Major Energy Users Inc.

Australian Energy Markets Commission

Optimisation of Regulatory Asset Base and Use of Fully Depreciated Assets

Comments on the Draft Decision

Submission by

The Major Energy Users Inc

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Executive Summary

The AEMC Draft Decision deals very poorly with the Major Energy Users (MEU) proposal relating to the rule changes on optimisation and retention of used and useful assets.

The current environment of massive change caused by reducing energy demand and consumption, closures of high energy use manufacturing facilities, the impact of the carbon tax and potential closures of high carbon emitting generation plants and the expansion of the Renewable Energy Target program, all are likely to result in many energy network assets being made redundant or significantly under-utilised.

The MEU is very concerned at the approach used by the AEMC to determine that the rule changes are not either appropriate or not necessary. It is critical of the MEU that it had not provided evidence of the need for the changes. The MEU points out that provision of "hard evidence" is not practical as all of the necessary information is held within the data bases of the NSPs and therefore is not available to the MEU. Despite the MEU's lack of evidence being considered an omission by the AEMC, the AEMC itself accepts assertions from NSPs and its consultant without comment. In fact, the AEMC makes assertions without providing supporting evidence.

To overcome the shortage of hard evidence, the MEU approach is based on theoretical approaches supported by modelling – something the AEMC has failed to carry out.

The Draft Decision in relation to optimisation provides the unsubstantiated view, based on poorly argued theoretical grounds, that it is better for consumers to incur a higher cost for infrastructure by allowing uncontrolled investment on the basis that reliability of supply must take primacy.

The analysis provided by the MEU provides significant clarity as to the merits and detriments of the rule change proposal, but the Draft Decision conclusion is essentially focused on a high level view that imposing optimisation will result in greater risk to the NSP with the potential that there is a corresponding risk to consumers of "the lights going out". The issue of inefficiency having large amounts of capital that do not provide a service to consumers is not addressed, the cost imposition is not addressed, nor is there any attempt made to assess the financial benefits of the proposal.

The AEMC's justification for treating monopoly networks differently to firms in the competitive arena – and therefore should not be exposed to optimisation of assets – is based on the assertions that reliability requirements are greater

for networks and on the need to minimise the risks to network owners, fall apart on closer examination. There are errors of fact and logic in the AEMC's assessment in this regard.

The rule change in relation to retention of used and useful assets is similarly dismissed on grounds based on assertion and poorly argued theory, but without any attempt to assess the financial impact of the proposal. The MEU provides modelling outcomes that support its conclusions that there is a significant benefit to consumers (and no cost to NSPs) by retaining fully depreciated assets that are still used and useful. The AEMC observation (another unsubstantiated assertion) that there is a significant regulatory cost does not reflect the actuality of what occurs in a regulatory reset review.

The Draft Decision hints that some of the issues raised by the MEU proposed rule changes could be addressed in the outcomes of the AEMC review of the AER network rule change package, but no details are presented.

In the MEU's view, the AEMC Draft Decision is substandard. The MEU considers that its proposals must be dealt with properly and assessed from the standpoint of the National Energy Objectives as required in the National Electricity Law and the National Gas Law.

1. Introduction

The MEU is concerned about the attitude of the AEMC towards rule change proposals in general. The MEU has made two rule change proposals in recent times (one of which is strongly supported by the AER) and the AER has proposed a rule change of significance based on its first hand experience of regulation.

The MEU proposals were submitted to supplement the AER's network rule change package which itself was a response to considerable consumer concerns with the over-incentivisation of investment embedded in the network rules. This over-incentivisation has caused significant increases in network costs and prices arising from the last round of AER network pricing reviews.

These concerns about network pricing have also been highlighted by at least three other reputable reports – Garnaut update #8, Parry/Duffy report to the NSW government and the NSW IPART report on regulated retail tariffs.

In the midst of massive structural transformation in the manufacturing and energy supply industries caused by the $A appreciation, the carbon tax, the imposition of the Renewable Energy Target (RET) and myriad clean energy and energy savings schemes (national and state based), the MEU is concerned that many network assets will become redundant and/or significantly under utilised. For example, as demand and consumption decline (caused in part by higher electricity prices and/or closures of manufacturing plants, especially in regional areas) coupled with closures of high carbon emitting generation plant, unit costs of electricity supplies will rise significantly unless redundant and under utilised assets are optimised from the Regulatory Asset Base at the next pricing resent reviews, as used to occur under the National Electricity Code.

The MEU points to evidence of declining demand and consumption (refer to the recent update by AEMO of its 2011 Electricity Statement of Opportunities) reports of manufacturing plant closures (eg of aluminium plants in NSW and Victoria) and the impact of the carbon tax and RET on generation plant closures. All of this points very clearly that there will be a significant impact on the extent and utilisation of network assets.

It is in light of this environment that the MEU proposed the rule changes on optimisation and retention of used and useful assets.

1.1 The assessment process

The Major Energy Users Inc (MEU) is a strong advocate of the need to change the network regulation rules to ensure that they are better balanced between the interests of the network providers and the consumers who are required to pay regulated prices for the services provided.

As a result of considerable concern raised in a series of reports[1] the AER has introduced a wide sweeping series of rule changes to re-balance the interests of network providers and consumers. The MEU noted that there were some "gaps" in the AER proposals and in order to ensure the issues were addressed as part of the network rule changes proposed, made the two supplementary rule change proposals to address these gaps. The intent of the MEU was that that its proposed changes would be "rolled into" the overall process reviewing the AER rule change proposals, following a similar approach used for the EURCC rule change proposal, and this was discussed with AEMC staff.

The AEMC has decided not to do this and is separately addressing the MEU rule change proposals on their merit. What is most concerning to the MEU, is that the AEMC makes frequent reference to the AER proposed rule changes and to outcomes from that review which could address some of the concerns raised by the MEU. This implies that there might be a "better rule" being assessed which addresses the MEU concerns which led to the proposed rules, but nothing is provided evidencing this.

The MEU acknowledges that the AEMC has the power and the obligation to assess rule changes on their merits and, if convinced there is a need to address the concern that is at the basis of the rule change proposed, to propose a better rule. There is considerable discussion by the AEMC that the concerns of the MEU might be addressed under the review of the AER rule change process. This seems to imply that it has a "better rule" under consideration but does not provide this as part of the assessment of the MEU proposals but will do so within the assessment of the AER rule change proposals.

Thus, as a fundamental issue, the MEU considers that this AEMC Draft Decision should have not been issued and that the MEU proposal should have been "rolled into" the overall process of review of the AER proposals, and the issues raised by the MEU assessed as part of that review.

[1] For example, Garnaut update #8, Parry/Duffy and IPART

1.2 Regulated monopolies vs competition

Within the Draft Decision the AEMC makes an assertion that regulated monopolies have to be assessed differently to businesses in the competitive arena and provides examples of where there are significant differences.

The major area of difference that the AEMC highlights, is that regulated businesses have imposed on them certain reliability standards which force then to make decisions that might not be comparable to firms operating in a competitive arena. This assumption is not correct. While it is acknowledged that regulated energy monopolies (especially in electricity) do have reliability standards imposed on them, a firm in the competitive market also has similar reliability standards imposed. In addition, the exposure to competitive pressures is a discipline that monopoly businesses are not subject to.

A firm in competition has to meet standards of performance or lose its customers to competitors. Such standards include quality of product, reliability of delivery, fitness for purpose and price. If any one of these standards is not meet, then the customer goes elsewhere and the investment made by the firm is made redundant. It may get another customer for a short time to replace the customer lost, but unless it meets the standards of the new customer, it will lose that one too.

In contrast, a regulated monopoly has to meet quality of product and reliability of delivery; fitness for purpose and price are not issues for the monopoly networks as they are managed elsewhere. If the network does not meet its quality of product or reliability of delivery requirements, its customers have no alternative but to continue to use the monopoly provider even if the service is substandard.

For the AEMC to assert that a regulated monopoly service provider has a higher level of reliability imposed on it than is seen in the competitive market, simply highlights the lack of appreciation the AEMC has of what occurs in a competitive market. To then suggest that the regulated service provider has higher requirements (such as reliability) that would impact on its investment needs, shows a lack of understanding of the competitive environment. It is an erroneous assumption that falls apart upon closer review.

This point is further reinforced by the assertion that poor performance in any one of the four basic standards of quality, reliability, fitness for purpose or price, can be overcome by seeking new customers again is not supported by a real understanding of the competitive market place..

For example, Norsk Hydro has recently closed the Kurri Kurri aluminium smelter. This plant reflected a significant capital investment and by closing the firm would incur some $200m in impairment costs[2]. The reasons given for the closure were:

> "… a response to the weak macro-economic environment, with low metal prices, uncertain market outlook and overcapacity in the aluminium industry, in combination with a strong Australian dollar."[3]

The closure was not due to the smelter not meeting its quality, reliability, or fitness for purpose obligations but because it could not meet its other obligation (price) due to reasons outside its control[4].

In contrast, a regulated energy service network provider has an effectively guaranteed revenue stream and does not face "low… prices", "uncertain market outlook" but has a tied customer base that cannot change its supplier regardless of the levels of reliability it provides.

What the AEMC fails to see is that the reliability standards imposed on the energy service providers are merely a regulatory imposition required because a monopoly provider does not have the driver of competition to meet reliability performance, or that its failure in meeting these does not result in a loss of customers.

1.3 Risk vs reward

Explicitly stated in the energy Laws, is that a network is to receive:

> "…a return commensurate with the regulatory and commercial risks involved in providing the … service…" (principle 4)

In establishing the rate of return a regulated network service provider is granted, the building block approach to regulated revenue is intended to provide for the return of debt at efficient cost and for the return of equity to be the average of the stock market as a whole through receiving the market risk premium. Regulatory and commercial risks faced are recognised through the value of the equity beta applied to the WACC formula and the value of gamma used to value the benefit of tax imputation.

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[2] Newcastle Herald 7 June 2012
[3] ibid
[4] Similar issues are faced by the steel industry, the paper industry, the auto industry, the tourism industry and all the suppliers dependent on these

In the assessment of the detriments of the MEU rule changes, the AEMC makes the observation that if the risks to the regulated monopoly service providers are varied, then there would need to be a variation to the WACC to compensate for the increased risk. The MEU agrees with the philosophy but also sees the need to recognise some facts:

- The decision to remove the risk of network optimisation that applied in the National Electricity Code was made by the AEMC in 2006. When this risk reduction process for investment was introduced[5] there was no compensating adjustment to reduce the equity beta to reflect the lesser risk. This implies that either the AEMC saw no risk change eventuated or that the cost of the change in risk was negligible. For the AEMC to now state that there is a risk is inconsistent with the earlier determinations of the AEMC.
- The value of the equity beta currently used by the AER was developed in 2009 and is based on real data from Australian business for periods that include both optimisation risk (pre 2007) and not (post 2007) and overseas markets which do include optimisation risk. The Australian market sources included a mix of firms which covered both regulated and competitive electricity and gas activities and overseas firms were predominantly gas businesses from the US. The equity beta finally settled on by the AER was one which is considered to be conservative. Implicit in this conservatism is that the risk is overstated and therefore provides a premium to the risks involved by the regulated firms. Additionally, the bulk of the development of the equity beta is based on data which occurred when optimisation risk was included in the equity beta.

For the AEMC to allege that if the risk was increased there would have to be a compensating adjustment in the WACC is not borne out by its own earlier actions or in the development of the risk factor (equity beta) used by the AER.

1.4 Incentives to over-invest

The AEMC does not consider that there is an implicit incentive to over invest embedded in the Rules. This ignores reality.

[5] "A key mechanism for managing the investment risk for TNSPs was to 'lock-in' and roll forward the RAB from one regulatory period to the next. This aimed to give greater security to investors in the transmission system that their investments would be treated in an appropriate way over time. More specifically, the RAB would not be subject to optimisation at regulatory resets to reflect the economic value of the assets to users, which would otherwise present a significant risk to investors." (page 98 AEMC Rule Determination, Rule 2006 No 18)

The automatic roll in of actual capex (regardless of the amount and what the capex was used for) means the NSP is assured of a long term return on the capex used.

The profit a regulated firm receives comes from the WACC*RAB calculation element of the building block approach. To increase profits on a quantitative (volumetric) basis requires the RAB to increase. As the RAB decreases annually with the depreciation included in the valuing of the RAB, the only way to increase the RAB is to invest more capital. Over investing increases the RAB by more than if only the efficient capital were invested.

If the WACC allowed by the regulator is higher than the firm's cost of capital, there is again an incentive to over invest. In recent years the debt risk premium has been consistently above the cost of debt incurred by regulated firms, again providing an incentive to over invest.

Inherent in the regulatory approach is an incentive to defer investment to later in a regulatory period as the firm receives the return on capital invested through prices even if the capital is not invested until later than is forecast in the regulatory period.

The MEU agrees with the AEMC that the incentive not to over invest decreases over a regulatory period,

> "…has taken a view that the overall strength of the capex incentive declines as a regulatory period progresses. That is, the incentive power is stronger at the beginning than at the end. This leads to an incentive to defer expenditure to a later time in the regulatory period." (DD page 13)

Intuitively this means that in the final year of a regulatory period, there is almost no disincentive not to over invest. This is logical because any over investment in the final year would incur almost no time related cost penalty. but receive an additional revenue stream for many years into the future.

The clear implication is that, providing there is capital available to invest, the impact of the disincentive to over invest late in the period needs to be balanced against the incentive to invest, especially in the last year of a regulatory period. The AEMC has not addressed this balance of competing elements in the Draft Decision.

The AEMC does add two riders to its view that there is an incentive not to over invest.

Firstly, the AEMC comment noted above is provided with the qualification that:

> "…leaving the cost of capital aside, there is no incentive in the NER to spend more than the capex allowance…" (DD page 13)

This is indeed a significant qualification. As the MEU notes, the issue of the cost of capital is itself a significant driver to over invest. Unless the qualification can be demonstrated to not apply, the conclusion the AEMC reaches is essentially flawed in logic.

Secondly, the AEMC notes that regulated firms do not have unlimited supplies of capital, and any limitation on capital provides an inherent disincentive to invest.

> "…capital constraints that may restrict the business's ability to undertake expenditure. These apply whether a business is regulated or competitive. As APIA notes, most regulated businesses do not have an excessive supply of capital…"(DD page 22)

To a large degree, the MEU agrees with the AEMC (and APIA). The constraint on capital is a disincentive not to over invest. The qualification that needs to be addressed is that given a certain amount of capital availability a firm (or provider of capital) will invest where there is the greatest return. So this means that if the return is going to be high, then this constraint is somewhat reduced in application. Likewise, if the risk is low or is non existent.

However, neither the Draft Decision nor APIA have taken the trouble to test the assertion that there is a continuous disincentive to over invest, although the MEU notes that there is an incentive to under invest during a regulatory period.

For example, assume that the regulatory allowance for a period is to allow $1,000 of capex for each year of a period and that the WACC is 10%. The overall capex allowed is $5,000. Suppose that the NSP elects not to invest at all in the first four years and all of the capex is used in the final year. There is a net benefit to the NSP of doing this.

Suppose that the NSP elects to increase the capex above $5,000 in the final year. This would erode the net benefit of not investing in the earlier four years. The amount of capex automatically rolled into the next regulatory period as currently permitted under t6he Rules would be higher than that allowed by the regulator and the NSP retains a net benefit. In fact under this simple model, the amount of capex in the final year would have to reach $15,000 (well above the original allowed $5,000) before the NSP has no net benefit from the delayed capex program.

It is accepted that this simplifies considerably the way capex is treated, but it does highlight that the incentive to under invest in the early years provides the potential for much greater investment than was considered to be efficient at the time of the regulatory review but without penalising the NSP.

1.5 Provision of evidence to support the need

The AEMC is critical of the MEU of not providing empirical evidence to support its rule change proposals for optimisation of assets and retention of used and useful assets. However, despite the apparent lack of evidence, the Draft Decision does include a statement:

> "The Commission agrees that some areas of the NER could benefit from enhancement and will address this in its draft rule determination in respect of the AER's rule change requests." (DD page (i))

The fact that the AEMC is even considering that there is a need for rule changes to reduce overinvestment incentives supports the thrust of the MEU requests and implies that there is evidence enough to support change.

Regardless of this, to provide specific evidence to support the contentions behind the proposed rule changes is almost impossible because any specific evidence would be held within NSPs' knowledge bases. Because the rule changes impose greater controls on NSPs, it is illogical to assume that NSPs would either confirm that there is evidence to support the changes or even surrender this to the MEU. A review of the NSP responses to the Discussion Paper supports this view.

With a background such as this, the MEU must rely on theoretical support for its rule change proposals due to this information asymmetry.

With regard to the support of the need for the proposed rule changes, the MEU already identified that there are a number of independent reports that have been submitted supporting concerns that there has been considerable inefficient investment made in the various energy transport networks. These include the Garnaut update #8, the Parry/Duffy report to NSW government and the IPART report on this issue.

Further supporting the need (although more indirectly) has been the AER proposed rule changes to ensure there are more robust rules for network regulation.

1.5.1 Optimisation and evidence

The principle of optimisation was inherent in the valuation of the energy transport assets that applied for the initial regulatory reviews. The assets were valued notionally on the Optimised Deprival Values (ODV) which was a difficult analysis. To overcome this difficulty, the assets were valued on the Depreciated Optimised Replacement Cost basis (DORC). If such approaches were acceptable at the time of initial valuation, then it is inconsistent to remove the requirement for optimisation now.

Overall, there is a significant and independent view that closer attention is needed to regulate energy transport networks. The MEU proposed rule changes are part of this overall thrust to make the rules more efficient and consistent with earlier approaches to set realistic values for the assets.

Despite its requirement for evidence from the MEU, the Draft Decision seems to accept theoretical arguments to supports its contention. For example, the AEMC cites a view of APIA:

> "For example, APIA points out that smaller size investment is likely to be more attractive for service providers because it is less likely to be optimised out of the asset base in future. This may result in a substantially greater capex requirement in the long run, thereby increasing the overall cost for transportation." (DD page 24).

Such theoretical arguments appear to be accepted yet the Draft Decision is critical of the MEU because it has relied on theoretical argument to support its case. This lack of balance is another area of concern with respect to the AEMC draft decision.

1.5.2 "Depreciated but used and useful" and evidence

With regard to the issue of the "used and useful" but depreciated assets, the MEU provides an example to show why there is a need to enforce the retention of used and useful but depreciated assets. Whilst the example is the most simple of all, the concept can be extended into all energy transport.

Consider a transmission gas pipeline. The pipeline was built for a specific gas source with a 30 year life and was expected to be redundant after 30 years so the pipeline is depreciated over this time frame even though it has an expected engineering life of 60 years. Assume that after

29 years of operation, another source of gas is discovered nearby which allows the original pipeline still be used for its engineering life span.

The pipeline has been fully depreciated but is still used and useful. The owner of the pipeline would only receive recovery of opex used if the building block approach is used as the other elements of the building block approach (ie recovery of RAB*WACC which includes the profit and depreciation are both zero). The incentive is for the owner of the asset to declare the existing pipeline as redundant (even though its still can be used) and to build a new asset so that the owner can make a profit. This is not an isolated example – many gas pipelines in the United States are still operating well after their notional engineering life and this expectation is likely to start applying in Australia as its older gas pipelines (such as in the Victorian and Moomba gas pipelines) reach their engineering life in the next 15-20 years.

This same principle applies to smaller elements in an energy transport network.

The argument that the engineering life and the time for replacement are equivalent fails to address the very basic issue that engineering lives are naturally conservative and there is an expectation that assets will last longer than their assessed engineering life.

For example, manufacturing industry (including MEU member companies) is replete with examples of plants built many years ago and now fully depreciated but which are still operating. The benefit of such fully depreciated plants is that the cost of products made on them no longer need to carry the cost of depreciation or paying off the cost of the capital used to build them. The MEU proposed rule change was to impress on networks that there is no need to necessarily replace assets that are still capable of performing the task but have been fully depreciated.

Thus, although there can be no evidence as such to prove the need for a rule change to reflect optimisation and retention of “depreciated but used and useful” assts, there is significant theoretical evidence to suggest there should be the imposition of rules to ensure that the interests of consumers are protected, as was the case when the National Electricity Code was established.

1.6 Prudency and pricing principle #2

Consistently throughout the AEMC Draft Decision, there is reference to the six network revenue and pricing principles included in the two energy Laws.

Pricing principle #2 states:

> "A regulated network service provider should be provided with effective incentives in order to promote economic efficiency with respect to [the services] the operator provides. The economic efficiency that should be promoted includes—
>
> (a) efficient investment in a distribution system or transmission system with which the operator provides [the services]; and
>
> (b) the efficient provision of [the services]; and
>
> (c) the efficient use of the distribution system or transmission system with which the operator provides [the service]."

The AEMC Draft Decision points out that the Gas Rules do include the need for investment to be "prudent" and also does acknowledge that the electricity rules do not have such a qualifier.

Principle #2 requires investment to be efficient and the second reading speeches of the two energy Laws discussed that efficiency is to be applied in an economic sense.

What is not included in the rules is how the regulator is expected to assess "prudency". Like the Regulatory Investment Test (RIT) used for electricity, prudency might imply that the investment must provide an outcome that shows costs are less than benefits, but this has little meaning if the forecast costs are never assessed against the actual costs that are included in the RAB. Equally, there is little direction provided in the rules over which time frame that the benefits are to be calculated, so there is a great deal of imprecision underlying how the rules are to be applied.

However, applying either prudency or efficiency does not deliver an outcome which provides a service which is optimal for the purpose or requires the continued use of fully depreciated assets which are still used and useful.

What principle #2 does require is that there are to be incentives to ensure that future investment is efficient. There are no incentives to ensure that this does occur, yet there are incentives which ensure that investment is not efficient.

Pricing principle #6 requires there to be regard for the costs and risks of over and under utilisation. Both of the rule changes proposed directly address this issue yet the AEMC Draft Decision would appear to be considering that this principle is less important than the others.

1.7 Conclusions

The AEMC is required to assess the rules proposed against the National Energy Objectives. The AEMC is also to ensure that the requirements of the six revenue and pricing principles are incorporated into the rules as well.

The Draft Decision has taken the view that:

- Despite the Draft Decision rejecting the proposed rules, the Draft Decision has advised that there is a need to address some shortcomings identified by the MEU rule changes. This implies that a "better rule" is being considered but, despite the Law permitting that a better rule can be implemented to address a concern, there is no "better rule" included in the Draft Decision, even though this is implied
- The MEU contention that regulation should replicate competitive pressures is accepted but the Draft Decision contends that regulated networks have a higher requirement for service provision (eg reliability) than a competitive business has. The facts do not support this contention
- The Draft Decision posits that the MEU rule changes would impose greater risks on regulated NSPs and that this would require an increased WACC to compensate. Historical approaches to the WACC setting do not support this contention.
- The Draft Decision does not consider there are incentives to over invest yet this contention is not supported by independent review or theoretical argument
- The MEU has not provided evidence of a need, and relied on theoretical arguments to support its contention
- The Draft Decision posits that the Gas Rules already accommodate the need for "prudent" investment although there is no similar requirement in the Electricity Rules. Despite this, the requirement for prudency does not address the concerns inherent in the MEU rule change proposals

2. Optimisation proposal

The Draft Decision considers that the risks of applying optimisation are too great and too difficult and that the benefits of it do not warrant the costs involved.

The Draft Decision provides argument that

- The risk of under investment now in relation to greater investment in the future is not efficient as required by the NEO or the pricing principles.
- The cost implication of under investment that might occur if NSPs only addressed short term needs are greater than the costs of over investment
- If the NSPs faced greater risk due to the potential for later optimisation, then a higher rate of return (WACC) would be required.
- Regulated monopolies face greater requirements (eg reliability) than firms faced by competition and therefore the controls to be applied need to reflect that practices developed in firms faced by competition cannot apply

2.1 What optimisation addresses.

Optimisation of the asset base achieves a number of key and positive outcomes, although it is recognised in the Draft Decision that there can be negative outcomes too.

2.1.1 It imposes discipline in the process

> The AEMC comments that the electricity Regulatory Investment Test (RIT) and the requirement for prudency in the gas rules impose a discipline on NSPs to be diligent in proving that an investment is properly developed, and that the forecast costs are less than the value of the benefit the investment will provide. Such an outcome demonstrates efficiency in the proposed investment.
>
> Currently the imposition of the RIT requirement (and even, to an extent, the prudency test) is limited in the extent of its application. Not all capital investments are tested under these requirements. If there was potential for a subsequent optimisation of the RAB, then the NSP would be more diligent in its development of the proving of a need for the investment, and that the costs of such investment are most likely to be incurred.

There have been examples of investment tests which have not addressed all options for providing the service (eg the Haymarket development in Sydney in 2003) where lower cost options (such as network support) were not appropriately included in the assessment supporting the investment.

2.1.2 Forecast costs vs actual costs

The threat of optimisation drives project costs controls. Under the current rules, the actual costs for an investment will be automatically rolled into the asset base, regardless as to whether the actual cost is efficient.

If the consideration for an investment was based on certain forecast costs for the benefits to be delivered then there is a driver for the project to deliver the costs used to underpin the project. If the actual costs exceed the forecast amount that was used to sustain the investment, it then becomes a moot point as to whether the investment should have been implemented.

Using the Haymarket development in Sydney again, the project was shown to be efficient at a certain capital cost. The delivery of the project was considerably higher than the cost on which the project was prepared. At that time, the National Electricity Code (NEC) was in operation (including the ability to carry out an ex post optimisation) and the project was then subject to an indepth analysis by the regulator and the actual value allowed into the asset base was less than the actual cost incurred although more than the original forecast of the cost for the project.

This example provides a sound basis for the need of an ex post analysis of capex and the removal of costs that are clearly not efficient.

2.1.3 Discipline on the use of capex.

The proposed optimisation rule change imposes a discipline on the use of ex ante capex allowances. Currently, once the ex ante capex allowance is set, the NSP can use the allowance for any purpose, even amounts for inefficient investment[6].

Whilst there is a sound argument that an NSP should be permitted to change its priorities for investment to reflect changed circumstances, such changes need to be in the long term interests of consumers. This

[6] As one commentator has quipped, the ex ante capex could be used to buy a fleet of Roll Royce cars for all staff and this would be rolled into the asset base. .

needs to be demonstrable and if a review considers that the investment was not efficient (either in value or application) then there must be a method for ensuring consumers are not required to pay a return on an investment that does not provide appropriate value to consumers.

2.1.4 Redundant assets

Optimisation prevents consumers from having to pay for assets that are no longer used but are still included in the RAB. An asset that is no longer used should be removed from the asset base so that consumers do not pay a return on its provision.

For example, some of the electricity transmission assets providing connection to the Hazelwood power station in Victoria will become redundant if the power station is closed[7]. These assets are included in the assets of the shared network and therefore consumers will be required to continue to pay a return on these assets until they are fully depreciated.

At the same time, a new power station will be constructed to replace the output of Hazelwood. The new power station will contribute to the connection assets but if there is any congestion caused by the new power station, consumers will be expected to pay for the relief of this congestion in the shared network.

Overall, consumers will continue to pay for assets not used and for new assets required. This is not efficient.

Optimisation will remove assets from the shared network asset base. There are three scenarios for addressing the reimbursement for these assets:

1. The assets are removed from the asset base and the network takes the cost against its profit (this is what occurs to firms in the competitive market)
2. The assets remain in the asset base and consumers pay both a return on the assets and for a return of the assets (this is what the current rules provide)
3. The assets are removed from the asset base and the unrecovered depreciation is allowed as a regulatory cost (this approach removes the risk to the network of its investment)

[7] This is a realistic outcome from the proposal to use carbon tax revenue to close the highest carbon emitting power stations in the NEM. Currently both Hazelwood PS and Playford PS are being used as examples of likely closures

What is concerning is that none of the options is discussed in the Draft Decision or its consultant when addressing the issue of optimisation of the asset base. The Draft Decision should have carried out quantitative analysis of the best option to address optimisation and balanced the risks of each to both the provider and consumer.

2.1.5 Oversized assets

Optimisation imposes a discipline on an NSP not to oversize. There can be no doubt that consumers will benefit in the short term by not paying for assets that are not needed or that it is inefficient to have unused capacity – capacity utilisation is specifically an aspect raised in the energy Laws as principle #6.

The argument put in the Draft Decision is that some assets might be sized correctly now based on information available at the time of commitment but proven to be oversized in the future needs deeper analysis and possibly other options implemented to address the concern.

To address this issue properly, there is a need to assess the time frame over which an investment is assessed to provide spare capacity for the future. Currently there is no formal guidance as to the length of time it is reasonable to assess for future growth for an asset. So what is a reasonable time frame for current consumers to fund investment that might be needed for future consumers? Until a time frame is established for the AEMC to posit that the needs of future consumers must be the only criterion about current day incentives, is an open ended commitment.

The issue of standard sizes of equipment is also important. Is it acceptable to use the next standard size up to provide for future capacity? For example, a 200mm diameter pipeline has nearly 80% more capacity than a 150mm diameter pipeline, yet the costs for both are not significantly dissimilar. If an asset is built now, with the provision for later augmentation, would an appropriate approach to avoid later optimisation be to define what is acceptable oversizing? This would provide protection against sensible oversizing and avoid the risk the unnecessary oversizing.

If the Rules addresses issues such as these in the form of guidance, then a regulator has the ability to quickly assess whether a currently oversized asset should be optimised or not. If an oversized asset was

Such an approach is preferable to making a blanket statement that oversized assets must not be prevented regardless of current and future interests of consumers due to the potential risk to NSPs that they might be later optimised down.

2.1.6 Undersized assets

The Draft Decision makes the quite valid point that the rule change would increase the risk that sensible oversizing now (to meet long term needs of consumers) might not occur and therefore transfer a larger cost to future consumers.

The MEU accepts this and considers the issue could be avoided by the provision of guidelines which allow for acceptable oversizing in the interests of future consumers.

The concern that the MEU has is that this observation takes primacy in the assessment and there is no attempt to identify if there are other methods to address the concern.

As the MEU notes above, if there are guidelines provided which allow a degree of oversizing without the risk of later optimisation then the risk of undersizing is greatly reduced.

2.1.7 Regulatory costs

Carrying out optimisation does impose increased regulatory costs, but as has been seen under the NEC, optimisation was a requirement that a regulator had to implement. The Draft Decision comments that imposing optimisation will incur increased complexity and regulatory costs. This is true, but the complexity and cost was readily absorbed in regulatory decisions under the NEC. When considering the complexity and cost of current regulatory reviews under the current rules compared to those that applied under the NEC, it is quite apparent that the more recent reviews display considerably more complexity and cost than in the past when optimisation was required. This implication of such concern with a rule which reintroduces a control that was eliminated because it might impact on investment, appears to be quite self serving.

There was no consideration of concern for complexity or cost when the new Rules were implemented so for the AEMC to consider that this to be an issue when implementing a more rigorous approach in the interests of consumers does not appear to be justified.

In observing that the rule change proposal would increase complexity and risk, the Draft Decision fails to examine the reality of what actually occurred. As anyone involved in regulatory reviews made under the current rules, there is massively greater complexity and cost than ever occurred in the reviews made under the NEC.

Of great concern to the MEU is the failure of the Draft Decision to canvass the pros and the cons and assess the net costs and benefits in terms of the energy Objectives.

2.2 The AEMC consultant views

The AEMC requested consultant covec to provide its insight into the MEU rule changes.

Its view is that if ex post optimisation was introduced, there would be an increase in risk and this would have to be balanced by an increase in the return on investment (ie an increase in WACC). It adds that ex post optimisation is not a process used in the UK or the US and that Australia and NZ is trending away from using this approach

What is of interest is that covec does comment that:

> "Alternative means of addressing the problem of over-investment are not explored in the MEU proposal. It might be possible to gain most of the benefits of optimisation by other means, in which case those other means constitute an alternative to optimisation and should be evaluated alongside (i.e. compared with) the MEU proposal." (covec page 3)

The MEU agrees that there might be a better approach to addressing the problem of over-investment but the Draft Decision does not do so. The AEMC is permitted to make a "better rule" than the one proposed, but instead it has implied that some of the concerns the MEU has will be addressed within a different rule change process. Other than this indication, no details are provided by the Draft Decision.

2.2.1 Higher WACC would be needed

Covec comments that a higher WACC would be needed to compensate for the increased risk. What covec does not comment on is that the WACC was not reduced when the risk of optimisation was removed. Nor does covec assess whether the current WACC allowed provides sufficient reward for taking the risk of optimisation.

To assess the WACC in isolation of the realities of the risks involved can be misleading and lead to conclusions that are not warranted when the facts are examined.

2.2.2 The impacts of optimisation

Covec addresses the impacts of attempting to optimise the assets base.

Covec observes that optimisation rules would have to be determined in advance. The MEU does not disagree with this observation and considers that the issues of optimisation of investment need to be prescribed. In the absence of such rules and the automatic roll in of actual expenditure there are no controls at all which provide a bound for what are appropriate costs to achieve an agreed outcome. This is the entire point of the MEU contention.

The MEU accepts that if an investment is made that is apparently efficient based on the costs incurred and the benefits the investment will achieve, then such an investment should not be optimised at a later stage, although it should be removed from the asset base if it is not achieving the expected outcomes. This prevents further payments for the return on the capital invested but which is not providing the service anticipated. The current rules do not impose this.

Covec cites that there are alternative methods of addressing the benefits that optimisation would provide, but with less negative impact on the investor and the regulatory process. Unfortunately, these are not provided by covec.

Covec goes on to state that there would be a need to provide a method for costing the optimised outcome. The NEC required this in the past and the regulators addressed this as and when the activity was carried out. The MEU observation that this was not an onerous task was based on direct observation as to how the regulators applied the requirements under the NEC.

2.2.3 The efficiency of optimisation

Covec addresses the concept of optimisation in terms of efficiency and provides a “thought experiment” based on what were considered to be efficient costs at the time, but where there was subsequent partial stranding. The MEU does not dispute that such an example could occur and considers that the concern can be managed by the development of specific guidelines for what are considered to be efficient investments

and how to address fully redundant or partially utilised assets stranded in the future.

What covec does not do is to assess the implications on efficiency of an asset where the efficiency is based on costs which imply the investment is efficient but where the actual costs are much higher. The current rules allow the inclusion of such higher costs than were assumed to be efficient when the investment was proposed. To include these higher costs in the asset base is inefficient.

Covec provides a view that:

> "…further mechanisms such as flexible depreciation regimes are required to offset what would otherwise be inefficient underinvestment." (covec page 9)

The MEU agrees, but the Draft Decision does not take up this sensible view, but merely concludes that optimisation should be precluded.

2.2.4 Flaws in the current process

Covec comments:

> "According to the MEU (section 1.4.1 on optimisation), the current arrangements would allow the following outcomes:
>
> - A firm could spend less on a capital project than the regulator allowed, and book the entire approved amount in its regulatory accounts; and
>
> - A firm could spend more on a capital project than the regulator allowed, and book the actual expenditure in its regulatory accounts.
>
> If these are both true, then the firm is in a no-lose position once it receives regulatory approval. It then has little incentive to maintain cost control during the actual physical investment stage. Indeed, it may seek to game the process by deliberately over- forecasting capital outlays." (covec page 17)

Whilst the covec comment in the first dot point is not correct (only actual costs are included in the asset base) the second is basically correct (see section 1.4 above). However, the covec conclusion remains valid – effectively the firm is in a no lose position and has

> "…little incentive to maintain cost control during the actual physical investment stage…"

and is in a position

> "…to game the process…"

The very fact that the AER is seeking better capex controls in its network regulation rule change is because there is considerable incentive to over claim capex allowances and to maximise the benefits by delaying capex and thereby increase the NSP rewards.

2.3 The Draft Decision and MEU Conclusions

The Draft Decision is of the unsubstantiated view, based on theoretical grounds, that it is better for consumers to incur a higher cost for infrastructure by allowing uncontrolled investment on the basis that reliability of supply must take primacy.

The analysis provided above provides clarity as to the merits and detriments of the rule change proposal, but the analysis in the Draft Decision is essentially focused on a high level view that imposing optimisation will result in greater risk to the NSP with the potential that there is a corresponding risk to consumers of "the lights going out". The issue of the cost to consumers of having large amounts of capital that do not provide a service to consumers (ie inefficiency) is not addressed,, cost is not addressed, nor is there any attempt made to assess the benefits of the proposal.

The Draft Decision posits its argument against the proposed rule change (or indeed any rule change that would impose some discipline on what costs can be rolled into the asset base) based on the reliability standards that are imposed on NSPs. The Draft Decision clearly considers that the element of reliability of supply has greater primacy within the energy Objectives than the element of cost.

The MEU accepts that reliability of supply is of great concern but the Draft Decision needs to quantify at what point ever increasing costs are to be balanced against the requirement for reliability. This is not an insignificant issue. If costs keep increasing to maintain reliability of supply, there will be a cost point that will trigger consumers to decide that the costs are too great for the service provided and will cease using the service. The result will be akin to the "Energy market death spiral" discussed by AGL's Simshauser and

Nelson[8] where costs are shared amongst fewer and fewer consumers, and increasing costs for those continuing to use the service.

The AEMC has a responsibility to provide a clear explanation as to when the costs of reliability exceed the benefits of it. Based on the assessment in the AEMC Draft Report on the cost of reliability in NSW[9], this point has already been reached (even passed) as the costs involved in increasing reliability exceed by the benefits this would bring.

This aspect is not addressed in the Draft Decision at all and if it had, the clear implication of the current reliability standards and the reliability achieved to date leads to the conclusion that incentivising reliability to the levels the rules already does, might not be warranted.

The Draft Decision provides an example where the MEU rule change might impact reliability. It suggests that deliberate redundancy for reliability reasons means that utilisation would be low and therefore the MEU rule change would optimise out the deliberate redundancy included. This is a spurious argument and is not the intent of the MEU proposal. Deliberate redundancy to ensure continuous supply would not be optimised out as it can be demonstrated that the redundancy provides a benefit which can be valued and therefore included in the cost benefit analysis that lies at the heart of optimisation.

What the rule change would address is where “gold plating” (a term used by Garnaut in update #8) would not be allowed to remain in the asset base.

Of concern with the Draft Decision approach, is that the underlying concern, clearly spelled out in the proposed rule change, is one of significant concern that consumers present and future will be required to pay a return on assets that are not required for the provision of the service. The Draft Decision and the consultant’s report misrepresent the basic issue and deride the approach suggested to address the concern and highlight the shortcomings in the specific rule change proposed.

The Draft Decision states that there is little empirical evidence of the need for change and that theoretical comparisons with firms in the competitive environment do not recognise the complexities of the issues being addressed

The Draft Decision then implies that the basic concern might be (at least in part) addressed as a part of a separate review. If this is the case, the Draft

[8] Available at http://www.aglblog.com.au/wp-content/uploads/2012/07/No-31-Death-Spiral1.pdf
[9] Available at http://www.aemc.gov.au/Media/docs/NSW-workstream-draft-report-c59a059a-e3a8-4036-9b3b-98db8f8edabf-0.PDF

Decision should have delivered an outcome that the concerns have some validity and that they will be addressed separately with perhaps a better rule being implemented.

Instead the Draft Decision states that there is no need for the rule as proposed yet then states there might be other options to address the concern but provides no details of what these might be.

3. Used and Useful assets proposal

Summary of decision

3.1 What the proposed rule addresses

The proposed rule is about requiring regulated businesses to retain used and useful assets in the provision of the service once they are fully depreciated. This is an approach that is used in all firms that are subject to competition, as it enhances their profitability.

In the assessment of stakeholder views, the Draft Decision comments:

> "Submissions from service providers generally disagree that they replace assets for the reasons that the MEU provided in its proposal. Ausgrid submits that its asset replacement decisions are not based on economic life of assets, but on the condition of the assets from an engineering perspective, and also taking into account safety and reliability." (DD page 27)

The MEU has no evidence that NSPs have actually replaced assets that are still used and useful because such information would be held within the data bases of the NSPs. It would not be in their interests to state that they have implemented such practices or to state anything other than they do not.

What the underlying concern of the MEU is, is that there is the potential for a regulated firm to replace used and useful assets merely because they are fully depreciated and no longer providing a return on or of the asset. Such an approach would be inefficient.

The MEU points out that there is an incentive for a regulated firm to replace assets that are fully depreciated, because the firm receives no profit from its retention and receives a profit by replacing the asset. The response from ENA that:

> "… service providers are rewarded for the deferral of replacement capital." (DD page 27)

To a degree this is possible depending on when the asset replacement deferral occurs although the reward is short term. The longer term benefit to the NSP is much greater from replacing the asset.

Whilst most supply side stakeholders argue that that the concept posited by the MEU regarding used and useful assets has little merit, it is interesting that Aurora Energy (a distribution network provider) agrees with the MEU that

there is an incentive to replace assets when they are fully depreciated rather than retain them if they are still used and useful.

Arguments provided by stakeholders against the proposal are quite spurious. ENA considers that the change would provide a disincentive to invest because of a greater risk (what risk?), it would not allow recovery of capital and is not in accord with the revenue and pricing principles. The MEU cannot find any legitimate argument to sustain these assertions the change does not affect any of these aspects.

Grid Australia considers that it would not impact utilisation of assets and therefore is immaterial. What GA fails to note is that it would reduce costs in the longer term.

The only argument that is provided to support why the proposal might create concern is from the AER that regulatory assessment costs would increase although Aurora is of the same view of the MEU that regulatory costs would minimal for implementing the task. But the Draft Decision does not attempt to provide any assessment of net benefit or detriment to consumers, as is required by the energy Objectives.

3.2 The AEMC consultant views

3.2.1 Quantitative analysis

> Covec asserts that the issue the MEU seeks to address is that asset lifetimes are uncertain. The MEU accepts this view.
>
> What the MEU has noticed, based on the observations of its members, is that depreciation schedules used in business are more likely to underestimate asset life than over estimate. This is logical because asset lives are based on engineering assessments and such assessments are more likely to be conservative than not, because the expectation is that the asset will live and meet its performance criteria for the expected depreciation period. This means that in all likelihood, the assets will live longer than period over which it is depreciated. That this is the case can be seen from the number of manufacturing concerns still using assets which have exceeded their original intended life.
>
> However, in its analysis covec posits that there is an equal likelihood that assets will not achieve their full expected life. Such an assertion is not in accordance with engineering principles. To under estimate an expected life is not what engineering assessments do – an engineering life is established on a conservative basis to ensure that in all probability the

expected life will be achieved. Therefore, the covec assertion of equal probability is not founded in practice.

Covec then moves to the financial implications of over and under allowances of expected asst lives to identify the value of such variances. Covec asserts that, as there is equal probability of over and under estimation of asset lives, the financial benefit of both under and over estimate will equal out. This is not so as can be shown assessing the financial impacts of these two options using the regulatory asset base adjustment formulae. The financial outcomes are not symmetrical.

For example, an asset valued at $1000 and depreciated over 20 years when inflation is 5% and the nominal WACC is 10%, delivers a net present value of payments made by consumers is $970. If that asset remains in service for another 5 years after it is fully depreciated, net present value of the payments made by consumers after 25 years is still $970. .

On the other hand if the same asset is replaced 5 years early at the then current cost (the original $1000 escalated at the same inflation rate) the net present value of the payments made by consumers after 25 years is $1183 a premium of 22%[10].

What covec does not do is to model its assumption of financial outcomes.

So not only is covec wrong in the assumption of equal predictive error, but also in the assumption that the financial outcomes are symmetrical. Because of these two inaccuracies, the covec quantitative analysis is flawed and leads to a misleading conclusion.

3.2.2 Overseas experience

Covec cites that the used and useful test is quite widely used, especially in the US and NZ. He advises that it is less used in the UK and Europe. Covec cites some economists as being of the view that a used and useful test is controversial and that the outcomes of the test can be achieved by other means.

What covec does not do is to provide commentary on what other options might be used in lieu of the used and useful test.

[10] This premium rises to 30% if the residual unreturned capital of the early retirement is added into the regulatory calculation

3.2.3 Tension between optimisation and used and useful test

> Covec highlights its view that there is tension between the two MEU rule change proposals. That the ex ante approach sought in the used and useful rule change would run counter to the ex post approach implied by the optimisation rule change and thereby put the regulator in an invidious position.
>
> The MEU disagrees with this assessment. The ex ante approval process merely provides the regulatory approved revenues to be set. The AER is not approving any specific capex project but has identified that the amount of capex that is included in the revenue is efficient. The ex ante approach allows the NSP to expend the allowed capital in anyway it sees fit, regardless of whether such expenditure is efficient or not.
>
> There is an implicit assumption that actual capex is efficient because actual capex is rolled into the next regulatory period without review[11]. This is indeed a bold assumption.
>
> An ex post review of capex for efficiency does not create tension for the regulator. In fact, the AER approach proposed in their rule change package, addressing over-investment, is to assess the amount of over-investment and only allow a portion of this to be added to the asset base. If the regulator does not see there is a problem with an ex post analysis after allowing and ex ante amount for revenue purposes, then there does not seem to be the problem that covec refers to.

3.3 The Draft Decision and MEU Conclusions

The Draft Decision comments that the NSPs do not consider that there is any evidence to support the MEU view that the automatic replacement of fully depreciated assets that are still used and useful actually occurs. The MEU points out that such information would be held by the NSPs and is not made available to consumers.

Ausgrid goes further by saying that the AER reviews its asset management plan and replacement expenditure and this provides a brake to do what the MEU asserts might occur. What Ausgrid and other supply side entities fail to mention is that energy regulation is about providing incentives to provide efficient outcomes for consumers. Therefore, to provide an incentive to implement practices that are not in the interests of consumers, should not be

[11] Although it is accepted that the Gas Rules do require a prudency test to be applied to capex incurred in the period as part of the roll in process, but this prudency test is more a test of what might not be prudent rather than one of assessing whether all capex was prudent.

provided. As the modelling provided for section 3.2.1 shows, there is a strong incentive to replace used and useful assets when they are fully depreciated. That Aurora (an electricity NSP) agrees with the MEU is quite revealing.

There is considerable opposition to the proposal with arguments ranging from assertions that it will disincentivise investment (but with no valid reason given), through a view that the impact will not be material, to the assessment it will be too difficult to implement. None of these are required to provide the evidence that the Draft Decision wants to impose on the MEU.

The Draft Decision posits that there is a benefit to an NSP from having each asset provided contributing revenue to the NSP. Implicitly this appears to support the MEU contention that an NSP would remove an asset not providing it with revenue, even if it were still used and useful. The Draft Decision then comments there are three reasons why this benefit might be reduced in impact.

1. The WACC will change over time and therefore there is a lack of certainty which will dampen the incentive to replace an asset. This argument is spurious as all assets (not just fully depreciated assets) are subject to the vagaries of the WACC valuation at any time. What the Draft Decision overlooks is that a fully depreciated asset provides **no return** so the impact of an uncertain WACC has no impact. Any NSP would appreciate any return on an asset rather than no return.
2. Capital is limited for investment[12]. The argument then points out that to replace fully depreciated assets will require increased debt and increase leverage. This applies to all new assets but the Draft Decision implies that fully depreciated but used and useful assets would be a separate class of asset with regard to replacement. This might be true, but to assume that having no return on an asset is better than having a return and seeking more capital (especially if the cost of that capital id less than the revenue that will be recovered) is not a certain outcome.
3. The disincentives for over-investment are strong as are incentives to underspend. The relative strengths of these incentives are of concern and discussed in section 1.4. Modelling does not support the contention provided in the Draft Decision.

The Draft Decision then posits that as the regulator does both a bottom up and top down assessment of capex on an ex ante basis the amount of capex approved is considered to be efficient. This is not challenged but all the regulator does is to approve an amount – the NSP is free to use this

[12] This is accepted as a principle, although the amounts of capital raised in recent years do not seem to support this assumption!

allowance as it sees fit[13] including deferring capex and well as its application. There is no compulsion on the NSP to use the capex in the way it developed its claim for the capex.

The Draft Decision then observes that this control on the development of the capex, coupled with the incentives, ensures the capex is used efficiently.

How this conclusion was reached is not clear and is a big leap in faith. If there is no ex post review of the capex (such as applies in the Gas Rules to ensure prudency), there are none of the controls or incentives to ensure that capex was efficient because the NSP is free to use the ex ante allowance for capex for whatever and whenever it considers is its most appropriate use. This is an essential element of ex ante approval. The Draft Decision does observe:

> "Within the expenditure allowance set by the regulator, the service provider will have reasonable freedom to manage its capex program to minimise expenditure." (DD page 30)

but then adds the comment:

> "At the same time, it is likely to see the allowance as some constraint on capex which does not deliver functional benefits." (DD page 30)

This comment is added without justification. There is nowhere in the Rules that requires the NSP to use capex to deliver functional benefits. There are government imposed minimum standards and in some cases financial incentives to improve service performance, but as long as the minimum standards are achieved and greater benefits from using capex to suit the needs of the NSP than are achieved from the performance incentive, there is no compelling requirement that capex must be used in the way the allowance was developed at the time of a regulatory review reset. When questioned on this point by the MEU, the AER observed that they have no ability to deny the automatic roll in of actual capex, regardless of the use of the capex.

The Draft Decision also posits that the regulator can change depreciation schedules if assets are being replaced when they are still used and useful. There are two aspects of this observation that are not correct.

Firstly depreciation schedules are proposed by the NSP not the regulator – the regulator only approves (or not) what has been proposed. This is a function of the propose/respond model in the current regulatory rules. It would

[13] This is discussed in section 3.2.3

quite f=difficult for the regulator to enforce a depreciation schedule that the NSP did not accept.

Secondly, the regulator would not be aware that fully depreciated assets were being replaced when use and useful, because there is no ex post review of capex which permit them to identify if such was occurring.

The Draft Decision then addresses the rule change proposal against a series of criteria:

3.3.1 Recovery of efficient costs

> The Draft Decision considers there might be some increased risk because the regulator might have a different view to the NSP as to the best time to replace the asset. The Draft Decision considers this risk to be minimal.
>
> The MEU agrees, and considers that the issue will not be about a couple of years of additional service for a small element of the asset base – it will be a significant issue such as one described in section 1.5.2 above or a power line or large elements of a power substation.
>
> However, what the Draft Decision does not do is examine the potential benefits to consumers of the proposal. Using the model developed for section 3.2.1 above, the rule change has the potential to create considerable benefit for consumers. Using the same model and allowing a fully depreciated asset to be used for an additional 5 years rather than replacing it at the time of it becoming fully depreciated, would reduce costs to the consumer by some 8% (assessed on an NPV basis) rather than replacing it at the time of it becomes fully depreciated.
>
> Thus the rule change provides consumers with a benefit that has not been quantified by the review.

3.3.2 Efficient utilisation

> The Draft Decision accepts that the rule change would increase efficient utilisation, although it adds the rider that by applying the rule change, it might “push the boundaries” of efficient operation. As noted above, practical application of the rule is not about seeking an extra couple of years service for a minor element (the regulator would not see these) but about significant elements of the assets

3.3.3 Investment incentives

The Draft Decision accepts that the rule change would not negatively impact on investment incentives although the Draft Decision comments that it might incentivise the NSP to perhaps use shorter life assets because of less flexibility. Such an observation is pure supposition and not supported by any evidence other than assertion by ENA.

3.3.4 Regulatory processes

There is a basis for assessing that the regulatory processes might be more complex and time consuming, and this is recognised. But the exposure the MEU already has had to the regulatory review processes (especially the engineering reviews that are undertaken by consultants to the AER) tends to indicate that addition of a review of assets that are scheduled for replacement due to age, would not create a significant imposition.

The data on the life of the asset is already held by the NSP as part of its regulatory requirements, as are the reports it generates on the condition of assets. Already NSP do seek early replacement of some assets for which asset condition reporting shows require replacement for reliability reasons. The engineering consultant already reports on these instances to the regulator. To impose on the engineering consultant a requirement to confirm that condition monitoring reports should be assessed for assets being replaced because of age does not significantly add to the workload in a review.

There is clear modelling evidence supporting the intuitive conclusion that retaining used and useful assets that are fully depreciated will provide consumers with a significant benefit. Against this the Draft Decision indicates that, other than the regulatory impost, there might be some disadvantages but effectively considers them to be minor, if not insignificant.

The Draft Decision does indicate that there might be, in principle, increased regulatory costs but when these are considered within the current regulatory processes, the costs are unlikely to increase costs significantly.

The Draft Decision, without any quantitative analysis reaches the conclusion that the benefits of the rule change do not exceed the likely costs. When simple modelling is carried out this assumption is erroneous.