

19 June 2019

Mr Chris Pattas
General Manager, Distribution
Australian Energy Regulator (AER)
GPO Box 520
Melbourne, VIC, 3001

Dear Mr Pattas,

CONSULTATION PAPER: ICT EXPENDITURE ASSESSMENT

Endeavour Energy appreciates the opportunity to provide feedback to the AER on the ICT Expenditure Assessment consultation paper. This consultation paper signals a refinement of the AER's approach to assessing ICT expenditure proposals. This follows concerns raised by some stakeholders that ICT expenditure has been increasing as a proportion of total expenditure but is not subject to the same rigorous assessment methods applied to other categories of expenditure.

Is there a problem with the current ICT assessment framework?

We believe the AER's assessment approach outlined in the Expenditure Forecasting Assessment Guideline has to date proven effective in ensuring customers do not pay more than necessary for network services.

Endeavour Energy has delivered price reductions since the release of the guideline in 2013 through initiatives targeted at improving our operational efficiency, service delivery and network planning decisions. In many cases, these improvements have been achieved by introducing technology in business-as-usual processes and leveraging from our ICT capabilities.

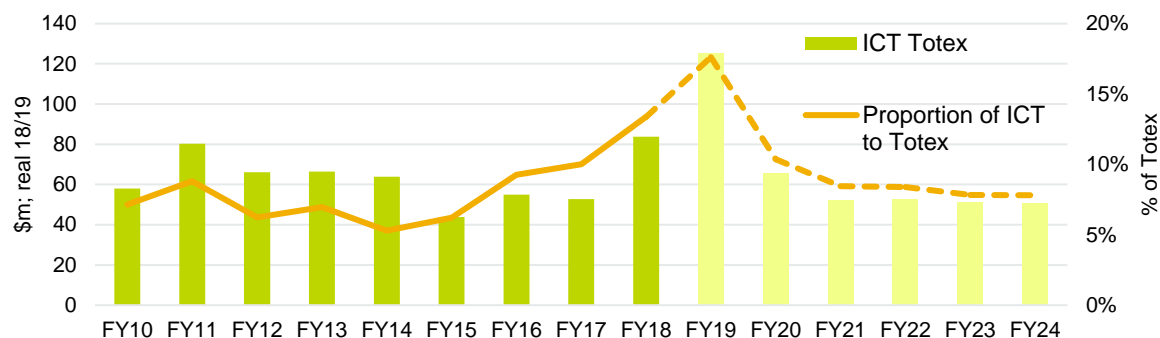
The technological transformation and associated reporting obligations occurring throughout the NEM will require networks to further enhance their ICT capabilities. As DER becomes more widely integrated into the system, networks will need to have an ICT infrastructure in place that allows customers to benefit from their investment. DNSPs will also become more reliant on ICT to: manage an increasingly interconnected network with dynamic energy flows; facilitate the collection and management of ever increasing information obligations to support regulatory and market reporting; manage increasing cyber security risks; and to optimise network planning decisions.

We are currently undertaking a major ICT transformation project that will equip us to manage these future challenges. Following our partial privatisation in 2017, this project was identified as a priority investment by our new management who considered our previous legacy systems inhibited efficiency and lacked the functionality required of a modern electricity distribution business.

As shown in Figure 1 below, the impact of this project will cause both ICT costs and its portion of total expenditure to temporarily increase before returning to historical levels. This pattern is broadly consistent with the NEM trends outlined in the consultation paper and indicates other networks are similarly undertaking major one-off investments to address constraints in their ICT systems within the current and near-term market and regulatory environment.

This project will be key to achieving the 0.5% p.a. opex productivity factor applied by the AER for the 2019-24 period and the material reduction we made, in consultation with the AER and stakeholders, to our capex allowance compared to preliminary forecasts and our initial proposal.

Figure 1: Endeavour Energy ICT Expenditure as a proportion of totex



Further, an increase in ICT costs is not unexpected given ICT is becoming more integrated into network functions and is now fundamental to the efficient and effective delivery of low cost network services. As noted in the consultation paper, ICT expenditure has generally increased for the right reasons and the heightened scrutiny on network spending from the AER and consumers representatives should provide confidence that recent increases in ICT have been tested and justified.

The contrasting trend between ICT and total expenditure suggests ICT has been delivering efficiency improvements driving cost reductions in other expenditure categories. This demonstrates the importance of assessing ICT expenditure with regard to its effect on total expenditure.

In our view, ICT increases during a period of reducing network expenditure do not point to shortcomings in the AER's assessment of ICT, but rather are a consequence of DNSPs responding efficiently to the AER's expenditure incentive schemes to prudently manage longer term total expenditure within the constraints of an efficiently set overall revenue allowance.

Will the new ICT assessment framework result in improved outcomes for customers?

Whilst we consider the AER has consistently provided an effective challenge to proposed ICT spending, we recognise there is a strong desire for networks to provide greater transparency in their ICT investment decisions. Introducing specific requirements for networks to clearly demonstrate how benefits from ICT have been incorporated into the overall expenditure forecast will improve the confidence stakeholders have in the efficiency of the AER's decisions and assist networks in developing justified ICT proposals.

Therefore, we believe it is appropriate for the AER to review their approach to ensure it remains fit-for-purpose. We consider much of the proposed refinements are practical and will ensure the degree of scrutiny applied to ICT expenditure is at least proportionate to its contribution to total expenditure. However, these refinements should be mindful of the difficulties in quantifying the benefits of ICT investment and not be so burdensome or narrowly defined as to result in prudent and efficient ICT investment not being accepted by the AER.

The AER should continue to rely on the strength of the incentive framework and existing assessment approach. A move towards granular, technical assessments (particularly for a relatively smaller category of expenditure) will increase regulatory costs and be constrained by the information asymmetry that exists between networks and the AER. We consider the current balance (between top-down and bottom-up tools) in the AER's assessment approach remains appropriate.

Our response to the questions in the consultation paper are provided in Attachment 1. If you have any queries or wish to discuss this matter further please contact Joe Romiti, Regulatory Analyst at Endeavour Energy on (02) 9853 6232 or via email at joseph.romiti@endeavourenergy.com.au.

Jon Hocking
Manager Network Regulation

Attachment 1: Responses to questions in the consultation paper

Question 1: Does it make more sense to disaggregate ICT into its ‘recurrent’ and ‘non-recurrent’ components? Ausgrid presented their ICT capex forecast into the categories ‘Comply’, ‘Protect (cyber)’, ‘Maintain’ and ‘Adapt’ that are based on purpose. Would stakeholders find these categories more useful than our suggested recurrent and non-recurrent categories?

We support the separate assessment of recurrent and non-recurrent ICT capex, noting the AER applied this “disaggregated” approach during their 2019-24 determinations. To facilitate these assessments, DNSPs were required to attribute forecast and historical ICT capex into one of four pre-determined “ICT capex by purpose” categories¹ as part of the Reset RIN.

Ausgrid’s alternate categories are aligned to specific objectives underpinning their technology plan and strategy but also reflect the broad drivers underpinning ICT investment for all networks. Adopting these categories may promote reporting consistency but as ICT groupings are likely to differ across networks it could be complicated and administrative burdensome if back-casting is required.

We believe there is merit in structuring reporting requirements so that recurrent and non-recurrent expenditure are reported as sub-categories to the “ICT capex by purpose” categories ultimately selected. This way, costs can be assessed using the appropriate methodology and avoids the need for the AER to presume that all costs within a single category to be either recurrent or non-recurrent rather than a combination of both.

Question 2: What other methodologies can we use to benchmark ICT capex? What are the benefits and disadvantages of each approach? What other benchmarking normalising factors do you consider appropriate? For example, Regulatory Asset Base (RAB) could be used as a proxy for asset size.

We broadly support the use of benchmarking to assess the relative ICT performance between DNSPs. However, as networks increasingly look to adopt technological solutions in response to the rapidly changing needs of customers, previous expenditure may not be a good indicator of future ICT needs.

We agree that benchmarking should include both opex and recurrent capex to account for opex/capex interrelationships, differences in ICT procurement strategies and capitalisation rates. We also consider benchmarking ICT costs against customer and employee numbers would account for some variations in the scale of ICT operations and go some way to normalising benchmarking results. However, it is important that benchmarking is complimented with other assessments tools to ensure there is both an efficient and sustainable level of ICT investment.

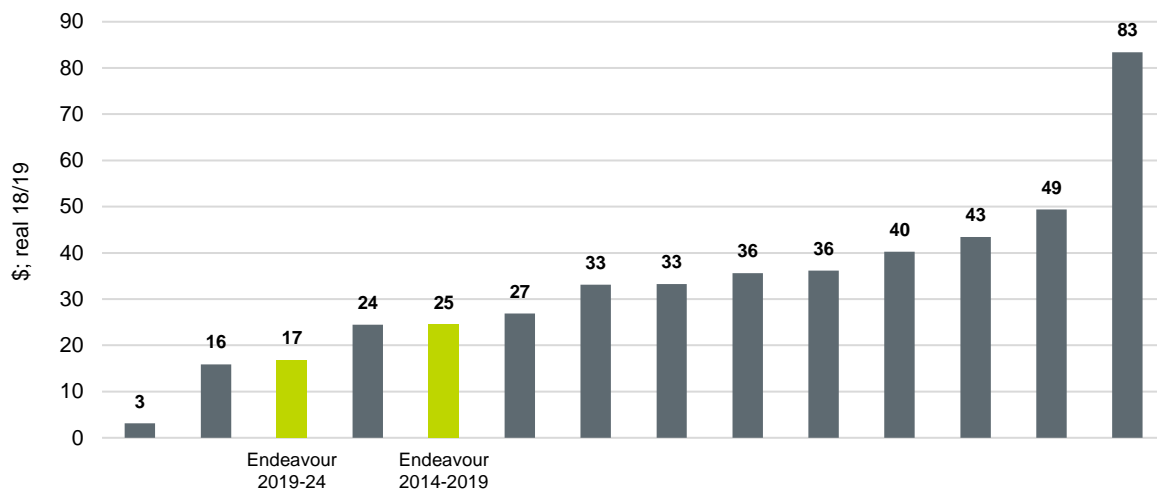
For instance, our ICT capex performance has been particularly strong as we have historically responded to ICT needs incrementally through low cost, bespoke updates and add-ons to our legacy systems. As detailed in the KPMG ICT benchmarking report which accompanied our 2019-24 regulatory proposal, Endeavour Energy has consistently benchmarked at or below the mean across several key ICT measures compared to our peers.

However, continuing to underinvest in ICT using this ad-hoc approach is no longer feasible in light of the current market and regulatory changes and therefore we have initiated an ICT transformation project to improve business and customer outcomes and meet the demands from an increasingly interconnected network. Through this program, we expect to replace many of our outdated systems

¹ Asset Replacement, Asset Remediation, Asset Extensions, Capability Growth.

and programs with modern equivalents meaning project costs will have both recurrent and non-recurrent elements. Although the capital costs of this project are significant, we expect our ICT capex per customer performance to improve in the next regulatory period.

Figure 2: Average annual ICT capex per customer



Source: RIN data
Averaging period for other DNSPs: FY12-16

It is important that there is not an over-reliance on benchmarking that penalises DNSPs undertaking periodic major ICT enhancements. Any benchmarking analysis should be mindful that DNSPs may be at different stages of their ICT investment cycle which limits their comparability. This is accentuated by the staggered time periods for each regulatory review and associated additional information relating to market and regulatory developments.

Question 3: We note the difficulty in assessing the efficiency of implementing a compliance driven step-change ICT projects. What information do you consider is required to assess the efficiency of these projects?

The guideline outlines a clear set of factors the AER considers when assessing step-changes associated with new regulatory obligations. To support any compliance driven ICT step-change, we expect networks would be able to provide supporting materials to demonstrate how the proposed step-change satisfies the AER’s specific criteria.

Question 4: What do you consider a sufficient business case for an ICT project should include?

We broadly support the expectations of a sufficient ICT business case outlined in the consultation paper. This would require DNSPs to outline the case for investment, conduct risk-based assessments and cost benefit analysis of a range of options beyond the “do nothing” option. The level of detail should be proportionate to the value of investment.

However, cost-benefit analysis is often problematic for ICT as it can be difficult to quantify risks and benefits underpinning ICT investment to the same degree of certainty as network investment given the available measures for such assessments such as VCR. This difficulty arises because investment in ICT is regularly driven by compliance obligations or qualitative drivers such as improving the quality of service, where there is little in the way of an accepted valuation or valuation method.

Expectations of adequate ICT business cases should consider these difficulties relative to network investment. On this basis, we believe that while primacy should be given to quantitative analysis, qualitative support should be considered to allow a holistic view of the project.

Notwithstanding the difficulties in measuring value to customers or agreeing on the measurement approaches, Endeavour Energy agrees that best endeavours should be applied by networks to provide as much transparency and evidence of the network's decision-making processes in these matters.

Question 5: What is your opinion on us requesting DNSPs provide post implementation reports from historical ICT investments?

It is reasonable to expect DNSPs to perform post-implementation reviews of major ICT investments. Post-implementation reviews provide evidence of sound governance and a commitment to continuous improvement. However, we caution against placing undue weight on these reports or over-prescribing their use as they are ultimately a secondary piece of evidence relative to the business cases supporting a forecast ICT program.

As internal business documents, the structure and content of PIRs will vary between networks. However, we expect they would generally focus on reviewing aspects of a project which are measurable and easy to assess (e.g. project delivery, costs, compliance etc.). Given the difficulty in quantifying ICT benefits, these reviews would not generally evaluate the benefits delivered beyond a qualitative assessment.

Furthermore, the benefits of ICT generally lag the associated costs. For some ICT projects, such as those resulting in the deferral of asset replacements, benefits can take years to be fully realised. However, PIRs are typically initiated soon after a project is complete which complicates comparisons between forecast and delivered benefits.

Also, as reports would be undertaken only for major ICT projects, there may be an insufficient sample of PIRs for the AER to make an accurate assessment of a DNSPs benefit forecasting abilities.

If PIRs become a mandatory requirement, it could increase costs and administrative burden and risk PIRs being developed to achieve favourable regulatory treatment instead of providing an honest and robust assessment of a project to obtain important learnings for future projects. We accept that there is a clear expectation from the AER and stakeholders that PIRs form part of the suite of evidence necessary to support and justify an ICT proposal. However, the scope and number of PIRs conducted should remain at the discretion of network management.

Question 6: What do you consider is required to demonstrate that DNSPs have incorporated benefits into its overall proposal?

Where a prudent and efficient non-recurrent ICT project can deliver cost reductions, we agree that DNSPs can best demonstrate these benefits are incorporated in the overall forecast through a negative step change, productivity adjustment or a reduction in overheads. These options will allow customers and the AER to assess whether the financial impact of an ICT project proposed by a DNSP is reasonable. There will also be projects that are established on the avoidance of future cost imposts, such as cost increases associated with ongoing maintenance of existing systems. How the AER will assess these non-observed cost impacts will also need to be considered in future determination processes.

However, not every non-recurrent ICT project will deliver cost saving opportunities. For instance, projects undertaken to satisfy regulatory obligations, protect against cyber-attacks, improve customer service, increase reliability and network resilience and improve DER hosting capabilities will deliver consumer benefits that generally provide no offsetting cost reductions.

In lieu of incorporating these non-cost benefits in the overall expenditure proposal, DNSPs should provide a detailed qualitative explanation of the customer benefits that will be delivered by the investment.

Question 7: Which scenario - self funding or productivity improvement - would you prefer and why? Are there other scenarios we should consider?

We support the productivity improvement scenario whereby the AER will only apply an adjustment to the proposed forecast when it is not satisfied DNSPs have adequately done so. This option is less likely to deter networks from undertaking innovative ICT investment than the self-funding model. Our main concern with productivity improvement approach is that unless it is properly informed, the AER's adjustment will not accurately reflect the likely or actual benefits delivered by the investment. If adjustments overstate potential cost saving reductions, the incentive framework could be undermined as DNSPs may reduce expenditure below efficient levels and be discouraged from undertaking innovative and efficient ICT investment in the future.

To ensure the AER's adjustments are suitably informed, we believe the AER should allow DNSPs sufficient opportunity to fill any information gaps to improve their understanding of the project and interactions with other categories of expenditure.

Question 8: We welcome stakeholder comments on the practical application of a productivity adjustment. If we were to include a productivity adjustment on the basis of ICT expenditure, how should it be incorporated? If so, how should we determine how large should this adjustment be? What aspects of a DNSP's forecast should it be applied to?

We agree that incorporating productivity adjustments would require crosschecks between interrelated expenditure categories which for large and sophisticated projects could be a complex and time-consuming task. We also consider it reasonable for the AER to have regard to the nature of the proposed ICT investment to determine where in a proposal an adjustment might apply.

However, for any given ICT project it is likely that cost saving opportunities would differ between networks and not be reflected in the adjustments proposed by other networks. We therefore believe there is limited merit in having regard to the productivity improvements proposed by other DNSPs as adjustments should be unique to the benefits offered by the project.

It is imperative that any opex productivity adjustment or step change be considered in conjunction with the AER's opex productivity factor. With ICT a key source of efficiency improvement, it will be relied upon by networks to achieve the 0.5% p.a. productivity target recently set by the AER. To ensure these savings are not double counted, opex reductions delivered from ICT investment should count towards the target and not be deducted in addition to the 0.5% adjustment.