



Technical advice to Energy Consumers Australia

Review of Energex's revised regulatory proposal

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NOTE - This report is an independent assessment of Energex’s revised proposal based on our expertise in economic regulation of electricity networks. The views expressed in this document do not necessarily reflect the views of Energy Consumers Australia.

Summary of findings

We have been engaged by Energy Consumers Australia (ECA) to provide expert regulatory advice on Energex's revised regulatory proposal for the 2020-25 regulatory period. This follows a report we prepared for the ECA in May 2019 which reviewed Energex's original regulatory proposal.

The ECA has asked us whether Energex's revised proposal on a 'decision-as-a-whole' basis is capable of acceptance by the Australian Energy Regulator (AER). In coming to this view, we were asked to identify material evidence gaps in the regulatory proposal. Our advice will help inform the ECA's submission to the AER on Energex's revised proposal.

Our analysis has considered whether Energex's revised regulatory proposal reflects the long-term interests of Queensland electricity customers with respect to price and quality of services. We examined the concerns raised by the AER's draft determination, and the documents submitted in Energex's revised regulatory proposal. Our review is limited by the short period provided to stakeholders to make submissions on the revised regulatory proposal. We expect the AER would have more time and resources to undertake a deeper review.

Under the stewardship of Energy Queensland, Energex has improved the efficiency of its capital and operating programs in the 2015-20 period. Energex's proposal for 2020-25 recognises that further operating efficiencies can be achieved to improve affordability for customers. In contrast to Ergon, Energex has not sought a significant step change from its current levels of capital expenditure.

However, we consider Energex's proposal on a 'decision-as-a-whole' basis is not 'capable of acceptance'. The value of the evidence gap is \$180 million. The majority relates to \$165 million of incentive rewards that Energex had chosen to forego in its original proposal. This is inconsistent with the commitments Energex made to consumer advocates in engagement on the proposal, and there is no evidence that it is in the long-term interests of customers. There also remain evidence gaps in the capital program particularly the replacement (repex), augmentation (augex), and property capex programs. The value of this gap is about \$110 million capex, which translates to about \$15 million in revenue.¹

Table 1 provides a summary of key elements of the revised proposal, and our findings. We provide a view on whether the proposal element is capable of acceptance and identify material evidence gaps. The table also shows the relevant section of our report which provides more details on our findings.

¹ At a high level, we have assumed that the returns on replacement and augmentation capex in 2020-25 is about 10% of the capital costs. This is based on the expected returns of investment for a 50 year asset at 3% real rate of return midway through the regulatory proposal. We have assumed 20% returns for property capex on the basis of a 25 year life. This is a rough estimate for the purpose of estimating the value of the evidence gap.

We commend Energex for its open approach to providing early versions of business cases. While we remain disappointed with its approach on incentive rewards, we note the professional engagement with Energex's staff on capital expenditure programs where significant efforts were made to openly discuss issues and provide us with new information.

Table 1 – Key findings by proposal element

Element of proposal	Capable of acceptance	Materiality	Key findings
Operating expenditure (See section 1)	Yes	\$0	We note the AER’s draft determination undertook a thorough review of Energex’s proposed opex and formed the view that the proposed opex was reasonable. Energex has not sought material revisions to proposed opex.
Capex – Repex (See section 2a)	No	\$40 million reduction to proposed capex (About \$4 million revenue)	The AER accepted the modelled components of Energex’s proposed repex. We consider this provides sufficient justification for these elements of Energex’s revised proposal. Energex has provided new business cases for 2 projects not accepted by the AER in the unmodelled repex categories. We consider that new information provided on the removal of asbestos from network assets is justified based on the known safety risks to Energex staff, and is therefore capable of acceptance. However, we consider there remain evidence gaps with the low voltage safety project.
Capex – Augex (See section 2b)	No	\$50 million capex (About \$5 million revenue)	The AER has already found that Energex have provided sufficient justification of its distribution growth and worst performing feeders. Energex have provided new information on its sub-transmission program. We consider that the new information demonstrates that more capex is required than the AER’s draft determination. However, we consider there are still evidence gaps including explicit consideration of demand management options to defer the timing of major projects. We still consider there is an evidence gap on the network communications program, primarily related to potential cost savings from inter-related programs.
Capex – Connections (See section 2c)	Yes	\$0 million	The AER’s draft determination has already accepted Energex’s proposed capex on connections, and no material revisions have been applied by Energex.
Capex – ICT (See section 2d)	Yes	\$0 million	The AER made significant cuts to Energex’s ICT program, which Energex has largely accepted. This gives us comfort that there is sufficient information to accept the proposal.

Element of proposal	Capable of acceptance	Materiality	Key findings
Capex – Property (See section 2e)	No	\$20 million capex (About \$5 million in revenue)	The AER's draft determination did not accept a material proportion of Energex's proposed property capex. We note that many of the property business cases have been made confidential, limiting the ability of stakeholders to actively engage in analysis of the proposed expenditure. We cannot conclude that the proposed projects are capable of acceptance.
Capex – Fleet (See section 2f)	Yes	\$0	Energex have undertaken substantial work on fleet modelling and analysis. We consider there is sufficient evidence to support the program.
Rate of return and tax (See Section 3)	Yes	\$0	Energex have used the parameters in the AER's rate of return guideline and have applied the AER's tax calculations.
Incentive rewards (See Section 4)	No	\$165 million	Energex have not provided evidence that the capital underspend in 2020-25 was due to efficiency rather than delivery issues.

Section 1 – Operating expenditure (opex)

In our initial review of Energex's original regulatory proposal, we noted that Energex is close to the top 4 efficient firms in the National Electricity Market (NEM) but that further improvement was attainable. We also questioned whether Energex had fully incorporated the level of savings targeted for 2019-20. However, we noted the significant productivity targets embedded in Energex's forecasts.

The AER found that while the base year was marginally inefficient, the proposed productivities were higher than the AER's guidelines. The AER noted that its calculation of opex was higher than forecast by Energex. On this basis it accepted the proposed opex as efficient and prudent.

Energex's revised proposal is consistent with the AER's decision. Given the AER has previously accepted the proposed opex as efficient, we consider the revised proposal is capable of acceptance.

Section 2a – Capex: Repex

In our initial review of Energex's original proposal, we had found that Energex replaces more assets than its peers despite having a younger network. However, Energex was not proposing a step change in replacement levels unlike Ergon. This provided us with some comfort that the program was in a reasonable range.

The AER applied its repex model to test whether Energex's 'modelled' categories of replacement was reasonable. The AER found that Energex's proposed replacement was in line with the predictions of the repex model. On this basis it accepted this element of the proposed replacement capex. However, the AER found a lack of justification for two major unmodelled projects – the low voltage safety project and the asbestos removal project.

In response, Energex's revised proposal has provided new business cases for these projects that seek to address the AER's concerns. For the low voltage safety project, Energex has revised downward its proposed capex from \$56 million to \$30 million. Based on its business case analysis, Energex has not revised its proposed capex of \$8 million for the asbestos removal project.

We consider the low voltage safety project still contains many evidence gaps.

- We question why Energex considers the risks are intolerable given it has known of the neutral integrity issues for many years.
- We have seen no basis for the volumes used in the options assessment. On this note, the business case shows that Energex only has 25% of the incidents of Ergon, but is seeking 60% of the capital expenditure of Ergon. This appears disproportionate.
- We have not seen any sub-options analysis which looks at the risk-cost profile of lower volumes.
- There is no information on prioritizing risks. This means that the program may not be able to target the assets most at risk.

In contrast, we find the business case for removal of asbestos to have a compelling need, and reasonable assessment of options. In particular, we note that there is evidence of Energex staff developing asbestos related diseases in the past, and that the cost of the program appears moderate to ameliorate the risk.

Section 2b – Capex: Augex

In our initial review, we considered that Energex’s proposed augmentation lacked sufficient evidence of need and options. We also expressed caution at the level of new assets given the falling utilization of the network from lower energy sales.

The AER reviewed each element of Energex’s proposed augex. It found sufficient evidence to accept Energex’s distribution capacity and reliability program. However, it did not find that the transmission capacity program, network communication program, and power quality programs had been justified.

Energex’s revised proposal has sought to provide more analysis of options underlying its transmission capacity projects. This was to address AER concerns that there were less costly options available. We have undertaken a review of the Bells Creek project which is the most material program. We consider that Energex has provided new information that addresses many of the concerns of the AER including reasons why alternative options posed by the AER were not feasible, and demonstration that it has modelled in lower capacity requirements for new customers.

Our concern with this project is the uncertainty of timing. The need for the project is heavily influenced by large spot connections, which may not materialize in the 2020-25 period. We have not seen evidence to show how Energex accounts for uncertainty in connection numbers or size. We are also concerned that no potential demand management options have been explicitly considered in the business case. We note that Power and Water’s revised proposal in 2018 put forward a demand management option to defer a large substation based on advice from its engineering consultant Cutler Merz. We would like to see similar studies before the project is capable of acceptance.

Energex has also provided more detail on its network communication and power quality programs including intelligent grid enablement, and protection monitoring. It has made minor reductions to its proposed capex upon review. We recognise that networks with high solar penetration require smart new investment to best utilise the grid. The intelligent grid program is similar to SAPN’s program, and we can see the benefits of investing in new IT capabilities rather than traditional augmentation.

We consider there are still residual evidence gaps that Energex may be able to close. We have not seen sufficient evidence on the costing of the programs. Further unlike SAPN, we have not seen how Energex’s total expenditure on the low voltage network consider inter-relationships between programs.

Section 2c – Connections

We note that the AER has accepted Energex's proposed connections capex, including the component of net capex funded by all customers. Energex has not materially revised its connection forecast except for latest inflation and escalation. We consider there is sufficient evidence for the program to be capable of acceptance.

Section 2d – Information and Communications Technology (ICT)

In our initial review to the ECA we had noted significant investments by Energex in ICT capex in the past without demonstration of its benefits to customers. In this context, we found that the proposed program needed greater demonstration of customer benefit before it was capable of acceptance. We also questioned the deliverability of such a large program.

The AER found that the cost estimates required further analysis and that the program would face deliverability issues. Energex has largely accepted the AER's decision in its revised proposal. On this basis we consider the proposed program is capable of acceptance.

Section 2e – Property capex

In our initial review, we had noted that there was lack of justification for major property projects in Energex's original proposal. There was little quantification of need or of viable alternative options.

The AER undertook a review of Energex's proposed property projects and made similar conclusions on lack of justification. It made a material reduction to Energex's proposed capex, but left open the opportunity for Energex to submit more information.

In its revised proposal, Energex submitted more detailed business cases for its proposed property projects including options assessment. Unfortunately, the business cases have significant redactions for confidentiality, and do not provide stakeholders with an opportunity to engage with the issues or interrogate the costs of each option. We therefore cannot conclude that the projects are not capable of acceptance.

Section 2f - Fleet capex

In our initial review, we found Energex's proposed fleet program seemed generally efficient when benchmarked, but that there was opportunity for more efficient practices.

The AER identified a number of areas for cost improvement including unit costs, volumes and fleet composition. On this basis it reduced Energex's proposed fleet capex by about 15%.

Energex has revised the modelling underlying its proposed fleet proposal to address the issues raised by the AER. We consider that there is sufficient evidence to show that Energex have substantively engaged with the issues raised by the AER, and therefore the proposed expenditure at a high level is capable of acceptance.

Section 3 – Rate of return and tax

Energex's original proposal aligned to the AER's rate of return guidelines. The AER's draft determination made adjustments to the proposed rate of return based on new market data, which has led to a further reduction. Energex's revised proposal has updated the rate of return parameters for latest data, and the AER will do so in the final decision. We consider that there are no issues for consumers with this process.

We note that Energex has raised an issue with the AER's calculation of inflation forecasts. We see merit in the case made by Energex which suggests that reliance on the mid-point of the RBA's target inflation band may not be an accurate forecast of inflation in the current economic circumstance. We consider this is an issue the AER may wish to re-examine when it undertakes its periodic rate of return guideline review.

Energex's original proposal included a placeholder tax allowance based on the AER's previous approach to calculating allowed tax. This was due to uncertainty with the AER's calculation in the post tax revenue model (PTRM) under the new approach following the AER's tax review. The AER's draft determination determined zero tax allowance for Energex based on its final PTRM modelling. Energex's revised proposal has not contested this calculation. To the extent that Energex has used the AER's modelling approach, we see that the proposed amount is capable of acceptance.

Section 4 – Incentive rewards

In our initial proposal, we had highly commended Energex for foregoing its claims for an incentive reward for the Capital Expenditure Sharing Scheme (CESS) and Efficiency Benefit Sharing Scheme (EBSS). We noted that this was an integral aspect of its proposal 'as a whole', demonstrating its commitment to affordability principles for its customers. Energex's proposal had left open the prospect of revisiting its decision to forego the reward.

The AER's draft decision accepted Energex's decision to forego the CESS and EBSS reward, noting that it had already received a revenue for underspending its allowance in the 2015-20 period. The AER however outlined how the reward would be calculated should Energex choose to re-visit its proposal to forego the reward.

Energex's revised proposal has chosen to retract its earlier commitment to customers, and has asked for a reward of \$96 million for the EBSS and \$68 million for the CESS, totaling \$165 million. This is

roughly the equivalent of seeking an additional \$1.6 billion of network capex. Rather than this amount being spent on improving services, it will be provided as profit to the shareholder.

We strongly question whether the under-spend is an efficiency. The evidence suggests that Energex's 2015-20 proposal was an ambit claim, seeking a higher level of capex and opex than what was later revealed to be required.

We are also concerned with the lack of consumer engagement on Energex's decision which appears to be consistent with working to revenue goals rather than a detailed consideration of the long-term interests of customers.