

# **ATTACHMENT 11.2**

## **KEY ASSUMPTIONS UNDERLYING CAPITAL AND OPERATING EXPENDITURE FORECASTS**

**April 2018**



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## Background

Schedule 6.1.1 and Schedule 6.1.2 of the National Electricity Rules (the rules) require Essential Energy's Regulatory Proposal to contain information and matters relating to capital expenditure and operating expenditure, including the key assumptions that underlie expenditure forecasts. The purpose of this document is to meet the requirements of the rules relating to key assumptions.

The certification of the reasonableness of the key assumptions by the directors of Essential Energy is contained within Appendix A to this document - Directors' certification of key assumptions.

We have identified the following assumptions which we consider are material to our expenditure forecasts.

<b>Key assumption 1</b>	The Legal Entity, Ownership and Organisational Structure are those in place at the time forecasts are finalised.
<b>Key assumption 2</b>	Replacement capital expenditure has been developed using a risk management framework that prioritises the expenditure necessary to maintain a safe, reliable and sustainable network.
<b>Key assumption 3</b>	Growth capital expenditure forecasts are derived from the spatial demand and customer connection forecasts included in the Regulatory Proposal.
<b>Key assumption 4</b>	Meter churn forecasts resulting from Power of Choice reforms relating to contestability in metering have been developed to account for future uptake of advanced meter technologies.
<b>Key assumption 5</b>	Forecast labour costs have been set consistent with our proposed Enterprise Agreement for the period in which the Enterprise Agreement is proposed to apply. For the period subsequent to the proposed expiry of the Enterprise Agreement, we have assumed any increases in wages above inflation will be offset by additional productivity improvements.
<b>Key assumption 6</b>	The operating expenditure year 2017-18 has been adopted as the efficient base year for deriving a forecast of recurrent operating expenditure.
<b>Key assumption 7</b>	Essential Energy has engaged with stakeholders in developing its Regulatory Proposal in accordance with the stakeholder engagement process outlined in the National Electricity Rules.
<b>Key assumption 8</b>	Investment in technology underpins our forecast efficiency improvements. Without the proposed investment in technology Essential Energy will not be able to achieve the forecast expenditure levels.

In the following sections, we identify why we consider the assumption is material to our forecast capital and/or operating expenditure. We also set out why the assumption is reasonable, with reference to the material that comprises our Regulatory Proposal.

## Key assumption 1 – Legal entity, ownership and structure

This is a key assumption as it provides clarity that capital and/or operating expenditure have been prepared based on current ownership and legal structure.

Our current structure has also been important in providing strategic input into the objectives that have underscored the development of our capital expenditure and operating expenditure proposals. For instance, under Essential Energy's strategic initiatives there has been a greater focus on customer affordability through efficiency programs introduced throughout Essential Energy. These have been instrumental in deriving efficiencies that have been incorporated in our forecast capital expenditure and operating expenditure and will enable us to meet our enterprise objectives while maintaining safety and reliability of the network. We consider that the level of efficiencies we have forecast are reasonable, as they have been based on a functional review of the costs we incur in providing services.

## Key assumption 2 – Risk management framework including prioritisation

We consider that this is a key assumption as the framework has enabled Essential Energy to better target replacement capital expenditure. A key aspect of our forecasting method was to apply the outcomes of an optimisation process that better aligned a renewed risk management approach to enterprise objectives and operational constraints.

The objective of the process was to identify prudent opportunities to optimise capital expenditure based on an assessment of relative risk such that we could minimise our requirement for investment funding and better meet the preferences of our customers. The prioritisation process was conducted in parallel with Essential Energy's planning processes. The key components of the prioritisation process were:

- > Essential Energy identified all the projects and programs that may reasonably have formed a part of the proposed expenditure portfolio.
- > Options for alternative levels of expenditure were developed.
- > Alternatives within projects and programs was assigned a value in line with our methodology for assessing risk.
- > A process of feedback and iteration refined the inputs with multiple passes through the optimisation tool.
- > The relationship between risk and different scenarios of expenditure informed the prudent level of capital investment.

We consider that the outcome of the optimisation is reasonable, in that it reflects a prudent assessment of risks to deliver value for our customers. In this respect, the reasonableness can be demonstrated by the method used to assess the value of each project/program. This enabled us to determine the combination of investments which deliver value aligned to our customers' expectations.

Further information on our risk framework to incorporate optimisation of the program can be found in the Risk Management and Capital Expenditure chapters of our Regulatory Proposal.

## Key assumption 3 – Demand and customer connection and forecasts

This is a key assumption underpinning our capacity related capital expenditure including our Distribution Growth Strategy, relevant Asset Management Plans and Investment Cases. Peak demand forecasts set out the expected increase in peak demand on locations of our network, while customer connections record the increase in the number of residential and non-residential customers on our network.

In respect of the reasonableness of peak demand forecasts, we note that in developing our capital expenditure forecasts for the 2019-24 period, we have applied our methodology using most recent available historic data. Similarly, customer connections have relied on historical estimates, and takes into account evidence on changes from historical levels due to well accepted drivers of connections such as economic activity and construction data.

The likely technology driven changes in consumption, such as increased embedded generation, have been incorporated into the forecasting analysis.

Further information on our demand forecast methodology and outcomes and forecast customer connections can be found in the Energy and Demand Forecasts chapter of our Regulatory Proposal document. These forecasts are based on advice provided by the National Institute of Economic and Industry Research (NIEIR) and other consulting firms. The NIEIR forecast report is contained at Attachment 14.1 to the Regulatory Proposal.

## Key assumption 4 – Advanced metering forecasts

The Power of Choice reforms relating to the competitive framework for the provision of metering services commenced on 1 December 2017. Prior to this date, Essential Energy assumed responsibility for basic metering relating to small customers. Retailers have assumed responsibility for advanced meter roll outs, where small customers will deal solely with retailers for advanced metering services. Small customers can opt out of having an advanced meter installed at their premises where a retailer proposes to install a meter to replace an existing working meter. However, the right to opt out of having an advanced meter will not apply in the following circumstances:

- > Where there is no meter at the site (e.g. a new connection);
- > A faulty meter requires replacement; or
- > Where testing results indicate that it is necessary or appropriate for the meter to be replaced to ensure compliance with the Rules.

Further information on our advanced metering forecasts can be found in the Energy and Demand Forecast chapter of our Regulatory Proposal.

## Key assumption 5 – Forecasts of labour costs

This assumption is material to the forecasts of undertaking capital works and operating activities in the 2019-24 regulatory period. Essential Energy has delivered significant efficiencies which have resulted in reduced labour costs which will be sustained through the 2019-24 regulatory period.

In deriving a value of labour costs, we have applied our proposed Enterprise Agreement for the period that it will operate. We consider this to be the most reasonable forecast to use as it provides a specific and accurate estimate of Essential Energy's future labour costs.

Our standard control operating expenditure and capital expenditure forecasts for the 2019-24 regulatory period assumes wages are in line with inflation. Any increases in labour costs above inflation, during the 2019-24 regulatory period, will be offset by additional productivity improvements.

## Key assumption 6 – Using 2017-18 as operating expenditure base year

This assumption is relevant to our proposed forecast operating expenditure. Essential Energy's forecast operating expenditure is largely derived using the base year approach under which the actual and forecast operating expenditure of the regulatory year 2017-18 is used as the opening starting point upon which 'change factors' are applied to derive the future operating expenditure requirements for the 2019-24 period.

The base year method is commonly used by the Distribution Network Service Providers and is the Australian Energy Regulator's preferred method to derive estimates of forecast operating expenditure. It is a reasonable method as the majority of our costs are largely recurrent. The 2017-18 base year will be the most recent year of actual operating expenditure at the time of the Final Determination and is, therefore, considered to be the most current estimate of providing Standard Control Services that are of a recurring nature. This current actual cost is then adjusted to account for future changes in Essential Energy's circumstances, operating environment, regulatory obligations and changes in demand and cost inputs in arriving at a forecast operating expenditure. This is to ensure that all known factors affecting Essential Energy's future operating expenditure requirements are appropriately accounted for.

We note that the way we have used 2017-18 data as a basis for forecasting is also fit for purpose and reasonable in our circumstances. Further information on why our approach to deriving forecast operating expenditure, including the manner in which we have applied 2017-18 data, can be found in the Operating Expenditure and Benchmarking chapters of our Regulatory Proposal.

## Key assumption 7– Engaging with customers

Our engagement activities have influenced the development of our operating expenditure and capital expenditure proposals. The findings of our customer engagement activities support the key objectives of our Regulatory Proposal and resultant expenditure forecasts, and demonstrate that our proposals are reasonable in the context of giving effect to the views of our customers. Through this engagement we have identified our customers' priorities as being:



Safety Leader



Affordability



Reliability



Good customer service  
& communication



Transparency/  
bill itemisation



Environmentally friendly/  
encouraging renewables



Innovative  
technologies

Our Customer Engagement chapter of our Regulatory Proposal provides further information on our customer engagement activities and outcomes.

## Key assumption 8 – Investment in Technology

We consider that this is a key assumption as the proposed investment in technology will enable further reductions to Essential Energy's forecast operating and capital expenditure. This assumption is material to the forecast efficiency improvements for both operating expenditure and capital expenditure for the 2019-24 regulatory period. Without the proposed investment in technology Essential Energy will not be able to achieve the forecast expenditure levels.

The significant business improvements achieved since 2011-12 have been largely achieved through the introduction of major workforce reforms and constraining costs wherever possible. To maintain these improvements, and to continue delivering further improvements in efficiency and productivity, the business must now move into a phase of innovation and investment in technology. This is a much more complex and challenging stage in our strategy, however, our forecast reductions in expenditure in this and future regulatory periods are not achievable without making these conservative yet critical investments.

Further information on our proposed investment in technology can be found in our Delivering Value chapter of our Regulatory Proposal.

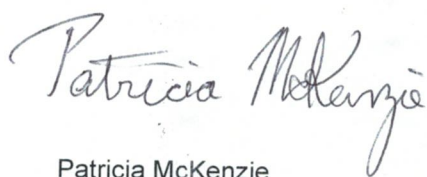
## Certification under clauses S6.1.1(5) and S6.1.2(6) of the National Electricity Rules

The undersigned chair of Essential Energy certifies that:

In accordance with schedule 6.1.1(5) of the National Electricity Rules, the key assumptions that underlie the capital expenditure forecast as set out in the Regulatory Proposal are reasonable.

In accordance with schedule 6.1.2(6) of the National Electricity Rules, the key assumptions that underlie the operating expenditure forecast as set out in the Regulatory Proposal are reasonable.

Signed in accordance with a resolution of directors.



Patricia McKenzie

Chair

28/4/18

Dated