

public interest
ADVOCACY CENTRE

ATTACHMENT B

PIAC's Submission on Ausgrid's 2019-24 Capex Proposal

17 August 2018

About the Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit legal centre based in Sydney.

Established in 1982, PIAC tackles barriers to justice and fairness experienced by people who are vulnerable or facing disadvantage. We ensure basic rights are enjoyed across the community through legal assistance and strategic litigation, public policy development, communication and training.

Energy and Water Consumers' Advocacy Program

The Energy and Water Consumers' Advocacy Program (EWCAP) represents the interests of low-income and other residential consumers of electricity, gas and water in New South Wales. The program develops policy and advocates in the interests of low-income and other residential consumers in the NSW energy and water markets. PIAC receives input from a community-based reference group whose members include:

- NSW Council of Social Service;
- Combined Pensioners and Superannuants Association of NSW;
- Ethnic Communities Council NSW;
- Salvation Army;
- Physical Disability Council NSW;
- Anglicare;
- Good Shepherd Microfinance;
- Financial Rights Legal Centre;
- Affiliated Residential Park Residents Association NSW;
- Tenants Union;
- The Sydney Alliance; and
- Mission Australia.

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List of recommendations

Recommendation 1

That the AER assess the trend in Ausgrid's capex productivity based on the capex proposals to ensure that the allowed capex is consistent with improvement in the capex productivity measures.

Recommendation 2

That the AER review each of Ausgrid's major projects to ensure they are efficient and prudent with respect to scope and timing.

That the AER also review each project to ensure DER and other efficiencies (including reduced need for other replacements) form part of the proposal.

Recommendation 3

AER should review property and fleet/plant expenditures in the context of Ausgrid's reduced staffing levels and increased outsourcing.

Recommendation 4

That the AER should:

- *request further evidence from Ausgrid that previous ICT capex has delivered the stated benefits; and*
- *require that Ausgrid's revised ICT proposal to include clear quantification of the stated benefits.*

Recommendation 5

That the AER request further evidence from Ausgrid on how it has incorporated the findings from its existing DMIA projects in its current proposal.

1. Overview of Ausgrid's capex proposal

Note: All figures in the discussion below are presented in \$2018-19 unless otherwise stated

In the issues paper, the AER sought stakeholder views on whether Ausgrid's capex proposal of \$3.1 billion over 2019-24, is consistent with Ausgrid's stated objectives of affordability, reliability and sustainability.¹ PIAC does not accept that the capex proposal is consistent with these objectives.

Affordability

The proposal does not improve affordability because it effectively locks in current high prices by maintaining prices close to their current real value.

Ausgrid's proposal forecasts only a very small decrease in real average prices and is vulnerable to upside pricing risk given the risk of higher capital costs in the future and Ausgrid's aggressive demand forecasts. Small changes in either of these elements will inevitably drive higher average prices over the short to medium term.

For example, 58% of the total reduction in Ausgrid's revenue proposal compared to the AER's allowed revenue in 2014-19 is due to a reduction in the return on capital.² To the extent the cost of capital increases in the future, average prices will have to increase to recover the investment cost in the RAB.

Reliability

The proposal supports the maintenance of the current levels of reliability, but fails to acknowledge that the current levels of reliability are substantially higher than is required by the regulatory standards. A lower level of capital expenditure that optimises performance against these standards would not impose a reliability risk above that currently accepted by the community and regulators as consistent with good practice. There are also significant questions around how reliability risks are assessed in the proposals.

Sustainability

The capex program does not reflect current market evidence on the rapid growth in DER, nor does it show sufficient evidence of Ausgrid working proactively with households, businesses and communities to promote DER in areas of network constraint or new growth. This increases the risk that the proposed capex will be redundant well within the asset lifetime.

PIAC notes that the cross-cutting issues identified in section 4 of our submission apply to Ausgrid's capex proposal. With that in mind, PIAC makes some specific and interrelated comments on Ausgrid's capex proposal:

- Ausgrid's capex proposal and the issue of declining asset utilisation and capital productivity;
- Ausgrid's approach to evaluating major projects, including the assumptions used in the options assessment process;

¹ AER, [NSW electricity distribution determinations, Issues Paper](#), June 2018, 23.

² The return on capital in 2015-16 was 6.68% (subject to appeal and to annual updating for the cost of debt). Ausgrid is now proposing a return on capital for 2019-20 of 6.33% (to be updated annually for cost of debt).

- Ausgrid's assessment of ICT projects including measurable costs and benefits – and ex post review in terms of delivering benefits to consumers and budget overrides; and
- Ausgrid's approach to developing and implementing the findings of its DMIA projects.

2. Improving the productivity of Ausgrid's capex

Improved productivity in its capex expenditure is essential for Ausgrid to overcome its expenditure challenges while ensuring the performance of the network satisfies regulatory standards, including safety and customer service standards.

PIAC acknowledges that Ausgrid has made significant improvements in its opex productivity. However, we are yet to see the same outcome for capex productivity. In the AER's most recent benchmarking report, Ausgrid's MTFP remains at the bottom of the league table, in 13th place.³

Given Ausgrid is forecasting substantial increases in capex in the last two years of the current regulatory period (2017/18 and 2018/19), it is likely that this trend of declining capex MPFP will continue to the end of the current regulatory period.

Therefore, a 'steady as she goes' capex forecast by Ausgrid in its 2019-24 proposal is not welcome news to consumers. As stated above, addressing this fundamental issue will require Ausgrid to focus further on prioritisation of its capex proposal for 2019-24.

Recommendation 1

That the AER assess the trend in Ausgrid's capex productivity based on the capex proposals to ensure that the allowed capex is consistent with improvement in the capex productivity measures.

3. Ausgrid's major project assessment approach

While PIAC is not in a position to evaluate each of the major distribution projects proposed by Ausgrid, we consider that major projects are important elements of Ausgrid's repex and augex plans and warrant careful review by the AER with respect to the assumptions, scope and timing of the projects.

However, we do wish to comment on Ausgrid's proposed "Ensuring reliability requirements in the Sydney CDB". We use this project to illustrate the issues that PIAC is concerned about and believe require detailed assessment by AER.

This project has moved to the final stages by issuing a final project assessment report (FPAR) under the RIT-D process, and Ausgrid has included it in its capex proposal. Recently, the Energy Users Association of Australia (EUAA) raised an objection to the project, stating that Ausgrid's VCR and scenario weightings were not reasonable. PIAC shares EUAA's concerns.

In the FPAR, Ausgrid has set out two 'options' for the CBD reliability project and has assessed these options against 'business as usual' case (BAU) by adopting a range of 'feasible scenarios'

³ AER, [Annual Benchmarking Report – Electricity distribution network service providers](#), November 2017, 36.

of capital costs, maintenance costs, demand, VCRs and discount rates.⁴ Ausgrid has selected three scenarios, namely 'baseline', 'low benefits', and 'high benefits' to evaluate the two options. These scenarios are set out in Table 1 below. In its FPAR, Ausgrid adopted a 50% weighting on the baseline scenario, and 25% on the low and on the high benefits scenario.

Table 1 – Summary of three scenarios adopted by Ausgrid to compare options

Variable	Baseline scenario	Low benefits scenario	High benefits scenario
Capital cost	100 per cent of capital cost estimate	125 per cent of capital cost estimate	75 per cent of capital cost estimate
Unplanned corrective maintenance cost	100 per cent of baseline corrective maintenance cost estimates	70 per cent of baseline corrective maintenance cost estimates	130 per cent of baseline corrective maintenance cost estimates
Demand	POE50	POE90	POE10
VCR	\$170/kWh	\$90/kWh	\$170/kWh
Discount rate	6.13 per cent	8.07 per cent	4.19 per cent

Source: Ausgrid, *Ensuring reliability requirements in the Sydney CBD, Final project assessment report*, 8 June 2018, Table 4.1, 22.

Effectively, the stated scenarios give a 75% weighting to a VCR of \$170/kWh (i.e. \$170,000/MWh), despite being above IPART’s direction to apply a VCR of \$90/kWh for assessment of risk in the Sydney City region. Notably, TransGrid has adopted \$90/kWh for the Powering Sydney Future region, providing even less justification for Ausgrid’s scenario approach.

Further, it appears that Ausgrid has dismissed the option of non-network options as viable for this project. Ausgrid states:

Ausgrid also considered non-network options more generally. Demand management has the potential to mitigate or address the risk of unserved energy due to equipment failure leading to load shedding, but cannot address the risk of unserved energy from multiple, coincident failures leading to total loss of connectivity, or the non-energy risks. As only a **small portion of the unserved energy risk is associated with failure modes leading to load shedding**, it is not considered that demand management can contribute in any material way to a viable solution to the identified need.⁵ [emphasis added]

This suggests that Ausgrid’s project assessment is based around unserved energy arising from a catastrophic failure of the CBD network (despite it being built to N-2 standards). It is not clear what the probability of a long-term catastrophic failure of supply is given existing redundancy and assuming Ausgrid maintains the network according to industry best practice.

⁴ Ausgrid defines the 'base case' (i.e BAU) as assuming Ausgrid undertakes escalating regular and reactive maintenance activities as the probability of failure and outages increase over time in the absence of an asset replacement program. See: Ausgrid, [Ensuring reliability requirements in the Sydney CBD, Final project assessment report](#), 8 June 2018, p 20. It is not clear from the report what functional form Ausgrid adopts regarding the relationship of age and asset failure, assuming ongoing maintenance.

⁵ Ibid, 19.

In PIAC’s view, the use of extremely high VCR and an unjustified dismissal of non-network options suggests shortcomings in Ausgrid’s major project assessment approach that should be assessed on a case-by-case basis by the AER.

Recommendation 2

That the AER review each of Ausgrid’s major projects to ensure they are efficient and prudent with respect to scope and timing.

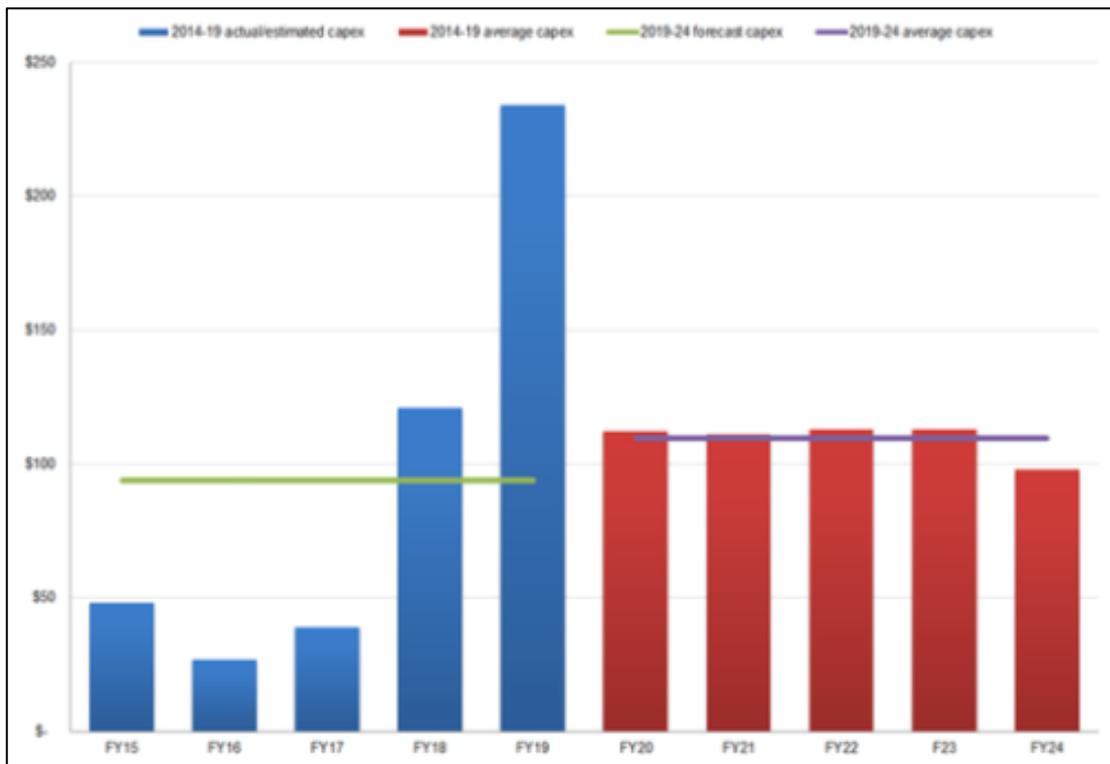
That the AER also review each project to ensure DER and other efficiencies (including reduced need for other replacements) form part of the proposal.

4. Ausgrid’s non-network capex

PIAC is concerned with both the level and potential benefits associated with Ausgrid’s proposed non-network capex.

Ausgrid’s proposed non-network capex is a real increase compared to 2014-19 period, despite the very significant increases that Ausgrid estimates for the last two years of the current regulatory period. This is illustrated in Figure 1.

Figure 1 – Ausgrid actual and estimated non-network capex, 2014/15 to 2019/24 (\$m, real FY2019)



Source: Ausgrid, *Ausgrid’s proposed capital expenditure*, Attachment 5.01, April 2018, Figure 14, 42.

PIAC considers that there is scope for reductions in Ausgrid’s non-network capex proposal. For example, Ausgrid’s proposal for a further \$209m for ‘Property’ and \$124m for ‘Fleet and Plant’ seems to be excessive in the context of:

- The very significant capex in the 2009-14 period; and
- The significant downsizing in staff and outsourcing of much of the capital program in the current regulatory period 2014-2019.

Recommendation 3

AER should review property and fleet/plant expenditures in the context of Ausgrid's reduced staffing levels and increased outsourcing.

PIAC is particularly concerned by the proposed \$216m capex for ICT, including Ausgrid's proposed Operational Technology and Innovation (OTI) program. If completed, this investment would mean Ausgrid has spent approximately \$450m (real dollars) in ICT between 2014 and 2024, following significant expenditures in 2009-14 period.

A careful review of ICT is particularly important because of the more rapid depreciation of ICT assets compared to other network assets (usually over 5 years). In addition:

- There is a high risk of overestimating the benefits and underestimating the costs of these projects. PIAC has not been able to identify a quantified assessment of past benefits in Ausgrid's current proposal or quantification of future benefits;
- PIAC is concerned whether ICT investment that is used to support contestable network services is appropriately allocated between the contestable services and provision of the standard regulatory services. We are seeking further clarity on this issue;⁶ and
- There are various models that can be adopted when moving IT to the cloud. Each model has different outcomes with respect to potential in-house savings and capex/opex trade-offs. It is important that the decisions made on this are transparent and justified, and are reflected appropriately in other aspects of the regulatory proposal.

Ausgrid suggests that the cloud implementation program will be completed by FY 2021 and will result in a capex reduction of only \$8m in the regulatory period.⁷ A component of this saving appears to be a move to SAPHANA, a cloud based 'software as a service' contract. While there are potential benefits in this move, there are significant risks in the delivery of this system.

Recommendation 4

That the AER should:

- *request further evidence from Ausgrid that previous ICT capex has delivered the stated benefits; and*
- *require that Ausgrid's revised ICT proposal to include clear quantification of the stated benefits.*

⁶ Although Ausgrid, like all the DNSPs has a 'compliant CAM', we remain concerned that the AER's Cost Allocation Methodology (CAM) Guideline has not been updated to reflect the significant developments arising from the AEMC's rule changes and expansion of the connection and metering services to third party service providers.

⁷ Ausgrid, *Attachment 5.01 – Ausgrid's proposed capital expenditure*, April 2018, 45.

5. Ausgrid's approach to DMIA

In the three regulatory years 2014-15 to 2016-17, Ausgrid has spent less than half (46%) of its regulatory allowance for DMIA projects. This is concerning given the focus in Ausgrid's current proposal on the impact of new technologies and services.

In total, Ausgrid has eight projects identified in its most recent annual report on DMIA. In 2016-17 Ausgrid initiated only one new project, being \$5,552 for a project titled for "*demand management for replacement needs*". Ausgrid indicates that:

This project aims to test the viability of using non-network options to defer or manage the load at risk associated with network investments that involve retiring/replacing aged assets. Around 80% of Ausgrid's capital investment expenditure over the next 5-10 years is related to the retirement /replacement of aged assets and this will be an important project in building demand management capability for this type of application.⁸

PIAC agrees with the importance of this project and given a total expected expenditure of some \$2.2 million by 2018-19,⁹ PIAC will be interested to see how this project is reflected in Ausgrid's revised repex forecasts for 2019-24.

PIAC also notes in the list of existing DMIA projects (initiated prior to 2016-17), a project labelled "*CBD embedded generator connection (Phase 2)*".¹⁰ This project commenced in 2011-12 to address various technical barriers to embedded generator connection in the Sydney CBD. It appears that Ausgrid has identified a solution that minimises costs with no adverse impacts on the network and customer reliability and this solution is currently being trialled.

PIAC agrees with the importance of this trial and is hopeful that Ausgrid's revised proposal and project cost benefit studies will include this as an option that can reduce the new capex requirements in the CBD – particularly in the context of the very high VCR (\$90 - \$170/kWh) that Ausgrid suggests is appropriate for evaluating projects in the CBD.

Recommendation 5

That the AER request further evidence from Ausgrid on how it has incorporated the findings from its existing DMIA projects in its current proposal.

⁸ Ausgrid, [Demand Management Innovation Allowance Report 2016-17](#), September 2017, 4.

⁹ Ibid, 5.

¹⁰ Ibid, 13-14.