Consumer Challenge Panel (CCP2 Panel) Submission on Energex and Ergon Energy Capex and Opex Proposals

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1. Capital Expenditure

Energex and Ergon are currently facing very different business drivers compared to the circumstances that they claimed to exist when they were awarded record-high capex allowances for the previous regulatory period.

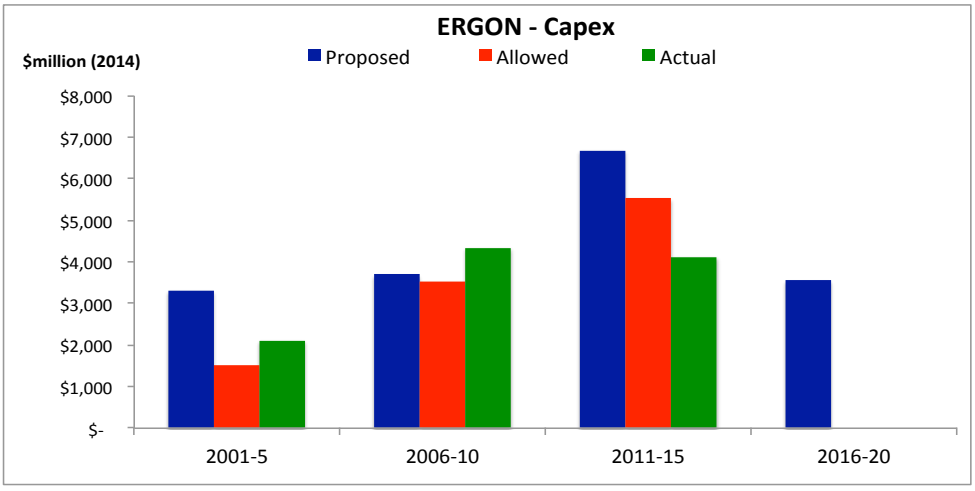
There are a number of drivers that are producing significant downward pressure on the networks' capex requirements, including:

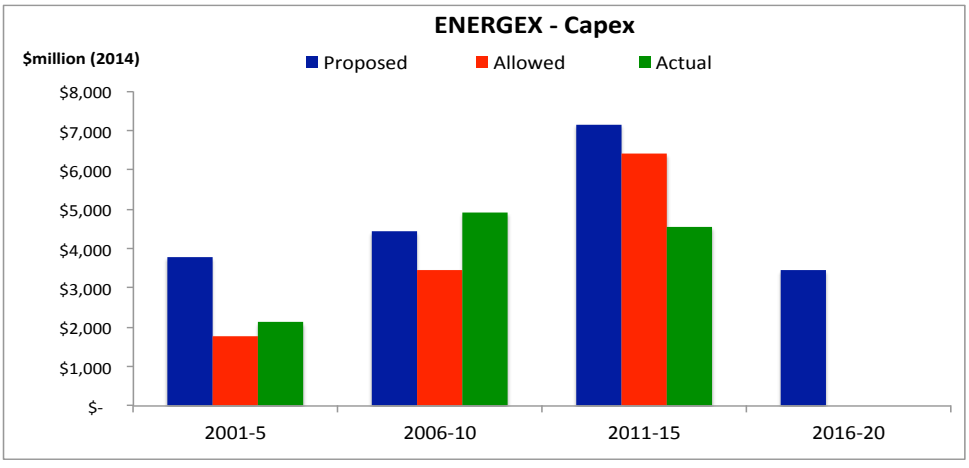
- **The significant downturn in electricity demand and consumption** - demand and consumption dropped over the previous regulatory period and are expected to remain flat over the next regulatory period
- **Less onerous network security and reliability standards** – the major network investments over the previous two regulatory periods are now delivering reliability levels well above the requirements of the revised reliability standards introduced in 2014, and well in excess consumers' willingness to pay
- **Excess system capacity** - over-investment in the networks over the previous two regulatory periods has resulted in major levels of excess capacity, declining network utilisation and significantly younger networks compared to interstate distribution networks
- **Reforms driven by the Queensland Government** - aimed at delivering major savings in capital and operating expenditures across the Queensland electricity network businesses

In light of these drivers, it is expected that the networks' capex requirements will revert to the long-term historical levels that applied prior to the previous two regulatory periods.

1.1 Comparison with Historical Capex

The charts below outline Energex and Ergon's proposed capex compared with their capex allowances and actual capital expenditure in the previous regulatory periods (all figures in 2014 dollars). [1]





[1] CCP2 (Bruce Mountain) presentation to the AER Public Forum on the Qld DNSPs' Revenue Proposals, 9th December 2014

These charts illustrate that:

- Ergon Energy is proposing a total capex similar to its total capex spend for the previous period. Energex is proposing a total capex around 25% below its capex spend for the previous period
- The networks' proposed capex levels are similar to their capex allowances for the 2006-10 period - a period that involved major increases in capex to meet the excessive reliability standards introduced in response to the 2004 EDSD review
- The networks' proposed total capex levels are 2-2.5 times their capex allowances for the 2001-05 regulatory period - a period with expenditure drivers closest to the current circumstances
- Both networks have consistently proposed capex levels significantly in excess of their actual requirements

Clearly the networks' proposed capex levels do not reflect the major capex reduction drivers outlined above.

1.2 Capex Forecasting Methodologies and Assumptions

We have a number of concerns with the networks' capex forecasting methodologies and their associated governance arrangements and assumptions, including:

- **An Over-Reliance on "Bottom Up" Forecasting Methodologies**

The networks' capex forecasts are predominantly based on 'bottom-up' methodologies, with insufficient regard to top-down considerations. Bottom-up assessments have a tendency to overstate expenditure requirements as they do not adequately account for inter-relationships and synergies between projects or areas of work, which are more readily identified at a portfolio level.

Supplementing bottom-up forecasts with top-down assessments is essential for ensuring that some level of overall restraint has been brought to bear.

As outlined in the AER's draft determinations for the NSW DNSPs:

"Historically, regulatory assessments of capital expenditure programs have predominantly incorporated bottom up assessments of a sample of projects and/or programs, with minimal top down assessment of the overall level of capex, underlying drivers and impacts on network prices. ***Given the substantial information asymmetry between DNSPs and regulators, past approaches have had limited success in determining an efficient overall level of capex****. It is far more difficult for a regulator to reject capital expenditure proposals on an individual project-by-project basis compared to setting a top down overall efficient level of capex within which DNSPs can prioritise individual projects"*

- **Overly Conservative Risk Management/Risk Assessments**

The DNSPs' capex forecasts are based on risk-averse and overly conservative risk assessments, together with multiple contingency allowances that systematically overstate project risks and costs

- **Inadequate Project Justifications**

The networks' proposed capex projects are very poorly justified, e.g.:

- Insufficient justifications of the demand drivers for growth-driven projects
- Insufficient justifications of asset conditions for replacement capex
- Insufficient justifications of reliability drivers and consumers' willingness to pay for reliability-driven capex
- Insufficient justifications of the prioritisation and timing of projects/programs over both the short and long-term

- **Non-Credible Assumptions**

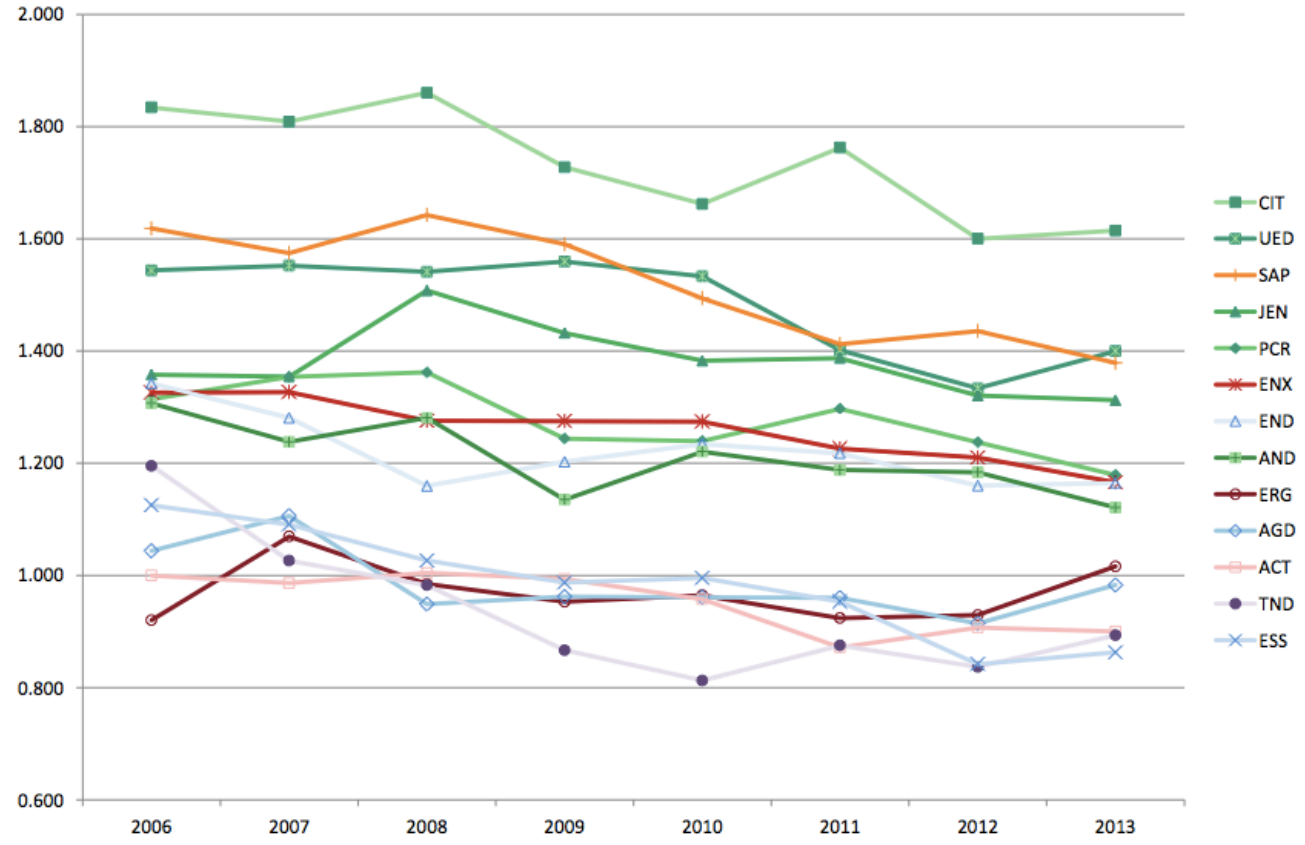
The manner in which the networks have formulated and applied their key assumptions in relation to demand, customer forecasts, reliability drivers and materials and labour escalation rates appear to be strongly biased towards over-estimating their capex requirements.

1.3 Capital Efficiency

The AER's benchmarking results [2] reveal that the Queensland DNSPs' capital efficiency levels are significantly lower than the levels achieved by other DNSPs in the NEM.

As illustrated in the chart below, the AER's Multilateral Total Factor Productivity (MTFP) results indicate that Ergon Energy is one of the least productive distributors in the NEM. Energex's productivity is also relatively low and deteriorating.

Figure 16 Multilateral total factor productivity for each distributor

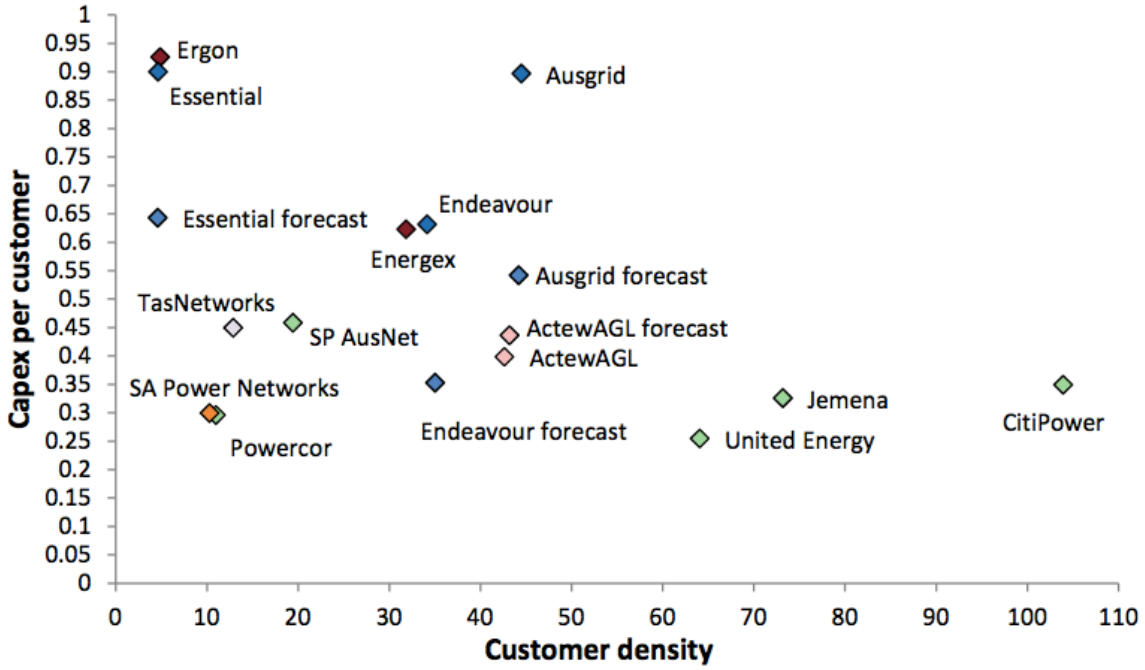


The charts overleaf illustrate that Ergon Energy had the highest levels of 'capex per customer' and 'RAB per customer' in the NEM for the 2008-2012 period, with levels of around 4.5 times the Victorian DNSPs.

Energex's capex and RAB levels per customer were also very high, at around 2.5 times the levels of the Victorian DNSPs.

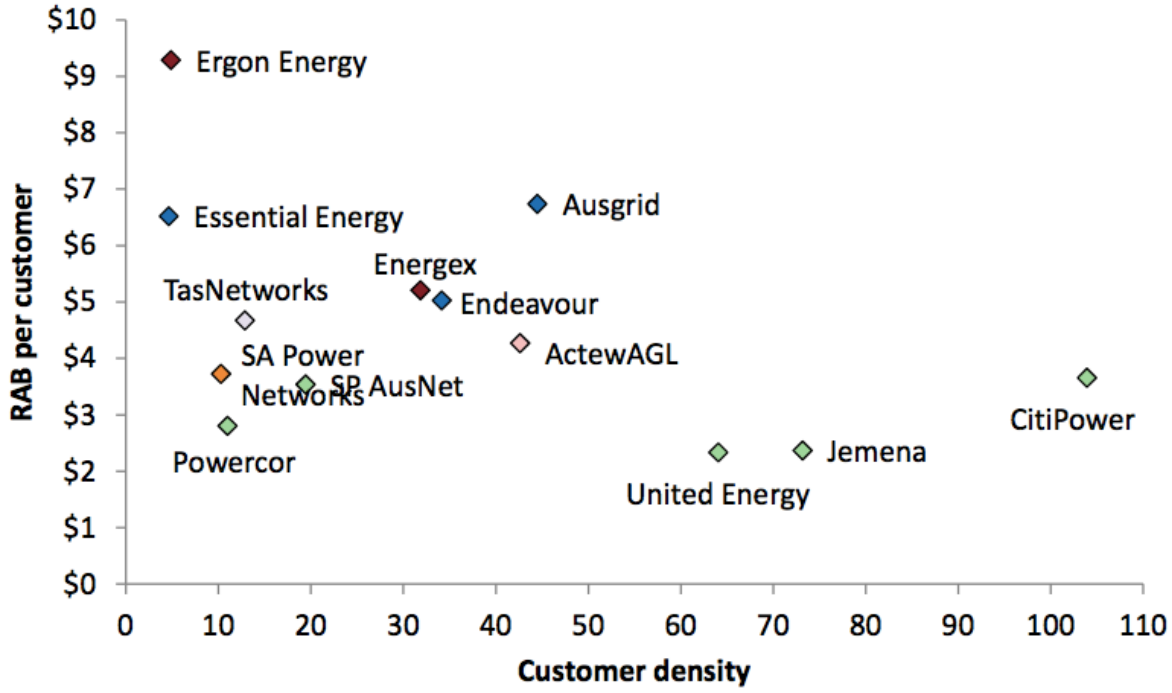
[2] AER Annual Distribution Benchmarking Report, November 2014

Figure 6-4 Capex per customer (000s, $2013-14), against customer density



Source: AER analysis.

Figure 6-6 RAB per customer (000s, $2013-14), against customer density

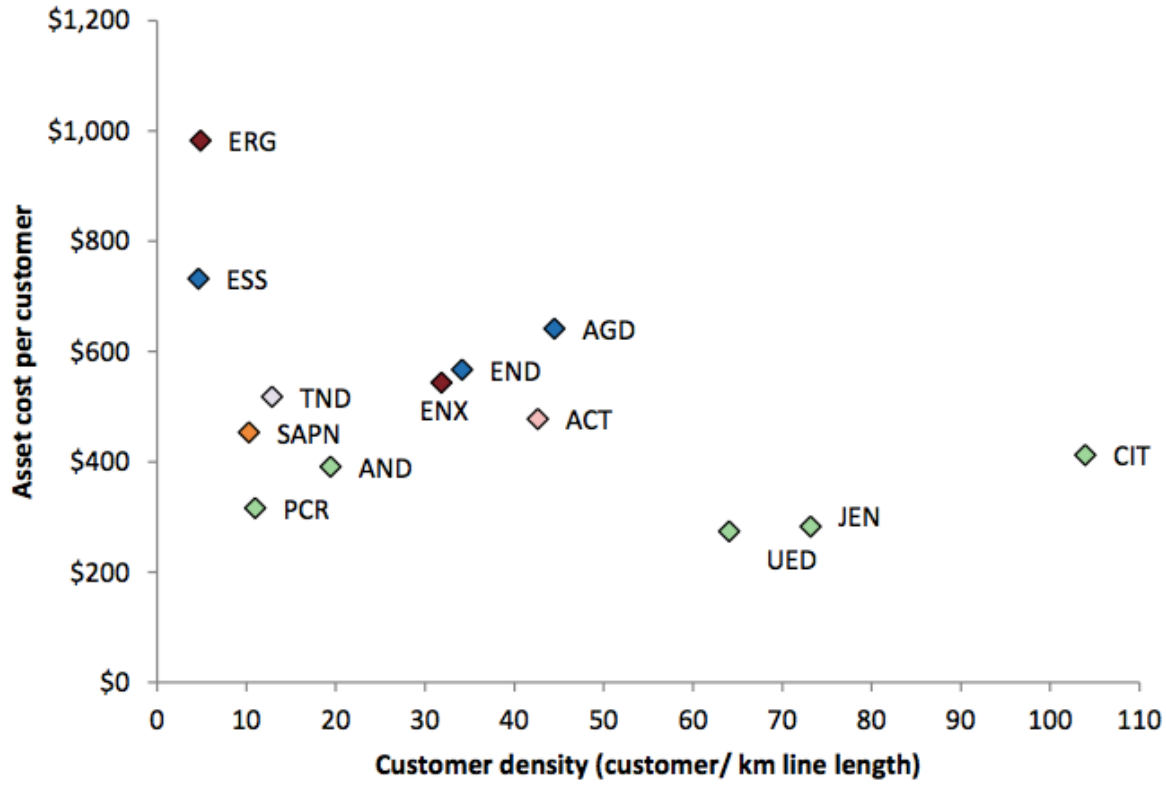


Source: AER analysis

The chart below illustrates that Ergon had the highest asset cost per customer in the NEM, at approximately 4 times the costs of the Victorian DNSPs.

Energex's asset cost per customer was over double the Victorian DNSPs' costs.

Figure 13 Asset cost per customer compared to customer density (average 2009–2013)



The above information indicates that there is the potential for significant efficiencies to be found in the Queensland networks' forecast capex.

These findings were strongly reinforced by the following findings on Energex and Ergon's capital efficiency by the *Queensland Government Independent Review Panel (IRP) on Network Costs* [3]*:*

- *"An industry engineering* ***culture biased toward expanding the network infrastructure and enlarging the capital base*** *of the NSPs -* ***driving inefficient expenditure****"*
- *"A* ***deficient commercial model*** *in that there was* ***no rigorous capital rationing*** *by the Government, as shareholder and provider of capital, to guide investment decisions"*
- *"A* ***regulatory model that does not allow*** *the Australian Energy Regulator (AER) to drive* ***the networks to deliver efficient capital*** *and operating programs"*

[3] Queensland Government Independent Review Panel (IRP) on Network Costs, Final Report

1.4 The AER's Capex Assessment Process

In light of the above issues, it is clear that the AER will be required to determine substitute capex forecasts that better reflect the capex objective.

We anticipate that the AER will adopt an assessment process similar to the process that it adopted in its draft determinations for the NSW DNSPs, applying various techniques including:

- A mix of top-down analysis, predictive modelling and adjustments to the bottom-up forecasts submitted by the networks
- Benchmarking - to assess the DNSPs' overall efficiency compared with other DNSPs
- Trend analysis and predictive modelling
- Engineering reviews - including reviews of the DNSP's governance, risk management, asset management, project scoping and project justification processes
- Cost-benefit analyses to test whether the proposed expenditure is efficient and prudent
- Reviews of the DNSPs' key assumptions regarding demand and reliability drivers, customer forecasts and their forecast materials and labour escalation rates
- Timing considerations – including the consideration of options to defer or to undertake interim work

We outline below some key issues that we expect the AER to consider in its development of substitute capex forecasts for the Queensland DNSPs.

1.5 Capex Components

The tables below outline the networks proposed capex, broken down to the key components (all figures in nominal dollars):

Energex	**2010-15 Actual Expenditure**	**2015-20 Proposed Expenditure**	**Change**
Replacement	$1,147.1 M	$1,909.9 M	**66.5% increase**
Augmentation	$1,930.6 M	$777.9 M	59.7% decrease
Connection and Customer Initiated	$883.8 M	$513.6 M	41.9% decrease
Non System	$459.2 M	$287.9 M	37.3% decrease
Total	**$4,420.7 M**	**$3,489.3 M**	**21 % decrease**

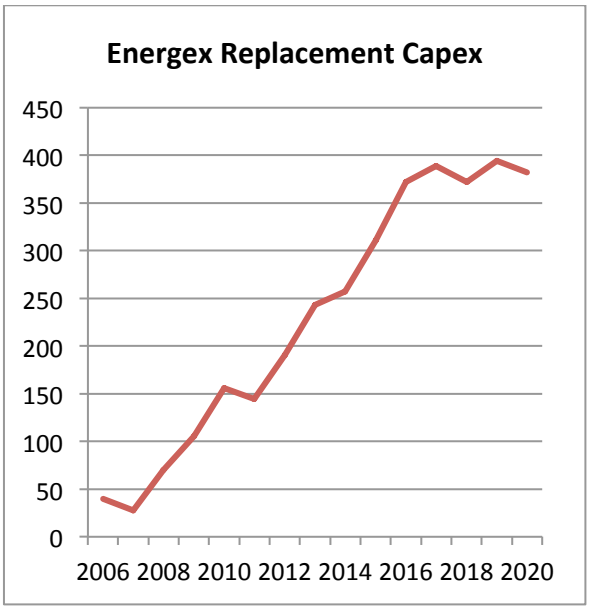
Ergon Energy	**2010-15 Actual Expenditure**	**2015-20 Proposed Expenditure**	**Change**
Replacement	$1,196.3 M	$1,467.6 M	**22.7% increase**
Augmentation	$771.9 M	$850.4 M	**10% increase**
Customer Connection Initiated	$998.6M	$1,286.4 M	**29% increase**
Reliability & Quality of Supply	$153.6 M	$18.9 M	87% decrease
Other System	$244.8 M	$159.8 M	34% decrease
Non System	$626.3 M	$645.4 M	**3 % increase**
Customer Contributions	($407.3 M)	($768.7 M)	89% increase
Total	**$3,584.2 M**	**$3,660 M**	**2.1% increase**

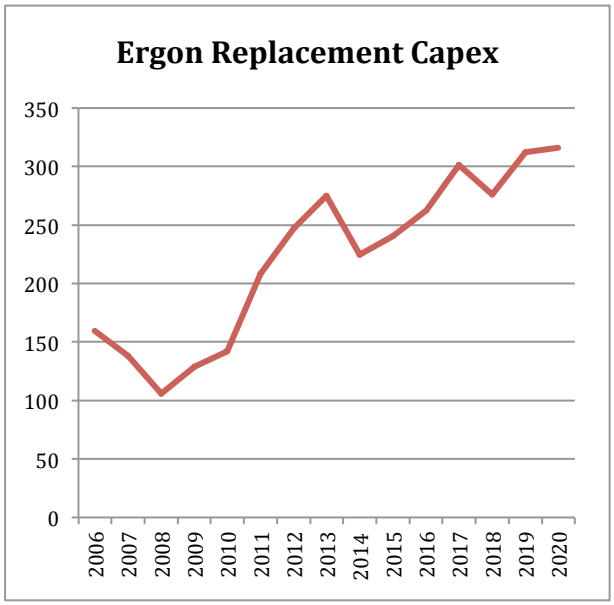
1.6 Replacement Capex

As outlined within the AER's Issues Paper [4] :

*"We consider the distributors' repex proposals to be a key issue for our assessment of their regulatory proposals overall……. **our general expectation is that repex levels should remain relatively constant over time**"*

The charts below outline the networks' historical and proposed replacement capex.





As highlighted in the above charts, the DNSPs are proposing record high levels of replacement capex, despite having undertaken major replacement capex programs over the previous regulatory periods.

For example, Energex is proposing to increase its replacement capex to an average of around $390m/annum, compared to its average repex spend of around $230m/annum for the 2010-15 period, and an average repex spend of around $80m/annum during the 2005-2010 period.

The networks' proposals do not provide any justifications for their major proposed increases, other than some unsubstantiated statements suggesting that their assets are ageing.

1.6.1 Asset Ages

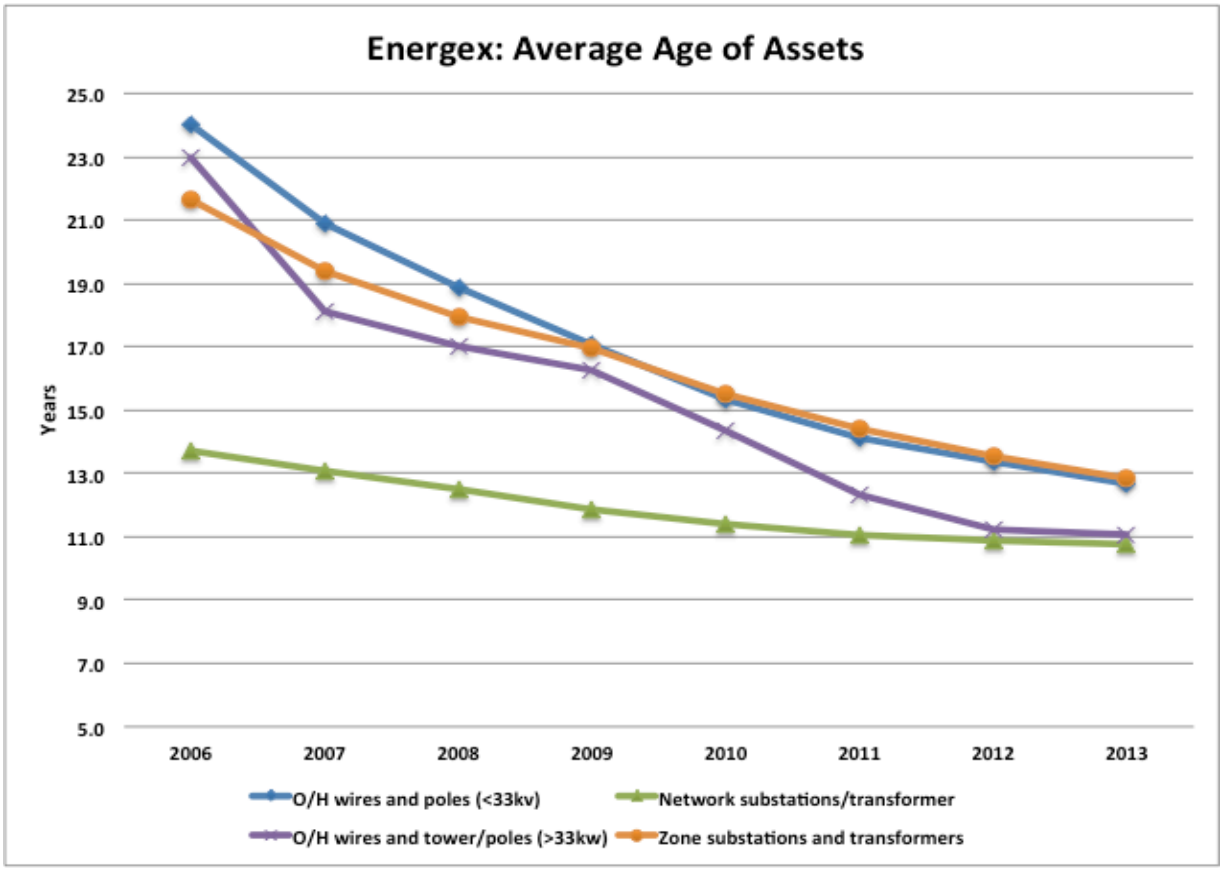
As outlined within the AER's Issues Paper: [5]

*"Despite undertaking substantial replacement programs in the 2010–15 period, the distributors have submitted that the **average age of network assets continues to increase**. They argue that their **proposed repex is required to maintain the average age of the network within an acceptable range**"*

However, an analysis of the networks' RINS data does not support the networks' claims regarding the ageing of their asset bases.

The chart overleaf outlines the trends in the average age of Energex's assets, broken down to four asset types.[6]

[4] AER Issues Paper, Page 15
[5] AER Issues Paper, Page 15
[6] Bev Hughson Analysis of Energex RINS Data



Clearly the above trends do not support claims that Energex's average asset age is increasing. As the AER is aware, the CCP presented this data at the AER Public Forum in December 2014, during which Energex's CEO acknowledged that the Energex network is relatively young and that its average asset age is reducing.

Furthermore, the networks' proposals have not justified why *their "**proposed repex is required to maintain the average age of the network within an acceptable range**"* – i.e., they have not identified the system performance outcomes that their major replacement capex programs will deliver.

We consider this to be a major deficiency in the networks' repex proposals.

1.6.2 Asset Condition

The DNSPs' repex proposals provide very scant details of asset condition information. Instead, they make broad assertions regarding average asset ages that are inconsistent and contradictory.

It is well understood that average asset age is a very simplistic indicator and not a credible measure of the "health" of a network. Credible asset replacement justifications need to be based on robust assessments of asset condition, together with risk assessments that transparently identify the risks of replacement versus alternative options (e.g. revised maintenance strategies, refurbishments and other risk mitigation options).

Such justifications have not been provided within the Queensland DNSPs' repex proposals.

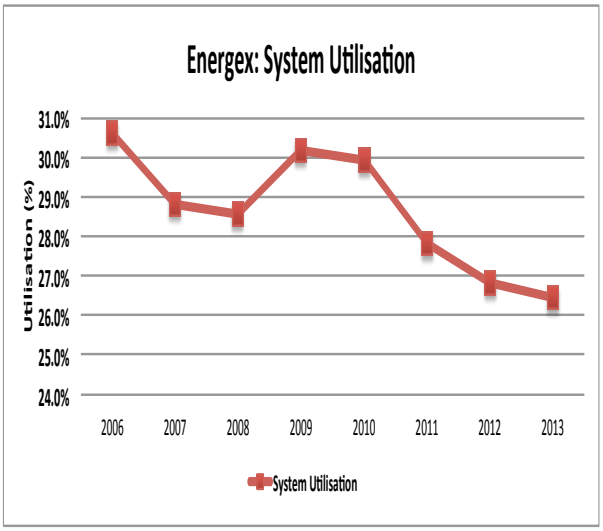
We expect the AER to undertake an extensive assessment of the networks' proposed replacement capex programs; including robust, transparent and independent assessments of asset condition information, together with assessments of the risks of replacement versus alternative options.

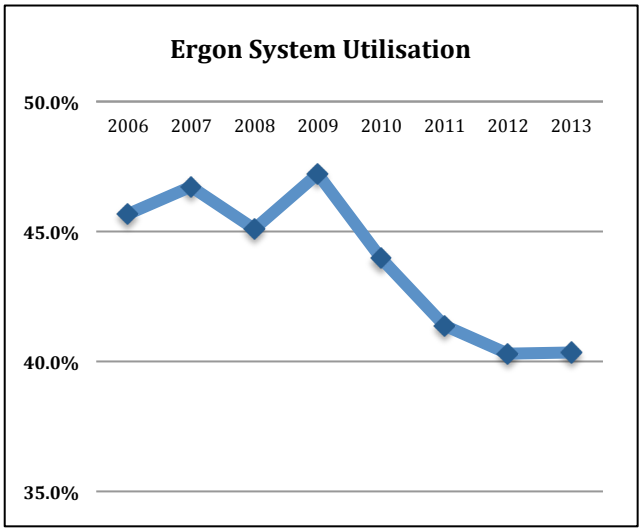
We expect that such assessments will confirm that the Queensland DNSPs are routinely prematurely replacing assets.

Premature replacement of assets on the basis of nameplate age, rather than asset condition, is one of the key drivers of unnecessary network expenditure and unnecessary price increases.

1.6.3 System Utilisation

System utilisation is another key consideration that the AER needs to take into account in its assessment of the networks' repex proposals. The charts below outline the declines in the networks' system utilisation over the past 7 years. [7]





The significant growth in the networks' excess capacity, together with flat/declining load trends, means that their assets will be ageing at reduced rates compared to previous periods. This has not been taken into account in the DNSPs' repex proposals.

1.6.4 Replacement Spend in Previous Periods

The AER's assessment of the DNSPs' repex proposals also needs to consider the impacts of their major replacement capex programs over the previous regulatory periods.

As outlined by the CCP at the AER Public Forum in December 2014, the DNSPs' previous replacement capex programs have effectively 'pre-installed' a good deal of their replacement capex requirements for the next regulatory period.

1.6.5 The AER's Replacement Capex Assessment

On the basis of the above evidence, we assert that the DNSPs have materially overstated their replacement capex needs. We expect the AER to develop substitute repex forecasts that reflect the replacement capex that prudent, efficient DNSPs would require to meet the capex criteria.

We expect that the AER's substitute forecasts will incorporate the considerations outlined in section 1.4 above, together with:

- A review of actual asset condition information – ensuring that asset replacements are justified on the basis of robust assessments of asset conditions
- Options analysis – ensuring that alternative options to asset replacement (e.g. revised maintenance strategies, asset refurbishments, life extensions, and other risk mitigation options) have been appropriately considered
- Timing considerations – including options to defer timings and/or to undertake interim work
- Ensuring that re-use strategies have been appropriately considered

[7] Bev Hughson analysis of Energex and Ergon RINs Data

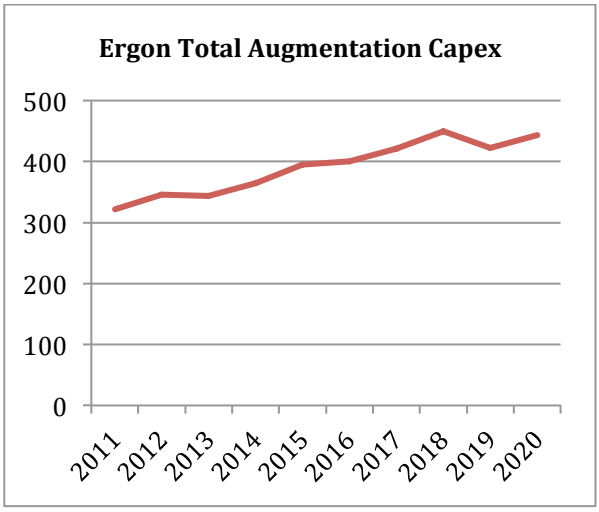
We note that the AER's assessments of the NSW DNSPs' replacement capex proposals resulted in the AER applying reductions of over 40% compared to their proposed repex.

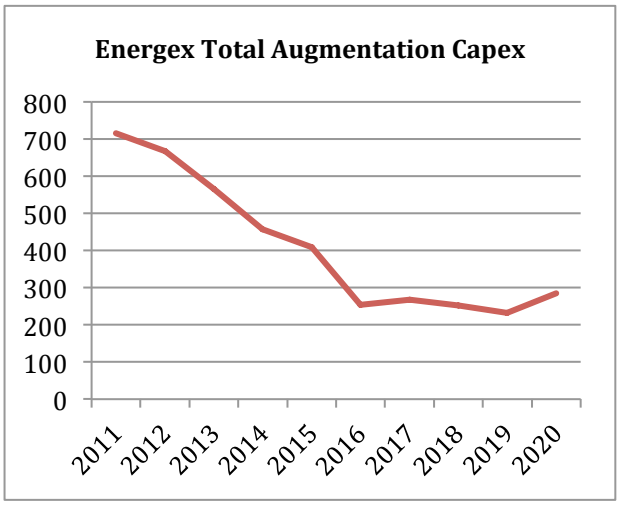
We expect that a thorough review of the Queensland DNSPs' repex proposals is likely to identify the need for larger percentage reductions - taking into account their major capex programs over recent years, the networks' excess capacity, and the fact that the Queensland networks are amongst the youngest and least utilised in the NEM.

1.7 Augmentation Capex

The charts below outline the Queensland DNSPs' historical and proposed total augmentation capex.

For Ergon this includes their capex defined as "Corporation Initiated Augmentation Capex" and "Customer Connection Initiated Capital Works". For Energex this includes their capex defined as "Augmentation Capex" and "Connection and Customer Initiated Works".





The networks' proposed levels of augmentation capex appear to be extremely high considering the declining/flat load trends and the relaxation of the excessive planning and reliability standards that drove their major capex expenditure increases in the previous regulatory periods.

This is particularly the case for Ergon Energy, with its proposed $2.14 billion in augmentation capex, comprising:

- $1.29 billion in "customer connection initiated capital works" - an increase of around 30% compared to the previous period
- $850 million in "corporation initiated augmentation capex" - a 10% increase compared to the previous period

This contrasts sharply with the augmentation capex proposals from the interstate DNSPs, many of which have proposed augmentation capex levels of around 10% of their spend in the previous regulatory period.

Ergon's revenue proposal does not provide any explanation or insights into why it believes it needs to maintain its augmentation capex at record high levels, or why its augmentation capex drivers differ so dramatically from Energex and the interstate DNSPs.

All of the available informations suggests that Ergon is currently facing similar augmentation capex drivers to Energex and the interstate DNSPs.

Infact, we assert that some specific factors, such as excessive network capacity, declining system utilisation and declining asset ages should result in Ergon's augmentation capex trends being lower than those of interstate DNSPs.

Based on a preliminary review of the Queensland DNSPs' augmentation capex proposals, we draw the AER's attention to the following key issues of concern:

1.7.1 Demand and Energy Delivered Trends

As the AER is aware, the peak demand and energy delivered forecasts used by the Queensland DNSPs to justify their record-high capital investment programs for the previous regulatory period were subsequently proven to be dramatically overblown. Rather than increasing significantly, as predicted by the networks, peak demand and energy delivered both reduced during the previous period.

As outlined in the table below, the Queensland DNSPs' over-estimated their 2015 peak demand forecasts by 33.2% and 41.4%, and over-estimated their energy delivered forecasts by 14.2% - 25.2%. [8]

	2015 Forecasts	2015 Actuals	Difference
Energex			
- Peak Demand	5,940 MW	4,200 MW	**41.4 % over-estimation**
- Energy Delivered	24,042 GWhrs	21,055 GWhrs	**14.2% over-estimation**
Ergon			
- Peak Demand	3,330 MW	2,500 MW	**33.2% over-estimation**
- Energy Delivered	16,874 GWhrs	13,496 GWhrs	**25.2 % over-estimation**

It is important to note that when the AER set the capex allowances for Energex and Ergon in 2009, there were many submissions from stakeholders that strongly challenged these forecasts.

It is also very important to note that the DNSPs were rewarded with 'windfall profits' of around $1 billion for these forecasting errors, as their revenue allowances included returns and depreciation on capex that they did not incur. [9]

The Queensland DNSPs' track-record in consistently over-estimating their demand and energy delivered forecasts was highlighted by the Queensland Government Independent Review Panel on Network Costs [10]:

*"Another factor contributing to the escalation in capital programs has been the **consistent over- estimation of demand by the NSPs.** The Panel also notes that the current revenue cap control mechanism places volume risk on customers. Where demand is over-estimated, capital programs will be excess to requirements and network tariffs to customers will increase during the regulatory control period to ensure the NSPs are able to recover the allowable revenue"*

All credible energy forecasters (including AEMO) are predicting that Queensland's recent flat/declining peak demand and energy consumption trends will continue over the next regulatory period, due to:

- Consumers responding to higher electricity prices by reducing energy use and adopting energy efficiency measures
- Increasing penetration of distributed generation, including commercial and residential photovoltaic (PV) generation
- Subdued economic growth and weaker energy demand from the manufacturing sector
- Subdued population growth in Queensland, particularly in terms of interstate and international migration
- A subdued Queensland housing market
- The impacts of new building regulations on energy use and efficiency

[8] CCP2 (Bruce Mountain) Submission on Energex and Ergon 2015-20 Revenue Proposals, Pages 4-6
[9] CCP2 (Bruce Mountain) Submission on Energex and Ergon 2015-20 Revenue Proposals, Page 7
[10] Queensland Government Independent Review Panel on Network Costs Final Report

1.7.2 The DNSPs' 2015-20 Demand and Energy Forecasts

Contrary to the above projections:

- Ergon is forecasting an average annual growth in peak demand of 2.2% over the 2015-20 period
- Energex is forecasting an average annual growth in peak demand of 1.1% percent over the 2015-20 period
- Both networks are forecasting growths in energy delivered over the 2015-20 period

These projections are not supported by AEMO's most recent forecasts, which suggest that returns to the previous peak demands may take until beyond 2021. [11]

We expect the AER to substitute the networks' demand and energy delivered forecasts with forecasts provided by credible independent forecasters.

We note that the networks are claiming that they need to invest in capacity to meet "pockets of demand growth" in their networks, despite declining demand through the rest of their networks and despite the significant number of substations that expect negative demand growth during the next period.

We expect the AER to apply a very high degree of scrutiny to these claims, particularly in light of the Queensland DNSPs' track records in realising extraordinary windfall profits from overestimating their demand forecasts.

1.7.3 The Impacts of the Reduced Reliability Standards

A key driver of the Queensland DNSPs' major capex programs over the previous two regulatory periods was meeting the excessive system security and reliability requirements that were introduced in 2005 in response to the EDSD Review.

As the AER is aware, these standards have been the subject of extensive criticism by various stakeholders since their introduction, as they have been a key driver of the Queensland DNSPs' over-investment and excessive price increases over the past 2 regulatory periods.

As outlined by the *Queensland Government Independent Review Panel (IRP) on Network Costs* [12]:

"The panel considers that the network security standards:

- ***are overly prescriptive**;*
- *have resulted in over-engineering of the network and **driven excessive capital and operating costs**;*
- *have **not sufficiently involved economic analysis** of the benefit of network capital expenditure relative to **outcomes that are acceptable to customers** in terms of both reliability and cost; and*
- *have **driven excessive increases in network tariffs** that affect the affordability of electricity supply for households and business"*

The Queensland Government revised the reliability standards on 1 July 2014, moving to a less deterministic approach and requiring an economic cost/benefit approach to be undertaken to take into account the value consumers place on reliability.

The Queensland Government is claiming that the reduced reliability standards will save an estimated $2 billion in capital expenditure over the next 15 years. [13]

In essence, the new reliability standards require the Queensland DNSPs to take account of customer expectations in terms of reliability of supply and affordability – i.e., they should only be undertaking reliability capex where the benefits clearly outweigh the costs.

It is important to note that the networks' previous capex programs have delivered a very high level of excess network capacity that will ensure that they significantly exceed the requirements of the new reliability standards for many years to come.

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[11] AEMO National Electricity Forecasting Report 2014
[12] Queensland Government Independent Review Panel (IRP) on Network Costs, Final Report
[13] https://www.dews.qld.gov.au/policies-initiatives/electricity-sector-reform/supply/electricity-network-reliability-standards

As outlined in Ergon's revenue proposal: [14]

"Over the last five years the performance of the network has significantly improved……this significant achievement is a result of a substantial investment in network improvements over the past decade"

In light of the above issues, minimal reliability-driven capex should be required for the next regulatory period.

It is therefore concerning that the Queensland DNSPs are proposing significant levels of reliability-driven capex. For example, Energex is proposing $88 million in reliability capex over the next period.

1.7.4 The Value Consumers Place on Reliability

In October 2014, AEMO published the results of its national *Value of Customer Reliability (VCR) review*. [15] The VCR represents, in dollars per kilowatt-hour, the willingness of customers to pay for the reliable supply of electricity.

The results of AEMO's study reveal that current VCRs are significantly lower than previous Australian studies.

In general, these lower VCRs indicate that consumers place less value on additional reliability-driven capex and opex if it leads to higher electricity prices – i.e., customers are more accepting of risk in terms of reliability of electricity supply.

This view has consistently been reinforced by Queensland consumers. The overwhelming feedback that the CCP has received from Queensland consumers is that they do not support further expenditure on reliability-driven capex, other than in some specific areas in the networks where performance is particularly poor.

We strongly assert that the Queensland DNSPs have not appropriately taken into account consumers' willingness to pay for their proposed reliability-driven capex, and that their proposed projects will not pass credible cost/benefit tests.

Consequently, we believe that the networks' proposed reliability-driven capex materially exceeds their requirements.

We therefore expect the AER to ensure that the Queensland DNSPs' reliability capex allowances appropriately reflect the recent changes to network planning and reliability standards, together with consumers' willingness to pay.

1.7.5 Excess Network Capacity

The Queensland DNSPs' major capex programs over the previous regulatory periods have produced significant levels of excess capacity, and significant declines in network utilisation. The charts overleaf illustrate that the networks' RABs have grown at around twice the rate of their peak demand growth over the past 7 years.

The DNSPs' capex forecasts have not taken these excess capacity trends into account, and are proposing that these unsustainable trends will continue over the next regulatory period – e.g., Ergon is proposing to increase its RAB by 27%, during a period of flat/declining load.

It is important to note that the Queensland DNSPs' returns on their inflated RABs are currently driving around 70% of their prices. The natural outcome of the continuation of these trends is the well documented "death spiral" [16] - i.e. as demand continues to decline and the move towards distributed generation increases, the burden of paying for the networks' costs will be placed on a smaller consumer base until those consumers can no longer afford to stay connected to the network.

The AER needs to ensure that the DNSPs' excess capacity is more efficiently utilised ahead of any additional augmentation investment.

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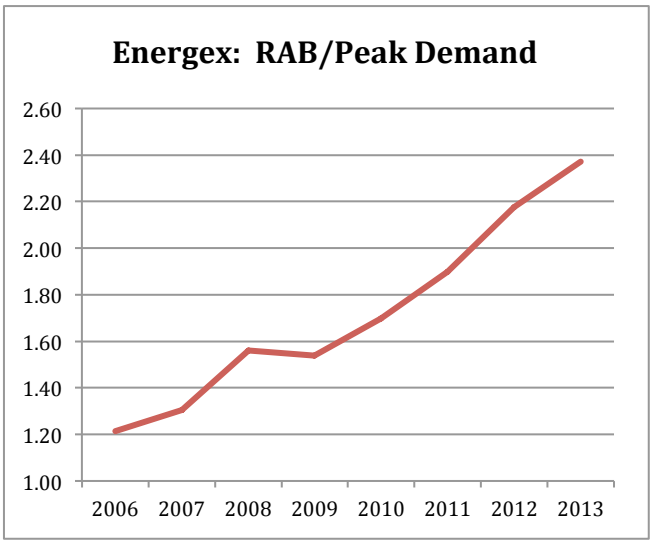
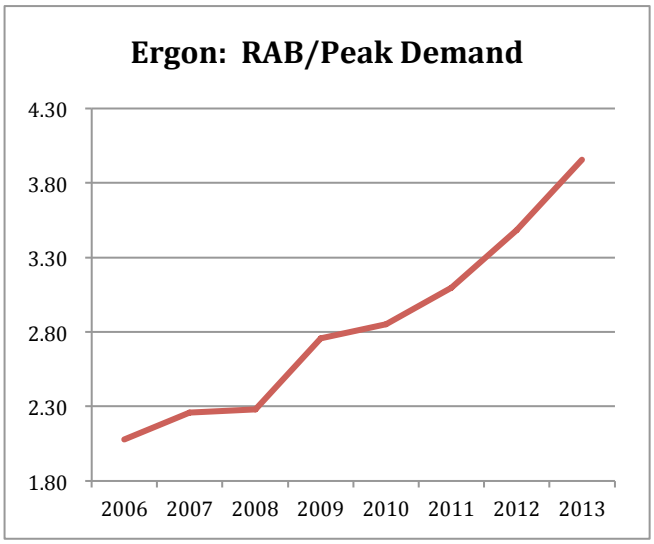
16 The Energy Market Death Spiral - Rethinking Customer Hardship, Paul Simshauser and Tim Nelson





1.7.6 Development of Substitute Augmentation Capex Forecasts

On the basis of the above evidence, we consider that the Queensland DNSPs have materially over-stated their augmentation capex requirements and that the AER is required to develop substitute forecasts that reflect the augmentation capex that prudent, efficient DNSPs would require to meet the capex criteria.

We expect that the AER's substitute augmentation capex forecasts will be informed by a comprehensive review, incorporating the considerations outlined in section 1.4 above, together with:

- The use of credible demand forecasts at the system and local demand levels
- Consideration of the networks' excess capacity, declining asset utilisation and reducing asset ages
- Consideration of the implications of the reduced reliability standards and consumers' willingness to pay
- Consideration of the DNSPs' capital efficiency results from the AER's benchmarking

We expect that this assessment will result in the AER determining substitute augmentation capex forecasts significantly lower than the DNSPs' proposed levels.

1.8 Non System Capex

The DNSPs are proposing significant levels of non-system capex. For example, Ergon is proposing $645 million in non-system capex for the next regulatory period – an increase of around 3% compared to the previous period.

We have not yet been able to review the DNSPs' proposed non-system capex in detail. However a high-level review has identified some significant areas of concern, e.g.:

- Ergon's 25% increase in fleet capex, based on a new approach to fleet management
- Ergon's major increases in ICT capex, and its unsubstantiated claims regarding the "significant efficiency opportunities" that the major investments will deliver
- The networks' non-system capex forecasts do not appear to address the major efficiency improvements outlined in the IRP report [17]
- The networks' non-system capex forecasting assumptions do not appear to incorporate their projected reductions in workforce numbers over the next regulatory period
- The networks' unsustainable increasing trends in the ratio of total overheads to totex (capex plus opex)

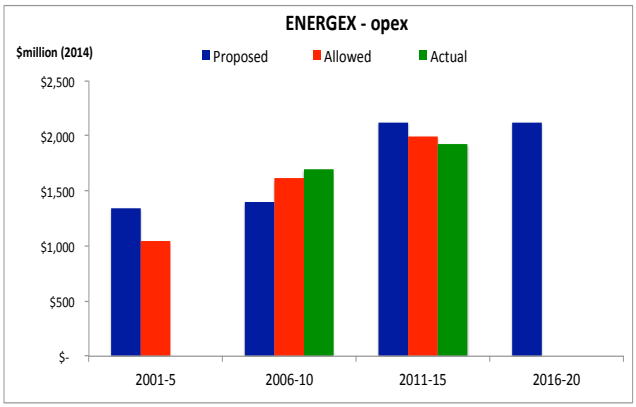
The Sub-Panel expects that the AER's assessment of the networks' non-system capex forecasts will result in the AER determining substitute forecasts significantly lower than the proposed levels.

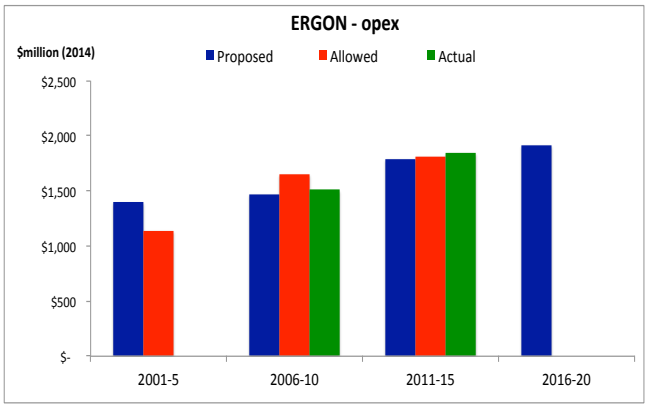
[17] Queensland Government Independent Review Panel on Network Costs Final Report

2. Operational Expenditure

2.1 Comparison with Historical Opex

The charts below provide an 'apples for apples' comparison of the DNSPs' proposed opex compared to their previous allowances and their actual operational expenditure in previous regulatory periods. [18]





These charts illustrate that:

- Both Energex and Ergon Energy are proposing increases in their opex compared to their record-high opex spend for the previous period
- The networks' proposed opex levels are 33% higher (Ergon) and 22% higher (Energex) than their opex allowances for the 2006-10 regulatory period
- The networks' proposed opex levels are around twice the AER's opex allowances for the 2001-05 regulatory period - the period with opex drivers closest to the networks' current circumstances

We have a number of major concerns with the networks' opex proposals, particularly in light of their major opex increases over the past 2 regulatory periods - over the past decade, Energex's opex has increased by an average of 12.5% per annum, and Ergon Energy's opex has increased by an average of 12% per annum.

2.2 The AER's Opex Assessment Approach

The AER's Framework and Approach paper indicated that the AER intends to adopt its *Expenditure Forecast Assessment Guideline*, when assessing the Queensland DNSPs' operating expenditure forecasts.

We anticipate that the AER will apply the base-step-trend assessment process that it applied in its assessment of the NSW DNSPs' opex proposals, i.e.:

- **Determination of the efficient base year opex** - using various techniques including benchmarking, trend analysis, category analysis, etc.
- **Determination of rate-of-change factors** - determination of escalation factors to take account of likely changes to efficient opex over the regulatory period due to price changes, output and productivity
- **Application of step changes** – adjusting the base year expenditure to account for any other forecast cost changes over the regulatory control due to new regulatory obligations

We hereby outline some key issues that we expect the AER to take into account when undertaking its base-step-trend opex assessment for the Queensland DNSPs.

[18] CCP2 (Bruce Mountain) presentation to the AER Public Forum on the Qld DNSPs' Revenue Proposals, 9th December 2014

2.3 Determination of Efficient Base Year Opex

2.3.1 The AER's Benchmarking Results

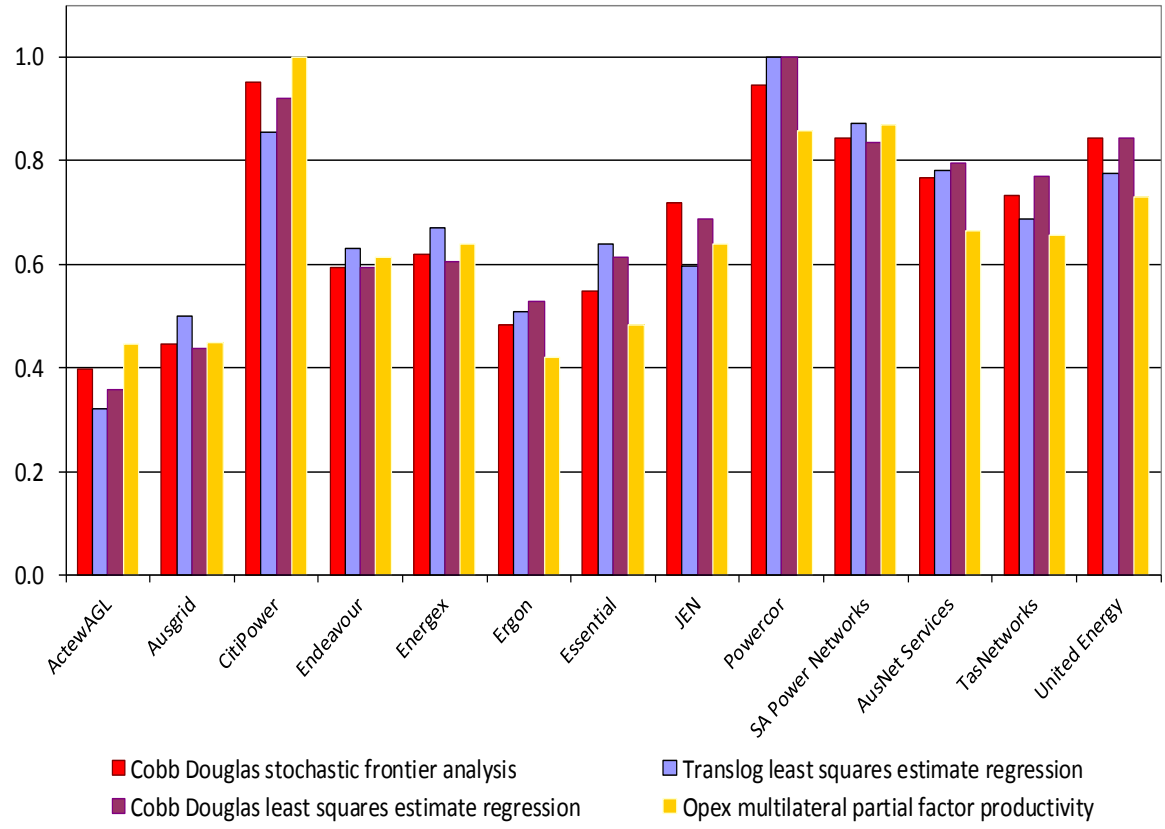
The Rules formally require the AER to undertake benchmarking to assess the relative efficiencies of network businesses, and to apply the outcomes of the benchmarking in its determination of efficient base year costs for the networks.

The AER released its first DNSP Benchmarking report in November 2014 [19], and applied the benchmarking results to its determination of the efficient base year opex for the NSW/ACT DNSPs.

We expect the AER to apply benchmarking in its determination of the efficient base year opex for the Queensland DNSPs, and draw the AER's attention to the relevant findings identified in the AER's benchmarking work performed to date.

The opex efficiency scores outlined below indicate very large efficiency gaps between the Queensland DNSPs and the frontier performers, CitiPower and Powercor - two Victorian DNSPs with contrasting metropolitan and rural coverage similar to Energex and Ergon.

DNSP Average Cost Efficiency Scores, 2006-2013 20



As outlined in the table overleaf, the AER's benchmarking results have identified efficiency gaps of around 60% for Ergon Energy and around 40% for Energex, i.e.:

- Ergon spends opex about 40 per cent as efficiently as the most efficient service providers in the NEM
- Energex spends opex about 60 per cent as efficiently as the most efficient service providers in the NEM

[19] AER 2014 Annual distribution benchmarking report - November 2014

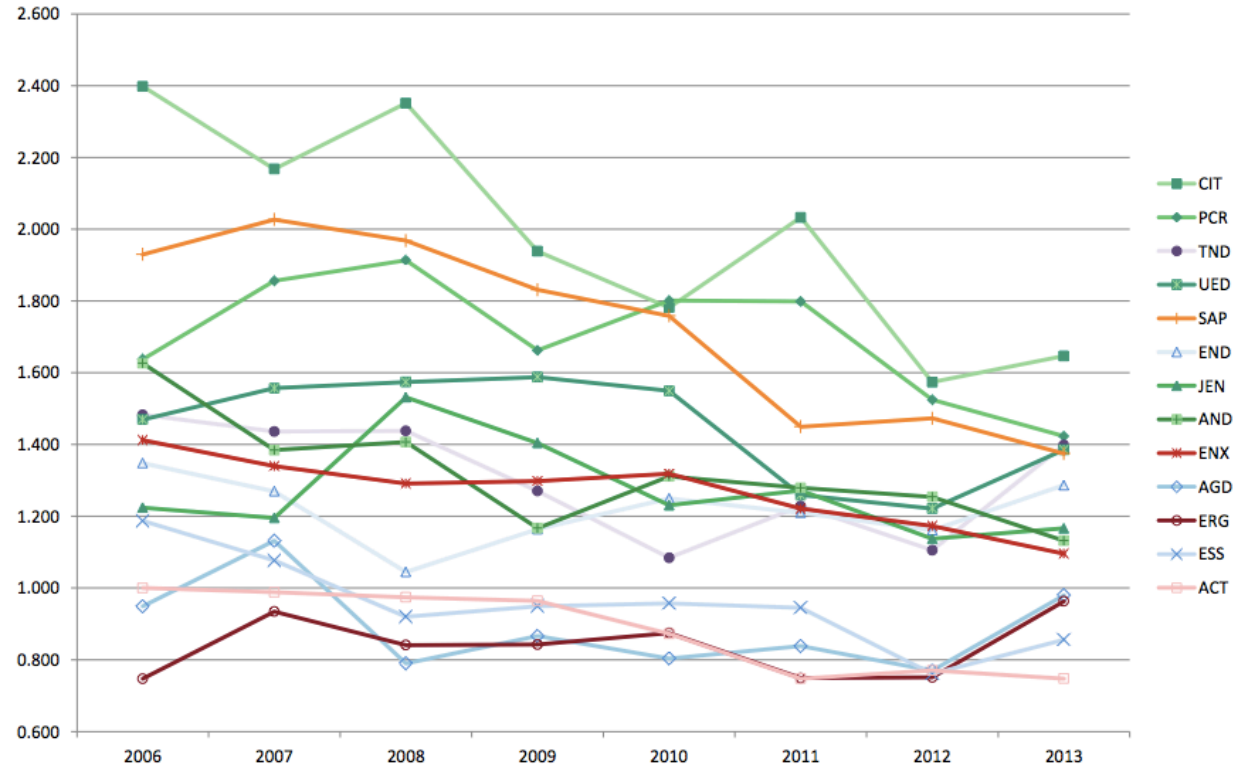
[20]

Table 4.2 **DNSP opex efficiency scores and implied opex reductions to reach full efficiency, 2006–2013**

DNSP	*Average opex efficiency score*	*Implied opex reduction to reach full efficiency*
CIT	1.000	0%
SAP	0.869	13%
PCR	0.857	14%
UED	0.730	27%
AND	0.665	34%
TND	0.657	34%
JEN	0.639	36%
ENX	0.639	36%
END	0.613	39%
ESS	0.482	52%
AGD	0.449	55%
ACT	0.445	56%
ERG	0.422	58%

The opex efficiency trend graph below demonstrates that Ergon Energy has consistently been one of the least efficient distributors in the NEM. Energex's efficiency is also low and has deteriorated by around 25% over the past 7 years, bringing it closer to Ergon's efficiency level.

Figure 19 **Partial factor productivity of opex**



The graphs below indicate that:

- Ergon had the highest "opex per customer" in the NEM, at around 3 times the costs of the Victorian networks
- Ergon had the highest "total costs per customer" in the NEM, at around 4 times the costs of the Victorian networks
- Energex's "total costs per customer" are around twice the costs of the Victorian networks

Figure 12 **Operating expenditure per customer compared to customer density (average 2009–2013)**

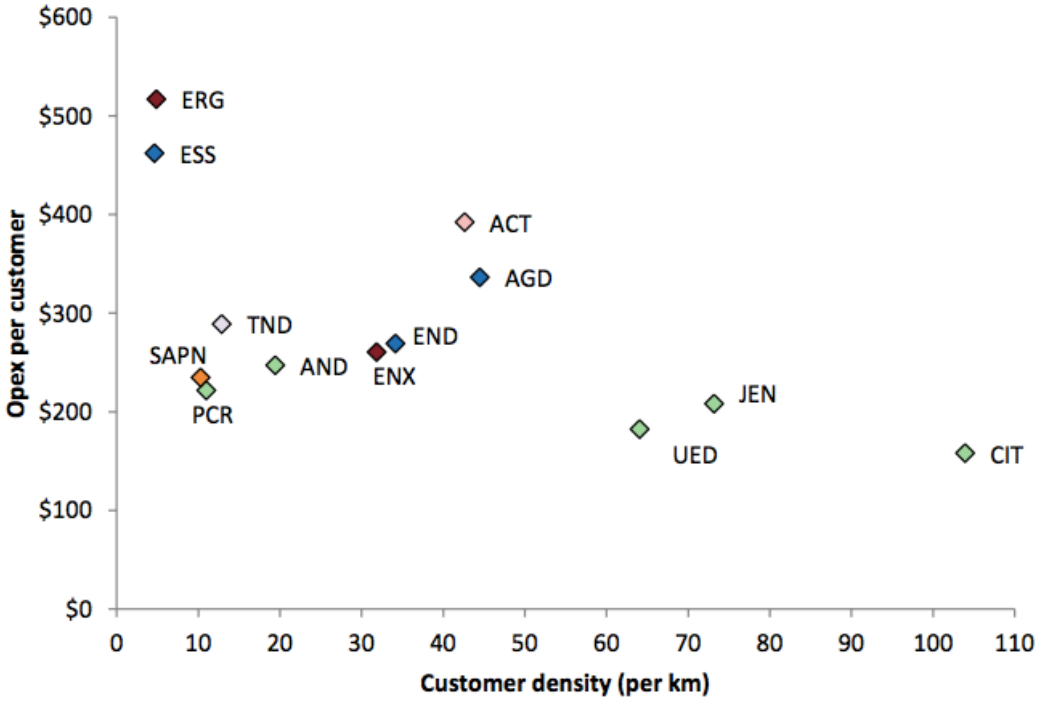
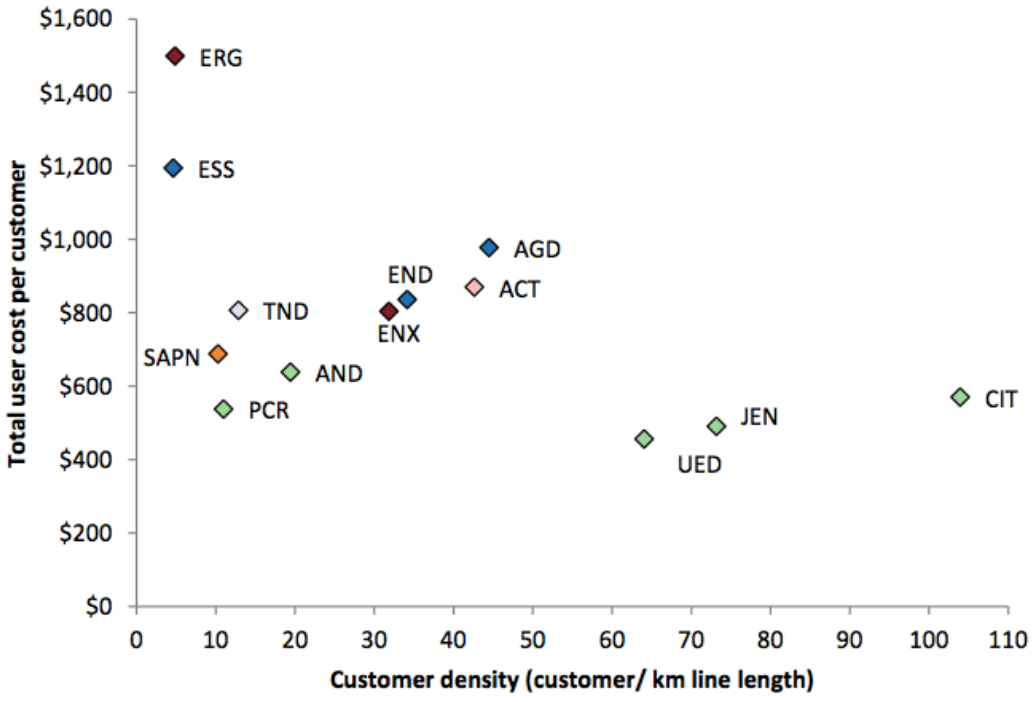


Figure 14 **Total cost per customer compared to customer density (average 2009–2013)**



2.3.2 Labour and Workforce Practices

In its assessment of the NSW DNSPs' opex, the AER examined potential sources of inefficiencies that might explain the gaps in operational efficiency. As labour costs account for a large proportion of the DNSPs' opex, the AER engaged Deloitte Access to perform a detailed review the NSW DNSPs' labour and workforce practices.

Some key findings from that review included:

- Labour costs are being impacted by unionised workforce that are relatively inflexible, high-cost and unproductive compared to their peers
- Labour inefficiencies and uncompetitive enterprise agreements
- Inflexible workforces with limited ability to innovate or respond to changing circumstances
- Poor management of labour costs – for example in relation to overtime

The sub-panel anticipates that the AER may perform a similar study for the Queensland DNSPs, and draws the AER's attention to some of the key findings in the *Queensland Government Independent Review Panel (IRP) on Network Costs* [21], which identified similar issues to those identified for the NSW DNSPs, e.g.:

- *"The IDC was particularly concerned about the IRP's* ***reports of a noticeable cultural disregard for cost within the distribution network businesses"***
- *"The capital programs and operating costs of the GOCs have* ***increased sharply and unsustainably****"*
- *"The overhead expense (indirect costs) of Ergon Energy and Energex is more than $1 billion annually (Ergon Energy $543 million; Energex $510 million). This expense has* ***grown rapidly in recent years and places the Queensland DNSPs among the least efficient in the NEM"***
- *"The three NSPs have all commenced programs to improve the efficiency of their operations and reduce both indirect and direct costs. The Panel acknowledges that these programs will yield results but believes that* ***additional impetus is needed to produce the level of savings required to restore affordability for customers"***
- ***"The need for cultural change as a driver for operational improvement*** *and refocus on cost effective outcomes that meet customer expectations"*
- *"Across the three companies,* ***647 employees earned in excess of 1.5 times their base pay….27 employees earned twice their base pay in 2011/12.*** *The Panel considers that such high ratios are likely to result in lower levels of productivity"*
- *"Contract resources are used inefficiently……****internal resources are being under-utilised****"*
- *"The start times of work crews are often not matched to the requirements of particular projects.* ***A rigid adherence to these start times means that there is a mismatch, leading to reduced productivity*** *and possibly longer outage durations"*
- *"Each of the three network businesses has autonomous fatigue management policies with different rules governing the timing and duration of rest periods……****the differences in fatigue management policies*** *complicate crew scheduling and joint workforce management* ***leading to response delays, inefficiencies and potential safety issues****"*

All of the above evidence points to the Queensland DNSPs' base year opex levels being materially inefficient.

Consequently, we assert that the DNSPs' opex forecasts do not reflect the opex criteria and that the AER is required to develop substitute forecasts.

[21] Queensland Government Independent Review Panel on Network Costs Final Report

2.3.3 Development of Substitute Opex Forecasts

In its development of the substitute opex forecasts for the NSW DNSPs, the AER followed a 3 step process:

- Identification of benchmark efficient opex
- Application of operating environment adjustments
- Determination of the benchmark comparison point

We hereby provide our views on the approach that the AER applied to the NSW DNSPs, and the implications of adopting that approach to its development of substitute opex forecasts for Energex and Ergon Energy.

2.3.4 Determination of Benchmark Efficient Opex

The AER determined its estimates of the efficient base year opex for each of the NSW DNSPs based on the results of its benchmarking.

We endorse that approach and considers that it is in accordance with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER).

As outlined above, applying the same approach to the Queensland DNSPs will result in the determination of efficient base year opex levels of:

- Around 40% below Energex's base year opex
- Around 60% below Ergon Energy's base year opex

2.3.4.1 Operating Environment Adjustments

In its draft determinations for the NSW DNSPs, the AER performed an extensive analysis to determine whether the benchmark efficient costs need to be adjusted to account for operating environment factors, not accounted for in its benchmarking.

This involved the detailed assessments of 35 'operating environment factors' identified by the AER, DNSPs and other stakeholders.

That analysis identified 3 factors that the AER considered required operating environment adjustments:

- Differences in subtransmission configurations
- The impacts of different occupational health and safety regulations
- Differences in the cost of managing bushfire risk

As outlined in the table below, the AER calculated that total adjustments of between 0.6-3.6% should be applied to account for these operating environment differences.

Summary of material operating environment adjustments for the NSW DNSPs [22]

Service provider	Subtransmission adjustment	OH&S regulations	Bushfire regulations	Total
Ausgrid	5.5%	0.5%	-2.4%	3.6%
Endeavour	5.0%	0.5%	-2.4%	3.1%
Essential	2.5%	0.5%	-2.4%	0.6%

We consider that the criteria and assessment methodology adopted by the AER to determine the need and magnitude of the above operating environment adjustments is reasonable.

However, rather than applying the above adjustments, the AER then decided to apply very conservative total operating environment allowances of 10% to all three NSW DNSPs.

22

The AER did not provide any justification for these major adjustments. Infact, in its draft determinations, the AER acknowledged the weaknesses of its decision: [23]

*"Based on the available evidence, we are of the view that **it is reasonable to assume that the opex of the benchmark Victorian and South Australian DNSPs would be considerably less than 10 per cent higher** if they had to operate under the same system sub-transmission intensiveness as the NSW DNSPs and if they faced the same occupational health and safety regulations as the NSW DNSPs"*

***"Nonetheless, we propose to make a conservative allowance of a 10 per cent input margin** on the benchmark Victorian and South Australian DNSPs to cover these factors. This includes allowance for a number of factors that, while individually not significant, may collectively be significant"*

We do not accept that the AER has justified the adoption of its major adjustments to the operating environment allowances for the NSW DNSPs, and considers that such adjustments are inconsistent with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER).

2.3.4.2 Determination of the Benchmark Comparison Point

The frontier benchmark for the NEM DNSPs is CitiPower [24] which has an efficiency score of 0.95. CitiPower is closely followed by Powercor, with an efficiency score of slightly less than 0.95.

However, in determining the cost efficiency target for the NSW/ACT DNSPs, the AER decided not to adopt the frontier DNSP as the benchmark. Instead, the AER decided to apply a modified benchmark point calculated as the weighted average of the efficiency scores in the top quartile.

The weighted average efficiency score of the five Victorian and South Australian DNSPs with efficiency scores greater than 0.75 is 0.86.

Consequently, the AER reduced the efficiency benchmark by 9 percentage points compared to the frontier DNSP efficiency score.

Again, the AER did not provide any substantial justifications for choosing this significantly lower efficiency target, other than stating:

***"Adopting a conservative approach** allows for general limitations of the models with respect to the specification of outputs and inputs, data imperfections and other uncertainties"*

The AER also acknowledged the weaknesses of this decision:

"This is equivalent to allowing an additional margin** on the frontier DNSP's input use **of 10 per** cent in calculating the benchmark for the NSW/ACT DNSPs (0.95/1.1 = 0.86) **and is thus a relatively generous allowance"

We do not accept that the AER has justified its adoption of the major reduction in the benchmark comparison point, and consider that this adjustment is inconsistent with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER).

The NEL/NER require the appropriate benchmark reference point for efficient opex to be set at that of an efficient service provider. The AER's benchmarking has concluded that CitiPower's score of 95 per cent represents the efficiency at which the benchmark efficient firm would be using its opex to provide core network services.

The combined effect of the above two changes – i.e., the 10% allowance for operating environment differences, together with the change to the benchmark comparison point, has resulted in reducing the target benchmark level of efficiency by around 18%.

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[23] AER Draft Decisions for the NSW DNSPs

[24] Note – the AER determined the frontier benchmark based on Australian service providers only. If the AER had included international service providers in its calculations, CitiPower would not be the frontier business.

As outlined in the table below, this will result in delivering "windfall gains" to the NSW DNSPs of around:

- $80 million per annum for Ausgrid
- $50 million per annum for Endeavour Energy
- $60 million per annum for Essential Energy

Impacts of the AER's Adjustments on the Target Opex for NSW DNSPs

	Ausgrid	Endeavour	Essential
DNSPs' Proposed base opex (adjusted)[a]	488.6	224.0	414.9
Benchmarking estimate of efficient base opex	268.6	165.7	223.2
Difference Between DNSPs' Proposed Opex and Benchmark Efficient Costs	241.0	72.6	204.4
Percentage opex reduction required to reach full efficiency[b]	**49%**	**32%**	**49%**
AER's modified opex target incorporating the AER's 10% Operating Environment Adjustment and the Modified Benchmark Comparison Point	325.9	201.0	270.8
Difference between AER modified target and proposed base opex	162.7	23.0	144.1
Percentage opex reduction applied by the AER	**33.3%**	**10.3%**	**34.7%**

As the AER acknowledged in its draft opex determinations for the NSW/ACT DNSPs:

***"A number of conservative decisions in favour of the DNSPs have been made in arriving at these figures**. These include conservative setting of the benchmark as the weighted average of top quartile DNSPs rather than the frontier DNSP and extra allowances for operating environment factors not explicitly included in the models.*

We are extremely disappointed that whenever the AER applies discretion to its regulatory decisions, it consistently chooses to apply that discretion heavily in favour of the networks' interests, and not in consumers interests.

The above adjustments will result in unnecessarily price increases for NSW consumers of around 4% above the prices that would apply if the AER applies the Rules. This is clearly not in consumers' long-term interests.

In summary, we consider that the AER's adjustments to the NSW DNSPs' 'operating environment factors' and the 'benchmark comparison point' are inconsistent with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER).

We therefore strongly oppose such adjustments being applied to the AER's determination of the Queensland DNSPs' efficient base year opex.

2.4 Rate of Change

2.4.1 The AER's Approach to Determining Rate of Change Factors

The AER's *Expenditure Forecast Assessment Guideline* [25] outlines the AER's approach to determining rate of change factors to account for:

- Price change
- Output change
- Productivity change

The Queensland DNSPs have used a different methodology to determining rate-of-change factors than set out in the AER's Guideline.

25

We anticipate that the AER will determine the rate-of-change factors in accordance with its Guideline methodology and provide the following comments in relation to the AER's methodology.

2.4.2 Price Change

The Queensland DNSPs' forecast price changes include real price growth escalators for labour and non-labour costs.

2.4.2.1 Labour Price Change

In determining its labour price change factor for the NSW DNSPs, the AER adopted the average of Deloitte Access Economics' and Independent Economics' wage price index (WPI) forecasts for the *Electricity, Gas, Water and Waste Services (EGWWS)* industry.

We have not yet been able to review those forecasts, but we are concerned that the results have determined that real price growth factors should be applied to the NSW DNSPs' labour prices.

We find it extremely difficult to accept that an industry that is in contraction due to declining demand for its services will incur labour price increases in excess of CPI. We consider that the forecasts are likely to have placed too heavy a reliance on the use of historical trends to predict future trends.

It is important to note that the *Queensland Government Independent Review Panel on Network Costs* [26] highlighted that the Queensland NSPs' labour costs are significantly higher than they should be. The AER must ensure that the Queensland NSPs do not continue with their previous approach of effectively treating EBA outcomes as a "pass through".

The AER needs to determine efficient allowances for the Queensland DNSPs' labour costs that better reflect the long-term interests of consumers.

We will provide some further perspectives on the Queensland DNSPs' labour price change factors at a later stage.

2.4.2.2 Non-Labour Price Change

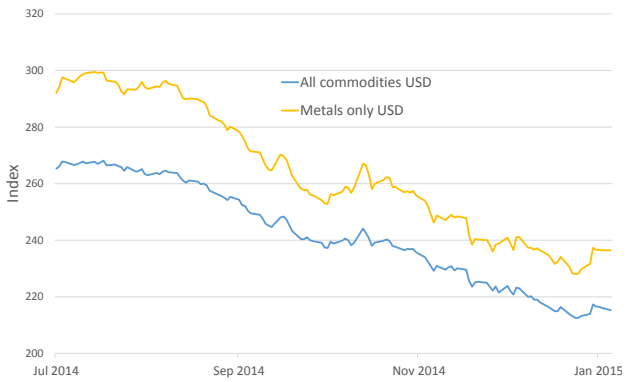
In determining its non-labour price change factors for the NSW DNSPs, the AER adopted CPI.

We have not yet been able to review the AER's rationale for that decision in detail. However, we are concerned that the prices of a number of the DNSPs' non-labour inputs are trending downwards and consequently the application of CPI is likely to over-estimate the DNSPs' costs.

During the current financial year, the prices for commodities (including copper, aluminium and steel) have fallen considerably. For example, the CBA Australian Commodities Price Index (illustrated below) has fallen by around 25% over the past 7 months.

We will provide some further perspectives on the DNSPs' non-labour price change factor at a later stage.

CBA Australian Commodities Price Index



[26] Queensland Government Independent Review Panel on Network Costs Final Report

2.4.3 Output change

We anticipate that the AER will determine the Queensland DNSPs' output change factors using the same methodology that it applied to its draft determinations for the NSW DNSPs.

We hereby provide our perspectives on that approach, and the implications for the AER's determination of the Queensland DNSPs' output change factors.

The AER's determination of output change factors for the NSW DNSPs was based on the weighted average increase in:

- Customer numbers (67.6% weighting)
- Circuit length (10.7% weighting)
- Ratcheted Maximum Demand (21.7 % weighting)

The AER's rate of change approach assumes that changes in the above outputs result in direct proportional changes in opex – i.e., the AER assumes that a 10 per cent increase in the weighted average output change results in a 10 per cent increase in opex.

We acknowledge that the above output variables may have some impact on opex, although we do not accept that they have the direct proportional change that the AER's calculation determines.

We note that Energex and Ergon have proposed various output factors, including:

- Network growth - based on forecast increases in line length, distribution transformer numbers and installed capacity
- Customer growth – based on forecast customer numbers
- Solar PV growth – based on the forecast of installed PV capacity

We do not consider that the Queensland DNSPs have justified the use of their proposed additional output factors.

We also strongly disagree with the networks' proposed 'installed capacity' factors. Such factors would result in the provision of increased opex for newer assets, rather than the reduced opex required due to their lower maintenance costs. This is an issue that we believe the AER should have applied greater scrutiny to in its assessment of 'operating environment adjustments'.

Irrespective, we expect the AER to determine output change factors on a consistent basis across all DNSPs.

2.4.4 Productivity

In its draft determinations for the NSW DNSPs, the AER applied a zero per cent productivity change.

The AER's rationale for applying zero per cent was that it *"considered past performance to be a good indicator of future performance under a business as usual situation".*

We note that from 2006–13 the electricity distribution sectors' productivity significantly declined. However, we consider that there are a number of reasons for that decline - particularly the AER's provision of excessive opex allowances, which we believe has been a strong driver of the networks' inefficient labour practices. Such factors must not be used to justify poor productivity outcomes in future years.

Many other asset intensive industry sectors experienced positive opex productivity growth during the 2006–13 period. We do not accept that there is any justification for the electricity distribution sector to have lower productivity expectations than those sectors.

We therefore expect the AER to determine positive productivity change rates for the Queensland DNSPs, aimed at bringing their productivity back into line with the productivity levels being achieved by other asset intensive industry sectors.

2.5 Step Changes

In its draft determinations for the NSW DNSPs, the AER decided not to include any step changes in its alternative opex forecasts.

In essence, the AER declined the NSW DNSPs' proposed step changes as they related to activities that the AER had explicitly considered in determining the networks' efficient base level opex.

We have reviewed the step changes proposed by Energex and Ergon and expect the AER to reach the same conclusion regarding those step changes - i.e. that they will be accounted for in the AER's determination of efficient base year opex.

Consequently, we expect the AER to decline all of Energex and Ergon's proposed step changes.

3. Incentive Schemes

3.1 Efficiency Benefit Saving Scheme (EBSS)

3.1.1 Outcomes from the Previous Regulatory Period

Ergon is claiming that it is entitled to a bonus of $146.1 million under the EBSS for not fully spending its opex allowance during the previous period. Energex is claiming that it is entitled to a bonus of $33.8 million.

Whist the Sub-Panel supports incentive schemes that deliver genuine efficiency improvements and long-term benefits to consumers, it is clear from the outcomes of the EBSS to date that the AER is consistently setting opex allowances well above the efficient level.

Since the EBSS scheme was introduced, many stakeholders have expressed major concerns regarding its assymetrical outcomes, requesting the AER to review the outcomes and to reconsider the design of the scheme and the AER's approach to determining efficient opex costs. Many stakeholders have also recommended that the AER should no longer apply the scheme, as they are not confident that the AER will be able to refine the scheme to deliver genuine efficiency improvements that are in consumers' long-term interests.

3.1.2 Application of the EBSS to the Next Regulatory Period?

The purpose of the EBSS is to encourage service providers to become more efficient.

In deciding whether or not to apply the EBSS to the Queensland DNSPs, the AER is required to consider whether the likely benefits to consumers are sufficient to warrant any rewards or penalties incurred under the scheme. [27]

We note that the AER has decided not to apply the EBSS scheme to the NSW DNSPs. The AER's rationale for that decision was predominantly based on the fact that the AER determined, through benchmarking, that the NSW DNSPs' base opex levels are materially inefficient, and therefore placed less weight on their revealed costs in its determination of their efficient base year costs.

In essence, the AER concluded that the NSW DNSPs will face strong incentives to make efficiency improvements while their actual opex is higher than that of a benchmark efficient service provider, and there is no need to apply an EBSS to further strengthen those incentives.

Whilst we agree with those conclusions, we point out that the AER's justification for not applying the EBSS scheme to 'inefficient networks' is, in itself, an acknowledgement of the serious deficiencies in the AER's previous opex determinations. The AER's benchmarking results confirm that the AER's decision to not apply benchmarking to its previous revenue determinations (despite being required to under the Rules) has resulted in the AER providing excessive opex allowances of up to 60% above the efficient level. This has very serious implications for the ongoing application of the EBSS scheme to all networks.

Irrespective, we recommend that the AER should not apply the EBSS to the Queensland DNSPs, as we are not confident that the AER will be able to apply the scheme to deliver genuine efficiency improvements that are in consumers' long-term interests.

[27] NER, clause 6.5.8(a).

3.2 Service Target Performance Incentive Scheme (STPIS)

The AER proposes to apply the Service Target Performance Incentive Scheme (STPIS) to the Queensland DNSPs during the next regulatory period.

We have not yet been able to review the DNSPs' proposed targets.

However, we expect the AER to determine targets that appropriately reflect the recent changes to the Queensland planning and reliability standards, together with Queensland consumers' willingness to pay.

We will provide our detailed perspectives on the application of the STPIS scheme to the Queensland DNSPs at a later stage.

3.3 Demand Management Incentive Scheme (DMIS)

3.3.1 The AER's Preliminary Position

In its Framework and Approach (F&A) paper, the AER acknowledged the need to reform the existing demand management incentive arrangements in Queensland and noted that SCER (now the COAG Energy Council) was considering a series of rule changes proposed by the AEMC Power of Choice review, examining distributor incentives to pursue efficient alternatives to network augmentation. This is expected to include new rules and principles guiding the design of a new DMIS.

The AER's preliminary position, outlined in its F&A, was that it intended to develop and implement a new DMIS during the next regulatory control period, depending on the progress of the above rule change process.

3.3.2 The DNSPs' Proposed Demand Management Expenditure

Ergon Energy is requesting $70.5 million in demand management funding, targeting a reduction in demand of 80MVA – i.e. an average cost of $881 per kVA.

Energex is requesting $95.3 million in demand management funding to target 170MVA of "load under management" – i.e. an average cost of $561 per kVA.

As a comparison, the AEMC recently published a report [28] that outlined the following costs of other DNSPs' demand management activities:

- Ausgrid $152.30 / kVA
- SA Power Networks $155 / kVA
- ActewAGL $239 / kVA
- Endeavour Energy $348.39 / kVA

On face value, on the basis of the above comparisons, the Queensland DNSPs' proposed demand management expenditure appears to be very expensive.

This view was reinforced by the Queensland Government Independent Review Panel on Network Costs [29] :

- *"One outcome has been expenditure on demand management and emerging technologies, much of which has yet to yield commercially viable solutions as genuine alternatives to network augmentation.* ***The level of expenditure in these areas by the Queensland DNSPs is much higher than in the privately owned DNSPs in other States"***
- *"In undertaking the analysis of the DNSPs' demand management programs, it became apparent that there were* ***issues with the transparency, consistency and rigour applied in delivering and evaluating the benefit of demand management solutions*** *as an alternative to network augmentation"*
- *"Over the five years to 2015, a total of $240 million could be spent by the DNSPs on demand management activities"*
- *"Both DNSPs have advised that they are expecting demand management expenditures and resourcing to reduce over the next two to three years as these types of programs become 'business as usual'"*

[28] Economic Concepts for Pricing Electricity Network Services, Table 4.1, Page 19
[29] Queensland Government Independent Review Panel on Network Costs Final Report

- *"Recommendation:* ***Demand management projects and activities should proceed only where a rigorous commercial assessment has been completed****"*
- *"Recommendation:* ***Discontinue demand management projects and activities associated with emerging technologies that will not be commercialised or provide benefits to consumers*** *within the medium term. This excludes projects covered by the AER's Demand Management Incentive Scheme"*

3.3.3 Benefits to Consumers?

The Rules require the AER to have regard to several factors in developing and implementing a DMIS for the Queensland distributors. One of those factors is "benefits to consumers", which is defined as: [30]

- *"the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme; and*
- *the willingness of customers to pay for increases in costs resulting from implementing a DMIS"*

This means that the AER must consider consumers' willingness to pay for any costs resulting from the DMIS.

Energex and Ergon are both claiming that their consumers are supportive of their proposed demand management initiatives. However, these claims are untested and have not been demonstrated through any credible willingness to pay studies.

We therefore expect the AER to strongly scrutinise the DNSPs' proposed demand management expenditure, and to ensure that its decisions regarding the application of a new DMIS and the associated demand management expenditure deliver clear tangible cost benefits to consumers.

[30] NER, clause 6.6.3(b).