

5 February 2010

The Chairman Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

NSSC Submission on Consultation on Draft Statement of Approach – Request for Advice on Cost Recovery for the Mandated Smart Metering Infrastructure - EPR0018

Dear Sir,

The National Stakeholder Steering Committee (NSSC) is pleased to attach its submission on the draft Statement of Approach issued by the Australian Energy Market Commission in response to the Ministerial Council on Energy's Request for Advice in relation to certain cost recovery matters arising from mandated smart meter pilots, trials and roll-outs.

The NSSC is stakeholder group comprising distributor, retailer and consumer representatives and the group trusts that the Commission will find helpful their common view expressed in the submission.

Thank you again for the opportunity to provide comments on the draft Statement of Approach. If you have any questions on our submission please do not hesitate to contact me on (03) 9672-3157 or via email on david.miles@damlaw.com.au or in my absence Harry Koller, NSMP Program Director via email on Harry.Koller@au.pwc.com.

Kind regards

David Miles NSSC Chairman



# Draft Statement of Approach – Request for Advice on Cost Recovery for Mandated Smart Metering Infrastructure – EPR0018

#### **Submission by National Stakeholder and Steering Committee**

#### 1 The National Stakeholder Steering Committee

The National Stakeholder Steering Committee (**NSSC**) welcomes this opportunity to comment on the draft Statement of Approach issued by the Australian Energy Market Commission (**AEMC**) in response to the Ministerial Council on Energy's (**MCE**'s) Request for Advice in relation to certain cost recovery matters arising from mandated smart meter pilots, trials and roll-outs.

The NSSC is a stakeholder group comprising distributor, retailer and consumer representatives which has been established by the MCE as a leadership body to facilitate the development of a consistent national framework for smart metering within the framework established by the MCE objectives and the NSSC vision statement. Given its membership the NSSC is able to draw on a breadth of experience and interests to present a strategic view on smart metering issues.

Over a period of some 12 months the NSSC has been focussed on the definition of the minimum functionality specification for smart metering infrastructure and the services that are enabled by that infrastructure. This work will see the NSSC make recommendations to the MCE on legislative definitions and changes to the National Electricity Rules and the NEM procedures made pursuant to the Rules.

Through this work the NSSC is well placed to assist the AEMC in understanding the technical, operational and regulatory context in which to place the MCE's Request for Advice. As the AEMC has made note of the related work streams of its own, so too it is important that there be co-ordination with the work of the NSSC and a common understanding of the premises upon which smart metering will proceed.

As an expert industry/consumer body, this submission reflects the common view of the NSSC stakeholders in relation to the issues addressed in draft Statement of Approach.

### 2 Executive summary

The AEMC has sought views on:

- its proposed approach, including the proposed decision making criteria and scenarios; and
- the identified issues for consideration.

The NSSC's comments on the identified issues for consideration are included in the appendix to this submission.



Its more general, strategic comments on the draft Statement of Approach are set out in section 3 of this submission (which also provides some further background to the NSSC's work program and to an understanding of smart metering). In summary, these comments are:

- The NSSC endorses the AEMC's approach of firstly examining the effectiveness of chapter 6 of the Rules to respond to a smart metering determination, but that the 'more fundamental issue' is to discover the most appropriate regulatory framework.
- 2. Whether chapter 6 of the Rules is the most appropriate regulatory framework for efficient cost recovery will depend on the level of certainty surrounding DNSP smart metering costs and benefits at the time of a roll-out determination.
- 3. The examination of chapter 6 is to be limited to smart metering and should not extend to a general review of the effectiveness of chapter 6 in relation to network investments. Any proposed changes to chapter 6 to support smart metering should preserve the integrity of that chapter in relation to network investments.
- 4. The distinction between 'metering services', 'smart metering services' and 'network services' requires deeper consideration. This has implications for various aspects of the AEMC's review including:
  - (a) the services that might be the subject of a ministerial determination as distinct from services that might be the subject of a distribution determination,
  - (b) the range of parties that might be able to provide the various services,
  - (c) the possibility that some smart metering services may be offered commercially rather than provided as regulated services,
  - (d) the treatment of regulated costs and benefits where some related costs and benefits may occur commercially,
  - (e) the operation of the Rules provisions including chapters 6 and 7, classification of services, contestability and unbundling of charges.
- 5. Smart metering infrastructure is not necessarily separate from electricity distribution infrastructure generally and this has implications for notions that the costs of the assets can be viewed as being separate (for example in terms of asset bases, the classification of services and tariffs). Procedurally, also, the costs and benefits may not be discrete from the costs and benefits arising in the periodic distribution determination process. In addition, the scope of the incremental investment required to meet a smart meter mandate may differ across DNSPs as businesses are at different stages of embracing 'smart grid' technologies.
- 6. The NSSC endorses the AEMC's recognition that smart metering benefits are a 'joint product' and further notes that:
  - (a) some of the benefits are likely to be immediately identifiable and quantifiable while others may not be;



- (b) the realisation of some benefits will not simply depend upon DNSP action and be within the sole control of the DNSP, but may also depend upon responses by others and broader changes to the national regulatory instruments; and
- (c) some benefits may be performance related rather than reductions in cost and in those circumstances the issue is the regulatory means for encouragement of the right behaviour.
- 7. The proposed decision making criteria need to be better reflective of the national electricity objective, revenue and pricing principles and MCE statement of policy principles.
- 8. The regulatory framework should:
  - (a) provide investment certainty for DNSPs in the particular circumstances of a mandate and where the stable conditions for forecasting expenditure (and the resulting applicability of financial incentives for efficient investment) that apply under chapter 6 may not be present;
  - (b) contain incentives for efficient service delivery and investment and for promptly and fully passing on to consumers the related benefits;
  - (c) be transparent, in particular in relation to the quantum and nature of benefits of smart metering; and
  - (d) ensure certainty that a DNSP is able to recover the costs it incurs in meeting the costs of retailers in participating in pilots and trials, and so remove a potential barrier to retailer participation.
- 9. The expected scope of contestability after the mandate is an important consideration. The cost recovery framework may have an impact on the effectiveness of any contestability after the mandate. In parallel the scope and effectiveness of contestability after the mandate period will affect the amount of cost recovery that is required during the mandate period in order to ensure full cost recovery overall.
- 3 NSSC strategic comments on draft Statement of Approach
- 3.1 The AEMC's approach, the regulatory framework and cost/benefit certainty

The primary question the AEMC has been asked to consider is whether or not current Chapter 6 of the Rules 'most efficiently accommodate[s] 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...'.

<sup>&</sup>lt;sup>1</sup> Paragraph 8 of the MCE's Request for Advice.



The AEMC's approach, in summary, is that this primary question requires consideration of two sub-issues:

- the extent to which the current Chapter 6 Rules accommodate the recovery of
  efficient DNSP costs arising from a Ministerial pilot metering determination
  (pilot determination) or a Ministerial smart meter roll-out determination (rollout determination); and
- the more fundamental issue of whether the regulatory arrangements embodied in the Chapter 6 Rules are the most appropriate means of facilitating cost recovery, or whether an alternative regulatory approach may be more appropriate.<sup>2</sup>

The AEMC has also been asked to consider a number of specific issues and notes that these relate to the 'first part' of the primary question i.e. whether or not current chapter 6 of the Rules allows for the recovery of efficient distributor costs arising from a roll-out determination.

The NSSC supports the AEMC's approach. It agrees that the starting point should be a consideration of the effectiveness of Chapter 6 and believes that any specific additional regulation should be minimised as far as possible and be well justified. The NSSC agrees, however, that despite the emphasis in the Request for Advice on specific issues that relate to the effectiveness of Chapter 6, the "more fundamental issue" is finding the most appropriate regulatory framework that responds to the various scenarios that may arise from a pilot or roll-out determination.

The AEMC observes that the degree of certainty in relation to costs and benefits at the time of a Ministerial determination may affect the effectiveness of the current Rules³ and that whilst uncertainty may be addressed to a large extent through smart meter trials, where uncertainty persists this presents a substantial difficulty for the regulator⁴. The NSSC expects that the level of uncertainty generally will be addressed to some extent through smart meter trials. Nevertheless, the NSSC considers that the scenarios against which the regulatory framework is to be considered broadly range from those in which there is a high degree of commercial certainty to those where there is a low degree of commercial certainty. Chapter 6 of the Rules responds well situations with low uncertainty and embodies an incentive framework for the attainment of the goal of efficient cost recovery. The AEMC's review gives the opportunity to consider the issue of the most appropriate regulatory framework, and the role of financial incentives, for attaining that goal in the circumstances of a lower degree of certainty than might normally apply under chapter 6.

However, as the AEMC notes, by the time of a roll-out determination a number of processes (including pilots and trials and Ministerial cost/benefit analyses), maturing technology and experience with smart metering generally will have reduced the

<sup>&</sup>lt;sup>2</sup> Section 2.1.1 of the draft Statement, at page 9.

<sup>&</sup>lt;sup>3</sup> Draft Statement, at page 7.

<sup>&</sup>lt;sup>4</sup> Draft Statement, at page 8.



uncertainty that prevails now. In addition, a number of DNSPs are in the process of installing various smart grid technologies, which may reduce or change the scope of investment required to meet a mandate, and in turn reduce the importance of the residual uncertainty (albeit not uniformly across businesses). The degree of certainty or uncertainty of smart meter costs and benefits at the time of a roll-out determination, and the consequence of that for the choice of an appropriate regulatory framework at that time, is not currently determinable by the AEMC.

Whilst the AEMC sensibly proposes to address this issue through scenario analysis, it remains unclear how such analysis will provide a definitive answer to the primary question posed in paragraph 8 of the MCE's Request for Advice. In other words, since the AEMC cannot fully know the circumstances that will exist at the time of a roll-out determination, it may be that a mechanism will need to be found for some flexibility to be available at the time of a roll-out determination on the specifics of the regulatory framework to be applied.

#### 3.2 Scope of review

The NSSC notes that the scope of the AEMC's review relates to smart metering and that the AEMC does not propose a general review of Chapter 6 of the Rules and that any general language in the Statement of Approach should be read accordingly. In particular, the NSSC suggests the Statement of Approach be clear that any amendment or adjunct to Chapter 6 will be specific to smart metering. Any proposed changes to chapter 6 to support smart metering should preserve the integrity of that chapter in relation to network investments.

#### 3.3 Scope of smart metering services

The National Electricity (South Australia) (Smart Meters) Amendment Act 2009 (Smart Meters Act) introduces a head of power allowing jurisdictional Ministers to make a Ministerial smart meter roll-out determination "about the provision of smart metering services."

Smart metering services is a defined term meaning "Services provided by means of required smart metering infrastructure that are specified as smart metering services under the Rules."

Required smart metering infrastructure is a defined term meaning "smart metering infrastructure that is specified under the Rules to be required smart metering infrastructure".<sup>5</sup>

Part of the NSSC's role is to give content to these legislative provisions by recommending proposed specifications, to be incorporated into the Rules, of 'required smart metering infrastructure' and 'smart metering services'.

Whilst the NSSC has yet to complete its work on the issue, it seems that the services that will be enabled by smart metering infrastructure that meets the national minimum

Smart metering infrastructure is a defined term meaning "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".



functionality specification go beyond traditional metering data services or metrology services currently provided by metering installations installed in the national electricity market. As well as 'metering data services' it is possible that smart metering infrastructure will enable the provision of:

- remote connect/disconnect services, or the turning on and turning off (and arming) the meter supply contactor remotely thereby turning on or off supply of electricity to the premises (this functionality may replace manual connection and disconnection of electricity supply);
- remote load control services, which will enable the turning on, turning off and cycling of controlled load.
- supply capacity limiting services, which will enable the turning on and turning off of electricity supply when demand exceeds a specified limit.
- HAN interface services, being the ability of the smart meter to interact with authorised home area network (HAN) devices (noting that while DNSPs are likely be required to install smart meters which have the capability for interface with a HAN, activation of the HAN will depend upon agreement between the DNSP and consumer or retailer and consumer); and
- event recording and meter maintenance services smart metering infrastructure will enable DNSPs to remotely measure, detect, store and manage quality of supply and access and security events, and to remotely check the presence of supply to a meter and to configure and upgrade meter settings.

The draft Statement of Approach refers, apparently interchangeably, to both 'metering services' and 'smart metering services' as being subject of the review. The NSSC notes that the use by the AEMC of 'metering services' is unclear (it may be being used to mean 'metrology services') but, in any event, such services are likely only to be a component of 'smart metering services'. In addition, it is possible that aspects of what may be thought of as 'smart metering services' may be better thought of as standard control services<sup>7</sup>. Clarity concerning the services under consideration and their context is important so that difficulties do not arise in those aspects of the review that are concerned with a 'service'.

For example Chapter 6 'deals with the classification and economic regulation of distribution services' and the AER's functions go to the economic regulation of services provided by a regulated distribution system operator. In broad terms Chapter 6 then contains provisions relating to capital expenditure to provide those services.

<sup>9</sup> See the definition of AER economic regulatory function or power in the NEL.

<sup>&</sup>lt;sup>6</sup> 'Metering data services' is defined in the (AEMO proposed) Rules to mean '[T]he services that involve the collection, processing, storage and delivery of metering data and the management NIM Standing Data and information from the metering register in accordance with the Rules.' Smart meters will allow the remote collection of metering data recorded in thirty minute intervals (trading intervals).

<sup>&</sup>lt;sup>7</sup> Within the meaning of the Rules, *ie* a direct control service that is subject to a control mechanism based on a DNSP's total revenue requirement.

<sup>&</sup>lt;sup>8</sup> Clause 6.1.2 of the Rules



However, some 'smart metering services' may not necessarily be provided by a DNSP but may be used by a range of parties to offer new (commercially negotiated) products to consumers. Issues that arise as to the effectiveness of Chapter 6 in these circumstances include:

- the proper identification of the 'regulated service', and how it is different from the functions DNSPs use to provide their standard control services;
- the treatment of regulated costs and benefits where some related costs and benefits may be offered commercially; and
- where access to smart metering infrastructure that has been rolled-out by the DNSP under the Ministerial determination (and subject to regulated cost recovery) is available to a third party for the provision of services to customers (that is, there may be a disconnect between the service delivery party and the regulated infrastructure provider).

Other examples where further clarity is required about the service being considered include the contestability issue (noting that current clause 7.2 of the Rules deals with exclusivity and contestability of the provision of the metering infrastructure and Chapter 7 regulates only the metrology service), the classification of 'metering services' as alternative control services and the unbundling of 'metering charges' from DUoS charges.

#### 3.4 Scope of smart metering infrastructure

Provision of smart metering services will require not only the capability of the actual smart meter but also the capability of 'smart metering infrastructure' including operational and communication systems.<sup>10</sup> The NSSC has identified the following components of 'smart metering infrastructure':

- smart meter, being a device which measures and records the production or consumption of electrical energy for the purposes or billing and settlements, and also contains non-metrology functionality at least to the level set down in minimum functionality requirements (that may include an interface to a home area network);
- interface to a HAN means an open standard interface supporting secure communications from the smart metering infrastructure to a local area communications network installed in a consumer's premises;
- smart meter management system, being the component of an smart metering infrastructure system that allows commands to be sent via the smart meter communications network to and from the smart meter; and
- smart meter communications network, being all communications equipment, processes and arrangements that lie between the smart meter and the smart meter management system.

 $<sup>^{</sup>m 10}$  As acknowledged by the AEMC in its draft Statement of Approach at page 7.



In addition, subject to what they already have in place, both DNSPs and retailers may need to augment their 'back office' systems and processes to accommodate the provision of smart metering services, including:

- business processes for the roll-out and ongoing management of the new metering equipment;
- information systems to validate, process and store metering data;
- processes and systems to manage the new meter, network and systems environment and achieve associated service obligations; and
- business processes to ensure that the current manual meter-reading, backoffice environment and current IT systems can be efficiently and effectively
  operated over the period in which they are being replaced by smart metering
  infrastructure.

However, it is not the case that smart metering infrastructure should be regarded separately from network infrastructure and, in particular from smart grid infrastructure. Many DNSPs are already well progressed in the establishment of smart grid infrastructure (including many of the IT and communications systems discussed above), and the investment necessary to enable smart metering services beyond those provided by this smart grid infrastructure may be a relatively small incremental addition. This has major implications for the review because it affects notions that smart metering infrastructure is discrete from the assets used to provide standard control services, can be rolled into a separate asset base, and that all the functions it provides can be classed as alternative control services that could ultimately become contestable.

### 3.5 Nature of smart metering costs and benefits

The issues to be considered here include the scope, identification and quantification of costs and benefits and the control of the attainment of benefits. Issues also include the linkages between the roll-out determination regulatory process and the incurring of costs and the realisation of benefits to be considered in a distribution determination regulatory process.

The economic regulatory framework needs to recognise the scope of costs likely to be incurred, including:

- expenditure on installing, commissioning and maintaining telecommunications and IT systems required to support smart meters and forming part of the smart metering infrastructure (where not included as network assets);
- expenditure incurred on project management and other preparation for implementation of smart metering infrastructure; and
- the financing costs incurred by the DNSPs (including expenditure incurred on prudent risk management).

Also, the costs of smart metering may impact costs relating more broadly to the distribution network (and already incorporated in a current distribution price



determination). In particular, significant system changes may be needed to network systems to fully realise the benefits of smart metering.

In an assessment of network operational benefits that DNSPs would be expected to realise, the NSSC notes that:

- some of the benefits of smart metering are likely to be immediately identifiable and quantifiable (for example, the avoided cost of manual meter reading) and such benefits may be readily and promptly passed through to customers;
- some of the benefits of smart metering are likely to be unquantifiable, such as more accurate settlement of bills, customer satisfaction, and product and service innovation:
- a relevant consideration in determining how benefits should be promptly passed through to customers is what action is required for the benefit to accrue;
- for example, realisation of some of the benefits of smart metering depend not just on DNSP action but on that of retailers and customers, and also upon national processes and procedures for smart metering services being put in place;
- smart metering may result in benefits arising in relation to other DNSP projects (and already incorporated in a current distribution price determination);
- some of the benefits may flow directly to customers without delivering a benefit to the DNSPs yet achieving those benefits may require costs to be incurred by the DNSP (for example, through systems augmentation);
- in those circumstances the imperative is to encourage DNSPs to undertake the additional investment to use these functions as soon as possible, which in turn depends on the capacity of the regulatory regime to permit the DNSPs to recover the additional costs:
- the efficient response in the presence of the smart metering capabilities may be to raise the levels of service rather than to reduce cost, or a combination of both<sup>11</sup>,
- thus a proper analysis of the network operational benefits needs to consider the levels of service being provided in combination with the costs that DNSPs may incur, and recognise that (absent service incentive mechanisms) the benefits of service improvements flow directly to customers; and
- the cost of regulatory change to 'bring forward' the benefits of smart metering that may be captured through the 'S-Factor' targets in the next regulatory

While it is common for cost-benefit analyses to derive estimates of the costs that may be avoided if new technologies are deployed (assuming a constant standard of service), this is done to make the cost benefit analysis more tractable.



control period under the current economic regulatory framework would require careful consideration.

# 4 NSSC comments on decision making criteria and scenarios and variables

# 4.1 Proposed decision making criteria

- 1. Are our proposed decision making criteria appropriate for the development of our advice? Are there any additional criteria that should be included?
- (a) Criterion One: This criterion should be amended so that it is consistent with the NEL 'revenue and pricing principle' that provides for a DNSP to 'be provided with a reasonable opportunity to recover at least [its] efficient costs' and to better reflect the primary question asked of the AEMC (which again refers to 'efficient distributor costs').
- (b) Criterion One: More specifically:
  - (i) the reference to 'efficient management' of costs is confusing. A better reference would be to 'promotion of recovery of efficient costs'
  - (ii) the reference to 'least cost basis' should be removed. The MCE has not required that smart metering infrastructure be provided on a least cost basis (as distinct from an efficient cost basis).
  - (iii) it is unclear what is meant by 'achievement of productive efficiency' in the context of smart metering?
- (c) Criterion Two: The reference to the regulatory framework 'ensuring' that risks are identified and managed should be amended to refer to 'promotion' of the identification and management of risks (consistent with the suggested change to criterion three below).
- (d) Criterion Three: The regulatory framework will not ensure the realisation of benefits, nor has the MCE required that benefits be realised to the 'maximum extent possible'. The criterion should be amended to reflect the MCE Statement of Policy Principles, particularly that cost efficiencies should be promptly passed through to customers, and the MCE's June 2008 decision paper that cost recovery should be net of reasonably achievable network operational benefits. The NSSC considers that this requires that the economic regulatory framework promote the prompt pass-through of benefits to customers, once those benefits are realised, or are considered reasonably able to be realised. The NSSC also considers that as well as promoting the prompt pass-through of benefits to customers, the economic regulatory framework should also facilitate the provision of information to customers to enable them to assess the quantum and nature of those benefits.
- (e) Criterion Four: The NSSC assumes it is not intended that this criterion require that stakeholders have input into the internal decision making processes of DNSPs. Stakeholders should have input into the regulatory processes for



determining smart metering costs and benefits, but not the internal decision making processes of DNSPs.

- (f) Criterion Four: The language of a 'best possible information' requirement is imprecise. Regulators should have the necessary information to make decisions.
- (g) Criterion Five: Each sentence in this criterion deals with a different point. It should be split into two.
- (h) Criterion Five: This criterion should be clear that 'all potential Ministerial determinations' refers only to pilot determinations and roll-out determinations, but there is also the need for a criterion that the Rules should accommodate the arrangements that may be required to transition off a roll-out determination.
- (i) Criterion Six: Please confirm/clarify that this criterion is intended to say that, unless there is good reason to do otherwise, economic regulation of investment in the distribution network and economic regulation of investment in smart metering should be consistent.
- (j) Criterion Six: Further 'any deviation in treatment' in the economic regulatory framework should apply consistently across the jurisdictions (and not apply to specific distribution networks).

The NSSC submits that the economic regulatory framework for a ministerial determination should:

provide sufficient and timely investment certainty for DNSPs.

The AEMC needs to consider the legitimate business interest of DNSPs and retailers and the fiduciary responsibilities of each board when it considers decisions to commit large new expenditure necessary to comply with a legal mandate to implement government policy rather than expenditure initiated by its own internal business case.

Not only is the business decision different from those normally made by businesses in the context of chapter 6 of the Rules, but it is to be made for an evolving technology where the stable conditions for forecasting expenditure and the resulting incentives for investment efficiencies that underpin the framework of chapter 6 also may not apply.

 contain incentives for efficient delivery of smart metering services pursuant to a roll-out determination and for promptly and fully passing on to consumers the benefits of efficient service delivery, in addition to efficiencies arising from efficient investment.

DNSPs should be prevented from recovering 'excessive' costs in relation to meeting of the minimum functionality specification and achieving the minimum specified service levels.



- be transparent to retailers and consumers, as well as DNSPs. In particular, the quantum and nature of the benefits of smart metering should be transparent to consumers.
- ensure that a DNSP is able to recover the costs it incurs in meeting the costs of retailers in participating in pilots and trials.

#### 4.2 Proposed scenarios and variables

2. Do our proposed scenarios capture the relevant range of potential circumstances that should be considered in preparing this advice? Are there other scenarios or variables that should also be considered?

Timing of the Ministerial determination and length of the mandated period

- (a) The NSSC notes it is possible that both the periodic distribution determination process and the cost pass-through process will be required to be activated in relation to a particular smart meter roll-out determination (assuming that these processes are considered to 'most efficiently accommodate' the recovery of costs) giving the long lead times for ordering equipment and investment certainty required prior to entering into contracts.
- (b) The Smart Meters Act provides that a roll-out determination is to specify the minimum number of relevant customers, or the class of relevant customers, or the minimum number of supply points, to be provided with smart metering services by a DNSP. The determination may also specify:
  - the date or dates by which, and the location at which, smart metering services, or different classes of smart metering services, must be provided;
  - (ii) the date or dates by which required smart metering infrastructure, or difference classes of smart metering infrastructure become operational.
- (c) In conducting its review, the AEMC should consider the implications, if any, of the uncertainties in the scope and duration of a roll-out determination.
- (d) When considering both the periodic distribution determination process and the cost pass-through process, the AEMC should take account that the two processes involve the application of very different forms of regulation. Cost pass-through was designed for rare unanticipated events. Accordingly it lacks many of the sophisticated properties of incentive-based regulation. Given the issues about the nature of smart metering infrastructure and its relationship with other network investment, cost-pass through arrangements should not be seen as an easy, uncomplicated and obvious choice.
- (e) The Smart Meters Act provides flexibility for a jurisdictional Minister to:
  - (i) determine the customers to whom smart meter services must be provided within the jurisdiction.



(ii) determine the dates by which smart metering services or different classes of smart metering services may be provided.

#### (f) This means that:

- (i) a jurisdictional Minister may require smart metering services be provided to persons living within a particular area of a jurisdiction not the whole of the jurisdiction/State.<sup>12</sup>
- (ii) the smart metering services required to be provided by a roll-out determination may not all be 'activated' at the same time. It is possible that the infrastructure required to deliver smart metering services to meet specified service levels may be installed or upgraded over the life of the roll-out program. DNSPs will have choice in the type of technology used to delivery smart metering services and, possibly, in the timing of installation of infrastructure required to deliver smart metering services and to deliver those services to specified service levels.
- (g) In addition, the National Electricity Amendment (Ministerial Smart Meter Roll Out Determinations) Transitional Rule (draft transitional Rule) will prescribe that the DNSP is the responsible person for a smart metering installation until 'the day the Minister smart meter roll-out determination that applies to the relevant metering installation ceases to have effect'. The Smart Meters Act does not require that a roll-out be completed, or that a roll-out determination, cease to have effect by a specified date. This will be a matter for each jurisdiction to determine. In other words the exclusivity granted to DNSPs in respect of the roll-out of smart metering installations is in the hands of the jurisdictional minister and may be significantly longer in some jurisdictions than in others.
- (h) The AEMC should consider how current Chapter 6 of the Rules will accommodate these variables in the nature of a roll-out determination.

#### Uncertainty of anticipated costs and benefits

(i) As noted in section 3.1, the level of certainty regarding anticipated costs and benefits (together with the status of the contestability of smart metering infrastructure following the end of the mandate period) will be an important determinant of whether or not current chapter 6 of the Rules most efficiently accommodates the recovery of efficient DNSP costs. Chapter 6 of the Rules is likely to be the most appropriate economic regulatory framework if the level of certainty surrounding the costs and benefits of smart meters at the time of the Ministerial determination is commensurate with that of other network investments.

<sup>12 [</sup>Compare the AEMC's statement in the draft Statement of Approach, at pg 7, that '[w]here a Ministerial determination is made, smart meters are to be installed across the distribution network for all (or most) residential and small customers.]



Future contestability of metering services

- (j) The AEMC proposes to consider cost recovery under both the 'periodic distribution determination process' and the 'cost pass-through process' of chapter 6 of the Rules, given either contestability of 'metering services' following a Ministerial determination (or the end of the mandate period) or the continuation of DNSPs as the exclusive providers of 'smart metering services' 13.
- (k) As noted in section 3.3:
  - (i) pursuant to chapter 7 of the Rules, contestability arises in respect of the provision, installation and maintenance of the metering installation i.e. contestability arises in respect of the infrastructure, not the service;
  - (ii) metering (or perhaps metrology) services are a component of smart metering services,

and so the AEMC needs to better define 'contestability' in considering this scenario.

- (I) In addition, the NSSC notes that while the AEMC has appropriately identified the question of whether or not smart metering services become contestable after the end of the mandate period as a scenario against which the regulatory regime for cost recovery of smart metering infrastructure should be tested, it has not drawn out the potential implications of contestability in the 'issues for consideration' that subsequently are discussed.
- (m) The NSSC observes that the contestability of smart metering services after the mandate period is a factor that may distinguish these services materially from the services that are regulated under current Part C of Chapter 6 of the Rules. There is an implicit assumption built into the prices for network services that the nature of distribution networks is such that the threat of competition for these services is immaterial. It is this assumption that justifies the position of regulators that the risk of network assets becoming stranded is low, even when prices are set to recover the cost of infrastructure over the technical lives of assets, which in some cases span decades.
- (n) Since competition may prevail at the end of the mandate period, the AER needs to take account of additional considerations when setting prices for the mandate period, most notably to permit the initial investment to be recovered so that all efficient costs can be recovered if future prices are constrained down to the level of an efficient new entrant. The question will also arise as to whether it would be possible to 'sculpt' depreciation allowances to align the charges for smart metering infrastructure with the expected flow of benefits, while at the same time providing a reasonable opportunity for the DNSPs to recover at least their efficient costs. In addition, as with the allocation of

<sup>&</sup>lt;sup>13</sup> Section 2.1.7 at page 13



- technology risk, the question will also arise as to whether it is valid to exclude effects on the WACC of the form of regulation in an environment where competition was a material possibility.
- (o) The NSSC encourages the AEMC to consider closely how competition for smart metering after the mandate period will affect the design of the cost recovery arrangements, and to ensure that the MCE is fully informed of the implications of contestability for those arrangements.



#### **Appendix**

#### NSSC's submission on the AEMC's 'Issues for consideration' in Section 3

In this appendix the NSSC comments on the issues raised in section 3 of the draft Statement of Approach, adopting the numbering set out in the list of questions in section 4.

#### Recovery of efficient DNSP costs

- 3. What issues may arise in regards to the recovery of the 'stranded costs' associated with DNSPs' existing metering infrastructure, following a mandated smart meter roll-out?
- (p) The recovery of 'stranded costs' associated with existing metering infrastructure is likely to impact each DNSP differently. In particular, it is noted that DNSPs have had a choice when rolling forward their RABs as to whether to measure the disposal value of assets according to the *proceeds* from a disposal or according to the *regulatory book value* of the assets disposed. To date, little has turned on this choice given that few assets are disposed of (mainly vehicles and computers). However, while measuring disposals according to the 'proceeds from disposals' would ensure that the relevant DNSPs would be able to recover the regulatory value of their existing metering assets, if disposals are measured according to their regulatory book value then a material stranded asset risk may remain. The AEMC should consider the best response to this issue in order to ensure an equitable treatment across DNSPs notwithstanding their historical choice about regulatory accounting conventions.
- 4. Are there any other issues that we should consider when assessing the current cost pass-through provisions in the Rules, particularly in regards to the materiality threshold and timeframes that apply?
- (a) As noted in section 4.2(d) of the main submission the two approaches of incentive based regulation generally captured in Part C of Chapter 6 and the pass through provisions in clause 6.6.1 are fundamentally different and cost-pass through arrangements should not be seen as an easy, uncomplicated and obvious choice.
- (b) In to relation to the definition of 'regulatory change event', while some comfort is provided by the expressed views of the Standing Committee of Officials and the AER's previous treatment of a 'smart meter event' as an additional category of pass-through event for ACT and NSW DNSPs, the AEMC should consider whether reliance on these statements will provide sufficient certainty for DNSPS to make an investment decision in the context of a roll-out determination (and if not, what amendment to the Rules would be required to provide this certainty).



- (c) As the AEMC notes the 'materiality issue' arises from the definition of a regulatory change event incorporating the requirement of a material increase or decrease in costs. In addition the definition of 'materially' in the Rules is that the word is to have its ordinary meaning. Thus, whatever the AER may have said in recent decisions may not provide sufficient certainty when the issue is not one of discretion for the AER but of the proper construction of the Rules. The fundamental issue is the uncertainty arising in the Rules themselves.
- (d) Does retaining the 'materiality threshold' (at all) promote the objective of cost recovery for a roll-out determination or pilot determination, assuming that the objective is the recovery of all efficient costs incurred in complying with such a determination? In other words, is the materiality hurdle that may well be appropriate for 'ordinary' pass through events appropriate for a roll-out determination or pilot determination?
- (e) Is it appropriate that the 'materiality threshold' for a smart meter event be dependent on costs over a financial year, or should the materiality threshold apply in respect of the whole of the event?
- (f) The timeframes for making a cost pass-through application (90 days/60 days) may not accommodate (and yet should accommodate):
  - (i) the time required for a DNSP to prepare required information; and
  - (ii) time for consumer groups to respond to the information.

#### Classification of metering services as alternative control services

- 5. With the exception of the current arrangements in the ACT, are there concerns with metering services becoming classified as alternative control services in other jurisdictions that we should consider in developing our advice?
  - (e) As noted in section 3.3 above, the question of whether or not 'metering services' may appropriately be classified as alternative control services is complicated by the fact that 'smart metering services' extend beyond traditional metrology/metering data services. Smart metering infrastructure will provide metrology services and non-metrology services and in this latter category there are services that might be 'customer services' (provided possibly not by the DNSP) and others which are actually standard control services.
  - (f) Normally the classification of services forms a part of the periodic distribution determination which may create difficulties for a classification proposal to occur arising from a roll-out determination during a regulatory period.

<sup>&</sup>lt;sup>14</sup> See clause 6.2.3 of the Rules



- (g) The pass through mechanism in clause 6.6.1 of the Rules applies only to standard control services as it is only those services that are subject to the control mechanism under Part C of Chapter 6.
- (h) The control mechanism for alternative control services is a matter for the distribution determination<sup>15</sup> (which may but need not adopt elements of the building block approach in Part C), but that is decided by the AER<sup>16</sup> in effect in its framework and approach paper prior to the distribution determination.
- (i) This raises a number of questions:
  - (i) should (and can) some smart metering services be classified as alternative control services while others remain standard control services and others be unregulated and should (and if so how should) the classification be made (or amended) within a regulatory period?
  - (ii) should (and can) the control mechanism for economic regulation for smart metering services classified as alternative control services be set out in the Rules rather than be a matter for the AER's discretion in the framework and approach paper preceding the distribution determination?
  - (iii) should (and if so how should) the cost pass-through provisions apply to alternative control services?
  - (iv) should the cost pass-through process be amended to allow for the classification of services as part of that process?

#### Cost recovery by a DNSP of retailer costs

- 6. What issues may arise in regards to the recovery of retailer costs via distribution charges for mandated smart metering pilots/trials?
  - (a) The AEMC states that its initial view 'is that we will need to consider whether the Ministerial determination will include an obligation on DNSPs to procure retailer services that are required to undertake a smart meter trial and/or pilot. Where this obligation is clear, this may minimise the cost recovery risk to DNSPs who enter into a contractual relationship with retailers to provide these services, and the consequent risks for retailers of providing such services. A clear obligation may also minimise the risks for end use consumers of being exposed to undue costs'.
  - (b) The NSSC notes that the scope of the Minister's power to make a pilot determination may not include directing the DNSP to procure retailer services and, in any event, retailer cooperation will be required for successful implementation of trials (regardless of Ministerial direction).

<sup>&</sup>lt;sup>15</sup> See clause 6.2.6 of the Rules

<sup>&</sup>lt;sup>16</sup> See clause 6.2.5(d) of the Rules



- (c) The AEMC should consider this issue assuming an absence of Ministerial direction (that is without relying on a direct regulatory obligation) in relation to the procurement of retailer services and on the basis that any DNSP-retailer contract will need to be entered into voluntarily. The issue is that the mechanism for retailer involvement through assuring its cost recovery under a contract with a DNSP may fail if there are difficulties in establishing the contract (for example there may be practical difficulties in relation to required access (if any) to DNSP systems and the relationship of those systems to network security).
- (d) Moreover the Rules may not provide the certainty to DNSPs that these contract costs can be recovered such that the DNSPs will enter into the contracts. In particular, there are identifiable regulatory risks about the ex ante nature of a pass-through application that may need to be made in response to a pilot determination (the application needs to be made within 90 days of that determination and that may be before the actual costs are known, ie before the contract is entered into) when the pass through framework of clause 6.6.1 of the Rules is built around the event having occurred and the incremental costs being known. Even if the costs are known and arise from a tender there is nothing which compels the AER to approve a tender outcome as efficient, about which there may be some conjecture in the circumstances.

#### The obligation to account for operational network benefits

- 7. How will the time delay between when smart metering costs are incurred and when benefits are realised, affect the distribution determination and cost pass-through process?
- 8. What are the implications of the expected uncertainty, in relation to the quantum of benefits that can be achieved through a mandated smart meter roll-out, for the effectiveness of the existing Rules?
- 9. What type of information may be required by the AER to assess whether operational network benefits are being realised within a reasonable timeframe? Should the AER be required to adopt a monitoring role to assess whether the benefits anticipated at the time of a Ministerial roll-out determination are being realised?
  - (a) The NSSC refers to the discussion in sections 3.1 and 3.5 above.

#### Incentives under the current regulatory regime

10. Is an EBSS appropriate for a mandated roll-out of smart meters, considering the MCE's requirement for the prompt pass-through of benefits to consumers?



- 11. To what extent are the current incentive mechanisms in the Rules likely to be effective in facilitating the revelation of recovery of efficient costs associated with a Ministerial determination?
- 12. What types of technology risks may DNSPs face in rolling out mandated smart metering infrastructure? What incentives do DNSPs have under the current regulatory regime to manage these risks?
- (a) The NSSC notes that questions 10 to 12 and the discussion that accompanies them address technical issues with respect to how the operation (or non-operation) of parts of Chapter 6 of the Rules may affect the strength of the incentives on DNSPs to minimise the cost associated with the roll-out of smart metering infrastructure or to find additional network operating cost savings that are created by this infrastructure.
- (b) As discussed in section 3.1 above, the NSSC notes that a fundamental issue for the AEMC is the extent to which it is appropriate to apply financial incentives to encourage the DNSPs to deliver such a roll-out efficiently, given potential characteristics of such a program. The matters addressed in these questions relate to subsidiary issues, namely how the chosen level of incentive power may be achieved in practice.
- (c) Having said that, the NSSC considers that if there are special arrangements introduced for smart metering cost recovery that those provisions be limited to the recovery of the costs associated with that infrastructure offset by the benefits that flow directly from that program. Any expenditure related to the use of smart technology in the provision of network services and the benefits that are created by such projects should be handled under the standard price review framework and Rules as they stand.

#### Consideration of alternative regulatory approaches

- 13. What alternative regulatory approaches should be considered in regards to the cost recovery of expenditure required to comply with a Ministerial smart meter roll-out or pilot determination?
  - (a) In addition to its comments in section 3.1, the NSSC encourages the AEMC to consider what would be required to apply the transmission network 'contingent project scheme' to smart metering.

#### **Pricing methodologies of DNSPs**

- 14. Are there any particular mechanisms for smoothing tariff impacts over time that we should consider in developing our advice?
- (a) The NSSC observes that the implication of smoothing of tariffs is that the rate at which capital is recovered (regulatory depreciation) is varied to generate the 'smoothed' tariff.



- (b) The NSSC notes, however, that an implication of smoothing the charges for the recovery of smart metering services costs is that the recovery of these costs would be deferred.
- (c) As discussed above, the AEMC needs to consider whether deferring cost recovery in order to ameliorate the price impacts on final customers remains compatible with cost recovery if contestability for smart metering services is to occur after the mandate period.
- (d) Moreover whilst deferring cost recovery may mitigate immediate impacts, it may create a greater difficulty at a point where the assets are replaced and both the remaining capital value of the replaced and the value of the new assets needs to be recovered through prices at that time.
- (e) Also the AEMC will need to consider the possibility that a roll-out determination may apply in some parts of, but not the whole of, a jurisdiction.
- 15. What potential issues may arise from the unbundling of metering charges from DUOS charges?
- (a) The NSSC notes that classifying smart metering services as alternative control services would require a separate price to be charged. As discussed above, however, in a competitive environment the characteristics of these services would depart materially from those that are regulated in the standard manner under Part C of the Rules.
- 16. What incentives are there under the current regulatory regime for DNSPs to alter their tariff methodologies, to facilitate the realisation of the potential demand side benefits of mandated smart meters?
- (a) The NSSC notes that the current guidance in the Rules for distribution pricing comprises generic economic principles that are equally relevant to a world with and without smart meters, namely the specification of upper and lower bounds and a requirement for prices to be structured to signal long run marginal cost, tempered by such factors as administrative costs. While the introduction of smart meters will expand the capacity for distribution tariffs to meet these principles, there is no reason to expect that the principles will be rendered obsolete.
- (b) That said the tariffs that are relevant to demand side management are the tariffs that are charged for the use of distribution network services, rather than the tariffs that are charged for smart metering services. As such, the NSSC considers this issue to be outside of the AEMC's terms of reference.