



Expanding Competition in Metering and Related Services

Rule change submission

Introduction

The AEMC is proposing to introduce competition into the provision of metering as well as pave the way for the introduction of smart meters for domestic users through a change to the National Electricity Rules.¹ In the words of the AEMC:²

The draft rule opens up the provision of metering services to more competition to promote efficient investment and increased consumer choice in products and services. It also includes a number of other features to support a competitive framework, including new minimum requirements for new and replacement meters for small customers and new obligations so that security of, and access to, advanced meters and the services they provide are managed appropriately.

While the draft rule change opens the way for competition in metering to lead towards installation of smart meters, nonetheless it proceeds in two parts – (i) opening competition in metering; and (ii) amending rules to remove barriers to smart meters.

The potential benefits of increased competition in meter provision and operation and from the introduction of smart meters are significant. These benefits flow directly to a range of market participants (retailers, distributors, users, meter providers). The extent to which the benefits flowing to various market participants are passed on to users depends on the extent of effective competition or regulation. Before a move to support smart meters can confidently be said to meet the National Electricity Objective there must be an assessment of the extent to which these benefits are likely to be passed on to users in the long term, and that the benefits exceed the short term costs arising from the transition process.

The extent to which smart meters provide benefits to consumers is affected by a range of factors, including:

- The cost and standard life of smart meters compared to existing accumulation meters. At present accumulation meters are cheaper, have a longer life (typically 25 years compared to 15 for smart meters), have a lower fault rate, and providers have greater existing infrastructure and knowledge to support and maintain them;
- Installation of batteries on the network is likely to shift load and thus provide a potentially cheaper way of shaving peak demand than a combination of demand tariffs and smart meters; and
- Whether existing arrangements such as current load control arrangements provide some of the benefits of smart meters.

Additionally, the successful implementation of rules to support the adoption of smart meters depends on the extent to which the benefits are likely to be captured in practice rather than simply theoretically available to be captured. This process can be hindered by consumer confusion and mistruths in the marketplace, such as those that reduced the effectiveness of the rollout of smart meters in Victoria.

¹ AEMC 2015, *Expanding competition in metering and related services, Draft Rule Determination*, 26 March 2015, Sydney, Accompanying Information Sheet.

² AEMC 2015, *Expanding competition in metering and related services, Draft Rule Determination*, 26 March 2015, Sydney, p. i

These factors make an assessment of the benefits of smart meters more difficult and thus make it critical that the rollout of smart meters is consumer-driven. Consumers are likely to be hostile to rules that encourage smart meters for those consumers who do not benefit from adopting them.

In implementing rules to support the adoption of smart meters, there is a danger that the difficult implementation issues will be swept away or ignored as they are perceived as holding back the benefits of smart meters. In fact the way in which challenging issues are dealt with will determine whether smart meters provide net benefits to users and other market participants.

Net benefits of smart meters for domestic users

The benefits of smart meters for domestic users have been contested over time.

A 2008 cost-benefit analysis by NERA for the Ministerial Council on Energy Smart Meter Working Group found that the installation of smart meters had net benefits compared to both doing nothing or direct load control.³ The analysis found that, “The benefits associated with a national rollout of smart metering have been estimated by CRA, KPMG and NERA to be between \$4.5 billion and \$6.7 billion in NPV terms over the twenty year period of analysis, under the distributor-led rollout scenario”.⁴ Of these benefits, around \$2.1 billion and \$2.9 billion in NPV terms over the twenty year period of the analysis accrued to distributors in business efficiency benefits and between \$98 million and \$196 million accrued to retailers.⁵

The net benefits varied within a wide range and in some States the bottom end of the range implied a negative value.⁶

As noted, the analysis assumed a wide-scale rollout of smart meters. The analysis also proceeded on the basis of a larger set of minimum functional specifications, which could generate different costs and benefits. Other factors, such as the relative cost of smart meters to accumulation meters, and technological choices have changed since the time of the report. In particular, the emergence of low cost batteries could lead to installation of batteries at a substation level to shave peak use. This might be able to be done at a lower cost than through demand tariffs implemented using smart meters.

Other benefits provided by smart meters can be provided in other ways e.g. in-house displays of electricity use can be provided without requiring the installation of smart meters, monthly billing can be instituted through estimated readings on a monthly basis with readings every three months (the difference between actual and estimated readings may not vary significantly over this period), and the savings from remote reading are diluted by regulations which permit estimates and less frequent reading.

³ NERA 2008, *Cost Benefit Analysis of Smart Metering and Direct Load Control: Overview Report for Consultation* (Report for the Ministerial Council on Energy Smart Meter Working Group).

⁴ NERA 2008, *Cost Benefit Analysis of Smart Metering and Direct Load Control: Overview Report for Consultation* (Report for the Ministerial Council on Energy Smart Meter Working Group), p. xiv.

⁵ NERA 2008, *Cost Benefit Analysis of Smart Metering and Direct Load Control: Overview Report for Consultation* (Report for the Ministerial Council on Energy Smart Meter Working Group), p. xiv to xv.

⁶ NERA 2008, *Cost Benefit Analysis of Smart Metering and Direct Load Control: Overview Report for Consultation* (Report for the Ministerial Council on Energy Smart Meter Working Group), p. xvii.

This illustrates not that smart meters do not have benefits but rather that balance of costs and benefits tend to be different for different users and could be expected to change over time with changes in technology and other factors. This emphasises the primacy of the user deciding on whether to install a smart meter, and in particular, the sentiment in the draft rule determination that the “draft rule will facilitate a market-led approach to the deployment of advanced meters where consumers drive the uptake of technology through their choice of products and services”.⁷ It militates against an opt out approach to retailer meter rollout programs.

Inconsistencies in regulatory approach to existing metering

The draft rule notes that the AER is considering unbundling of metering charges from distribution charges and appropriate means for distributors to recover residual costs associated with accumulation and interval metering services.⁸

The current outcomes under the AER’s regulatory approach are not satisfactory, suggesting that the rule as finally determined may need to be more explicit in specifying the approach and powers of the regulator in relation to existing metering services. The current regulatory arrangements and outcomes may hinder the passing on of the benefits from the introduction of smart metering.

The view that the outcome of the AER’s regulatory approach is not satisfactory stems from the wide variety of observations about how existing metering is proposed to be regulated under the recent regulatory determinations finalised or in progress in NSW, Queensland, and South Australia.

The AEMC’s power of choice review (stage 3)⁹ recognised the interrelationship between effective regulation by the regulator and the success or otherwise of rules expanding competition in metering services. Without effective regulation, factors such as exit costs may discourage emerging competition in metering. The AEMC set out a range of criteria for exit arrangements (discussed later).

It is important to recognise that exit costs are driven by factors such as the MAB and new capex entering the MAB. Thus this submission examines first the valuation of the MAB and new capex by the regulator prior to examining the setting of exit arrangements and costs.

There is little consistency of approach either in the approaches proposed by distributors or in the regulatory decisions reached by the AER. These inconsistencies can be observed in relation to:

- Valuation of the metering asset base (MAB);
- Capex allowances; and
- Opex allowances.

For example, there are no agreed rules for valuation of the metering asset base (MAB) and distributors have taken divergent approaches. Distributors were required to value their existing

⁷ AEMC 2015, *Expanding competition in metering and related services, Draft Rule Determination*, 26 March 2015, Sydney, p. i.

⁸ AEMC 2015, *Expanding competition in metering and related services, Draft Rule Determination*, 26 March 2015, Sydney, p. ix and Appendix D.

⁹ AEMC 2012, *Final Report Power of choice review – giving consumers options in the way they use electricity*, November, Sydney.

metering asset base (MAB) for type 5 and 6 meters as part of the round of electricity distribution regulatory determinations in NSW, South Australia, and Queensland. The distributors' valuation methodologies for the MAB have varied among:¹⁰

- Depreciated actual cost or DAC (e.g. Energex);
- Optimised depreciated replacement cost or ODRC (e.g. Ergon); and
- RAB carve-out (e.g. Essential).

The valuations proposed by distributors and the valuations set by the regulator are inconsistent, as can be seen from table 1.

Table 1: Average meter values

	Ergon*	Essential	SAPN*	Endeavour	Energex*	Ausgrid	Average
Average meter value proposed by distributors	48	81	101	20	200	111	93
Average meter value set by AER	47	65	101	14	206	114	91

Source: AER regulatory decisions

* Preliminary decisions

It can be observed that:

- Energex's average meter value is almost twice as much as any other distributor. In fact, Energex's MAB as set by the regulator in the preliminary decision of \$448.8m is almost as high as the total MAB for all the NSW and SA distributors combined (\$465.9m).¹¹
- The variation in average meter value (comparing the values set by the regulator) is a factor of almost 15.¹²
- The only distributor to receive a significant cut in the value of their MAB was Endeavour, which had proposed by far the lowest average value for its MAB.

These inconsistencies are implausible given the valuations relate to meters using similar technologies. It could be argued that one MAB was significantly older than another or that one MAB contained significantly more interval meters than another. However, in the context of whether Energex's MAB as the most expensive is younger or contains more interval meters, it is noted that Energex's MAB contains a high proportion of old meters.¹³

It may be sensible to consider specifying a valuation methodology for the MAB as part of the rule change. One feasible valuation methodology would be DAC, given that the MAB is intended to have a finite life (until depreciation of the existing asset base with few new assets being added to the MAB). The valuation under an ODRC methodology is likely to approximate the valuation under a

¹⁰ Energex regulatory proposal 2014, p. 274; Ergon Regulatory Proposal 2014, *05.03.01 Default Metering Services Summary*, p. 37; Ausgrid Regulatory Proposal Attachment 8.21 - *Energeia review of Ausgrid's metering tariffs*, p. 44

¹¹ The NSW MABs are in \$2013-14 while the SA and Qld MABs are in \$2014-15.

¹² Energex meters at an average value of \$206 per meter compared to Endeavour meters at an average value of \$14 per meter.

¹³ Energex provides information that 298,163 of its meters or almost 14% of its meters are 35 years of age or older: AER, *Energex determination 2015-20, Attachment 16 – Alternative control services*, p. 16-45, table 16.16.

DAC methodology. The ODRC measures the cost of replicating system assets in the most efficient way possible, from an engineering perspective, given their service capability and the age of the existing assets. However, there is no sensible modern proxy for valuation of the existing meters apart from the existing meters themselves. The step change in functionalities between the existing accumulation and interval meter asset base and the new smart meter asset base means that smart meters are not a suitable comparator for valuing the existing meter stock. The RAB carve-out method, where metering assets are carved out of the RAB and assigned a transfer value that is then deducted from the RAB, is not in itself a distinct valuation methodology – all that it achieves is a consistent valuation of the assets previously part of the RAB.

A key issue in setting the MAB is whether the AER has the power to examine and determine the MAB. In the context of the large variation in Energex's and Ergon's MAB, the AER argued that:¹⁴

There are various reasons why the MABs of Energex and Ergon Energy can differ. For example, the amount of past capex and depreciation differs across both service providers. We do not currently have powers to review past capex on meters. This means a key driver behind Energex's relatively higher opening MAB cannot be reviewed as part of our regulatory processes.

This raises the question whether the AER has adequate power to determine the MAB under the current rules. Based on the AER's position in relation to Energex, it may lack sufficient power to amend the MAB proposed by a distributor. The Commission could consider amending the rules to clarify the AER's powers and to specify a valuation methodology for determining the MAB.

Capital spending on existing meters

There may also be a role for the rule to clarify approaches to approving capital expenditure in relation to the MAB. The new regulatory arrangements provide for increased competition in the provision of metering. Under this approach, users pay upfront for new meters installed after the commencement of a new regulatory control period and distributors will no longer be the monopoly provider of metering services. An expectation from this might have been that new capital spending by the distributors on accumulation metering and associated infrastructure (such as land, vehicles, buildings, ICT) would tend to fall, and in particular new capex by distributors on metering would fall.

However, table 2 below shows that new capex approved by the regulator in NSW, South Australia, and Queensland is high as a proportion of the MAB. The new capex ranges from a low of 7 per cent for Energex to a high of 85 per cent of the existing MAB for Ergon. As Energex's MAB and to a lesser extent Ausgrid's MABs are unusually high as discussed earlier, this may have the effect of making the capex spending as a percentage appear unusually low. Accordingly, the new capex programs have also been expressed as a percentage of the average MAB value, i.e. as a levelised capex/MAB, which may be a fairer way of comparing relative capex among distributors. On the levelised capex/MAB measure, capital expenditure ranges between a low of 12 per cent for Endeavour and a high of 55 per cent for Ausgrid.

¹⁴ AER, *Energex determination 2015–20, Attachment 16 – Alternative control services*, pp. 16-37 to 16-38.

Table 2: New capital spending on accumulation and interval meters by distributors

	Ergon	Essential	SAPN	Endeavour	Energex	Ausgrid
Capex accepted by regulator	51.3	46.6	10.6	14.6	29.4	117.8
Capex/MAB (%)	85	49	12	78	7	44
Levelised capex/MAB (%)	44	35	14	12	15	55

Source: Distributor Regulatory Proposals, 2014 and AER decisions. \$2014-15

The proposed capital expenditure by Ausgrid is particularly notable as:¹⁵

- the approved capex program over the 2014-2019 regulatory control period is \$117.8m compared with a MAB of \$267.2m (44 percent)
- Of this new capex, about \$80m is in new type 5 and 6 meters (\$25.6 for replacement of meters and \$53.2m for the rollout of new meters)
- The approved capex for new metering represents a 97 per cent increase in new capex on metering from the 2010-2015 regulatory control period.

The proposed capex program by Ergon is also notable as the capex program is \$51.3m compared with an approved MAB of \$60.7m (or 85 per cent of the MAB).¹⁶

This would indicate that:

- The distributors, some more so than others, expect to continue to spend strongly on expansion of their MAB;
- Depending on depreciation profiles, MABs may well continue to expand rather than shrink over time, particularly over the course of the next regulatory control period in some distribution areas in NSW and Queensland;
- Over time rising MABs may drive exit costs higher, with implications for users who have switched to smart meters. These users may find that their annual residual capital cost associated with paying off their old accumulation meter *rises* from year to year, and thus their initial private cost-benefit analysis of the net benefits of switching to a smart meter is wrong;
- Exit costs are unlikely to be clear and transparent as recommended by the AEMC in their Power of Choice review, reasonable, or less than three times the annual metering charge; and
- It may be difficult for new entrants to metering provision and servicing to compete with distributors in the provision of new meters given distributors have large forward capex budgets for provision and installation of new meters.

¹⁵ AER 2014, *Ausgrid Final decision 2015–19: Attachment 16 – Alternative control services*, p. 16-33, and Ausgrid Regulatory Proposal Attachment 8.21 - *Energeia review of Ausgrid's metering tariffs*, pp. 5, 22, 35. Expressed in \$2014-15.

¹⁶ AER 2014, *Ergon Preliminary decision 2015–20: Attachment 16 – Alternative control services*, p. 16-23. Expressed in \$2014-15.

Operating expenditure on existing meters

Table 3 below sets out the approved operating expenditure for each of the distributors, the approved opex as a percentage of the MAB, and a levelised opex as a percentage of an average MAB.

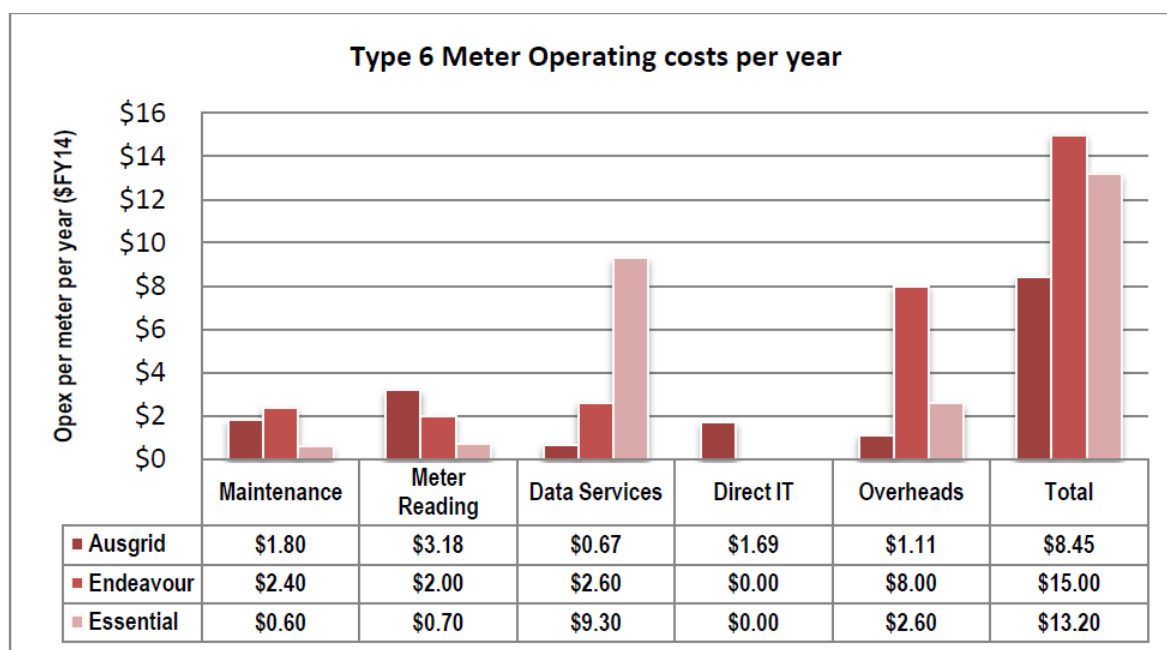
Table 3: Approved operating expenditure to maintain existing metering asset base

	Ergon	Essential	SAPN	Endeavour	Energex	Ausgrid
Forecast opex approved by AER	118.6	124.7	34.9	71.7	78.6	111.0
Opex/MAB (%)	195	132	41	381	18	42
Levelised opex/MAB (%)	102	93	46	58	40	52

Source: Distributor Regulatory Proposals, 2014. \$2014-15

As with the MAB and proposed capital spending, there are big variations in proposed opex. While it could be expected that rural-based distributor opex costs would be higher than urban-based distributor opex, the unusual aspect of the opex proposals is that the components vary very considerably among the distributors. This is illustrated in Ausgrid's regulatory proposal. Ausgrid set out the variations in the component costs that make up the operating costs per year in their regulatory proposal. This is extracted as Figure 1 below.

Figure 1: Components of opex costs for NSW distributors



Source: Ausgrid Regulatory Proposal 2014, Attachment 8.15 Type 5 & 6 metering services proposal, p.27

These variations seem implausible.

There may be a role for the rule to clarify the AER's approach to setting the allowed opex and capex for the existing metering base in order to ensure metering charges are not too high and the costs of exiting existing meters (which is partly driven by the MAB and forward capex allowance) do not present a barrier to expanding competition in metering services.

Recognition of opex and capex savings from the installation of smart meters

One of the benefits of the introduction of smart meters identified in the draft rule is the saving in opex and capex to the distributors. These savings come in a number of forms, including savings in meter reading, connection and disconnection costs, quicker fault detection, and capital and operating expenditure savings arising from shifting demand from peak to shoulder or off-peak times. As noted earlier, a substantial portion of the benefits identified in the NERA 2008 cost-benefit analysis accrued to distributors.¹⁷

The AER has not recognised any capex or opex savings in the forthcoming NSW, South Australian, or Queensland regulatory control periods arising from installation of smart meters. Thus consumers do not receive any benefit, at least for the next regulatory control period, from the savings arising to distributors from the installation of smart meters.

Fees for installation of new meters

Table 4 lists estimated fees for installation of new accumulation meters across the NSW, South Australian, and Queensland distribution networks. The fees vary widely. While rural-based distributors might be expected to pay higher fees, the Essential fees are the lowest among the cohort at \$35.5, while the Ergon fees are the highest at around ten times this amount or \$339.¹⁸

Table 4: Upfront meter installation fees

	Ergon	Essential	SAPN	Endeavour	Energex	Ausgrid
Upfront meter installation fees	339.0	35.5	295.0	41.9	273.9	47.7

Source: Distributor Regulatory Proposals, 2014. \$2014-15

As before, the wide variation in fees appears difficult to explain and a concern in relation to its impact on competition, particularly for those customers who are accustomed to dealing with the incumbent distributor in relation to meter supply and who might assume that their offer represents the best value offer in the market.

Exit costs

Distributors have proposed to charge exit fees for users switching from existing accumulation or interval meters to smart meters.

The exit fees are said to reflect the residual capital costs of accumulation and interval meters that are written off when such meters are replaced with a smart meter. The distributors also proposed that the exit fee include a component for administration costs associated with transfer of the user to a smart meter.

¹⁷ \$2.1 to \$2.9b out of total net benefits of \$4.5 to \$6.7b, or roughly half the total net benefits.

¹⁸ In some cases the fees are the basis for calculating the cost of meter installation rather than proposed upfront fees for meter replacement.

The AEMC set out recommended criteria for the AER in setting exit costs in its 2012 Power of Choice (stage 3) report. As summarised by Ausgrid, these were:¹⁹

The AEMC considers that the exit fee be determined by the AER in order to provide sufficient transparency for all parties regarding fees, and certainty to networks that they are able to recover costs appropriately. The AEMC proposed a set of criteria for the AER to have regard to when making an exit fee determination. Among other things, these included:

- *the exit fee must be reasonable;*
- *the exit fee must be based on the average remaining asset life of the existing meter type and operating costs;*
- *the exit fee may include efficient and reasonable costs of processing the consumer transfer to another Responsible Person;*
- *a cap must be placed on the exit fee. We consider that this should be, at a maximum, no more than three times the annual metering charge. This is to provide consumer confidence that costs will not be exceedingly high when willing to change their meter;*
- *the DNSP must remove the cost of the replaced metering installation from its asset base and reduce the DUOS tariff to the retailer accordingly; and*
- *the existing contribution that consumers have already paid towards the existing metering stock.*

The exit fees proposed by distributors in the current round of electricity distribution reviews reflect a wide variation, as evidenced in table 5 below. The exit fees, including administration fees, vary widely in a range from \$65.70 for Endeavour to a high of \$290 for Energex. When compared with the proposed annual fees for metering, the exit fees vary from a multiple of 1.6 for Ergon to 7.4 for Energex, with three of the multiples being in excess of the AEMC recommendation of a maximum multiple of 3 times.

Table 5: Proposed exit fees

	Ergon	Essential	SAPN	Endeavour	Energex	Ausgrid
Proposed exit fee	137.0	131.6	212.0	65.7	290.0	195.2
Annual fee	85.3	48.7	33.0	26.2	39.2	34.7
Exit fee as a multiple of annual fee	1.6	2.7	6.4	2.5	7.4	5.6

Source: distributor regulatory proposals for 2014 and 2015 resets, stated in \$2014 and \$2015

The AER has proposed that instead of exit fees, users replacing meters would continue to pay residual capital costs (although not operating costs). It is understood that users would continue to pay the residual capital cost until the MAB depreciates to zero. The AER disallowed the administrative component of the exit fee.

¹⁹ Ausgrid Regulatory Proposal 2014, Attachment 8.15 Type 5 & 6 metering services proposal, p.25 citing AEMC 2012, Final Report Power of choice review – giving consumers options in the way they use electricity, November, Sydney, p. 87.

The AER's approach avoids the need for the user to pay an upfront exit fee. However, in essence it provides for a similar approach in that the residual fee is based on the average meter cost under the MAB. Thus the suitability of the AER's approach depends on whether the MAB is appropriately valued, as the MAB drives the calculation of the residual fee paid by users migrating to smart meters. As noted above, the valuation of the MAB has been problematic in that a wide variety of valuation methodologies and values have been proposed and accepted by the AER.

As noted above, given the significant approved capex inflows to the MABs for the next regulatory control periods in some distribution areas in NSW and Queensland (although not in South Australia where the capex proposal is more modest) exit costs may rise over the course of the regulatory control period. This may cause confusion for consumers, change the terms of their private cost-benefit equation, and move the exit arrangements and costs away from those recommended by the AEMC in 2012.

Opt out approach

The draft rule is expressed as supporting consumer choice of smart meters. However, as designed, it provides that "if a retailer proposes to undertake a "new meter deployment" (as defined in the draft rule), the draft rule requires the retailer to allow a small customer to opt out of having their meter replaced as a part of that deployment".²⁰

In determining the balance of opt in or opt out provisions, it is important to recognise that the benefits to individual users from migration to smart meters will vary considerably and will in some cases be negative. Thus, there are significant dangers in implementing an opt out approach to the adoption of smart meters. Where a user is not fully engaged with a retailer, or misunderstands his or her choices, then his or her meter may be changed to a smart meter in circumstances where this is not to his or her benefit. QCOSS's submission provides a description of circumstances where the opt out rule may impose net costs on users.

Further, the draft rule provides for a number of exceptions to the opt out rule, effectively providing for compulsory migration to a smart meter in a range of circumstances discussed in Appendix C2 to the draft rule determination.

Where the user is not engaged or under the exceptions to the opt out provisions, users may have to pay two sets of fees – for a smart meter that they did not want and for a new smart meter – in circumstances where they may not derive a benefit from switching to a smart meter. Noting above, that the MABs could be expected to grow with the approved new capex arrangements, consumers may be caught by surprise at increasing residual charges for their previous accumulation meters.

A further problem may arise from the fact that the minimum functional specifications for smart meters do not include load control. Where a user with existing load control and load control tariffs switches to a smart meter without load control functionality, he or she may unintentionally lose access to existing load control tariffs. Load control tariffs are at a major discount to standard domestic tariffs.

²⁰ AEMC 2015, *Expanding competition in metering and related services, Draft Rule Determination*, 26 March 2015, Sydney p.vii.

This might mean a loss of load control functionality for users with existing load control tariffs if new smart meters are installed without load control functionality.

Upfront payment for new meters

The draft rule provides for users to pay upfront for new meters. This compares with the historical arrangement where meters have been paid for through the DUOS component of electricity tariffs.

The draft rule needs to deal with the following issues:

- *Tenancy agreements*: Meters become a fixture of the dwelling that they are attached to and provide benefits to that dwelling. Those benefits remain for the standard life of the meter (15 years for smart meters), which is likely to be well past the life of a tenancy agreement. Accordingly, the rules could provide that landlords rather than tenants should have to pay the upfront costs of meter installation. It may however be reasonable for tenants to pay for the operating costs of meters;
- *Affordability*: Some users may struggle to afford to pay upfront for meters. This may be exacerbated by the fact that concession arrangements may not cover payment for meters. There should be some mechanism to enable meters to be paid for over time.

Consumer protection issues identified in previous work

The draft rule specifies some consumer protections. Specifically, the draft rule protects data privacy and provides for opt out provisions.²¹

While these provisions are not criticised, there remains the question whether they go far enough to protect consumer's rights. Some consumer protection issues have been highlighted earlier, including tenancy and affordability issues.

Consumer protections may be more important in these markets compared to other markets in view of consumer inexperience with paying for metering and the functionality of smart meters, and consumer confusion over exit arrangements where consumers switching to smart meters may have to pay off the capital costs of existing meters.

²¹ See AEMC 2015, *Expanding competition in metering and related services, Draft Rule Determination*, 26 March 2015, Sydney pp. 31-32. Under the opt out provisions, "retailers must provide their small customers with prior written notice of a proposed replacement of the customer's working metering installation, which must include (amongst other things) details regarding the customer's ability to opt out of having its metering installation replaced and the upfront charges the customer will incur under its retail contract as a result of the replacement".

NERA (2008) identified a range of consumer protection issues as part of its cost-benefit analysis of the introduction of smart meters. These are put forward for the Commission's consideration as consumer protections as part of the rule change. The issues identified in the NERA report were:²²

- *The underlying regulatory framework for the introduction of smart metering should consider whether hardship policies and other consumer protections and assistance programs should be modified to ensure that existing protections are not eroded;*
- *Designing education programs about the introduction of smart metering and associated innovative tariff products to ensure that demand responses are maximised;*
- *New mechanisms for ensuring that households facing financial stress are identified and provided with information on assistance available prior to utilising remote disconnection functionalities;*
- *Providing an opportunity for households to readily shift between tariff products if they discover that they are actually financially worse off from the new tariff product offering;*
- *The need to consider the relationship between network businesses (offering TOU network tariffs and/or CPP) and the customer, given that most customers only receive a bill from a retailer and the retailer will not have an obligation to pass these new tariff structures onto customers. Alternatively an incentive mechanism could be designed to ensure that TOU tariffs and/or CPP are transparently conveyed by retailers to customers; and*
- *Ensuring that there is sufficient notice of critical peak events to provide the opportunity for a household to respond appropriately to pricing signals.*

Conclusion

Expanding competition in metering and removing barriers to the introduction of smart meters for smaller users could provide net benefits for smaller users consistent with the National Electricity Objective. However, these benefits depend critically on the interaction between the rule and NER provisions for regulation of existing metering services.

Inconsistencies in regulatory approach could reduce the benefits for users from the rule change, both in respect of the provisions expanding competition in metering services and the provisions enabling the introduction of smart meters. The inconsistencies relate to the setting of the MAB and related exit cost, opex, capex, and upfront fees for new meters. The Commission could consider strengthening and clarifying the regulatory approach under the NER in these areas to ensure consistency in approach and outcome.

The proposed consumer protection framework for users currently covers only data privacy and opt out rights and could be strengthened to cover unanswered issues such as affordability and landlord and tenancy issues. The opt out provisions may not be sufficient to protect the rights of consumers in a newly emerging market where the level of consumer knowledge and experience is very low.

²² NERA 2008, *Cost Benefit Analysis of Smart Metering and Direct Load Control: Overview Report for Consultation* (Report for the Ministerial Council on Energy Smart Meter Working Group), p. xxiii (footnotes omitted)