Consumer Utilities Advocacy Centre

Level 2, 172 Flinders St
Melbourne VIC 3000
Phone: 03 9639 7600
ACN 100 188 752

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Neil Howes
Australian Energy Market Commission
PO Box A2449
Sydney South
NSW 1235

Dear Mr Howes,

RE: National Electricity Amendment (Replacement expenditure planning arrangements) - Rule Change.

We thank the Australian Energy Market Commission's (AEMC) for the opportunity to provide feedback on the Australian Energy Market Commission's (AEMC) consultation paper *National Electricity Amendment (Replacement expenditure planning arrangements) Rule 2016*.

The Consumer Utilities Advocacy Centre (CUAC) is a specialist consumer organisation established in 2002 to represent Victorian energy and water consumers in policy and regulatory processes. As Australia's only consumer organisation focused specifically on the energy and water sectors, CUAC has developed an in-depth knowledge of the interests, experiences and needs of energy and water consumers.[1]

The Australian Energy Regulator (AER), as the proponent of the rule change, has argued that the sub-clause exemptions in the Chapter 5 framework creates minimal transparency around replacement capex. This undermines the objective of efficient network expenditure. The AER argues:

- "there is no clear, transparent, consistent and timely planning process for the economic replacement of network assets,
- the framework provides limited requirement for network business to consider and assess alternatives for like-for-like replacement, and engage with non-network proponents,
- network users may not be aware of how the timing and location of their connections might affect network replacement decisions,
- the lack of transparency will make it difficult for policy makers to understand and assess the impact of the changing environment on network business asset management practices,
- it will make the assessment of revenue proposals more challenging as network replacement expenditure makes up a high proportion of revenue proposals and there is

[1] CUAC would like to acknowledge the assistance of Hugh Grant, Executive Director at ResponseAbility, and the Public Interest Advocacy Centre in producing this submission, though this submission does not necessarily reflect their views

lack of detailed information on network replacements in APRs and no RIT assessments of major network replacement projects that would otherwise support their claims".[2]

We share the AER's concerns about the minimal transparency around replacement expenditure. We strongly support the AER's proposed rule change to:

- extend the application regulatory investment tests to replacement projects;
- require that network service providers include planned asset retirements and de-ratings in their annual planning requirements; and,
- consider various options to address network limitations arising from these retirements and de-ratings.

In our view, the AER's proposed rule change would meet the National Electricity Objective by promoting more efficient investment in distribution and transmission networks, ensuring consumers pay no more than necessary to maintain quality, safety, reliability and security of supply.

Though Victoria has relatively low distribution network prices compared with other jurisdictions in Australia, the cost of electricity remains a primary concern for consumers and electricity price pressures on households remain evident. For example, the most recent Essential Services Commission Comparative Performance Report indicates that the disconnection rate of residential energy customers in Victoria for non-payment remain at the near historic highs of 2013-2014, with 56,740 residential customers disconnected in 2014-15.[3] We support measures to encourage more efficient network investment to ensure distribution and transmission costs passed onto consumers are minimised while maintaining a secure and reliable network.

Changing context

The AER notes that the transmission and distribution framework was originally designed with assumptions about continuing consumer demand driving network investment and no expectation that 'like-for-like' asset replacement alternatives would emerge.[4]

According to the AER, recent distribution determinations have revealed that replacement expenditure now 'exceeds augmentation expenditure by a large margin'.[5] Growth in consumer demand in Victoria has been flat or in decline since 2011, and AEMO has forecast flat demand and consumption growth for the next 20 years, with expectations that energy efficiency and increasing penetration of distributed generation will more than offset any population increase.[6] In the absence of demand growth, replacement expenditure on 'like-for-like' assets without due consideration of changing grid demand patterns may result in inefficient investment, causing unnecessary growth in network service providers' regulated asset base. We agree with the AER that 'in the current environment… this lack of transparency is no longer appropriate'.[7]

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[2] Australian Energy Regulator, *Request for rule change – Replacement expenditure planning arrangements*, June 2016, 11.
[3] Essential Services Commission, *Comparative Performance Report 2014-15 – Customer Service*, 5 May 2016, 40.
[4] AER, *Replacement expenditure planning arrangements*, 5.
[5]Ibid., 10.
[6] Australian Energy Market Operator, *National Electricity Forecasting Report*, June 2016, 3.
[7] AER, *Replacement expenditure planning arrangements*, 10.

Regulatory Investment Test - replacement expenditure

In our view, a regulatory investment test (RIT) for the replacement expenditure of distribution and transmission assets is a prudent measure to improve transparency and ensure that network service providers' investment is as efficient as possible. This measure is particularly necessary given the changing market dynamics have shifted the priority of the framework from augmenting the network to managing the existing network.

Importantly, network service providers do not necessarily have a financial incentive to reduce their regulated asset base, and are therefore less inclined to utilise a non-network solutions to extend the life an asset.

In a context of maintaining the existing network by the most cost effective means possible, alternative solutions should necessarily be considered to deliver the NEO. Emerging technologies are increasingly able to provide a genuine alternative to a 'like-for-like' replacement for some network assets.

The AER's proposed requirement for network service providers to include planned asset retirements and de-ratings in their annual planning reports is logical and provides greater transparency around network asset management. We suggest this proposal will improve investment certainty for other energy market stakeholders who may seek to provide alternative non-network solutions in lieu of 'like-for-like' replacements. In our view, this proposal is sensible and should be adopted.

CUAC also recommends that this rule change should be extended to non-network capex which is currently subject to little AER scrutiny. In our view, investment in improved ICT systems should yield productivity gains so extending the RIT to this capex will provide greater transparency to the regulator and market participants.

Recommendations

CUAC supports the AER proposals:

- for network service providers to include planned asset retirements and de-ratings in their annual planning reports
- for network service providers to include options to address network limitations arising from these retirements and de-ratings for alternative solutions in their annual planning reports
- to extend the application of the regulatory investment tests to replacement projects
  CUAC also recommends that:
- the new RIT should be extended to non-network capex - such as ITC

Exemptions

It is unclear why the AER would propose an exemption report for assets where it is 'unlikely that there would be a viable alternative'.[8] This logic seems to assume new technologies and innovative methods to manage networks will not emerge, sitting somewhat contrary to the intent of the remainder of the proposed rule change. This line of reasoning also suggests some assets will need replacing regardless of changing grid demand patterns, again running contrary to much of the logic of the rule change proposal.

[8] Ibid., 3.

In our view, an investment test for all replacement expenditure is prudent, particularly given the recent unexpected fall in the growth of demand and the distinct possibility of further changes to grid demand patterns.

Recommendation:

- That the AER does not proceed with the proposed requirement for exemption reports for certain 'like-for-like' assets

Materiality threshold

The AER has not recommended any change to the materiality threshold as part of its proposed rule change, which means that the RIT process would only be triggered when a network business exceeded the current threshold. This threshold - $5 million for distribution networks, $6 million for transmission - is designed to minimise the regulatory burden on network service providers by limiting the investment test to projects with a higher value.

We believe that the current threshold may no longer be appropriate, as emerging non-network solutions - such as grid-scale batteries - are likely to be priced well below the current threshold (see AusNet battery trial case study). Network service providers might also seek to replace their assets incrementally, in stages or by replacing parts of the asset, which may mean the reporting requirement is not triggered.

AusNet's grid-scale battery trial at Thomastown

AusNet has been trialling a grid-scale battery at Thomastown Industrial Estate – known as the Grid Energy Storage System – as an alternative to more costly investment in permanent new assets to meet peak demand events during summer.

The one MW battery system improves system power quality during peak demand periods and can also operate independently as a mini-grid, with the capacity to discharge at full power for an hour to supply approximately 300 homes in the local community.[9]

The battery system is being trialled at Thomastown for two years, however this asset can provide various network uses. At the end of the trial the grid-scale battery could easily be moved elsewhere in the AusNet network. It could be used to extend the life of a different de-graded asset, or remain at Thomastown as a cost-effective way to avoid augmenting investment.

The Grid Energy Storage System, which includes a backup diesel generator, cost approximately $5 million.[10] As the price of battery storage is forecast to continue falling, subsequent investment in similar grid-sized battery systems is likely to cost significantly less than the investment test threshold.[11]

We recommend that the AEMC reduce the RIT reporting threshold trigger to ensure non-network solutions are adequately captured in the replacement expenditure RIT. CUAC supports the initiative of the 'mini-RIT', as proposed by the Public Interest Advocacy Centre, to help reduce the regulatory burden on network service providers.[12]

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[9] AusNet Services, *AusNet Services' Australian-first network battery trial,* 6 Jan 2015.
[10] Karen Percy, 'AusNet testing new battery system to curb power outages in summer', *ABC News,* 7 Jan 2015.
[11] Anna Hirtenstein, 'Batteries Storing Power Seen as Big as Rooftop Solar in 12 Years', *Bloomberg New Energy Finance,* 13 June 2016.
[12] Public Interest Advocacy Centre, *Addressing key gaps in the regulatory investment test,* 24 November 2016, 3.

Recommendations:

- That the AEMC consider reduced RIT reporting threshold trigger to capture new non-network solutions
- The introduction of a ‘mini-RIT’, as advanced by PIAC

Regulatory burden and administrative costs

We do not consider this rule change places an undue or costly burden on distribution and transmission network service providers. As pointed out by the AER, network businesses:

> “already have internal planning procedures in place for asset management, including retirement and reinvestment… Currently, internal best practice planning requires that project options are assessed to determine the most efficient outcome.”[13]

Network service providers have in place planning procedures and the proposal for increased transparency around asset replacement expenditure should not add significantly to costs. We agree with the AER that any additional costs “may be minimised by using the existing planning processes already available for augmentation.”[14]

Thank you for the opportunity to provide feedback on this proposed Rule Change. If you have any queries about this submission, please do not hesitate to contact the undersigned.

Yours Sincerely,

Petrina Dorrington
Acting Executive Director
Consumer Utilities Advocacy Centre
T: 03 9639 7600
Petrina.dorrington@cuac.org.au

[13] AER, *Replacement expenditure planning arrangements,* 20.
[14] Ibid.