

28 July 2010

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Reference EPR0018

Dear Mr Pierce,

Cost recovery for mandated smart metering infrastructure draft report

Integral Energy welcomes the opportunity to comment on the Commission's draft report on the cost recovery arrangements for smart metering infrastructure (SMI) published in June 2010.

Integral Energy is the second largest state owned energy corporation in New South Wales, serving some of Australia's largest and fastest growing regional economies. It provides distribution network services to almost 860,000 customers or 2.1 million people in households and businesses spanning 24,500 kilometres in Greater Western Sydney, the Blue Mountains, the Illawarra and Southern Highlands.

Before responding to the issues raised by the Commission, Integral Energy wishes to raise an important concern specific to New South Wales.

As part of the 2009-10 to 2013-14 determination for the NSW Distribution Network Service Providers (DNSPs), the Australian Energy Regulator (AER) determined that Type 1 to 4 metering services were unregulated distribution services. Accordingly, if smart meters are, as currently expected, classified as Type 4 meters then any trials or rollout investment undertaken by NSW DNSPs in accordance with a Ministerial determination will not be subject to regulatory control. Nor would the changes being considered by the Commission as they pertain to SMI be applicable in NSW.

Whether this becomes a material issue depends on a number of factors including the timing of any such Ministerial determination. However, at a minimum, Integral Energy submits that the Commission should identify a preferred mechanism for addressing the current uncertainty in its final advice to the Ministerial Council on Energy (MCE).

The remainder of this submission has been prepared on the basis that SMI cost recovery will be regulated. As a general principle, Integral Energy supports an SMI cost recovery framework that ensures full recovery, certainty, consistency with existing regulatory arrangements as far as practicable and administrative simplicity.

Going further for you is what we do

Detailed responses to the specific issues raised by the Commission appear in the attachment to this letter. In summary, Integral Energy supports:

- excluding SMI expenditure from the regulatory test;
- the AER being able to adjust for expenditure timing differences but only where any such the differences are material; and
- excluding SMI expenditures from the EBSS.

Integral Energy does not support:

- extending the AER's information powers;
- recovering costs only from those customers who have had smart meters installed and back-end loading the recovery of those costs; and
- modifying the incentive framework beyond excluding SMI costs from the EBSS.

Integral Energy looks forward to further participating in the Commission's process for finalising the Rule change. If you have any questions with respect to this submission, please contact Anthony Englund, Regulatory Policy Manager on (02) 9853 6511.

Yours faithfully



Michael Martinson
Manager Network Regulation

Attachment — responses to Commission’s specific questions

Cost recovery under the distribution determination process (Chapter 2)

Standard control services

Integral Energy agrees that the existing distribution determination process allows for the recovery of mandated SMI expenditure where the expenditure occurs within a control period and the services are classified as standard control services.

However, as noted in the covering letter, Type 1 to 4 meters have been classified as unregulated distribution services in New South Wales by the AER in its current distribution determination. If, as is currently proposed, smart meters are classified as Type 4 meters, then SMI cost recovery will be unregulated in NSW.

Regulatory test not appropriate

Integral Energy agrees that it would be inappropriate to apply the regulatory test to SMI investments given that the obligation to conduct the pilots and trials and rollout will be mandated by the Minister and subject, prior to the mandate, to a public consultation process and cost benefit analysis.

Timing uncertainty

Integral Energy agrees in principle that there is a risk that DNSPs may incur SMI related expenditure either earlier or later than forecast within a regulatory control period. Integral Energy agrees that the AER should, at the next determination, have the power to add or remove the difference in revenues based on the relevant unit costs but only where that difference is material.

Integral Energy submits that, in order to guide the AER in making this assessment, Ministers should include minimum annual targets in rollout determinations. Further, the AER should be required to consider the DNSP’s individual circumstances and operating conditions. For example, the AER should be careful to not destroy efficiencies of scope such as putting in place a step upgrade in the capacity of the associated communications systems when rolling out a certain number of smart meters ahead of the expected schedule.

Integral Energy also notes the Commission’s view that the incentive on a DNSP to delay the rollout would be reduced if customers were only required to pay when their own smart meter is installed and operational. Integral Energy has serious concerns about any such approach to cost recovery. These concerns are set out further below.

Expenditure uncertainty

Integral Energy notes the Commission’s concern regarding the potential for windfall gains arising from uncertainty in relation to SMI rollout costs. It is a key element of the existing regulatory model that this kind of uncertainty is factored into the cost forecasts and allowed revenues. Doing so is an entirely appropriate way to balance between investment certainty for the business and efficient prices for consumers. Ultimately, the business remains best placed to assess and manage the risk with the regulator’s principal role being to ensure the ex-ante prudence of those forecasts.

Any proposal to change this arrangement must consider the likely materiality of the uncertainty. In this regard, the Commission’s draft report notes that smart meters

have short lives and therefore a larger potential for windfall gains *as a proportion of the value of that class of assets*. However, the potential for gains relative to the value of the total asset base should be assessed to establish if there is a material impact on regulated revenues or returns *as a whole*.

Current estimates are that a smart meter rollout would comprise approximately 10% of annual capital costs and 1% of annual operating costs. The uncertainty in relation to overall business costs is thus likely to be comparatively small. For example, a 10% error margin in forecasted rollout cost would result in an overall capital cost variance of less than 1% and an operating cost variance of less than 0.1%. The costs and risks associated with the proposed regulatory solution, including the problems already acknowledged by the Commission in the AER separating out the assets on the basis of their lives alone, are therefore likely to be larger than the claimed issue.

It is also important to consider the applicable incentives on DNSPs. Distribution assets with shorter lives tend to be of an enabling or innovative nature. Such investments are expected to provide value to the business beyond the period over which the costs of those assets are recovered. Accordingly, there are already strong incentives on DNSPs to ensure that the investments are delivered on time and on budget outside of the general capex incentives embedded within the regulatory framework.

In summary, Integral Energy submits that there is no case for altering the current, well-functioning incentive mechanisms.

However, should the Commission consider that changes are warranted, Integral Energy submits that the most appropriate mechanism would be to exclude SMI expenditure from the Efficiency Benefits Sharing Scheme (EBSS). This is preferred as it relies on the business to separate the SMI-related expenditure from other costs in accordance with the AER approved Cost Allocation Methodology rather than leave doing so to the AER, a process that would carry the risk of information asymmetry.

Annual information provisions

The Commission's justification for providing the AER with additional information gathering powers in relation to SMI pilots and rollouts is based on the concern regarding cost uncertainty. As noted above, Integral Energy doesn't consider the additional level of uncertainty to be material when viewed in the context of overall regulatory outcomes.

Further, the Commission's draft report does not clearly demonstrate that AER's current information gathering powers are inadequate to the task. Indeed, comments in the draft report suggest that the AER currently has the required authority. Integral Energy therefore does not support the AER being further additional powers.

Integral Energy's responses to specific questions raised by the Commission in the draft report are provided below.

Q1.1 Should the AER be able to apply the proposed mechanism 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?

A1.1 Expenditure uncertainty is a feature of all regulatory regimes and cannot be avoided entirely. The appropriate question is whether new types of investments introduce an additional level of uncertainty that cannot be managed within the current, well-functioning regulatory regime. The case for doing so in relation to SMI expenditure has not been made.

Q1.2 *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 rollouts, pilots and trials? Or do you consider that the AER's current information gathering powers under the NEL are sufficient?*

A1.2 The AER's powers under the existing Rules are more than sufficient.

Mid period cost recovery for mandated smart meter rollouts (Chapter 3)

Timing of Ministerial determination

Integral Energy agrees that the Ministerial rollout determination should be aligned with the start of the next regulatory control period where possible in order to minimise the relevant regulatory burden and revenue risks.

Integral Energy notes the Commission's conclusion that, were the determination not to align, then SMI expenditure could in principle be recovered via the cost pass through provisions. Integral Energy reserves judgement on the Commission's view that the service standard event is appropriate for this purpose and the regulatory change event not.

Importantly, Integral Energy sought, and the AER agreed, in its last revenue determination that there would be a pass through for SMI related expenditure¹. Although not explicit in the AER's determination, it is assumed that this was on the basis that SMI services would be classified as standard control services.

However, as previously indicated, the classification of Type 1 to 4 metering in NSW as unregulated distribution services and the present likelihood that smart meters will be classed as Type 4 meters means that this pass through mechanism may not in fact be available to Integral Energy. Whether via a pass through or the ex-post revenue adjustment mechanism discussed below, this issue should be addressed if the intention is to regulate the expenditure.

Ex-post revenue adjustment

Integral Energy agrees that the current timeframes for the cost pass through process are likely to be inadequate in relation to a mandated smart meter rollout. Following on from the comments made above regarding the nature of the regulatory compact, Integral Energy has reservations about allowing the regulator a general power to approve expenditure with the benefit of hindsight. Accordingly, any such mechanism would need to incorporate strong limitations on the AER's scope including protections against regulatory "clawback". Integral Energy would strongly support the AER being obliged to consult on and publish guidelines as to how it would approach such a review and for the Commission to provide guidance on key aspects.

¹ AER, *New South Wales distribution determination 2009-10 to 2013-14*, 2009, p 295.

In addition, the proposed within-period cash injection would need to err on the conservative (more generous) side in order to satisfy the principle of ensuring that the DNSP was given "an opportunity to earn a reasonable return".

Integral Energy also has serious concerns regarding the proposed "back ending" of depreciation for new smart metering infrastructure. This is discussed further below.

Q2.1 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?

A2.1 Should the ex-post determination approach end up being used, Integral Energy consider it appropriate that any interim price adjustments be based on the most up to date information available.

Q2.2 Are there any other principles the AER should be required to take into account when undertaking its ex-post review?

A2.2 No.

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

Integral Energy agrees with the Commission's draft findings and proposed changes to the Rules set out in Chapter 4, including removal of the "dead zone" in relation to cost pass throughs during the last thirteen months of a regulatory control period.

Q3.1 Are there 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?

A3.1 No, the current provisions appear adequate.

Q3.2 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?

A3.2 No. There should be a case by case assessment of any need for change.

Cost recovery for mandated smart meter services which are classified as alternative control services (Chapter 5)

Alternative control services and pass through arrangements

The Commission considers that there is a risk that, where smart metering services are classified as alternative control services and the Minister makes a determination during a regulatory control period, cost recovery will not be assured due to the lack of adequate pass through provisions in the AER's revenue determination. The Commission accordingly recommends that changes be made to the Rules to allow those pass through provisions to be established. Integral Energy agrees that this is an appropriate change.

The Commission concludes that the risk in relation to alternative control services is only applicable to *future* regulatory periods. However, as previously indicated, under the regulatory determination that currently applies in NSW, Type 1 to 4 metering services are classified as unregulated distribution services and the expectation is that smart meters will be classified as Type 4 meters. If it was decided that the solution to this specific issue was to reclassify smart meter services as alternate control services for the current NSW regulatory control period (Integral Energy expresses no view in this regard), then the changes to the Rules to allow the pass through provisions would also need to occur at the same time.

Q4.1 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 alternative control services?

A4.1 No.

Incentives under the current regulatory regime (Chapter 6)

Excluding SMI costs from the EBSS

Integral Energy considers that SMI expenditure should be excluded from the EBSS. The intention behind the EBSS is to reward the regulated business for achieving greater than forecast efficiency savings and to provide a disincentive from exceeding those forecasts. Underpinning this is an assumption that the business has a history in relation to providing the services and is therefore in a reasonably strong position to manage the associated costs. Where the DNSPs are required to provide new services, including the associated expenditure within the EBSS is unlikely to meaningfully enhance the incentive on the business to be efficient.

Q5.1 Are any changes to the Rules required to ensure the incentives under the current regulatory regime are appropriate for mandated SMI?

A5.1 Yes, the exclusion of SMI related costs from EBSS.

Tariff issues associated with mandated SMI (Chapter 7)

Cost allocation

The Commission claims that most of the benefits of a rollout (a combination of additional demand response functionality and network operational savings) would be captured by individual customers with an installed and functioning smart meter³. It argues that this therefore supports the use of a beneficiary pays approach to smart meter cost allocation.

It is true that the installation and functioning of a smart meter is necessary to obtain the benefits. However, the Commission appears to have simply assumed (without evidence) that the bulk of the benefits will arise from the increased demand response functionality. In fact, the clear majority of the benefits will initially arise from network operational savings⁴. These savings rely on the installation of smart meters to larger groups of customers rather than individuals (a shared benefit). In addition, the operational savings will also accrue to customers who have not (yet) decided to have smart meters installed but who are located in an area where other customers have them.

The Commission also appears to have assumed that the benefits from an increased demand response functionality will arise immediately whereas, realistically, they are expected to take some time to accrue. Typically, new customer behaviour patterns take time to develop and the benefits are also likely to rely on the adoption of demand response enabled appliances. The market for such appliances is at present relatively undeveloped.

To summarise, the bulk of the expected benefits will:

- arise not as the result of an individual's decision to have a smart meter installed; and
- also arise to those who have not made that decision.

In addition, Integral Energy notes that the Commission has recognised:

- the practical difficulty and administrative cost associated with apportioning the network benefits to individual customers⁵; and
- the fact that allocating costs on the basis of when individuals receive their meters potentially gives rise to intergenerational equity issues⁶.

Integral Energy submits that the Commission hasn't provided a sound rationale for adopting an alternative pricing or cost allocation arrangement for SMI costs relative to those of the existing distribution regulatory framework generally. As the benefits of SMI (particularly in the early stages) will be those that accrue to customers generally, the costs of SMI should be allocated on the same basis, namely, via broad based

³ Draft Report, p 87.

⁴ See, for example, Report for the MCE Smart Meters Working Group: Cost Benefit Analysis of Smart Metering and Direct Load Control - Final Overview Report, Executive Summary, page xii, NERA (1998).

⁵ Draft Report, p 88.

⁶ Draft Report, p 95.

charges applied to all distribution customers, not merely from customers who have had a new meter installed.

Unbundling

Integral Energy notes that, while supporting the unbundling of smart meter charges, the Commission recognises that the benefits of doing so are in fact dependent on a decision by the MCE in relation to the contestability of smart metering services⁷.

The industry-led National Stakeholder Steering Committee (NSSC) is in the process of recommending to the MCE that any decision in relation to contestability only be taken towards the completion of the mandate period once there is:

- a clear understanding of the costs and benefits of contestability, including the full costs to DNSPs arising from the need to make significant changes to their billing systems as a result;
- confidence regarding the technical feasibility of having multiple communications systems operating between retailers and DNSPs; and
- certainty that doing so will not adversely impact network performance and reliability and data security and integrity.

Integral Energy therefore submits that it would be inappropriate for the Commission to advocate unbundling in the absence of the MCE's decision.

Tariff smoothing

Integral Energy supports the Commission's recommendation to require the cost of stranded meters to be recovered over their in-service lives. While there may be some tension with the Rules in this regard⁸, recovering the residual value of existing meters over their previously forecast remaining lives is not inconsistent with the broader regulatory framework. This is contingent upon the previously accepted remaining economic lives being preserved and applied through the roll forward model. It is also essential that the regulatory WACC remains appropriate.

However, while maintaining or even shortening the economic lives of existing assets can be viewed consistent with the Rules, this is not the case for extending previously accepted remaining lives. The latter is clearly inconsistent with the Rules and would introduce additional risks into the regulatory regime for which DNSPs are not currently compensated.

On this basis, Integral Energy does not support the Commission's proposal to allow the AER to "back end" the depreciation of (new) SMI assets for the sole purpose of avoiding what it considers may be material tariff changes to customers. Doing so distorts DNSPs' ability to make timely, efficient investment decisions.

In addition, the Commission does not appear to have recognised that the way in which the AER's Post-Tax Revenue Model (PTRM) is applied already results in a back end loading of cash flows through the model's approach to calculating inflation and "regulatory" depreciation. By offsetting increments from applying CPI to the regulatory asset base (RAB) against the depreciation cash flows, the AER has

⁷ Draft Report, p 90.

⁸ National Electricity Rules clause 6.5.5(b).

instituted a cash flow profile which is designed (amongst other things) to provide smoother intergenerational pricing. Integral Energy submits that the application of the PTRM in the manner used by the AER already provides more than sufficient back-end loading of cash flows to meet the Commission's desired transiting of pricing outcomes and does not require any further divergence from the existing regulatory arrangements.

Q6.1 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?

A6.1 See A6.2 below.

Q6.2 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?

A6.2 No. The Commission should not recommend unbundling until the MCE has conducted its gateway review into the business and technical case for SMI contestability.

Q6.3 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?

A6.3 No. As indicated above, depreciation should reflect the economic life (the timing of the benefits) of the assets, and the AER's application of the PTRM already provides significant back-end loading of the depreciation cash flows without requiring further distortion.