. For each retailer, it is assumed that these costs are collected from shared customers, which allows for an estimation of the impact on customers in dollar terms and as a percentage increase in energy costs.

In estimating the dollar impact, it is assumed that the risk management costs are applied equally across all of the shared customers of each retailer with no distinction made between small and large customers.

For each of the options examined by Promontory, the impact of the risk management costs, in terms of the percentage increase in customers' bills, is determined using the following two-step approach:

1. annual gas and electricity consumption figures for a representative shared electricity and representative shared gas customer, respectively, is used for each NECF jurisdiction;[24]

2. the consumption figures for these two sets of representative customers, in each NECF jurisdiction, are converted into annual bills. Then, the per-capita risk management cost of each option is calculated as a percentage of the annual bill for each of electricity and gas shared customers.

4.2.2 Post-default analysis

In modelling the impact of retailer default, three separate default scenarios - labelled scenario 1, scenario 2 and scenario 3 - were examined.

Table 4.1 Default scenarios

Scenario Number	Description
scenario 1	Default of the retailer with the largest market share within a distribution network
scenario 2	Default of the retailer with the largest market share across all electricity and gas networks
scenario 3	Default of three retailers each with a market share of less than five per cent across electricity and gas networks

The modelling considers the impact of retailer default under each of the three default scenarios for each of the options being considered, in terms of:

- **revenue impact:** the revenue impact for each distributor under the three scenarios is measured in terms of foregone revenue plus default-related costs, as explained in more detail in the Promontory report (see section 5.2, pp. 39 - 40). Foregone revenue is calculated as 110 per cent of the defaulted retailer's NCL. A rate of 110 per cent is used to account for the potential increase of unpaid network charges that accrue until all of the defaulting retailer's customers are transferred to a new retailer;

24 Electricity consumption data was obtained from AEMC, 2014 Residential Electricity Price Trends Report, 5 December 2014. Gas consumption data was compiled from: Sustainability Victoria (2014), Victorian Households Energy Report, State Government of Victoria; http://www.ipart.nsw.gov.au/Home/For_Consumers/Compare_Energy_Officers/Typical-householder_energy_use; South Australian Council of Social Services (2014), The South Australian Gas Market Consumer Factsheet 2014

- **cash flow impact:** the cash flow impact for each distributor under the three scenarios is analysed by estimating the distributor's working capital ratio three months after the retailer default. The working capital ratio is defined as the distributor's current assets (minus the foregone revenue) over current liabilities (plus any costs associated with the retailer default). For the purpose of the modelling, current assets include cash and receivables. Current liabilities consist of maintenance, operating expenditures, planned capital expenditures, financial charges and - for electricity distributors - transmission use of system charges. The cash flow impacts under the three default scenarios are explained in more detail in the Promontory report (see section 5.2, pp. 40 and 41);

- **customer impact:** as with ongoing costs, the post-default cost impact on customers - under those options where the distributor is able to recover foregone revenue and/or costs from customers across their network - is estimated. The dollar impact for each customer is estimated by applying the costs equally across the distributor's entire network. In the case of post-default costs, these costs are spread across the distributor's entire customer base, rather than just the customers of the defaulted retailer. To estimate the impact as a percentage increase, the average of the estimated annual energy costs for each of the shared customers is used.

A full list of the assumptions used in the modelling is set out in Appendix A.

4.3 Option 1: retain the existing arrangements

Under this option, the following existing mechanisms would be available to distributors to manage the risk of retailer default:

- credit support requirements;
- insurance;
- overs and unders process;
- corporate insolvency process; and
- retailer insolvency cost pass-through provisions.

4.3.1 Credit support requirements

Under this option, the distributor would be able to request credit support from a retailer where the retailer's network charges liability exceeds its credit allowance. The methodology of the calculation of credit support required under the current rules is set out in section 2.1 of this paper.

4.3.2 Insurance

A distributor could elect to purchase commercial insurance or pursue self-insurance to protect itself from the risks associated with retailer default. The distributor would then apply to the AER to include any costs associated with the insurance into its regulatory determination process, which may or may not be approved.

4.3.3 Overs and unders process

Where the distributor is subject to a revenue cap form of regulation for the provision of network services, it may be able to recover the foregone revenue associated with retailer default through the unders and overs process.

In particular, at the end of each regulatory year, a distributor subject to a revenue cap is required to report its actual revenues to the AER. Differences between actual and expected revenues are then accounted for in future years of the regulatory control period. Specifically:

- if actual revenues are greater than allowed revenues for that year, the distribution business is required to 'give back' that additional revenue by lowering its prices in the following year(s); or
- if actual revenues are lower than allowed revenues for that year, the distribution business will be able to increase its prices in the subsequent year(s) to recover the previous under-recovery.

It would be expected that if a retailer default occurs, the distributor's actual revenue would be lower than the allowed revenue and it would be allowed to recover that amount in subsequent years.

4.3.4 Corporate insolvency process

A distributor that is unable to recover in full the money owed to it by a retailer as a result of a retailer default, is able to join a general corporate insolvency process as an unsecured creditor under the *Corporations Act 2011 (Cth)*. As a distributor is an unsecured creditor, there are numerous factors that will impact the ability of the distributor to recover the monies owing including, but not limited to, the amount of funds available for payments, the amounts owing to secured and other higher-rated creditors and the number and amounts owing to other unsecured creditors of the same ranking.

4.3.5 Cost-pass through mechanism

Under the current retailer insolvency cost pass-through provisions, a distributor is able to seek recovery of increases in costs from a retailer default and - in the case of an electricity distributor - where this amount exceeds the materiality threshold. If the distributor's application is approved, costs incurred due to retailer default are passed through, and thus recovered from, customers in the form of increased prices.

4.3.6 Modelling of the current arrangements

Ongoing Costs for retailers

Under the current arrangements, the annual ongoing costs for a retailer are impacted by the amount of credit support required, which, in turn, is based on the amount that a retailer's NCL exceeds its credit allowance. Figures 4.1 (for the eleven representative electricity distributors, E1 to E11) and 4.2 (for the eight representative gas distributors, G1 to G8) each show:

- the percentage of retailers within each network that have a NCL (as a proportion of the retailer's credit allowance) of less than 100 per cent (where no credit support would be required), and
- the proportion of retailers operating at a level greater than 100 per cent (where credit support would be required).

For example, Figure 4.1 shows that, under current arrangements, of the retailers in E1's network, almost 93 per cent have NCLs as a proportion of their respective credit allowances - of less than five per cent. Seven per cent of retailers have proportionate NCLs between 50 and 100 per cent. That is, all retailers in E1's network have network charges liabilities that do not exceed their credit allowances, and therefore none of these retailers are required to provide credit support.

Using an example from gas distributors, Figure 4.2 reveals that, under current arrangements, 60 per cent of retailers in G5's network have proportionate NCLs of less than five per cent. A further 20 per cent of retailers have NCLs of five to 50 per cent, and another 20 per cent have NCLs between 50 and 100 per cent. Therefore, similar to E1, none of the retailers in G5's network need to provide credit support, under current arrangements.

Figure 4.1 Electricity distributors - retailer's NCL operating band

NCL to credit allowance (%)	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11
< 5	92.9%	71.4%	89.7%	75.0%	81.5%	87.9%	87.1%	75.0%	75.9%	76.9%	77.4%
5 to 50	-	25.0%	6.9%	21.4%	18.5%	9.1%	12.9%	21.4%	20.7%	23.1%	19.4%
50 to 100	7.1%	-	3.4%	3.6%	-	3.0%	-	-	-	-	-
> 100	-	3.6%	-	-	-	-	-	3.6%	3.4%	-	3.2%

Figure 4.2 Gas distributors - retailer's NCL operating bands

NCL to credit allowance (%)	G1	G2	G3	G4	G5	G6	G7	G8
< 5	50.0%	46.2%	46.2%	66.7%	60.0%	33.3%	75.0%	80.0%
5 to 50	50.0%	53.8%	53.8%	16.7%	20.0%	66.7%	18.8%	-
50 to 100	-	-	-	16.7%	20.0%	-	6.3%	20.0%
> 100	-	-	-	-	-	-	-	-

Figures 4.1 and 4.2 assume that when the NCL to credit allowance percentage exceeds 100 per cent, electricity and gas distributors do request retailers in their network to provide credit support.[25]

Using this assumption, Figures 4.1 and 4.2 reveal that very little credit support is required to be provided by retailers, under current arrangements, across the sample of electricity and gas distributors. Under current arrangements, none of the gas retailers have proportionate NCLs above 100 per cent, while only three per cent of electricity retailers have proportionate NCLs above 100 per cent. In dollar terms, the total amount of credit support received by distributors across all networks (of which only electricity customers are impacted) is approximately $3 million.

Consequently, the modelled estimate of ongoing costs is insignificant, under current arrangements, with only one per cent of electricity customers (across all networks) impacted. The estimated maximum impact on a customer's annual electricity bill is around $2.40, less than 0.22 per cent of the bill. For a more detailed discussion, see section 5.3.1 of Promontory's report (pp. 42-43).

Post-default analysis: overs and unders process

In the modelling, it is assumed that the AER will only allow customer price increases (from a distributor's revenue adjustment) of up to ten per cent in any one year. If the increase in customer prices is greater than ten per cent, the period of recovery is extended beyond one year. The distributor's cost of debt is used to calculate the funding costs incurred by distributors from a delay in the recovery of foregone revenue.

The total post-retailer default impacts include foregone revenue and additional costs, which are assumed to include both funding and administrative costs resulting from retailer default. The method and determination of these amounts are more specifically provided in Promontory's report in section 5.3.2 (pp.43-44).

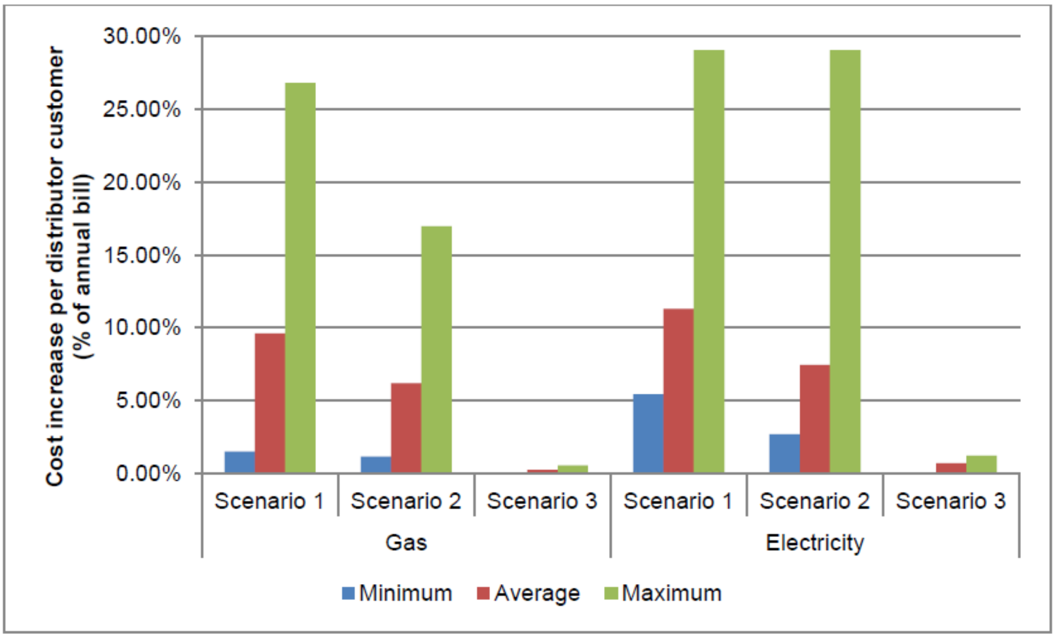
25 As noted in section 2.1, credit support can - but need not - be provided by a retailer when its NCL exceeds its credit allowance.

For this and the other three options, and for each default scenario, when expressing the post-default costs as a percentage of a customer's bill, the percentage change is calculated relative to the customer's *annual* bill, even if this is greater than 10 per cent. This treatment is done for ease of exposition, and is in contrast to the assumption, noted in the prior paragraph, about the AER's ten per cent limit on the annual growth in customer prices.

Collection of the foregone revenue and additional costs through the overs and unders process would result in material impacts on customers as shown in Figure 4.3. Figure 4.3 shows the maximum, minimum and average impact on customers for the three retailer default scenarios.

For example, the post-default costs under default scenario 1 represent, on average, an increase of around seven per cent to a representative shared customer's annual bill. In contrast, the minimum and maximum possible increases to a representative shared gas customer's annual bill, under the same default scenario, is one and a half per cent and 27 per cent, respectively. As noted above, in calculating and graphing the percentage changes in annual bills, changes above 10 per cent are included even though the AER may spread this change over more than one year.

Figure 4.3 Post-default costs to distributors' customers - overs and unders process

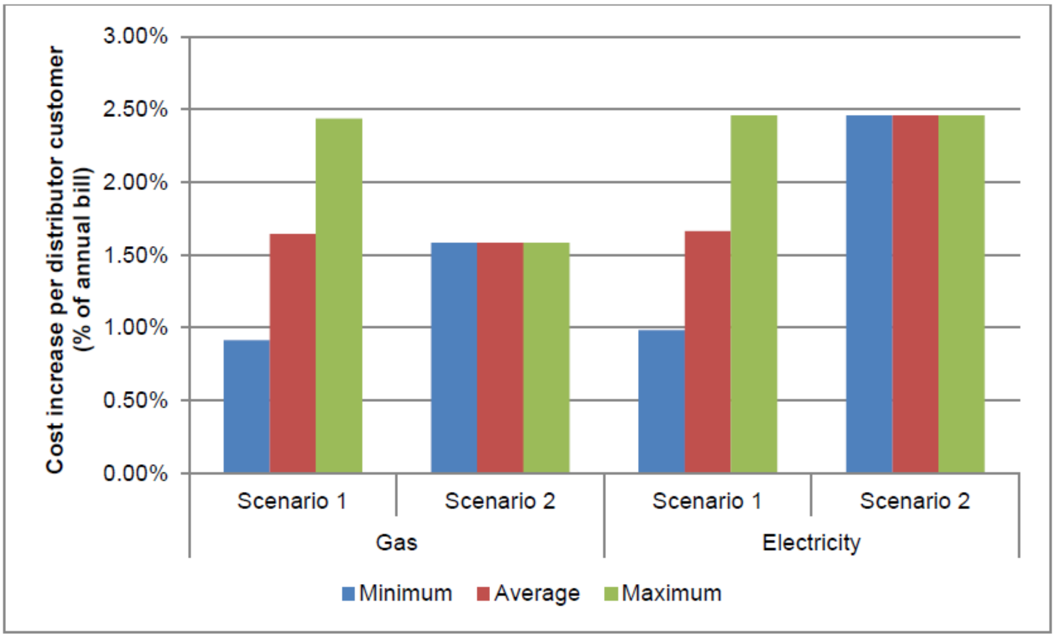


Post-default analysis: retailer insolvency cost-pass through

Under the current retailer insolvency cost pass-through provisions there is uncertainty in relation to a distributor's ability to recover foregone revenue. For the purposes of the modelling, it is assumed that distributors are able to recover only costs associated with the default and not foregone revenue, provided the costs exceed the one per cent materiality threshold.

Under the three default scenarios, the materiality threshold is only exceeded in scenarios 1 and 2 as shown in section 5.3.2 of Promontory's report (p.45). Therefore, for scenario 3, the distributor would not be able to recover the costs associated with the retailer default through the retailer insolvency cost pass-through provisions. For scenarios 1 and 2, where the materiality threshold may be exceeded, the post-default costs passed through to the distributor's customers are shown in Figure 4.4. Figure 4.4 shows the maximum, minimum and average cost impact on customers resulting from the retailer default.

Figure 4.4 Post-default costs to distributors' customers - retailer insolvency cost pass-through



For a more detailed discussion on post-default costs to a distributor's customers, and the revenue impact absorbed by the distributor due to the assumption that foregone revenue cannot be collected or where the costs are less than the materiality threshold, see section 5.3.2 of Promontory's report (pp. 44-46).

Question 1 The option to retain existing arrangements

(a) What are the advantages of retaining the existing arrangements for both the credit support requirements and the cost pass-through provisions in terms of recovering revenue related to managing the risks associated with retailer default?

(b) How does this option compare to the other options discussed in this options paper to manage the risks associated with retailer default?

4.4 Option 2: strengthen the existing arrangements

This option involves some measures that would strengthen the retailer-insolvency cost pass-through provisions and/or retailer-distributor credit support provisions. These two sets of measures are considered independently from one another and in concert. It should be noted that under this option, mechanisms such as the overs and under process and the corporate insolvency process would still be available to distributors.

4.4.1 Enhanced cost pass-through provisions

The enhancements to the cost pass-through provisions could include:

- removing the materiality threshold, where one applies; and
- clarifying the provisions to ensure that foregone revenue is included in the costs distributors are able to recover in the cost pass-through amount.

This is in line with the COAG Energy Council and Jemena rule change requests.

Another possible enhancement to the cost pass-through provisions relates to the timing associated with when a distributor may be able to start collecting the approved cost pass-through amount. A mechanism for consideration is whether it may be appropriate to include an exception in the rules to allow a distributor to start collecting the approved cost pass-through amount immediately after it has been approved, rather than waiting to include it in the next annual pricing proposal. Alternatively, the AER could make a guideline outlining under what circumstances the AER may exercise its discretion to allow immediate collection of an approved cost pass-through amount related to retailer insolvency, rather than included in the next annual pricing proposal.

Under this enhancement, customer prices may be changed more than once a year. This would result from the possibility that prices may change once when the annual pricing proposal is implemented and once when the retailer insolvency cost pass-through amount is passed through to customers. This enhancement may result in an exception to the standard regulatory practice of ensuring prices only change once, from one year to the next.

Enhanced cost pass-through provisions could be used:

- as the main mechanism to recover costs associated with retailer default with no credit support or other substituted mechanism provided for in the either the NER or NGR;
- in concert with the current credit support requirements;
- in concert with enhanced credit support requirements as discussed below;
- in concert with Option 3: a retailer default fund as discussed in section 4.4 below; or
- in concert with Option 4: a liquidity support scheme as discussed in section 4.5 below.

4.4.2 Strengthen the credit support mechanism

There are several ways in which the current credit support mechanism may be strengthened and these options are not necessarily mutually exclusive. These options include:

- strengthening and clarifying the provisions dealing with multiple retailer authorisations and parent company guarantees;
- removing the concept of the maximum credit allowance and a retailer credit allowance;
- limiting the measures of creditworthiness that can be used to determine the level of credit support required; or
- providing a mechanism to address credit concentration.

Multiple retailer authorisations

A number of retailers operate their businesses using several retailer authorisations or licences.[26] Multiple retailer authorisations or licences arise for numerous reasons, including where a parent company operates several subsidiaries each with its own retailer authorisation or licence or when one retailer has purchased or merged with another retailer resulting in more than one retailer authorisation or licence being held. There appears to be a multitude of interpretations in the market in relation to how those retailer authorisations or licences should be treated for the purposes of determining the level of credit support required; namely whether they should be combined or treated separately for the purposes of determining the applicable credit allowance.

Under this option, in order to account for multiple retailer authorisations or licenses an amendment to Rule 6B.B3.4 of the NER and Part 21, Rule 521 of the NGR would be required. The amendments would clarify that:

- a licensed retailer is not allowed to use its parent credit rating unless an explicit guarantee is provided by the parent; and
- if multiple guarantees are provided by the parent of a retailer group, the credit allowance of the parent must be apportioned out to the individual retailer authorisations or licences being guaranteed.

Removal of credit allowances

The decision to have a credit support regime with a maximum credit allowance and the level of the maximum credit allowance are policy decisions. One enhancement to the current credit support regime may be to remove the concept of the maximum credit allowance completely. This would be in line with the proposal put forward by AGL.

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26 A retailer authorisation or license is granted by the AER and allows a party to operate in the market as a retailer

As indicated in section 1.1 of this options paper, under AGL's proposal the benchmark credit rating is set at BBB-.

The AGL methodology related to the calculation of credit support is also being assessed whereby the benchmark credit rating is set at A- rather than BBB-. This is in line with the current benchmark credit rating level in the NER and NGR. This would result in any retailer rated below A- providing that level of credit support which lowers the credit risk faced by the distributor to that of a retailer with an A- credit rating. As most retailers currently have a credit rating below A-, such a measure would result in most retailers having to provide some level of credit support. This would include retailers who would not be required to provide credit support under AGL's proposal (that is, retailers rated between A- and BBB-).

Limiting the available measures of creditworthiness

Under the current credit support requirements, a retailer may use either an S&P credit or equivalent[27] or a Dun & Bradstreet (D&B) dynamic risk score. One enhancement to the credit support requirements would be to limit the use of D&B dynamic risk scores by realigning S&P ratings and D&B dynamic risk scores. This enhancement could apply to any alternative that is based on the retailer's creditworthiness; that is, this could apply to both the current arrangements and any option that removes the concept of a credit allowance.

This option would consider the following two amendments to the available measures of creditworthiness:

- realignment of S&P or equivalent credit ratings and the D&B dynamic risk scores: there are fundamental differences between how an S&P credit rating and a D&B dynamic risk score is determined and the inputs into determining the applicable rating. To account for the limitations associated with the D&B dynamic risk scores - which include the limited inputs used to derive the score - D&B dynamic risk scores would be re-aligned to S&P ratings based not just on the default probability associated with each credit rating, but also the relative processes used to determine the creditworthiness under each rating system. For example, a retailer should not necessarily be classified as equivalent to an investment grade institution, based on a D&B dynamic risk score, where the main input is payment history.

27 Where there is a reference to an S&P credit rating it should be taken to include equivalent credit ratings from other credit rating agencies unless specifically indicated otherwise

A possible example of this realignment could be:

S&P or equivalent rating	D&B dynamic risk score rating[28]
AAA+ to BBB	-
BBB-	Minimal
BB+	Very low
BB	Low
BB-	Average
B+	Moderate
B	High
B-	Very high
CCC and below	Severe

- mandate use of an S&P or equivalent credit rating where one is available: the current rules provide a retailer who has an S&P rating and a D&B dynamic risk score to select which rating it will use for the purposes of determining the amount of credit support required. Under this option, if a retailer (or its parent, if they have provided a guarantee) has an S&P rating, that S&P rating must be used. If this retailer decides not to use the S&P rating, then that retailer, under this enhancement, will be assessed as if it were unrated and cannot rely on a D&B dynamic risk score. If a retailer has no S&P rating (and is not guaranteed by a parent with an S&P rating), then that retailer can rely on a D&B dynamic risk score.

Credit Concentration

In the event of a retailer defaulting, there is the potential for financial contagion and systemic instability if the retailer's default sets off a cascade of defaults and insolvencies, starting with the distributor. To minimise the potential for such contagion, one option would be to require credit support to be greater for retailers with large market shares. This is similar to the proposal put forward by the NSW Distribution Networks in its submission to the Commission's consultation paper.

Under this option, additional credit support would be required to account for a retailer's market share beyond a threshold level. The concentration credit support premium would be calculated as follows:

28 The terms used in this table represent the risk score rating terms used by D&B when issuing dynamic risk scores.

Concentration credit support premium = excess market share (%) x cash flow at risk

Where:

Excess market share (%) = retailer's market share (%) – threshold market share (%)

$$\text{Threshold market share (\%)} = 1 - \frac{\text{distributor's committed liabilities}}{\text{distributor's billing revenue}} = \frac{\text{cash flow at risk}}{\text{distributor's billing revenue}}$$

The need for a credit concentration premium may depend on the underlying methodology used to determine credit support. For example, if the AGL methodology - but with an A- benchmark rather than a BBB- benchmark - were to be used, the need for a credit concentration premium would appear to be diminished.

4.4.3 Modelling of credit support enhancements

In this section, there are three separate enhancements examined and modelled, labelled option 2.1, 2.2 and 2.3.

Table 4.2 Credit support enhancements

Options	Description
Option 2.1	Strengthen existing arrangements: COAG Energy Council and Jemena proposals without credit support. The purpose of this option is to assess the impacts on distributors of removing the current credit support arrangements and introducing the COAG Energy Council and Jemena proposal. Under this option the retailer insolvency cost pass-through provisions are enhanced to allow recovery of foregone revenue resulting from retailer default and removing any applicable materiality threshold.
Option 2.2	Strengthen existing arrangements: COAG Energy Council and Jemena proposals and AGL proposal. This option assumes that retailer insolvency cost pass-through proposed rule changes are implemented and credit support requirements are amended as per AGL's proposal. Under the AGL proposal credit allowances are removed and only retailers rated below BBB- are required to provide credit support.
Option 2.3	Strengthen existing arrangements: COAG Energy Council and Jemena proposals with enhanced credit support. This option assumes that the retailer insolvency cost pass-through proposed rule changes are implemented and an alternative set of credit support requirements are introduced. Under the alternative credit support arrangements credit allowances are removed. Unlike the AGL proposal, however, this option retains the current benchmark credit rating of A-. That is, only retailers rated below A- are required to provide credit support. Other enhancements implemented for this option include: re-alignment of D&B dynamic risk scores and credit ratings to reflect differences in methodology and restricting the use of D&B dynamic risk scores in instances where a retailer or its parent guarantor have a credit rating.

Ongoing costs for retailers

The annual ongoing costs for a retailer are influenced by the amount of credit support required. The level of credit support required under each of four sub-options (option 1, and sub-options 2.1 to 2.3) is calculated as a proportion of each retailer's NCL. For each of the eleven representative electricity distributors (E1 to E11), Figure 4.5 shows the required level of credit support. Figure 4.6 shows the credit support required for each of the eight representative gas distributors (G1 to G8).

For example, Figure 4.5 shows that the level of credit support provided by retailers of electricity distributer E3 is only 0.6 per cent under sub-option 2.2, compared to over 69 per cent under sub-option 2.3. For both electricity and gas distributors, the level of credit support required of retailers is higher under sub-option 2.3 than sub-option 2.2. This outcome is expected, reflecting, amongst other enhancements, the higher threshold credit rating (A-) under sub-option 2.3 than sub-option 2.2 (BBB-).

Figure 4.5 Credit support as a proportion of retailer NCLs - electricity distributors

	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11
Option 1	-	1.1%	-	-	-	-	-	0.7%	0.2%	-	0.7%
Option 2.1	-	-	-	-	-	-	-	-	-	-	-
Option 2.2	0.0%	5.8%	0.6%	4.4%	0.0%	0.5%	0.5%	6.0%	4.9%	4.3%	5.5%
Option 2.3	60.3%	61.0%	69.2%	56.8%	69.6%	61.9%	66.5%	60.0%	55.9%	58.8%	56.8%

Figure 4.6 Credit support as a proportion of retailer NCLs - gas distributors

	G1	G2	G3	G4	G5	G6	G7	G8
Option 1	-	-	-	-	-	-	-	-
Option 2.1	-	-	-	-	-	-	-	-
Option 2.2	1.8%	2.0%	2.2%	0.0%	0.0%	2.4%	0.0%	0.0%
Option 2.3	57.7%	57.0%	56.2%	70.9%	66.4%	63.3%	62.3%	44.3%

There are no ongoing costs associated with option 2.1 as there is no credit support. The ongoing costs to the shared customers under options 2.2 and 2.3 are discussed in more detail in section 5.4.1 of Promontory's report (pp.50-53) and are presented in Figures 4.7 and 4.8 for electricity and Figures 4.9 and 4.10 for gas.

Costs to shared customers are presented as a percentage change to a shared customer's annual energy bill. To demonstrate the range of impacts, the below figures present the minimum, average and maximum percentage impacts separated into various S&P and D&B dynamic risk score ratings.

Figure 4.7 Ongoing costs to shared customers - electricity retailers (option 2.2)

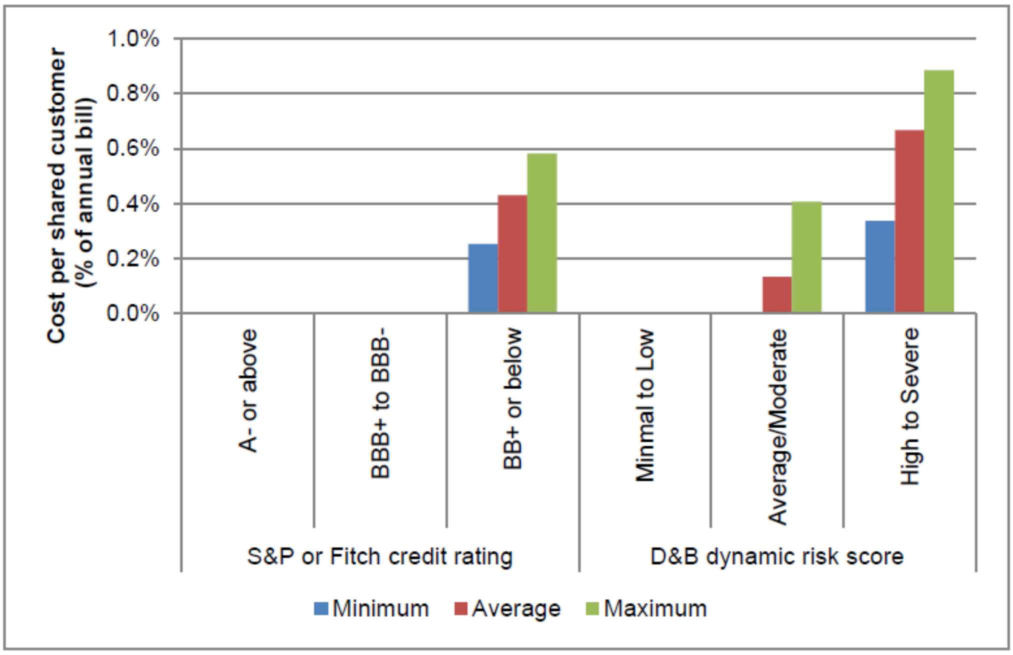
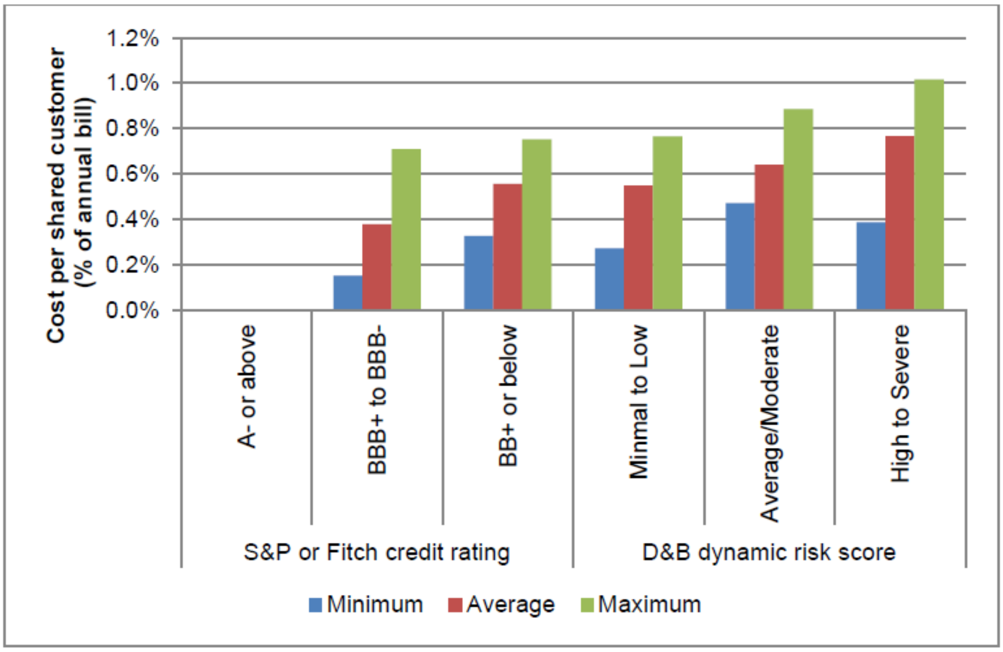


Figure 4.8 Ongoing costs to shared customers - electricity retailers (option 2.3)



The annual costs to shared customers of electricity retailers are higher under option 2.3 than option 2.2, with the largest differences observed for customers of retailers in the middle credit ratings range (BBB+ to BBB-). Under option 2.3, retailers in this credit ratings range would be required to provide credit support, which is not the case under option 2.2.

Figure 4.9 Ongoing costs to shared customers - gas retailers (option 2.2)

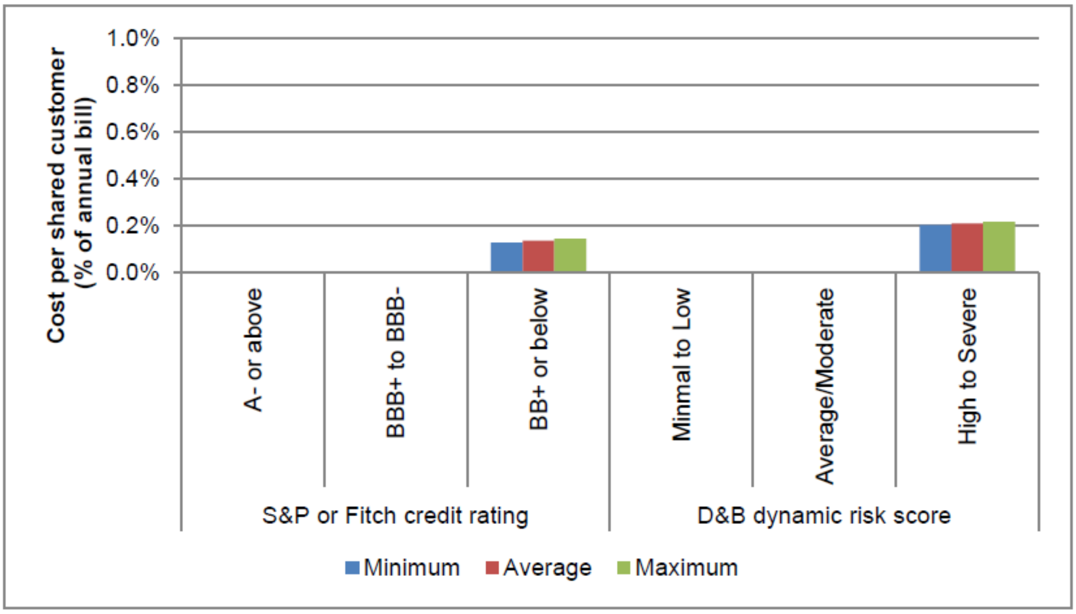
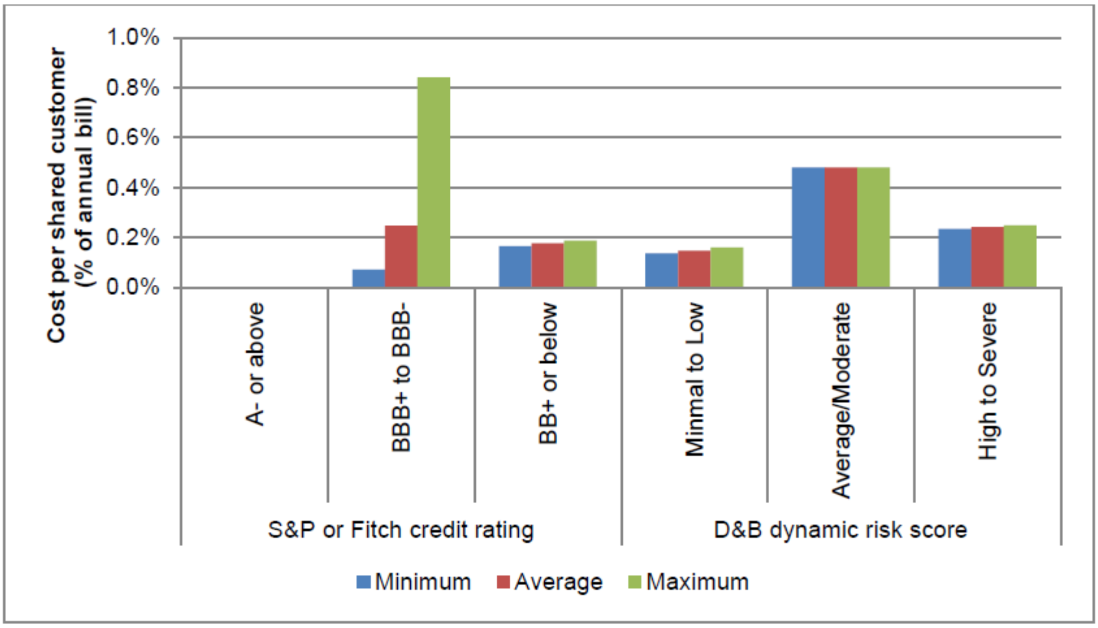


Figure 4.10 Ongoing costs to shared customers - gas retailers (option 2.3)



Similar to electricity, the annual ongoing costs for shared gas customers is higher under option 2.3 than 2.2.

Post-default analysis

For the purposes of the post-default analysis, the modelling examines the impact of retailer default in terms of:

- foregone revenue,
- cash flow impacts (including implications in terms of funding costs), and
- customer impact (where the post-default cost to distributors' customers are a function of both foregone revenue and funding costs under the three retailer default scenarios set out above).

In examining the post-default impacts under this option, the amount of foregone revenue less any credit support held is estimated to determine the amount that may be passed through and is set out in Promontory's report in section 5.2.4 (pp. 54-55). The pass-through amount also includes an estimate of the cash flow impacts and funding costs which can be found in section 5.2.4 of Promontory's report (pp. 56-57).

Under option 2.1, no retailers provide credit support. Under option 2.2, the large retailers that are assumed to default in default scenario 1 and 2 (see Table 4.1) have credit ratings of BBB- or higher, and hence do not provide credit support. In default scenario 3 (see Table 4.1), credit support would be provided under option 2.2. In contrast, all of the retailers assumed to default in all three default scenarios would provide some level of credit support under option 2.3. The proportion of foregone revenue mitigated under all three retailer default scenarios for option 2.3 is material and results in a significantly smaller amount being passed through to the distributor's customers through the retailer insolvency cost pass-through mechanism.

In respect of cash flow impacts from a retailer default, under option 2.1, the impacts are not materially different than the cash flow impacts under option 1 (the option to retain the existing arrangements; see Section 4.3). In relation to option 2.3, the cash flow impacts are insignificant and so have not been specifically modelled.

In examining the cash flow impacts under option 2.2 for gas distributors, these distributors will have access to sufficient credit support from retailers to maintain their cash flow position to meet current liabilities. Therefore, no additional funding should be required.

For electricity distributors, although a few distributors may face not significant cash flow impacts from retailer default, the level of credit support that would be held would alleviate the bulk of any potential cash flow shortfalls. This occurs in all of the three default scenarios.

In respect of the pass-through effects to distributors' customers (both electricity and gas) following a retailer default, under each of the three default scenarios the following observations can be made:

- **default scenario 1 and 2:** given the varying levels of credit support and cash flow impacts, the post-default impacts on customers is lower under option 2.3 than for options 2.1 and 2.2. The post-default impact for options 2.1 and 2.2 will be identical given the lack of any credit support for the particular group assumed to default under default scenarios 1 and 2;
- **default scenario 3:** the post-default impact on customers varies under options 2.1, 2.2 and 2.3, due to the different levels of credit support provided by the three retailers that are assumed to default under this scenario.

The post-default impacts are presented as a percentage change in the annual bill of gas and electricity customers. As with the post-default analysis presented for option 1, it is assumed that the AER will only allow customer price increases of up to 10 per cent in any one year. If the pass-through amount results in more than a ten per cent increase in a given year, the collection of the pass-through amount is spread out over more than one year. Further, funding costs incurred by distributors for a delay in the recovery of foregone revenue is calculated on the basis of the distributor's cost of debt.

Figure 4.11 Post-default impact on customers - default scenario 1

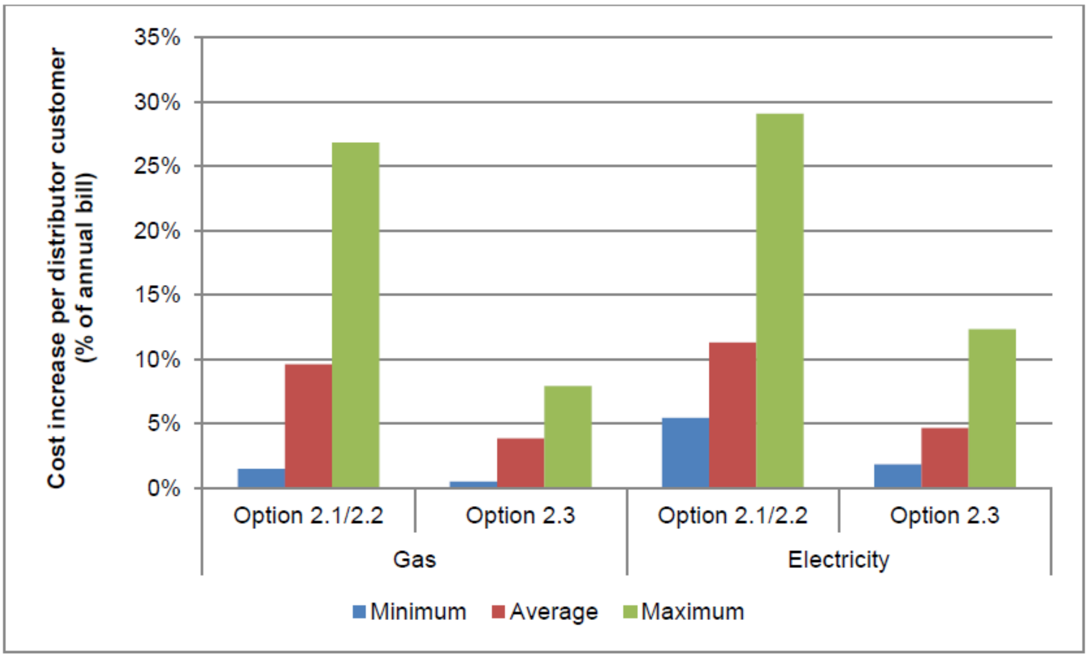


Figure 4.12 Post-default impact on customers - default scenario 2

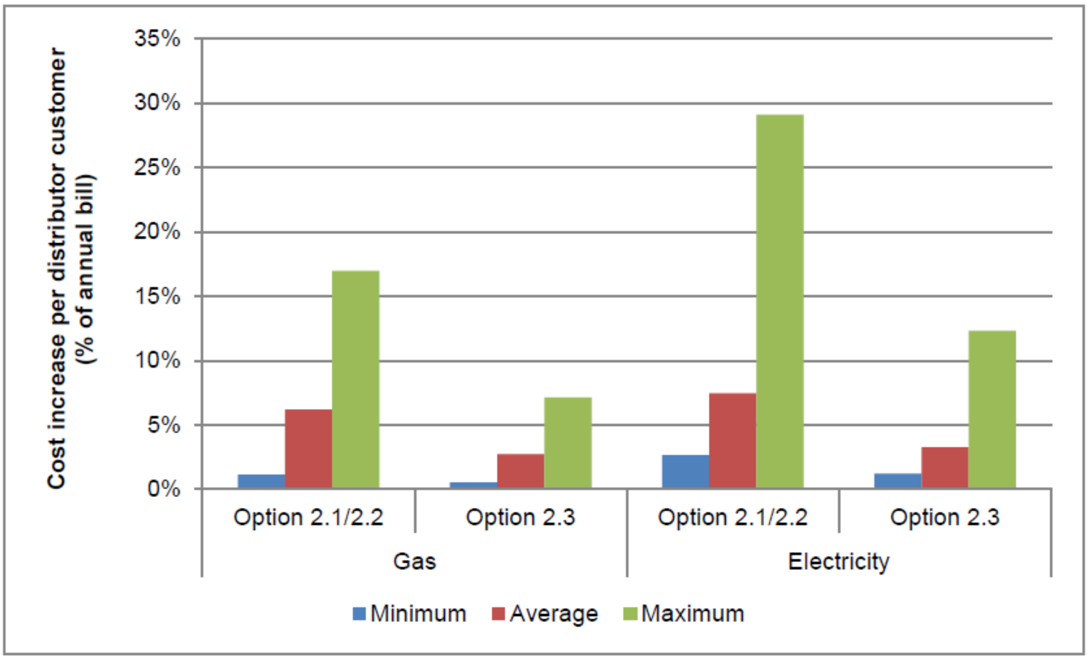
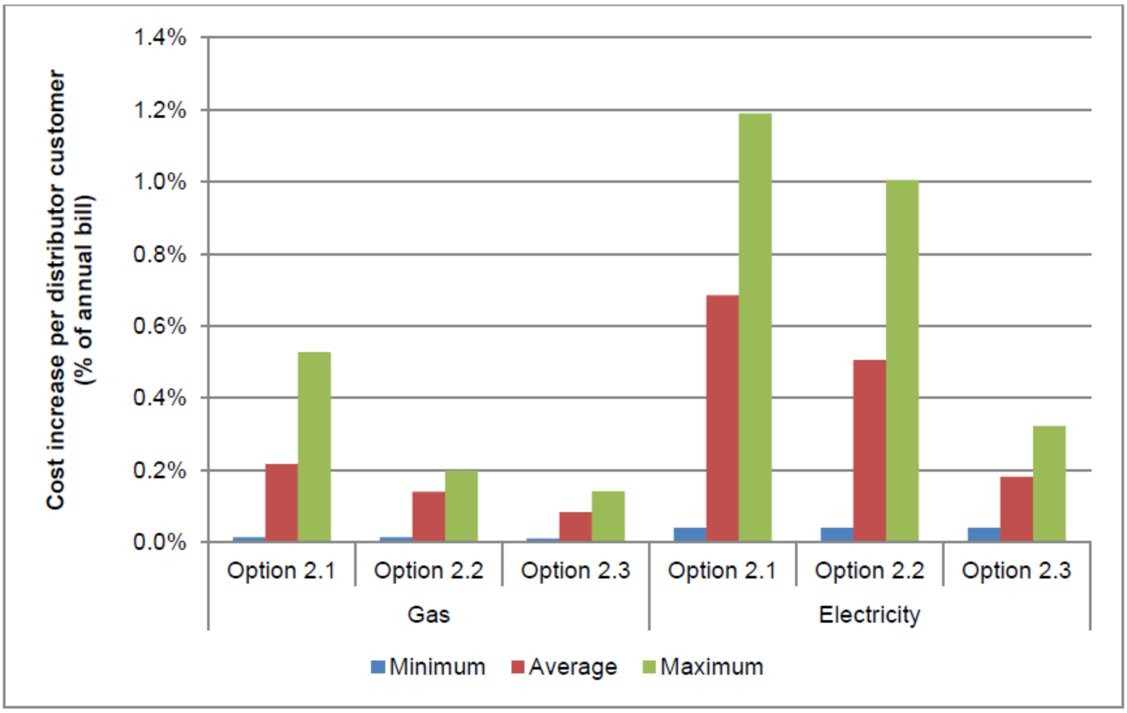


Figure 4.13 Post-default impact on customers - default scenario 3



Question 2 The option to strengthen existing arrangements

(a) What are the advantages of strengthening the existing arrangements for both the credit support requirements and the cost pass-through provisions in terms of recovering revenue related to managing the risks associated with retailer default?

(b) Are there other measures that would more effectively strengthen the retailer insolvency cost pass-through provisions and/or the retailer-distributor credit support provisions, which have not been outlined above?

(c) How does this option compare to the other options discussed in this options paper to manage risks associated with retailer default?

4.4.4 Other credit support designs

In addition to the credit support enhancements discussed and modelled above, other credit support designs may be considered. For example, KPMG in its report[29] outlined various credit support designs between distributors and retailers including, but not limited to:

New Zealand's approach for the electricity market: under this design, the key features of the credit support regime are as follows:

- the distributor has the choice and not the obligation to require the retailer to provide credit support;
- the retailer must either:
  - maintain an acceptable credit rating of at least BBB- (S&P rating) or equivalent and not be subject to a negative credit watch; or
  - maintain acceptable security in the form of a cash deposit, a third party with an acceptable credit rating providing the security or a combination of the two.
- the value of the security must be the distributor's reasonable estimate of the retailers charges for a period not to exceed two weeks;[30]
- the distributor and retailer can agree to credit support that is less onerous than the requirements as set out;

29 Report on approaches to Credit Support Regimes between distributors and retailers: [insert weblink]

30 It should be noted that distributors bill retailers on a monthly basis.

- the distributor may require additional security from a retailer who does not maintain an acceptable credit rating but the increased amount cannot be more than two months' of charges; and

- where a distributor requests additional security from a retailer, the distributor must pay a financing charge to reflect the funding costs of a new entrant retailer.[31]

New Zealand's approach for the gas market: under this design, credit support is set out in each gas distributor's use of system agreement and is determined as follows:

- the retailer must maintain an acceptable credit rating which has been defined as BBB- for two of the three gas distributors in New Zealand while the other distributor's use of system agreement is silent on what is the acceptable credit rating; or

- provide credit support of up to two or three months of estimated network charges payable by the retailer.[32]

Ireland's approach for the electricity market: under this design, credit support is set out in the distributor's use of system agreement and the key features of the credit support regime are as follows:

- a retailer must maintain an approved credit rating of not less than an A+ credit rating; or

- provide either a letter of credit or cash deposit where the amount is based on the retailer's use of system charges over a two month period;

- the entity providing the letter of credit must be rated as least AA by S&P (or equivalent).[33]

Ireland's approach for the gas market: under this design, the key features of the credit support regime are as follows:

- the retailer (or shipper) is exempt from having to provide credit support if it has an approved credit rating which is set at an S&P rating of BBB (or equivalent);

- where a retailer does not have an approved credit rating it must provide credit support in the form of a letter of credit issued by a bank with at least a S&P rating of AA (or equivalent), a charged account[34], a cash deposit or a qualifying guarantee;

31 KPMG report, p.33

32 KPMG report, p.38

33 KPMG report, p. 43 & 44

34 A charged account is an interest bearing deposit account with a bank that satisfies certain specific criteria.

- the credit support amount is based on 72 calendar days' work of network charges.[35]

Alberta's approach for both the electricity and gas market: under this design, the key features of the credit support regime are as follows:

- a distributor is obliged to require a security bond from a retailer prior to providing any services to the retailer;
- the security deposit is in an amount equal to the value projected by the retailer of the retailer's payments over a period of equal to the lesser of:
  - 75 days; or
  - the total of 20 days plus the number of days between consecutive bills issued by the distributor to the retailer plus the number of days from the issuance of a bill until payment is due from the retailer.
- a retailer's security deposit may be reduced by a prescribed amount based on its credit rating if its credit rating is above BBB-. The prescribed amount does not vary with the retailer's market share;
- the security deposit must be provided in the form of a financial deposit, a bond, an irrevocable letter of credit or an irremovable guarantee from a person with a credit rating (other than the retailer).[36]

Another credit support design, which is established in the rules and applied, is the credit support regime implemented by the Australian Energy Market Operator (AEMO) for participation in the electricity spot market. Retailers pay AEMO for the electricity their customers consume, and AEMO subsequently pays generators for the electricity they supply into the market. This settlement process occurs weekly about 33 calendar days in arrears, which means payments for electricity bought are made four weeks in arrears. This creates a risk for generators that one or more retailers may be unable to pay their bill when they come due.[37]

The NER sets out a credit support regime that is designed to protect generators against a settlement shortfall arising from the non-payment by retailers. AEMO determines a maximum credit allowance (MCL) for each participant based on a two per cent probability that a participant's outstandings to AEMO will exceed its MCL by the time the participant is suspended from the market, restricting residual settlement risk to very low probability events.[38] Any market participant who does not meet AEMO's

35 KPMG report, p. 46 & 47

36 KPMG report, p. 50 & 54

37 This risk is known as settlement risk.

38 NER, clause 3.3.4A. The two per cent probability is referred to as the National Electricity Market (NEM) prudential standard.

acceptable credit criteria must provide an amount of credit support to AEMO which is at least equal to that participant's MCL.[39]

Participants also have a trading limit which is currently set in relation to their MCL.[40] The margin between the credit and trading limits is designed to cover AEMO's potential liabilities during a seven day reaction period, representing the expected amount of time required to suspend a participant. If a participant exceeds its trading limit, it is required to provide additional cash or credit support to AEMO.[41]

Question 3 Other credit support designs

(a) What are the possible advantages or disadvantages of the other credit support designs outlined above?

(b) How do these other credit support designs compare to the other options discussed in this options paper in relation to managing the risk of retailer default?

4.5 Option 3: establish a retailer default fund

Under this option, credit support would be replaced with a retailer default fund. The fund's purpose would be to mitigate the revenue, liquidity and systemic risks faced by distributors in the event of a retailer default.

The retailer default fund would be a pool of funds accumulated over time that would be called upon by distributors in the event of a retailer default. Under this option there are several elements that will need to be considered in determining the costs and benefits of this option, including:

- **The size of the fund:** the size of the fund would need to be determined in advance of rule implementation and would have to be sufficient to allow a distributor or - in the case of a large retailer dealing with multiple distributors - multiple distributors to call on the fund in the event of a retailer default. There are various ways how the size of the fund may be determined. For example:
  - the fund size could be set at a level sufficient to reduce the probability of the default fund's insolvency to an acceptable level; or
  - the fund size could be set at a level at least big enough to protect against the impacts of the largest retailer defaulting.

39 NER, clause 3.3.5

40 NER, clause 3.3.10

41 For more information on how AEMO calculates the required credit support see AEMO"s Credit Limit Procedure v2.

- **Contributions:** as the funds for a retailer default fund would need to be built up over time, the time period for that build up would need to be determined. In addition, how the contributions would be allocated amongst the various retailers would impact the fund design. There are various ways in which the contribution amount may be determined. For example, it could be that retailers with the same credit rating would make the same contribution in proportion to their total outstanding network charges. In addition, it may be the case that retailers with a lower credit rating would contribute more, all else being equal, than a retailer with a higher credit rating. If the Commission pursues this option, the fund's design would be articulated in detail and the NER and NGR be amended to include a method for determining a retailer's contribution to the fund.

- **Use and replenishment of the fund:** the design of the retailer default fund would also need to include parameters around when and how the fund could be used and how the fund would be replenished in the event of a retailer default. Generally speaking, when and how the fund would be used would be determined through an application to the AER. In relation to the replenishment of the fund, there are two main options:

  - the fund could be replenished through new contributions from retailers in line with the detailed design set out for the original contributions to the fund. Under this alternative, the distributor would only need to rely on the overs and unders process or cost pass-through mechanism if the value of the fund was less than the amount of its foregone revenue; or

  - the fund could be replenished through the funds received from the distributor through the retailer insolvency cost pass-through process.

- **Management of the fund:** another design consideration would be the management of the fund over time, including who would be appointed to undertake this function.

Although this option removes the current credit support requirements, the other mechanisms such as the retailer insolvency cost pass-through process, the overs and unders process and corporate insolvency process would still be available to distributors in the event of a retailer default.

A fund similar to a retailer default fund already exists under the NER; namely the participant compensation fund.[42] The purpose of this fund is to compensate scheduled generators, semi-scheduled generators or scheduled network service providers for scheduling errors. The participant compensation fund is funded by scheduled generators, semi-scheduled generators and scheduled network service providers.

42 NER, clause 3.16

Currently, AEMO charges participant compensation fund fees on a 50 per cent capacity and 50 per cent energy basis.[43]

For each financial year the amount collected by AEMO and included in the participant fund compensation fees is the lesser of $1,000,000 or $5,000,000 less the amount which AEMO reasonably estimates will be the balance of the participant compensation fund at the end of the relevant financial year.[44]

4.5.1 Modelling of retailer default fund

For the purposes of modelling this option, it is assumed that:

- the fund size is determined by the largest retailer NCL,
- the fund is established over a period of time, and
- the fund is operated and managed on a national basis to allow the fund to benefit from risk pooling across the industry.

The key assumptions made in modelling this option are set out in Table 4.3 below. A summary of the issues considered in determining these assumptions is set out in section 5.5 of Promontory's report (p.60).

Table 4.3 Retailer default fund - key assumptions

Feature	Description or nominal value
Target fund size	$941.25 million
Annual contribution	$73.32 million (target fund size reached after 10 years)
Use and replenishment	Funds accessible within 10 days following retailer default subject to AER approval. Replenishment occurs through annual retailer contributions.
Management costs	0.5%

Ongoing costs for retailers

It is assumed that the annual ongoing costs of the retailer default fund will be allocated to retailers and ultimately paid by the retailers' shared customers. These ongoing costs will depend on the way in which the annual contributions are allocated to retailers. For the purposes of the modelling, as discussed in detail in section 5.5.1 of Promontory's report (pp. 60-61), contributions are based on each retailer's market share and credit

43 AEMO issued a consultation paper on 14 September 2015 in relation to the structure of participant fees in the NEM, including the participant compensation fund fees. Submissions close on AEMO's consultation paper on 20 October 2015.

44 NER, clause 3.16.1

rating. In order to achieve a risk-based allocation of costs, risk-weights are assigned to each retailer based on their credit rating or risk score and are set out in Table 4.4 below.

Table 4.4 Risk weights for determining annual contributions to retailer default fund

S&P/Fitch credit rating	Moody's credit rating	D&B dynamic risk score	Risk-weight
AAA	Aaa		100%
AA+	Aa1		100%
AA	Aa2		100%
AA-	Aa3		100%
A+	A1		100%
A	A2		100%
A-	A3		100%
BBB+	Baa1		175%
BBB	Baa2		250%
BBB-	Baa3	Minimal	400%
BB+	Ba1	Very low	538%
BB	Ba2	Low	850%
BB-	Ba3	Average	850%
B+	B1	Moderate	850%
B	B2	High	850%
B-	B3	Very High	850%
CCC	Caa	Severe	850%
CC	Ca		850%
C	C		850%

The risk weights are applied to each retailer's NCL in order to calculate a risk-weighted NCL for each retailer. For example, if retailer A has an NCL of $10 million and a D&B dynamic risk score of 'minimal', the risk-weighted NCL for that retailer is $40 million ($10 million x 400%). The risk weighted NCL is then used to calculate the retailer's share of the annual retailer default fund contribution. For example, if retailer A's risk-weighted NCL is $40 million, and this represents 0.5 per cent of total risk-weighted NCLs across all retailers, then retailer A's annual contribution to the default fund would be $366,600 (0.5 per cent of the annual contribution of $73.32 million, from Table 4.2).

The total cost of maintaining and operating a retailer default fund at this level is approximately $73.32 million. Unlike credit support which has annual ongoing costs in perpetuity, the annual contributions for the retailer default fund would cease as the fund reaches its target size after ten years. In Table 4.2, the annual contributions and investment return earned on these contributions - based on an annual investment return of six per cent - together result in the default fund reaching its target fund size after ten years. For a given target fund size, changes to investment return, risk-weights and/or management costs would influence the time for the fund's size to reach its target.

Figures 4.14 and 4.15 present the annual ongoing costs to shared customers from establishing a retailer default fund. For a detailed discussion of these cost estimates, see section 5.5.1 of Promontory's report (pp. 62-63).

Figure 4.14 Ongoing costs of the retailer default fund to shared customers - electricity retailers

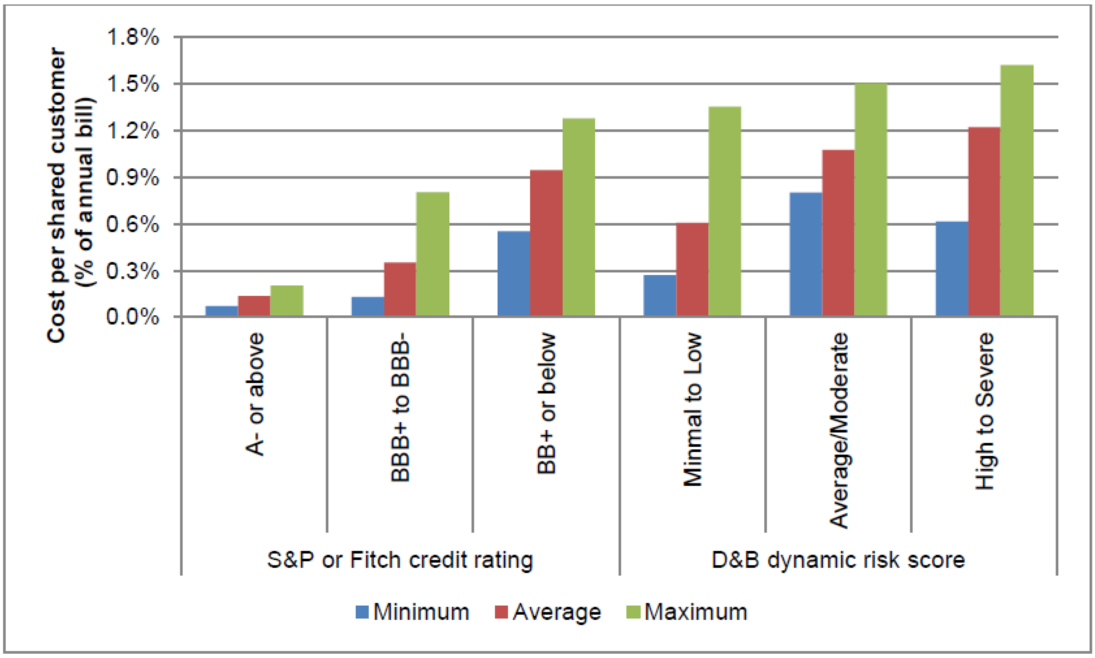
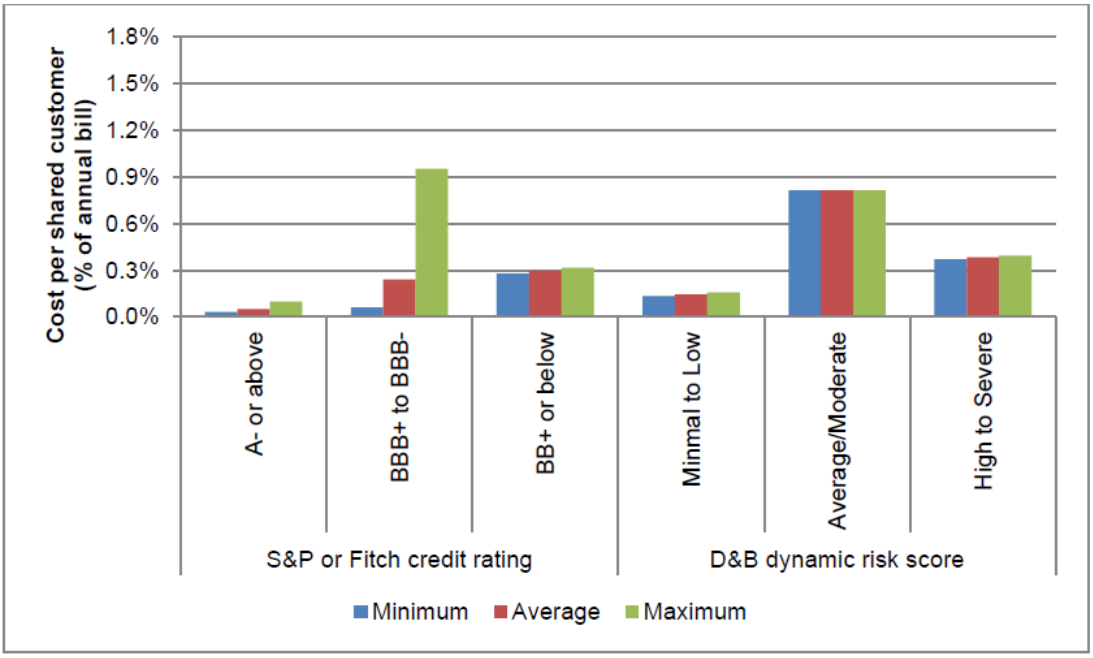


Figure 4.15 **Ongoing costs of the retailer default fund on shared customers - gas retailers**



Post-default analysis

In relation to the post-default analysis, the following assumptions are made:

- the retailer default fund has reached its target size prior to default, under all three retailer default scenarios;
- in the event of a retailer default, distributors have access to funds from the retailer default fund within 10 days; and
- the replenishment of the fund, following a retailer default, occurs through annual retailer contributions using the same methodology that was used to build the fund to its target size. That is, the amounts in Table 4.2 are assumed to remain unchanged following a retailer default.

The implications of the assumptions used are that:

- distributors do not face any foregone revenue or cash flow impacts under any of the retailer default scenarios when there is a default fund in place;
- the post-default costs are allocated to the shared customers of retailers in accordance with the methodology used to determine contributions to the fund (i.e. the replenishment of the fund would be governed by the same rules governing retailer contributions with a total annual contribution of $73.32 million). The impact on shared customers during the period of replenishment would therefore be the same as the ongoing costs as set out above;

- The period of time needed to replenish the default fund to its original target size under each of the three default scenarios is:
  - default scenario 1: in this scenario, it is assumed that the largest retailers in each network do not default simultaneously, resulting in a replenishment period of less than 10 years;
  - default scenario 2: approximately 10 years given that scenario 2 was used to set the target size of the fund; and
  - default scenario 3: between 1 and 2 years.

Given the assumptions, there are no further post-default impacts under this option.

Question 4 The option to establish a retailer default fund

(a) What are the advantages of establishing a retailer default fund in terms of recovering revenue related to managing the risks associated with retailer default?

(b) How does this option compare to the other options discussed in this Options Paper to manage risks associated with retailer default?

(c) Are there any practical considerations of developing and implementing this type of retailer default fund? If so, what are these considerations?

(d) If a retailer default fund were established:

- **how should the size of the fund be determined?**
- **over what period of time should the fund be built?**
- **how should the contributions into the fund be determined (eg. based on creditworthiness, market share or some other measures)?**
- **how should the funds of the retailer default fund be replenished if the fund is called upon in the event of a retailer default?**

4.6 Option 4: introduce a liquidity support scheme

Under this option, the primary risk being addressed would be the liquidity risk faced by distributors upon a retailer default. Most of the existing mechanisms (and the options set out above) are designed to recover revenue resulting from a retailer default, but they do so over a period of time. Due to the potentially drawn-out nature of the existing mechanisms, this can result in cash flow shortfalls for distributors while they await full recovery of foregone revenue.

Under this option, it is assumed that one or more of the existing mechanisms (retailer insolvency cost pass-through, overs and unders process or corporate insolvency process) could be relied on to recover the foregone revenue as well as the costs associated with retailer default. As a result, this option's aim would be to address only the cash flow risks faced by the distributor in the event of retailer default.

In the liquidity support scheme, each distributor would be required to obtain and maintain access to a committed liquidity facility from the banking sector, which would be used to mitigate the cash flow impacts in the event of a retailer default. In the event of a retailer default, the distributer would call on the liquidity instrument to cover its cash flow shortages. The distributor would use the foregone revenue recovered through the existing mechanisms to repay the funds borrowed through the liquidity instrument.

There are two main elements to the design of this option which would need to be considered should the Commission decide to pursue the liquidity support scheme:

- **size of the liquidity instrument:** the size of each distributor's liquidity instrument would vary based on the distributor's working capital and the exposure it has to retailers. One approach in determining the size of the liquidity instrument for each distributor could be to aggregate the network charges liability of the two largest retailers for that distributor. Alternatively, the size of the liquidity instrument could be capped at a set percentage - for example, fifty per cent - of all retailers' network charges liability for a given distributor. Other options for determining the size of the liquidity instrument may be considered.

- **Fees and charges associated with the liquidity instrument:** a committed facility of the nature being considered would typically carry an upfront establishment fee, an annual commitment fee and an utilisation fee if and when the facility is used:

  — annual commitment fee: there are two broad ways in which the annual commitment fee could be addressed in the design. The first would be to have the distributor include the annual commitment fee in its operating expenses to be included in its revenue determination. The second option would be to have the annual commitment fee paid for by retailers. The allocation of the fee amongst retailers would be set out in the NER and NGR and may take into account both the market share of the retailer and the retailer's creditworthiness;

  — utilisation fee: generally, the utilisation fee would be included in the costs associated with the retailer default event and would be collected as part of either the cost pass-through mechanism or the overs and unders process.

4.6.1 Modelling of the liquidity support scheme

Under this option, two sub-options are modelled, based on different ways of allocating the costs of the liquidity facility to retailers as set out below:

Table 4.5 Description of liquidity support scheme sub-options

Sub-option	Description
Sub-option 4.1	Liquidity support scheme (market-share based allocation of ongoing fees) Each distributor calculates its exposure to each retailer operating in its network. The size of the liquidity facility for a given distributor is set to the largest single exposure the distributor faces from a single retailer, subject to a cap equal to 50 per cent of the distributor's unpaid network charges. Within each network, the cost of the liquidity facility is allocated to each retailer in that network in proportion to the retailer's annual network charges.
Sub-option 4.2	Liquidity support scheme (risk-based allocation of ongoing fees) As with sub-option 4.1, the size of the liquidity facility is set equal to the largest single exposure to a retailer within each distribution network, subject to a cap of 50 per cent of the distributor's unpaid network charges. Within each network, the cost of the liquidity facility is allocated to each retailer in accordance with a formula based on both the retailer's NCL and their creditworthiness.

The size of the liquidity facility is capped at 50 per cent of the distributor's unpaid network charges to ensure the size of each liquidity facility does not become unreasonable. The use of the retailer's NCL in allocating costs under both sub-options scales the cost allocation according to the distributor's exposure to the retailer and provides the retailer an incentive to reduce the exposure in order to minimise its allocation of the facility's cost. The use of creditworthiness in sub-option 4.2 modifies the allocation method by allocating a higher proportion of the facility's cost to those retailers who are more likely to cause the drawdown of the facility.

In estimating the costs associated with the drawn and undrawn components of the liquidity facilities, it is assumed that the fees associated with the facility fall into two categories: ongoing and funding. It is assumed that:

- the ongoing facility fee consists of a commitment fee plus a 50 per cent credit margin applied by the financial institution (based on a distributor's credit rating);
- the funding fee is a mix of the 3-month bank bill swap rate plus a credit margin; and
- all distributors have at least an investment grade rating.[45]

The assumptions used in the modelling in relation to the ongoing and funding fees for the liquidity facility are set out in the Promontory report in section 5.6 (p.65).

45 See the Promontory report at p.60 for a complete list of the liquidity facility fees.

Ongoing costs for retailers

The ongoing costs associated with option 4, which include the annual ongoing facility fee, are passed on to retailers and collected either under the allocation scheme set out in sub-option 4.1 or 4.2. The allocation of the ongoing facility fee for retailers is discussed in more detail in section 5.6.1 of Promontory's report (p.66). The ongoing cost of the liquidity facility for each distribution network is influenced by the size of the facility and the distributor's credit rating (see Promontory's report, section 5.6.1, p.67).

Figures 4.16 and 4.17 present the ongoing costs to shared customers for electricity networks, as a percentage of a customer's annual energy bill, under sub-option 4.1 and 4.2, respectively.

Figure 4.16 Ongoing costs to shared customers - electricity retailers (sub-option 4.1)

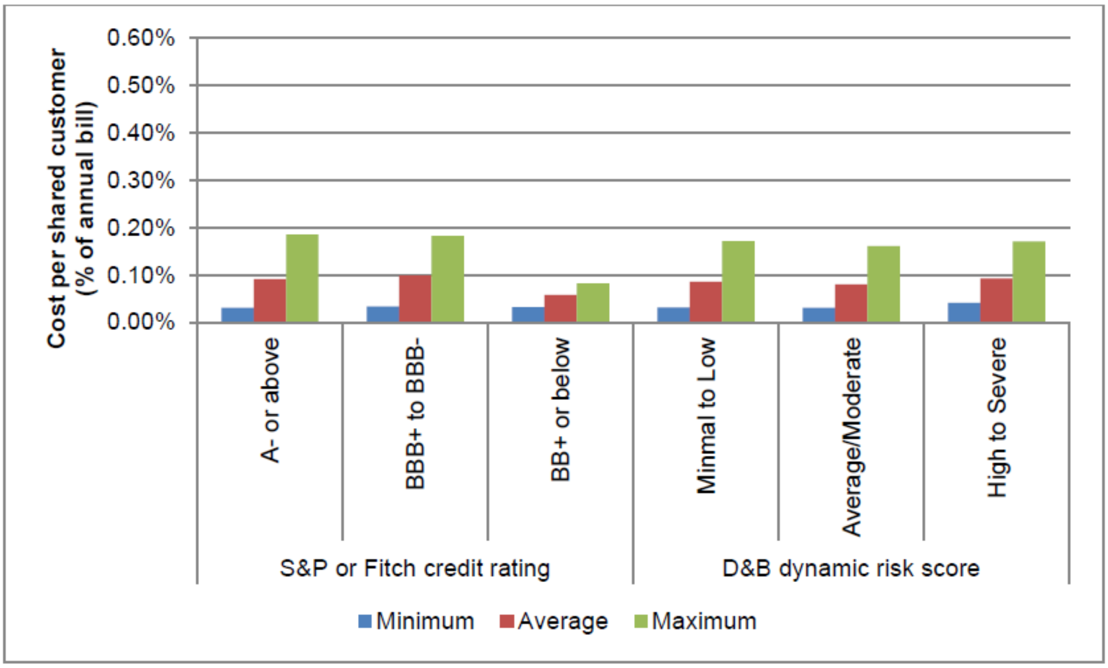
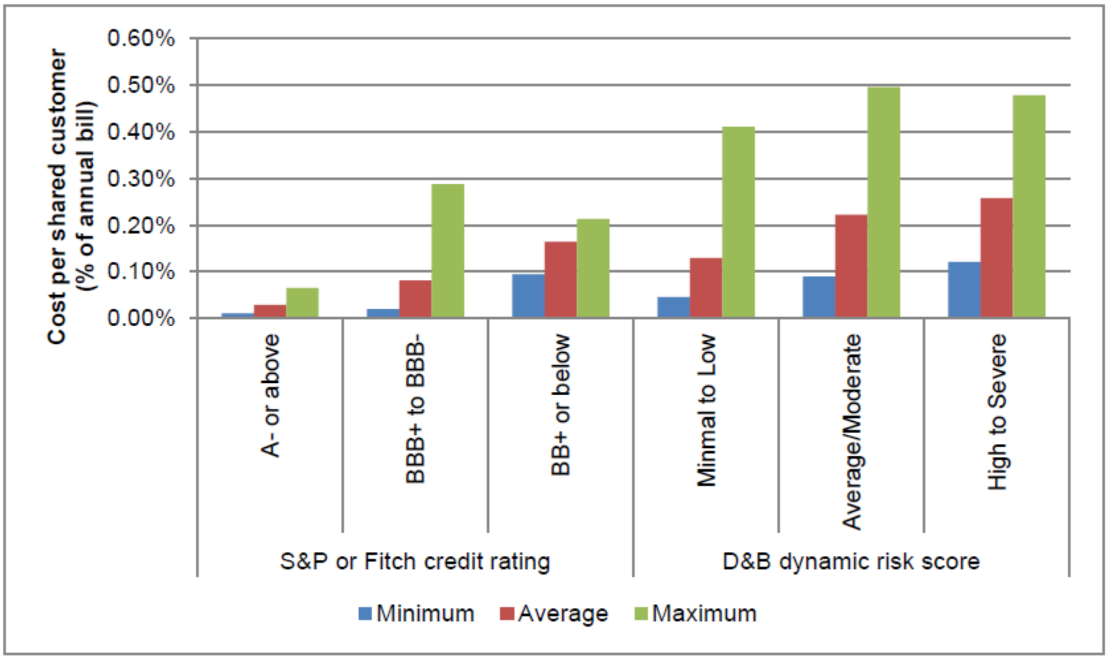


Figure 4.17 Ongoing cost to shared customers - electricity retailers (sub-option 4.2)



It can be seen from the above figures that when a risk-based allocation (sub-option 4.2) is used, the creditworthiness of a retailer impacts the costs for customers. Shared customers of retailers with higher credit ratings face lower costs than customers of lower-rated retailers.

Figures 4.18 and 4.19 present the ongoing costs of the liquidity support scheme for gas networks, as a percentage of a typical shared customer's annual bill.

Figure 4.18 Ongoing costs to shared customers - gas retailers (sub-option 4.1)

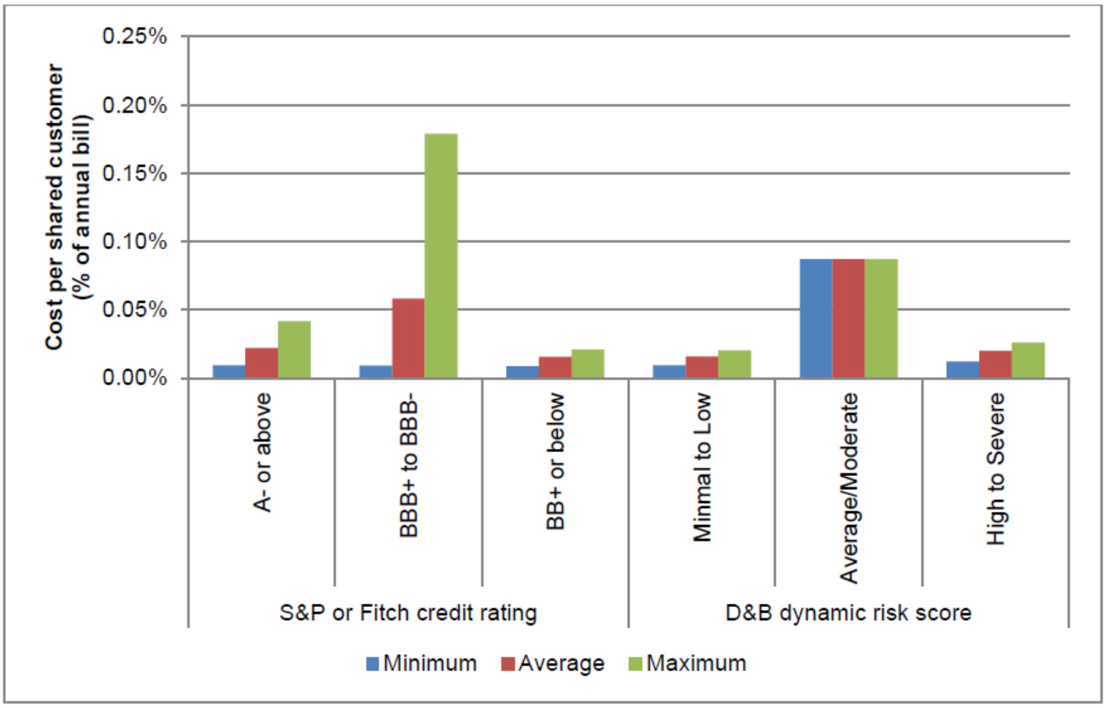
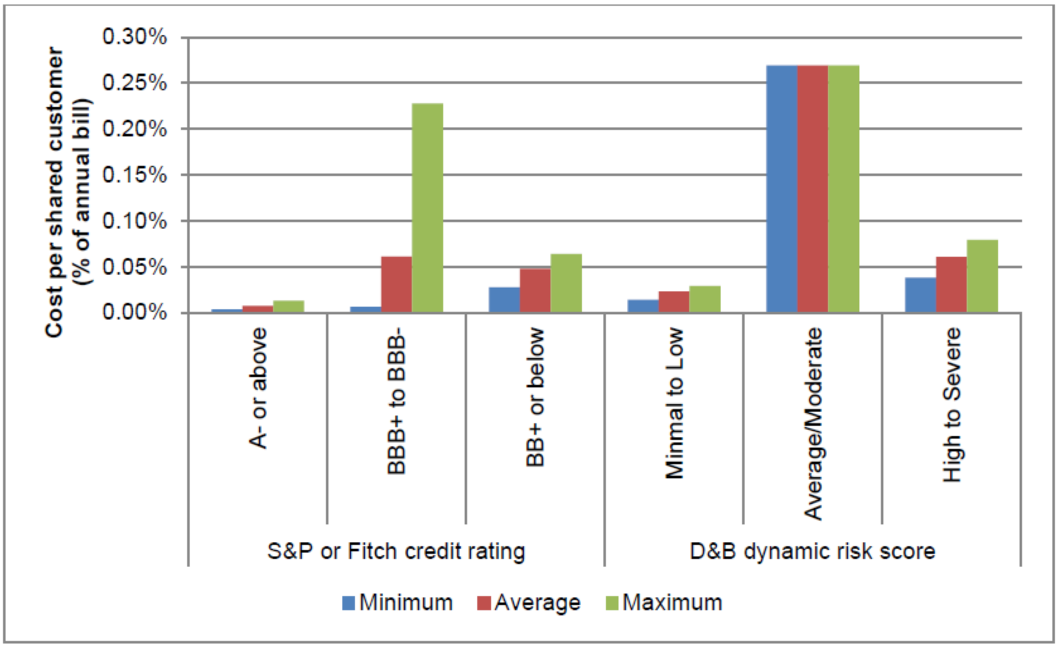


Figure 4.19 Ongoing costs to shared customers - gas retailers (sub-option 4.2)



As a proportion of a typical gas customer's annual bill, the costs of the liquidity facility under either sub-option 4.1 or 4.2 are less than the cost for a typical electricity customer under each corresponding sub-option. Similar to shared electricity customers, the creditworthiness of the retailer impacts on the ultimate costs to shared gas customers, under sub-option 4.2.

Post-default analysis

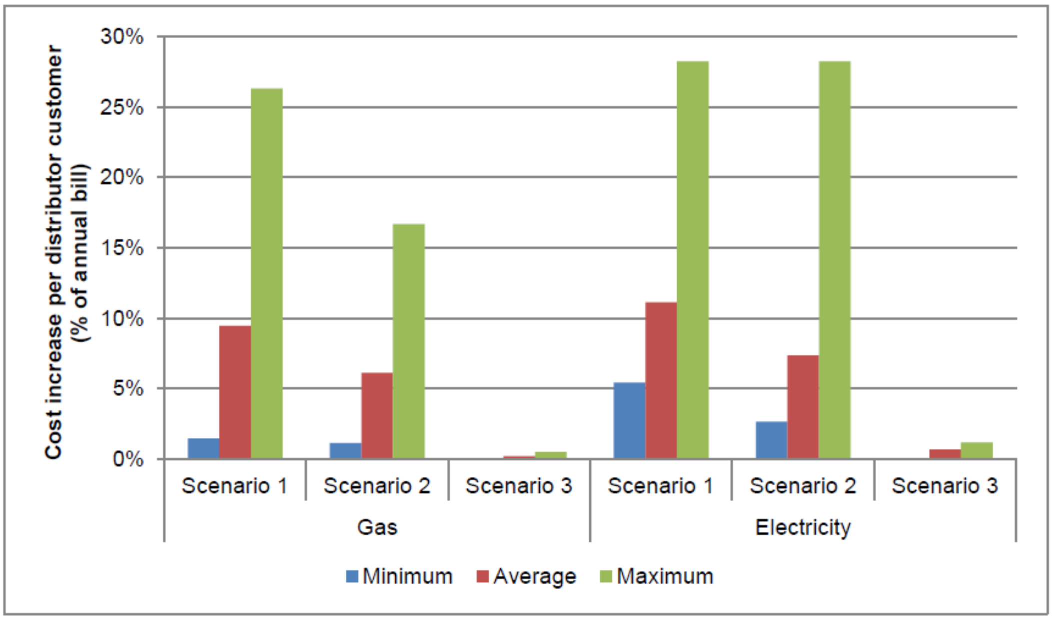
Under this option, the post-default impacts are a function of foregone revenue and funding costs on the drawn component of the liquidity facility. For a greater discussion on these impacts, see Promontory's report (section 5.6.2, pp.70-72). The cost associated with funding will depend on the amount of the liquidity facility utilised in each of the three default scenarios, as well as the timing of collection of the cost pass-through amount. As a result, the following assumptions were made with respect to the liquidity facility:

- distributors only use the liquidity facility if their working capital ratio falls below 1.0 under each of the three default scenarios; and
- the duration over which the facility remains used ranges from 1.5 to 3.5 years, where the precise duration is determined by the need to contain customer price increases to less than 10 percent in any regulatory year.

The availability of a liquidity instrument significantly improves the cash flow position of all distributors, compared to the situation where neither a liquidity facility nor credit support is available which can be seen by reference to section 5.6.2 in Promontory's report (p.71). However, even when a liquidity facility is available, there may be situations where the liquidity facility is insufficient to meet the needs of distributors, due to the facility's size being capped at 50 per cent of the distributor's unpaid network charges.

The post-default costs to customers include foregone revenue, funding costs associated with drawing on the liquidity facility, and administrative costs. These costs are assumed to be shared equally amongst all of the customers on the distributor's network. The cost increase to customers is assessed under the three default scenarios and presented as a percentage of the customers' annual energy bill in Figure 4.20.

Figure 4.20 **Post-default costs to customers on distribution network - option 4**



Question 5 The option to introduce a liquidity support scheme

(a) What are the advantages of introducing a liquidity support scheme in terms of recovering revenue related to managing the risks associated with retailer default?

(b) How does this option compare to the other options discussed in this Options Paper to manage risks associated with retailer default?

(c) Are there any practical considerations of developing and implementing such a liquidity support scheme? If so, what are these considerations?

(d) If a liquidity support scheme were established:

- **how should the size of each distributor's liquidity support instrument be determined?**
- **how should the costs associated with the establishment fee and annual commitment fees be funded?**
- **if the establishment fee and annual commitment fees were to be collected from retailers, how should the costs be allocated amongst the retailers of that distributor?**

Question 6 Relationship between the discussed options to manage the risk of retailer default

(a) How do the various options discussed above, to manage the risk of retailer default, work to complement each other in ensuring that the risk of retailer default is managed in the most efficient manner?

(b) How should these different options be combined in a regime to manage the risk of retailer default to ensure an efficient outcome?

Question 7 Options

(a) Are there other options for managing the risks and costs associated with retailer default, which stakeholders feel the Commission should consider?

5 Lodging a Submission

Submissions to this options paper are to be lodged online or by mail by 26 November 2015.

Where practicable, submissions should be prepared in accordance with the Commission's Guidelines for making written submissions on Rule change proposals.[46] The Commission publishes all submissions on its website subject to a claim of confidentiality.

All enquiries on this project should be addressed to Shari Boyd on (02) 8296 7869.

5.1 Lodging a submission electronically

Electronic submissions must be lodged online via the Commission's website, www.aemc.gov.au, using the "lodge a submission" function and selecting the project reference code "ERC0183". The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated.

Upon receipt of the electronic submission, the Commission will issue a confirmation email. If this confirmation email is not received within three business days, it is the submitter's responsibility to ensure the submission has been delivered successfully.

5.2 Lodging a submission by mail

The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated. The submission should be sent by mail to:

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Or by Fax to (02) 8296 7899.

The envelope must be clearly marked with the project reference code: ERC0183.

Except in circumstances where the submission has been received electronically, upon receipt of the hardcopy submission the Commission will issue a confirmation letter.

If this confirmation letter is not received within three business days, it is the submitter's responsibility to ensure successful delivery of the submission has occurred.

46 This guideline is available on the Commission's website.

Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
COAG Energy Council	Council of Australian Governments Energy Council
Commission	See AEMC
D&B	Dun & Bradstreet
MCL	Maximum Credit Allowance
NCL	Network Charges Liability
NECF	National Energy Customer Framework
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
NERO	National Energy Retailer Objective
NERR	National Energy Retail Rules
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
S&P	Standard & Poor's
TARC	Total Annual Retail Charges

A Assumptions made in the modelling process

Table A.1 details each of the key input variables used in the modelling exercise, and the assumptions made about each input variable. The table also lists the data sources associated with each variable.

Table A.1 Assumptions used for key input variables

Variable	Assumptions	Data source
Forgone revenue	• Measured as 110% of defaulted retailer's network charges liability (NCL) • The additional 10% is to account for the fact that retailer's NCL would continue to grow following retailer default until its customers are transferred by AEMO or acquired by another retailer • The calculation of defaulted retailers' NCL involved use of retailer's market share and an assumption about the aggregate retailers' NCL within each distribution network • The market share was estimated using the number of shared customers of each retailer within a distribution network. The aggregate retailer's NCL was assumed to be 25% of each distributor's total annual revenue charge (TARC) (that is, it is assumed that a distributor's TARC over a 90 day period represents the sum of each retailer's NCL across the network).[47] • The total network NCL is then allocated to the retailers in that network based on each retailer's market share (measured by number of shared customers divided by the total number of customers in the network). For example, if a distributor's TARC is $10 million and a retailer's market share based on its number of customers is 20%, the NCL for that retailer would be calculated as $10 million x 25% x 20% = $500,000.	Shared customer data was obtained from the AEMC. Information on TARC was obtained from the AER's access arrangements (for gas) and responses to regulatory information notices (for electricity).
Working capital ratio	• Estimated as at 3 months post a retailer default • Measured as current assets (minus forgone revenue) as a percentage of current liabilities over a 3 month period (plus costs	Distributor's revenue, maintenance costs, operating expenditure, transmission costs, debt costs and capital expenditure was obtained

47 In practice, each retailer's NCL will be driven by the maximum days outstanding (MDO) which is dependent on how frequently the distributor invoices its retailers, the time it takes prepare invoices and the period allowed for payment. A simplifying assumption is made that the MDO is equivalent to a 90 day period

<table>
<tr><th>Variable</th><th>Assumptions</th><th>Data source</th></tr>
<tr><td></td><td>from retailer default)
Current assets = cash (1% of distributor revenue) and receivables (25% of TARC)
Current liabilities = Maintenance costs (for electricity), operating expenditure, transmission costs (for electricity), debt costs and capital expenditure.[48] In order adjust for a 3 month timeframe, current liabilities were divided by four.
Costs from retailer default = administrative costs (capped at $0.1 million) and funding costs (varies with distributor's amount of external funding required and debt costs).</td><td>from AER's access arrangements, regulatory determination, and/or annual reports.</td></tr>
<tr><td>Cost to shared customers</td><td>Measured as a dollar impact as a percentage of annual energy bills
To estimate the cost increase, market offers from 23 retailers are used for a representative customer in a distribution network
To obtain market offers, electricity and gas consumption of a representative shared customer in each network at a jurisdiction level was used. These are provided in the table below
It is also assumed that retailers pass on any costs of managing default risk under each of the options to their shared customers. It is assumed that retailers make no distinction between small and large customers in allocating the cost
<table>
<tr><th>Annual usage</th><th>Gas (mj)</th><th>Electricity(kWh)</th></tr>
<tr><td>ACT</td><td>25,000</td><td>7,180</td></tr>
<tr><td>NSW</td><td>21,600</td><td>6,500</td></tr>
<tr><td>QLD</td><td>12,000</td><td>4,533</td></tr>
<tr><td>VIC</td><td>54,000</td><td>4,645</td></tr>
<tr><td>SA</td><td>18,000</td><td>5,000</td></tr>
</table></td><td>AER's Energy Made Easy, My Power Planner and Yourchoice.

Electricity usage was obtained from the AEMC's price trends report.[49]

Gas usage was obtained from variety of documents.[50].</td></tr>
</table>

48 For electricity, data was obtained from distributor's responses to AER's Regulatory Information Notices (RIN). For gas, information was obtained from access arrangements.

49 AEMC, 2014 Residential Electricity Price Trends Report, 5 December 2014, Sydney.

50 Sustainability Victoria (2014), Victorian Households Energy Report, State Government of Victoria, Melbourne; http://www.ipart.nsw.gov.au/Home/For_Consumers/Compare_Energy_Offers/Typical_household_energy_use; South Australian Council of Social Service (2014), The South Australian Gas Market Consumer Factsheet 2014

Variable	Assumptions	Data source
Cost to distributor customers	• To estimate the cost, it is assumed that costs are shared equally by customers in a distributor's network • Measured as the dollar impact as a percentage of the average market offers to representative gas and electricity customers from retailers operating in each network.	As above

In addition to assumptions about input variables, assumptions were made about the various mechanisms associated with each of the four potential options considered in this options paper. Table A.2 outlines four key mechanisms, the major assumptions made about each of these mechanisms, and the options to which these mechanisms relate.

Table A.2 Assumptions made in applying the various mechanisms and options

Mechanisms	Assumptions	Options
Overs and unders and cost pass-through	Where overs and unders process or cost pass-through mechanism is applied the minimum duration of recovery of forgone revenue and/or costs from retailer default is 1.5 years. This is based on the assumption that: • It takes a maximum of 130 days for the cost pass-through application process to be approved. That is, maximum 90 days from the date of default to submit an application and maximum 40 days for approval • Subsequent to approval, distributors face a time lag until the start of the next regulatory year before recovery begins (given AER's preference for no more than one annual price adjustment) • In total, it is assumed a period of 6 months between a retailer's default and when recovery commences • The AER does not allow for cost increase of more than 10% per annum to distributors' customers under cost pass-through	Options 1.1 and 1.2; Options 2.1, 2.2 and 2.3; Option 4
Credit support calculation	• Retailer's NCL is a product of 25% of the distributor's TARC and the retailer's market share (based on number of shared customers divided by total number of customers in the network) • The assumptions related to retailers' creditworthiness vary based on the option	Options 1.1 and 1.2; Options 2.2 and 2.3

<table>
<tr><th>Mechanisms</th><th>Assumptions</th><th>Options</th></tr>
<tr><td></td><td>
being modelled:

— Option 1.1 and 1.2 – Estimating a retailer’s credit allowance involves the use of the retailer’s credit rating or D&B risk score. It is assumed that retailers with a credit rating who operate across multiple FRMPs will adopt a D&B risk score of either Minimal or Very Low if it benefits them in minimising the amount of credit support needed. The remaining unrated retailers were assigned a D&B risk score ranging from Minimal to Very High. The process of assigning risk scores was aided by data provided by the AEMC

— Option 2.2 and 2.3 – In estimating the credit support as a percentage of NCL it is assumed those retailers with multiple FRMPs and an S&P credit rating would cease using a D&B risk score, particularly if their credit rating is BBB- or better.

• It is assumed that the re-alignment of S&P credit ratings and D&B risk scores for option 2.3 reflects the fundamental differences in these two measures of retailer’s creditworthiness. In particular, D&B risk scores have been aligned to no more than a BBB- rating from S&P

• Credit support costs are based on the retailer’s credit rating as provided in the table below. If a retailer does not have a credit rating, it is assumed the retailer is rated BB+ for the purposes of calculating credit support costs

<table>
<tr><th>Credit rating</th><th>Credit support cost</th></tr>
<tr><td>AAA to AA</td><td>1%</td></tr>
<tr><td>AA- to A-</td><td>1.50%</td></tr>
<tr><td>BBB+ to BBB-</td><td>3.50%</td></tr>
<tr><td>BB+ to BB-</td><td>4%</td></tr>
<tr><td>B+ to B-</td><td>7.50%</td></tr>
<tr><td>CCC/C</td><td>15%</td></tr>
</table>
• It is assumed that retailers allocate credit support costs equally to their shared customers and make no distinction between small and large customers
</td><td></td></tr>
<tr><td>Retailer default fund</td><td>
• Target fund size – Both the electricity and gas market are highly concentrated with the market share of three largest retailers accounting for about 80%. Recognising the concentrated nature of the market, it is assumed the target fund size should cater
</td><td>Option 3</td></tr>
</table>

Mechanisms	Assumptions	Options
	for at least the default of the largest retailer's NCL across gas and electricity market. Using the largest retailer's NCL for both gas and electricity distributors from the credit support calculations above, the target fund size is estimated to be $941.25 million.[51] • Contributions – It is assumed the target fund size would be built up over time through annual contributions from gas and electricity retailers. The two key determinants for the annual contributions are the acceptable time period for the fund to reach its target size and the investment return earned on the contributions. It is assumed the acceptable time period to be 10 years and investment returns earned on the contributions is 6%. Based on these assumptions and after accounting for management fees of 0.5%, the annual contributions for the fund to reach its size is estimated to be $73.32 million • Management – It is assumed the fund will be managed independently. The AEMC would be required to set the investment mandate for the fund's strategy and the level of liquidity needed (proportion of assets that can be converted into cash within a short period of time). There will also be management fees and operating expenses. As noted above, it is assumed to be 0.5% per annum.	
Liquidity facility	• Size – Each distributor calculates its exposure to each retailer operating in its network (i.e., each retailer's NCL). The size of the liquidity facility is set to the largest NCL for a retailer within each distributor network (capped at 50% of the distributor's unpaid network charges) • Allocation – There are two approaches to allocating the cost to retailers. A market share based allocation and a risk-based allocation (which uses the retailer's NCL combined with a measure of creditworthiness) • Fees – Two types of fees are ongoing and funding fees. Ongoing fees are passed on by distributors to retailers and ultimately, to	Options 4.1 and 4.2

51 We note this is likely to be higher than would be the case if the actual NCL of largest retailer was used. However, in the absence of such data we have used this amount for the purposes of modelling the benefit and costs of this option. We also note that we considered the possibility of establishing separate retailer default funds for gas and electricity. Recognising that many retailers operate in both markets and the potential efficiency benefits of single fund, we assumed a single retailer default fund would be established that covers both gas and electricity.

Mechanisms	Assumptions	Options
	shared customers. Funding fees are passed on by distributors to their customers under cost pass-through. It is assumed there are no upfront fees • Ongoing fee = commitment fee plus 50% of the credit margin (based on a distributor's credit rating) • Funding fee (i.e., drawdown fee) = 3-month bank bill swap rate (BBSW) plus a credit margin (based on a distributor's credit rating) • It is assumed that all distributors have at least an investment grade rating (i.e., have a credit rating of BBB- or better) • Access – The access to facility is subject to AER approval and use test (i.e., facility cannot be accessed unless distributors experience a cash flow shortfall).	