

A photograph of a multi-lane highway interchange with a sign for 'Turbot St EXIT'. The image is overlaid with a dark purple and blue gradient. The text is white and bold.

# **SUBMISSION TO THE AUSTRALIAN ENERGY REGULATOR ON ENERGEX'S REGULATORY PROPOSAL FOR THE 2015-2020 REVENUE DETERMINATION**

**CHAMBER OF COMMERCE AND INDUSTRY QUEENSLAND SUBMISSION**

30 January 2015

## CONTENTS

1.0 OVERVIEW.....	3
2.0 REVENUE AND SOLAR BONUS SCHEME.....	5
3.0 CAPITAL EXPENDITURE.....	8
- Replacement expenditure.....	8
- Augmentation.....	9
4.0 OPERATING EXPENDITURE.....	12
5.0 RATE OF RETURN.....	14
- Departures from AER guidelines.....	14
- Return on debt.....	15
- Return on equity.....	15
6.0 CONSUMER ENGAGEMENT.....	17
7.0 FUTURE TECHNOLOGY.....	19
8.0 CONCLUSION.....	19

## 1.0 Overview

- 1.1 The Chamber of Commerce and Industry Queensland (CCIQ) welcomes the opportunity to provide a submission to the Australian Energy Regulator (AER) on the Queensland electricity distribution network determination process for 2015-2020 for Energex.
- 1.2 As Queensland's peak industry body, we wish to work with Government bodies to achieve the best possible outcomes for businesses in this state. There is much to be done to realise the potential of the energy sector to enable Queensland small businesses to make a significant contribution to our economy.
- 1.3 In particular, electricity price rises since 2007 are taking a toll on small businesses who are failing to keep pace. This in turn impacts on Queensland's economy as increases in the price of power increase the cost of doing business and the cost of goods and services in Queensland. Queensland's small and medium enterprises (SMEs) play a pivotal role in achieving the growth of our four pillar economy.
- 1.4 The supply and cost of energy is a key issue for Queensland businesses. Businesses rightfully expect a reliable, efficient and cost-effective energy sector.
- 1.5 Queensland's electricity costs represent a major area where we can either stimulate or suppress ongoing economic growth. As with other 'costs of doing business' CCIQ believes we should champion the need to keep them as low as possible and develop an energy sector that is nationally and internationally competitive.
- 1.6 CCIQ believes that the energy sector must deliver greater certainty, operational efficiency, strategic future focused planning and investment, service excellence and be integrated and harmonised with energy efficiency policy. Above all it must be conducive to and support business and economic growth in Queensland.
- 1.7 The AER revenue determination process is particularly pertinent, as the network cost component makes up the majority of the average electricity bill. Therefore, in order for small businesses to see real cost savings, the network charges must be drastically reduced.

1.8 Many Queensland small businesses have done all they can do to reduce usage and exercise operational efficiencies. It is now time for the electricity industry to submit revenue proposals that will deliver real price reductions for electricity consumers in Queensland.

1.9 It is pertinent to recognise that without significant cost reductions, small businesses will be forced to seek alternative arrangements or inevitably close their doors.

1.10 CCIQ acknowledge that Energex has proposed to deliver price stability in the coming years and purport to have taken positive steps to minimise the impact of rising electricity prices.

1.11 Energex's proposal seeks to recover less capital expenditure (capex) and operational expenditure (opex) than the previous regulatory period. However, overall revenue figures are higher than the previous period which translates to continued proportionally high prices for consumers and on-going financial burden.

This submission will address the following concerns:

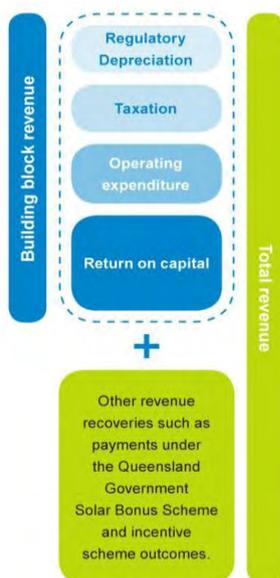
- Revenue and solar bonus scheme;
- Capex;
- opex;
- rate of return;
- consumer engagement; and
- future technologies.

## 2.0 Revenue and solar bonus scheme

The total revenue requirement is the amount of money needed to efficiently manage and operate a network business during the 2015-20 regulatory period in order to deliver a safe and reliable electricity service. Energex’s revenue is established using a ‘building block approach’ (see Figure 1).

**Figure 1**

### Building block approach



*Source: Energex Regulatory Proposal Overview Paper p18*

Revenue is a key part to the Energex’s proposal and they recover this through the network prices they develop. For the 2015-20 period, Energex are seeking approval for \$8.4 billion of revenue. This is up from the amount that was approved by the AER during the previous period of \$7.4 billion. One of the major drivers of revenue in the 2015-20 period is the solar bonus scheme. Currently, payments for the Queensland Government Solar Bonus Scheme are funded through Energex’s revenue and network electricity prices. Should the Queensland Government fund these payments in a different manner, Energex has proposed that their revenue and network prices would decrease as a result.

Energex have reportedly experienced significant under-recovery of revenue in the previous regulatory period and are in turn now seeking compensation for this variation against budget

through their 2015-2020 proposal. This under-recovery has arisen from lower than forecast energy usage resulting from increased energy conservation, use and installation of energy efficient appliances and the high uptake of solar PV. Energex has estimated the under recovery of charges at approximately \$1.4 billion and is accordingly seeking to now recover this revenue through the 2015-2020 determination.

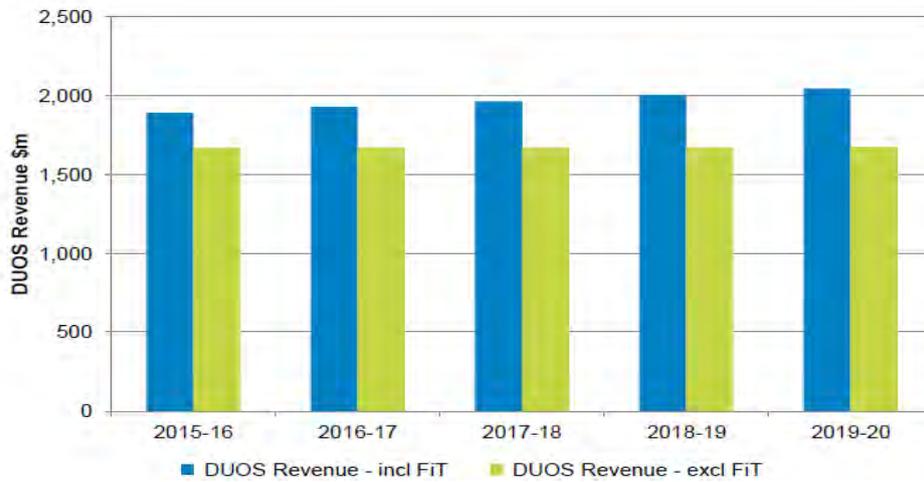
CCIQ is aware that the Queensland LNP Government has mandated to remove the cost of the Solar Bonus Scheme as part of their Strong Choices Cost of Living Fund. However, if this plan is not implemented Queensland consumers should not have to continue to subsidise the cost of solar usage through their power bills. Queensland consumers are already heavily burdened by the impost of costs associated with the Solar Bonus Scheme and it is unacceptable that they should be responsible for compensating the failure of Energex to adequately forecast demand. CCIQ urges the AER as part of its determination to prevent Energex from recovering these costs from consumers and recommends that these charges should be absorbed by Energex.

As can be seen in Figure 2, Energex's revenue forecast for the 2015-20 period continue to trend upwards. Energex claims that its proposed revenue would result in annual price increases of around 2 per cent. It is evident that the only relief energy customers are likely to experience is if the solar bonus scheme costs are removed (Figure 3). Small to medium business customers would be likely to see network tariff price decreases of up to 8.4 per cent in the first year without the solar bonus scheme costs. However, small to medium business network tariffs inclusive of the solar bonus scheme costs will see increases of 3.5 per cent year on year.

CCIQ is concerned that Energex's proposal appears to consider that ongoing price increases are acceptable. It is important to stress that Queensland small businesses are struggling to cope with current prices.

**Figure 2**

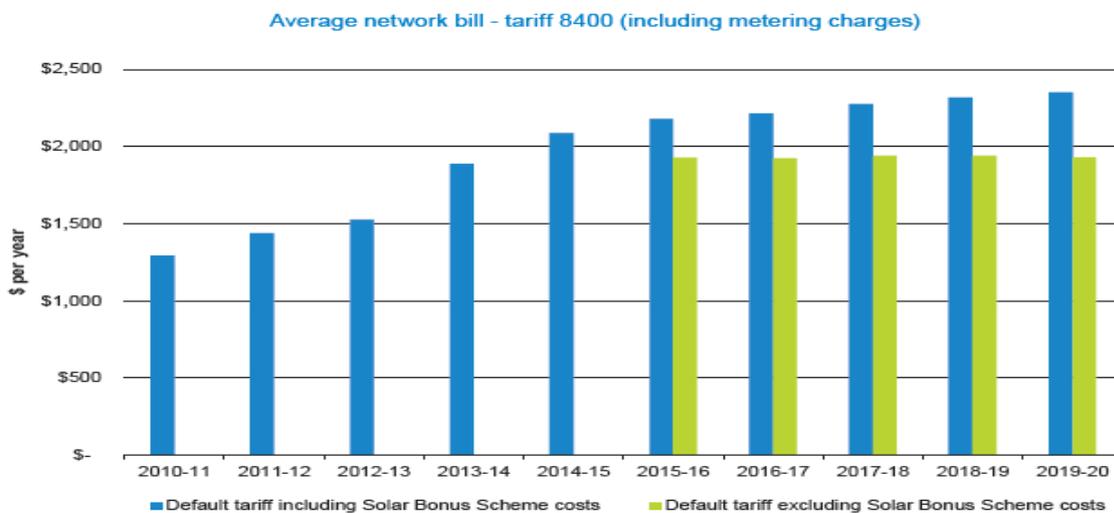
**Revenue in 2015-20 with and without solar feed in tariff**



Source: Energex revenue overview

**Figure 3**

**Small to medium business customers with and without the Solar Bonus Scheme**



Source: Energex Regulatory Proposal Overview

*Recommendation 1: CCIQ urges the AER to prevent Energex from recovering the Solar Bonus Scheme costs from consumers and recommends that these charges should be absorbed by Energex.*

## 3.0 Capital Expenditure

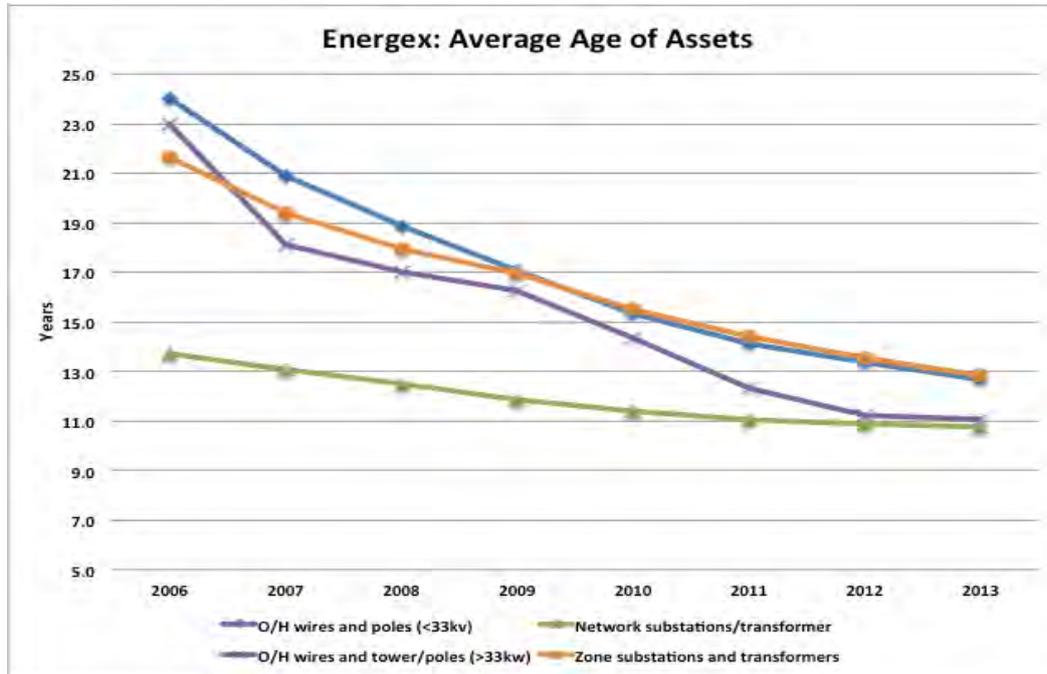
CCIQ has many concerns surrounding the calculations provided by Energex in relation to their capital expenditure (capex). The proposed levels of augmentation capex are inconsistent with the flat/declining demand trends and reduced reliability standards that have been recorded throughout SEQ. Additionally, the proposed levels of replacement capex are significantly above the underlying needs and CCIQ question Energex's classification of supposed 'ageing assets'. The elements that make up the total capex consist of network augmentation (augex), asset replacement expenditure (repex) and connections. Capex refers to the capital expenses incurred in the provision of network services. Energex has proposed a total capex 33 per cent lower than its actual capex in the previous period. These lower capex forecasts reflect lower forecast expenditure on augmentation, while expenditure on aged asset replacement is expected to rise. Energex's actual spend in the last period was significantly lower than what was approved by the AER. This suggests lower than forecast peak demand as well as revised reliability standards.

Energex's capex is largely driven by their need to ensure network reliability as well as to replace ageing assets. A majority of Energex's capex requirement consists of replacing or repairing network equipment (55%), followed by building new network substations and circuits to supply growth areas and improve reliability (22%).

### **3.1 Replacement expenditure:**

Given that repex makes up over half of Energex's capex calculation, it is important to assess whether the repex is based on prudent and efficient forecasts. In order to do this it is necessary to assess the age and condition of the network. Energex is proposing a 66 per cent increase in repex compared to its actual spend in the previous period. These levels of expenditure are very high by historical standards and follow substantial replacement capex programs during the previous regulatory periods. As provided in the AER's Issue Paper, the repex proposals are considered to be a key issue for assessment as repex levels should remain relatively constant over time. As can be seen in the following graph figure 4, the average age of Energex's assets has been rapidly decreasing since 2006.

**Figure 4**



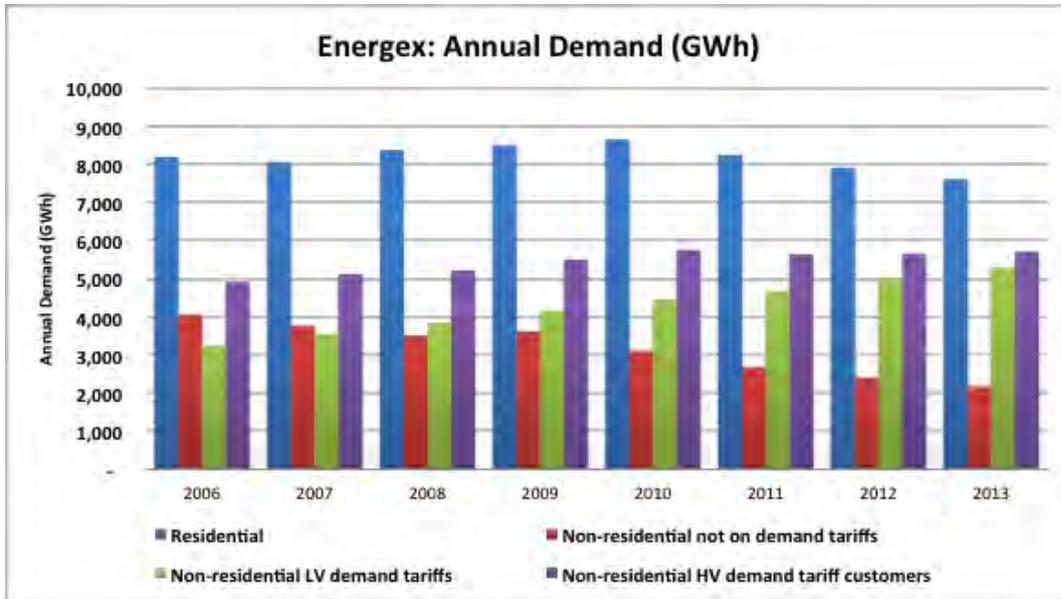
Source: Bev Hughson Analysis of Energen RINS Data

The proposed levels of repex appear very high, particularly in light of the substantial replacement capex programs performed during the previous regulatory periods as well as the asset age and asset utilisation trends which are notably declining. CCIQ would expect to see reductions in repex of around 40 per cent similar to those of other AER determinations.

**3.2 Augmentation:**

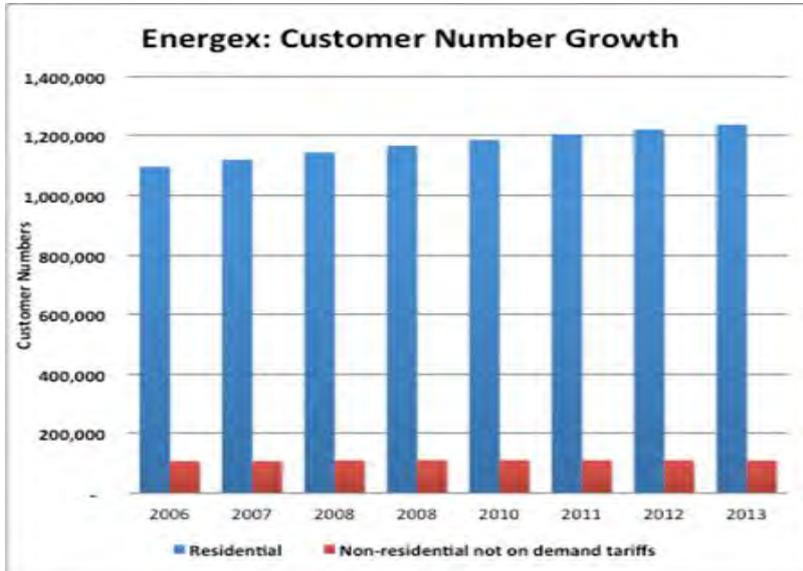
When assessing revenue attributed to the growth of the network it is important to assess whether the forecasts of energy demand and peak demand are accurate. Augmentation is undertaken in response to increasing demand which places overall pressure on the networks capacity. More specifically, peak demand is notably the key driver in augmentation requirements. In light of this, annual demand and customer growth must be reviewed. It appears that both annual demand and customer growth are either flattening or declining as seen in figures 5, 6 and 7.

Figure 5



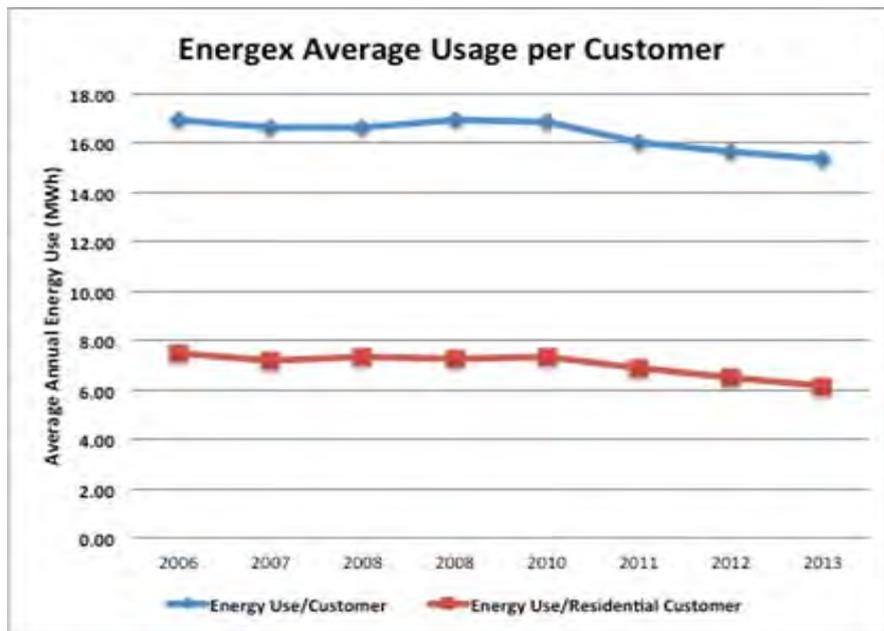
Source: Bev Hughson Consumer Challenge Panel

Figure 6



Source: Bev Hughson Consumer Challenge Panel

Figure 7



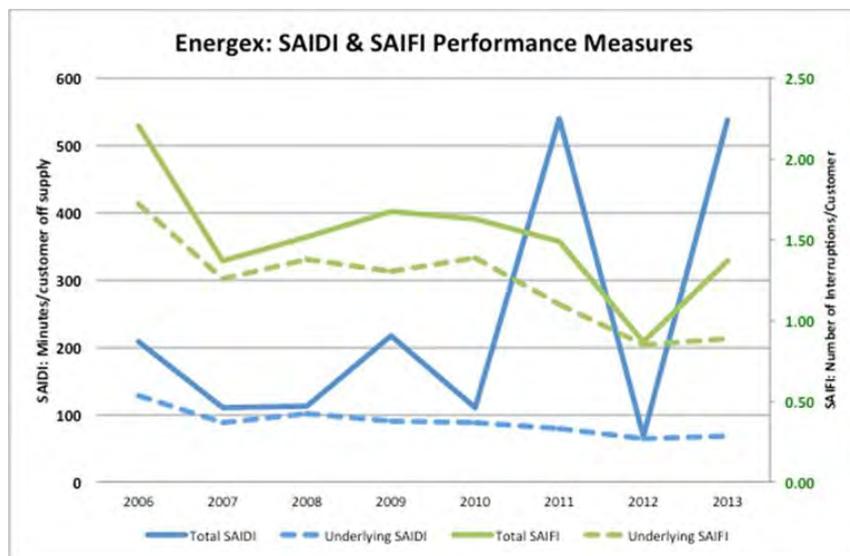
Source: Bev Hughson Consumer Challenge Panel

Whilst the key driver for augmentation is related to increasing demand, Energex claim that these figures are required in order to maintain the average age of the network within an acceptable range, consistent with their reliability and safety obligations. However, it can be seen that reliability standards have been well above the regulatory standards (figure 8), suggesting that they are too high. These factors are inconsistent with the figures proposed by Energex, and there is little evidence of reasonable justification within their proposal for increased augex. This is largely concerning to CCIQ as poor forecasting of demand from the previous period have shown extremely negative impacts on consumers.

Additionally, there is no mention in Energex’s proposal of their purported plans to implement new tariffs to address peak demand. Should these new tariffs significantly reduce peak demand, overall demand is likely to fall as a result. Energex has not demonstrated that this has been adequately considered as part of their demand forecasting methodology.

## Reliability Capex

Figure 8



Source: Bev Hughson Consumer Challenge Panel

*Recommendation 2: CCIQ urge the AER to implement reductions in repex of around 40 per cent similar to those of other AER determinations.*

*Recommendation 3: Energex should adjust their augmentation assessments to adequately reflect the implementation of future peak demand programs.*

## 4.0 Operating Expenditure

Energex has proposed very minimal reductions in their operating expenditure (opex) of around 5 per cent lower than its actual spend in the previous period.

Also, Energex's opex figures are not adjusted for inflation and so are lower over the forward estimates than other distributors' figures (Ergon Energy). The Energex opex figures also do not include any opex associated with type 5 or 6 meters or solar feed-in-tariffs as was done in the previous period thus making them appear less. These omissions are a deliberate display of veiling the true costs being proposed.

Other opex issues to consider include the possibility of adjusting other operational activities. Firstly, should the solar bonus scheme continue to be financed through network tariffs, CCIQ suggest that it may be more appropriate to alter the recovery arrangements more moderately, such as being

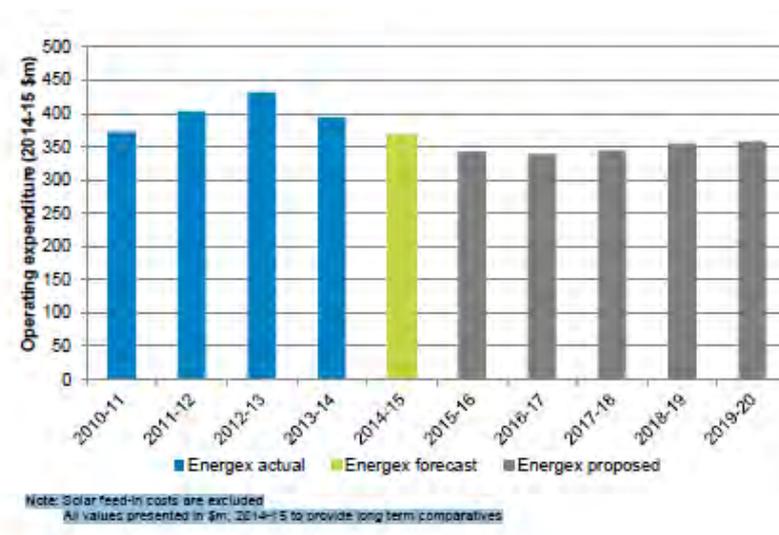
spread over 5 years rather than 2. This would drastically reduce the detrimental price impacts on customers in the first two years.

Secondly, labour costs such as salaries and the size of the workforce should be appropriately assessed. Given the reduced capex and opex forecasts going forward, the size of the workforce should be presumably less. Furthermore, salaries of staff/labour should take account of lower demand, weak economic conditions and rigidities in industrial relations arrangements.

Additionally, CCIQ understand the importance of maintaining sufficient workforce numbers in order to service the network when needed. However, provided Energex reported that feedback confirmed customers were not willing to increase reliability or service from current standards, it is not clear what is driving the opex increases in the last 3 years of the proposed period (see figure 9).

**Figure 9**

**Energex trend opex over 2010-2015 and 2015-2020 regulatory periods**



Source: Energex Regulatory Proposal, Figure 10.1, p.124

*Recommendation 4: Where Solar Bonus Scheme costs are financed through network tariffs, recovery costs should be spread over a longer period.*

*Recommendation 5: Energex’s workforce size should appropriately reflect the reduced capex and opex forecasts.*

*Recommendation 6: Workforce salaries should take account of lower demand, weak economic conditions and rigidities in industrial relations arrangements.*

## 5.0 Rate of Return

The allowed rate of return provides a distributor a return on capital to service the interest on its loans and give a return on equity to investors. To estimate this cost, two sources of funds for investments are considered – equity and debt:

- the return on equity is the return shareholders of the business will require to attract new investment; and
- the return on debt is the interest rate the distributor pays when it borrows money to invest in capex.

Energex has proposed a rate of return of 7.75 per cent. This rate is lower than what was afforded to them in the 2010-15 period where it was 9.72 per cent. CCIQ believes that the proposed rate remains excessively high. Energex's overall rate of return reflects:

- a return on debt of 5.91 per cent
- a return on equity of 10.5 per cent
- gearing of 60 per cent

### **5.1 Departures from the AER guidelines:**

The AER formulated and published a Rate of Return Guideline in December 2013 which whilst not binding, is the preferred approach distributors are to use in determining their rate of return. Energex has departed from the AER guidelines in calculating their rate of return, specifically in the following areas:

- estimating the return on equity
- method for averaging the return on debt estimates
- return on debt benchmark credit rating
- return on debt minimum averaging period
- estimating the value of imputation credits.

Under the National Electricity Rules (NER) the regulated rate of return is calculated on the basis of the weighted average cost of capital (WACC). The objective of the NER in relation to the allowed rate of return is as follows:

*The allowed rate of return objective is that rate of return for a DNSP is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the DNSP in respect of the provision of standard control services.*

Therefore, the rate of return proposed by Energex is expected to represent the efficient financing cost of a benchmark efficient entity of similar degree of risk, in CCIQ's opinion it is not.

#### 5.1.1 Return on debt

Energex considers that the benchmark credit rating should be based on recent observations and therefore proposed to use BBB as the benchmark, instead of BBB+ as advised in the AER's Guidelines. Energex has estimated the BBB debt margin based on the RBA's 10 year BBB yields. This way Energex use RBA data on 10 year debt that is only published one day in each month, as opposed to the AER requirement of 10 consecutive days of publication. CCIQ recommend that a short and current debt observation window be used in light of recently falling rates.

The AER Guideline sets a benchmark credit rating of BBB+ based on the median credit rating for a sample of Australian utilities from 2002 to 2012. CCIQ believe that the credit ratings of BBB and BBB+ are both too low for Energex given their low cash flow volatility. It is CCIQ's view that Energex has the opportunity to manage debt funding risk, base interest risk, credit cost risk and inflation risk completely independently from one another. These flexibilities demonstrate that as a utility provider Energex has significantly more policy and product flexibility to reduce debt costs and manage risks than private sector borrowers.

#### 5.1.2 Return on equity

Energex propose to depart from the AER Guidelines in their return on equity calculations so as not to apply the Sharpe-Lintner Capital Asset Pricing Model (SLCAPM). The AER consider the Sharpe-Lintner model as the superior model for their purposes in calculating an appropriate return on equity. Energex has applied a range of models to determine the selection of the appropriate value from the range suggested by the Sharpe-Lintner model. Energex has been consistent with the AER's Guideline regarding the choice of model, but has departed from the Guideline in the application of the

foundation model. CCIQ believe that Energex has chosen not to apply the Sharpe-Lintner model as it under-estimates the return on equity for low risk companies such as electricity distributors.

The risk free interest rate is an input into the cost of equity calculation in the CAPM. The SLCAPM is estimated by adding the risk free rate to the product of the equity beta and market risk premium. The AER's approach is to estimate the risk free rate based on market conditions that prevail as close as possible to the commencement of the regulatory control period. The AER Guideline proposes to use 10-year Commonwealth government securities based on the 'prevailing' yield averaged over a short period close to the date of the determination. The AER's point estimate for equity beta is 0.7 and market risk premium is 6.5 per cent, resulting in an equity risk premium of 4.55 per cent. Energex has proposed an equity beta of 0.91 and market risk premium of 7.75 per cent in applying their foundation model approach. CCIQ assert that a low market risk premium be used preferably within the range of 5 per cent – 7.5 per cent. Furthermore, the risk free rate should be set over a term shorter than 10 years.

The assessment of the equity beta is an important factor in determining the overall return on equity. The equity beta for a firm or industry modifies the market risk premium calculated for the market as a whole, based on the relative risk. It is widely accepted and acknowledged that Australian utilities face a much more stable business environment than the market as a whole. Network businesses are able to present themselves to investors as providing stable long term regulated cash flows and as regulated monopolies with high barriers to entry. It was decided during the 2013 Better Regulation process that an equity beta of well below 1 reflects the very low risks of the regulated network businesses compared to the market as a whole. Additionally the AER conducted a number of empirical studies, including the extensive 2009 study undertaken by Professor O Henry which included multiple analyses of Australian utility data returns. The AER concluded from these studies that the range of equity betas derived from the empirical analysis was between 0.4 and 0.7. CCIQ believe that Energex's proposed equity beta of 0.91 is an inaccurate calculation given Energex's significantly reduced risk compared to the risks in the market as a whole.

CCIQ recommends an equity beta of lower than 0.7 be used. An equity beta of 0.7 would still be at the top end of the estimated range of 0.4 to 0.7. The following table depicts other equity regulatory benchmarks for a variety of sectors. In comparison, Energex's proposed rate of equity of 10.5 per cent is well in excess of the average rate other regulated sectors have been approved.

**Figure 10**

**Table B.2 Other regulators' estimates of the expected return on equity**

Regulatory authority	Decision date	Sector	Return on equity (per cent)
ERA	July 2013	Rail	6.04 – 9.28 <sup>(a)</sup>
ESC	June 2013	Water	7.13
IPART	June 2013	Water	8.3 – 9.3 <sup>(b)</sup>
ESCOSA	May 2013	Water	8.59
IPART	May 2013	Water	8.3 – 9.3 <sup>(b)</sup>
QCA	April 2013	Water	6.19
ERA	January 2013	Water	6.62

Notes: (a) This ERA decision included estimates for three networks. The two estimates included in this table reflect equity beta estimates of 0.45 and 1.0.  
 (b) This range is estimated using the mid-points of IPART's input parameter ranges.  
 Source: AER analysis, ERA, ESC, QCA, IPART, ESCOSA.<sup>116</sup>

Source: AER Explanatory Statement RoR Guideline, Appendix C, p32

*Recommendation 7: CCIQ recommend that a short and current debt observation window be used in light of recently falling rates to calculate return on debt*

*Recommendation 8: CCIQ believe that the credit ratings of BBB and BBB+ are both too low for Energex given their low cash flow volatility and thus a higher rating should be applied.*

*Recommendation 9: CCIQ assert that a low market risk premium be used preferably within the range of 5 per cent – 7.5 per cent. Furthermore, the risk free rate should be set over a term shorter than 10 years.*

*Recommendation 10: CCIQ believe that Energex's proposed equity beta of 0.91 is an inaccurate calculation given Energex's significantly reduced risk compared to the risks in the market as a whole. CCIQ recommends an equity beta of lower than 0.7 be used.*

## 6.0 Consumer Engagement

CCIQ participated extensively in Energex's consumer engagement program in the lead up to their regulatory proposal submission. Energex conducted a number of information sessions designed to inform rather than consult with consumer groups on specific aspects of their proposal. There were approximately 7 workshops which were held from March 2014 up until the submission of the proposals in October 2014. Energex has dedicated lengthy material in their proposal to represent

the extent of their consumer engagement activities. However, it is not clearly evident where consumer feedback has been used to sway Energex decision making.

Whilst CCIQ has been actively involved in consultation engagement with Energex over the past 8 months in relation to their regulatory proposal, it is worth noting that there continues to remain many barriers for encouraging consumer engagement with network service providers. CCIQ takes the view that the sheer size of Energex's proposal acts as a significant barrier to consumers' participation in the regulatory process. Despite Energex producing a number of 'overview' and 'summary' documents, there remains a significant amount of spin within the proposal. A large proportion of the documents are also dedicated to justifying variations from the AER Guidelines, which would otherwise not be necessary if a more strategic approach was adopted.

Energex were clear that their engagement program was to conduct workshops that aimed to inform consumer groups to actively participate in the regulatory process. Whilst CCIQ found these information sessions useful, they stopped short of meeting consultative requirements that are prescribed under the AER Guidelines. There were significant delays in postulating proposed facts and figures that were likely to be included in the final proposal, which made it difficult for consumer groups to provide meaningful comment. Many of the initial interactions lacked the transparency needed for CCIQ to engage effectively. Despite being required to sign a confidentiality agreement in order to participate, CCIQ felt Energex remained wary of divulging appropriate detail, particularly in relation to capex, opex and rate of return figures. Once this information was eventually disclosed, CCIQ felt there was minimal opportunity to influence change or digression from what was to be proposed.

Whilst CCIQ understands that this was the first time that Energex has conducted consultation sessions with consumer groups of this nature, CCIQ believes there is much room for improvement. CCIQ recommends that in future, Energex engage with consumer groups much earlier in the process. CCIQ also recommends that consumer groups be afforded more opportunity to actively influence Energex's decision making process.

*Recommendation 11: Energex should seek to engage with consumer groups much earlier in the regulatory process to allow for consumers to actively influence Energex's outcome.*

## 7.0 Future Technologies

CCIQ believe that Queensland distributors have a lot to learn from the recent trends in new technological change in the energy sector. The high uptake of solar PV in SEQ is one example of the sheer popularity of adopting alternatives to relying on existing sources of electricity. Whilst Energex has made mention of the impact of solar PV, it related predominantly to their need to adapt their network to accommodate two-way energy flows.

Energex has attributed little in their proposal to address the impact emerging technologies is likely to have on their overall demand and customer rates. CCIQ was disappointed to be continually dismissed by Energex technical staff when expressing that many small business operators had communicated they were implementing alternative technologies and even going 'off the grid' to counter the effect of high prices.

Energex centred their discussions around displaying that solar PV had little impact on overall peak demand. Nevertheless, CCIQ finds it difficult to believe that with the increasing availability of affordable technologies such as batteries, this would not affect Energex's future demand forecasting. Energex believe this is not likely to be a reality until the next regulatory period, however, it is CCIQ's understanding that energy customers are implementing these technologies today and Energex would be wise to ensure that their proposal takes account of these factors. Energy customers will be paying for Energex's lack of foresight at predicting the high uptake of solar PV for the coming 13 years. Energex is now presenting the same arguments against recognising the uptake of future technologies.

*Recommendation 12: Energex should learn from previous mistakes and prepare their proposal to reflect new technologies that are being implemented today.*

## 8.0 Conclusion

Queensland small businesses have been struggling with the rising costs of electricity for the past several years. The network revenue determination process is one area where suitable influence can realise real cost savings for energy consumers. Given the network component of the average electricity bill makes up over 50 per cent, it is reasonable to expect that considerable concern

surrounds this regulatory process. The last regulatory period saw excessive overspend on network infrastructure which inevitably saw prices skyrocket. Energex's proposal suggests some price stability for consumers before 2020, but CCIQ believes there is significant fat to be trimmed off the network business to bring costs down.

Energex is seeking a total of \$8.4 billion (up from \$7.4 billion for the current five-year regulatory period). CCIQ is unaware of any private sector business at present that could increase their prices by the magnitude of what is being proposed. The practical result of this complex issue is that Queensland electricity consumers will be paying a higher electricity price than they otherwise should have to if Energex were to adopt comparable industry benchmarks.

CCIQ believes that the figures proposed by Energex in relation to their capex, opex and rate of return are excessive and will result in continuing price increases for Queensland small businesses in the coming 5 years. CCIQ urge the AER to consider that current prices are unsustainable and decreases in electricity prices are necessary for small business survival.