AEMC

REVIEW

Australian Energy Market Commission

DRAFT REPORT

Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure

Commissioners
Pierce
Henderson
Spalding

18 June 2010

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Draft Report

Inquiries

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

E: aemc@aemc.gov.au
T: (02) 8296 7800
F: (02) 8296 7899

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About the AEMC

The Council of Australian Governments, through its Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005 to be the rule maker for national energy markets. The AEMC is currently responsible for rules and providing advice to the MCE on matters relevant to the national energy markets. We are an independent, national body. Our key responsibilities are to consider rule change proposals, conduct energy market reviews and provide policy advice to the Ministerial Council as requested, or on AEMC initiative.

Summary

This report sets out the Australian Energy Market Commission's (Commission) draft advice to the Ministerial Council on Energy (MCE) on whether Chapter 6 of the National Electricity Rules (Rules) most efficiently accommodates cost recovery for smart metering infrastructure (SMI) mandated by a Ministerial determination.

Our assessment finds that the existing processes for cost recovery are adequate and have the potential to accommodate the recovery of the efficient costs of SMI mandated by Ministerial determination. No fundamental changes are required to support the MCE's policy on smart meters. We do, however, recommend that some incremental amendments to the Rules are required to better accommodate the nature of expenditure relating to SMI in this context. These include:

- a revenue adjustment mechanism to remove any gain or loss a distribution network service provider (DNSP) would make if the actual timing of the roll-out differs from the forecast profile agreed to with the Australian Energy Regulator (AER);
- providing the AER with the option to adapt the expenditure incentives on DNSPs to better balance the risks between customers and DNSPs;
- requiring DNSPs to report annually on the actual costs and operational benefits associated with SMI;
- deferring consideration of the efficiency of SMI expenditure until the next distribution determination process where a Ministerial roll-out determination has triggered costs to be incurred within a regulatory control period, which were not anticipated at the previous distribution determination;
- including additional pricing principles for smart metering services to promote the efficient allocation of costs and the unbundling of smart metering tariffs from network tariffs; and
- providing the AER with the ability to change depreciation schedules to smooth the tariff impact of mandated SMI over the economic life of these assets.

This report provides an opportunity for interested parties to comment on our draft findings.

The framework for cost recovery is only one of the many factors within the wider context that will collectively shape the impact on consumers from a roll-out of SMI. While smart meters will enable tariffs to vary by time and place, and facilitate new types of retail offers and services, the successful capture of the benefits associated with SMI will depend on the willingness and ability of participants, including DNSPs, to pursue such opportunities. An appropriate tariff framework which enables variability in tariffs and also provides sufficient protection to customers are key factors. Also how market participants will engage with customers will be important. Although we will

address some of these issues separately as part of our work on the implications of smart grid technology, we invite comments on the wider context necessary to support an efficient and effective roll-out.

The purpose and scope of this Review, and our reasoning behind our draft findings are summarised below.

MCE Request for Advice

The MCE is currently applying a staged approach to facilitating a national roll-out of SMI in areas where the benefits outweigh the costs. It has provided for mandated smart meter roll-outs to be exclusively performed by DNSPs, as it considered that the potential benefits of a roll-out are split between various parties in such a way that individual parties are unlikely to independently establish a positive business case for investing in a roll-out. To facilitate this, amendments have been made to the National Electricity Law (NEL) to enable Energy Ministers in participating jurisdictions to make a determination to require DNSPs (operating predominately in their jurisdiction) to roll-out smart metering services to customers within their jurisdiction. To help inform this process, the amendments to the NEL also enable a Minister to direct a DNSP to conduct trials and undertake an assessment of the costs and benefits of SMI and other related technologies, including direct load control.

The MCE has agreed that DNSPs should receive regulatory cost recovery for the direct costs associated with complying with any Ministerial determinations, but that cost recovery should be limited and net of reasonably achievable network operational benefits. This is to ensure that such benefits are passed directly to consumers. Therefore, to assess whether additional changes to the regulatory framework are needed to support these principles, the MCE has asked the Commission to review the current Rules and provide advice on whether amendments are needed.

In its Request for Advice, the MCE has raised a number of issues regarding how the AER would determine the level of allowed revenue to compensate a DNSP for mandated SMI expenditure, either through the five yearly distribution determination process or via an adjustment within a regulatory control period through the cost pass through provisions. The MCE has also asked for advice on matters relating to how the costs of mandated SMI should be translated into customer tariffs. This includes asking us to consider whether it is appropriate to unbundle tariffs for smart metering services from the common distribution use of system (DUOS) charges. We have also been asked to consider whether the mechanisms in the Rules allow the tariff impact of a smart meter roll-out to be smoothed.

Draft Advice

Overall our assessment finds that the existing processes for cost recovery are reasonably adequate and have the potential to accommodate the recovery of the efficient costs of SMI mandated by Ministerial determination. No fundamental changes are required to support the MCE policy for smart meters and our analysis does not support the inclusion of a separate specific SMI cost recovery arrangement. Given the synergies between SMI and the network's broader operations we stress that there are

significant benefits in considering mandated SMI expenditure at the same time as other network expenditure under the distribution determination process. Further, DNSPs are familiar with the existing Rules and their ability to finance the expenditure needed to meet their regulatory obligations under these Rules is well established.

We are, however, recommending that some incremental amendments are made to better accommodate the nature of SMI expenditure. Such amendments include additional regulatory mechanisms which better address the issues caused by DNSPs being exposed to the variance between allowed expenditure and actual expenditure and also provide greater certainty for DNSPs regarding how SMI costs will be considered.

Our recommendations recognise that the characteristics of a mandated smart meter roll-out or pilot may be significantly different from both current metering arrangements and traditional network expenditure. Mandating the roll-out of smart meters through an exclusive arrangement for DNSPs will result in a mass accelerated provision in smart meters across the market, requiring significant up-front capital investment. While an accelerated roll-out is likely to increase the potential benefits of smart meters, there is the potential for considerable uncertainty to remain regarding the efficient costs and benefits of SMI at the time a Ministerial determination is made. This uncertainty may arise as SMI technology is relatively new and there is limited experience with a large scale roll-out of SMI in Australia. It is difficult to estimate the level of uncertainty that may be present when the AER is required to assess proposed expenditure for mandated SMI, although it is expected that uncertainty will reduce with increased experience and knowledge.

Further, accommodating mandated SMI will involve a different decision making format for DNSPs from other types of distribution investments. Under a Ministerial smart meter roll-out or pilot determination there is a shift in the responsibility and accountability for the parameters of the investment from the DNSP to the Minister. In contrast, in regards to other network investments, the DNSP is the initiator and primary decision maker of investment proposals. This shift in responsibility and accountability has the potential to affect the incentives on DNSPs in undertaking a mandated smart meter roll-out or pilot.

Our draft findings are:

- The ability of the AER to form an accurate assessment of the efficient costs and benefits of a mandated smart meter roll-out will depend on the availability of reliable information. Any pilots or smart meter assessments will provide an important source of information. In addition, there could be merit in amending the Rules to include a general annual information requirement on all DNSPs to report on actual costs and benefits over the course of smart meter roll-outs and pilots to assist the AER in making future distribution determinations.

- Where there is uncertainty around the quantum of efficient costs and benefits of mandated SMI during the distribution determination process, there is a risk that either higher than efficient expenditure may be approved or that DNSPs are

heavily exposed to the risk of expenditure over-runs. This is caused by the incentives under the current regulatory framework and the relatively short asset lives of SMI assets. The Rules should be amended to include additional mechanisms which can dampen the level of incentives on expenditure for mandated SMI (either through changing the treatment of depreciation in the roll-forward model or applying cost sharing factors to actual expenditure). The AER should be given the discretion to decide if such mechanisms are needed.

- Under the existing incentive arrangements, DNSPs may have an incentive to delay the installation of smart meters under a mandated roll-out (and also face the risk of enforced delays). To address this, the Rules should be amended to provide for an explicit revenue adjustment at the time of the next distribution determination which makes the DNSP neutral to the difference between the forecast profile of installation and the actual timing of the roll-out. This amendment would apply to all mandated smart meter roll-outs, as this risk will not lessen with experience or more information.

- The current cost pass through arrangements are unlikely to provide for the recovery of the efficient costs of mandated smart meter roll-outs. These arrangements are not an appropriate alternative to the distribution determination process in this regard. This issue can be alleviated if the Minister aligns a Ministerial roll-out determination with the start of the distribution determination process. This would allow the costs of a mandated smart meter roll-out to be incorporated in the distribution determination process and there are clear benefits from doing so, including the avoidance of additional regulatory costs and a robust public consultation and expenditure assessment process. It would also enable the AER to undertake a comprehensive review of all proposed network expenditure at the same time as it considers expenditure for a mandated smart meter roll-out. We encourage the alignment of these timeframes where possible.

- In the event that the timeframe for a mandated smart meter roll-out is not aligned with the timeframe for the distribution determination process, and the costs have not been anticipated in a relevant distribution determination, the next best option would be to defer the AER's decision on the roll-out expenditure until the making of the next distribution determination. The AER would undertake an ex-post review of any incurred expenditure at this time and would assess the incurred expenditure in accordance with the existing capital and operating expenditure criteria in the Rules. In undertaking its ex-post review, the AER would also be required to take into account defined principles in the Rules, which would include a 'no hindsight' principle. A temporary interim adjustment to a DNSP's tariffs may also be needed to address cash flow concerns prior to the next distribution determination.

- The current cost pass through arrangements have the potential to promote the recovery of the efficient costs of mandated smart meter pilots and trials, subject to some mechanical amendments. These amendments include: allowing the AER to extend its decision making timeframe; and the inclusion of a specific

requirement for the AER to consider the efficiency of the proposed pass through amount. In addition, the AER should required to consider (as part of its distribution determination process preceding any Ministerial pilot determination) how it would classify mandated smart meter pilots in making a distribution determination. This would ensure that DNSPs have an opportunity to recover their costs through the cost pass through arrangements.

- If a Ministerial pilot determination is made in the 13 months prior to the next regulatory control period, but the associated costs of the mandated pilot are not incurred until the next regulatory control period, the current Rules would prevent cost recovery under the cost pass through arrangements. The Rules should be amended to remove this risk. As this is a general risk for all pass through events, it is proposed that this amendment apply to all pass through events and not just be limited to mandated pilots.

- Where mandated smart metering services are classified as alternative control services, the current regulatory framework will provide for the recovery of efficient costs under the distribution determination process. The AER should maintain its current discretion to develop specific control mechanisms for alternative control services. However, a minor amendment to the Rules is needed to require the AER to consider the appropriate pass through arrangements for mandated smart meter pilots during the distribution determination process, if pilots are to be classified as an alternative control service.

Regarding the tariffs for SMI costs, we consider that in principle, the unbundling of smart metering charges will promote economic efficiency. It would be preferable to establish unbundled charges at the start of a mandated roll-out, as it will improve the transparency and regulatory scrutiny of those services. The current Rules, however, may not promote the efficient allocation of the costs of a mandated roll-out. We have recommended the inclusion of additional pricing principles in the Rules to support the efficient allocation of costs. Consistent with an efficient allocation of costs, we consider that it would be inappropriate for individual smart metering charges to be levied on customers before a customer has an installed and functioning smart meter.

We support the MCE's decision to require the AER to consider tariff smoothing mechanisms to minimise the price impacts on customers caused by the timing inconsistency between the upfront costs and benefits associated with a mandated smart meter roll-out.[1] Amendments to the Rules would be needed to enable the AER to achieve both the objectives of tariff unbundling and tariff smoothing.

However, the MCE is yet to make a decision on future contestability for smart metering services and there is also currently some uncertainty on the range of regulated services that may arise from mandated SMI. The unbundling of smart metering charges must be undertaken in a manner that promotes future contestability and also provides certainty to DNSPs in relation to how the costs of mandated SMI will be recovered following the mandated exclusivity period. Therefore, we suggest that at

1 MCE, 2008, Smart Meter Decision Paper, 13 June, p. 8.

this stage it is not appropriate for the Rules to prescribe in detail how the unbundling of tariffs should be undertaken, as it could damage the future development of competitive markets.

While our proposed amendments will facilitate tariff unbundling, further consideration of the appropriate Rules governing the pricing of smart metering services should be undertaken when the MCE makes a decision regarding contestability. We will shortly commence work to appraise how the Rules can better support efficient consumption decisions in the presence of smart grid technology (including smart meters) as foreshadowed in our report on the Review of Demand Side Participation, submitted to the MCE in December 2009. This analysis will assist in any future considerations on the pricing of smart metering services.

Our proposed amendments are not applicable to Victoria, as the existing legislative arrangements for the advanced metering infrastructure (AMI) roll-out, including those relating to the recovery of the costs of the AMI roll-out, will continue to apply. However, in preparing our draft advice we have had regard to the design of the Victorian arrangements and the reasons behind this approach. We have also used the experience gained in undertaking the Victorian roll-out in developing our draft advice.

Next Steps and Consultation on the Draft Report

This draft advice sets out our assessment of the Rules against the National Electricity Objective (NEO) and MCE's policy objectives for smart meters. It identifies possible areas where amendments to the Rules would better accommodate the recovery of the efficient costs of mandated SMI and explains our reasoning as to why such amendments are needed. To support our reasoning, we have also published legal advice from Allens Arthur Robinson (AAR) and an Options Paper (with supporting spreadsheet calculations), which describes and assesses the alternative cost recovery mechanisms we considered.

At this stage, our proposed amendments are high level concepts and we recognise that further work is needed to specify the amendments in further detail. We would appreciate stakeholder comments on whether our proposed amendments are the most appropriate solution to the issues we have identified, and how such amendments should be applied. We also note that for some of the proposed amendments there may be benefits in applying them more generally to all distribution network expenditure. We would appreciate stakeholder views on the appropriate scope of the proposed amendments.

We invite stakeholders to make submissions on our draft advice by **23 July 2010**. Following consideration of stakeholder submissions, we will submit our Final Report to the MCE by **31 August 2010**.

Contents

1 The MCE's Request for Advice and the Commission's approach

On 19 November 2009, the MCE requested the Australian Energy Market Commission (Commission) provide advice on whether Chapter 6 of the Rules most efficiently accommodates cost recovery for SMI mandated by a Ministerial determination. The MCE also requested that the Commission make recommendations on any changes to the Rules necessary to ensure the recovery of the efficient costs of mandated SMI and have regard to the need for the prompt pass through of benefits to consumers, where this is in their long term interest.

This report outlines the Commission's draft advice in response to the MCE's request. This Chapter outlines the MCE's Request for Advice and the Commission's approach to developing its advice. It also sets out the consultation process for this Draft Report, the next steps for the Review, and the structure of this report.

1.1 The MCE's Request for Advice

The MCE seeks advice on mechanisms for the recovery of the efficient costs borne by DNSPs, in meeting their obligations under smart meter roll-out and pilot Ministerial determinations, as contemplated under recent amendments to the NEL. The MCE has requested that the Commission provide its final advice by 31 August 2010. A copy of the MCE's terms of reference (ToR) can be found at **Appendix A**.

Smart meters refer to meters which are capable of two-way communications. When connected to a communications network, they can allow 'real time' data and instructions to flow to and from the network and the customer's site. SMI includes the smart meter and the required communications and IT equipment which connects the smart meter to a distribution network. Smart meters can significantly expand the range of functions that traditional meters can provide, and are capable of facilitating functions such as time of use pricing, remote connection and disconnection, and direct load control. These expanded functions provide opportunities for improved efficiency in the use and management of the electricity network, and also provide customers with a greater capacity to manage their electricity consumption. Further discussion on SMI technology and the costs and benefits of SMI can be found at **Appendix B**.

1.2 Background to the MCE's Request for Advice

The MCE's Request for Advice was made following a decision in June 2007 by the Council of Australian Governments (CoAG) to endorse a staged approach for a national mandated roll-out of electricity smart meters, in areas where the benefits of a roll-out outweigh the costs. In June 2008, the MCE determined that mandated smart meter roll-outs should be exclusively performed by DNSPs, to maximise the potential benefits of a roll-out.[2] The MCE agreed that DNSPs should receive regulatory cost

2 MCE, 2008, Smart Meter Decision Paper, 13 June, p. 1.

recovery for the direct costs associated with complying with any jurisdictional obligation to roll-out smart meters, but that cost recovery should be limited and net of reasonably achievable network operational benefits to ensure these benefits are passed directly to consumers.[3]

In October 2009, the NEL was amended to enable Energy Ministers in participating jurisdictions to make a Ministerial determination to require DNSPs operating predominately in their jurisdiction to:

- roll-out smart metering services to customers; and
- conduct trials and pilots of SMI and other related technologies, including direct load control.

1.3 The Commission's approach to developing its advice

In developing our draft advice, we have assessed how the current Chapter 6 Rules would be applied to cost recovery associated with a mandated smart meter roll-out compared to a mandated smart meter pilot or trial, which may include direct load control. We then analysed what is possible under the current legal framework of the Rules and the NEL. A copy of the legal advice that was provided to us by Allens Arthur Robinson (AAR) in preparing our draft advice is published with this Draft Report.[4]This legal advice (AAR Advice) provides comprehensive detail on the way that the Chapter 6 Rules and the NEL would be applied to DNSPs seeking cost recovery for SMI which is mandated by a Ministerial determination (mandated SMI).

In considering how the Rules and the NEL would be applied in practice, we have also assessed the potential differences between mandated SMI and other distribution investments. The potential issues that may arise from a mandated smart meter roll-out or pilot under the scenarios for assessment outlined in the Final Statement of Approach were also considered, along with the issues that were raised in submissions on the Draft Statement of Approach.[5]

In developing our draft findings, we have sought to identify the areas where the current Rules are able to accommodate the recovery of the efficient costs of mandated SMI for both roll-outs and pilots. Where we consider that the Rules are unable to accommodate the recovery of efficient costs, we have assessed alternatives and proposed amendments to the Rules using the decision making criteria for the Review. A paper outlining the alternative cost recovery mechanisms we considered (Options Paper) is published with this Draft Report.[6]

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3 MCE, 2008, Smart Meter Decision Paper, 13 June, p. 8.

4 AAR, 2010, Advice in Response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June.

5 A summary of these submissions was contained in Appendix D to our Final Statement of Approach. Copies of the submissions are available on the AEMC website at: www.aemc.gov.au

6 AEMC, 2010, Assessment of Options: Cost Recovery Mechanisms for Mandated Smart Meter Roll-out Expenditure, 18 June.

1.4 Differences between mandated SMI and other distribution network investments

In considering the appropriateness of the current Chapter 6 Rules, we have considered how investments required for mandated smart meter roll-outs and pilots, including trials of direct load control, may differ from other kinds of distribution network investments. We consider that the key differences between mandated SMI and other distribution network investments include:

- **Shift in the role of decision maker** - A mandated smart meter roll-out or pilot is not the usual decision making format for the majority of network services and investments. Under a mandated roll-out or pilot of SMI, a Ministerial determination will set out the parameters of the required investment including the timing of when a mandated smart meter roll-out or pilot will occur, the services that DNSPs must provide and the minimum functionality requirements of the smart meters they must install. In contrast, in regards to other network investments, the DNSP is the initiator and primary decision maker of investment proposals. This shift in responsibility for determining how and when a roll-out or pilot of SMI is undertaken may impact on a DNSP's incentives in carrying out its obligations under a Ministerial determination.

- **Exclusivity over the provision of services** - Under a mandated roll-out of SMI, DNSPs will be the exclusive providers of SMI during the mandated period. This situation will differ from the current arrangements for the provision of smart meters, as metering services are contestable. Exclusivity over smart metering services may impact on the timing, risks and ability for DNSPs to recover their costs in undertaking a mandated smart meter roll-out. The exclusivity period may also impact on the incentives on DNSPs in selecting technologies to meet their obligations.

- **Uncertainty about costs and benefits** - As SMI technology is relatively new and yet to be rolled out on a mass scale in Australia, there is the potential for considerable uncertainty about the efficient costs and benefits associated with SMI investments. This is in contrast to more traditional distribution network investments, where there is a relatively high degree of certainty from both DNSPs and the regulator about potential costs and benefits, which has been developed through experience and acquired information. Uncertainty about the efficient costs and benefits of SMI may present difficulties for the regulator in determining an appropriate level and profile of recoverable net expenditure.

- **Scope and scale of investment**- The potential scope and scale of a mass mandated smart meter roll-out also differs from the scope and scale of other distribution network investments which are usually undertaken by DNSPs. For example, a smart meter roll-out across NSW would involve installing smart meters for approximately 5.2 million customers, while a roll-out across Qld would involve approximately 3.3. million customers.

In considering these differences between a mandated accelerated provision of SMI and other distribution network investments, we have remained mindful of the need to maintain an appropriate balance between prescription in the Rules in relation to specific issues such as mandated SMI, and the need to maintain a more generic Rules framework, which provides appropriate guidance and discretion to both DNSPs and the AER.

1.5 Decision making criteria for the Review

In our Final Statement of Approach we outlined the decision making criteria we will use to guide our approach and the development of our recommendations to the MCE. These criteria were refined following stakeholder submissions on our Draft Statement of Approach and were developed with regard to the NEO, the MCE's Statement of Policy Principles on Smart Meters, the NEL Revenue and Pricing Principles, and the requirements in the ToR. The following decision making criteria have been used in the development of our draft advice:

1. **Promotion of the efficient management of costs and provision of services**

   The regulatory framework should promote the efficient provision of smart metering services and the efficient operation of SMI. The Rules need to provide incentives for DNSPs to minimise costs in deciding upon the design, purchase and implementation of equipment and software to meet their obligations under Ministerial determinations. The regulatory framework must promote efficient investment by DNSPs in mandated SMI and reduce the risks of over and under investment. The regulatory framework should also provide DNSPs with a reasonable opportunity to recover their efficient costs in meeting a Ministerial determination.

2. **Appropriate allocation of risk, having regard to what DNSPs can control**

   There are a number of risks associated with mandated investment in SMI, including the risk of costs being higher than forecast and the technological risks associated with making a substantial long term investment. The regulatory framework needs to promote the effective identification and management of such risks, both between different parties and between different administrative processes, to deliver the best outcomes for customers.

3. **Support potential benefits being realised in practice**

   The benefits of smart metering can be divided into two main categories: operational benefits and demand response benefits. The regulatory framework needs to ensure that the regulator is able to consider these benefits in making its determinations, and that benefits are realised to the maximum extent possible and promptly passed through to customers, to ensure their long term interests are supported.

4. **Promotion of transparent, well informed and appropriate regulatory processes**

The regulatory process for determining the efficient costs and benefits associated with mandated SMI should be transparent and open, with the opportunity for stakeholder input. The regulatory framework should also ensure that the regulator has sufficient time and information to make its determinations.

5. **Robust to the necessary range of possible applications**

   The Rules for mandated SMI should be robust enough to accommodate all potential Ministerial determinations and the potential for future contestability in smart metering services. The regulatory framework should also be consistent with the principles of good regulatory design and practice, in order to promote the stability and predictability of the framework, and to ensure that the framework is proportionate.

6. **Consistency in treatment across different types of regulated distribution investments**

   A common framework for economic regulation should be applied to all distribution investments which are used in the provision of regulated services, to promote consistent and effective regulation and regulatory certainty. Any deviation in treatment, specifically in relation to mandated SMI, would have to be justified as being in the long term interests of consumers.

1.6 Scenarios for assessment

In our Final Statement of Approach, we outlined the scenarios that we intended to use to test our assessment of the issues which may arise from a smart meter roll-out or pilot Ministerial determination and to understand the potential implications of alternative cost recovery mechanisms. The following scenarios have been used to test the robustness of our draft advice:

- The timing of the Ministerial determination;
- The length of the mandated period;
- The uncertainty of anticipated costs and benefits; and
- The future contestability of metering services.

1.6.1 The timing of the Ministerial determination

This variable relates to when the Ministerial determination is made in relation to the periodic distribution regulation determination process. We considered two possibilities:

- the timing of the Ministerial determination is such that it allows the roll-out or pilot to be incorporated within the periodic distribution determination process conducted by the AER; or

- the timing of the Ministerial determination is such that incorporation of the impact of the roll-out or pilot within the distribution determination process is not practicable, creating a requirement for cost recovery to be pursued via other available mechanisms, such as the cost pass through provisions.

1.6.2 The length of the mandated period

This variable relates to whether or not a mandated roll-out extends from one regulatory control period to another. We considered a scenario in which a mandated roll-out is initiated during one regulatory control period and extends into subsequent regulatory control periods. The costs during the first regulatory period will require cost recovery to be initiated under a separate mechanism (such as a pass through provision), but the costs in subsequent regulatory control periods could be accounted for through the distribution determination process. For all scenarios, benefits will be considered to occur following the roll-out, and to extend beyond the end of the regulatory control period in which costs are incurred.

1.6.3 The uncertainty of anticipated costs and benefits

The third variable relates to the question of whether a reliable and detailed project specification will be available at the time that the Ministerial determination is made. We considered two possibilities:

- Scenarios in which costs and benefits at the time of the Ministerial determination are relatively firm, or are considered to be subject to substantial uncertainty; and

- Scenarios in which, as the roll-out proceeds, costs and benefits are revealed to be either as anticipated, or substantially more or substantially less.

Where the estimates of potential costs and benefits are subject to a higher level of uncertainty, are contentious or are disputed by the DNSP, the task of judging the appropriate timing and level of off-setting cost savings will be made more difficult for the regulator.

1.6.4 The future contestability of metering services.

This final variable relates to whether smart metering services will become contestable following the end of the mandated exclusivity period for DNSPs. In assessing the future contestability of smart metering services, we have considered the types of services that may be provided using mandated SMI. We note that this has the potential to encompass a range of services, including but not limited to: remote connection/disconnection services; remote load control services; smart metering data

services; and supply capacity limiting services.[7] In considering the future contestability of metering services, we have assessed scenarios which allowed for:

- The contestability of residential and other small customer smart metering services following the end of the mandated exclusivity period specified in a Ministerial determination; and
- The continuation of DNSPs as the exclusive providers of smart metering services.

1.7 The timetable for the Review

The Commission's timetable for the Review is set out in the table below.

Stage of the Review	Date
Request for advice made by the MCE	19 November 2009
Publication of Draft Statement of Approach	17 December 2009
Close of submissions on the Draft Statement of Approach	5 February 2010
Publication of Final Statement of Approach	10 March 2010
Publication of Draft Report and specifications	18 June 2010
Close of submissions on the Draft Report	*23 July 2010*
Submit Final Report and draft Rules to the MCE	*By 31 August 2010*

1.8 Consultation on the Draft Report and next steps

We invite written submissions in response to this Draft Report. In particular, we are interested in stakeholder views on the specific questions we have outlined in Chapters 2 to 7. A list of these questions is set out in Appendix D. Submissions are requested by **5pm, 23 July 2010**. Submissions should contain the reference number **"EPR0018"** in the subject heading. Submissions may be sent electronically through the AEMC's online lodgement facility at: www.aemc.gov.au

Or in hard copy to:

Australian Energy Market Commission

PO Box A2449

7 The National Stakeholder Steering Committee on Smart Meters (NSSC) commented on the range of possible services that may be provided using mandated SMI in their submission to the Draft Statement of Approach. See NSSC, Submission on the Draft Statement of Approach, pp. 12-15.

Sydney South NSW 1235

After considering submissions on the Draft Report, we will submit our Final Report and draft Rules to the MCE by 31 August 2010. Under the ToR, we are also required to publish our final advice on the AEMC website, no later than 2 weeks after providing this advice to the MCE.

1.9 Implementation of our proposed changes to the Rules

If we continue to consider that amendments to the Rules are necessary, we intend to include draft Rules and a Rule change request with our Final Report, to be submitted to the MCE in late August 2010. The MCE will then consider our final recommendations and proposed Rules. If the MCE determines that changes to the Rules should be made, any proposed Rules would then need to be considered through a standard Rule change process.

Under our proposed changes to the Rules, the AER would be required to develop a number of guidelines. To ensure that the AER has adequate time to develop and consult on these guidelines, we consider that the AER should be provided with 6 months to publish these guidelines following the making of any Rules.

We have sought legal advice on any potential issues of retrospectivity that may arise in regards to cost recovery for DNSPs which may be in the process of undertaking mandated smart meter roll-outs and pilots, when any Rule changes are made. The impact of any changes to Chapter 6 of the Rules will depend on the specific circumstances of each DNSP. However, we consider that any changes to the Rules regarding cost recovery for mandated SMI should not present any retrospectivity issues for DNSPs and that cost recovery under any new arrangements will present minimal implementation issues if the introduction of the new arrangements is effected as described below. [8]

To provide regulatory certainty for DNSPs, our proposed changes to the distribution determination process and pricing arrangements, outlined in Chapters 2, 3, 5 and 7, should not be applied until their next regulatory reset. This would ensure that our proposed changes can be implemented at the commencement of a distribution determination process. The AER would then be able to consult on how changes to the distribution determination process may apply through its Framework and Approach Paper. For NSW and ACT DNSPs, the next distribution determination process will commence in June 2012 for the start of the next regulatory control period on 1 July 2014. For SA and Qld DNSPs, the next distribution determination process will commence one year later, in June 2013. The completion of any Rule change process by the Commission by mid 2011 would provide ample time for any new arrangements to be applied for the commencement of the NSW/ACT distribution determination process in mid 2012.

8 AAR, 2010, Advice in Response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, pp. 31-32.

Our proposed changes to the cost pass through provisions in clause 6.6.1 of the Rules, as outlined in Chapter 4, should take effect from the time the Rules are made. These proposed changes are mechanical in nature and should not have a significant impact on how the cost pass through process is undertaken.

1.10 Structure of this Paper

The structure of the remainder of this paper is outlined below. We have developed our advice and structured this report around the key themes raised in the ToR.

Chapters 2 to 8 outline our draft findings and recommendations on the issues set out in the ToR, and are structured as follows:

- Chapter 2 - Cost recovery under the distribution determination process;
- Chapter 3 - Mid period cost recovery for mandated smart meter roll-outs;
- Chapter 4 - Mid period cost recovery for mandated smart meter pilots and trials;
- Chapter 5 - Cost recovery for mandated smart metering services which are classified as alternative control services;
- Chapter 6 - Incentives under the current regulatory regime;
- Chapter 7 - Tariff issues associated with mandated SMI; and
- Chapter 8 - Summary of draft findings against the items in the ToR

Appendices A to D outline supporting information for our draft advice. The appendices to this report include:

- Appendix A - MCE's ToR;
- Appendix B - Costs and benefits of SMI;
- Appendix C - Specifications of our proposed changes to the Rules; and
- Appendix D - Questions for stakeholder comment.

2 Cost recovery under the distribution determination process

This Chapter sets out the Commission's draft findings on cost recovery for mandated SMI under the periodic distribution determination process for standard control services. It outlines our assessment of how the distribution determination process would be applied to mandated smart meter roll-outs and smart meter pilots and trials, and whether the distribution determination process would provide for the recovery of efficient costs. Further discussion of the policy options that were considered in developing our draft findings is contained in the Options Paper published with this Draft Report.

This Chapter only addresses how mandated SMI expenditure would be considered under the distribution determination process for standard control services. Where expenditure for mandated SMI cannot be incorporated in the distribution determination process for standard control services, because of the timing of the mandated SMI expenditure, another mid period cost recovery mechanism, such as the cost pass through provisions in clause 6.6.1 of the Rules, would be required. The Commission's draft findings regarding mid period cost recovery for mandated smart meter roll-outs and mandated smart meter pilots and trials are set out in Chapters 3 and 4 respectively. A different cost recovery mechanism may also apply where mandated smart metering services are classified as alternative control services rather than standard control services. The Commission's assessment of the implications for cost recovery where mandated smart metering services are classified as alternative control services is outlined in Chapter 5.

Box 2.1: Summary of draft findings for cost recovery under the distribution determination process

Assessment of the Rules and the NEL

1. Under the distribution determination process, DNSPs can seek cost recovery for the costs incurred in undertaking a mandated smart meter roll-out or pilot. In addition, the AER has an obligation under the Rules to take into account reasonably achievable network operational benefits when making a distribution determination.

2. The current requirements in the NEL and the Rules have the potential to accommodate the recovery of the efficient costs of mandated smart meter roll-outs and pilots. There is no conflict between the NEL Revenue and Pricing Principles and the capital expenditure objectives and the operating expenditure objectives in the Rules.

3. However, in practice there are two issues arising from the circumstances of mandated smart meter roll-outs which could impede the ability of the Rules to promote the recovery of efficient costs:

    - DNSPs have an incentive to delay the timing of a roll-out of smart

meters within a regulatory control period, given the incentives under the regulatory framework in Part C of the Chapter 6 Rules, all else being equal. There is the potential that sanctions for failure to comply with a roll-out schedule in a Ministerial determination may counteract the incentives to delay a roll-out under the Rules. However, as these are separate mechanisms, this is not certain; and

- As SMI is a relative new technology there may be additional uncertainty around the efficient costs and benefits of a roll-out compared to other network expenditure. This additional uncertainty may affect the ability of the AER to make a distribution determination which accommodates the recovery of efficient costs.

4. The level of uncertainty that may remain at the time of a future AER distribution determination is difficult to predict. The level of uncertainty will depend on the number of pilots and trials of SMI which precede a particular Ministerial roll-out determination and the information that is available to the AER on smart meter roll-outs that have been undertaken in other jurisdictions.

5. The AER can request information on the costs and benefits of mandated SMI under the NEL, where it can demonstrate that this information is required for a specific determination for cost recovery. The importance of this information in addressing any remaining uncertainty regarding the efficient costs and benefits of a mandated roll-out may justify a change to the Rules to specifically require its provision on an annual basis across jurisdictions.

Proposed changes to the Rules

To counter-act incentives for DNSPs to delay the timing of smart meter roll-outs within a regulatory control period, the Rules should be amended to provide for an explicit revenue adjustment at the time of the next distribution determination to:

- Remove any additional revenue earned by a DNSP, where a DNSP has rolled out smart meters and/or associated infrastructure slower than forecast in the previous distribution determination and allowed for in revenues for that period; and

- Compensate a DNSP for costs above allowed revenues where a DNSP has rolled out smart meters and/or associated infrastructure faster than forecast in the previous distribution determination.

The AER should be required to calculate this revenue adjustment in its distribution determination. The amount of revenue which is removed/ compensated would be based on the cost assumptions (e.g. unit meter cost) contained in the previous distribution determination, thus preserving incentives

for DNSPs to achieve cost efficiencies.

Where there is a substantive degree of uncertainty regarding the efficient costs and expected benefits of SMI at the time the AER makes a distribution determination, the AER should be provided with the discretion to apply one of the following mechanisms in making a distribution determination:

- Rolling forward the regulatory asset base (RAB) on the basis of forecast depreciation for assets with economic lives of 15 years or less. For asset with lives of more than 15 years, the AER could maintain higher powered incentives for efficiencies by rolling forward the RAB on the basis of actual depreciation; or

- A cost sharing mechanism, which would allow the AER to vary the proportion of any underspend or overspend which is retained by DNSPs and shared with customers, according to the extent of uncertainty the AER considers remains in relation to the costs and benefits of SMI. This mechanism would only apply to expenditure which is specifically required or mandated SMI.

The AER would be required to indicate in its Framework and Approach Paper for a distribution determination whether it considers there is a possible need to apply one of these mechanisms in the forthcoming regulatory control period.

To ensure that the AER has access to relevant information to assist it in estimating the efficient benchmark costs of a mandated smart meter roll-out or pilot in making a distribution determination, the Rules should be amended to require DNSPs in all jurisdictions to provide annual information to the AER on the costs and network operational benefits of any mandated smart meter roll-out, pilot or trial they are undertaking. The AER should be required to publish a guideline, following stakeholder consultation, which sets out the nature and format of information that DNSPs must provide.

2.1 Considerations in developing our draft advice

The distribution determination process determines the maximum allowed revenue or prices that DNSPs can recover/charge for a defined regulatory control period, of usually five regulatory years. The DNSP is incentivised to seek additional efficiencies and outperform its revenue allowance within the regulatory control period, as it is allowed to retain a proportion of any unspent allowed revenue.[9] The current distribution determination process is based on a 'propose-respond' model where the AER is required to assess a DNSP's regulatory proposal and accept certain parts of it unless they fail to meet specified criteria. The AER is also required to consider the NEL Revenue and Pricing Principles and the NEO in making a distribution determination.[10]

9 The proportion of an underspend that is retained by a DNSP would depend on whether the expenditure was operational expenditure or capital expenditure.

10 Section 16 of the NEL

Given the likely length of a mandated period, it is likely that the distribution determination process will be the main avenue for DNSPs to seek the recovery of mandated SMI expenditure. For standard control services, the distribution determination process is specified in detail in Part C of the Chapter 6 Rules and these services are regulated under a 'building block' regulatory approach.

The MCE has requested advice on whether the existing regulatory framework 'most efficiently accommodates' the recovery of the efficient costs of mandated SMI. This requires both an assessment of whether the existing Rules allow for cost recovery and also consideration of potential alternatives to the current approach which may better accommodate the recovery of efficient costs. In this Chapter, we first assess how the regulatory framework would facilitate cost recovery and whether DNSPs have an ability to seek cost recovery for the costs they may incur in complying with a Ministerial determination. In particular, the MCE has requested advice on the interactions between the obligations imposed on DNSPs under the NEL amendments with the NEL Revenue and Pricing Principles and the operating expenditure objectives and the capital expenditure objectives in the Rules.

Secondly, we assess whether the practical application of the current Rules would promote the recovery of the efficient costs associated with complying with a Ministerial determination. In this assessment, we consider the key characteristics of the expenditure associated with a smart meter roll-out or pilot and the extent to which these characteristics differ from other distribution investments. Where we have identified areas of the Chapter 6 Rules which we consider would not adequately accommodate the recovery of efficient costs, we have examined a range of possible alternative cost recovery mechanisms and assessed these against the decision making criteria identified in Chapter 1. These alternatives include the cost recovery arrangements that apply in Victoria for the roll-out of AMI.

In considering whether the Rules would provide for the recovery of efficient costs, the MCE has also asked for advice on whether the AER has an obligation and the ability to consider 'reasonably achievable network operational benefits' that may arise as a result of mandated SMI, when making distribution determinations. There are a range of potential network operational benefits that may arise from mandated SMI, with the avoided cost of meter reading (both routine and special reads) being one of the most significant operational benefits identified. As noted by a number of stakeholders, some of the network operational benefits associated with mandated SMI may accrue automatically to DNSPs (e.g. reduced meter reading costs), while the realisation of other operational benefits (e.g. reduction in network investment) may require a change in behaviour by the DNSP or other market participants.[11] While mandated smart meter roll-outs are expected to provide a number of network operational benefits, the network operational benefits that may result from a mandated smart meter pilot or trial are likely to be minimal.

The current distribution determination process is based largely on the expectation that there is a high degree of certainty regarding the efficient costs of distribution

11 See submissions on the Draft Statement of Approach from: Energex, p. 6; NSSC, p. 9.

investments. It is difficult to predict the level of uncertainty that may be present when the AER makes a decision on SMI expenditure as part of its distribution determination. Such uncertainty may be reduced through the pilots and trials of SMI that are conducted prior to a Ministerial determination. However, as SMI is a relatively new technology and there is as yet limited practical experience in an Australian context with a large scale roll-out, we consider there is the potential for uncertainty around the costs and benefits of SMI to remain when a distribution determination is made by the AER. This is particularly the case for those jurisdictions that are one of the first to mandate a roll-out under the NEL provisions.

In considering the implications of uncertainty for the effectiveness of cost recovery under the distribution determination process, we have considered both the impact of uncertainty in relation to the timing of expenditure under a mandated roll-out and uncertainty in relation to the magnitude and scope of the expenditure required. In particular, we have considered the interaction between this uncertainty and the incentives on DNSPs under the existing regulatory framework.

We have also assessed the AER's current powers to request information on the efficient costs and benefits of mandated SMI under the NEL and Rules, and whether the AER's current powers are sufficient to reduce the level of uncertainty that may remain when the AER makes its distribution determination.

We have also considered whether DNSPs have the ability to recover third party costs under the distribution determination process that they may incur in undertaking their mandated obligations. In particular, the MCE has requested advice on whether DNSPs are able to enter into a contract with a retailer to provide services used in mandated smart meter pilots and trials and recover those retailer fees. In our assessment of this issue, we have considered the implications for cost recovery where a DNSP and a retailer are related parties and where there is limited retail competition.

2.2 Assessment of the current Rules

This section outlines our assessment of the adequacy of the current distribution determination process for standard control services to provide for the recovery of the efficient costs of SMI which is provided under a mandated smart meter roll-out or a mandated smart meter pilot or trial.

2.2.1 Do DNSPs have an ability under the Rules to seek cost recovery for mandated SMI under the distribution determination process?

Under the distribution determination process DNSPs are required to submit a building block proposal to the AER for standard control services, which sets out the total forecast operating and capital expenditure for the forthcoming regulatory control period that the DNSP considers is required to achieve the operating and capital expenditure objectives. [12] These objectives include the expenditure required to "comply

12 Clauses 6.5.6(a) and 6.5.7(a) of the Rules

with all applicable *regulatory obligations or requirements* associated with the provision of standard control services".[13]

"Regulatory obligations or requirements" is a defined term under the NEL and includes an obligation or requirement made under the NEL or Rules.[14] A Ministerial determination requiring DNSPs to roll-out smart meters or undertake a smart meter pilot or trial would be made under Sections 118B and 118D of the NEL. Therefore, under the current Rules, DNSPs would be required to include the forecast operating and capital expenditure needed to comply with their obligations under a Ministerial determination in their building block proposal.[15] As a result, under the Rules, DNSPs would have an ability to seek cost recovery under the distribution determination process for mandated SMI which is provided under a mandated smart meter roll-out or a mandated smart meter pilot or trial.

Draft Finding 1: DNSPs have an ability to seek recovery for mandated SMI expenditure under the current distribution determination process.

2.2.2 Will the distribution determination process provide for the recovery of the efficient costs of mandated SMI?

The distribution determination process will promote the recovery of efficient costs if the AER's approved level of expenditure: reflects the efficient costs of complying with the Ministerial determination; takes into account the cost savings generated by SMI; and properly incentivises the DNSP to maximise the potential network operational benefits that mandated SMI may provide going forward. In considering whether the distribution determination process is likely to provide for this outcome in practice, we have assessed the criteria that the AER must take into account when making a distribution determination.

Under the distribution determination process, the AER would be required to accept a DNSP's forecast operating and capital expenditure for mandated SMI, if it is satisfied that the forecast operating and capital expenditure reasonably reflects the operating and capital expenditure criteria.[16] These criteria relate to the efficient and prudent costs of achieving the operating and capital expenditure objectives.[17] Where the AER is not satisfied with a DNSP's forecast expenditure, it must reject that forecast and substitute its own assessment of the DNSP's forecast operating and capital expenditure.[18]

Under the NEL, the AER is also be required to take into account the NEL Revenue and Pricing Principles in determining whether it is satisfied that the DNSP's forecast

13 Clauses 6.5.6(a)(2) and 6.5.7(a)(2) of the Rules.

14 Section 2D(1)(b)(I) of the NEL.

15 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, pp. 3-4.

16 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, p. 3.

17 Clauses 6.5.6(c), 6.5.7(c), and 6.8.2(c)(2) of the Rules.

18 Clauses 6.5.6(d), 6.5.7(d). 6.12.1(3)(ii) and 6.12.1(4)(ii) of the Rules.

operating and capital expenditure reasonably reflects the operating and capital expenditure criteria.[19] The NEL Revenue and Pricing Principles require the AER to provide DNSPs with a reasonable opportunity to recover the efficient costs of providing direct control services. The AER would also be required to take into account the NEO, as the AER is required to perform its economic regulatory functions in a manner that will or is likely to contribute to the achievement of the NEO. [20]There is no necessary conflict between the interaction of the NEO, the NEL Revenue and Pricing Principles and the operating and capital expenditure criteria.[21] The AER has extensive regulatory experience in assessing the efficiency of proposed network expenditure using these criteria. There is no reason to change these provisions with respect to mandated SMI expenditure.

In our consideration of whether the distribution determination process will provide for the recovery of efficient costs, the MCE has also requested advice on whether the Rules provide the ability for the AER to take into account 'reasonably achievable network operational benefits'. In determining whether the forecast expenditure reflects the operating and capital expenditure criteria, the AER is required to consider the capital and operating expenditure factors, which include the benchmark expenditure that would be incurred by an efficient DNSP over the regulatory control period.[22]

In considering the efficiency and prudency of the forecast expenditure, we consider that the AER would have an obligation to consider whether the forecasts reflected any 'reasonably achievable network operational benefits' associated with the mandated SMI, including any network operational benefits that would be expected to be achieved by an efficient DNSP over the regulatory control period.[23] This would ensure that the level of expenditure allowed under the distribution determination reflects the DNSP's efficient net costs associated with complying with the Ministerial determination. If this is not the case, then the AER cannot be satisfied that the overall forecast expenditure reflects the efficient costs of complying with the Ministerial determination and is consistent with the operating and capital expenditure criteria. However, we note that only benefits which accrue to the DNSP and have a monetary value can be taken into account by the AER.

The AER's ability in practice to take into account reasonably achievable network operational benefits in making a distribution determination will depend on the availability of relevant information. This will partly depend on the extent of relevant experience (and therefore information) with mandated roll-outs both in Australia and overseas and on the information available from pilots and trials. Pilots and trials may not provide information on the scale effects of the benefits that could be achieved by a large scale smart meter roll-out. In addition, the ability of the AER to request

19 See section 16(2)(a)(I) of the NEL.

20 See section 16(a)(a) of the NEL.

21 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, p. 11.

22 Clause 6.5.6(e) of the Rules.

23 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, p. 4

appropriate information to inform its decision making will also impact its ability to consider network operational benefits. This issue is discussed in section 2.2.4.

Where the capturing of operational benefits requires a change in operational practices by a DNSP, it may be more difficult for the AER to determine the reasonably achievable network operational benefits for the first regulatory control period. However, at the following regulatory control period, the AER would be better informed by the experience and behaviour of the DNSP during the first period.

It is likely that the smart meter roll-out will affect the performance of the DNSP on the service quality measures contained in existing service target performance incentive schemes, which may lead to additional revenue for the DNSP.[24]Specifically, the roll-out of smart meters may improve both the duration of unplanned interruptions (as outages will be detected more quickly) and customer service (e.g. telephone answering times). Under the Rules the AER has the ability to modify the existing schemes to take into account the impact of the roll-out of smart meters on the service performance levels set under the scheme. If the AER does not modify the scheme, then the DNSP may earn additional rewards for improved service where this improvement has already been funded by allowed revenue. However, such rewards are not likely to be material, given the incremental impact of SMI on these performance measures, and therefore would not substantially affect the promotion of efficient cost recovery.

In conclusion, the AER's ability to determine whether a DNSP's forecasts for mandated SMI expenditure are efficient and prudent will depend largely on the degree of certainty with which it can establish the efficient costs and potential network operational benefits associated with a Ministerial determination. Where the costs and benefits of SMI are relatively firm and the AER has access to reliable information, the current distribution determination process has the potential to provide for the recovery of efficient costs. We also note that the requirement on the AER to reject a DNSP's forecasts and substitute its own assessment where it is not satisfied that a DNSP's forecasts reflect the operating and capital expenditure criteria, is likely to provide strong incentives on DNSPs to submit regulatory proposals which meet the requirements of the operating and capital expenditure criteria.[25] However, where there is substantial uncertainty in relation to the costs and operational efficiencies associated with SMI expenditure, then the effectiveness of the cost recovery arrangements may be compromised, as discussed in section 2.2.3 below.

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24 The service target performance incentive scheme is developed by the AER in accordance with clause 6.6.2 of the Rules and provides for a proportion of a DNSP's annual revenue requirement to be adjusted up or down depending on its performance on selected measures of service compared to pre-set targets.

25 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, p. 14.

Regulatory Test for distribution network investments

We have also had regard to whether a mandated smart meter roll-out or pilot should be subject to the Regulatory Test.[26] The objective of the Regulatory Test is to ensure that DNSPs conduct a transparent economic assessment to determine the most cost effective option to an identified need for investment.[27] In undertaking a mandated roll-out or pilot, DNSPs would be required to comply with the specified parameters set out in a Ministerial determination, which is likely to include, amongst other parameters, the timing for the roll-out, the minimum functionality requirements of the smart meters that must be rolled out, the services that must be provided, and the geographic area and number of customers that the services must be provided to. Therefore, the ability of a DNSP to consider alternative investment options would be restricted to how the DNSP would meet the requirements of the Ministerial determination (e.g. choice of IT and communications equipment etc), rather the type of investment that should be made to meet an identified need.

Requiring a DNSP to undertake a Regulatory Test in these circumstances is likely to lead to unnecessary regulatory costs for the DNSP and has the potential to delay the timing of a mandated roll-out or pilot. We also note that under the NEL amendments, Ministers would be required to undertake public consultation prior to making a Ministerial roll-out determination and consultation with interested parties prior to making a Ministerial pilot determination.[28] It is considered that these consultation processes, in addition to the cost-benefit analysis that would have been conducted prior to the making of a Ministerial determination, would provide sufficient analysis and consultation regarding the need for a mandated roll-out or pilot and how the roll-out or pilot should be undertaken. Therefore, it is recommended that the Regulatory Test (nor the Regulatory Investment Test for Distribution if implemented) not apply to a smart meter roll-out or pilot, which is mandated under a Ministerial determination.

2.2.3 What is the impact of uncertainty during the distribution determination process on the recovery of efficient costs?

As noted above, the extent of uncertainty in relation to efficient SMI expenditure will partly depend on the degree of experience and information on mandated smart meter roll-outs, pilots and trials both in Australia and overseas at the time of the AER's distribution determination. The level of uncertainty is also likely to depend on the timing and nature of a Ministerial determination. As jurisdictional roll-outs and pilots proceed, the level of uncertainty can be expected to diminish. As SMI is a relatively new technology, we consider that there is the potential for some uncertainty to remain when the AER makes its distribution determinations. However, it is difficult to predict

26 In September 2009, the Commission submitted its Final Report on its Review of National Framework for Electricity Distribution Network Planning and Expansion to the MCE. In this Final Report, the Commission recommended that the Rules should be amended to replace the current Regulatory Test in clause 5.6.2 of the Rules with the Regulatory Investment Test for Distribution. The MCE is currently considering the Commission's recommendations on this Review.

27 Clause 5.6.2(g) of the Rules

28 See Sections 118E and 118C of the NEL.

the level of uncertainty that may exist at the time a future distribution determination is made by the AER. We note that stakeholders have expressed different views on the level of uncertainty around the costs and benefits of mandated SMI.[29]

We consider that there is the potential for uncertainty to arise in relation to:

- The speed with which a smart meter roll-out will be undertaken, particularly if the Ministerial determination has not specified annual roll-out targets for the mandated period;

- The efficient costs that need to be incurred by DNSPs. The extent of this uncertainty is likely to vary in relation to the different types of expenditure required (e.g. the unit costs of smart meters may be more certain than the costs of installing smart meters). There may also be some difficulty in identifying the scope of the efficient costs for some expenditure items (e.g. IT systems required to support a roll-out could also be expanded to allow the DNSP to develop 'smart grid' functionalities); and

- The quantum of operational benefits that DNSPs may be able to achieve.[30]

Such uncertainty will have implications for the recovery of efficient costs, due to the incentive mechanisms in the Rules, as discussed in the following section.

Implications where the timing of a mandated smart meter roll-out is uncertain

In considering the implications of uncertainty in regards to the timing of a mandated roll-out, we note that there is no requirement in the NEL for a Ministerial determination to specify annual roll-out targets. Even where a Ministerial determination has specified annual roll-out targets, DNSPs would have an incentive to delay the timing of the roll-out during the regulatory control period. This occurs as the AER would have determined the DNSP's revenue requirement for the regulatory control period based on a forecast of how many smart meters are expected to be rolled out each year. Where a DNSP rolls out smart meters slower than forecast it is still allowed to charge prices based on the higher revenue requirement, despite its actual costs being lower. DNSPs also face the risk of enforced delays as a result of implementation problems, such as faulty meters or higher than expected installation times. In these circumstances, a DNSP would also receive an additional return on capital and depreciation.

Where a Ministerial determination has specified annual roll-out targets, non-compliance with the Ministerial determination would be considered a breach of the NEL, and the AER may be able to seek a court injunction to require the DNSP to

29 See submissions on the Draft Statement of Approach from: TRUenergy, p. 2; Integral Energy, p. 2; Origin Energy, p. 11; NSSC, pp. 5, 9; Energex, pp. 1, 6.

30 Further detail on these potential sources of uncertainty is outlined in our Options Paper.

comply with the Ministerial determination. [31] Whether a DNSP has an incentive to defer the timing of the roll-out will depend on the interaction of these processes.

The risk of a DNSP deferring the roll-out of smart meters within a regulatory control period is unlikely to lessen over time or with more information. The incentives on DNSPs to delay roll-outs have the potential to affect how quickly the roll-out is undertaken and when the potential benefits of SMI begin to be realised.

Draft Finding 2: DNSPs would have an incentive to delay the roll-out of smart meters under the current distribution determination process.

Implications for incentives during the regulatory control period where costs and benefits are uncertain

Where there is uncertainty around the costs and benefits of mandated SMI expenditure at the time a distribution determination is made by the AER, there will be implications for the incentives on DNSPs during the regulatory control period. If costs and benefits of SMI are uncertain, DNSPs will face a risk of incurring costs that are higher than expected and/or achieving operational benefits that are lower than expected. Once a determination is made by the AER, the opportunities for a DNSP to reopen a distribution determination or to recover additional costs are limited, and such opportunities do not include forecasting errors made by the DNSP.[32] Where there is an underestimation of costs or an overestimation of operational savings by the DNSP compared to the expenditure forecasts approved in the distribution determination, the DNSP would be required to absorb the cost impact of the difference between forecast and actual costs.[33]

In these circumstances, the DNSP may seek to limit its risk by building an increased allowance for contingencies into its forecasts of costs and benefits. Other things being equal, the presence of uncertainty could therefore be expected to lead to an increase in the DNSP's forecast expenditure for the mandated SMI.

In making its assessments of the DNSP's forecast expenditure, the AER is required under the NEL Revenue and Pricing Principles to ensure that the DNSP has a reasonable opportunity to recover its efficient costs, and under the Rules can only substitute its own assessment of forecast expenditure if it is not satisfied that a DNSP's forecast expenditure reflects prudent and efficient costs. If significant uncertainty

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31 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, p. 33.

32 The DNSP can only re-open the distribution determination for material errors or wrong information provided to the AER under clause 6.13 of the Rules. The DNSP is able to pass through some additional costs during the regulatory control period via the cost pass through provisions (clause 6.6.1 of the Rules) and the pass through of transmission use of system service charges (clause 6.18.7 of the Rules).

33 In the case of an over-spend of capital expenditure, the actual (higher) level of capital expenditure would be rolled into the DNSP's regulatory asset base (RAB) at the time of the next distribution determination, but the DNSP would not recover the foregone return on the higher level of capital expenditure during the regulatory control period or the higher level of depreciation.

remains when the AER makes its distribution determination, then it is likely that this uncertainty could result in the AER approving a higher level of forecast expenditure.

The approval of a higher level of forecast expenditure as a result of uncertainty during the distribution determination process has the potential to lead to windfall gains being made by the DNSP during the regulatory control period. If the DNSP does not require the contingencies that have been included in its forecast expenditure, actual costs will be lower than forecast costs by an increased margin. To some extent, this margin could be considered a windfall gain to the DNSP, rather than the result of real efficiencies, as this margin would not have been achieved if there was greater certainty around costs and benefits at the time the distribution determination was made. Conversely, if the DNSP overspends in relation to the forecast, even despite any contingency allowance, this could be viewed as a windfall loss to the business, rather than an inefficiency. Although this is a common issue for all network expenditure, the greater extent of potential uncertainty associated with smart meter expenditure means that the magnitude of the problem is greater in this case.

For capital expenditure, the impact of actual costs being lower than forecast costs means that regulated revenues during the period reflect an additional return on capital and depreciation, compared with actual costs incurred. DNSPs are able to retain this additional return as under the Rules there is no 'claw back' of additional revenue earned during the previous regulatory control period. Further, in recent distribution determinations the AER has determined that a 'higher powered' incentive should be applied to capital expenditure and in rolling forward the RAB, the AER has re-calculated depreciation based on actual rather than forecast capital expenditure. [34] Due to the one-off nature of capital costs and the absence of any claw-back of additional revenues, the impact of over-estimating forecast capital expenditure when a distribution determination is made represents a permanent loss in revenue for consumers.[35]

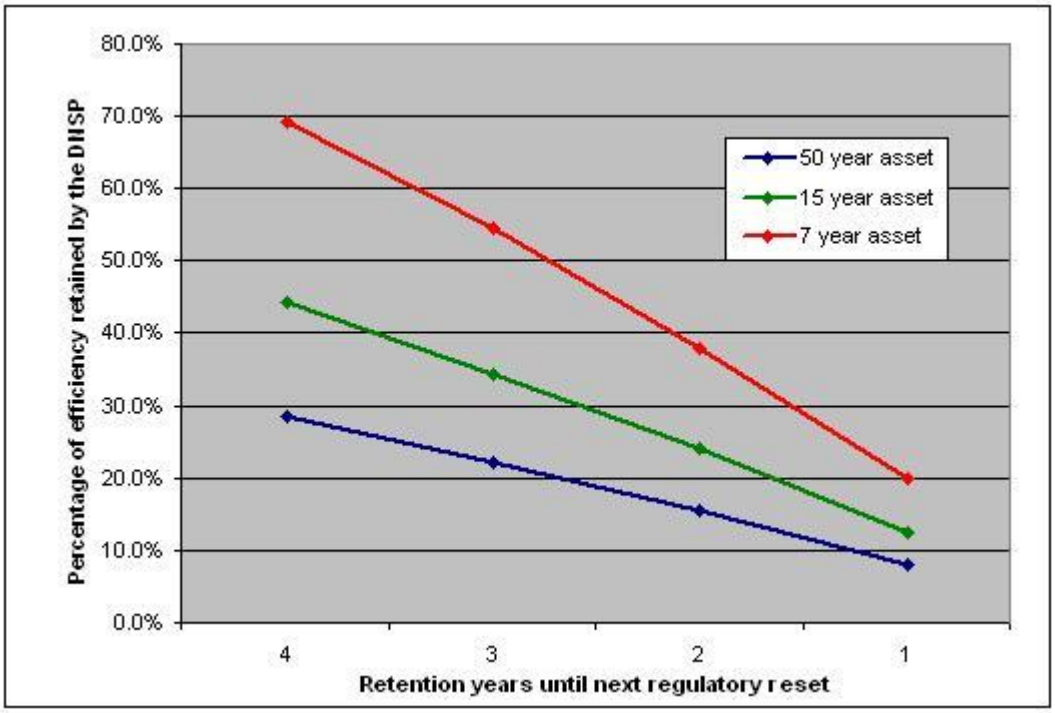
The relatively short asset lives of smart meters (approximately 15 years) and IT and communications assets (approximately 7 years) will increase the proportion of any gain or loss retained by a DNSP as a result of uncertainty, under the current treatment of depreciation in rolling forward the RAB. DNSPs may retain nearly 70% of any under spend in capital expenditure as profit, where assets have an asset life of 7 years and this underspend is achieved in the first year of a regulatory control period. Figure 2.1 shows the relative impact of uncertainty for short asset lives gains compared to longer term assets. We note that this is a general issue for capital expenditure for all short

34 The roll-forward of the RAB for the purposes of depreciation on the basis of actual or forecast capital expenditure is determined by the AER under clause 6.12.1(18) of the Rules. As a result, the AER is able to determine whether there should be a stronger incentive for efficiency in capital expenditure. Re-calculating depreciation on actual expenditure means that an under-(over-)spend in capital expenditure will result in less (more) depreciation being deducted in rolling forward the RAB than the amount that was allowed for in regulated revenues during the previous regulatory control period. Thereby resulting in a benefit (penalty) to the DNSP.

35 We note in contrast, where actual capital costs are greater than forecast, DNSPs would face a permanent loss in revenue.

lived assets. However, its importance is highlighted for SMI expenditure, given the potential high degree of uncertainty in relation to these capital costs.

Figure 2.1 Proportion of capital expenditure savings retained by DNSPs by asset life



In relation to operational expenditure, the incentives on DNSPs to achieve cost efficiencies during the regulatory control period stem from the five year regulatory control period in combination with no claw-back of any efficiencies within the period; and the Efficiency Benefit Sharing Scheme (EBSS), which is developed by the AER.[36] Together these incentives allow DNSPs to retain 30% of underspends in operational expenditure (or a 30% penalty in relation to overspends in operational expenditure), via an increase in allowed revenues in the next regulatory control period.

Therefore the impact of uncertainty on the incentives for efficiencies in operational expenditure is less material than those discussed above for capital expenditure, as operating costs are likely to be recurring over more than one regulatory control period. Again, there is a question as to whether such a sharing ratio is appropriate in the case of SMI expenditure, where forecasts are subject to a significantly greater degree of uncertainty.[37]

36 Under clause 6.5.8(b) of the Rules, the EBSS may also cover efficiency gains and losses related to capital expenditure or distribution losses, but to date the AER has determined not to extend the EBSS to capital expenditure or distribution losses.

37 We note that the experience in Victoria is that some DNSPs have chosen to meet their expenditure obligations in relation to the AMI roll-out by entering into contracts which result in a large proportion of the roll-out expenditure being treated as operating expenditure rather than capital expenditure.

Where there is uncertainty around the costs and benefits of SMI when a distribution determination is made, the current distribution determination process may not provide for the recovery of efficient costs, as the incentives for capital and operational expenditure during the regulatory control period may not result in the promotion of the efficient management of costs and provision of services. Due to the lower level of expenditure required and the reduced likelihood of operational benefits, the impact of uncertainty is smaller for smart meter pilots and trials compared to smart meter roll-outs. Therefore, the Commission considers that the current distribution determination process is appropriate for mandated smart meter pilots and trials.

Draft Finding 3: Where there is uncertainty around the costs and benefits of SMI when a distribution determination is made, the current process may not promote recovery of the efficient costs of mandated smart meter roll-outs.

2.2.4 Ability of the AER to request information on the efficient costs and benefits of mandated SMI

The level of uncertainty facing the AER, and the risk that DNSPs may recover more than their efficient costs during the regulatory control period, may be reduced where the AER has access to or is able to obtain reliable information on the efficient costs and benefits of mandated smart meter roll-outs and pilots from other jurisdictions. Information on the efficient costs and benefits of mandated roll-outs and pilots can assist the AER to develop benchmarks which could be used in the making of future distribution determinations. In considering the ability of the AER to request information, we have also assessed whether the AER is able to obtain the necessary information to ensure benefits are being realised within a reasonable timeframe.

The availability of reliable information will depend largely on the level of consultation and assessment on the potential and expected benefits of mandated SMI that is undertaken prior to the making of a Ministerial determination. A number of DNSPs are currently undertaking smart meter pilots and trials on an independent basis and the NSSC has been requested by the MCE to provide annual status reports on the outcomes of such pilots and trials.[38] We encourage that all relevant information on pilots and trials is shared with the AER.

However, we also note that the NSSC does not have any powers to request information from DNSPs and that DNSPs are providing the NSSC with information on a voluntarily basis only. This information is likely to be useful in providing an indication to the AER on the efficient costs and reasonably achievable network operational benefits that may be possible, but may not have sufficient rigour for the AER to make definitive conclusions on the level of efficient costs and benefits that can be expected from mandated SMI and the timing of such benefits. Further, pilots and trials will not inform on any scale effects of a smart meter roll-out.

38 The NSSC's status reports on smart meter pilots and trials can be found at: http://share.nemmco.com.au/smartmetering/Pages/NSMPProgress.aspx

As part of the distribution determination process, the AER will be able to obtain information on the expected costs and benefits of a mandated roll-out or pilot through:

- The DNSP's regulatory proposal;
- Submissions the AER receives during the distribution determination process;
- Analysis undertaken for or by the AER; and
- Any other publicly available information (e.g. documents provided during consultation processes on Ministerial determinations) and the AER's own regulatory experience.[39]

The AER also has a general power under the NEL to serve a notice on a person to obtain information or documents the AER requires for the performance or exercise of its functions or powers under the NEL or Rules. [40] Further, if the AER considers it reasonably necessary for the performance or exercise of its functions or powers under the NEL or Rules, it may require a DNSP to provide it with information and/or prepare, maintain or keep specific information by serving a regulatory information notice or making a general regulatory information order.[41]

Where the AER is not satisfied with the information it has been provided in the making of a distribution determination, the AER would be able to request further information from a DNSP or person using its powers in the NEL. In requesting such information, the AER would be required to clearly demonstrate that such information is necessary for the making of a specific distribution determination.

The MCE has also asked us to consider whether the framework allows the AER to obtain the necessary information to ensure benefits are being realised within a reasonable timeframe. The AER is not currently required under the NEL or Rules to monitor the outcomes of mandated smart meter pilots or roll-outs or any other pilots or trials that are undertaken by DNSPs independently of a Ministerial determination. Therefore, the AER's ability to obtain information to ensure that benefits are being realised within a reasonable time frame will depend on its ability to demonstrate that information on network operational benefits is necessary for the performance or exercise of its functions or powers under the NEL or Rules. We note that a number of stakeholders have questioned the need for any additional monitoring of operational network benefits by the AER.[42]

The Commission considers that the AER's ability to obtain information on the efficient costs and benefits of mandated SMI, and to ensure benefits are being realised within a reasonable timeframe, may be restricted to the information required to make a specific cost recovery determination. We note that this could include either a distribution

39 See clauses 6.5.6(e)(1)-(3) of the Rules.

40 Section 28 of the NEL.

41 See sections 28C, 28D and 28F of the NEL.

42 See submissions on the Draft Statement of Approach from: EnergyAustralia, pp. 4, 10-11; AER, p. 2; Energex, p. 2.

determination or a cost pass through determination. We consider that this would permit the AER to seek information from DNSPs operating in different jurisdictions, if it can establish that these DNSPs are in sufficiently similar circumstances to the DNSPs that it is making a distribution determination for, and that such information would be reasonably necessary for it to establish the benchmark costs of an efficient DNSP. However, it does not appear that the AER would be able to demonstrate outside of a cost recovery determination process that such information was reasonably necessary for the performance or exercise of its functions or powers under the NEL or Rules.[43]

Draft Finding 4: The AER potentially has an ability to request information on the costs and benefits of mandated SMI under the NEL, subject to such information being required to assist make a cost recovery decision.

2.2.5 Does the distribution determination process provide for the recovery of third party costs?

In undertaking a mandated smart meter pilot or trial, DNSPs may be required to contract retailers to assist them to fulfill some of their obligations (e.g. billing, responding to customer enquiries etc).[44] The ability of a DNSP to recover third party costs, including any retailer costs, through the distribution determination process will depend on two factors. The first factor is whether the DNSP can demonstrate to the AER that the relevant third party services were necessary for the DNSP to comply with its regulatory obligations and requirements in a Ministerial determination.[45] The second is whether the AER considers that the proposed expenditure meets the operating expenditure criteria and reflects prudent and efficient costs.

Where a Ministerial determination does not clearly require a DNSP to contract retailer services, and the AER considers that retailer services are not required to meet their regulatory obligations or requirements or any other operating expenditure objective, the AER must not accept a DNSP's proposed forecast expenditure for retailer services.[46] We note that the intention of this provision in the Rules is to ensure that DNSPs do not include any expenditure in their building block proposal which is not required to meet the operating expenditure objectives. However, provided that the expenditure is necessary to meet a DNSP's regulatory obligations under a Ministerial determination and the AER is reasonably satisfied that the forecast expenditure reflects

43 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, pp. 42-43.

44 We note that the MCE Standing Committee of Officials (SCO) considers that as retail price regulation is a jurisdictional responsibility, that the recovery of any retailer costs incurred by DNSPs in undertaking a pilot should be recovered through distribution charges. See MCE SCO, 2009, National Electricity Amendment - Smart Meters: MCE SCO Policy Response, June, p. 24.

45 Under clauses 6.5.6(a) of the Rules DNSPs must include in their building block proposal the total forecast operating expenditure it considers is required to achieve the operating expenditure objectives, which includes complying with all applicable regulatory obligations and requirements.

46 See clauses 6.5.6(a) and 6.5.6(d) of the Rules.

the operating expenditure criteria, we consider that such expenditure would be approved by the AER.[47]

If a DNSP and its contracted retailer are related parties, the AER is also required to have regard to the extent to which the DNSP's forecast operating expenditure does not reflect arm's length terms in deciding whether it is satisfied that the proposed expenditure meets the operating expenditure criteria.[48]However, we note this is the same way that any other expenditure that is proposed by a DNSP would be assessed during the distribution determination process.

There is the potential for the charges levied by retailers to reflect monopoly rents. A Ministerial determination may require a DNSP to undertake a pilot or trial in a relatively constrained time frame and as a consequence there may be a limited number of retailers who are able to assist a DNSP to meet its obligations. Further, if a DNSP is required to undertake a pilot in an area where there are a small number of retailers operating, the DNSP may also have a limited choice of retailers with whom it can contract. However, as the operating expenditure criteria refer to the costs that a "prudent operator in the circumstances of the relevant Distribution Network Service Provider would require", we consider that provided a DNSP's forecast expenditure meets the operating expenditure criteria, the AER would be required to approve such charges in making its distribution determination.[49]

Draft Finding 5: DNSPs have an ability to recover efficient third party costs under the distribution determination process that may be incurred in undertaking a mandated smart meter pilot or trial.

2.3 Recommended changes to the Rules

Our assessment of how the distribution determination process would be applied to mandated SMI expenditure has identified several risks to the recovery of efficient costs. These risks arise in regards to the incentives to delay expenditure associated with a mandated roll-out, relative to the profile of expenditure approved in the distribution determination. Risks to the recovery of efficient costs may also arise where there is uncertainty around the costs and benefits of mandated SMI, which may result in substantial windfall gains being made by DNSPs. This section describes our recommended changes to the Rules to address these risks to the recovery of efficient cost under the distribution determination process. Discussion of the alternative cost recovery mechanisms considered in developing our recommended changes to the Rules is contained in the Options Paper.

47 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, p. 25.

48 Clause 6.5.6(c)(9) of the Rules. Also, see AAR, 2010, 'Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure', 18 June, p. 26.

49 Clause 6.5.6(c)(2) of the Rules. Also see AAR, 2010, 'Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure', 18 June, p. 26.

2.3.1 Mechanism to address the impact of timing uncertainty when a distribution determination is made

The Rules should be amended to include an explicit revenue adjustment at the time of the next distribution determination to:

- Remove additional revenue earned by a DNSP, where a DNSP has rolled out smart meters and/or associated infrastructure slower than forecast in the previous distribution determination; and

- Compensate a DNSP for costs above allowed revenues where a DNSP has rolled out smart meters and/or associated infrastructure faster than forecast in the previous distribution determination.

The AER would be required to calculate this revenue adjustment in its distribution determination. The amount of revenue which is removed/compensated would be based on the cost assumptions (e.g. unit meter cost) contained in the previous distribution determination, thus preserving incentives for DNSPs to achieve cost efficiencies. This mechanism would be applied to all mandated smart meter roll-outs.

Reasoning for our proposed changes

Our proposed changes to the Rules would counteract incentives under the existing regulatory framework for DNSPs to delay the roll-out of smart meters and associated infrastructure during a regulatory control period. In the absence of these changes, it is possible that the potential benefits of a mandated roll-out could be delayed, without a corresponding price reduction for customers. This is accomplished at the time of the next distribution determination by removing the additional revenue the DNSP would otherwise have earned from delaying the roll-out, where it has rolled out less meters than forecast. Conversely, where a DNSP has rolled out more meters than forecast, a DNSP would be compensated for the time cost of money and the penalty for bringing this expenditure forward would be removed.[50]

As the revenue adjustment would be based on the unit operating and capital costs originally forecast at the beginning of the previous regulatory control period, DNSPs would continue to have an incentive to minimise the unit costs of the roll-out. This would promote the efficient management of costs and the efficient provision of mandated smart metering services. It would also ensure that DNSPs have an incentive to manage any implementation risks.

Our proposed changes to the Rules could be adopted where roll-out costs are treated as operational expenditure or capital expenditure and could be applied separately to variable and fixed cost elements. For example, communications costs may be structured to be a fixed cost and therefore, independent of the rate at which smart meters are rolled out. Under our proposed revenue adjustment, the AER could

50 This mechanism could also be amended to include the opportunity for a DNSP to earn additional revenue for out-performing its forecast roll-out timetable.

recalculate a DNSP's revenue based on actual investment in communications, which would remove the incentive to defer investment. As a result, our proposed amendments to the Rules are robust enough to accommodate variations in how DNSPs choose to meet their mandated obligations.

We also consider that our proposed changes represent a proportionate change to the Rules. Other potential mechanisms we considered such as a specific price adjustment during the regulatory control period, would result in greater complexity, particularly where mandated smart metering services have not been unbundled from other network services. In comparison, our proposed charges would be relatively transparent, which would ensure that stakeholders are able to comment on how the revenue adjustment is applied. We also note that the incentives on DNSPs to delay the roll-out of smart meters would be reduced if DNSPs are only allowed to charge consumers for the costs of the mandated roll-out, once a consumer has received an installed and functioning smart meter. Hence DNSPs would only receive revenue from a consumer for the mandated roll-out, once their smart meter is operational. Further consideration regarding the appropriate tariffs and the timing of charges for a mandated roll-out is contained in Chapter 7.

2.3.2 Mechanisms to address the impact of expenditure uncertainty when a distribution determination is made

There is a risk that the costs and benefits of a mandated smart meter roll-out will remain uncertain at the time a future distribution determination is made by the AER. The Rules should be amended to provide the AER with the discretion to apply one of the following mechanisms to better manage uncertainty:

- Rolling forward the RAB on the basis of forecast depreciation for assets with economic lives of 15 years or less, in order to reduce the proportion of losses/gains retained by the DNSP in relation to these assets. For assets with lives of more than 15 years, the AER would continue to have discretion to maintain higher powered incentives for efficiencies by rolling forward the RAB on the basis of actual depreciation; or

- A cost sharing mechanism, which would allow the AER to vary the proportion of any over or under-spend which is retained by DNSPs and shared with customers, according to the extent of the uncertainty the AER considers remains in relation to SMI expenditure. This mechanism would allow the AER to apply a proportional factor to the difference between actual and forecast expenditure to determine the amount which is added or subtracted to the DNSP's allowed revenue at the next distribution determination. The AER would decide upon the proportion factor for the forthcoming period as part of its distribution determination.

The AER could also exclude SMI-related expenditure from the operation of the EBSS, in order to reduce the proportion of windfall gains retained by the DNSP in relation to such expenditure. We note that the AER already has the discretion to exclude nominated categories of expenditure from the EBSS.

The AER would be required to indicate whether it considers there is a possible need to apply one of these mechanisms in the forthcoming regulatory control period. in its Framework and Approach Paper for a distribution determination.

Reasoning for our proposed changes

Where there is uncertainty around the level of the efficient costs and benefits of mandated SMI when a distribution determination is made, there is the potential for the AER to approve higher than efficient expenditure. This may result in windfall gains accruing to DNSPs during the regulatory control period, where they are able to efficiently manage their allowed revenue.

Our proposed changes seek to reduce the exposure to expenditure risks that DNSPs face as a result of the additional uncertainty associated with the mandated SMI expenditure. We recognise that it is not possible to predict the level of uncertainty that may exist at the time the AER makes a distribution determination and there is the potential for uncertainty to be reduced through pilots and trials of SMI. Therefore, by allowing the AER the discretion to implement our proposed mechanisms, the AER is able to tailor the appropriate control mechanism for each DNSP based on the level of uncertainty that is present at the time it makes its distribution determination. This will ensure that the Rules are robust enough to accommodate the circumstances of each Ministerial determination.

Roll-forward of the RAB

Our proposed mechanism regarding the ability for the AER to choose to roll forward the RAB on the basis of forecast rather than actual depreciation for short lived assets will promote the recovery of efficient costs, as it will limit the proportion of underspend which is retained by DNSPs or losses from over expenditure from close to 70% to approximately 18% for assets which have an asset life of 7 years.[51]As discussed above, in the presence of uncertainty, such an underspend is likely to reflect windfall gains, rather than true efficiencies. We consider that there may be merit in providing the AER with the discretion to apply the mechanism to all assets with a standard life below a specified level (suggested as 15 years), rather than only SMI assets. This would avoid the AER being required to identify which assets are 'SMI assets', which may not always be clearly delineated. The issue which this change addresses (i.e., the appropriateness of the stronger incentives for short-lived compared to long-lived assets under the current approach) is also an issue of general applicability, although it has been specifically highlighted in the context of considering cost recovery for SMI.

We consider it appropriate to maintain the ability for the AER to choose a higher powered incentive for longer lived assets, as these assets form the majority of the RAB and this will ensure that DNSPs remain focused on achieving efficiencies in relation to these assets. It is also noted that this proposed mechanism is a proportionate change to the Rules, as the AER currently has the ability to determine whether the roll forward of the RAB is undertaken on the basis of forecast or actual depreciation. Our proposed

51 Modelling demonstrating the effect of this change is outlined in our Options Paper.

changes to the Rules serve to provide the AER with greater flexibility in how the roll forward is undertaken, by allowing the AER to roll forward the RAB differently for short lived assets compared to long lived assets.

Cost Sharing Mechanism

Our proposed cost sharing mechanism could be applied by the AER, as an alternative to the treatment of depreciation, to adapt the power (i.e., the percentage of gain or loss) of the expenditure incentives. This mechanism would allow the AER to tailor the appropriate percentage of over or under expenditure which is retained by the DNSP for SMI expenditure, depending on the level of confidence it has on future costs and benefits. Hence, under this mechanism the percentage could be decreased from the current 70% to say, 30% which is the percentage for 50 year assets. This would give the AER more flexibility than the option of changing the roll forward of depreciation, which would only reduce the percentage of underspend which is retained to 18% .

This mechanism depends upon the ability of the AER to separate out SMI expenditure from non-SMI expenditure. For IT and communications assets which may be used to provide other network services by the DNSP, this may be difficult. Alternatively, there may be merit in applying this mechanism more generally to other types of network expenditure. The AER would also be required to make its decision on the appropriate cost sharing factor in its distribution determination to provide certainty for DNSPs on how expenditure would be treated.

The proposed cost sharing mechanism could also be varied by altering the sharing ratio between DNSPs and network users, depending on the level of variance between forecast and actual SMI costs. For instance, as the variance between forecast and actual SMI costs increase, the share that is received (or borne) by network users could grow. This would result in network users receiving a greater proportion of the profits (or any losses), where the size of the variance between forecast and actual SMI costs increases. As large variances between the size of forecast and actual SMI costs may indicate the presence of windfall gains or losses, increasing the share of profits (or losses) which are received (or borne) by network users, would limit the size of the windfall gains that would accrue to DNSPs and which are funded by consumers.

Exclusion of SMI Expenditure from the EBSS

We note that the AER currently has the discretion to exempt mandated SMI expenditure from the EBSS, which would limit the share of windfall gains that DNSPs may accrue in relation to operational expenditure. The DNSP would still receive a benefit (penalty) from an under-spend (over-spend) of operational expenditure (either as a result of efficiencies or as a windfall gain), as a result of the 'no claw-back' provisions.

However, we note that as most operational expenditure would be contracted expenditure, uncertainty regarding the efficient level of these costs may be smaller than the uncertainty that may be present in relation to capital expenditure. This may be offset in specific cases by concerns in relation to third party relationships, where contracts have not been awarded on a competitive, arms-length basis. Exempting SMI

expenditure from the EBSS would also introduce an arbitrary boundary between SMI and non-SMI operational expenditure, which may lead to gaming opportunities for DNSPs. The AER would need to consider these issues in determining whether to exclude SMI expenditure from the scope of the EBSS.

Other Cost Recovery Mechanisms Considered

Other mechanisms we considered in developing our draft recommendations are discussed further in our Options Paper. These mechanisms included: shorter regulatory control periods, triggers for re-opening the distribution determination process, ex-post reviews and a separate cost recovery mechanism for mandated SMI, similar to the arrangements adopted in Victoria. These mechanisms would require more complex and substantial amendments to the Rules, which are not considered proportionate to the risks to the recovery of efficient costs we have identified. Further, mechanisms such as shorter regulatory control periods, ex post reviews, and a separate cost recovery mechanism are likely to substantially reduce or remove incentives for efficiency, which may create further risks to the recovery of efficient costs.

2.3.3 Annual information provisions on the costs and benefits of mandated smart meter roll-outs, pilots and trials

The Rules should be amended to require DNSPs in all jurisdictions to provide annual information to the AER on the costs and network operational benefits of any mandated smart meter roll-outs, pilots and trials they are undertaking. It is recommended that this requirement also be extended to the AMI roll-out currently being undertaken in Victoria.

The AER would be required to publish a guideline, following stakeholder consultation, outlining the nature of the information that DNSPs must provide and the format it must be provided in. Subject to any confidentiality considerations, such information will be made public.

Reasoning for our proposed changes

As discussed above, where there is uncertainty about the efficient costs and expected benefits of SMI, there is a risk to the recovery of efficient costs and a risk that the benefits of SMI may not be maximised or passed through to consumers. To ensure that the AER has sufficient information to determine the efficient costs and reasonably achievable network operational benefits of mandated roll-outs and pilots, we have proposed changes to the Rules to require a DNSP to provide annual information on the actual costs and network operational benefits of mandated smart meter roll-outs, pilots and trials

While we consider that there is the potential for the AER to gather such information under the existing provisions in the NEL, there would be benefits from placing a prescribed obligation in the Rules. Doing so would remove any potential uncertainty regarding the AER's ability to request such information under its powers in the NEL and therefore, reduce the risk of delays in the provision of this information, in the

event that the AER's ability is disputed. A specific information requirement would also create boundaries on the type and nature of information that DNSPs must provide and set out an established process and timetable. In addition, an annual disclosure of actual costs and benefits would improve transparency on the mandated roll-out for stakeholders.

We consider that DNSPs undertaking the AMI roll-out in Victoria should also be subject to this annual information requirement. As this is the only mass scale roll-out that has been undertaken in Australia, information from DNSPs in Victoria would ensure that the AER has information on the scale effects of a roll-out and the potential operational network benefits that a roll-out may provide.

Under our proposed amendments the AER would also be required to publish a guideline outlining the nature and format of the information that must be provided, which will ensure that the requirements on DNSPs are transparent and that stakeholders have an opportunity to comment on the type of information that is required of DNSPs.

Question 1 Cost recovery under the distribution determination process

1.1 Should the AER be able to apply the proposed mechanisms to address remaining uncertainty (i.e. the roll-forward of the RAB on the basis of forecast depreciation and the cost sharing mechanism) to other distribution investments, where the potential costs and benefits of such investments are uncertain at the time a distribution determination is made?

2.2 Do you consider that a specific information provision requirement should be included in the Rules to require DNSPs to provide annual information on the costs and operational benefits of mandated smart meter roll-outs, pilots and trials? Or do you consider that the AER's current information gathering powers under the NEL are sufficient?

3 Mid period cost recovery for mandated smart meter roll-outs

This Chapter outlines the Commission's draft findings on the adequacy of the Chapter 6 Rules to provide for the recovery of efficient costs, where a Ministerial roll-out determination requires a DNSP to incur expenditure within a regulatory control period and these costs have not been allowed for in a relevant distribution determination. Further discussion of the alternative cost recovery mechanisms we considered in developing our draft findings is outlined in the Options Paper.

Box 3.1: Summary of draft findings for mid period cost recovery for mandated smart meter roll-outs

Assessment of the Rules

1. The current timing of the distribution determination cycles provides each relevant jurisdictional Minister with a reasonable opportunity to make a Ministerial roll-out determination, so that it can be taken into account in the next distribution determination process. Where possible, the timing of a Ministerial determination should be aligned with the distribution determination process, so that expenditure for a mandated roll-out commences with the start of the next regulatory control period. There are significant benefits in aligning the timing of these processes, particularly as it would remove the need for separate arrangements to operate within a regulatory control period which would be costly and duplicative.

2. If the timing of a Ministerial determination did not align with the distribution determination process and a DNSP is required to undertake expenditure for a mandated roll-out prior to the start of the next regulatory control period, the current Rules would permit the DNSP to submit a cost pass through application to recover this expenditure. The most relevant pass through event in Chapter 10 of the Rules for a mandated smart meter roll-out would be the 'service standard event' and not a 'regulatory change event'.

3. However, the current pass through process would not adequately accommodate the recovery of the efficient costs of a mandated smart meter roll-out, particularly as the AER's criteria for assessing expenditure, including the ability to consider off-setting benefits, is not clearly specified in the Rules. Also, the timeframes for the cost pass through process are not appropriate for mandated smart meter roll-outs, given the potential scope and complexity of such roll-outs.

Proposed amendments to the Rules

The Rules should be amended to include a new mid period mechanism to accommodate the recovery of the efficient costs of a mandated smart meter roll-out. Under this mechanism, where a Ministerial roll-out determination is made

subsequent to a distribution determination process and has triggered expenditure which has not been incorporated in a relevant distribution determination, the AER's decision on the allowed level of expenditure would be deferred until the next distribution determination process. At this time, the AER would perform an ex-post review on the efficiency of the incurred expenditure.

Principles to guide the AER's ex-post review should be inserted in the Rules and the AER should be required to publish a guideline outlining its approach to ex-post reviews for mandated smart meter roll-out expenditure. The AER would have the discretion to allow temporary interim increases in prices in accordance with a defined methodology within a regulatory control period, if it considers there is a material cash flow risk for the DNSP.

3.1 Considerations in developing our draft advice

The cost pass through provisions in clause 6.6.1 of the Rules provide an opportunity for DNSPs to recover changes in the costs of providing standard control services during the regulatory control period, where these costs have not been incorporated into their allowed revenue. Where a Minister makes a roll-out determination within a regulatory control period which was not anticipated in a relevant distribution determination, the cost pass through provisions provide the only avenue available to DNSPs to seek additional revenue before the start of the next regulatory control period. Given that, the MCE has raised questions on the adequacy of the current provisions to provide for the recovery of efficient costs.[52]

The MCE has sought advice on two aspects to the current cost pass through provisions. The first aspect is whether a Ministerial roll-out determination would be consistent with the definition of allowed cost pass through events. This would determine whether DNSPs would have an ability to recover the costs of complying with a Ministerial roll-out determination under the existing cost pass through provisions.

The second aspect relates to the practical application of the cost pass through provisions and whether these arrangements would promote the recovery of efficient costs. The MCE has requested advice on whether the timeframes for pass through applications and determinations are appropriate and whether they would enable sufficient consideration of the efficient level of expenditure, including any off-setting benefits.

In addressing these issues, we first consider the potential timing of a Ministerial roll-out determination against the timing of the current distribution determination processes for DNSPs. This will inform our assessment of the likelihood that the cost pass through provisions would need to be used to recover mandated roll-out expenditure. We then address the question on whether DNSPs would have an ability to seek cost pass through for a mandated smart meter roll-out by considering how the

52 This assumes that mandated smart metering services will be classified as standard control services. The scenario where these services are classified as alternative control service is discussed in Chapter 5.

pass through events defined in Chapter 10 of the Rules would apply to such circumstances. We note that the MCE has requested specific advice on whether DNSPs would be able to seek cost pass through for mandated roll-outs under the 'regulatory change event' in Chapter 10 of the Rules.

The current timeframes for the cost pass through process and the AER's criteria for assessing expenditure are two important factors to consider in assessing whether the current cost pass through provisions are sufficient to accommodate the recovery of the efficient costs of mandated smart meter roll-outs. There is also a need to consider whether it is appropriate to assess roll-out expenditure separately from the distribution determination process, given the interactions between roll-out expenditure and general network operation costs. When assessing the criteria which governs the AER's decision on a pass through application, we consider whether the AER has an obligation and an ability to consider the network operational benefits which may be generated by a roll-out. This is relevant in assessing the effectiveness of the cost pass through provisions to provide for the recovery of efficient costs. We also note that the availability of reliable information and the degree of certainty around the costs and expected benefits of a mandated roll-out will also affect the effectiveness of the AER's assessment process, just as it affects the effectiveness of the distribution determination process (as discussed in Chapter 2).

The issues discussed in this Chapter are related to our assessment of whether the cost pass through provisions are appropriate for mandated smart meter pilots and trials (Chapter 4) and the implications for cost recovery where mandated smart metering services are classified as alternative control services (Chapter 5).

3.2 Assessment of the current Rules

This section outlines our assessment of the adequacy of the cost pass through provisions in clause 6.6.1 of the Rules to provide for the recovery of the efficient costs of mandated smart meter roll-outs.

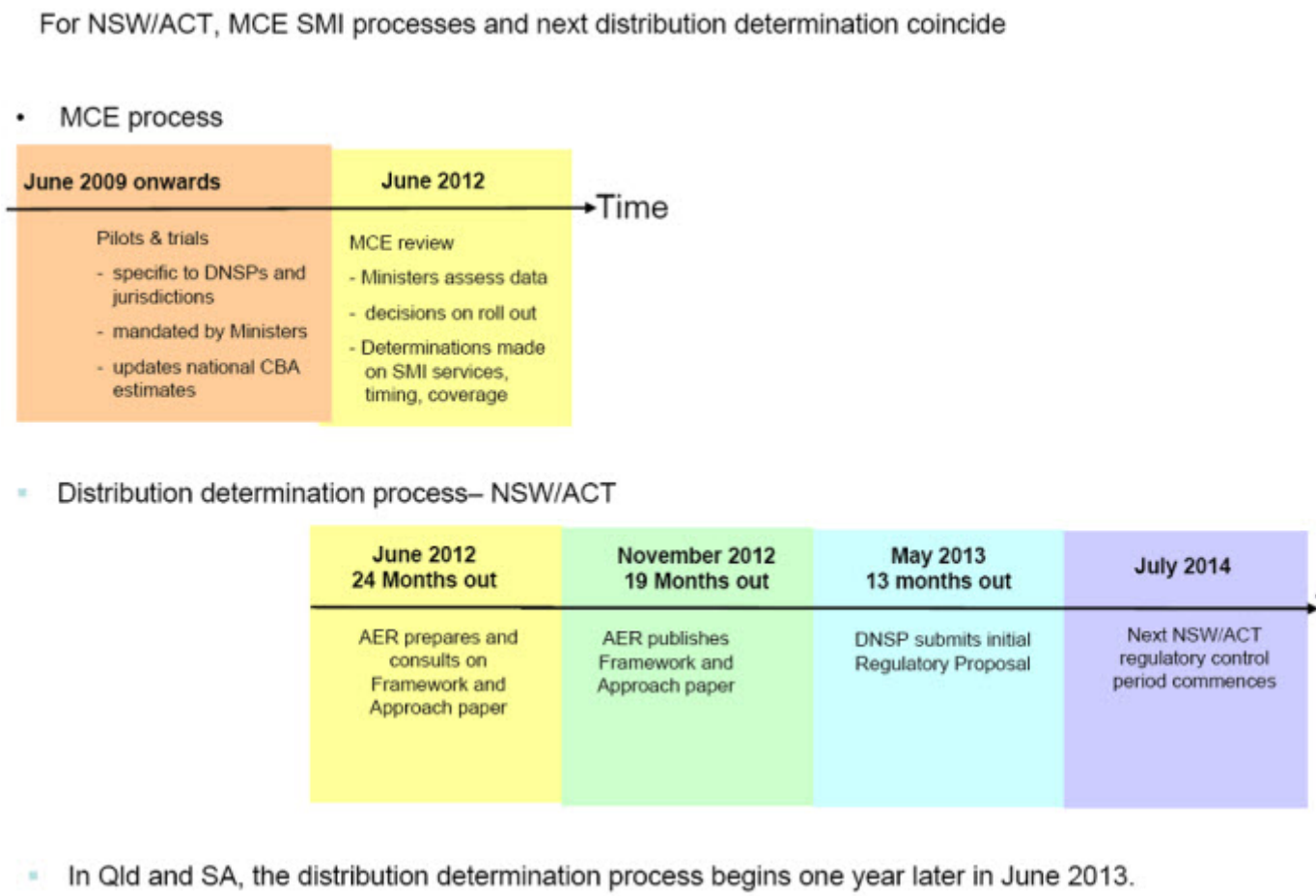
3.2.1 What is the likelihood of DNSPs needing to use the cost pass through provisions?

As discussed above, DNSPs will only need to seek cost recovery under an alternative mechanism, such as the cost pass through provisions, where the efficient costs of a mandated smart meter roll-out cannot be incorporated in a periodic distribution determination. Prior to considering how the cost pass through provisions would be applied to a mandated smart meter roll-out, we have considered the timing of the current distribution determination processes for DNSPs against the potential timing of a Ministerial roll-out determination, to assess the likelihood of DNSPs needing to seek cost recovery through the cost pass through provisions.

Figure 3.1 below sets out the timing of the key announced dates for the MCE's decision making timeframes against the timeframes for the making of the next distribution determinations for NSW and ACT DNSPs. The MCE has indicated that jurisdictional

Ministers will review the findings from pilots and trials and consider smart meter deployment plans in June 2012.[53] It is possible that any decision to mandate a smart meter roll-out would also be made at this time. In comparison, the process for making the next distribution determinations for NSW and ACT DNSPs for the 2014 - 2019 regulatory control period will commence in June 2012, 24 months prior to the 1 July 2014 commencement date of the next regulatory control period. The first step in this process is the AER's development of its Framework and Approach Paper, which would need to reflect possible changes in the regulatory framework for distribution determinations (as discussed in Chapter 2). In addition, the DNSPs' submission of their regulatory proposals in May 2013 would need to incorporate their forecasts of the expenditure required to comply with any Ministerial determination.

Figure 3.1 Timeframe comparison: MCE decision making processes and the distribution determination process for NSW and ACT DNSPs



As Figure 3.1 highlights, the expected timing of the planned MCE June 2012 decision appears to fit well with the timing of the distribution determination process for NSW and ACT DNSPs, on the assumption that a Ministerial roll-out determination is made around June 2012 and before May 2013, and does not require DNSPs to commence the roll-out prior to July 2014. This alignment of timeframes would support an orderly

53 MCE, 2008, Smart Meter Decision Paper, June, p. 4.

process for policy decision making and the implementation of roll-outs, and allow effective coordination with the development of the next distribution determinations for NSW and ACT. The distribution determination process for Qld and SA DNSPs will commence one year later in June 2013 for the commencement of the next regulatory control period on 1 July 2015. This would provide an opportunity for the progressive implementation of roll-outs across the country, which would result in improved project planning and the management of potential resource bottlenecks.[54]

Therefore the current timing of the regulatory determination cycles provides each relevant jurisdictional Minister with a reasonable opportunity to coincide a Ministerial roll-out determination with the start of the distribution determination process. There are a number of benefits in aligning the cost recovery process for mandated roll-outs with the distribution determination process:

- the distribution determination process is comprehensive and would allow mandated smart meter expenditure to be assessed at the same time as all other expenditure. This is important where it is difficult to separate out smart meter expenditure from other network expenditure (e.g., IT systems);
- it would avoid additional regulatory costs for the AER and DNSPs, as a separate cost recovery process would not be required; and
- it would remove any potential 'gaming' incentives for DNSPs to cherry-pick between different cost recovery mechanisms.

Given these benefits, we would encourage aligning the timing of a Ministerial roll-out determination with the start of the next distribution determination process, so that expenditure for a mandated roll-out commences with the start of the next regulatory control period. This would decrease the need for an alternative mechanism to operate within a regulatory control period. However, the possibility that a Ministerial roll-out determination would require DNSPs to undertake expenditure prior to the start of the next regulatory control period still needs to be accommodated in the Rules. In the remainder of this section we assess the effectiveness of the current Rules and possible alternatives for mid period cost recovery in such an event.

Draft Finding 6: The current timing of the distribution determination cycles provides each relevant jurisdictional Minister with a reasonable opportunity to coincide a Ministerial roll-out determination with the start of the next distribution determination process. We advise that, where possible, jurisdictional Ministers should seek to align the timing of a Ministerial roll-out determination with the distribution determination process, so that expenditure for a mandated roll-out commences with the start of the next regulatory control period. There are significant benefits in aligning the consideration of mandated smart meter roll-out expenditure

54 The distribution determination process for Tasmania will commence in June 2010, for the commencement of the next regulatory control period on 1 July 2012. However, as Tasmania will not be participating in co-ordinated smart meter pilots to progress a decision on smart meter roll-outs, we have not considered the possibility of a Ministerial roll-out determination occurring in Tasmania within the next two years.

with the distribution determination process. In particular, aligning the timing between these processes would remove the need (and associated costs) for separate arrangements to operate within a regulatory control period.

3.2.2 Does a Ministerial determination trigger a pass through application?

Under the Rules DNSPs are able to seek additional cost recovery within a regulatory control period if a 'positive change event' occurs. A 'positive change event' is defined in Chapter 10 of the Rules for DNSPs as a 'pass through event' which materially increases the costs of providing direct control services.[55] A 'pass through event' is in turn defined in the Rules as a number of prescribed events (including a regulatory change event, service standard event, tax event and terrorism event) and includes the ability for the AER to approve additional pass through events in a distribution determination. [56]

During consultation on the NEL amendments, stakeholders expressed concern that whilst an obligation appearing in the NEL would constitute a 'regulatory change event' it was not clear that an instrument made under the NEL would create the same legal obligation. In addition stakeholders were concerned that a Ministerial roll-out determination may not constitute a 'change' in obligation, as it was a 'new' obligation. In response, the MCE SCO noted its view that the proposed NEL amendments did create the necessary obligation and that a Ministerial roll-out determination would fall within the scope of a 'regulatory change event' as defined in the Rules.[57]

We agree that a Ministerial determination would allow DNSPs to seek recovery for mandated SMI costs through the current cost pass through provisions (if classified as a standard control service). However, we consider that the most relevant pass through event in Chapter 10 of the Rules for a mandated smart meter roll-out would be the 'service standard event' and not a 'regulatory change event'.[58]We consider that a Ministerial roll-out determination would meet the requirements of a service standard event as a such a determination would be made under the NEL and would alter the nature and scope of the direct control services provided by a DNSP during a regulatory control period. As a mandated roll-out of smart meters is expected to occur on a mass scale, a mandated smart meter roll-out is likely to meet the materiality threshold for service standard events determined by the AER.[59]

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55 See the definition of a 'positive change event' in Chapter 10 of the Rules.

56 See the definition of "pass through event" in Chapter 10 of the Rules for the list of pass through events in the Rules that DNSPs can seek cost pass through for.

57 National Electricity Amendment Bill - Smart Meters, MCE SCO Policy Response, June 2009, p. 8.

58 For further discussion on the distinction between a 'service standard event' and a 'regulatory change event' see: AAR, 2010, 'Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure', pp. 15-16.

59 In recent distribution determinations the AER has noted that it will generally consider that a pass through event will have a material impact if the costs associated with the event would exceed 1 per cent of the smoothed forecast revenue specified in the final decision in the years of the regulatory control period that the costs are incurred. For example see: AER, 2009, Final Decision: New South Wales Distribution Determination 2009-10 to 2013-14, April, p. 280.

We consider that a Ministerial roll-out determination would not meet the requirements of a regulatory change event, as a regulatory change event is defined as a change in a regulatory obligation or requirement that "falls within no other category of pass through event". [60] As we consider that a mandated roll-out would meet the definition of a service standard event, we advise that it would be difficult for DNSPs to seek cost pass through under a 'regulatory change event'.

Draft Finding 7: A Ministerial roll-out determination is consistent with the definition of a service standard event and would permit a DNSP to seek cost recovery through the current pass-through provisions. Hence, it is not essential for the AER to nominate a separate smart meter event to facilitate cost recovery of mandated smart meter roll-outs.

3.2.3 Will the current cost pass through provision promote efficient cost recovery?

For the current cost pass through provisions to sufficiently accommodate efficient cost recovery associated with a mandated smart meter roll-out, a number of conditions must be met. In particular, the AER would need the ability to undertake a rigorous assessment of both the costs and the potential network operational benefits of a roll-out. To do so, it will need to have sufficient information and adequate time to form its decision on the efficiency of the DNSPs proposed expenditure. As discussed in Chapter 2, the level of uncertainty around the potential costs and benefits of a mandated roll-out will be an important factor in the ability of the AER to determine the efficient costs of a roll-out. For the DNSP, it is important that it has regulatory certainty regarding how the AER would make its decision on the level of efficient costs and what criteria it would be required to take into account. We do not consider that such conditions are likely to be met under the current cost pass through provisions.

The criteria in the cost pass through provisions for assessing a DNSP's expenditure forecasts are not as clearly specified as the criteria for assessing expenditure forecasts in the distribution determination process. The current cost pass through provisions do not require the AER to have regard to the operating and capital expenditure objectives nor the operating and capital expenditure criteria. Instead, the AER is required to consider the costs the DNSP has and is likely to incur as a result of the pass through event, and the efficiency of the DNSP's decisions and actions in relation to the risk of the pass through event.[61] The Rules are not explicit in specifying that eligible pass through amounts can be off-set by reductions in other cost categories. However, we note that under clause 6.6.1(j)(8) of the Rules, the AER has the ability to consider any other factors it considers relevant in making its cost pass through determination. In this regard, the AER would have the discretion to consider the efficiency of the pass through amount and any network operational benefits it considered relevant.

The AER would be required to consider the NEO in making a cost pass through determination, as under the NEL the AER is required to perform or exercise its

60 See definition of 'regulatory change event in Chapter 10 of the Rules.

61 Clause 6.6.1(j) of the Rules.

economic regulatory functions or powers in a manner that will or is likely to contribute to the achievement of the NEO.[62] However, as the AER has not assessed a distribution cost pass through application with off-setting benefits previously, we do not have a direct precedent that would support an expectation that the AER would consider off-setting benefits in making a cost pass through determination. Given this, it is unclear which factors the AER would take into consideration when deciding upon the level of efficient expenditure.

In addition, the timeframes in the Rules do not appear adequate for the AER to make its cost pass through determination and the AER has no flexibility to extend its existing 60 business day decision making timeframe.[63] 60 business days is likely to be insufficient for the AER to make a cost pass through determination on a mandated smart meter roll-out due to the potential scope and complexity of such roll-outs. If the AER does not make its cost pass through determination within this 60 business day period, it will be considered to have approved the pass through amount and the timing for the recovery of this amount, as specified in a DNSP's written statement.[64] We note that the AER has indicated that it had and required an eight month period to test and consult on initial budget applications for Victorian AMI and that these initial budget applications only related to a two year period.[65]

A mandated smart meter roll-out is likely to provide for a number of operational benefits for the DNSP. Although benefits may be limited in the early years of the roll-out, any operational cost savings should be considered in the AER's assessment. This assessment is likely to take a significant amount of time, particularly where there is uncertainty about the expected level of network operational benefits that an efficient DNSP would achieve. Under a 60 business day timeframe, the AER is also unlikely to have sufficient time to undertake public consultation, which will reduce the transparency of the cost recovery process for a mandated roll-out.

The 90 business day period for a DNSP to submit a cost pass through application following a Ministerial determination is also likely to be insufficient for a DNSP to submit a detailed request for smart meter expenditure.[66] Under the current Rules, DNSPs only have one opportunity to seek approval to pass through the costs of a positive change event in relation to each pass through event.[67] Their written statement

62 The AER may also be required to consider the NEL Revenue and Pricing Principles in making a cost pass through determination. Under the NEL (Sections 16(2)(a)(I) and 16(2)(b)), the AER must take into account the NEL Revenue and Pricing Principles when exercising discretion in making a distribution determination, but may take them into account when exercising any other economic function or powers. The AAR advice notes that it is unclear whether a distribution determination includes the making of a cost pass through determination. See: AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, pp. 22-23.

63 See clause 6.6.1(e) of the Rules.

64 See clauses 6.6.1(e)(I) and (ii) of the Rules.

65 AER, Submission on the Draft Statement of Approach, p. 1.

66 Clause 6.6.1(c) of the Rules.

67 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, p. 22.

must set out the actual and likely increases in costs as a result of the pass through event until the end of the regulatory control period. DNSPs are likely to require a significant amount of time to estimate the costs of a smart meter roll-out with sufficient certainty to make an application for cost pass through. Although the AER must extend this timeframe if it is satisfied that the difficulty of assessing or quantifying the effect of the relevant pass through event justifies the extension, it is likely to have to give a significant extension.[68]

Another difficulty with the current provisions is that they may preclude cost pass-through, where a Ministerial roll-out determination is made in the last 13 months of a regulatory control period, during the period between the lodgement of a regulatory proposal and the start of the next regulatory control period. This period has been labelled as a ' dead zone' and is assessed further in Chapter 4, where we assess the application of the current cost pass through provisions to mandated pilot expenditure.

For these reasons, we doubt whether the current cost pass through provisions would adequately accommodate the recovery of efficient costs, if a Ministerial roll-out determination triggers unanticipated expenditure within a regulatory control period. To address this, we advise that a new mid period cost recovery mechanism for mandated smart meter roll-outs be inserted in the Rules and the next section describes our proposed changes to the Rules.

Draft Finding 8: The current pass through provisions would not adequately accommodate the recovery of the efficient costs of a mandated smart meter roll-out. The timeframes for the cost pass through process are not appropriate for mandated smart meter roll-outs given the scope and complexity of a roll-out. The AER's criteria for assessing expenditure, including the ability to take into account off-setting benefits, is not clearly specified in the Rules. The Rules need to be amended to include a new mid period cost recovery mechanism to accommodate the recovery of the efficient costs of mandated smart meter roll-outs.

3.3 Recommended changes to the Rules

As discussed above, our assessment of the Rules is that the application of the current pass through provisions to a mandated smart meter roll-out would not adequately accommodate the recovery of efficient costs. We have considered a range of possible alternative mid period mechanisms to enable DNSPs to recover roll-out costs within a regulatory control period. Our Options Paper provides more detail on our assessment of these options. This section describes our proposed changes to the Rules and the justification for these changes, with reference to the decision making criteria for the Review outlined in Chapter 1.

68 Clause 6.6.1(k) of the Rules.

3.3.1 New mechanism for mid period cost recovery for mandated smart meter roll-outs

The Rules should be amended so that where DNSPs incur costs in undertaking a mandated smart meter roll-out within a regulatory control period in complying with a Ministerial roll-out determination, and these costs have not been incorporated in a relevant distribution determination, the AER's decision on the level of efficient expenditure that should be recovered should be deferred to the making of the next distribution determination.

As a result, the cost pass through provisions in clause 6.6.1 of the Rules would not apply to a mandated smart meter roll-out. Rather, the expenditure that a DNSP has incurred in complying with the Ministerial roll-out determination during the regulatory control period would be assessed by the AER under an ex-post review process, when it makes its distribution determination for the next regulatory control period. This expenditure, like other forecast expenditure for the next regulatory control period, would be assessed by the AER in regards to the operating and capital expenditure criteria in clauses 6.5.6(c) and 6.5.7(c) of the Rules. In addition, the AER would be required to comply with the following principles when undertaking its ex-post review:

- The AER must only take into account information that the DNSP could have reasonably been expected to have considered at the time it undertook its expenditure;

- In making its determination on the appropriate level of expenditure, the AER must only take into consideration the value of those network operational benefits which occur directly to the DNSP and solely as a result of the implementation of the mandated SMI; and

- The AER must provide the DNSPs with the time cost of money for incurred costs, based on the weighted average cost of capital (WACC) for the previous regulatory control period.

The AER would also be required to publish a guideline, following stakeholder consultation, outlining its approach to ex-post reviews of mandated roll-out expenditure.

We are not certain whether a temporary interim adjustment to prices within the regulatory control period is also required. It might be necessary if there is a risk that the DNSP would experience material cash flow difficulties in undertaking a mandated roll-out before the next distribution determination. If so, we consider that there are two possible methods to adjust prices that would not require the AER to review any forecast expenditure:

(a) An adjustment based upon the forecast of costs and benefits used by the Minister in making its Ministerial roll-out determination; or

(b) An adjustment based upon the DNSP's own forecasts.

The approved level of costs incurred before the start of the next regulatory period will be rolled-in to the allowed revenue in the next distribution determination (which could be a total amount or a net amount when the mechanism includes an interim price adjustment).We seek stakeholder views on whether an interim adjustment to prices is needed and if so which of the two proposed options would be the most appropriate.

Reasoning for our proposed changes to the Rules

In our Options Paper, we evaluate a range of possible mid period mechanisms to facilitate the recovery of the efficient costs of mandated smart meter roll-outs. These mechanisms vary in the framework governing the DNSP's application for additional costs, the criteria for the AER's assessment of expenditure, and also in the nature of the AER's approval process. We found that all of the options considered suffered disadvantages, particularly in regards to the comprehensiveness of the AER's assessment process and the incentives for DNSPs to seek efficiencies.

Our recommended option of deferring the AER's assessment to the next distribution determination process is considered the most appropriate and efficient approach to address the potential need for a mid period cost recovery mechanism. The distribution determination process (including our recommended amendments outlined in Chapter 2) provides the most effective mechanism for the recovery of the efficient costs of mandated smart meter roll-outs. We consider that it would be very difficult to practically separate out mandated smart meter expenditure and consider it in isolation from other expenditure proposed by a DNSP. It is also likely to be difficult to determine the precise scope of SMI expenditure (e.g. in relation to IT and communication systems), as such expenditure may facilitate other activities undertaken by the DNSP. Deferring the AER's decision to the next distribution determination process will allow the AER to undertake a comprehensive assessment of SMI expenditure at the same time as it considers all other proposed expenditure. It would also allow the AER to consider any network operational benefits that may have impacts on other areas of a DNSP's operations.

Further, this option would give the AER a relatively long timeframe to assess the SMI expenditure. This would ensure that the AER has sufficient time to make its assessment. It would also require the AER to undertake public consultation on the appropriate expenditure for the mandated roll-out. We consider that the distribution determination process provides the most transparent and rigorous regulatory process for the consideration of a DNSP's roll-out expenditure, with the opportunity for comprehensive stakeholder input.

Another benefit is that it would avoid additional regulatory costs for both the AER and DNSPs, as a separate cost recovery process will not be required. We note that a separate cost recovery process would also duplicate many of the activities that would need to be undertaken in any event as part of the next distribution determination process. Potential gaming incentives for DNSPs to cherry-pick between different cost recovery mechanisms would also be removed.

Other options we considered in developing our draft recommendations range from a high level stop gap allowance to a separate price control for mandated smart meter expenditure. For a separate mechanism to work effectively, we consider that the AER would have to be given the ability to re-consider service classifications and a DNSP would need to have the opportunity to restructure its tariff. This would make this mechanism very similar to the distribution determination process. We have also considered amending the current cost pass through provisions to address the issues we have identified. However, we consider that to adequately adapt the current provisions to promote the recovery of efficient costs would result in a fundamental re-drafting of the current provisions. As there is no justification to amend the provisions for other cost pass through events to the same extent, this would result in a separate arrangement for mandated smart meter roll-outs in any event.

Given these considerations, we consider that the most appropriate option is to defer cost recovery to the next distribution determination process. This is also considered a proportionate response to the issues we have identified and is also likely to promote more transparent and efficient outcomes, than the other alternatives we have assessed. Furthermore, deferring the AER's decision to the next distribution determination process is likely to address many of the difficulties associated with uncertainty regarding the costs and benefits of mandated SMI, as discussed in Chapter 2.

However, there is the potential for two material disadvantages with our recommended option. Firstly, an ex-post review of expenditure may increase the regulatory risk to DNSPs as they may face uncertainty about the recovery of expenditure that they have already incurred. Secondly, an ex-post review may also weaken the incentives on DNSPs to make efficiency improvements, as they may perceive that there is a risk that the AER may claw back any additional profit. To address these regulatory risks, we have proposed the inclusion of principles in the Rules, which the AER must consider in undertaking its ex-post assessments. The AER would also be required to develop a guideline to set out its approach to ex-post reviews of mandated roll-out expenditure, which would provide greater regulatory certainty to DNSPs regarding how ex-post reviews would be undertaken.

In relation to the impact on incentives for efficiency and the ability of the AER to consider network operational benefits during its ex-post review, we consider that the AER should only have the ability to off-set the value of any benefits which occur automatically as a direct result of the roll-out (e.g. avoided meter reading costs) and not those cost savings that arise from the DNSP actively pursuing a change in operations. Furthermore, the ex-post review must be consistent with the operation of any applicable incentive schemes - for example, the EBSS. We consider that the AER should also be required to explain its approach to considering network operational benefits during its ex-post review in its guideline. We consider that this would strike an appropriate balance between incentivising the business to maximise the cost savings generated by a roll-out of smart meters and the MCE's decision that the efficiencies gained from a roll-out should be passed onto customers promptly. We also note that in the initial years of a roll-out (i.e., the period for which the ex-post review would apply), the extent of off-setting benefits may be limited, as benefits are only expected to accrue in line with the number of meters that are rolled-out.

Therefore, we consider that the potential disadvantages of our recommended option can be reasonably addressed through the development of Rules which would govern how the AER must undertake its ex-post reviews. We also consider that the benefits of enabling the AER to assess SMI expenditure at the same time as it assesses all other expenditure proposed by a DNSP would result in the most efficient outcomes, compared to the range of options we considered. However, as we stress above, the best approach would be for the timing of a Ministerial roll-out determination to align with the timing of a distribution determination process, so that a DNSP is only required to undertake expenditure at the start of the next regulatory control period. The timing of the current distribution determination cycles provides each relevant jurisdictional Minister with a reasonable opportunity to align these processes and we strongly advise that Ministers consider the benefits of aligning these timeframes when making their determinations.

Another issue to consider is whether there is a need for a temporary interim adjustment to prices within the regulatory control period. Such an adjustment might be necessary if there is a risk that the DNSP would experience material cash flow difficulties in incurring the mandated expenditure.[69] This will depend upon whether our recommendation that the stranded costs of accumulation meters not be recovered through accelerated depreciation is accepted (see chapter 7) as this would defer some of the initial costs. We have identified two methods to calculated such an adjustment which do not require the AER to make an assessment of the expenditure; it could either be based on the forecast costs and benefits outlined in the relevant Ministerial roll-out determination or the DNSP's own forecasts. We are keen for stakeholder views on whether such an adjustment would be necessary and if so, the appropriate method to determine the interim price increase.

Question 2 Mid period cost recovery for mandated smart meter roll-outs

2.1 Would an interim adjustment in prices be required prior to the next distribution determination, where a DNSP is required to roll-out smart meters within a regulatory control period? If so, should this adjustment be based on the forecast costs and benefits outlined in the relevant Ministerial roll-out determination or on the DNSP's own forecasts?

2.2 Are there any other principles the AER should be required to take into account when undertaking its ex-post review?

69 For the Victorian roll-out, we understand the annual AMI costs in 2009 and 2010 ranged between $20m to $70m depending upon the DNSP, which represented approximately 10% to 20% of allowed DUOS revenue. See Assessment of Options: Mechanisms for Mandated Smart Meter Roll-out Expenditure paper, Table 3.3.

4 Mid period cost recovery for mandated smart meter pilots and trials

This Chapter sets out the Commission's draft findings regarding the adequacy of the Chapter 6 Rules, where a DNSP is required to seek cost recovery for a mandated smart meter pilot or trial within a regulatory control period as a result of a Ministerial pilot determination, and these costs have not been incorporated in a relevant distribution determination. In particular, this Chapter assesses how the current cost pass through provisions in clause 6.6.1 of the Rules would be applied to a mandated smart meter pilot or trial, and whether the cost pass through provisions would provide for the recovery of efficient costs.

Box 4.1: Summary of draft findings for mid period cost recovery for mandated smart meter pilots and trials

Assessment of the Rules

1. The ability of DNSPs to seek cost pass through will depend on whether mandated smart meter pilots and trials fall under a pre-existing classification of a service. If so, DNSPs would have the ability to apply for cost pass through for mandated smart meter pilots and trials under a service standard event.

2. The Rules provide the AER with sufficient flexibility to determine an appropriate materiality threshold for mandated smart meter pilots and trials.

3. The timeframe for DNSPs to submit an application for cost pass through is sufficient for mandated smart meter pilots and trials. However, the timeframe for the AER to make its cost pass through determination may not be sufficient for mandated smart meter pilots and trials, if there is limited reliable information available on costs.

4. Under the current cost pass through provisions it is not certain that the AER would conduct an efficiency assessment as the criteria for assessing expenditure are not clearly specified. As a result, the cost pass through provisions may not accommodate the recovery of the efficient costs of a mandated smart meter pilot or trial.

5. DNSPs would be able to recover retailer costs under the cost pass through provisions, as long as DNSPs demonstrate that these costs are a consequence of a Ministerial determination and these costs satisfy the AER's requirements for pass through. However, given the current lack of specification on the criteria the AER may apply in making its cost pass through determination, the cost pass through provisions may not provide for the recovery of efficient retailer costs.

6. If a Ministerial determination is made in the last 13 months of a regulatory

control period but costs are not incurred until the next regulatory control period, DNSPs may be unable to seek cost recovery for mandated smart meter pilots and trials under either the cost pass through provisions and the distribution determination process. This issue which is referred to as the "dead zone" is a common problem for cost pass events. It arises as DNSPs can only seek cost pass through for costs which are incurred in the same regulatory control period as the pass through event. DNSPs may also be unable to seek cost recovery under the distribution determination process, as DNSPs have limited opportunities to submit new cost forecasts to the AER following the submission of their regulatory proposals.

7. A number of Rules amendments are required to improve the practical application of the cost pass through provisions to accommodate the recovery of the efficient costs of mandated pilot and trials. An amendment is also required to address the general cost recovery risk associated with the "dead zone".

Proposed amendments to the Rules

- The Rules should be amended to require the AER to indicate how it will classify mandated smart meter pilots and trials provided under Section 118B of the NEL when making a distribution determination.
- The cost pass through provisions in clause 6.6.1 of the Rules should be amended specifically for mandated smart meter pilots and trials to:
  - Allow the AER to extend its time period for making a cost pass through determination for mandated smart meter pilots and trials to a maximum of 6 months by publishing a notice, if it considers that the difficulty of assessing or quantifying the effect of the Ministerial determination justifies the extension; and
  - Require the AER when making a cost pass through determination for mandated smart meter pilots and trials, to consider the costs that an efficient and prudent DNSP in the circumstances of the relevant DNSP would require.
- A general amendment to the cost pass through provisions should be made to allow DNSPs to seek cost recovery for pass through events in the following regulatory control period, when an event occurs in the last 13 months of one regulatory control period, but the costs associated with the event are not incurred until the next regulatory control period.

4.1 Considerations in developing our draft advice

As explained in Chapter 3, the current cost pass through provisions provide an opportunity for DNSPs to seek recovery for changes in the costs of providing standard control services within a regulatory control period, where these costs could not be

included in a distribution determination. The issues to be considered in this Chapter are similar to those raised in the previous chapter regarding mandated roll-out expenditure. These include whether DNSPs have an ability to seek cost pass through following a Ministerial determination and also whether the practical application of the current Rules would promote the recovery of efficient costs.

In undertaking our assessment, we have considered the differences between mandated roll-outs and mandated pilots and trials. We note that, as pilots and trials are temporary in nature, it is likely that mandated smart meter pilots and trials will not provide any ongoing network operational benefits to DNSPs unlike mandated roll-outs. As pilots and trials are smaller in scope, they would also involve significantly lower expenditure and complexity.

As clause 6.6.1 of the Rules only applies to standard control services (unless the AER states that the provisions apply to alternative control services in the distribution determination), this Chapter focuses on the scenario where mandated smart meter pilots and trials are classified as standard control services. Chapter 5 contains an assessment of the implications for efficient cost recovery where mandated smart metering services are classified as alternative control services.

In considering whether DNSPs would have an ability to seek cost pass through for mandated smart meter pilots and trials, we have considered whether mandated pilots and trials, including trials of direct load control, would meet the NEL definition of an 'electricity network service'. We note that only services which meet the definition of an 'electricity network service' may be regulated under a distribution determination and be subject to the cost pass through provisions. [70]

We have also considered the specific questions the MCE has raised in regards to the application of the cost pass through provisions to mandated smart meter pilots and trials. These include whether there is sufficient flexibility for the AER to determine an appropriate materiality threshold for Ministerial pilot determinations; and whether DNSPs would be able to recover any retailer fees they may incur in providing smart meter and direct load control pilots and trials.

Finally, we have considered the implications for cost recovery where a Ministerial pilot metering determination is made in the last 13 months of a regulatory control period, but a DNSP only incurs costs associated with the Ministerial determination in the next regulatory control period. We note that the ability of DNSPs to seek cost recovery under these circumstances has been raised by a number of DNSPs in recent distribution determinations. We recognise that this issue has the potential to affect the effectiveness of cost recovery under the cost pass through provisions for pass through events more generally and is not specific to mandated smart meter pilots and trials.

70 See the definition of an 'electricity network service' in Sections 2 and 2B of the NEL.

4.2 Assessment of the current Rules

This section outlines our assessment of the adequacy of the cost pass through provisions in clause 6.6.1 of the Rules to provide for the recovery of the efficient costs of mandated smart meter pilots and trials.

4.2.1 Do DNSPs have an ability to seek cost pass through for mandated pilots and trials under the current cost pass through provisions?

The ability of DNSPs to seek cost pass through for mandated pilots and trials will depend on two factors. The first factor is whether the standard control services relating to metering are broadly classified in the relevant distribution determination such that the services which are provided under a mandated pilot and trial will be subject to the cost pass through provisions. The second is whether any of the pass through events in Chapter 10 of the Rules or in a relevant distribution determination would apply to the circumstances of the mandated pilot or trial.

Only services which meet the definition of an 'electricity network service' under the NEL are able to be regulated under a distribution determination.[71] An 'electricity network service' is defined as 'a service provided by means of, or in connection with a ...distribution system'. [72] Mandated pilots and trials would be provided in connection with a distribution system (e.g. for both smart meter pilots and direct load control trials a DNSP's communications systems would be required). Moreover, these services would only be able to be provided by a DNSP, as a DNSP would be mandated to provide these services and will have exclusivity in doing so. Accordingly, we consider that mandated pilots and trials would meet the definition of an 'electricity network service' and be capable of being regulated under a distribution determination.

However, although pilots and trials are consistent with the definition of a electricity network service, for a Ministerial determination to trigger a cost pass through application, it would still be necessary for the pilots and trials to be covered by an existing type of electricity network service as classified by the AER. If the trial or pilot did not fall within a pre-existing classification contained in the AER's distribution determination, then these services would be unregulated and would not be subject to Chapter 6 of the Rules.[73]Under the Rules, the AER can only classify services as part of the distribution determination process for the forthcoming regulatory control period. In the event that a Ministerial pilot determination occurs within a regulatory period and was not anticipated at the most recent distribution determination, the ability of the DNSP to make a cost pass through application will depend on how the AER has defined the range of network services in a distribution determination. There is the potential that a mandated smart meter pilot or trial would not be covered by a pre-existing classification of a service (e.g. metering services). Therefore, the Rules should

71 See the definition of an 'electricity network service' in Sections 2 and 2B of the NEL.

72 Section 2 of the NEL.

73 AAR, 2010, 'Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure', pp. 9-10.

be amended to remove this possibility to ensure that the Rules can accommodate cost recovery for mandated pilots and trials.

Regarding the pass through events defined in Chapter 10 of the Rules, it is likely that a mandated pilot or trial would meet the definition of a 'service standard event' as a Ministerial pilot determination would be made under the NEL and would alter the scope of the direct control services provided by a DNSP within a regulatory control period.[74] Therefore, we consider that DNSPs would be able to seek cost pass through under a service standard event if the costs of meeting the Ministerial determination met the materiality threshold determined by the AER. As we consider that a mandated pilot or trial would meet the requirements of a service standard event, it is unlikely that DNSPs could seek cost pass through under a regulatory change event as a regulatory change event is defined as a change in a regulatory obligation or requirement that falls under no other category of pass through event.[75]

The AER has approved a 'smart meter event' in its recent distribution determinations for NSW, ACT, Qld and SA DNSPs.[76] DNSPs may have some scope to seek pass through under such a 'smart meter event'. [77] However, DNSPs are only able to seek pass through under this event for regulatory control periods in which the AER has determined that it is an appropriate cost pass through event. If the AER did not approve a 'smart meter event' in future distribution determinations, we consider that DNSPs would still be able to seek cost pass through for mandated pilots and trials under a service standard event in Chapter 10 of the Rules, subject to the materiality threshold which we now discuss.

Draft Finding 9: The ability of DNSPs to seek cost pass through will depend on whether mandated smart meter pilots and trials fall under a pre-existing classification of a service. If so, DNSPs would have the ability to apply for cost pass through for mandated smart meter pilots and trials under a service standard event.

4.2.2 Is there sufficient flexibility for the AER to determine an appropriate materiality threshold for mandated smart meter pilots and trials?

DNSPs may only apply for cost pass through for mandated smart meter pilots and trials if the costs of undertaking the pilots and trials meet the relevant materiality threshold determined by the AER. Stakeholders have raised concerns that there may be

74 See definition of a 'service standard event' in Chapter 10 of the Rules

75 See definition of 'regulatory change event' in Chapter 10 of the Rules.

76 See AER, 2009, Final Decision: New South Wales Distribution Determination 2009-10 to 2013-14, April; AER, 2009, Final Decision: Australian Capital Territory Distribution Determination 2009-10 to 2013-14, 28 April; AER, 2010, Final Decision: South Australia Distribution Determination 2010-11 to 2015-16, 6 May; AER, 2010, Final Decision: Queensland Distribution Determination 2010-11 to 2015-16, 6 May. The cost pass through arrangements for the Tasmanian DNSP is currently regulated under jurisdictional instruments rather than under the Rules.

77 For discussion of the interaction between the different types of pass through events see: AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, pp. 15-16.

a risk that mandated pilot expenditure would not be able to be recovered through the cost pass through provisions because of the materiality threshold.[78]

Under clause 6.2.8(a)(4) of the Rules, the AER is able to publish a guideline which outlines its likely approach to determining materiality in the context of possible pass through events, but has not published such a guideline to date. Instead, the AER's practice has been to indicate its approach to materiality in its distribution determinations. In recent distribution determinations, the AER has specified different materiality thresholds for different pass through events, and has indicated that it would generally consider a pass through event as having a material impact if the costs associated with the event would exceed 1% of the smoothed forecast revenue specified in a final distribution determination in the years of the regulatory control period that the costs are incurred.[79]

Under a materiality threshold of 1% of smoothed forecast revenue, there is a risk that a mandated pilot or trial may not meet this threshold and that DNSPs may not be able to seek cost recovery under a service standard event.[80] The AER cannot set different materiality thresholds for different service standard events.

However, the AER could nominate a separate mandated smart meter event in its distribution determination and apply a lower materiality threshold to this nominated event. This is a benefit of the nominated pass through events, as the AER has discretion in determining the materiality threshold for each nominated event. We note that the AER has already indicated that a lower materiality threshold than 1% of smoothed forecast revenue would apply to nominated smart meter events approved in recent distribution determinations.[81]

Hence, the AER would have sufficient flexibility to determine the appropriate materiality threshold for mandated smart meter pilots and trials. We consider that the Rules should not be amended to remove the AER's discretion to set a materiality threshold for cost pass through events. There are administrative benefits from having a materiality threshold for cost pass through events and we consider that the Rules provide the AER with sufficient flexibility to determine the appropriate threshold applicable to Ministerial pilot determinations. If the AER thought that a lower materiality threshold than the general threshold of 1% of smoothed forecast revenue should apply to mandated smart meter pilots, it has the ability to nominate a specific smart meter event with a lower threshold through the distribution determination process.

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78 See submissions on the Draft Statement of Approach from: EnergyAustralia, p. 10; NSSC, pp. 12, 17; Origin Energy, p. 9; Energex, p. 4.

79 For instance see: AER, 2009, Final Decision: New South Wales Distribution Determination 2009-10 to 2013-14, April, p. 280.

80 For example, SMI trials to be undertaken by EnergyAustralia between 2009 and 2011 were estimated to cost a total of $16m in its regulatory proposal for the 2009-10 to 2013-14 regulatory control period. In contrast, 1% of the smoothed revenue requirement for EnergyAustralia for 2009-10 would be equivalent to $12.3m and in 2010-11 it would equal $13.8m

81 For instance see: AER, 2010, Final Decision: Queensland Distribution Determination 2010-11 to 2014-15, 6 May, p. 298.

A materiality threshold is likely to reduce the risk of DNSPs seeking to re-open distribution determinations for minor cost increases. In the absence of a materiality threshold, DNSPs may seek to pass through costs that could be accommodated in the normal course of their operational activities and budget management. [82]A materiality threshold may also provide an incentive for DNSPs to efficiently manage the costs of a pass through event. Therefore, a materiality threshold should continue to apply for Ministerial pilot determinations.

Draft Finding 10: The Rules provide the AER with sufficient flexibility to determine an appropriate materiality threshold for mandated smart meter pilots and trials.

4.2.3 Are the timeframes in the cost pass through provisions appropriate for mandated smart meter pilots and trials?

In considering whether the timeframes in the cost pass through provisions are appropriate for mandated smart meter pilots and trials, we have considered both the timeframe for DNSPs to submit a written application for a cost pass through and the timeframe for the AER to make its cost pass through determination.

Under clause 6.6.1(c) of the Rules, DNSPs would be required to submit a written statement to the AER within 90 business days of the making of a Ministerial determination. This 90 business day timeframe must be extended by the AER by written notice to the DNSP if it is satisfied that the difficulty of assessing or quantifying the effect of the relevant pass through event justifies the extension.[83]

Under the current Rules, DNSPs only have one opportunity to apply for cost pass through in relation to each pass through event, and their written statement must set out the actual and likely increases in costs as a result of the pass through event until the end of the regulatory control period.[84]However, the amount that a DNSP will seek to pass through will depend on the timing of when a Ministerial determination is made within a regulatory control period.[85]

The current timeframe for DNSPs to submit an application for cost pass through is likely to be appropriate for mandated smart meter pilots and trials, as the scope of mandated pilots and trials will be limited under the definitions of a 'smart meter trial'

82 AER, 2009, Final Decision: New South Wales, Distribution Determination 2009-10 to 2013-14, April, p. 280.

83 Clause 6.6.1(k) of the Rules.

84 Clauses 6.6.1(c) and 6.6.1(c)(6) of the Rules. Under the definition of an "eligible pass through amount" in Chapter 10 of the Rules, a DNSP is only able to pass through the costs that it has incurred and is likely to incur until the end of the current regulatory control period.

85 For example, if a Ministerial determination was made in the first year of a regulatory control period and the DNSP is likely to incur costs until the end of the regulatory control period, the DNSP may seek cost pass through for the costs it will incur over the remaining four years of the regulatory control period. In contrast, if a Ministerial determination was made in the last month of a regulatory control period, the DNSP would only be able to seek cost pass through for any costs it incurs over that single month.

and a 'smart meter assessment' under the NEL amendments.[86] By definition, a trial should be limited in scope and temporary, and therefore should have significantly lower expenditure and complexity compared to a mandated roll-out.

Draft Finding 11: The timeframe for DNSPs to submit an application for cost pass through are sufficient for mandated smart meter pilots and trials

After receiving a written statement seeking cost pass through from a DNSP, the AER has 60 business days to make a cost pass through determination on the amount that should be passed through to customers and the timing for the recovery of the pass through amount.[87]If the AER does not make its cost pass through determination within this 60 business day period, it will be taken to have approved the proposed pass through amount and timing for the recovery of this pass through amount, as specified in the DNSP's written statement.[88]Under the current Rules, there is no opportunity for the AER to extend its 60 business day decision making period.

In most circumstances, 60 business days is likely to be sufficient for the AER to make a cost pass through determination on mandated smart meter pilots and trials, as the scope and complexity of pilots and trials will be limited. Unlike a mandated smart meter roll-out, a mandated pilot or trial is not likely to provide a DNSP with any network operational benefits. This is likely to reduce the required decision making period for the AER to make its cost pass through determination. However, where there is a lack of reliable information on the costs of undertaking comparable smart meter pilots or trials at the time the AER makes its cost pass through determination and the AER is required to undertake further analysis or consultation, there is a risk that 60 business days may be insufficient. In addition, this timeframe may not be adequate to allow the AER to publicly consult on a cost pass through application.

Draft Finding 12: The timeframe for the AER to make its cost pass through determination may not be sufficient for mandated smart meter pilots and trials, where there is limited reliable information available on costs.

4.2.4 Will the cost pass through provisions provide for the recovery of the efficient costs of mandated pilots and trials?

In making a decision on the cost pass through amount, the AER must take into account the factors in clause 6.6.1(j) of the Rules. In Chapter 3, we assessed whether these considerations would be sufficient to promote the recovery of the efficient costs of mandated roll-out expenditure. We concluded that the criteria for determining efficiency are not clearly specified compared to the distribution determination process and that the AER has discretion to consider what factors are relevant in its cost pass through determination.[89] The ability of the current pass through provisions to

86 See Sections 118A and 118B of the NEL.

87 Clause 6.6.1(e) of the Rules.

88 Clause 6.6.1(e) of the Rules.

89 Clause 6.6.1(j)(8) of the Rules.

accommodate the recovery of the efficient costs of a Ministerial pilot determination raises similar concerns.

Under clause 6.6.1(j) of the Rules, the AER must consider the costs the DNSP has incurred and is likely to incur as a result of the pass through event, and the efficiency of the DNSP's actions in regards to the risk of the pass through event. The AER must also take into account the need to ensure that the provider only recovers any actual or likely increment in costs (to the extent that such increment is solely the consequence of the pass through event). The AER is not explicitly required to consider the efficiency of the pass through amount proposed by the DNSP.

The AER has the discretion to undertake an efficiency assessment if it considers it relevant.[90] The AER would also be required to consider the NEO (and possibly the NEL Revenue and Pricing Principles) in making its cost pass through determination. [91] Given this and as a matter of good regulatory practice, it is likely that the AER would seek to ensure that DNSPs only recover the efficient costs of a pass through event, despite there being no explicit requirement on the AER to do so. However, given the lack of prescription on the criteria which the AER must apply, there is merit in amending the Rules to clarify the cost pass through determination process.

Draft Finding 13: Under the current cost pass through provisions it is not certain that the AER would conduct an efficiency assessment as the criteria for assessing expenditure are not clearly specified. As a result, the cost pass through provisions may not accommodate the recovery of the efficient costs of a mandated smart meter pilot or trial.

4.2.5 Are DNSPs able to recover third party costs under the cost pass through provisions?

In undertaking a smart meter pilot or trial, DNSPs may incur third party costs, which may include the costs of any necessary retailer services (for example, customer liaison activities). A number of stakeholders have raised concerns about the recovery of retailer costs that may be incurred in providing mandated smart metering services, and that retailers may be reluctant to participate in mandated smart meter pilots and trials where cost recovery is uncertain.[92]

Under the current Rules, DNSPs would be able to seek the recovery of any third party costs, including retailer costs, under the current pass through provisions. However,

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90 There is also no obligation on the AER under the cost pass through provisions to consider any network operational benefits that may arise from a mandated pilot or trial, although it would be able to take any relevant off-setting benefits into account under clause 6.6.1(j)(8) of the Rules. However, as discussed above, as pilots and trials are temporary in nature, the potential for any network operational benefits is limited and therefore, this is not a material concern.

91 Under Section 16(1)(a) of the NEL, the AER is required to perform or exercise its economic regulatory functions or powers in a manner that will or is likely to contribute to the achievement of the NEO

92 See submissions on the Draft Statement of Approach from: Energex, p. 6; NSSC, p. 19; AGL, p.2; Origin Energy, p. 10.

any third party costs would be subject to the assessment process conducted by the AER under clause 6.6.1(j) of the Rules. In particular, DNSPs would be required to demonstrate it had or would incur the third party costs solely as a consequence of the Ministerial determination being made and that these costs had not been incorporated in an existing distribution determination.[93] This is the current way that any other third party costs would be assessed and these criteria are also considered appropriate for a mandated smart meter pilot, as it would ensure that DNSPs may only seek cost pass through for any necessary and prudent costs. However, as discussed above, as there is no obligation on the AER to conduct an efficiency assessment and there is also a lack of specification regarding the criteria the AER may apply, the cost pass through provisions may not provide for the recovery of efficient retailer costs.

Draft Finding 14: DNSPs would be able to recover retailer costs under the cost pass through provisions, as long as DNSPs demonstrate that these costs are a consequence of a Ministerial determination and these costs satisfy the AER requirements for pass through. However, given the current lack of specification on the criteria the AER may apply in making its cost pass through determination, the cost pass through provisions may not provide for the recovery of efficient retailer costs.

4.2.6 Applying for cost pass through in the dead zone

Under the cost pass through provisions, there is a risk that DNSPs may be unable to seek cost recovery for mandated smart meter pilots and trials where:

- a Ministerial determination is made in the last 13 months of a regulatory control period; and
- the DNSP only begins to incur costs associated with the event in the next regulatory control period.

This risk has been raised by DNSPs in a number of recent distribution determinations and was labeled as a "dead zone" by EnergyAustralia in its most recent regulatory proposal.[94]Under the dead zone period, a DNSP may be unable to seek recovery for the costs of a pass through event under either the cost pass through process or the distribution determination process. We consider that this is a material problem with the current Rules, that arises not just with regards to the recovery of mandated pilot expenditure but in relation to all pass through events. Figure 4.1 below sets out when the dead zone would occur in relation to a Ministerial pilot determination.

Under the current definition of eligible pass through events, DNSPs may only seek cost recovery for costs incurred in the same regulatory control period as the pass through event.[95] As a result, if the Ministerial determination occurs in one regulatory control period, but DNSP does not incur any costs associated with the pass through event until

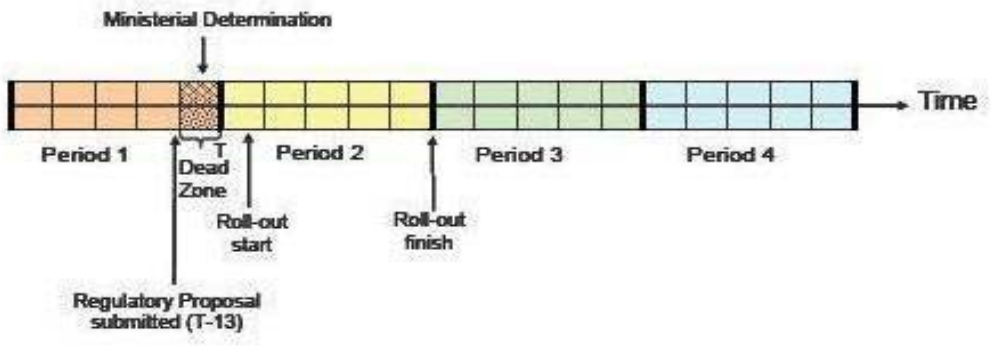
93 Clause 6.6.1(j)(5) and 6.6.1(j)(7) of the Rules.

94 EnergyAustralia, 2008, Regulatory proposal for 2009-14 regulatory control period, June, p. 162.

95 See the definition of "eligible pass through event" in Chapter 10 of the Rules.

the next regulatory control period, then the DNSP would not be able to seek cost pass through under the current Rules.[96]

Figure 4.1 The dead zone for the cost pass through process



In such event, the DNSP could attempt to recover these costs through the distribution determination. However, this avenue may not be effective if the Ministerial determination is made in the last 13 months of a regulatory control period. In these circumstances, the DNSP would have already submitted its regulatory proposal to the AER outlining its forecast capital and operating expenditure for the next regulatory control period.[97]After this date, there are only limited opportunities for DNSPs to submit proposals for additional forecast capital and operating expenditure. DNSPs do have an opportunity to submit a revised regulatory proposal following the publication of the AER's draft determination, but may only make revisions to address matters raised by the draft determination or the AER's reasoning in the draft determination.[98]

However, if the AER had not raised this matter in its draft distribution determination or if a Ministerial determination was not made at the time of the AER's draft distribution determination, then the DNSP would not be able to include the additional expenditure for the pilot in its revised regulatory proposal. Alternatively, the DNSP could make a separate submission to the AER's draft distribution determination, seeking the additional expenditure. Under the Rules, the AER would be required to consider any forecasts included in a submission in making its final distribution determination.[99] However, this is not considered to be a satisfactory regulatory process to accommodate the recovery of mandated pilot expenditure, as it does not provide regulatory certainty for DNSPs nor transparency for stakeholders.

96 AAR, 2010, Advice in response to MCE Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure, 18 June, p. 17.

97 Under clause 6.8.2(b)(1) of the Rules, DNSPs must submit their regulatory proposals to the AER at least 13 months prior to the expiry of the existing distribution determination.

98 Clause 6.10.3(b) of the Rules.

Draft Finding 15: If a Ministerial determination is made in the last 13 months of a regulatory control period but costs are not incurred until the next regulatory control period, DNSPs may be unable to seek cost recovery for mandated smart meter pilots and trials under either the cost pass through provisions or the distribution determination process. This issue which is referred to as the "dead zone" is a common problem for cost pass events.

4.3 Recommended changes to the Rules

Our assessment of the Rules has identified a number of potential risks to the recovery of the efficient costs of mandated smart meter pilots and trials under the current cost pass through provisions. This section sets out the Commission's recommended changes to the Rules to address these risks and the reasons why these particular changes are considered the most appropriate response, consistent with our decision making criteria for the Review.

4.3.1 The classification of mandated smart meter pilots and trials

The Rules should be amended to require the AER to consider the service classification of mandated smart meter pilots and trials which may be provided under Section 118B of the NEL, when making a distribution determination.

Reasoning for our proposed changes to the Rules

Where the AER has not considered the potential for a Ministerial pilot determination to be made in the forthcoming regulatory control period when it makes its distribution determination, there is a risk that DNSPs may be unable to seek cost recovery for mandated pilots and trials within a regulatory control period. This may occur because if these mandated pilots and trials do not fall within an existing service classification, they would be unregulated.

Our proposed changes to the Rules would remove this cost recovery risk by requiring the AER to consider the potential for DNSPs to provide mandated pilots and trials when it makes its distribution determination. This would provide DNSPs with greater regulatory certainty regarding their ability to seek cost recovery for these services, which would support the provision of these services. As the AER would be required to outline how it would classify mandated pilots and trials at the start of the regulatory control period, the proposed changes would also promote transparent regulatory processes and ensure that the Rules are robust enough to accommodate potential Ministerial pilot determinations.

99 Clause 6.11.1 of the Rules.

4.3.2 Amendments to the cost pass through process for mandated smart meter pilots and trials

The current cost pass through provisions should be amended specifically in regards to mandated smart meter pilots and trials to:

- Allow the AER to extend its time period for making a cost pass through determination for mandated smart meter pilots and trials to a maximum of 6 months by publishing a notice, where it considers that the difficulty of assessing or quantifying the effect of the Ministerial determination justifies the extension; and

- Require the AER when making a cost pass through determination for mandated smart meter pilots and trials, to consider the costs that an efficient and prudent DNSP in the circumstances of the relevant DNSP would require.

Reasoning for our proposed changes to the Rules

In most circumstances the AER's current 60 business day period will be sufficient for it to make a cost pass through determination on a mandated smart meter pilot or trial. However, where there is uncertainty about the costs of a mandated pilot or trial and the AER is required to undertake further analysis or consultation to make its cost pass through determination, the AER may require more than 60 business days.

The proposed amendments will ensure that the cost pass through provisions are robust enough to accommodate the potential that there may be remaining cost uncertainty when the AER makes a cost pass through determination. Allowing the AER to extend its time period for making a cost pass through determination would also ensure that the AER is able to assess expenditure with sufficient time and rigour, which is likely to provide for more efficient outcomes and promote well informed and appropriate regulatory processes. Further, requiring the AER to make a cost pass through determination within 6 months of receiving a DNSP's written statement seeking cost pass through, would provide for a timely response from the AER and support the provision of services. Therefore this proposed amendment would promote efficient outcomes, without creating undue additional risks for DNSPs. The proposed amendment would also facilitate the AER in conducting public consultation on cost pass through applications, thereby promoting transparency.

Requiring the AER to consider the costs that an efficient and prudent DNSP would require when it makes a cost pass through determination would promote the efficient management of costs and provision of services. It would also provide incentives for DNSPs to effectively identify and manage the risks of mandated pilots and trials, as DNSPs would be required to demonstrate that their costs are efficient and prudent when seeking cost recovery. A requirement on the AER to undertake an efficiency assessment would also provide greater consistency between the cost pass through process and the distribution determination process. Importantly, it removes the current lack of clarity on how the AER assesses applications and would therefore, provide more certainty on the treatment of third party costs.

These amendments have been proposed to address specific issues arising from the assessment of the Rules against the MCE policy objectives for smart meters and also in recognition of the specific characteristics of mandated smart meter pilots and trials. However, it is acknowledged that there may be merit in extending these proposed changes to all pass through events to provide for greater consistency in the treatment of distribution investments.

4.3.3 Cost recovery during the dead zone

A general amendment to the cost pass through provisions in clause 6.6.1 of the Rules should be made to allow DNSPs to seek cost recovery for pass through events in the following regulatory control period, when a pass through event occurs in the last 13 months of one regulatory control period, but the costs are incurred in the following regulatory control period.

This amendment to the Rules would apply to all pass through events and not only to mandated smart meter pilots and trials.

Reasoning for our proposed changes to the Rules

As discussed in section 4.2.6, there is a cost recovery risk under the Rules, where a pass through event occurs in the last 13 months of a regulatory control period (i.e. the 'dead zone') but costs are only incurred in the following regulatory control period. Where a Ministerial pilot determination is made in the dead zone, DNSPs may be unable to seek cost recovery for mandated pilots and trials under either the cost pass through provisions or the distribution determination process.

This problem arises due to the timing of the Ministerial pilot determination and the issue could be avoided if the Ministerial determination is aligned with the distribution determination process. However, there is considerable merit in addressing this issue as it is a common problem to all pass through events. Therefore, an amendment to the Rules should be made to enable DNSPs to seek cost recovery in the following regulatory control period for all pass through events, where a pass through event occurs in the last 13 months of a current regulatory control period, but costs from that event are not incurred until the following regulatory control period. This amendment is a simple and proportionate response to the cost recovery risk identified.

In regards to mandated pilots and trials, these proposed amendments to the Rules would promote the provision of smart meter pilot and trial services as DNSPs would have greater certainty regarding opportunities for cost recovery. These amendments would also allow the Rules to accommodate the potential that a Ministerial pilot determination would be made in the last 13 months of a regulatory control period. Further, as a general amendment would be made which would apply to all cost pass through provisions, it would also provide for greater consistency in how mandated smart meter pilots and trials are treated compared to other types of regulated distribution investments.

Question 3 Mid period cost recovery for mandated smart meter pilots and trials

3.1 Are any further amendments to the cost pass through provisions required to provide for the recovery of the efficient costs of mandated smart meter pilots and trials?

3.2 Should our proposed amendments to the cost pass through provisions, to extend the AER's decision making timeframe and require the AER to consider the efficient and prudent costs of a mandated smart meter pilot or trial, be extended to all pass through events?

5 Cost recovery for mandated smart metering services which are classified as alternative control services

The Draft Report has so far discussed the arrangements for the recovery of the efficient costs of mandated smart metering services where they have been classified as standard control services. The MCE has also requested advice on the implications for the recovery of the efficient costs associated with a Ministerial smart meter determination where mandated smart metering services are classified as alternative control services. This Chapter outlines our assessment of how the Chapter 6 Rules would be applied to mandated smart metering services which are classified as alternative control services, and whether the current Rules would provide for the recovery of efficient costs.

Box 1.1: Summary of draft findings for cost recovery for mandated smart metering services which are classified as alternative control services

1. The current distribution determination process has the potential to provide for the recovery of the efficient costs of mandated smart metering services which are classified as alternative control services, as the AER is required to have regard to the NEL Revenue and Pricing Principles and NEO when determining the revenue requirement for alternative control services. Modifications to the Rules are not required.

2 There is a possible risk that in the event that mandated smart metering services are classified as alternative control services and the Minister makes a pilot determination during a regulatory control period, DNSPs may not be able to recover their costs. This may occur if the applicable control mechanism does not contain adequate pass through provisions. However, this is a small risk and is only applicable to future regulatory control periods as there are already adequate cost pass through provisions in current distribution determinations.

3. Further consideration of the impact of the classification of commercial services associated with mandated SMI expenditure is recommended once the nature of the services is better known and a decision on contestability in smart metering services has been made by the MCE.

Proposed changes to the Rules

The Rules should be amended to require the AER to consider the need for adequate cost pass through arrangements for mandated smart metering services arising from a Ministerial pilot determination, when deciding upon the appropriate control mechanisms for alternative control services.

5.1 Considerations in developing our draft advice

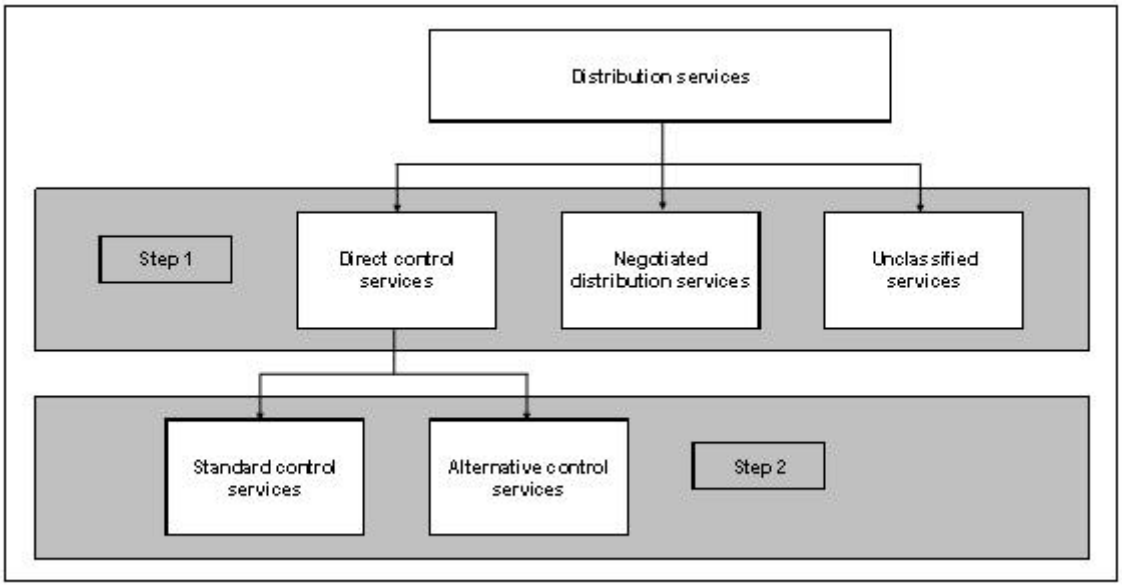
The arrangements for classifying distribution services are set out in clause 6.2 of the Rules. The AER may classify distribution services as either direct control services or negotiated distribution services (with services not classified by the AER not being regulated under the Rules). The AER must further classify direct control services as either standard control services or alternative control services. In making its decision on service classification for direct control services, the AER is to have regard to a number of factors specified in clause 6.2.2(c) of the Rules. These factors include, amongst other factors

- the potential for competition;
- the impact on administrative costs;
- the desirability for a consistent regulatory approach to similar services; and
- the extent to which costs are directly attributable to the customer to whom the service is provided.

We note that the AER has discretion in terms of how it considers these factors and the weighting it applies to each factor when considering the classification of services. The AER's classification of services applies for the length of a regulatory control period, and there is no scope under the Rules for the AER to change its classification of services or to classify new services within a regulatory control period.[100] Figure 5.1 below outlines the service classification process for distribution services that is undertaken by the AER.

100 Clause 6.2.3 of the Rules.

Figure 5.1 Distribution service classification process under clause 6.2 of the Rules



Service classification effectively determines two key aspects of the distribution determination for DNSPs: the nature of the form of control that will apply to each service; and whether the costs of providing the service should be recovered through the general DUOS charges paid by most customers, or through separate tariffs paid by individual customers requesting the service.

Direct control services are characteristically services where it is considered necessary to regulate the revenue earned by DNSPs through the AER making a distribution determination. The possibility of further segmenting direct control services as either standard control or alternative control services gives the AER the flexibility to adapt the distribution determination process and apply either a separate building block control or an alternative regulatory approach to those services which meet the requirements for an alternative control service classification in the Rules. There is little guidance in the Rules as to how alternative control services are to be regulated and the AER has discretion in designing the control mechanism for such services. For instance, the alternative control mechanism can adopt elements of Chapter 6, such as the cost pass through provisions, with or without modification.[101] However, in determining the control mechanism that is to apply for alternative control services the AER must consider the NEL Revenue and Pricing Principles.[102]

The MCE has requested advice as to whether the current Chapter 6 Rules will provide for the recovery of efficient costs where mandated smart metering services are classified as alternative control services. To address this question, we have considered the arrangements for cost recovery for alternative control services and how such arrangements differ compared to the framework for standard control services. We have

101 Clause 6.2.6(c) of the Rules.

102 Section 16(2)(a)(i) of the NEL.

examined the cost recovery arrangements for alternative control services in terms of the distribution determination process and focused on the arrangements for cost pass through for mandated pilot determinations.

There are considerable differences in how metering services are currently classified and regulated. Currently, metering services for small customers are classified as standard control services in the majority of jurisdictions. The exception is the ACT where metering services have been classified as alternative control services.[103] In Tasmania metering services are yet to be classified by the AER, but are currently included as part of the overall 'declared services.' If our assessment identifies significant issues with cost recovery for alternative control services, it would be necessary to give further consideration of whether the proposed arrangements for cost recovery could cope with such jurisdictional differences or whether a single approach to classification is needed.

The MCE has also asked whether the efficient costs of alternative control services could be recovered under the cost pass through mechanism, if this was not anticipated at the time a distribution determination was made. We have only considered this question in relation to Ministerial pilot determinations, as we have recommended in Chapter 3 that a separate approach be adopted for mid period cost recovery for mandated smart meter roll-outs. As the cost pass through provisions contained in clause 6.6.1 of the Rules only apply to standard control services, the AER has the discretion to determine whether these provisions should be applied to alternative control services. The AER also has the discretion to develop alternative arrangements for cost pass through or determine not to apply any cost pass through arrangements to alternative control services.

Mandated SMI has the potential to facilitate a range of services, including but not limited to, remote connect/disconnect services; remote load control services; smart metering data services; and supply capacity limiting services. In considering these issues, we recognise there is the potential for future contestability in some of these smart metering services and that service classification may differ across the possible range of services. We also note that the classification of mandated smart metering services as alternative control services will have implications for issues relating to tariffs, as it would facilitate the unbundling of mandated smart meter costs from DUOS charges. The implications of unbundling mandated smart meter costs are discussed in Chapter 7.

103 The control mechanism applying to metering services in the ACT is a 'building block' mechanism similar to that applying to standard control services, with the same pass through provisions as standard control services and also a specific 'smart meter' pass through event. See AER, 2009, Australian Capital Territory distribution determination 2009-10 to 2013-14: Final Decision, April, p. 136.

5.2 Assessment of the current Rules

This section outlines our assessment of the adequacy of the current Chapter 6 Rules to provide for efficient cost recovery, where mandated smart metering services are classified as alternative control services.

5.2.1 What are the implications for the recovery of efficient costs for alternative control services under the distribution determination process?

Table 5.1 summarises the Rule requirements for both standard control service and alternative control services and details the implications for the recovery of efficient costs where the AER decides to classify the provision and management of mandated smart metering services as alternative control services. The table shows the areas where the legal requirements are the same and highlights the areas where there is more prescription in relation to standard control services.

Table 5.1 Summary of legal requirements between alternative control services and standard control services

Feature of the Regulatory Framework	Standard Control Services	Alternative Control Services
Overarching provisions for AER powers and functions	The AER must exercise its powers in a manner that will or is likely to contribute to the achievement of the NEO and must take into account the NEL Revenue and Pricing Principles.[104]	
Control mechanism	Prospective CPI-X form or some incentive based variant, in accordance with the building block approach.[105] Annual revenue requirement to be calculated in accordance with Part C of Chapter 6 of the Rules.	Not specified. May utilise elements of the building block approach. Basis for the control mechanism must be stated in a distribution determination and could vary across different alternative control services.[106] The AER may publish guidelines concerning the regulation of such services, but these are not binding upon the AER.
Factors the AER must have regard to when developing the control mechanism	1) Administrative costs 2) Applicable regulatory arrangements immediately prior to determination 3)Desirability of consistency between regulatory	Same as standard control services factors 1) to 4) except that instead of the need for efficient tariff structures, the following clause is applied: The potential for the

104 Sections 16(1)(a) and 16)(2)(a) of the NEL.

105 Clause 6.2.6(a) of the Rules.

106 Clauses 6.2.6 (b) and (c) of the Rules.

107 Clause 6.2.5(c) of the Rules.

Feature of the Regulatory Framework	Standard Control Services	Alternative Control Services
	arrangements for similar services 4) Any other relevant factor 5) Need for efficient tariff structures[107]	development of competition and how the control mechanism might influence this potential
Cost pass through arrangements	Set out in clause 6.6.1 of the Rules	Up to AER discretion whether to include cost pass through arrangements and the design of those arrangements.
Weighted average cost of capital	Must be developed in accordance with clause 6.5.2 of the Rules	Could differ from standard control services. Different returns would have to be justified by the different risk levels attached to the type of service.
Framework for determining efficient expenditure	Allowance must include expenditure required to achieve the capital and operating expenditure objectives set out in 6.5.6(a) and 6.5.7(a) of the Rules which include expected demand, complying with regulatory obligations, and maintaining quality, reliability and security of supply. AER must accept forecasts if it is satisfied that it meets the capital and operating expenditure criteria in clauses 6.5.6(c) and 6.5.7(c) of the Rules, having regard to the capital and operating expenditure factors in clauses 6.5.6(e) and 6.5.7(e) of the Rules.	No framework specified. The AER may use elements of the framework that applies to standard control services.
Consideration of the NEL Revenue and Pricing Principles	The AER must take these principles into account when exercising discretion in making a distribution determination.[108]	
Possible appeals process	Merits Review to the Australian Competition Tribunal	
Treatment of depreciation	Relevant provisions are set out in clause 6.5.5 of the Rules.	No provisions are specified. The AER may use elements of the provisions set out in clause 6.5.5 of the Rules.

108 Section 16(2)(a)(i) of the NEL.

The table highlights the possibility that the control mechanism regulating alternative control services may be less prescriptive compared to the building blocks requirements for standard control services. Stakeholders have raised concerns about this lack of prescription, with the NSSC questioning whether the control mechanism for alternative control services should be set out in the Rules rather than left to AER discretion.[109]

In our view, additional prescription is not required, as the regulatory framework requires the AER to adopt a form of control for alternative control services that would promote the recovery of efficient expenditure for mandated SMI. In determining the control mechanism and the revenue requirement for an alternative control service, the AER is required to take into account the NEL Revenue and Pricing Principles.[110]The AER is also required to regulate the cost recovery for smart metering infrastructure in a manner that is likely to contribute to the NEO. [111] Therefore, the AER would be required to determine a control mechanism and revenue requirement for smart metering services in a manner that:

- provides the DNSP with a reasonable opportunity to recover the efficient costs of providing the service;
- includes effective incentives to promote economic efficiency in the provision of the service; and
- ensures that the price for the service allows for a return commensurate with the regulatory and commercial risks involved in providing the service.

These same obligations are placed upon the AER irrespective of whether it classifies the mandated smart metering service as a standard control service or an alternative control service. Furthermore, the revenue that DNSPs are able to recover for both standard control services and alternative control services is determined through the distribution determination process, which provides DNSPs with the same avenue as standard control services to appeal AER decisions on the regulation of alternative control services (i.e. merits review by the Australian Competition Tribunal).[112]

As the AER would be required to specify the control mechanism in its Framework and Approach Paper for a distribution determination, there would not be any regulatory uncertainty for a DNSP as to how the mandated smart metering services would be regulated. Importantly, the Rules do not require the AER to apply less prescription in the terms of the control mechanism it applies to alternative control services, compared to standard control services. The Rules specify that the control mechanism for alternative control services may utilise elements of Part C of the Chapter 6 of the Rules

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109 See submissions on the Draft Statement of Approach from: Integral Energy, p. 2; EnergyAustralia, p. 10; NSSC, p. 18; Energex, p. 5.

110 Under Section 16(2)(a)(i) of the NEL, the AER must take into account the NEL Revenue and Pricing Principles when exercising discretion in making a distribution determination relating to direct control network services.

111 Section 16(1)(a) of the NEL.

112 Division 3A of Part 6 of the NEL.

with or without modification.[113] We also note that in the ACT, where metering services are classified as alternative control services, the AER has applied a building block approach which is almost identical to that applying to standard control services.

For these reasons, the current Rules for alternative control services would provide for the recovery of efficient costs through the distribution determination process, in the event that mandated smart metering services are classified as alternative control services. It is appropriate that the Rules continue to provide the AER with the flexibility to determine the appropriate form of regulation that should apply to the particular circumstances of each alternative control service.

If mandated smart metering services are to be classified as alternative control services, removing some of the AER's current discretion would not be a proportionate response, given the regulatory framework that currently governs the AER decision making process. Rather, we consider that there is a risk that removing some of the AER's current discretion could result in inefficient outcomes as it could prevent the AER from applying the most appropriate control mechanism to the specific circumstances of each alternative control service. In addition, maintaining the current arrangements would permit jurisdictional differences to continue to be reflected in the classification of services.

Draft Finding 16: The current distribution determination process will provide for the recovery of the efficient costs of mandated smart metering services which are classified as alternative control services, as the AER is required to have regard to the NEL Revenue and Pricing Principles and the NEO when determining the revenue requirement for alternative control services. Modifications to the Rules are not required.

5.2.2 Can the efficient costs of complying with Ministerial pilot determinations be recovered under the cost pass through process if the service is classified as an alternative control services?

There are three possibilities regarding how cost pass through events could be regulated for alternative control services. Firstly, the AER could determine to apply the existing cost pass through provisions in clause 6.6.1 of the Rules for standard control services in its control mechanism for alternative control service. Secondly, it could apply alternative cost pass through arrangements to alternative control services. Thirdly, it could decide not to apply any cost pass through arrangements to alternative control services. Therefore, in relation to the MCE's specific question regarding whether the costs of alternative control services can be recovered through a cost pass through mechanism if this was not anticipated in a distribution determination, the answer will depend upon the specific control mechanism the AER has applied to the mandated smart metering service.[114]

113 Clause 6.2.6(c) of the Rules

114 We note that the AER can apply various differing control mechanisms to different alternative control services.

If the AER has determined to apply the provisions in clause 6.6.1 of the Rules, then as discussed in Chapter 4, DNSPs would be able to recover their costs under a service standard event. If the AER has determined to apply other cost pass through arrangements to alternative control services, then it would depend upon how the AER has defined the range of permitted pass through events. Clearly, if the AER does not include any pass through arrangements in the alternative control mechanism, there would be no opportunity for DNSPs to recover the costs of complying with a Ministerial pilot determination within the regulatory control period.

As discussed in Chapter 4, where the cost pass through provisions in clause 6.6.1 of the Rules apply to alternative control services, the ability of DNSPs to apply for cost pass through would also depend on whether the mandated smart metering services are able to fall within a pre-existing classification (e.g. metering services) in the AER's distribution determination. Therefore, whether DNSPs are able to seek cost pass through for mandated smart metering services would depend on both the AER decisions on service classification and the arrangements for cost pass through for alternative control services.

As a result, there is a risk that if a Minister makes a pilot determination during a regulatory control period then the mandated pilot expenditure may not be able to be recovered through a cost pass through arrangement. The DNSP would have to wait until the next distribution determination to recover its costs, which may delay the timing of the pilot. However, this cost recovery risk does not exist for the current distribution determinations. With the exception of the ACT, metering services are classified as standard control services. The arrangements in ACT for metering services are very similar to the standard control services and would permit the DNSP to seek cost pass through for expenditure incurred as a result of a Ministerial determination.

However, a cost recovery risk could materialise in future regulatory control periods, as the AER has discretion over whether the cost pass through provisions would apply to mandated smart metering services which are classified as alternative control services. We consider that in practice, this cost recovery risk is small, as the AER is required to provide DNSPs with a reasonable opportunity to recover their efficient costs in setting the control mechanisms for alternative control services.[115] Also, given the amendments to the NEL which provide for the possibility of a Ministerial pilot determination, it is likely that the AER and/or DNSPs would anticipate such an occurrence within the forthcoming regulatory period. However, despite this limited risk, there is merit in amending the Rules to place an obligation on the AER to consider the pass through arrangements for mandated smart metering services which are classified as alternative control services, when making its distribution determinations.

Draft Finding 17: There is a possible risk that in the event that mandated smart metering services are classified as alternative control services and the Minister makes a pilot determination during a regulatory control period, that DNSPs may not be able to recover their costs. This may occur if the applicable control mechanism does not contain adequate pass through provisions. However, this is a small risk and

115 See the NEL Revenue and Pricing Principles

is only applicable to future regulatory periods, as there are already adequate cost pass through provisions in current distribution determinations. We advise that a minor amendment to the Rules is necessary to require the AER to consider the need for cost pass through arrangements for mandated pilot expenditure when making a distribution determination.

5.2.3 Associated Ancillary Services

As highlighted by stakeholders in their submissions to the Review, there could be the potential for DNSPs to provide a number of ancillary services using mandated SMI (for example remote load control services and data management services).[116] The possibility of such services will depend upon the active functionality of the smart meter. We understand that the NSSC has proposed that jurisdictional Ministers retain discretion as to the services and functionalities that DNSPs must provide in rolling out mandated smart meters. Therefore, there is the potential that not all of the possible functionalities of a mandated smart meter will be activated. [117] It is possible that service classification would differ across the range of services that are provided and that certain services may be deemed to be competitive and hence not regulated by the AER in accordance with the Chapter 6 Rules.

The development of such services will have implications for cost recovery for mandated SMI. The AER would need to consider how the expenditure for mandated SMI should be allocated across the various services in accordance with the cost allocation principles set out in Part F of the Chapter 6 of the Rules. At this stage, it is very difficult to give advice on whether the Rules would need to be amended to facilitate the recovery efficient costs under such circumstances. The nature of these services is unknown. It is also unclear whether the MCE will require the introduction of contestability in the provision of some or all 'smart metering services' and the framework for any such contestability is yet to be developed. It is likely that further Rules will be needed at such a time to facilitate contestability, and this would provide an opportunity to consider the implications for efficient cost recovery for mandated SMI expenditure.

Draft Finding 18: Further consideration of the impact of the classification of commercial services associated with mandated SMI expenditure is recommended once the nature of the services is better known and a decision on contestability in smart metering services has been made by the MCE.

5.3 Recommended changes to the Rules

Our assessment has identified a small risk that in the event that mandated smart metering services are classified as alternative control services and the Minister makes a pilot determination during a regulatory control period, a DNSP may not be able to

116 See submissions on the Draft Statement of Approach from: Origin Energy, p. 5; NSSC, pp. 2, 6, 7.

117 National Smart Meter Program Regulation Workstream, 2010, "Smart meter services"- Rules drafting, 5 May.

recover its costs during the regulatory control period if the AER's control mechanism does not contain adequate pass through provisions. This section sets out our recommended change to the Rules to address this risk and the reasons why this particular change is the most appropriate response, consistent with the decision making criteria for the Review.

5.3.1 Application of the cost pass through provisions to alternative control services

The Commission recommends that the Rules should be amended to require the AER to consider the need for adequate cost pass through arrangements for mandated smart metering services arising from a Ministerial pilot determination, when deciding upon the appropriate control mechanisms for alternative control services in a distribution determination.

Reasoning for our proposed changes

We consider that this additional obligation is a proportionate response to the identified cost recovery risk and is consistent with the existing Rules. Such an amendment maintains the discretion for the AER to develop the appropriate control mechanism for alternative control services and does not create an onerous regulatory burden on the AER. As noted above, in practice we consider that it is very likely the AER would anticipate the need for cost pass through arrangements and put in place appropriate arrangements. Our proposed amendment would remove any possibility that it would not.

An alternative would be to specify that the AER must ensure that the cost pass through provisions set out clause 6.6.1 of the Rules be applied to any mandated smart metering services which are classified as an alternative control service. We do not consider that such a change is justified. It is not proportionate to the materiality of the risk identified and would create inconsistency in the treatment of alternative control services in the Rules. It is not necessary to remove the flexibility for the AER to determine the appropriate control mechanism for mandated smart metering services which are classified as alternative control services, as the existing regulatory obligations on the AER would promote the recovery of efficient costs. There is also a risk that removing some of the AER's current discretion could be inefficient, as it could prevent the AER from applying the most appropriate control mechanism to the specific circumstances of a mandated smart metering service.

Question 4 Cost Recovery for mandated smart metering services which are classified as alternative control services

4.1 Is greater prescription required in the Rules to provide for the recovery of the efficient costs of mandated smart metering services, where these services are classified as an alternative control service?

6 Incentives under the current regulatory regime

This Chapter sets out the Commission's draft findings on whether the incentives under the current regulatory regime are appropriate for mandated SMI. In Chapter 2, we considered the impact of the incentives for capital and operating expenditure efficiencies where there is uncertainty around the efficient costs and benefits of a mandated smart meter roll-out, when a distribution determination is made. Changes to the Rules were recommended to provide the AER with additional flexibility to apply mechanisms during the distribution determination process to reduce the impact of uncertainty on the recovery of efficient costs. This Chapter outlines our assessment of whether the incentives in the EBSS are appropriate for a mandated smart meter roll-out, and whether the incentives in the Chapter 6 Rules are sufficient for the competitive purchase of meters and metering services and the management of technology risks.

Box 6.1: Summary of draft findings on incentives under the current regulatory regime

Assessment of the Rules

1. It is appropriate to apply the EBSS to the operational benefits of a mandated smart meter roll-out. However, the AER should retain its current discretion to determine whether the EBSS should be applied to expenditure associated with a mandated smart meter roll-out, where there is significant uncertainty in relation to that expenditure.

2. The incentives in the Rules are appropriate for the competitive purchase of meters and metering services under the distribution determination process, under the Commission's recommended changes to the Rules.

3. The incentives in the Rules are appropriate for the management of technology risks by DNSPs, as many of these risks will be addressed by the MCE and NSSC processes which will result in obligations on the DNSP. It is expected that the materiality of these risks are likely to be reduced prior to a mandated smart meter roll-out.

Proposed changes to the Rules

The Commission recommends that no changes to the Rules are required, other than those already outlined in Chapter 2.

6.1 Considerations in developing our draft advice

The incentives under the current regulatory regime will have implications as to whether the Rules promote effective decision making by DNSPs and encourage DNSPs to undertake mandated roll-outs and pilots in an efficient manner. In particular, the incentives on DNSPs will affect the level and nature of the costs and benefits of

mandated SMI, and whether the potential operational benefits of SMI are maximised for consumers.

There are three main costs associated with a mandated roll-out of SMI. These include: the costs of the smart meter; installation costs; and communications and data system costs. Installation costs will depend on the roll-out schedule, while communications and data system costs are fixed costs, which would also require ongoing maintenance expenditure and future replacement. The potential benefits of SMI include operational benefits and demand response benefits, with the avoided cost of meter reading one of the most significant operational benefits expected from SMI. We note that some of the benefits of mandated SMI would occur automatically (e.g. reduced meter reading costs), while other benefits (e.g. demand response benefits) would require a change in behaviour by the DNSP, other market participants and consumers. The majority of the costs of a mandated smart meter roll-out would be incurred in a relatively short timeframe in the initial years of a roll-out, while the benefits and cost savings associated with SMI would lag costs and accrue more slowly.[118] Further discussion on the costs and benefits of SMI is in **Appendix B**.

In considering the incentives on DNSPs under the current regulatory regime, we have focused our analysis on the costs and benefits of mandated smart meter roll-outs. As mandated smart meter pilots and trials would be temporary in nature, they are not expected to provide ongoing benefits to DNSPs or consumers. Further, as mandated pilots and trials would be by nature smaller in scope, the materiality of their costs would also be limited.

The MCE has stated that the cost efficiencies of mandated roll-outs should be promptly passed through to consumers.[119] Under the distribution determination process, operational efficiencies that are expected to accrue as a result of the roll-out would be reflected in the level of allowed revenues. As a result, these efficiencies would be promptly passed through, where they can be estimated with sufficient certainty. In addition, under the EBSS, DNSPs have an increased and constant incentive to make additional operational efficiencies over a regulatory control period, as they are allowed to retain a portion of these additional cost savings. This creates a trade off between how quickly operational cost savings are passed through to consumers and the total amount of efficiencies that are achieved. In considering the appropriateness of the incentives on DNSPs, the MCE has sought advice on whether the EBSS is appropriate for a mandated smart meter roll-out.

The MCE has also requested advice on whether the current incentives in the Rules are sufficient for DNSPs to maximise the competitive purchase of meters and metering services. In considering this issue, we have assessed the incentives under the current distribution determination process. We have also considered the potential impact on incentives for DNSPs where the costs and benefits of mandated SMI are uncertain at

118 However, we note that although the capital costs associated with a smart meter roll-out will be incurred relatively quickly, cost recovery via the regulatory process (i.e. the return on the capital invested and depreciation) occurs over the life of the assets, rather than during the roll-out period.

119 MCE, 2008, Statement of Policy Principles on smart meters, June, p. 1.

the time the AER makes its distribution determination. As discussed in Chapter 2, we have recommended a number of changes to the distribution determination process to reduce the impact of uncertainty on the recovery of efficient costs. In assessing whether the incentives in the Rules are sufficient to maximise the competitive purchase of meters and metering services, we have considered whether any additional changes to the Rules are required.

As SMI is a relatively new technology, we note that there is a degree of risk in undertaking large scale roll-outs of smart meters. Mismanagement of the potential risks of mandated roll-outs has the potential to affect the timing and cost of roll-outs, and the magnitude of the potential benefits of SMI. In considering whether there are appropriate incentives on DNSPs to manage technology risks, we have assessed the type of technology risks that DNSPs may face in undertaking a mandated roll-out and any arrangements outside of the Rules processes that may assist in minimising these risks. In our consideration of technology risks, the MCE has requested the Commission does not re-examine the WACC, as it is outside the scope of this Review.

6.2 Assessment of the current Rules

This section outlines our assessment of whether the incentives in the Chapter 6 Rules are appropriate for expenditure on mandated SMI.

6.2.1 Is an EBSS appropriate for a mandated smart meter roll-out?

Under clause 6.5.8 of the Rules, the AER is required to develop and publish an EBSS which provides for the "fair sharing" between DNSPs and consumers of the efficiency gains and losses derived from the difference between the actual operating expenditure of DNSPs and the forecast operating expenditure approved by the AER over a regulatory control period. The AER's current EBSS only relates to a DNSP's operating expenditure and applies solely to standard control services, unless otherwise specified in a distribution determination.[120] As the AER's current EBSS does not apply to capital expenditure, our assessment of the appropriateness of the EBSS has focused on its application to operational expenditure associated with mandated SMI. In recent distribution determination processes, the AER has allowed DNSPs to propose exclusions of specific expenditure from the EBSS in their regulatory proposals, which the AER is able to approve or reject in its distribution determination. The AER is also able to exclude specific expenditure from the EBSS.[121]

120 Under clause 6.5.8(b) of the Rules the AER may also develop an EBSS relating to capital expenditure and distribution losses.

121 See for example: AER, Final Decision, Efficiency Benefit Sharing Scheme for the ACT and NSW 2009 Distribution Determinations, February 2008, p. 23. We also note that under the current EBSS, cost pass through expenditure is exempt from the EBSS. As a result, where the costs of mandated SMI are passed through to consumers under clause 6.6.1 of the Rules, these costs would be automatically excluded under the current EBSS for the remainder of the regulatory control period. However, as discussed in Chapter 3, we recommend that the costs of mandated smart meter roll-out should not be subject to the current provisions in clause 6.6.1 of the Rules.

Under the EBSS customers do not receive the benefit of any efficiency gains as quickly as they would if the EBSS was not in place, but the scheme is intended to increase incentives for efficiency gains by the DNSP, resulting in customers receiving the benefits of a greater amount of efficiency gains eventually. Under the current EBSS, DNSPs would retain 30% of their efficiency gains for the length of the carry over period.[122]Table 6.1 below outlines the proportion of savings in recurring operating expenditure that a DNSP would retain under different retention periods where an EBSS is not applied. This table demonstrates that where an EBSS is not applied, the incentives on DNSPs to make operational efficiencies fall over the course of a regulatory control period. In contrast, the EBSS provides a continuous incentive on DNSPs to make efficiency savings, irrespective of the regulatory year in the regulatory control period in which the efficiency is made.

Table 6.1 Operating efficiency savings retained by DNSPs under different retention periods[123]

Retention period (years)	Recurring operating expenditure
2	13%
3	18%
4	24%
5	29%

We note that the MCE has stated that the benefits of mandated SMI should be passed through to consumers promptly. Where mandated SMI results in an automatic reduction in the operating costs, DNSPs would have an increased and constant incentive to make *additional* operational efficiencies over a regulatory control period. We consider that an EBSS is appropriate for a mandated smart meter roll-out as it would encourage DNSPs to reveal the efficient costs of meeting their mandated obligations. Improved information regarding the efficient costs of undertaking a mandated smart meter roll-out would allow the AER to consider these costs in making future distribution determinations, which would result in more cost savings being passed through to consumers over time.

A number of submissions to the Draft Statement of Approach questioned whether it is appropriate for the EBSS to apply to mandated SMI, due to the uncertainty around smart meter technology and the characteristics of a mandated roll-out.[124] As discussed

122 AER, 2008, Final Decision: Electricity distribution network service providers: Efficiency Benefit Sharing Scheme, June.

123 These calculations are based on a recurring saving of $1m per year. Hence, the share is calculated as the net present value of $1m over the number of years which the DNSP retains the savings before the price (or revenue) cap is adjusted, divided by the net present value of a permanent $1m reduction in prices.

124 See submissions on the Draft Statement of Approach from: Integral Energy, p. 3; the NSSC, p. 20; Origin Energy, p. 11.

in Chapter 2, we consider that it is appropriate for the AER to retain its current discretion in the Rules to exempt expenditure from the EBSS, as it preserves the ability of the AER to determine the most appropriate form of regulation that should apply to mandated smart metering services, given the level of uncertainty at the time it makes its distribution determination.

In addition, in practice it may be difficult for either a DNSP or the AER to separate out the costs of mandated SMI from the costs of other direct control services a DNSP provides.[125] For instance, the IT and communications equipment that is used to facilitate mandated SMI is likely to be also used to provide other direct control services. Also, while there may be benefits in exempting expenditure relating to the direct costs of mandated SMI (e.g. smart meters, required IT and communications equipment etc) from the EBSS, where mandated SMI reduces recurrent expenditure in other areas of a DNSP's operations (e.g. asset management costs may be reduced as DNSPs are able to obtain more frequent information regarding network use), it may be prudent to retain the EBSS for expenditure in these areas. Retaining the EBSS for expenditure which may be impacted by the implementation of mandated SMI would maintain incentives for a DNSP to maximise the potential benefits of mandated SMI across its operations.

Draft Finding 19: The EBSS is appropriate for a mandated smart meter roll-out. However, the AER should retain its current discretion to determine whether the EBSS should be applied to expenditure associated with a mandated smart meter roll-out, where there is significant uncertainty in relation to that expenditure.

6.2.2 Are the incentives in the Rules appropriate for the competitive purchase of meters and metering services?

Under the distribution determination process, the incentives for the competitive purchase of meters and metering services relate to the AER's assessment of a DNSP's forecast expenditure for meters and metering services under the capital and operating expenditure criteria. Under the capital and operating expenditure criteria, the AER must approve a DNSP's forecast expenditure for smart meters and smart metering services if it is satisfied that it reasonably reflects the efficient and prudent costs of meeting its obligations under a Ministerial smart metering determination.[126] As discussed in Chapter 2, where a DNSP contracts services, the AER is also required to consider whether the services have been contracted under arm's length terms.[127] Where the AER is not satisfied that the DNSP's forecast expenditure reasonably reflects the capital and operating expenditure criteria, it must not accept those forecasts and must substitute its own assessment of the DNSP's required forecast capital and operating expenditure, which reflects the capital and operating expenditure criteria.[128] We consider that the risk of the AER not accepting a DNSP's forecast expenditure and

125 AER, Submission on the Draft Statement of Approach, pp. 1-2.

126 Clauses 6.5.6(c) and 6.5.7(c) of the Rules.

127 Clauses 6.5.6(e)(9) and 6.5.7(e)(9) of the Rules.

128 See clauses 6.12.1(3)(ii) and 6.12.1(4)(ii) of the Rules.

substituting its own forecasts, provides appropriate incentives for the competitive purchase of meters and metering services by DNSPs.

We note that under the Victorian cost recovery arrangements for the AMI roll-out, the AER was required to consider whether a DNSP had undertaken a competitive tendering process in determining whether a DNSP's proposed expenditure was prudent.[129]However, it is considered that a change to the Chapter 6 Rules is not required to explicitly require the AER to consider whether mandated meters and metering services were competitively tendered, as the capital and operating expenditure criteria provide sufficient incentives for the competitive purchase of meters and metering services.

As discussed in Chapter 2, where there is uncertainty regarding the efficient costs of mandated SMI at the time the AER makes its distribution determination, the AER may approve higher than efficient expenditure as the AER is required to provide a reasonable opportunity for DNSPs to recover at least their efficient costs.[130] However, we consider that the changes we recommended to the distribution determination process in Chapter 2 will limit the impact of uncertainty on the recovery of efficient costs. Therefore, we advise that where there is uncertainty regarding the efficient costs of mandated SMI, the distribution determination process has the potential to provide appropriate incentives for the competitive purchase of meters and metering services under our recommended changes to the Rules.

Draft Finding 20: The incentives in the Rules are appropriate for the competitive purchase of meters and metering services under the distribution determination process, under the Commission's recommended changes to the Rules.

6.2.3 Are the incentives in the Rules appropriate for the management of technology risks by DNSPs?

We consider that some of the technology risks that may arise in relation to mandated SMI include:

- Premature failure of smart meters or associated communications technology following installation;
- Inadequate testing of SMI prior to a mandated smart meter roll-out;
- Inability by DNSPs to source smart meters which meet the required minimum functionality specifications;
- Asset stranding caused by technological obsolescence; and

129 AER, 2009, Final Determination: Victorian advanced metering infrastructure review: 2009-11 AMI budget and charges application, October, p.3.

130 See Section 7A(2) of the NEL.

- Lack of interoperability in the SMI technology adopted by mandated DNSPs, resulting in difficulties in the competitive provision of smart metering services following the mandate period.

A number of stakeholders commented on these technology risks in their submissions to the Draft Statement of Approach, with Origin Energy suggesting that a key technology risk would relate to the communications technology that is adopted by DNSPs, as it may limit contestability in SMI provision following the mandate period. The Energy Networks Association also noted that new technology may lead to shorter lifecycles due to technological obsolescence and a greater risk of long term asset stranding.[131]

As highlighted by the Victorian Auditor General, technology risks in a complex project such as the roll-out of smart meters can result in cost increases if the development or integration of technology proves more challenging than expected and can also delay the realisation of benefits.[132] Further, where a DNSP has determined not to contract out its obligations, the costs of undertaking a mandated roll-out would involve a number of large one-off capital costs (e.g. smart meters, IT equipment etc) rather than recurrent expenditure. This would mean that the AER would have a limited ability to use the actual expenditure spent by a DNSP to reduce the allowed revenue provided to a DNSP in future regulatory control periods. However, the AER would be able to use this information when considering proposals for SMI expenditure by other DNSPs and the potential risks associated with this expenditure. In particular, we note that the communications technology which is adopted by DNSPs is likely to have a significant bearing on the potential risks and costs of a roll-out. [133]

The MCE has agreed to undertake coordinated pilots and business specific case studies in a number of jurisdictions to inform Ministers' decisions as to whether mandated smart meter roll-outs should proceed and to assist in the development of roll-out implementation plans to maximise benefits. The MCE has stated that these pilots and business case studies will allow all aspects of smart meters and associated systems to be tested, including the performance of technologies and the interoperability of technologies.[134] We also note that a number of DNSPs are undertaking pilots and trials of SMI independently of the MCE processes. As highlighted by the Victorian Auditor-General, technology trials form a significant role in reducing the potential risks of a mandated smart meter roll-out and comprehensive trials are required to ensure that DNSPs are able to undertake roll-outs within the required timeframes and costs envisaged by jurisdictional Ministers. [135]

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131 See submissions on the Draft Statement of Approach from: AGL, pp. 1-2; Origin Energy, pp. 5-6, 12; Energy Networks Association, p. 2; Energex, p.7.

132 Auditor General of Victoria, 2009, 'Towards a 'smart grid' – the roll-out of Advanced Metering Infrastructure', November, p. 34.

133 Auditor General of Victoria, 2009, 'Towards a 'smart grid' – the roll-out of Advanced Metering Infrastructure', November, p. 37.

134 MCE, 2008, Smart Meter Decision Paper, 13 June, pp. 3-4.

135 Auditor General of Victoria, 2009, 'Towards a 'smart grid' – the roll-out of Advanced Metering Infrastructure', November, pp. 37, 40

The NSSC is also undertaking work for the MCE to develop national minimum functionality specifications for smart meters. We understand it is intended that these minimum functionality specifications would be included in the Rules and Ministerial determinations would require DNSPs to install smart meters which meet these minimum functionality specifications. Therefore, compliance with these minimum functionality specifications would be enforced by the AER. We note that the minimum functionality specifications would describe the minimum performance requirements for the SMI and the minimum service performance requirements that mandated DNSPs would be required to comply with.[136] This level of prescription regarding the minimum functionality of mandated smart meters, infrastructure performance levels, and participant service levels is likely to limit the technology risks associated with undertaking a mandated roll-out for DNSPs.

DNSPs would still be able to install mandated SMI which goes beyond the minimum functionality specifications which are included in the Rules, although the expenditure for this mandated SMI would be subject to the approval of the AER. In developing these minimum functionality specifications, we note that the NSSC is conducting a vendors review, to test its proposed minimum functionality specifications and assess the costs and benefits of smart meters which meet these specifications.[137]The MCE has also requested the NSSC provide advice on the most appropriate framework to manage the risk of insufficient interoperability between different meters, communications infrastructure and metering management systems in the Australian market.[138] We also note that issues regarding the use of radiofrequency spectrum for smart grids is currently being considered by the Australian Communications and Media Authority.[139]

The MCE's pilots and trials of mandated SMI in addition to the development of national minimum functionality specifications for smart meters is likely to reduce the materiality of the technology risks of SMI, prior to a mandated smart meter roll-out. These arrangements will also provide the AER with information that it can use to assess technology proposals by DNSPs, when considering mandated SMI expenditure during the distribution determination process. This is likely to reduce the level of uncertainty around the efficient costs of a mandated smart meter roll-out, which will provide for more efficient outcomes and support the realisation of the potential benefits of mandated SMI for consumers.

We also note that when a DNSP seeks cost recovery from the AER for mandated SMI expenditure, under the distribution determination process the AER is required to assess the efficiency and prudency of its forecast expenditure under the capital and operating expenditure criteria. It is considered that this assessment would require

136 Further information on the NSSC's proposed minimum functionality specifications can be found at: http://share.nemmco.com.au/smartmetering/Pages/BRWG.aspx

137 See: National Smart Metering Program Business Requirements Working Group, 2010, Smart Metering Infrastructure Vendor Request for Information, 31 May.

138 MCE, 2008, Smart Meter Decision Paper, 13 June, p. 6.

139 ACMA, 2010, Five-year Spectrum Outlook for 2010-2014, March.

DNSPs to meet their mandated obligations and the minimum functionality specifications in an efficient and prudent manner.

Draft Finding 21: The incentives in the Rules are appropriate for the management of technology risks by DNSPs, as many of these risks will be addressed by the MCE and NSSC processes which would result in obligations on the DNSP. It is expected that the materiality of these risks are likely to be reduced prior to a mandated smart meter roll-out.

Question 5 Incentives under the current regulatory regime

5.1 Are any changes to the Rules required to ensure the incentives under the current regulatory regime are appropriate for mandated SMI?

7 Tariff issues associated with mandated SMI

In the preceding chapters, we have assessed how DNSPs would be permitted to recover the costs of mandated SMI, either at the start of the regulatory control period through the distribution determination process or during the regulatory control period through a cost pass through adjustment. The MCE has also asked for advice on how the costs of mandated SMI should be translated in customer tariffs. In particular, the MCE has asked us to consider whether the Rules would provide for the efficient allocation of the costs of a mandated roll-out and if it is appropriate to unbundle tariffs for smart metering services from DUOS charges. We have also been asked to provide advice on what mechanisms are available to smooth the tariff impact of a smart meter roll-out decision. This Chapter addresses these issues and assesses whether the existing Rules would promote efficient outcomes consistent with the MCE's policy objectives.

Box 7.1: Summary of draft findings on tariff issues associated with mandated SMI

Assessment of the Rules

1. The current Rules are based on the 'causer pays' principle. This principle may not be applicable to mandated SMI costs and therefore may not provide for the efficient allocation of costs. Instead, the 'beneficiary pays' principle may be more appropriate. This would result in the bulk of mandated SMI costs being allocated to the individual customer (as the main beneficiary) and the remaining proportion being allocated to the general customer base through the DUOS charge (as some types of network operational benefits would be common to all network customers). However, consideration of the administrative costs involved in applying the beneficiary pays principle would be needed, as well as the difficulty of separately identifying SMI costs.

2. As the costs for SMI are fixed and do not vary with consumption, charges for a mandated roll-out should be recovered through a fixed charge per a customer, which can vary across customers. However, it is not clear whether the Rules would promote this outcome.

3. In principle, there are clear net economic benefits from unbundling the tariffs for a mandated smart meter roll-out from DUOS charges. Such unbundling should occur at the start of a roll-out, because it would provide transparency regarding the costs of a roll-out and facilitate greater regulatory scrutiny and provide useful information for potential competitive entrants if contestability occurs.

4. Unbundling may not occur under the current Rules if mandated smart metering services are classified as standard control services. Under the current Rules, unbundling would only occur if mandated smart metering services are classified as alternative control services by the AER.

5. However, at this stage it is difficult to be prescriptive on how to achieve unbundling of smart metering services. The MCE has yet to make a decision on future contestability and there is uncertainty on the range of services that could arose from SMI. Therefore, any Rules on unbundling can only be based on high level principles, with the decision on whether smart metering services should be unbundled and the scope of services to unbundle made by the AER at each distribution determination.

6. Based on the figures for the AMI roll-out in Victoria, we estimate that the initial price impact of a mandated smart meter roll-out would be significant. Given this and the potential benefits that may arise from tariff smoothing, the AER should consider the potential tariff impacts on customers which may be caused by paying for a SMI roll-out before the majority of benefits are realised.

7. Under the current Rules, DNSPs would be able to recover the stranded costs of existing accumulation meters through accelerated depreciation. This could significantly increase the initial tariff impact of a mandated roll-out on consumers.

8. The AER currently has the ability to smooth the tariff impact of a mandated roll-out *within* a regulatory control period. However, under the current Rules the AER does not have the ability to require a DNSP to modify its proposed depreciation schedules, to smooth the tariff impact of a mandated roll-out *between* regulatory control periods.

Proposed Amendments to the Rules

To address the risk that the Rules may not promote the efficient allocation of the costs of a mandated smart meter roll-out, and to provide for the unbundling of the costs of a mandated roll-out from DUOS charges, the Rules should be amended to:

- Provide greater prescription regarding the setting of tariffs for smart meter metering services, by inserting an set of 'SMI pricing principles' into the Rules;

- Require the AER to make its decision on whether smart metering services should be unbundled from DUOS charges (and whether this should be done as a standard control service or as an alternative control service) in its Framework and Approach Paper during the distribution determination process. The AER would be required to make this decision after taking into account the SMI pricing principles; and

- Require DNSPs to take into account the SMI pricing principles when proposing tariffs for smart meter services. The AER would be provided with the ability to require a DNSP to amend its proposed tariffs if it considers that the DNSP's proposal is not consistent with the SMI pricing

principles.

To smooth the tariff impact of a mandated smart meter roll-out on consumers, the Rules should be amended to:

- Prevent DNSPs from recovering the stranded costs of existing accumulation meters through accelerated depreciation following a mandated smart meter roll-out. Instead, DNSPs would be required to continue to recover the costs of these meters through DUOS charges based on their current asset lives;
- Require the AER to have regard to the need to minimise the initial tariff impact of a mandated smart meter roll-out, when determining the appropriate X factor for the forthcoming regulatory control period; and
- Provide the AER with the ability to modify a DNSP's proposed depreciation schedule for smart metering assets in order to smooth the tariff impact of a mandated roll-out. AER can only modify depreciation schedules if it considers that there would positive economic benefits from doing so.

7.1 Considerations in developing our draft advice

The significant scale of a mandated smart meter roll-out has the potential to have an extensive impact on customer tariffs. This impact would be the most substantial in the initial years of a roll-out, given the difference in the profile of the costs of a roll-out, which occur upfront, and the benefits, which materialise over a longer timeframe as meters are installed.

In regards to the AMI roll-out in Victoria, which is subject to a separate cost recovery mechanism, the AER approved customer charges for the roll-out ranging from $69 to $134 in 2010 and $89 to $137 in 2011 in its final determination for the first regulatory period of the roll-out.[140] Importantly, these charges included costs associated with the accelerated depreciation of the accumulation meters which are being replaced as a result of the roll-out. Given the potential for a mandated roll-out to have a significant impact on customer tariffs, the MCE has asked for advice regarding how the costs of mandated SMI would be translated into customers tariffs.

The MCE has requested advice in regards to three main areas:

- Cost allocation: Whether the Rules would provide for the efficient allocation of the costs of a mandated smart meter roll-out across different customers;
- Tariff smoothing: Whether the Chapter 6 Rules require modification to allow the tariff impact of the costs of a mandated roll-out on customers to be smoothed. In

140 AER, 2009, 'Final Determination: Victorian advanced metering infrastructure review: 2009-11 AMI budget and charges applications', October.

particular, the MCE has requested advice on whether depreciation schedules could be used to achieve tariff smoothing; and

- Unbundling: Whether it is appropriate to unbundle the costs of mandated smart metering services from DUOS charges.

We have focused our consideration of these issues in regards to a mandated smart meter roll-out. Expenditure for a mandated smart meter pilot is not likely to have a material effect on network charges and would be recovered through the relevant service charge for which the pilot is classified. Our assessment of these issues is common to both standard control services and alternative control services, as Part I of the Chapter 6 Rules applies to all direct control services (except for those Rules which are clearly confined to standard control services).[141]

We have approached each issue by first considering what would be the most efficient outcome, consistent with the MCE's policy objectives, and have then assessed whether the current Rules would deliver such an outcome. We note that there are clear interactions across these three areas. For example, the efficient allocation of SMI costs has implications on whether unbundling is considered appropriate. In considering these issues we have taken these dependencies into account to develop a coherent set of recommendations across all three issues.

In regards to the adequacy of the current Rules to provide for the efficient allocation of costs, we note that the Rules do not contain a prescribed cost allocation methodology. Instead, there are pricing principles which promote efficient price setting, with the responsibility for tariff setting left to the DNSP with oversight by the AER. [142]As a result, the process for setting distribution tariffs is very similar to the propose-respond model of the distribution determination framework. Each year, the DNSP submits a price proposal which sets out its tariff classes and proposed tariffs. The AER must approve the proposal if it is satisfied that it complies with the relevant Rules, including the pricing principles.

Generally speaking, under the pricing principles, customers with similar characteristics in relation to electricity (e.g. usage and connection) must be assigned to the same tariff class, although there must be separate tariff classes for standard control services and alternative control services.[143] The Rules explicitly provide that a basis for assigning customers to a tariff class may be the installation at the customer's premises of remotely-read interval metering (or other similar metering technology), where that has been installed as a result of a "regulatory obligation or requirement".[144]

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141 Clause 6.18.1 of the Rules

142 See clause 6.18.5 of the Rules

143 Clauses 6.18.3(c) and (d) and 6.18.4(1), (2) of the Rules.

144 Clause 6.18.4(a)(1)(iii) of the Rules. The revenue that is recovered from any such tariff class is required to be between the avoidable cost of not serving the customers in that tariff class and the stand alone cost of serving those customers. In addition, the tariff must take into account the long run marginal cost for the relevant service and must be determined having regard to whether the relevant customers are able or likely to respond to price signals. See Clause 6.18.5.

We note that in implementing the current arrangements for tariff setting, the MCE has favoured this principles based approach, instead of a prescriptive cost allocation methodology, as it ensures that tariffs are set in an efficient manner while allowing for differing local operating conditions across the DNSPs to be considered.[145] A key aspect in considering our advice to the MCE is whether the current arrangements would continue to promote efficiency or whether greater prescription is required to accommodate the costs of mandated SMI. As set out in our decision making criteria, any recommended deviation in the treatment of pricing across different categories of network costs would need to be justified as being in the long term interest of consumers.

A key consideration in assessing efficient tariff outcomes is the prospect of competition in the services that may arise from mandated SMI. The MCE has stated that it remains open to the introduction of contestable smart metering services beyond the mandated exclusivity period, as technology and retail competition matures to support this, and has called for regulatory and operational arrangements in the national framework to allow for this future flexibility.[146] The range of potential services the potential to encompass many products not just the meter installation, including remote connect/disconnect services; remote load control services; smart metering data services; and supply capacity limiting services. Such services could be within the Rules definition of smart metering services[147] or may be a commercial service outside the Rules (e.g., aggregated demand control services).Therefore, our advice on the appropriate tariff framework for the recovery of the costs of a mandated roll-out must not create any barriers to the potential for effective competition in future smart metering services and any additional commercial services which may arise as a result of the roll-out

A consideration in assessing the appropriate tariffs for mandated smart metering services is the possibility that the scope of a mandated roll-out may be limited to a sub-group of the general customer base. Therefore, we have assessed whether customers should contribute to the roll-out costs, if they have not received a smart meter.

The potential economic benefits of a smart meter roll-out can be driven by facilitating changes in a consumer's expected consumption behaviour, by providing customers with more information on the costs of their electricity consumption. This chance in behaviour could be achieved through a reduction in overall energy consumption or a shift in energy demand from peak times to off-peak times. In our Draft Statement of Approach, we noted that the realisation of these demand side benefits would depend on the adoption of time of use (TOU) tariffs and/or critical peak pricing and that we intended to consider the incentives on both the network businesses and retailers to implement such tariff arrangements. In response, stakeholders that these

145 MCE SCO, 2007, Changes to the National Electricity Rules to establish a national regulatory framework for the economic regulation of electricity distribution, Explanatory Material, April, p.30

146 MCE, 2008, Smart Meter Decision Paper, 13 June, p. 7

147 We note that the NSSC is currently considering the appropriate definition for 'smart metering services', and the MCE's intention is this term would defined in the Rules

considerations were out of scope of the MCE's ToR, as the MCE has not requested advice on how tariffs should facilitate demand side benefits.[148]

The provision of cost reflective signals to consumers is crucial for the benefits of a mandated smart meter roll-out to be fully captured and we remain of the view that the effectiveness of the current Rules to achieve such signals should be considered. However, we agree that the MCE has not requested advice on this matter. The issue is more appropriately addressed, therefore, as part of the Commission's planned work to assess how the Rules can better support efficient consumption decisions in the presence of smart grid technology (including smart meters). This work was foreshadowed in our report on the Review of Demand Side Participation, submitted to the MCE in December 2009, and is anticipated to commence shortly.

7.2 Assessment of the current Rules

This section outlines our assessment of the adequacy of current Rules in regards to: the efficient allocation of the costs of a mandated roll-out; the unbundling of mandated smart metering services from DUOS charges; and the mechanisms available to smooth of the tariff impact of a mandated roll-out.

7.2.1 Efficient allocation of costs

The costs associated with mandated SMI can be divided into five broad categories:

1. Unit cost of meters;
2. Installation costs;
3. IT systems/back office support;
4. On-going operating costs (primarily data communication costs); and
5. The stranded costs of replacing existing accumulation meters.

The MCE has requested advice on whether the current Rules provide for the efficient allocation of these costs. We consider that there are two aspects which need to be assessed. Firstly, how should the costs be apportioned between the individual residential customer which has a smart meter and the total residential customer base of the DNSP; and secondly, should costs be recovered from customers via a fixed charge or a variable charge and should this charge should be the same for all customers.

Network costs can either be allocated directly to a defined individual consumer (or group of customers) through a separate charge or allocated across all network customers through a common use of system charge. In order to promote allocative

148 See submissions on the Draft Statement of Approach from: Energy Australia, NSSC.

efficiency[149], network charges should generally be set on a 'causer pays' basis where possible. This means that where costs are incurred following a direct request by (or agreement with) a particular customer or group of customers, customer(s) should be required to pay the relevant costs of that service. Where prices equal the marginal or incremental costs of a customer's decision, customers will tend to make efficient decisions, as customers will have an incentives to use services up to the point where their incremental benefits from using the service equal the incremental costs of its provision.

The existing distribution pricing Rules are based on a high level application of this causer pays principle. It is questionable as to whether this principle is relevant to the allocation of costs for a mandated smart meter roll-out, as a roll-out would occur as a result of a Ministerial determination rather than as a result of a customer request or by customer agreement. For this reason, the causer pays principle may not be appropriate in determining how best to allocate the costs of a mandated roll-out. A possible alternative principle to apply in allocating roll-out costs would be the 'beneficiary pays' principle. Under this principle, where an investment provides a benefit to others, those who receive the benefit should pay for the cost of providing that investment.

This would result in allocating roll-out costs to customers in relation to where the benefits of the SMI are captured. Most of the benefits[150] of a roll-out would be captured by individual customers with an installed and functioning smart meter. Such customers would benefit directly through the additional demand response functionality provided by the smart meter and also from a share of the network operational costs savings that the SMI would provide. However, the SMI would also provide network operational benefits that accrue to network users more generally rather than solely to those customers which have a smart meter. These more general cost savings could include, for example, deferral of augmentation investment costs or improved network management. Therefore, under the beneficiary pays principle, the efficient allocation of the costs of a mandated roll-out would be result in the bulk of the costs being allocated to individual customers with smart meters, and a proportion of costs being allocated across the general customer base.

The application of the beneficiary pays principle to the allocation of roll-out costs is likely to provide for a more efficient allocation of costs than the causer pays principle. This would occur as the beneficiary pays principle recognises that all customers would receive a share of the network operational costs savings that the SMI would provide, irrespective of whether that customer has a smart meter. It is likely that not all residential customers would have a smart meter, particularly in the initial years of the roll-out. In addition, allocating the bulk of the costs to those customers with a smart

149 Allocative efficiency is a dimension of economic efficiency and describes the benefits associated with linking costs to prices such that appropriate provision and use of services occurs. For example, if the price of a particular service is higher than the cost of providing the service, then, all other things being equal, there is likely to be higher than efficient provision and lower than efficient use of that particular service. Allocative efficiency benefits can therefore accrue by linking prices to incremental costs.

150 See Appendix B on detailed information on the costs and benefits from SMI

meter would encourage those customers to maximise the potential benefits from having the smart meter. [151]

Consistent with the efficient allocation of costs, we consider that it would be inappropriate for individual smart metering charges to be levied on customers before a customer has an installed and functioning smart meter. Without an operational smart meter, customers would be unable to capture the potential benefits of the meter and therefore should not be required to make a prior contribution to this share of the costs. We also consider this to be a more equitable outcome.

There are a couple of practical issues with applying the beneficiary pays principle. Some costs associated with a mandated roll-out may be clearly identified and separated out, while other costs (for example the IT system costs) may not be. Where there is no clear line between the mandated SMI expenditure and other network expenditure, unbundling and allocating such costs would be difficult.

Also, as discussed in Chapter 2, there maybe some uncertainty regarding the value of network costs savings which are expected during a roll-out. It would be very difficult to directly attribute such network operational cost savings to individual customers and therefore it would be a complex task to correctly determine the proportion of costs between an individual customer charge and DUOS charges, based the relative value of benefits. In addition, these proportions would change over time as more meters are installed and different benefits from the roll-out start to materialise. Ultimately, a degree of judgment would be required in implementing this approach. Under the current Rules, network tariffs must be determined having regard to the transaction costs associated with the tariff and this principle should continue to be applied in determining tariffs for a mandated smart meter roll-out.

Draft Finding 22: The current Rules are based on the 'causer pays' principle. This principle may not be applicable to mandated SMI costs and therefore may not provide for the efficient allocation of costs. Instead, the 'beneficiary pays' principle may be more appropriate. This would result in the bulk of mandated SMI costs being allocated to the individual customer (as the main beneficiary), and the remaining proportion being allocated to the general customer base through the DUOS charge, as some types of network operational benefits would be common to all network customers. However, consideration of the administrative costs involved in applying the beneficiary pays principle would be needed, as well as the difficulty of separately identifying SMI costs.

As the costs of a mandated roll-out would involve fixed costs that would not vary with consumption, this suggests that on efficiency grounds the costs associated with a roll-out should be recovered as a fixed charge, rather than a per kWh charge. Whether this should be a standardised charge common to all customers with a smart meter would depend on the degree to which the costs and benefits of the roll-out can be attributed to a specific group of customers. For example, installation costs or network deferral benefits may vary by location. Therefore, a standardised charge per a customer would

151 We recognise that capturing of such benefits may depend upon other arrangements (i.e. TOU pricing)

not necessarily result in the most efficient allocation of costs. However, a standardised charge may be most practical way to allocate costs, depending on how difficult it is to allocate costs by location.

Draft Finding 23: As the costs of a mandated roll-out would involve fixed costs that would not vary with consumption, the costs of a roll-out should be recovered through a fixed charge per a customer. This charge should not necessarily be in the form of a standardised charge per a customer and could vary by location, depending on whether the costs and benefits of the roll-out can be attributed to a specific group of customers.

Under the Rules, tariff setting is the responsibility of the DNSP, with oversight provided by the AER. As noted above, the basis on which costs are allocated to tariff classes and tariff elements would be determined by the DNSP in accordance with the pricing principles in clause 6.18.5 of the Rules. [152]These principles contain general efficiency criteria based on the 'causer pays' approach and reflect good regulatory practice. The AER can only seek to amend the proposed tariffs if it considers that the tariffs do not comply with the pricing principles.[153]

As these principles are set at a high level, a range of possible tariffs, between the stand alone cost and the avoidable cost of the roll-out, would comply with the Rules and each DNSP has the discretion to determine which of these possible tariffs should apply. It is possible that this arrangement would not result in the efficient allocation of the costs of a roll-out. As discussed above, we consider that an efficient allocation of costs would result in a proportion of costs being recovered through the common DUOS charge. It is uncertain whether the Rules would provide for this outcome. It is also unclear as to whether the Rules would promote a fixed charge that could vary by location.[154]

Therefore, further prescription for the tariffs for a mandated roll-out may be warranted to provide for the efficient allocation of costs. However, we note that further prescription would be out of step with the general balance between principles and prescription reflected in the current Rules. Whether the Rules should be amended to better promote the beneficiary pays principle would also depend on whether the costs of a mandated roll-out should be unbundled from DUOS charges, which is discussed in the following section.

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152 The revenue expected to be recovered from any such tariff class is required to be between the avoidable cost of not serving the customers in that tariff class and the stand alone cost of serving those customers under clause .6.18.5(a) of the Rules. In addition, the tariff must take into account the long run marginal cost for the relevant service and must be determined having regard to whether the relevant customers are able or likely to respond to price signals under clauses 6.18.5(b)(1) and (2)(ii) of the Rules. Tariffs must also be determined having regarded to the associated transaction costs and whether customers are able or likely to respond to price signals. In regards to the recovery of fixed costs, the DNSP must adjust its tariffs with minimum distortion to efficient patterns of consumption.

153 However, there is no past example of the AER doing so.

154 The principle embodied in clause 6.1.8.5 (c) is a reference to Ramsey Pricing, which states that fixed costs should be recovered from those with lowest elasticity of demand, as this results in the least deviation from efficient consumption levels

Draft Finding 24: The current Rules may not provide for the efficient allocation of the costs of a mandated roll-out, under the beneficiary pays principle. It is also unclear whether the Rules would result in a fixed charge that could vary by location.

7.2.2 Unbundling of smart metering tariffs

The MCE has requested advice on whether the costs of a mandated roll-out should be unbundled from DUOS charges. In principle, we consider that the costs of a mandated roll-out should be separated from DUOS charges. We consider that the following four benefits from unbundling would outweigh any additional administrative costs for DNSPs:

- Promotion of future contestability in smart metering services;
- Facilitation of competition in the commercial services associated with SMI (e.g. aggregated demand services)
- Transparency for stakeholders, the AER and customers; and
- Potential to encourage consumers to maximise the possible benefits of smart meters.

A key reason for establishing a separate charge (or charges) for mandated smart metering services is to support the transition to future competition in these services. We note that this occurred in relation to the AMI roll-out in Victoria, where separate smart metering charges were introduced following a decision to progressively replace accumulation meters with interval meters. The MCE has stated that it remains open to the further expansion of contestable "metering services" beyond the mandated exclusivity period.[155] Given the level of uncertainty concerning the future development of commercial services associated with SMI, it would be prudent to allow for flexibility in regulatory arrangements to avoid the creation of barriers to the operation of natural commercial and competitive processes. We consider that the separation of charges for mandated smart metering services would assist in providing such flexibility and reducing potential barriers.

As well as fostering future contestability, we consider that unbundling would also provide other benefits, such as increased transparency regarding the costs of a mandated roll-out. In some circumstances it may be difficult to specify a clear boundary between mandated smart metering services and other associated commercial services that DNSPs may develop using mandated SMI, especially given the role smart meters would play in facilitating the introduction of smart grids. Therefore, unbundling may improve regulatory scrutiny of the services being provided at the interface between regulated and competitive activities.

Another benefit of unbundling tariffs for mandated smart metering services is that it may encourage customers to maximise the potential benefits of smart meters. The

155 MCE, 2008, Smart Meter Decision Paper, 13 June, p. 7.

realisation of many of the potential benefits of SMI for consumers depends on consumer action. Making SMI costs transparent to consumers would improve the likelihood of the realisation of benefits, as it would increase customer awareness of the roll-out and stimulate interest in Time of Use tariffs.

We recognise that further policy initiatives may be needed to support the realisation of customer benefits and that retailers would determine whether the unbundled smart meter charge would be displayed on a customer's bill. However, we consider that our advice to the MCE should not create any additional barriers to customers maximising the potential benefits of a mandated roll-out. We also consider that the current absence of clear pricing signals to the end use customers is not a sufficient reason not to advocate for the unbundling of mandated smart metering services. As noted above, we also intend to examine the wider issue of how best to facilitate pricing signals as part of our work on smart grid technology.

Submissions from retailers on the Draft Statement of Approach argued for unbundling. Origin strongly supports the unbundling of smart metering charges from DUOS as it provides clarity for consumers and a benchmark for third parties. [156]TRUenergy noted that competition in the provision of smart metering services requires the unbundling of smart metering services from DUOS charges.[157] In its submission to the Draft Statement of Approach, AGL preferred smart meter services to be classified as alternative control services as they are distinct from network services and are subject to future contestability. AGL also submitted that charges for smart meters should be ring fenced from DUOS, and the charges for meter and service provision should be separated as these are currently two contestable markets. AGL considers this would facilitate contestability by providing a transparent disclosure of cost and charges for smart meters and services. [158]

However, we also note that unbundling may lead to increased costs for DNSPs. Energex noted that the unbundling of metering charges from DUOS would require significant changes to its systems including the identification and separation of variable and fixed charges, tariffs, and associated pricing processes. [159]We note these comments but consider that such administrative costs are unlikely to be material in relation to the value of the benefits discussed above.[160]

For these reasons, we advise that metering services, including smart metering services, should be unbundled from DUOS charges. We also advise that in principle it would be better to establish unbundled charges from the start of the roll-out and not just before the start of contestability, as there are wider benefits to unbundling beyond the promotion of competition following the mandated exclusivity period. Unbundling at

156 Origin, Submission on the Draft Statement of Approach, p.

157 TRUenergy, Submission on the Draft Statement of Approach, p.

158 AGL, Submission on the Draft Statement of Approach, p.

159 Energex, Submission on the Draft Statement of Approach, p.

160 We note that the Victorian Order in Council for the AMI roll-out required the unbundling of roll-out costs from DUOS and that the cost to do so was not raised as a significant cost in those cost recovery determinations.

the start of the roll-out would require DNSPs to establish their accounting practices early on and would provide retailers and other potential entrants with valuable information to develop business cases to enter the market in smart metering services following the exclusivity period.

Before assessing whether the Rules would promote the unbundling of smart metering services, there is a need to consider what assets or services would be included within the scope of the 'metering service' that is to be subject to a separate charge. In its submission, Origin suggested there should be a separate smart meter charge and a separate data charge.[161]We note that the MCE has sought the assistance of the NSSC in developing recommendations on a definition of smart metering services for inclusion within the Rules, consistent with the minimum functionality requirements that are established for mandated smart meters. This definition would be used as the basis for determining the unbundled charges, but further consideration is needed on exactly what SMI costs would be included in such charge.

As discussed above, we consider that the beneficiary pays principle should be used to determine the allocation of costs between mandated SMI charges and the general DUOS charge, but noted there may be practical difficulties in the application of this approach. Therefore, the administrative costs in applying such a principle needs to be further assessed. In addition, it is difficult at this stage to make a decision on what costs should be unbundled given the uncertainty on the range of smart metering services that would be provided by DNSPs and as the MCE is yet to make a decision on future contestability. The implications of unbundling for the profile of tariffs and the potential need for tariff smoothing would also need to be considered.

Draft Finding 25: In principle, there are clear net economic benefits from unbundling the tariffs for a mandated smart meter roll-out from DUOS charges. Such unbundling should occur at the start of a roll-out, because it would provide transparency regarding the costs of a roll-out and facilitate greater regulatory scrutiny. Unbundling would also provide useful information for potential competitive entrants if contestability occurs. However it is difficult at this stage to be prescriptive on what assets/services should be unbundled given that the MCE is yet to make a decision on future contestability and there is uncertainty on the range of smart metering services that would be provided.

Whether the Rules would promote the unbundling of a smart metering charge from DUOS would depend on whether the services are classified as alternative control or standard control services. As noted above, a DNSP is required to have separate tariffs for standard control services and alternative control services.[162]

In the event that mandated smart metering services are classified as alternative control services, the current Rules would promote a separate smart metering charge. The requirement that customers are required to be assigned to a tariff class on the basis of

161 Origin, Submission on the Draft Statement of Approach, p.

162 Clause 6.18.3(c) of the Rules

similar characteristics (i.e., use of mandated smart meter technology) should result in a separate charge for each type of smart metering service.

Whether the Rules would promote unbundling if smart metering services are classified as standard control services is less clear. The general constraints of the pricing principles may not necessarily require the DNSP to unbundle smart metering charges from DUOS charges. The AER cannot require a DNSP to have a separate tariff (and therefore line item) for smart metering services within a standard control service if the DNSP's proposed tariffs are consistent with the pricing principles in the Rules. Importantly the DNSP may have an incentive not to unbundle charges in order to create a barrier to future contestability or to affect competition in the ancillary commercial services associated with SMI.

In addition, the Rules only allow the AER 10 business days to determine whether a pricing proposal complies with the pricing principles.[163] This is unlikely to give the AER sufficient time to determine whether the smart metering services should be unbundled. Therefore, where smart metering services are classified as standard control services, it is unlikely that the existing Rules would promote tariff unbundling.

Draft Finding 26: The current Rules may not achieve unbundling if the mandated smart metering services are classified as standard control services. Under the current Rules, unbundling would only occur if mandated smart metering services are classified as alternative control services by the AER.

7.2.3 Tariff smoothing mechanisms

One of the key characteristics of a mandated smart meter roll-out is that the costs incurred in rolling out the meters and associated communications occurs up-front,[164]whilst the benefits (including the network operational benefits) would only begin to be realised once a high proportion of the roll-out is complete. The national cost benefit analysis commissioned by the MCE assumed that benefits would accrue proportionally with the roll-out of smart meters. However, even in this case there are still fixed costs associated with the supporting infrastructure that need to be incurred up-front, ahead of the roll-out of the meters themselves. The timing difference between when DNSPs incur costs and when benefits are realised (at least in relation to these fixed costs), has the potential to impact consumer tariffs in a manner that may not be desirable. The MCE has already made the decision that the AER should consider mechanisms to smooth tariffs over time and has asked for advice on the current mechanisms in the Rules available to the regulator to achieve this.[165]In particular, the MCE has requested advice on whether the AER is able to modify depreciation schedules to smooth tariffs.

163 Clause 6.18.8 of the Rules

164 We note that although the investment occurs in a relatively short time-frame, the return on and of that investment is reflected in regulated prices over the life of the asset, rather than solely over the roll-out period.

165 June 2008, MCE Statement of Policy Principles on Smart Meters

Potential tariff impact of a mandated roll-out

Before assessing the possible mechanisms under the Rules to smooth the tariff impact of a mandated roll-out, we first consider the available evidence on the potential tariff impact of a smart meter roll-out compared to recent and prospective increases in DUOS charges. We also assess the possible economic effects of tariff smoothing to assess the implications of minimising the potential price impacts of a roll-out.

For the Victorian AMI roll-out, the AER has approved smart meter customer charges ranging from $69 to $134 in 2010 and $89 to $137 in 2011 in its final determination for the first two years of the roll-out, which included an allowance for the accelerated depreciation of stranded accumulation metering assets.[166] Comparing this to current residential bills and the price increases approved under recent distribution determinations, it is likely that the initial tariff impact of a smart meter roll-out could be significant. As outlined in Box 7.2 below, we estimate that the price impact of a smart meter roll-out could be in the order of 5-10% of the average customer retail bill in the first full year of the roll-out.

Box 7.2: Potential tariff impact from mandated smart meter roll out

We can compare the Victorian price impacts to the price increases approved under recent distribution determinations:

- The AER's assessment of the increase in the average retail customer's annual electricity bill in 2009-2010 as a result of its distribution determination for NSW ranged from $73.32/customer to $78/customer, depending on the distribution area. This is approximately 5-6% of total indicative bills for 2009/10.[167]
- The AER's Final Decision for Qld DNSPs is that the average residential bill will increase by just over 9%, or around $129 in the first regulatory year, followed by further price rises of around $35 each year. [168]
- The AER's Final Decision for SA is that the average residential bill will increase by 6%, or around $84 in the first regulatory year, followed by further price rises of around $52 each year.[169]

Distribution network tariffs (including metering charges but excluding transmission use of system charges) represent around 35-37% of a customer's total retail bill. Based on the magnitude of costs in Victoria, the potential price impact from a roll-out of smart meters (including accelerated depreciation of

166 AER, Final determination Victorian advanced metering infrastructure review 2009-11 AMI budget and charges applications, October 2009, p. viii.

167 AER, 2009, Final Determination: Victorian advanced metering infrastructure review: 2009-11 AMI budget and charges applications, October.

168 AER, 2010, Final Decision: Queensland distribution determination 2010–11 to 2014–15, 6 May.

169 AER, 2010, Final Decision: South Australia distribution determination 2010–11 to 2014–15, 6 May.

stranded meters) could be in the order of 5-10% of the average customer retail bill in the first full year of the roll-out. This would be added to other DUOS cost increases, which are currently in the order of a 5 to 10% each year. Without tariff smoothing, the tariff impact of a mandated roll-out would be to approximately double the potential impact of DUOS cost increases.

We have identified a number of possible reasons to support smoothing the tariff impact of a mandated roll-out:

- The current regulatory framework sets a forecast revenue allowance which the business is incentivised to out perform against and achieve further cost savings. In Chapter 6, we stress the benefit of this approach in encouraging the DNSP to maximise the potential operational benefits of SMI. However, as a result of this approach, the value of benefits which are passed through to customers would be higher in subsequent regulatory control periods compared to the first control regulatory period. This would occur as the incentives provided under the first period would encourage the business to achieve and reveal additional efficiencies. This impact on the profile of benefits may justify deferring a proportion of the up-front costs of a roll-out into subsequent regulatory control periods to better align the timing of costs to benefits and achieve tariff smoothing;

- With the timing inconsistency between the costs and benefits of a roll-out, customers who receive a smart meter early in the roll-out timetable and begin paying for the roll-out after receiving the meter, would end up paying more than customers who receive a smart meter later in the roll-out timetable. As customers can not control the timing of when they receive a smart meter, differences in the profiling of tariffs over the roll-out period may place early customers at an unfair disadvantage, which cannot be justified. However, this issue is dependent on how the costs for the roll-out are recovered. If the total costs are rolled into DUOS and recovered across all customers then this effect would not occur; and

- Tariff smoothing may have a marginal benefit in promoting stable and certain prices for customers, which may result in customers making more efficient consumption decisions.

However, it is important that any tariff smoothing does not negatively affect future competition in smart metering services. There is a risk that if the costs of assets are recovered beyond their asset lives, then a DNSP would be at a disadvantage when the services become contestable. Therefore, we advise that there is a potential economic benefit from tariff smoothing where it is done in a manner that does not affect future competition.

Draft Finding 27: Based on the figures for the AMI roll-out in Victoria, we estimate that the initial price impact of a mandated smart meter roll-out would be significant.

Recovery of stranded costs following a mandated roll-out

We have considered the implications of the time period allowed for the recovery of stranded accumulation meter costs on tariff smoothing. As the economic life of accumulation meters following their replacement by smart meters would in effect be zero, the reference to 'economic life' in clause 6.5.5(b)(1) of the Rules could be interpreted as requiring these stranded accumulation meters to be depreciated according to an accelerated profile (of a single year, in the extreme). In any event, it is also likely that DNSPs may propose an accelerated depreciation profile for these stranded meters, if there is an expectation of the future introduction of contestability in smart metering services.[170]

In Victoria, accumulation meters and manually read interval meters which have become stranded as a result of the AMI roll-out are being depreciated over the first three years of the roll-out, ahead of the planned introduction of contestability.[171] We understand that this treatment of existing meters contributed roughly between 6% to 12% of the total annual AMI tariffs charged by the Victorian DNSPs in 2009, and 2.5% to 6% of the annual tariffs charged in 2010.[172] Whether a similar tariff impact would occur in other jurisdictions would depend on the remaining asset lives of the existing meters. However, we consider that the tariff impact of accelerated depreciation in other jurisdictions would be at least equal to the impact on tariffs in Victoria. This is because the majority of existing accumulation meters in Victoria were close to the end of their economic lives, with some dating to pre-1950 in some cases. There are also very few manually read interval meters in Victoria.

Accelerated depreciation for metering assets which are stranded as a result of a mandated roll-out would have an immediate tariff impact on consumers, and would result in today's customers paying for the remaining value of the stranded assets. This is contrary to the MCE's policy objective of minimising the tariff impact of a mandated roll-out on customers. We advise that a more equitable outcome, and one that meets the MCE's objectives, would be for the costs of the stranded assets to continue to be recovered through DUOS charges over their existing (in-service) lives. This would require an amendment to the Rules, which would be specific to these assets.[173] We note that such an amendment may impact on future contestability. However, as long as there is sufficient certainty in the Rules for DNSPs to continue to recover these stranded costs through DUOS charges, DNSPs should not be at a competitive disadvantage when contestability occurs.

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170 We note that the AER has previously approved accelerated depreciation schedules for stranded assets

171 AER, 2009, Final Determination: Victorian advanced metering infrastructure review 2009–11 AMI budget and charges applications, October, p. 70.

172 See the Victorian AMI final decision charges models available from the AER website here: http://www.aer.gov.au/content/index.phtml/itemId/726410?refreshCache=1.

173 This amendment may also need to apply to any capital expenditure incurred under a mandated pilot determination

Draft Finding 28: Under the current Rules, DNSPs would be able to recover the stranded costs of existing accumulation meters through accelerated depreciation. This could significantly increase the initial tariff impact of a mandated roll-out on consumers.

Current mechanisms in the Rules for tariff smoothing

Our assessment of the Rules finds that the AER currently has the ability to smooth tariffs *within* a regulatory control period, but that there is limited ability for the AER to smooth the tariff impact of a mandated roll-out *between* regulatory control periods.

The AER is able to smooth the tariff impact on customers within a regulatory control period through the profile of X factors under clause 6.5.9 of the Rules. The AER is not explicitly required under the Rules to consider the tariff impact on customers when determining the value of X factors. However, in practice, the AER has actively considered tariff smoothing in determining the appropriate X factors, and has used its discretion to smooth tariffs over the regulatory control period.

Smoothing tariffs between regulatory control periods would involve requiring DNSPs to recover their costs over a longer time period (e.g. tariffs could be smoothed by requiring DNSPs to recover costs over two regulatory control periods rather than a single regulatory control period). This could occur through the use of depreciation profiles, by requiring DNSPs to recover a greater proportion of their costs at the end of the economic lives of the SMI assets (i.e. by 'back-ending depreciation'). However, we doubt whether the current Rules could permit the use of depreciation to smooth the potential tariff impact of a mandated roll-out. Clause 6.5.5 of the Rules requires the AER to calculate depreciation using the depreciation schedules nominated by the DNSP. The depreciation schedules proposed by the DNSP must conform to the requirements in clause 6.5.5(b) of the Rules and the AER must amend the proposed schedules where these schedules do not conform to these requirements.[174]

As one of the requirements in clause 6.5.5(b) of the Rules is that depreciation schedules must use a profile that reflects the nature of the assets over the economic life of the assets, the Rules do not appear to preclude back-ending depreciation for SMI assets, where this is the accepted commercial depreciation methodology for those assets.[175]

We consider that the AER would only be able to require a DNSP to modify its proposed depreciation schedules to smooth the tariff impact of a smart meter roll-out under the current Rules, if could successfully prove that the nature of the SMI assets means that the use of these assets are strongly correlated with the timing of the benefits of the roll-out. This would mean that straight line depreciation would be an

174 The requirements in for depreciation schedules in clause 6.5.5(b) of the Rules can be summarised as: the schedules must use a profile that reflects the nature of the assets over their economic life; the sum of depreciation over the economic life of the assets must be equivalent to the value of that asset initially included in the regulatory asset base, and the economic life and the depreciation method and rates must be consistent with those determined for the same assets on a prospective basis in the distribution determination for that period.

175 See clause 6.5.5(b)(1) of the Rules.

inappropriate profile for these assets. Rather, the nature of these assets would mean that they should be depreciated on a declining profile, such that their value gradually declines at the start of the roll-out and then declines more quickly over the asset life, consistent with the timing of the realisation of the benefits of the roll-out.

It seems unlikely that a back-ended depreciation profile could be applied to the unit costs of the smart meter, as the nature and use of the smart meter would support these costs being depreciated on a constant basis over its asset life of approximately 15 years. However, an argument for back-ended depreciation could possibly be applied to the IT costs of a smart meter roll-out, as the use of these assets would depend on the number of meters in operation. However, there are a number of reasons as to why this argument may not be successful under the current Rules. There is no precedent for the AER applying a similar rationale to existing IT assets and therefore it would represent a departure from the current practice. Also, under the Rules, the onus is on the regulator to argue against the schedules proposed by the DNSP and it would be difficult to demonstrate that new IT assets would not depreciate on a constant basis.

For these reasons, we advise that the Rules would need to be modified to allow the AER to require a DNSP to modify its proposed depreciation schedules, to smooth the tariff impact of a smart meter roll-out decision.

Draft Finding 29: The AER currently has the ability to smooth the tariff impact of a mandated roll-out *within* a regulatory control period. However, under the current Rules the AER does not have the ability to require a DNSP to modify its proposed depreciation schedules, to smooth the tariff impact of a mandated roll-out *between* regulatory control periods.

7.3 Recommended changes to the Rules

As explained above, we consider that there are clear economic efficiency benefits from unbundling the costs of a mandated smart meter roll-out from DUOS, and for the tariff impact of a roll-out decision to be smoothed.

Our assessment of the Rules highlighted a number of areas where the current Rules would not facilitate unbundling or tariff smoothing. This section presents our proposed amendments to the Rules to addresses these areas and our reasoning why we consider such amendments to be the most appropriate response, consistent with our decision making criteria for the Review.

7.3.1 Unbundling roll-out costs from DUOS and the efficient allocation of costs

To address the risk that the Rules may not promote the efficient allocation of the costs of a mandated smart meter roll-out, and to provide for the unbundling of the costs of a mandated roll-out from DUOS charges, the Rules should be amended to:

- Provide greater prescription regarding the setting of tariffs for smart meter metering services, by inserting an additional set of 'SMI pricing principles' into the Rules;

- Require the AER to make a decision on whether smart metering services should be unbundled from DUOS charges (and whether this should be done as a standard control service or as an alternative control service) in its Framework and Approach Paper during the distribution determination process. The AER would be required to make this decision after taking into account the SMI pricing principles; and

- Require DNSPs to take into account the SMI pricing principles when proposing tariffs for mandated smart meter roll-outs. The AER would be provided with the ability to require amendments to the proposed tariffs if it considers that a DNSP's proposal is not consistent with the SMI pricing principles

Reasoning for our proposed changes

We considered three possible approaches to address our considerations regarding the efficient allocation of costs and unbundling of the costs of a mandated roll-out from DUOS:

1. Amending the Rules to include detailed prescription regarding the calculation of tariffs for mandated smart metering services;

2. Amending the Rules to apply a principles based approach and to provide the AER with additional ability to determine the appropriate tariffs for mandated smart metering services. This would remove some of the current discretion of DNSPs. The AER's decisions regarding smart metering tariffs would be made in accordance with a set of criteria specified in the Rules; and

3. Maintaining the current Rules and then assessing the appropriate provisions for the setting of tariffs once the MCE has made a decision on the future contestability of smart metering services.

There are a range of advantages and disadvantages associated with each of these approaches.

Approach 1 is similar to the arrangements for the Victorian AMI roll-out. The Victorian Order in Council for the AMI roll-out contains specific provisions relating to the calculation of individual charges and also requires the AER to determine maximum charges for exit fees, restoration fees, and the provision of metering services to unmetered connection points.[176] This approach would remove any uncertainty regarding how tariffs should be calculated and would ensure unbundling in undertaken consistent with an efficient allocation of costs. However, there is a risk that

176 Advanced metering infrastructure Order in Council 2008, 2008, S 314, Victoria Government Gazette, 25 November.

this approach may be too prescription at this stage, as the framework for future contestability is unclear. Such prescription may also be counter-productive, as it could limit the flexibility of DNSPs to develop tariffs which are appropriate for the future market.

Approach 3 is not considered an appropriate response, as we have identified deficiencies in the current Rules which would not promote efficient tariff outcomes. In particular, we consider that the current Rules would not result in the most efficient allocation of the costs of a mandated smart meter roll-out. Also, under this approach there is a risk that the costs of a roll-out may not be unbundled from DUOS charges. As noted above, there are additional benefits to unbundling besides promoting future contestability and therefore in principle, unbundling should occur at the start of the roll-out.

Our preferred change is based on the second approach. The proposed amendments would provide additional prescription regarding the setting of tariffs for a mandated roll-out, by inserting 'SMI pricing principles' in the Rules. The AER would be required to take these principles into account, when determining whether tariffs should be unbundled from DUOS. DNSPs would also be required to consider these tariffs when proposing the tariffs for a mandated roll-out each year. These amendments address the identified deficient in the current Rules regarding the efficient allocation of costs and the unbundling of the costs of a mandated roll-out. It would also provide the AER with the ability to require unbundling if it decides to classify mandated smart metering services (or some of these services) as standard control services. Such an amendment also facilitates unbundling from the start of a roll-out, and is proportionate to the identified problems with the current Rules.

The disadvantages of this approach is that it may result in additional uncertainty for DNSPs and creates an inconsistency between the pricing framework for SMI and other network costs. It would also be out of step with previous decisions regarding the general balance between principle and prescription in the Rules.

A possible list of SMI pricing principles could include:

- tariffs must be based on the costs incurred in providing the mandated smart metering service;
- the costs of providing mandated smart metering services should be recovered through a fixed tariff;
- a proportion of costs should be allocate to those customers who benefit from the mandated smart metering services, based on the share of benefits those customers receive compared to the benefits that all customers receive;
- a proportion of the costs should be allocated to the general DUOS tariffs, based on the share of benefits all customers receive compared to the benefits that are specific to customers with mandated smart meters;

- the DNSP shall not be remunerated twice for the same cost through different tariffs;
- should promote future contestability in smart metering services;
- should be easily comprehensible; and
- must be determined with regard to the transaction costs of calculating the tariff.

We will work further on developing the SMI pricing principles for our Final Report and would appreciate any stakeholders views on our proposed principles. We recognise that further consideration on how to calculate the unbundled charges for mandated smart metering services may be needed, given the difficulties of separately identifying 'SMI costs'. We will also need to consider how the cost allocation Rules in Part F of the Chapter 6 Rules would apply. Importantly, any unbundling would need to be done in a manner that promotes future contestability and also provides certainty to DNSPs regarding how expenditure on mandated SMI would be recovered from customers following the mandated exclusivity period.

The AER would need to make a decision regarding unbundling prior to the start of the regulatory control period, in its Framework and Approach Paper at the beginning of the distribution determination process. This would provide greater regulatory certainty for DNSPs and would allow the prospect of unbundling to be considered in sufficient time and through a public consultation process. As discussed in Chapter 3, it is possible that a mandated roll-out may occur within a regulatory control period, but the costs of this roll-out may not have been incorporated in the relevant distribution determination. For the same reasons why we advise that the AER's decision on the efficiency of the costs should be deferred until the next distribution determination, we recommend that there should be no decision on unbundling until the start of the next regulatory control period.

Under our proposed amendments, the AER would not required to unbundle the costs of a mandated roll-out from DUOS. However, the AER would be required to take into account the proposed SMI pricing principles in determining whether unbundling should occur, and it could be possible for bundled charges to be consistent with these principles. This could occur if there is uncertainty regarding future contestability and the range of services that may be provided. Bundled charges may also be consistent with the SMI pricing principles where there is difficulty in separately identifying and allocating SMI costs.

A possible variant to our proposed amendments would be to limit these amendments to when mandated smart metering services are classified as alternative control services. If limited to alternative control services, the AER would have to classify mandated smart metering services as alternative control services in order to achieve unbundling. While this may be a more proportionate amendment (and if there is the prospect of future competition then the AER may be more likely to classify mandated smart metering services as alternative control services), we do not consider that it appropriate to constrain the AER's current ability to classify services. We note that it is likely that there will be a range of regulated smart metering services with different characteristics

and it is appropriate that the AER continues to have the ability to apply different classifications to such services in accordance with the existing Rules. Our proposed amendments would be able to accommodate a mandated smart metering service being classified as a standard control service and also being unbundled from DUOS.

It is likely that our proposed amendments would serve as an effective interim solution until there is greater clarity on the nature of future contestability and the range of smart metering services that DNSPs would provide. It is likely that further consideration of the appropriate Rules on smart metering services will be needed once the MCE's policy on future contestability has been determined. For example, at this time, decisions on restoration or exit fees and the type of smart metering services that may need to continue to be regulated may be required. The work that we intend to undertake on how the Rules can better support efficient consumption decisions in the presence of smart grid technology (including smart meters) will assist this.

7.3.2 Amendments to support tariff smoothing

To smooth the tariff impact of a mandated smart meter roll-out on consumers, the Rules should be amended to:

- Prevent DNSPs from recovering the stranded costs of existing accumulation meters through accelerated depreciation following a mandated smart meter roll-out. Instead, DNSPs would be required to continue to recover the costs of these meters through DUOS charges based on their current asset lives;

- Require the AER to have regard to the need to minimise the initial tariff impact of a mandated smart meter roll-out, when determining the appropriate X factor for the forthcoming regulatory control period under clause 6.5.9 of the Rules; and

- Provide the AER with the ability to modify a DNSP's proposed depreciation schedule in order to smooth the tariff impact of a mandated roll-out under clause 6.5.5 of the Rules.

Reasoning for our proposed changes

The MCE has stated that the AER should consider mechanisms to smooth the tariff impacts of a smart meter roll-out decision.[177] In response, we have proposed three amendments to the Rules to reflect the MCE's policy on tariff smoothing.

The first amendment relates to the recovery of the stranded costs of existing accumulation meters. We consider that it is not appropriate for the stranded costs of accumulation meters to be recovered in initial tariffs through accelerated depreciation. As the current Rules require network assets to be depreciated consistent with their economic lives, once existing accumulation meters are taken out of service during the roll-out, DNSPs may be required to recover the remaining costs through accelerated depreciation. This may increase the initial tariff impact on consumers. To address this

177 MCE, 2008, Smart Meter Decision Paper, 13 June.

risk, we recommend that a new provision be added to the Rules regarding the treatment of the stranded metering assets. We consider that the capital cost of such assets should continue to be recovered through DUOS charges over their current (in-service) lives. This proposed amendment would provide more prescription to the Rules and creates an inconsistency in the treatment of different types of network assets. However, we consider that this is a proportionate response given the potential tariff impact of the current Rules.

For this proposed amendment to be effective, the DNSP must have certainty in their ability to recover their costs over the original asset lives of the accumulation meters. We note that there is limited opportunity under the Rules for the AER to remove assets from the RAB. However we note that Schedule S6.2.1 (e)(7) of the Rules permits the removal of assets that are no longer used to provide standard control services, as a result of a change to the classification of a particular service. This condition may become relevant if smart metering services are reclassified as part of a decision to introduce contestability, depending on the precise definition of the service. We will consider whether there is a need to amend this provision in these circumstances as we develop the detail on our proposed Rule amendments for the Final Report.

The second of our proposed amendments to facilitate tariff smoothing relates to the use of X factors by the AER. As discussed above, under the existing Rules the AER already has the ability to determine the profile of the X-factors in relation to each distribution determination. The AER has used this ability to expressly smooth tariff impacts during a regulatory control period. As this would be a useful mechanism to smooth the impact of recovering SMI costs within a regulatory control period , we advise that this be added to the AER's list of considerations in determining the X-factor under clause 6.5.9 of the Rules. Such a change would codify the existing practice of the AER and would not appear to be a disproportionate change. In addition, we consider this amendment could be applied to all network expenditure and not be limited to SMI tariffs.

Our third proposed amendment would allow the AER to smooth tariffs between regulatory control periods. Smoothing tariffs between periods could occur by requiring DNSPs to the back-end depreciation profiles for mandated SMI assets or by introducing a separate building block component in clause 6.4.3 of the Rules to expressly capture 'deferred revenue'. Both of these options would represent a fundamental change to the current arrangements and consideration of whether such changes are proportionate to the problem is needed. Given the short economic life for fixed cost SMI assets, approximately 7 years for IT systems and 15 years for smart meters, there may be limited benefits in changing the profile of cost recovery for such assets. Our recommendation regarding stranded accumulation meters may also smooth the price impact of a roll-out to the point where it limits any need for additional action.

We consider that the option to back-end depreciation to be the 'least worst' of these above two approaches. However, we note that providing the AER with the ability to require the depreciation of certain assets to be back-ended would be reversal of the presumption that it is the DNSP which most appropriately selects the depreciation profile.

Given that this would be a significant change to the current arrangements and would create inconsistency in the treatment of network assets, we consider that the AER should only be given the option to back-end depreciation where it considers there is an economic case to do so. The AER's decision would need to be based on a list of factors defined in the Rules. One such factor should be the impact on future competitive conditions.

The deferral of cost recovery associated with a roll-out has the potential to result in a barrier to any later introduction of contestability, as it would affect the extent of costs which the DNSP would need to recover when contestability is introduced. Although the approach to introducing contestability has not yet been determined, where customers are required to 'buy out' their current provider in order to switch suppliers, a deferral of cost recovery would increase this buy out amount. This would need to be considered by the AER when making any decision on using depreciation to smooth tariffs between regulatory control periods.

Also any uncertainty for the DNSP regarding how mandated expenditure would be recovered under contestability may affect how they roll-out the smart meter investment. Such uncertainty has the potential to undermine commercial considerations by the DNSP and may affect the willingness of the DNSP to participate in a mandated roll-out. We advise the MCE to consider this when making its decision on future contestability and the framework for how the market would work.

Further consideration on the appropriate list of factors that the AER must have regard to when determining whether to back-end depreciation for mandated SMI assets is needed. We would welcome stakeholder views on the possible factors that should included in the Rules and also on whether it is appropriate to provide the AER with an ability to back-end the depreciation of SMI assets.

Question 6 Tariff issues associated with mandated SMI

6.1 What principles should the AER be required to have regard to for the efficient allocation of costs and in determining whether to require a DNSP to unbundle mandated smart metering services from DUOS charges?

6.2 Should Rules on the unbundling of mandated smart metering services be made at this time, in light of the current uncertainty regarding the future contestability of smart metering services?

6.3 Is it appropriate to allow the AER to back end depreciation? What factors should the AER be required to have regard to when determining to back end depreciation for mandated SMI assets?

8 Summary of draft findings against the items in the ToR

This Chapter provides a summary of the Commission's draft findings, as contained in Chapters 2 to 7 of this Draft Report, against the items in the MCE's ToR. Our proposed changes to the Rules are explained in detail in legal specifications, which are set out in Appendix C.

Summary of the draft findings against the items in the MCE's Terms of Reference

MCE ToR Item	Commission's draft findings
Provision for recovery of efficient costs of smart meter roll-outs and pilots	
8.1. The interaction of the obligations imposed on distribution network service providers under sections 118B and 118D of the proposed NEL amendments with the revenue and pricing principles in the NEL and the operating expenditure objectives and capital expenditure objectives in clauses 6.5.6(a) and 6.5.7(a) of the Rules	The obligations imposed on DNSPs to undertake a smart meter pilot or trial (section 118B of the NEL) and roll-out smart meters (section 118D of the NEL) interact with the NEL Revenue and Pricing Principles and the operating and capital expenditure objectives in the Rules to: • Require a DNSP to include its forecast operating and capital expenditure in its regulatory proposal to meet its mandated obligations under sections 118B and 118D of the NEL; • Require the AER to accept a DNSP's forecast expenditure if it is satisfied that it reasonably reflects the operating and capital expenditure criteria in clauses 6.5.6(c) and 6.5.7(c) of the Rules; and • Require the AER to take into account the NEL Revenue and Pricing Principles when making a distribution determination. Under these Principles, the AER must provide a DNSP with a reasonable opportunity to recover at least its efficient costs of meeting its mandated obligations. The current requirements in the NEL and the Rules have the potential to accommodate the recovery of the efficient costs of mandated smart meter roll-outs and pilots through the distribution determination process. There are no inconsistencies between the NEL Revenue and Pricing Principles and the capital expenditure objectives and the operating expenditure objectives in the Rules. **No changes to the Rules recommended** However, in practice the recovery of the efficient costs of mandated smart meter roll-outs may not occur under the current Rules where there is sufficient uncertainty about the timing and quantum of expenditure. We recommend amending the Rules to introduce additional regulatory mechanisms, to address the impact of this potential uncertainty on the incentives on DNSPs to better balance the risks between customers and DNSPs.
8.2. The interaction of the obligations imposed on distribution network service providers	DNSPs would be able to seek cost pass through for mandated smart meter roll-outs and pilots under clause 6.6.1 of the Rules under a 'service standard event', as a Ministerial determination made under the NEL is

MCE ToR Item	Commission's draft findings
under sections 118B and 118D of the proposed NEL amendments and the definition of 'regulatory change event' for the purposes of the cost pass through provisions in clause 6.6.1 of the Rules	likely to alter the nature or scope of direct control services provided by a DNSP within a regulatory control period. However, DNSPs would only be able to recover their costs under a 'service standard event', if their costs met the relevant materiality threshold determined by the AER for that event. Our assessment of whether the AER has sufficient flexibility to determine an appropriate materiality threshold for mandated smart meter pilots is in item 10.1. As it is considered that mandated smart meter roll-outs and pilots would meet the definition of a service standard event, it is unlikely that DNSPs could seek cost pass through under a regulatory change event as a regulatory change event is defined as a regulatory obligation or requirement that falls under no other category of pass through event However, as discussed in regards to item 10.2, the Commission has recommended that the cost pass through provisions should not apply to mandated smart meter roll-outs and should only apply to mandated smart meter pilots and trials. Where costs for a mandated smart meter roll-out are incurred within a regulatory control period, cost recovery would be deferred until the next regulatory reset. **No changes to the Rules recommended**
8.3. Whether the provisions of Chapter 6 of the Rules allow a distributor to enter into a contract (or other arrangement) with a retailer for the provision of retail services used in smart meter and direct load control pilots or trials and then allow the distributor to recover the associated fees charged by the retailer	The provisions in Chapter 6 of the Rules relating to the distribution determination process and the cost pass through process would allow a DNSP to enter into a contract with a retailer and recover the associated fees charged by the retailer. Under the distribution determination process, the DNSP would be required to demonstrate that these retailer services were necessary for it to comply with its regulatory obligations under a Ministerial smart metering determination, in accordance with the operating expenditure objectives in clause 6.5.6(a) of the Rules. The retailer fees would be assessed by the AER in relation to the operating expenditure criteria in clause 6.5.6(c) of the Rules and the AER would be required to accept the proposed retailer fees if it is satisfied that the fees reasonably reflect the operating expenditure criteria. Under clause 6.5.6(e)(9), the AER would also be required to consider whether the proposed retailer fees were referable to arrangements that reflected arm's length terms in determining whether it is satisfied that the retailer fees meet the operating expenditure criteria. Under the cost pass through process, DNSPs would only be able to seek pass through if the Ministerial smart metering determination met the requirements of a pass through event in Chapter 10 of the Rules or an additional pass through event that had been approved by the AER in a relevant distribution determination. The

MCE ToR Item	Commission's draft findings
	AER would be required to determine the appropriate pass through amount, which may include any retailer fees which are necessary for the DNSP to fulfill its mandated obligations. Under the Commission's proposed changes to the cost pass through provisions discussed in regards to item 9.1, the AER would also be required to consider the costs that an efficient and prudent DNSP in the circumstances of the relevant DNSP would require when making a cost pass through determination. **No changes to the Rules recommended**
8.4. The implications for cost recovery of services being categorised as alternative control services rather than standard control services, and whether any modifications to the Rules are required to ensure recovery of efficient costs and whether it is appropriate to unbundle metering services from distribution use of system charges	Under the distribution determination process, the AER has discretion to determine the appropriate form of control that should apply to alternative control services. However, in determining the revenue requirement for alternative control services, the AER is required to take into account the NEL Revenue and Pricing Principles, which include providing DNSPs with a reasonable opportunity to recover at least their efficient costs. Therefore, where mandated smart metering services are classified as an alternative control service, the current Rules and the NEL would provide for the recovery of efficient costs under the distribution determination process. There is no requirement in the Chapter 6 Rules for the AER to apply the cost pass through provisions in clause 6.6.1 of the Rules to alternative control services or any other mechanism which would allow DNSPs to seek an adjustment in revenue within a regulatory control period. Therefore, there is a risk to the recovery of the efficient costs of a Ministerial smart metering determination for DNSPs, where mandated smart metering services are classified as alternative control services, the costs of a Ministerial smart metering determination have not been incorporated in a distribution determination, and the distribution determination contains no relevant cost pass through provisions. To reduce this cost recovery risk, we have proposed changes to the Rules which would require the AER to consider what cost pass through arrangements should apply to mandated smart meter pilots and trials, if these services are classified as alternative control services. We have not extended this amendment to mandated smart meter roll-outs, as roll-outs would not be subject to the cost pass through provisions and would instead be assessed under a separate mid period cost recovery mechanism- this is discussed further in item 10.2. **Changes to the Rules recommended** In principle, there are clear net economic benefits from having unbundling the tariffs for smart metering services. Such unbundling should occur at the start of the roll-out because it will provide transparency and regulatory scrutiny regarding the costs of these services It would also provide useful information for potential

MCE ToR Item	Commission's draft findings
	competitive entrants if contestability occurs. The current Rules may not result in unbundling, if smart metering services are classified as standard control services. Under the current Rules, the AER can only achieve unbundling if it classifies the services as alternative control services. Therefore, to facilitate the unbundling of smart metering services from DUOS charges, we have recommended that the Rules be amended to allow the AER to require DNSPs to unbundle smart metering services, where these services are classified as standard control services. Principles, inserted in the Rules, would govern the AER's decision as to whether unbundling should occur and how unbundled charges should be calculated. **Changes to the Rules recommended**
8.5. The implications for the recovery of efficient costs of implementing a future Ministerial pilot metering determination which may include direct load control and/or a Ministerial smart meter rollout determination for distribution price determinations that have already been made by the AER prior to the NEL amendments, including whether the costs of alternative control services can be recovered under the cost pass through mechanism if this was not anticipated in the determination	Where a distribution determination have been made by the AER prior to the NEL amendments, DNSPs would still be able to seek cost pass through for mandated smart meter pilots under a 'service standard event'. The costs of alternative control services cannot be recovered under the cost pass through provisions, unless the AER had determined to apply the cost pass through provisions (or an alternative cost pass through mechanism) to alternative control services in a relevant distribution determination. As discussed above in regards to item 8.4, the Commission has recommended changes to the Rules to require the AER to consider what cost pass through arrangements should apply to mandated smart meter pilot and trials, if these services are classified as alternative control services. **Changes to the Rules recommended**
Obligation and ability to take into account network benefits	
9.1. Whether there is an obligation under the NEL and the Rules for the AER to take into account 'reasonably achievable network operational benefits' in determining efficient costs	Under the distribution determination process, we consider there is an obligation on the AER to take into account 'reasonably achievable network operational benefits' in determining whether it is satisfied that a DNSP's forecast expenditure reasonably reflects the operating and capital expenditure criteria. In determining whether a DNSP's forecast expenditure reflects the operating and expenditure criteria, the AER is required to have regard to the benchmark capital and operating expenditure that would be incurred by an efficient DNSP. In considering this benchmark expenditure, we consider that the AER would have an obligation to consider whether a DNSP's forecast expenditure reflected any 'reasonably achievable network operational benefits' associated with the mandated SMI, including any network operational benefits that would be achieved by an

MCE ToR Item	Commission's draft findings
	efficient DNSP. Under the cost pass through process, there is no specific obligation under the NEL or Rules on the AER to take into account of 'reasonably achievable network operational benefits' or the efficiency of the proposed pass through amount when making a cost pass through determination. However, the AER would have the discretion to consider 'reasonably achievable network operational benefits' if it considered it relevant to the making of its cost pass through determination. The Commission has recommended that the cost pass through provisions be amended to require the AER when making a cost pass through determination to consider the costs that an efficient and prudent DNSP in the circumstances of the relevant DNSP would require. **Changes to the Rules recommended**
9.2. Whether the Rules provide the ability for the AER to take into account 'reasonably achievable network operational benefits' either during the distribution determination process or in making a pass through determination or both, and to request information sufficient for this purpose	The ability of the AER to consider network operational benefits during the distribution determination process and the cost pass through process will depend on the availability of reliable information about the potential benefits of SMI at the time the AER makes its determinations. Under the distribution determination process, the AER is able to obtain information on reasonably achievable network operational benefits through the DNSP's regulatory proposal, submissions it receives, any public information and any additional analysis which is undertaken by the AER. Under the cost pass through process, the information requirements for the DNSP's application are less detailed than the distribution determination process and consultation is at the discretion of the AER. If the AER considers that it requires additional information on 'reasonably achievable network operational benefits' to make its distribution determination or a cost pass through determination, under the NEL, the AER is able to: • serve a notice on a person to obtain information or documents; and/or • require a DNSP to provide it with information and/or prepare, maintain or keep specific information. However, to ensure that the AER has access to relevant information to assist it in estimating the efficient benchmark costs of a mandated smart meter roll-out or pilot in making a distribution determination, the Rules should be amended to require DNSPs in all jurisdictions to provide annual information to the AER on the costs and network operational benefits of any smart meter roll-outs, pilots or trials they are undertaking. The AER

MCE ToR Item	Commission's draft findings
	should be required to publish a guideline, following stakeholder consultation, which sets out the nature and format of information that DNSPs must provide. **Changes to the Rules recommended**
9.3. Whether the framework provides for the efficient allocation of costs of a smart meter roll-out, which may include apportioning costs against something other than a standardised cost per customer	The beneficiary pays principle could be applied to determine the efficient allocation of SMI costs. This would result in the bulk of the costs being allocated to the individual customer and the remaining proportion being allocated to the general customer base. This is because some types of network operational benefits will accrue to all network customers and therefore a proportion of these costs should be recovered through the common DUOS charge. However, further consideration of the administrative costs involved in applying the beneficiary pays principle will be needed. As the costs for SMI are fixed and do not vary with consumption, the charge for a mandated roll-out should be recovered through a fixed charge per a customer. The Rules should be amended to include more prescriptive pricing principles to better promote the efficient allocation of costs for SMI. **Changes to the Rules recommended**
Cost pass through provisions under clause 6.6.1	
10.1. Whether there is sufficient flexibility provided under the Rules for the AER to determine an appropriate materiality threshold for the pass through of distributor costs associated with a Ministerial pilot metering determination	The Commission considers that a materiality threshold should apply to mandated smart meter pilots, to encourage the efficient management of costs by DNSPs and reduce the likelihood of DNSPs seeking cost pass through for minor cost increases. We note that other pass through events which may also impose uncontrollable increases in costs to DNSPs, such as changes in tax, are also subject to a materiality threshold. As a result, we consider that there is no reason as to why a materiality threshold should not apply to mandated smart meter pilots. As the materiality threshold for pass through events is not specified in the Chapter 6 Rules, the AER has discretion to determine the appropriate threshold for different pass through events. Therefore, the Commission considers that the AER has sufficient flexibility under the current Chapter 6 Rules to determine an appropriate materiality threshold for the pass through of DNSP costs associated with a Ministerial pilot metering determination.

MCE ToR Item	Commission's draft findings
	No changes to the Rules recommended
10.2. Whether the time frames in the current Rules for pass through applications and determinations are appropriate, in the context of a Ministerial pilot metering determination and/or a Ministerial smart meter rollout determination	The time frames for DNSPs to submit a pass through application are considered sufficient for mandated smart meter pilots and trials but are not considered sufficient for mandated smart meter roll-outs, because of the scope and complexity of roll-outs. The AER has 60 business days to make a cost pass through determination after receiving a pass through application and can not extend this timeframe. We consider that this timeframe is likely to be sufficient for the AER to make a cost pass through determination on mandated smart meter pilots and trials, but that the AER should be provided with the opportunity to extend its timeframe if it considers that the difficulties of assessing or quantifying the effect of the relevant pass through event justifies the time extension. However, it is recommended that the AER be required to make its cost pass through determination within 6 months of receiving a cost pass through application. The timeframe for the AER to make a cost pass through determination is considered not sufficient for mandated smart meter roll-outs due to the potential scope and complexity of a roll-out. Further, as a smart meter roll-out is likely to provide for a number of operational benefits for the DNSP, it is likely to take a significant amount of time for the AER to consider the efficient costs of a smart meter roll-out. The most preferable approach to cost recovery for mandated smart meter roll-outs would be for the timing of a Ministerial roll-out determination to align with the timing of a distribution determination process, so that a DNSP is only required to undertake expenditure at the start of the next regulatory control period. To accommodate circumstances where this is not possible, we recommend that the Rules be amended so that the AER's decision on the level of efficient expenditure that should be recovered is deferred to the making of the next distribution determination. Where a Ministerial smart metering determination is made in the last 13 months of a regulatory control period but a DNSP only incurs costs in the next regulatory control period, DNSPs may be unable to seek cost recovery under either the cost pass through arrangements or the distribution determination process. A change to the Rules is proposed to ensure that DNSPs can seek cost recovery through the pass through provisions in these circumstances. This would apply generally to all pass through events, rather than only to mandated smart meter pilots and trials. **Changes to the Rules recommended**

MCE ToR Item	Commission's draft findings
Incentives under the regulatory regime	
11.1. Whether an efficiency benefit sharing scheme as provided for under clause 6.5.8 of the Rules is appropriate for an accelerated roll-out of smart meters, given the MCE decision that the efficiencies gained from a roll-out are to be passed on to customers 'promptly'	It is appropriate to apply the EBSS to the operational benefits of a mandated smart meter roll-out. However, the AER should retain its current discretion to determine whether the EBSS should be applied to expenditure associated with a smart meter roll-out, where there is significant uncertainty in relation to that expenditure. **No changes to the Rules recommended**
11.2. Whether the current incentive mechanisms incorporated in the Rules are sufficient to maximise the competitive purchase of meters and metering services	The Commission considers that the current incentives under the distribution determination process are sufficient to maximise the competitive purchase of meters and metering services, as the AER is able to substitute its own assessment of a DNSP's required forecast expenditure if it considers that the DNSP's proposed expenditure does not reflect the operating and capital expenditure criteria. As discussed in item 8.1, where there is uncertainty regarding the efficient costs of a mandated smart meter roll-out when a distribution determination is made, there is the potential for the AER to approve higher than efficient expenditure. We have recommended a number of mechanisms that the AER may apply during the distribution determination process to reduce the impact of uncertainty on the recovery of efficient costs. Therefore under our proposed changes, where there is uncertainty regarding the efficient costs of mandated SMI, the distribution determination process will provide appropriate incentives for the competitive purchase of meters and metering services. **No changes to the Rules recommended**
11.3. Whether Chapter 6 of the Rules provides appropriate incentives for a distribution network service provider to manage technology risks for the long-term benefit of consumers without a re-examination of the Weighted Average Cost of Capital (WACC), which is outside the scope of this review. The risks to be managed include	The incentives in the Rules are appropriate for the management of technology risks by DNSPs, as many of these risks will be addressed by the MCE and NSSC processes which will result in obligations on the DNSP. It is expected that the materiality of these risks are likely to be reduced prior to a mandated smart meter roll-out. Under the distribution determination process, the AER would be required to assess the efficiency and prudency of the DNSP's forecast expenditure for mandated SMI, which would ensure that DNSPs meet their mandated obligations and the minimum functionality specifications for mandated smart meters in an efficient and prudent manner.

MCE ToR Item	Commission's draft findings
premature failure of a new technology	**No changes to the Rules recommended**
Mechanisms to smooth impacts on tariffs over time	
12.1. Whether clause 6.5.5 of the Rules in relation to depreciation requires modification, to allow the AER to require a distributor to modify its proposed depreciation schedules in order to smooth the tariff impact of a smart meter roll-out decision, (this includes the depreciation of existing accumulation meter assets that are being replaced before the end of their economic life)	Clause 6.5.5 of the Rules does not allow the AER to require a DNSP to modify its proposed depreciation schedules to smooth the tariff impact of a smart meter roll-out decision. It is recommended that clause 6.5.5 of the Rules be amended to provide the AER with the ability to modify a DNSP's proposed depreciation schedule in order to smooth the tariff impact of SMI costs. Under clause 6.5.5(b) of the Rules, DNSPs may be required to accelerate the depreciation of existing accumulation meters following a mandated smart meter roll-out, to reflect the premature end of the economic life of the accumulation meters. We note that the accelerated depreciation of these accumulation meters may lead to a price shock for consumers. It is recommended that the Rules be amended to prevent a DNSP from recovering the stranded costs of existing accumulation meters through accelerated depreciation. These meters should continue to be recovered through the DUOS charge based on their current asset lives. This amendment may assist in further smoothing the tariff impacts of SMI over the roll-out. **Changes to the Rules recommended**
12.2. The need to minimise potential price impacts on customers caused by paying for the Smart Metering Infrastructure (SMI) roll-out before benefits are realised	The AER is currently able to minimise the price impacts on consumers within a regulatory control period by adjusting the X factor in making a distribution determination. However, tariff smoothing is not an explicit factor the AER must consider in determining the appropriate X factor. The Rules should be amended to require the AER to have regard to the need to minimise the initial tariff impacts of recovering SMI costs when deciding upon the appropriate X factors for the regulatory control period. **Changes to the Rules recommended**
12.3 Whether the framework allows the AER to obtain the necessary information to ensure benefits are being realised within a reasonable timeframe.	Under the NEL and Rules, the AER has no specific obligation to monitor the progress of mandated smart meter roll-outs or pilots to ensure benefits are being realised within a reasonable timeframe. However, the AER is required to determine the revenue that should be provided to DNSPs to undertake mandated roll-outs and pilots. As discussed in regards to item 9.2, under the distribution determination process the AER is required to have regard to the benchmark capital and operating expenditure that would be

MCE ToR Item	Commission's draft findings
	incurred by an efficient DNSP. In considering this benchmark expenditure, we consider that the AER would have an obligation to consider whether a DNSP's forecast expenditure reflected any 'reasonably achievable network operational benefits' associated with the mandated SMI, including any network operational benefits that would be achieved by an efficient DNSP. As outlined in item 9.2, to ensure that the AER has access to relevant information to assist it in estimating the efficient benchmark costs of a mandated smart meter roll-out or pilot in making a distribution determination, the Rules should be amended to require DNSPs in all jurisdictions to provide annual information to the AER on the costs and network operational benefits of any smart meter roll-outs, pilots or trials they are undertaking. **Changes to the Rules recommended**

Abbreviations

AAR	Allens Arthur Robinson
AER	Australian Energy Regulator
AMI	advanced metering infrastructure
CoAG	Council of Australian Governments
Commission	Australian Energy Market Commission
DNSP	distribution network service provider
DUOS	distribution use of system
EBSS	Efficiency Benefit Sharing Scheme
HAN	home area network
MCE	Ministerial Council on Energy
NEL	National Electricity Law
NEO	National Electricity Objective
NSSC	National Stakeholder Steering Committee on Smart Meters
RAB	regulatory asset base
Rules	National Electricity Rules
SCO	MCE Standing Committee of Officials
SMI	smart metering infrastructure
ToR	MCE's terms of reference
TOU	time of use
WACC	weighted average cost of capital

A The MCE's ToR

MCE
Ministerial Council on Energy

CHAIR
The Hon Martin Ferguson AM MP
Minister for Resources and Energy
Telephone: (02) 6277 7930 Facsimile: (02) 6273 0434

Min ID:B09/2403

Dr John Tamblyn
Chairman
Australian Energy market Commission
PO Box A2449
SYDNEY SOUTH NSW 1215

Dear Dr Tamblyn, John

ADVICE ON WHETHER THE ECONOMIC REGULATION OF DISTRIBUTION SERVICES CONTAINED IN CHAPTER 6 OF THE NATIONAL ELECTRICITY RULES EFFICIENTLY ACCOMMODATES COST RECOVERY FOR MANDATED SMART METERING INFRASTRUCTURE

In a recent out of session decision, the Ministerial Council on Energy (MCE) agreed that I write to you to request that the Australian Energy Market Commission provide advice to the MCE on whether Chapter 6 of the National Electricity Rules efficiently accommodates cost recovery for smart metering infrastructure mandated by Ministerial Determination as contemplated in the *National Electricity (South Australia) (Smart Meters) Amendment Act 2009.*

The detailed Request for Advice, including a requirement to publish a Statement of Approach, is attached. We look forward to receiving your advice by no later than end August 2010.

Yours sincerely

Martin Ferguson

MCE Secretariat
GPO Box 1564 CANBERRA ACT 2601
Telephone: (02) 6213 7789 Facsimile: (02) 6213 6689
E-mail: MCE@ret.gov.au
Web Site: www.mce.gov.au

MINISTERIAL COUNCIL ON ENERGY REQUEST TO THE AUSTRALIAN ENERGY MARKET COMMISSION FOR ADVICE ON WHETHER CHAPTER 6 OF THE NATIONAL ELECTRICITY RULES EFFICIENTLY ACCOMMODATES COST RECOVERY FOR MANDATED SMART METERING INFRASTRUCTURE

Pursuant to Section 6(b) AUSTRALIAN ENERGY MARKET COMMISSION ESTABLISHMENT ACT 2004 (SA)

REQUEST FOR ADVICE

BACKGROUND

1. On 13 June 2008 the Ministerial Council on Energy (MCE) issued a Statement of Policy Principles (the Statement of Policy Principles) in relation to the mandated roll-out of smart meters. The Statement of Policy Principles contains the following principles:

   1.1. To promote competitive retail markets and maximise the benefits of a large scale accelerated roll-out of smart meters to residential and other small customers, there should be a national minimum functionality supported by a national regulatory framework for smart meters.

   1.2. To maximise the net benefits of a mandated roll-out of smart meters in a timely manner and capture the operational benefits for distribution network service providers, distribution network service providers will be legislatively obliged to roll out smart meters to some or all residential and other small customers in those jurisdictions where a mandated roll-out will take place.

   1.3. A distribution network service provider who is obliged to roll out smart meters should have exclusivity over meter provision and responsibility for related metering data provision in respect of the customers covered by the mandate during the period in which the distribution network service provider must complete that mandate.

   1.4. The regulatory framework for distribution network tariffs, consistent with the revenue and pricing principles, should ensure that distribution network service providers:

      1.4.1. are able to recover in a transparent manner the costs directly resulting from meeting the mandated service standards for smart meters and the costs of their existing investment which has been stranded by any mandatory roll out; and

      1.4.2. promptly pass on cost efficiencies resulting from the installation of smart meters to tariff classes affected by the costs of a smart meter roll-out.

2. Further to the Statement of Policy Principles, following two rounds of public consultation the MCE presented the *National Electricity (South Australia) (Smart Meters) Amendment Bill 2009* to the South Australian parliament which passed on 29 October 2009. The *National Electricity (South Australia) (Smart Meters) Amendment Act 2009* (the Smart Meter Act) facilitates and supports mandated trials, pilots and roll-outs of smart meters in participating jurisdictions. As set out in the second reading speech, a Ministerial smart metering determination will have the effect of changing the regulatory obligations on the distribution business, triggering a mechanism for recovery of efficient direct costs in accordance with the National Electricity Rules (the Rules). Ministers also recognised the importance of promptly passing on cost efficiencies resulting from smart metering to customers affected by the costs of a roll-out. This Request for Advice is to ascertain whether the interaction of the Rules with the Law could be improved to more efficiently accommodate Ministerial smart metering determinations.

3. The Smart Meter Act and the Statement of Policy Principles were developed to implement the MCE decision of June 2008 to place an obligation on distribution businesses to roll out smart meters where a jurisdictional implementation date has been set and to facilitate distribution businesses recovering the efficient direct costs of providing the mandated infrastructure and services.

4. The Smart Meter Act also supports the timely implementation of pilots with the objective of confirming smart metering costs and benefits in jurisdictions where these remain uncertain, facilitating distribution business recovery of efficient costs in delivering these pilots.

5. Pursuant to s6(b) of the *Australian Energy Market Commission Establishment Act 2004 (SA)* the MCE may request the Australian Energy Market Commission (AEMC) to provide advice.

6. Participating jurisdictions under the National Electricity Law (NEL) have agreed to the following Request for Advice by the AEMC.

REQUEST

7. In November 2009, MCE agreed to request the AEMC to provide advice to MCE on whether the existing economic regulation applying to distribution services set out in Chapter 6 of the National Electricity Rules (the Rules) most efficiently accommodates the recovery of the efficient costs of smart metering activities mandated by a Ministerial Determination. This advice and any proposed Rule changes (the Advice) is to have regard to:

   - the National Electricity Objective;
   - the MCE Statement of Policy Principles;
   - the Smart Meter Act at Attachment A and draft initial rule at Attachment B; and
   - the June 2008 MCE Smart Meters Decision Paper.

   The Advice is to be prepared in accordance with the following requirements.

Issues to be addressed

Provision for recovery of efficient costs of smart meter roll-outs and pilots

8. The AEMC should consider whether the current Rules most efficiently accommodate the recovery of efficient distributor costs associated with meeting their obligations under a Ministerial pilot metering determination (which may include direct load control) or a Ministerial smart meter roll-out determination, via the distribution determination process and the cost pass through provisions in clause 6.6.1 of the Rules.

   Specific issues to consider include:

   8.1. The interaction of the obligations imposed on distribution network service providers under sections 118B and 118D of the proposed NEL amendments with the revenue and pricing principles in the NEL and the operating expenditure objectives and capital expenditure objectives in clauses 6.5.6(a) and 6.5.7(a) of the Rules;

   8.2. The interaction of the obligations imposed on distribution network service providers under sections 118B and 118D of the proposed NEL amendments and the definition of 'regulatory change event' for the purposes of the cost pass through provisions in clause 6.6.1 of the Rules;

   8.3. Whether the provisions of Chapter 6 of the Rules allow a distributor to enter into a contract (or other arrangement) with a retailer for the provision of retail services used in smart meter and direct load control pilots or trials and then allow the distributor to recover the associated fees charged by the retailer;

   8.4. The implications for cost recovery of services being categorised as alternative control services rather than standard control services, and whether any modifications to the Rules are required to ensure recovery of efficient costs and whether it is appropriate to unbundle metering services from distribution use of system charges;

   8.5. The implications for the recovery of efficient costs of implementing a future Ministerial pilot metering determination which may include direct load control and/or a Ministerial smart meter rollout determination for distribution price determinations that have already been made by the AER prior to the NEL amendments, including whether the costs of alternative control services can be recovered under the cost pass through mechanism if this was not anticipated in the determination;

Obligation and ability to take into account network benefits

9. The AEMC should consider:
   9.1. Whether there is an obligation under the NEL and the Rules for the AER to take into account 'reasonably achievable network operational benefits' in determining efficient costs;
   9.2. Whether the Rules provide the ability for the AER to take into account 'reasonably achievable network operational benefits' either during the distribution determination process or in making a pass through determination or both, and to request information sufficient for this purpose;
   9.3. Whether the framework provides for the efficient allocation of costs of a smart meter roll-out, which may include apportioning costs against something other than a standardised cost per customer.

Cost pass through provisions under clause 6.6.1

10. In respect of the cost pass through determination process under clause 6.6.1 of the Rules the AEMC should consider:
   10.1. Whether there is sufficient flexibility provided under the Rules for the AER to determine an appropriate materiality threshold for the pass through of distributor costs associated with a Ministerial pilot metering determination;
   10.2. Whether the timeframes in the current Rules for pass through applications and determinations are appropriate, in the context of a Ministerial pilot metering determination and/or a Ministerial smart meter rollout determination.

Incentives under the regulatory regime

11. It would be appropriate for the AEMC to consider:
   11.1. Whether an efficiency benefit sharing scheme as provided for under clause 6.5.8 of the Rules is appropriate for an accelerated roll-out of smart meters, given the MCE decision that the efficiencies gained from a roll-out are to be passed on to customers 'promptly';
   11.2. Whether the current incentive mechanisms incorporated in the Rules are sufficient to maximise the competitive purchase of meters and metering services; and
   11.3. Whether Chapter 6 of the Rules provides appropriate incentives for a distribution network service provider to manage technology risks for the long-term benefit of consumers without a re-examination of the Weighted Average Cost of Capital (WACC), which is outside the scope of this review. The risks to be managed include premature failure of a new technology.

Mechanisms to smooth impacts on tariffs over time

12. In light of MCE's June 2008 decision that the regulator should consider mechanisms to smooth any impact on tariffs over time, the AEMC should consider:
   12.1. Whether clause 6.5.5 of the Rules in relation to depreciation requires modification, to allow the AER to require a distributor to modify its proposed depreciation schedules in order to smooth the tariff impact of a smart meter roll-out decision, (this includes the depreciation of existing accumulation meter assets that are being replaced before the end of their economic life);
   12.2. The need to minimise potential price impacts on customers caused by paying for the Smart Metering Infrastructure (SMI) roll-out before benefits are realised;

12.3. Whether the framework allows the AER to obtain the necessary information to ensure benefits are being realised within a reasonable timeframe.

Assumptions

13. In developing the Advice requested above, the AEMC is to assume that:

13.1. the provisions described in the transitional Rule have commenced;

13.2. Rules, standards and the National Electricity Market technical procedures describing technical specifications, performance requirements, amendments to functions, service standards and national minimum functionality in respect of SMI have been made; and

13.3. no further Rule changes for jurisdictional derogations in relation to delivery of smart meter trial, pilot and roll-out programs will be made.

Consultation

14. The AEMC must prepare and publish on its website a draft Statement of Approach by no later than 20 December 2009. The AEMC must invite public comment on the draft Statement of Approach. The AEMC must consider comments on the draft Statement of Approach in preparing the final Statement of Approach for publication.

15. The AEMC must prepare and publish draft Advice on the issues outlined in the Request for Advice, and invite public comment on the draft Advice. The AEMC must consider comments on the draft Advice in preparing the final Advice on issues outlined in the Request for Advice.

Recommendations

16. The Advice should make recommendations on any changes to the Rules necessary to ensure the recovery of the efficient costs of mandated smart metering infrastructure and have regard to the prompt pass through of benefits to consumers, where this is in their long term interest.

Management of confidential information

17. The AEMC must manage confidential information provided in accordance with the requirements of section 24 of the AEMC Establishment Act 2004 and section 108 of the NEL.

Date by which advice is due

18. The AEMC must provide a copy of the final Advice to the MCE by end August 2010. The AEMC must also publish a copy of the final Advice on its website no later than two weeks after providing the Advice to MCE.

A

No 54 of 2009 assented to 5.11.2009

South Australia

National Electricity (South Australia) (Smart Meters) Amendment Act 2009

An Act to amend the *National Electricity (South Australia) Act 1996.*

Contents

The Parliament of South Australia enacts as follows:

Part 1—Preliminary

1—Short title

This Act may be cited as the *National Electricity (South Australia) (Smart Meters) Amendment Act 2009*.

2—Commencement

(1) This Act will come into operation on a day to be fixed by proclamation.

(2) Section 7(5) of the *Acts Interpretation Act 1915* does not apply to this Act or to a provision of this Act.

3—Amendment provisions

In this Act, a provision in Part 2 amends the *National Electricity Law* set out in the Schedule to the *National Electricity (South Australia) Act 1996*.

Part 2—Amendment of *National Electricity Law*

Division 1—Smart meter amendments

4—Amendment of section 2—Definitions

(1) Section 2, definition of ***additional Minister initiated Rules***—delete "or section 90B" and substitute:

, section 90B or section 90C

(2) Section 2—after the definition of ***Ministerial Gazette notice*** insert:

Ministerial pilot metering determination means a determination made under section 118B;

Ministerial smart metering determination means—

(a) a Ministerial smart meter rollout determination; or

(b) a Ministerial pilot metering determination;

Ministerial smart meter rollout determination means a determination made under section 118D;

(3) Section 2—after the definition of ***shared transmission service*** insert:

smart meter amendments means the amendments to this Law made by section 5 of the *National Electricity (South Australia) (Smart Meters) Amendment Act 2009* of South Australia;

5—Insertion of Part 8A

After Part 8 insert:

Part 8A—Smart metering services

Division 1—Interpretation

118A—Definitions

In this Part—

relevant customer means a person who consumes electricity through a supply point connected to a distribution system owned, operated or controlled by a regulated distribution system operator to which a Ministerial smart metering determination applies;

required smart metering infrastructure means smart metering infrastructure that is specified under the Rules to be required smart metering infrastructure;

smart meter assessment means an assessment of the costs and benefits, or operational performance, or both, of different smart metering infrastructure and other related technologies, including devices designed to enable direct load control;

smart metering infrastructure means infrastructure (and associated systems) associated with the installation and operation of remotely read electricity metering and communications, including interval meters designed to transmit data to, and receive data from, a remote locality;

smart metering services means services provided by means of required smart metering infrastructure that are specified as smart metering services under the Rules;

smart meter trials means trials of smart metering infrastructure and other related technologies, including devices designed to enable direct load control.

Division 2—Ministerial pilot metering determinations

118B—Ministerial pilot metering determinations

(1) A Minister of a participating jurisdiction may make a determination that requires a regulated distribution system operator that earns most of its revenue from the provision of electricity network services provided by means of a distribution system situated partly or wholly in that participating jurisdiction to conduct smart meter trials or undertake a smart meter assessment (or both).

(2) In making a Ministerial pilot metering determination, the Minister must have regard to—

(a) the national electricity objective; and

(b) any comments or submissions made to the Minister as part of the consultation conducted under section 118C.

(3) A Ministerial pilot metering determination must specify the regulated distribution system operator, or the class of regulated distribution system operator to which the determination applies (the ***relevant operator or relevant operators***).

(4) Without limiting subsection (1), a Ministerial pilot metering determination may—

(a) specify minimum standards of performance and service that must be met or investigated by the relevant operator or relevant operators in conducting smart meter trials;

(b) specify the nature and timing of the smart meter trials;

(c) in relation to information derived from a smart meter trial or a smart meter assessment, require the relevant operator or relevant operators to—

(i) subject to any conditions specified in the determination, provide that information to a person specified in the determination; or

(ii) make such information publicly available.

(5) A requirement of the kind referred to in subsection (4)(c) may require information that relates to a person—

(a) be provided to another person; or

(b) be made publicly available.

(6) However, a requirement referred to in subsection (4)(c) must not require the relevant operator to make the information publicly available in a manner that identifies the person to whom the information relates unless the relevant operator has the written consent of the person to do so.

(7) Subsection (6) does not apply to information that is in the public domain.

118C—Consultation with interested persons required before making Ministerial pilot metering determination

Before making a Ministerial pilot metering determination, the Minister must consult with a person or body that the Minister considers has an interest in the determination.

Division 3—Ministerial smart meter rollout determinations

118D—Ministerial smart meter rollout determinations

(1) A Minister of a participating jurisdiction may make a determination about the provision of smart metering services by a regulated distribution system operator that earns most of its revenue from the provision of electricity network services provided by means of a distribution system situated partly or wholly in that participating jurisdiction.

(2) In making a Ministerial smart meter rollout determination, the Minister must have regard to—

(a) the national electricity objective; and

(b) any submissions made to the Minister as part of the consultation conducted under section 118E.

(3) A Ministerial smart meter rollout determination must not be inconsistent with the Rules.

(4) A Ministerial smart meter rollout determination must—

(a) specify the regulated distribution system operator, or the class of regulated distribution system operator to which the determination applies (the ***relevant operator or relevant operators***); and

(b) specify any of the following or a combination of any of the following in relation to which the relevant operator or relevant operators must provide smart metering services:

(i) the minimum number of relevant customers;

(ii) the class of relevant customers;

(iii) the minimum number of supply points; and

(c) specify the date on which the determination expires.

(5) Without limiting subsection (1), a Ministerial smart meter rollout determination may specify—

(a) the date or dates by which, and the location at which, smart metering services, or different classes of smart metering services, must be provided;

(b) the date or dates by which required smart metering infrastructure, or different classes of smart metering infrastructure, become operational.

(6) A Ministerial smart meter rollout determination has effect according to its tenor despite anything to the contrary in any agreement or contract.

118E—Public consultation required before making Ministerial smart meter rollout metering determination

Before making a Ministerial smart meter rollout metering determination, the Minister must consult with the public about the determination.

Division 4—Provisions applicable to Ministerial smart metering determinations

118F—Compliance with Ministerial smart metering determinations

(1) A regulated distribution system operator must comply with a Ministerial smart metering determination that applies to the operator.

(2) A regulated distribution system operator incurs, by complying with a Ministerial pilot metering determination, no liability for breach of contract, breach of confidence or any other civil wrong.

118G—Minister of participating jurisdiction must consult with other participating jurisdiction Ministers

A Minister of a participating jurisdiction must consult with the Ministers of the other participating jurisdictions before making a Ministerial smart metering determination.

118H—Content of Ministerial smart metering determinations

A Ministerial smart metering determination—

(a) may be of general or limited application;

(b) may differ according to differences in time, place and circumstances.

118I—Publication and giving of Ministerial smart metering determinations

As soon as practicable after a Ministerial smart metering determination is made the determination—

(a) must be published in the South Australian Government Gazette; and

(b) must be given to—

(i) every regulated distribution system operator to which it applies; and

(ii) the AER; and

(iii) the AEMC.

118J—When Ministerial smart metering determinations take effect

A Ministerial smart metering determination has effect on and after the day specified in the determination for the period specified in the determination.

118K—AEMC must publish Ministerial smart metering determination it receives on its website

The AEMC must publish a Ministerial smart metering determination on its website as soon as practicable after receiving it.

Division 2—Other related amendments

6—Insertion of section 90C

After section 90B insert:

90C—South Australian Minister to make initial Rules related to smart meters

(1) The Minister in right of the Crown of South Australia administering Part 2 of the *National Electricity (South Australia) Act 1996* of South Australia (the ***South Australian Minister***) may make Rules for or with respect to either or both of the following subjects:

(a) the smart meter amendments;

(b) any other subject contemplated by, or consequential on, the smart meter amendments.

(2) Rules may only be made under subsection (1) on the recommendation of the MCE.

(3) Section 34(3) applies to Rules made under subsection (1) in the same way as it applies to Rules made by the AEMC.

(4) As soon as practicable after making Rules under subsection (1), the South Australian Minister must—

(a) publish in the South Australian Government Gazette notice of the making of the Rules stating the date of commencement of the Rules or, if different Rules commence at different times, the various dates of commencement; and

(b) make the Rules publicly available.

(5) Once the first Rules have been made under subsection (1), no further Rules can be made under that subsection.

B

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26 NOV 2009

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Department : .....

On : .....

By : .....

Confidential Draft prepared by the Office of Chief Parliamentary Counsel Victoria

National Electricity Amendment (Ministerial Smart Meter Roll Out Determinations) Transitional Rule 2009

TABLE OF PROVISIONS

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Department : .....

On : .....

By : .....

Sixth Draft
10/08/2009

National Electricity Amendment (Ministerial Smart Meter Roll Out Determinations) Transitional Rule 2009

1 Title

This Rule is the *National Electricity Amendment (Ministerial Smart Meter Roll Out Determinations) Transitional Rule 2009.*

2 Commencement

This Rule commences operation on [ ].

3 Amendment of National Electricity Rules

The National Electricity Rules are amended as set out in Schedule 1.

SCHEDULE 1

[1] New Rule 11.28—Ministerial Smart Meter Roll Out Determinations

After Rule 11.27 insert:

11.28 Ministerial Smart Meter Roll Out Determinations

11.28.1 Definitions

In this rule 11.28:

relevant commencement date, for a relevant *metering installation*, means the day on which the Ministerial smart meter roll out determination that applies to the relevant *metering installation* takes effect.

relevant *metering installation* has the meaning given by rule 11.28.2.

specified amount means the amount assigned to variable "y" in Schedule 3 of the *metrology procedure* in relation to a participating jurisdiction.

supply point means a supply point—

(1) that is a *connection point* connected to the distribution system of a regulated distribution system operator; and

(2) through which the regulated distribution system operator is required to provide smart metering services in accordance with a Ministerial smart meter roll out determination.

volume consumption means the volume of *energy* consumed by a customer through the relevant supply point calculated in accordance with Schedule 2 of the *metrology procedure*.

11.28.2 Meaning of relevant *metering installation*

(a) For the purpose of this rule, a **relevant *metering installation*** is a *metering installation* for a supply point in respect of which the volume consumption of the customer is less than the specified amount.

(b) For the purpose of this rule, a **relevant *metering installation*** does not include:

(1) a *metering installation* installed for a supply point before the relevant commencement date in respect of which a *Market Participant* is the *responsible person*; or

(2) a *metering installation* referred in paragraph (a) that is installed for the supply point referred to in that paragraph on and after the relevant commencement date in accordance with the ordinary replacement cycle of that *Market Participant*; or

(3) a *metering installation* located at a *high voltage connection point*.

11.28.3 Period of application of rule to relevant metering installations

This rule 11.28:

(a) applies to a relevant *metering installation* on the day the Ministerial smart meter roll out determination that applies to the relevant *metering installation* takes effect; and

(b) ceases to apply to a relevant *metering installation* on the day the Ministerial smart meter roll out determination that applies to the relevant *metering installation* ceases to have effect.

11.28.4 Designation of responsible person

Despite clauses 7.2.2 and 7.2.3, the *responsible person* for a relevant *metering installation* is the regulated distribution system operator to whom the Ministerial smart meter roll out determination (that applies to that relevant *metering installation*) applies.

11.28.5 Agency data collection systems and agency metering databases

(a) If *AEMO* uses:

(1) *agency data collection systems* under clause 7.3.5(c); or

(2) *agency metering databases* to form part of the *metering database* under clause 7.9.1(b),

in respect of *metering data* from a relevant *metering installation*, the person engaged by *AEMO* under clause 7.9.1(b1) to provide the *agency data collection systems* and the *agency metering databases* must be selected by the *responsible person* for the relevant *metering installation*.

(b) Paragraph (a) applies despite anything to the contrary contained in any contractual or other arrangement between a *Market Participant* and *AEMO*.

11.28.6 Remote acquisition of data by the responsible person

For the purposes of clause 7.9.2(a):

(a) the *responsible person* for a relevant *metering installation* (and not *AEMO*) is responsible for the *remote acquisition* of *metering data* from a relevant *metering installation*;

(b) *AEMO* is responsible for storing the *metering data* referred to in paragraph (a) as *settlements ready data* in the *metering database*; and

(c) the *responsible person* for a relevant *metering installation* must provide the *metering data* remotely acquired under paragraph (a) to *AEMO*.

ENDNOTES

B The costs and benefits of SMI

B.1 Smart Meter Infrastructure

SMI can be considered as comprising of four main components:

- The smart meter - The device which measures and records the production or consumption of electrical energy;
- The smart meter management system - The component of an SMI system that allows commands to be sent via the smart meter communications network to and from the meter;
- The smart meter communications network - This includes all communications equipment, processes and arrangements which enable remote communications between the smart meter and the smart meter management system; and
- The interface to a home area network (HAN): This includes the interface which supports secure communications from the meter to a local area communications network installed in a customer premises.[178]

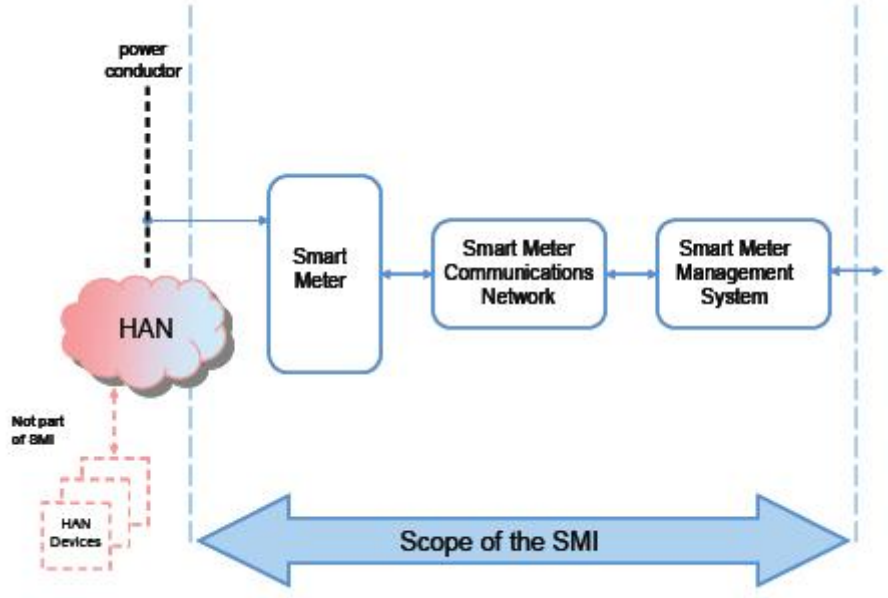
An overview of SMI technology is outlined in Figure B.1 below.

Smart meter technology essentially does two things. Firstly, and most significantly in terms of the expanded range of functions that smart meter technology provides, it brings the customer's site within the scope of the electricity network's automated control systems (the 'upstream' functionality). This allows 'real time' data and instructions to flow to and from the network and the customer's site. This could include data on consumption and the quality of voltage supply. Interruptions and faults can also be automatically and remotely accessed; and instructions can be issued to the meter to disconnect or reconnect supply, cap the level of consumption or otherwise control the supply provided to the customer's site. Not only are many presently manual functions automated, the expanded functions provide opportunities for more efficient use and management of the electricity system.

Secondly, smart meter technology provides the customer with an increased capacity to manage their electricity consumption through in-house control systems that connect to the meter. Such systems may, for example, allow the use of individual appliances to be managed according to information received by the meter on the price of electricity applying at that time. This 'downstream' functionality is dependent upon the development of in-home control systems that communicate with the smart meter. These in-home systems are considered to be outside the boundaries of SMI technology.

178 National Smart Meter Program Business Requirements Work Stream, Smart Metering Infrastructure Minimum Functionality Specification, 28 May 2010.

Figure B.1 Overview of SMI technology[179]



The NSSC are currently developing recommendations for the MCE regarding the minimum functionality requirements for mandated SMI, and the minimum infrastructure performance levels and participant service levels that DNSPs will be required to comply with when undertaking a mandated smart meter roll-out. Nevertheless, significant discretion will remain with the DNSP in relation to the choice of equipment, the design of systems and the integration of SMI into the wider aspects of a DNSP's network operations. DNSPs may also opt to use technology which provides capabilities over and above the minimum functionality requirements. It is understood that both the smart metering services which may be provided using mandated SMI and the minimum functionality requirements for SMI will be specified in the Rules. However, each jurisdictional Energy Minister would retain discretion over the smart metering services that DNSPs would be required to provide in their jurisdiction.

B.2 Costs and Benefits of Smart Meter Infrastructure

There are three main cost categories for SMI:

- Capital costs of the meter: The lifetime costs of meters can be sensitive to the discount rate and the assumed lifetime of the meters. Smart meters have a shorter technical life than traditional electromechanical meters and a lifetime of 15 years is typically assumed. There is also the cost of existing meters being stranded;

- Installation costs: The average installation costs tends to depend on the roll-out schedule. Accelerating the roll-out schedule increases the costs of installation due to an increase in the number of physical installations over a shorter period of

179 Source: National Smart Meter Program Business Requirements Work Stream, Smart Metering Infrastructure Minimum Functionality Specification, 12 February 2010.

time. The coordination of the roll-out has an impact on the magnitude of this cost increase. If the roll-out is coordinated by region, travel time between sites can be minimised; and

- Communication and data systems: This requires on-going operational expenditure and tends to be the most uncertain of the costs associated with SMI.

The benefits of SMI can be divided into two main categories: operational benefits and demand response benefits. As with the costs of meters and metering systems, the magnitude of benefits is influenced by a number of factors, including the level of functionality, deployment speed, coordination and behavioural change. The benefits of SMI include:

- Operational benefits: The avoided cost of meter reading is one of the most significant operational benefits and is facilitated by the remote reading function. Deployment speed has an impact on operational benefits; in general, slower deployment can have an adverse effect on total benefits. The ability of a DNSP to avoid site visit costs in practice as a result of SMI will depend on the requirements in the National Energy Customer Framework and the safety requirements in each individual jurisdiction.

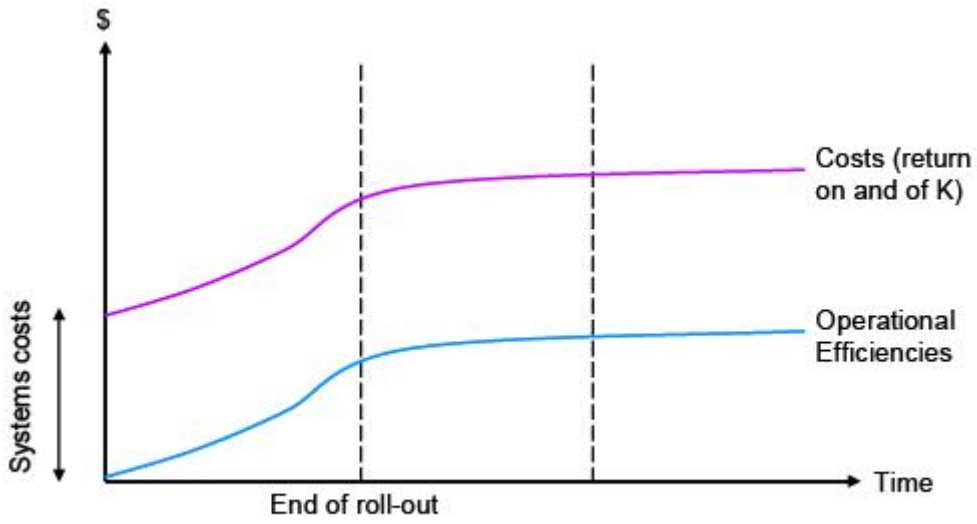
  Other potential operational benefits include: better outage detection; faster response times to outages; improved quality of supply recording; and more accurate billing. There may also be a reduction in customer service costs due to a lower level of customer complaints. Smart meters may also lead to a reduction in non-technical electricity losses (e.g. from theft and tampering). DNSPs will also benefit from the avoided costs from not having to replace and install accumulation meters that are nearing the end of their service lives.

- Demand response benefits: Smart meters can influence customer demand in a number of ways: first, by facilitating direct load control of appliances; second, by facilitating the introduction of time varying prices; and third, by providing additional consumption information either via the meter, external display or directly from the supplier. Direct load control and time-varying prices have the potential to shift consumption from peak to off-peak periods; and time-varying prices and information may lead to changes in average consumption levels. Changes in demand can have a number of benefits for networks, retailers, the customer and broader society. Shifting consumption from peak to off-peak periods may defer the need for peak network investment; this shift may also defer investment in peak generating capacity. More cost-reflective pricing may also help suppliers to minimise their hedging costs. The impact on carbon emissions will depend on whether there is an overall reduction in demand; it also depends on the carbon intensities of marginal plant during peak and off-peak periods.

The benefits of SMI will start to accrue to the DNSP as smart meters are installed in customers' premises and activated. Benefits will increase in proportion as more smart meters are installed and activated. Since the activation of the smart meter requires the

upstream infrastructure and network systems to be in place, benefits will lag costs and accrue more slowly. While this will generally be the case, the actual extent of the lag and the gap between costs and benefits in the early years of a mandated smart meter roll-out will depend on the DNSP's response to the roll-out parameters determined by the Minister. An indicative profile of the costs and benefits of a smart meter roll-out is outlined below in Figure B.2.

Figure B.2 Indicative profile of the costs and benefits of a smart meter roll-out



C Specifications of proposed Rules amendments

This Appendix sets out specifications, which set out in detail the Commission's proposed changes to the Rules, relating to:

1. Cost recovery during distribution determination process;

2. Mid period cost recovery for mandated smart meter roll-outs;

3. Mid period cost recovery for mandated smart meter pilots and trials;

4. Cost recovery for mandated smart metering services which are classified as alternative control services; and

5. Tariff issues associated with mandated SMI.

It should be noted that these specifications are not draft Rules and should not be interpreted as such. Further detail on the reasoning for these proposed amendments to the Rules are outlined in Chapters 2 to 7 of the Draft Report.

C.1 Cost recovery during the distribution determination process

C.1.1 Addressing the impact of timing uncertainty

Insert new Rule:

(a) Where the costs of complying with a relevant Ministerial smart meter roll-out determination, made under Section 118D of the *National Electricity Law*, have been allowed in a DNSP's annual revenue requirement, at the end of the regulatory control period, the AER must calculate the "corrected" allowed revenue requirement based on the actual timing of the installation of smart meters by the DNSP over the regulatory control period. The AER must then calculate the net present value of the difference between the allowed revenue requirement and the corrected allowed revenue requirement.

(b) The AER must calculate the corrected allowed revenue requirement referred to in paragraph (a) using the cost assumptions (e.g. unit meter cost) and the annual forecast allowance for SMI costs and the forecast installation profile specified in the previous distribution determination.

(c) When making a subsequent distribution determination, the AER must adjust the DNSP's annual revenue requirement, using the net present value calculated in paragraph (a). The effect of this adjustment to the DNSP's annual revenue requirement will be to:

    (i) Remove any additional revenue earned by a DNSP, where a DNSP has rolled out smart meters and/or associated infrastructure slower than

forecast in the previous distribution determination and allowed for in revenues for that period; and

(ii) Compensate a DNSP for costs above allowed revenues, where a DNSP has rolled out smart meters and/or associated infrastructure faster than forecast in the previous distribution determination

(d) In making the adjustment to a DNSP's annual revenue requirement referred to in paragraph (c), the AER should have regard to the benefits of smoothing the impact of the adjustment over the next regulatory control period.

(e) If the AER has calculated the net present value referred to in paragraph (a) using forecasts of the smart meters and/or associated infrastructure that a DNSP will roll out in the last two years of the regulatory control period, a reconciliation adjustment will be determined and will apply during the subsequent regulatory control period to address any forecasting variances between the forecasts used by the AER and the actual smart meters and /or associated infrastructure that a DNSP has rolled out in the last two years of the previous regulatory control period. *[Note- It is proposed that this adjustment would apply where the AER is not able to use data on the actual smart meters and/or associated infrastructure that was rolled out by the DNSP in the last two years of the regulatory control period to calculate the net present value, because of the timing of its calculation. We note that the Rules currently contain provisions for a similar adjustment to be made under S6.2.1(e) of the Rules].*

(f) For the avoidance of doubt, the adjustment referred to in paragraph (c) cannot be applied, where the costs of a Ministerial smart meter roll out determination have not been anticipated at the time of the previous distribution determination.

C.1.2 Addressing the impact of expenditure uncertainty

Insert new Rule:

(a) Where the AER considers that there is a substantive degree of uncertainty regarding the actual level of the efficient costs and expected benefits of smart metering infrastructure associated with a Ministerial smart meter roll-out determination, and the existing arrangements would result in either a) an incentive for a DNSP to under-spend the allowed expenditure which is too strong or b) an inappropriate balance of expenditure risk between the DNSP and its customers, the AER may apply one of the following mechanisms in making a distribution determination:

(i) For mandated smart metering assets with economic lives of 15 years or less, the AER may roll forward the regulatory asset base on the basis of forecast depreciation rather than actual depreciation; or

(ii) A cost sharing mechanism, which varies the proportion of any underspend or overspend between the annual revenue requirement and actual expenditure which is retained by a DNSP and shared with its customers.

(iii) *[Note: We have asked for stakeholder comments on whether the AER should be able to apply the depreciation mechanism in (a)(I) to all distribution network expenditure, where this expenditure involves short asset lives and where there is uncertainty regarding the efficient costs of those assets.]*

(b) The AER must state in its framework and approach paper, published under clause 6.8.1 of the Rules, whether it considers there is a possible need to apply one of the mechanisms in paragraph (a) in the forthcoming regulatory control period. If the AER considers that there is a possible need to apply one of the mechanisms in paragraph (a), the AER must explain (and provide examples) in its framework and approach paper regarding how such a mechanism could be applied.

(c) If the AER determines to apply one of the mechanisms in paragraph (a), it must explain how the mechanism will be applied in its draft distribution determination for the forthcoming regulatory control period. The AER must also state its reasons as to why it considers such a mechanism is required.

(d) The AER must ensure that any mechanism which is applied under this clause is applied in a manner which is consistent with the Efficiency Sharing Benefit Scheme.

(e) The cost sharing mechanism, must operate in accordance with the following requirements:

(i) It cannot result in an expenditure incentive which is stronger than the incentive that would have applied if the cost sharing mechanism was not applied; and

(ii) The mechanism must operate through an adjustment to the allowed revenue requirement calculated for the next regulatory control period. The impact of the adjustment must be smoothed by the AER over this regulatory control period.

(iii) *[Note: Further prescription on the operation of the cost sharing mechanism is required]*

C.1.3 New reporting requirement for DNSPs on the costs and benefits of smart meter roll-outs and pilots

Insert new Rule:

(a) DNSPs must provide the AER with information each year on the actual costs and network operational benefits of any smart meter roll-outs, pilots or trials they are undertaking.

(b) For the avoidance of doubt, this Rule applies to smart meter roll-outs, pilots and trials that a DNSP may be undertaking independently of a Ministerial determination which is made under the *National Electricity Law,* and also applies

to the roll-out of advanced metering infrastructure which is undertaken under an Order in Council made under the *Electricity Industry Act 2000 (Victoria.*

(c) The AER must publish a guideline which outlines the nature and format of the information that is to be provided under paragraph (a). This guideline must be published in accordance with the distribution consultation procedures in rule 6.16.

C.2 Mid period cost recovery for mandated smart meter roll-outs

Insert new Rule

(a) Where a Ministerial smart meter roll-out determination, made under Section 118D of the *National Electricity Law*, is made following a distribution determination and requires a DNSP to incur expenditure which has not been incorporated in a relevant distribution determination, the appropriate level of expenditure will be decided by the AER when it makes its distribution determination for the following regulatory control period.

(b) In its regulatory proposal for the following regulatory control period, the DNSP must include information on the level of costs incurred or to be incurred up to the start of the next regulatory control period and any supporting evidence to justify such costs. The AER is required to perform an ex-post review of the efficiency of these costs in making its distribution determination for the following regulatory control period.

(c) In undertaking an ex-post review under paragraph (b), the AER must comply with the following principles:

(i) The AER must only take into account information that the DNSP could have reasonably been expected to have considered at the time it undertook its expenditure;

(ii) In making its determination on the appropriate level of expenditure, the AER can only take into consideration the value of those network operational benefits which occur directly to the DNSP and solely as a result of the implementation of the mandated smart meter roll-out;

(iii) The AER must provide the DNSP with the time cost of money for incurred costs, based on the weighted average cost of capital for the previous regulatory control period; and

(iv) The AER must accept the level of expenditure submitted by the DNSP if the AER is satisfied that such level of expenditure is consistent with the operating expenditure criteria in clause 6.5.6 of the Rules and the capital expenditure criteria in clause 6.5.7 of the Rules.

(d) The AER must publish a guideline which outlines its approach to undertaking ex-post reviews under paragraph (b), in accordance with the distribution consultation procedures in rule 6.16.

(e) [In regards to the circumstances described in paragraph (a), the AER may approve a temporary adjustment in prices within a regulatory control period, where the AER considers that a DNSP is likely to experience material cash flow difficulties in undertaking a mandated smart meter roll-out prior to an ex-post review at the next distribution determination. This interim adjustment in prices must be based on *[Note: the following two options are under consideration. It is likely that the Rules will only specify one possible method]:*

(i) [An adjustment based upon the forecast of costs and benefits used by the Minister in making its Ministerial determination under Section 118D of the *National Electricity Law]*

(ii) [An adjustment based on the DNSP's own forecast costs and benefits of undertaking the mandated smart meter roll-out].

(f) The AER must take into account any temporary adjustment in prices which is approved under paragraph (e), in undertaking its ex-post review and determining the allowed revenue requirement for a DNSP under paragraph (b).

C.3 Mid period cost recovery for mandated smart meter pilots and trials

Insert new clause in 6.6.2 of the Rules:

(a) In making a distribution determination, the AER must indicate how it will classify smart meter pilots and trials provided under Section 118B of the *National Electricity Law* as services. For the avoidance of doubt, this clause applies even where no Ministerial pilot determinations have been made under the *National Electricity Law,* which are relevant to that DNSP.

Amend clause 6.6.1 of the Rules in the following three ways:

- **To address the dead zone period, insert the following new clause:**

(a) Where a pass through event occurs in the remaining 13 months of a regulatory control period and costs are incurred in relation to that pass through event in the forthcoming regulatory control period, a DNSP must submit a written statement under clause 6.6.1(c) or (f) to the AER within the forthcoming regulatory control period if the expenditure has not been included in the distribution determination. *[Note: It is intended that this proposed amendment would have a general application to all cost pass through events and would not be limited to cost pass through events associated with a Ministerial smart meter pilot determination]*

- **To enable the AER to extend the timeframes for making a cost pass through determination, insert the following new clause:**

(a) The AER may extend the time limit for it to make a determination referred to in clause 6.6.1(d) of the Rules:

(i) where such a determination is in regards to determining the approved pass through amount for a mandated smart meter pilot or trial, which a DNSP has been required to undertake under Section 118B of the *National Electricity Law;* and

(ii) the AER is satisfied that the difficulty of assessing or quantifying the effect of the relevant pass through event justifies the extension.

(a) Where the AER has extended its timeframe to make a determination under paragraph (a), the AER must publish a notice which outlines its new timeframe for making a determination and the reasons for its extension of time. It must also notify the relevant DNSP of the new timeframe.

- **To require the AER to have regard to the efficient and prudent costs of a pass through event, insert the following new clause to 6.6.1(j) of the Rules:**

(a) In making a determination under clause 6.6.1(d) in regards to determining the approved pass through amount for a mandated smart meter pilot or trial, which a DNSP has been required to undertake under Section 118B of the National Electricity Law, the AER must take into account:

(i) The costs that an efficient and prudent operator in the circumstances of the relevant DNSP would require.

[Note: We have asked for stakeholder comments on whether the proposed amendments to enable the AER to extend its decision making timeframe and require the AER to have regard to the efficient and prudent costs of a pass through event, should be limited to pass through events associated with expenditure for a Ministerial smart meter pilot determination, or whether these amendments should apply to all pass through events].

C.4 Mandated smart metering services which are classified as alternative control services

Insert following new clause into clause 6.2.5(d) of the Rules:

(a) Where the AER has determined to classify services which are provided under Section 118B of the *National Electricity Law* as alternative control services, in determining the appropriate control mechanism for these services, the AER must consider the need for adequate pass through arrangements for Ministerial smart meter pilot determinations.

C.5 Tariff issues associated with mandated SMI

C.5.1 Amendments for the efficient allocation of costs and to facilitate the unbundling of tariffs

Insert new Rule in rule 6.18 of the Rules:

(a) The tariffs for smart metering services, which are proposed by a DNSP under clause 6.18.2 of the Rules, must be consistent with the following principles (i.e. the SMI pricing principles):

(i) tariffs must be based on the costs incurred in providing the mandated smart metering service;

(ii) the costs of providing mandated smart metering services should be recovered through a fixed tariff;

(iii) a proportion of costs should be allocated to those customers who benefit from the mandated smart metering services, based on the share of benefits those customers receive compared to the benefits that all customers receive;

(iv) a proportion of the costs should be allocated to the general DUOS tariffs, based on the share of benefits all customers receive compared to the benefits that are specific to customers with mandated smart meters;

(v) the DNSP shall not be remunerated twice for the same cost through different tariffs;

(vi) tariffs should promote future contestability in smart metering services;

(vii) tariffs should be easily comprehensible; and

(viii) tariffs must be determined with regard to the transaction costs of calculating the tariff.

(b) The AER may require a DNSP to unbundle the tariffs for smart metering services which a DNSP is required to provide under Section 118D of the *National Electricity Law*, where these services are classified as standard control services.

(c) The AER must indicate its intention to require a DNSP to unbundle its tariffs for smart metering services for the forthcoming regulatory control period in its framework and approach paper, which is published under clause 6.8.1.

(d) In determining whether the require a DNSP to unbundle its tariffs for smart metering services under paragraph (b), the AER must take into account the SMI Pricing Principles under paragraph (a).

[Note: The definition of smart metering services is currently being considered by the NSSC]

[Note: Further amendments to the Rules may be required following a decision by the MCE regarding the future contestability of smart metering services].

C.5.2 Amendments to facilitate tariff smoothing

Amend clause 6.5.9 of the Rules by inserting the following new clause:

(a) In determining the appropriate X factor for the regulatory control period under clause 6.5.9 of the Rules, the AER must have regard to the need to minimise the initial tariff impacts of recovering the costs for a mandated smart meter roll-out, which a DNSP is required to undertake under Section 118D of the *National Electricity Law*.

Amend clause 6.5.5 of the Rules by inserting the following new clauses:

(a) The AER may modify a DNSP's depreciation schedule under clause 6.5.5 of the Rules, to smooth the tariff impact of a mandated smart meter roll-out, for assets which a DNSP is required to provide under Section 118D of the *National Electricity Law*. In determining whether to modify a DNSP's depreciation schedule, the AER must consider:

  (i) any economic effects from smoothing the tariff impacts; and

  (ii) any impact on the ability of the DNSP to finance the mandated roll-out.

  (iii) *[Note: We are seeking stakeholder comments on the factors the AER must consider when determining whether to use depreciation schedules to smooth the tariff impact of a mandated roll-out is required].*

(b) For the avoidance of doubt, the application of paragraph (a) may result in depreciation schedules being different for similar assets categories.

(c) Where a DNSP is required to undertake a mandated smart meter roll-out under Section 118D of the *National Electricity Law*, the existing meters which will be replaced as a result of the roll-out, must continue to be depreciated under the asset lives that were approved by the AER, prior to the making of the relevant Ministerial determination under Section 118D of the *National Electricity Law*.

(d) The costs of the existing meters referred to in paragraph (c) must continue to be recovered by DNSPs through DUOS charges.

D Questions for stakeholder comment

Set out below is a summary of the specific questions for stakeholder comment that have been outlined in Chapters 2 to 7 of this report.

Chapter	Questions
Chapter 2: Cost recovery during the distribution determination process	1.1: Should the AER be able to apply the proposed mechanisms to address remaining uncertainty (i.e. the roll-forward of the RAB on the basis of forecast depreciation and the cost sharing mechanism) to other distribution investments, where the potential costs and benefits of such investments are uncertain at the time a distribution determination is made? 1.2: Do you consider that a specific information provision requirement should be included in the Rules to require DNSPs to provide annual information on the costs and operational benefits of mandated smart meter roll-outs, pilots and trials? Or do you consider that the AER's current information gathering powers under the NEL are sufficient?
Chapter 3: Mid period cost recovery for mandated smart meter roll-outs	2.1: Would an interim adjustment in prices be required prior to the next distribution determination, where a DNSP is required to roll-out smart meters within a regulatory control period? If so, should this adjustment be based on the forecast costs and benefits outlined in the relevant Ministerial roll-out determination or the DNSP's own forecasts? 2.2: Are there any other principles the AER should be required to take into account when undertaking its ex-post review?
Chapter 4: Mid period cost recovery for mandated smart meter pilots and trials	3.1: Are any further amendments to the cost pass through provisions required to provide for the recovery of the efficient costs of mandated smart meter pilots and trials? 3.2: Should our proposed amendments to the cost pass through provisions, to extend the AER's decision making timeframe and require the AER to consider the efficient and prudent costs of a mandated smart meter pilot or trial, be extended to all pass through events?

Chapter	Questions
Chapter 5: Cost recovery for mandated smart metering services which are classified as alternative control service	4.1: Is greater prescription required in the Rules to provide for the recovery of the efficient costs of mandated smart metering services, where these services are classified as an alternative control service?
Chapter 6: Incentives under the current regulatory regime	5.1: Are any changes to the Rules required to ensure the incentives under the current regulatory regime are appropriate for mandated SMI?
Chapter 7: Tariff issues associated with mandated SMI	6.1: What principles should the AER be required to have regard to for the efficient allocation of costs and in determining whether to require a DNSP to unbundle mandated smart metering services from DUOS charges? 6.2: Should Rules on the unbundling of mandated smart metering services be made at this time, in light of the current uncertainty regarding the future contestability of smart metering services? 6.3: Is it appropriate to allow the AER to back end depreciation? What factors should the AER be required to have regard to when determining to back end depreciation for mandated SMI assets?