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19 June 2019

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

Dear Mr Pattas

Consultation paper - ICT Expenditure Assessment

Essential Energy welcomes the opportunity to provide feedback to the Australian Energy Regulator (AER) on their May 2019 Consultation paper on ICT Expenditure Assessment.

Essential Energy endorse the AER's work on ensuring that expenditure undertaken by networks is in the long-term interests of customers. However, we caution the potential to over-engineer a response to a specific category of expenditure (such as ICT), when the regulatory and legal frameworks are in place to sufficiently assess all types of expenditure.

The ideas canvassed in the consultation paper are numerous, diverse and their potential impacts are far-ranging. The AER will need to ensure that any changes are thoroughly analysed and modelled correctly, so they do not result in unintended consequences at odds with the existing legislative framework.

We note and support the submission by Energy Networks Australia but provide our own submission to further highlight some key issues and observations that we consider important. Further detail on these issues is provided in **Attachment 1**, along with responses to the specific questions posed by the AER in the consultation paper.

Essential Energy welcomes the opportunity to discuss these issues further. Please contact our Head of Regulatory Affairs, Natalie Lindsay on (02) 6589 8419 or natalie.lindsay@essentialenergy.com.au .

Yours sincerely

Chantelle Bramley
General Manager Strategy, Regulation and Corporate Affairs

Attachment: 1. Essential Energy response to AER Consultation paper

Attachment 1

Essential Energy's response to AER consultation paper

ICT Expenditure Assessment

June 2019

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Executive Summary

Essential Energy acknowledges that ICT expenditure has increased in proportional terms in recent years, and this trend is likely to continue in future years. However, it is imperative that any proposed change in how ICT expenditure is assessed, needs to be well-reasoned, is evidently going to result in a better long-term outcome for customers, and is not merely about applying additional layers of regulation.

The submission focusses on the following:

- **Legislative and Regulatory framework** – The AER needs to ensure that any changes made to assessments for ICT expenditure comply and align with the National Electricity Rules and the National Electricity Law.
- **ICT categories** – Essential Energy recommends the introduction of three categories for ICT expenditure – Comply, Maintain, and Optimise.
- **Benefits incorporation** – If the AER has agreed that a particular ICT spend is prudent and efficient, it should not be excluded (self-funded), or subject to further productivity adjustments, due to AER uncertainty about how benefits have been incorporated into a proposal.
- **Relative value** – Consideration needs to be given to the effort and relative value for ICT expenditure business cases. Essential Energy recommends a materiality threshold of 1% of annual Allowed Revenue be referenced for ICT spend, to ensure there is scrutiny on material projects and that the administrative costs of this change do not outweigh the associated benefits.
- **Benchmarking** – Benchmarking is an important tool to understand business efficiency and improvement opportunities, however the benchmarking methodologies utilised must be fit for purpose and closely match costs with the drivers of those costs.
- **Post Implementation Reports** – Obtaining information on historical ICT expenditure is expected to be resource intensive, and less likely to be useful due to the high rate of technological change.

1. Introduction

This submission is provided to the AER in response to their consultation request for assessing ICT expenditure.

2. Framework

The National Electricity Rules (NER) set out the objectives, criteria and factors under which forecast expenditure is to be prepared and assessed. There is a strong focus in the legislation that the incentive schemes work together with the expenditure framework to ensure the best long-term benefit for customers. There are also revenue and pricing principles under the National Electricity Law (NEL) that specify that a network provider should be provided with a reasonable opportunity to at least recover their efficient costs of either providing network services, or in complying with regulations.

The AER must ensure that its focus is on interpreting and delivering under the NER and NEL, and that any extra layers of rigour added for expenditure assessment still reflect the intention of the legislation.

3. ICT categories

The AER has proposed splitting ICT spend into recurrent and non-recurrent categories for assessment purposes, with benchmarking to be used to assist in assessments for recurrent spend, and deeper dives required for non-recurrent spend. Essential Energy agrees that while there are benefits in different assessment approaches, these two categories may not be the best solution.

Most ICT spend is recurrent, in that it relates to regular replacement of software and hardware on a cyclical basis. Even if the replacement cycle is longer than five years, it should still be categorised as standard business as usual spend and be able to meet the standard guidelines for expenditure to be accepted.

ICT expenditure can also include a significant amount of compliance spend. This is spend where if it were not required for licencing or regulatory requirements, the business is unlikely to choose to make the investment. These investments usually come without efficiencies and few, if any, quantifiable benefits to customers. However, they are required for risk reduction purposes, and will not necessarily have a positive NPV.

Where ICT spend is related to new or expanded capabilities, or when replacement costs are materially increased, then this warrants increased scrutiny.

Essential Energy proposes the following ICT categories for use in the RINs and for expenditure assessment purposes:

ICT Category	Explanation
Comply	Deploying technology solutions and processes to ensure compliance with both national and state based licencing and legislative obligations
Maintain	Ensure technology solutions and processes are maintained to preserve the quality and reliability of supply of the distribution network and customer services
Optimise	Implementation of strategic business initiatives focused on the data and digital technologies that will deliver the greatest value to our customers

4. Benefits incorporation

The AER has indicated that where they consider a non-recurrent ICT project included in a regulatory proposal to be prudent and efficient but find that the financial benefits have not been adequately demonstrated, they may look to exclude that spend and either require the business to self-fund it or apply a productivity adjustment to the overall proposal.

4.1 Self-funding

The definition of self-funding proposed by the AER is unclear. Essential Energy has interpreted ‘self-funding’ as meaning excluded from the RAB and thus any revenue allowance. Essential Energy expects that the AER would assess known investments and benefits and would ensure that these are incorporated into the Allowed Regulated Revenue (ARR). If during a regulatory period a new investment was identified, then this should be self-funded without the risk of Capital Expenditure Sharing Scheme (CESS) or Efficiency Benefit Sharing Scheme (EBSS) penalties for spending above the ARR.

The AER has suggested that a business will self-fund the costs of the ICT spend from productivity and efficiency cost savings. The CESS and EBSS are incentives set up to capture and lock in expenditure efficiencies, but they also limit the distributors benefit to approximately 30%. It is highly unlikely that any investment would occur if costs to the business were only partially covered. Essential Energy is still required to finance the expenditure and needs to be able to cover the finance costs, which is not possible if they are not included in the RAB. The introduction of self-funding is expected to inhibit spending to only positive NPV projects where the benefits are easily quantified, and the AER is satisfied that those values are included in a proposal. Under the self-funding option, it is therefore

likely that businesses will reduce the number of innovative projects undertaken and those that are compliance-driven will cause significant adverse financial impacts.

4.2 Productivity improvement

The AER has recently instigated a 0.5% productivity improvement requirement for opex for some network service providers, which was subsequent to Essential Energy proposing opex productivity improvements close to three times that for the 2019-24 regulatory period on top of capex productivity improvements. These improvements will result in ongoing savings for customers. Any additional productivity improvements need to be thoroughly analysed considering the existing and agreed productivity improvements to prevent the expectation of unrealistic outcomes or double counting of the adjustments.

5. Relative value

Essential Energy recommends that the AER look to introduce a materiality threshold for ICT expenditure assessment, so that the correct focus is given to those items that require the scrutiny. Materiality thresholds commonly used by the AER revolve around a percentage of the Allowed Revenue in a regulatory year. Essential Energy recommends that a materiality threshold of one per cent of Annual Allowed Revenue is appropriate and ensures the AER's expenditure assessments are targeted and add value to customers.

6. Benchmarking

Benchmarking is an important tool that can highlight areas for improvement. However, as it generally involves looking at old data and technologies, applying those old trends and measures may not align well with the technology in use now and is less valuable for innovative solutions. A company that is prepared to invest in ICT projects for long term customer value could potentially benchmark poorly against companies who have not yet begun their ICT transformation – this is because benchmarking will generally show the costs but not the productivity improvements which will be realised over time.

The AER needs to be cautious with using benchmarks such as customer and employee numbers. Costs must be carefully attributed to cost drivers for benchmarking purposes, for example, it is appropriate to benchmark employee device costs using employee numbers, as opposed to customer numbers where there is virtually no relationship. Equally, it will be less useful to use customer or employee numbers for ICT spend on networks of the future, where spend is tailored for that network and its particular attributes. Reliance on generic ICT spend information as a benchmark may not result in worthwhile comparative information.

In addition, the setting of benchmarks using currently reported information from distributors can be expected to result in errors as it will be difficult to accurately back-cast categories using historical ICT spend categories, as this is very subjective. Different distributors have not always aligned when selecting categories, due to the current subjectivity of the categories. Essential Energy suggests that the allocation of ICT spend into different categories needs to be done by the businesses – based on very clear category guidelines from the AER. This means that any data to be included for setting future benchmarks will have to be correctly categorised by the businesses in future proposals.

7. Post Implementation Reports

Essential Energy recommends that Post Implementation Reports (PIRs) are required for material ICT expenditure, but only for prospective projects once a revised assessment approach is implemented by the AER, and that the timing of PIRs should be aligned with when benefits are realised. ICT spend is often part of larger investment projects and the specific benefits realisation purely from the ICT spend may not be easy to unbundle.

The provision of historical PIRs is expected to result in additional resource costs, as the original project may not have been structured using the measurement framework now required. The information is also expected to be less useful for assessing future ICT spend due to the high rate of technological change.

8. Responses to consultation questions

Question 1: Do you agree with the RIN categories of ICT expenditure? Are there others we should request DNSPs to report? 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?

Essential Energy sees value in looking to improve the RIN categories of ICT expenditure. Ausgrid's suggestions of four categories above are consistent with Essential Energy's proposal for the following three categories:

ICT Category	Explanation
Comply	Deploying technology solutions and processes to ensure compliance with both national and state based licencing and legislative obligations
Maintain	Ensure technology solutions and processes are maintained to preserve the quality and reliability of supply of the distribution network and customer services
Optimise	Implementation of strategic business initiatives focused on the data and digital technologies that will deliver the greatest value to our customers

The above categories, and their definitions, result in less subjectivity when allocating ICT spend and are more meaningful than just recurrent and non-recurrent. However, Essential Energy acknowledges that there is a need to further differentiate between spend that is standard business as usual and non-standard which requires a deep-dive approach. The use of materiality thresholds could provide this extra level of differentiation.

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.

The benchmark used should differ depending on the category. Where spend is difficult to independently check, benchmarks could be used. There is some benefit in looking towards a risk-based benchmark for ICT spend, i.e. what is the cost of an event happening, and demonstrating a risk-reduction.

Costs must be carefully attributed to cost drivers for benchmarking purposes, for example, it is appropriate to benchmark employee device costs using employee numbers, as opposed to customer numbers where there is virtually no relationship. Equally, it will be less useful to use customer or employee numbers for ICT spend on networks of the future, where spend is expected to be tailored for that network and its particular attributes.

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?

A compliance driven step-change ICT project should be assessed in a similar manner to other projects; a business case is required to articulate the need, explore all viable options, outline the risks being managed, and make a recommendation based on the evidence. Where it differs from other projects is that it is less likely to be efficient, but it must still be prudent. A compliance driven step-change ICT project can be expected to provide benefits, but

they may be difficult to quantify for the Distribution Network Service Provider (DNSP) as they are likely to be based on risk-assessment and risk-reduction by regulatory bodies.

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

A sufficient business case for an ICT project should meet the requirements under the NER, i.e. the spend aligns with the NER Forecasting expenditure objectives and criteria, and this is demonstrated clearly in the documentation. Essential Energy recommends that the requirement for business cases is limited to those with a material value.

The business case needs to articulate:

- the "need" for the expenditure;
- the benefits expected from the expenditure;
- that the timing of expenditure is appropriate;
- that the expenditure is sound, demonstrated, defensible;
- what other options have been identified and considered; and
- why the expenditure is efficient.

In other words, it needs to be able to fully explain "Why should a customer pay for that?".

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

The provision of PIRs from historical ICT investments comes with significant issues, unless it is within the same regulatory period. Historical requirements and frameworks differ from those that are current. Unless the spend was significant there may not have been a requirement at the time for a PIR. To prepare a PIR for an historical ICT investment is likely to come at a significant resource cost that may not be efficient.

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

Essential Energy's business cases for material ICT spend were included in its 2019-24 regulatory proposal. Essential Energy also clearly articulated the link between ICT investment, customer benefits and value in plain English. This material was well received by the AER, CCP and customer groups. A sufficient business case (as per Question 4 response) will have benefits incorporated and these should automatically be included in the overall proposal expenditure if accepted by the AER. They should not require any other specific treatment, to ensure benefit incorporation. If there are additional benefits achieved these are addressed under the existing incentives framework and shared with customers over time.

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

Essential Energy suggests that this could be a problem area for ICT, and it should be looked at based on the category. Compliance based spend will not necessarily have any benefits and should not be self-funded or subject to a productivity improvement, if the AER considers the investment is prudent and efficient.

Incentive schemes are already in place to capture scenarios where benefits may be harder to quantify, but overall the gains or losses will be shared between DNSPs and customers.

A requirement to self-fund a project which the AER agrees is prudent and efficient, goes against the revenue and pricing principles of the NEL, and will result in sub-optimal outcomes that will not be in the long-term interest of customers. The introduction of a further specific productivity adjustment, in addition to the recently introduced 0.5% across an overall proposal, is also likely to be problematic as this may result in double-dipping of productivity adjustments.

Essential Energy suggests that clearly articulated business cases (refer question 4) such as those included in their 2019-24 proposal, which were supported by customers, should be accepted by the AER without further adjustments for uncertainty of benefits.

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?

Essential Energy does not agree with the application of a productivity adjustment being applied for specific projects where there is uncertainty in the benefits. The value of the productivity adjustment to be applied will obviously be difficult to quantify. All ICT investments at Essential Energy - outside of compliance projects – are required to be supported by a business benefits justification, which ensures that they incorporate an element of productivity enhancement.

The current incentives framework does account for benefits over time, and there are likely to be unintentional issues in relation to interactions with the current productivity adjustment.