30 January 2015

Mr Sebastian Roberts
General Manager - Networks Regulation
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Dear Mr Roberts

RE: SUBMISSION TO QUEENSLAND ELECTRICITY DISTRIBUTORS' REGULATORY PROPOSALS

Origin Energy Electricity Limited (ABN 33 071 052 287, "Origin") appreciates the opportunity to provide input to the Australian Energy Regulator's (AER) assessment of the regulatory proposals submitted by the Queensland electricity Distribution Network Service Providers (DNSPs) under the National Electricity Rules to determine their revenue allowances for the period 2015-20.

This assessment will provide the AER with an opportunity to consider fully the outcomes from the Queensland Government's independent reviews, undertaken throughout the 2010-15 regulatory period.

These independent reviews have resulted in a significant lessening of network security and performance standards with the adoption of network security policies based on customers' expectations. Coupled with expected consumption and demand levels not eventuating, this has resulted in the expenditure levels of the Queensland DNSPs – Energex and Ergon - being significantly lower than their original allowances.

Origin notes the actions of Energex to lower expenditure levels by passing these savings back to customers within the previous regulatory period.

Despite the savings made to date, Origin believes that further savings to capital and maintenance are possible. Notably, both Energex and Ergon Energy have proposed significant increases in replacement capex relative to actual expenditure for 2010-15. Based on improvements in network utilisation and downgraded demand and security of supply requirements, Origin considers the proposed replacement expenditure program is high when compared to: (1) historic expenditure; and (2) the allowances determined by the AER in its recent draft decision for the NSW DNSPs.

In addition, Origin considers that the DNSPs are yet to extract the full scope of efficiencies in corporate and non-network support costs. We expect the AER will identify future savings through the application of its enhanced investigative powers under the revised National Electricity Rules.

As part of its review of the NSW proposals, Origin raised concerns regarding the lack of an orderly presentation of information and the consistency of information across the various regulatory documents. Origin has noted a significant improvement in the quality and consistency of information presented by the Queensland DNSPs. However, stakeholders continue to be confronted with a quantity of information (11,246 pages submitted by Energex and Ergon) that contains an unacceptable level of inconsistency in the manner in which costs are presented (notably capex) across the different regulatory documents. Providing easily accessible, consistent and comparable data is critical to promoting well informed engagement with stakeholders and, therefore, quality contributions to the AER's regulatory debate.

Origin Energy Electricity Limited ABN 33 071 052 287 • Level 45, Australia Square, 264-278 George Street, Sydney NSW 2000
GPO Box 5376, Sydney NSW 2001 • Telephone 02 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

The DNSPs have proposed a number of departures from the AER's Rate of Return Guidelines. The networks' proposed approach delivers a higher weighted average cost of capital (WACC) and higher network charges without any commensurate increase in service. Origin notes that the departures proposed by the DNSPs result in parameters that are significantly higher than the previous regulatory decision, not only by the AER but also by jurisdictional regulators across various regulated industries. Origin is strongly supportive of the material relied upon by the AER as this delivers a rate of return commensurate with the efficient financing costs of a business exposed to the level of risk that applies to an Australian regulated DNSP.

Origin recognises that the key assessment method of network expenditure is the AER's various benchmarking techniques. However, Origin considers that the AER must also interrogate the asset management frameworks of the DNSPs to understand how they have determined customer preferences, with respect to reliability and service, and how these have been integrated into their respective asset management plans.

Finally, Origin considers that the AER should adopt an approach to metering that is consistent with its decision for NSW. This includes the removal of exit fees and clearly defined annual and new metering charges. Both these elements are necessary to promote effective competition in metering and related services and to allow customers to access and compare the costs and benefits of different metering service options.

If you have any questions regarding this submission please contact Sean Greenup in the first instance on (07) 9507 0620.

Yours sincerely

Keith Robertson
Manager, Wholesale and Retail Regulatory Policy
(02) 9503 5674 keith.robertson@originenergy.com.au

Response to Energex and Ergon Energy Regulatory Proposals for the regulatory control period 2015-19

Origin Submission

January 2015

Contents

1 Context

The expenditure proposals for the 2010-15 regulatory period were developed to target prescriptive performance requirements, including achieving and maintaining an N-1 security standard on major network assets such as bulk substations, zone substitutions and sub-transmission feeders, and the minimum service standards set out in the Queensland Electricity Industry Code (EIC).

Achieving these standards required a substantive program of work over multiple regulatory periods that resulted in historically high expenditure levels.

In October 2011, following growing public concern about rising electricity prices driven by network charges, the Queensland Government established the independent Electricity Network Capital Program (ENCAP) Review. The objective of the Review was to assess the progress made by the DNSPs in achieving their prescriptive security standards and to consider whether the standards still appropriate.

The ENCAP review was followed in May 2012 by the Queensland Government established Interdepartmental Committee on Electricity Sector Reform (IDC). The objectives of the IDC were to make sure electricity in Queensland is supplied in the most cost-effective and sustainable way for customers, industry and Government.

The outcome of these independent reviews has been a significant lessening of network security and performance standards with the adoption of network security policies based on customers' expectations. To address issues of non-network costs, the DNSPs have also put in place efficiency programs targeting ongoing cost reductions in corporate overheads and network support functions.

In tandem with these changes, expected consumption and demand levels did not eventuate, with lower demand growth rates expected to continue into the 2015-20 regulatory period.

Collectively, these events will have a significant impact on the 2015-20 regulatory proposals. Namely, Origin considers that it is essential that the AER assess whether:

- the DNSPs have undertaken appropriate customer consultation to determine their expectations with respect to the value they place on security and service;
- asset management frameworks have appropriately integrated any revised network security and reliability standards following their customer consultation and that these are being applied to generate the proposed programs of work;
- the DNSPs' have fully implemented their business efficiency programs; and
- the DNSPs' have appropriate governance structures in place and, equally as important, that these are operating as intended.

2 Demand Forecasts

The National Electricity Rules (NER) require a DNSP to produce forecasts of load growth and key variables that are relied upon in developing forecast capital and operating expenditure.

Over the 2010-15 regulatory period, both DNSPs significantly over-forecast consumption and demand in their respective networks.

Poor forecasting impacts customers in a number of ways. Firstly, overstating demand supports a higher program of work than is otherwise required. Under the transitional rules, which have now expired, unnecessary capital expenditure may have been included in the RAB resulting in higher network charges than should have otherwise have been the case. Secondly, under the revenue cap mechanism, inaccurate forecasts of consumption leads to over or under-recovery of revenue, resulting in potentially volatile network charges year-on-year.

For the last regulatory period, Energex overestimated its forecast demand by as much as 27% and energy consumption by 20% while Ergon Energy (Ergon) overestimated demand by as much as 26%.

In addition, within the regulatory period, Energex submitted revised forecasts as part of its annual pricing proposals. Despite these annual revisions, Energex continued to overestimate consumption, resulting in significant revenue under-recovery and higher network charges.

Origin recognises that since the last regulatory period, the DNSPs have embarked on improvements to their respective forecasting methodologies and that they now consider that their approaches are reasonable and consistent with good demand forecasting practice.[1]

Energex is forecasting an average annual system demand growth of 1.1% over the 2015-20 regulatory period. Energex also indicate that growth rates in outer regions of SEQ are driving its augmentation expenditure, highlighting that over 15% of its substations have an annual compound growth greater than 2%, with 7% of its substations exceeding annual compound growth rates of 4%.

Ergon has proposed average growth in system demand over the 2015-20 regulatory period at 1.3% to 1.5% per year. These growth levels are underpinned by expected increases in coal mining activity in Central Queensland and LNG activity in Central and Southern Queensland.

The proposed forecasts are well below the forecasts of annual average growth in peak demand for the 2010-15 regulatory period of 3.8% per annum for Energex and 4.7% per annum for Ergon.[2]

Origin considers that, on balance, the system demand forecasts of the Queensland DNSPs reflect a reasonable expectation of future demand. Origin notes, however, that as part of the Council of Australian Governments (COAG) energy market reform implementation plan, the Australian Energy Market Operator (AEMO) has been requested to develop demand forecasts to support the AER to analyse the demand forecasts submitted by the DNSPs. We understand that AEMO has not completed its assessment for Queensland, but this will be completed by July 2015.[3] Origin expects that the AER will fully consider the AEMO findings before making its final determination in October 2015.

[1] See Ergon's Forecast Expenditure Summary: Customer Initiated Augmentation 2015-20, p. 15 and Energex Proposal, p. 99.
[2] AER, Final Determination, pp. 40-42.
[3] AEMO, Transmission Connection Point Forecasting Report For New South Wales and Tasmania, p. 3.

3 Forecast Capex

Network security and performance standards that the Queensland DNSPs are required to meet has reduced significantly since 2012. Coupled with much lower demand levels than previously forecast, this has resulted in substantially lower levels of capital expenditure than were originally forecast for the 2010-15 regulatory period. Origin expects that this trend will continue throughout the 2015-20 regulatory period.

In the case of Energex, the variations to the security standards resulted in savings totalling $255M while changes to the service standards delivered $40M in savings. Energex also identified $550M in demand related savings to customer and corporate initiated works.

Ergon identified $250M in savings from variations to the security standards and $350M in demand related savings to customer and corporation initiated works.

Another notable outcome from the Government initiated independent reviews was the decision that Government should no longer prescribe input-based security standards and that responsibility for network security standards should reside with the respective Boards and Management of the DNSPs.[4]

Origin considers that to determine the prudency of the proposed capital program it is necessary that the AER confirm how the DNSPs have determined the value of customer reliability, how these values have been integrated into their asset management framework, and whether there is an appropriate risk-based assessment in developing their forecasts.

3.1 Augmentation Capex

The Queensland DNSPs have undertaken significant investment in their networks over the 2010-15 regulatory period, well above the historical trend. As noted by the ENCAP review, a key outcome of the investments made to comply with the security standards has been a reduction in network utilisation in their respective networks.[5]

As a result, Origin considers that this excess capacity in the network needs to be more efficiently utilised ahead of additional augmentation investment.

Energex has proposed a 62% reduction in is augmentation capex and a 42% reduction in corporate initiated capex relative to actual expenditure over the 2010-15 regulatory period. On balance, Origin considers that reductions of this magnitude are consistent with the changes to Energex's operational conditions.

The AER Issues Paper for the Queensland Proposals identified a reduction in Ergon's proposed augmentation of 14% relative to the 2010-15 period.

As part of Ergon's proposed costs, we consider there is a lack of clarity around Ergon's proposed customer initiated capital works and how it compares to that undertaken in the 2010-2015 period. Ergon estimates that for the remainder of the current regulatory control period, it will underspend its customer initiated capital works by 42%. Ergon also states that its proposed customer initiated capital works for the forthcoming regulatory control period is 63% less than the AER's current allowance.[6] However, using information presented in Ergon's Regulatory Proposal, Origin calculates an increase in its customer initiated capital works of 13.7% relative to the 2010-15 regulatory period.

[4] Independent Review Panel on Network costs, Electricity Network Costs Review Final Report, p. 42.
[5] Electricity Network Capital Program Review 2011, p.30.
[6] Ergon Energy, Forecast Expenditure Summary – Customer Initiated Capital Works 2015-20, pp. 8-9.

Notwithstanding that Ergon explains that differences across the documents are a result of comparing direct costs with total costs (i.e. inclusive of real cost escalations and overhead)[7], Ergon's total costs appear inconsistent with the reductions achieved by Energex. On that basis, Ergon's proposed augmentation and customer initiated works require detailed investigation to establish evidentiary links between localised demand and capex projects and where relevant other network specific drivers of expenditure.

3.2 Energex Replacement Capex

Energex has proposed replacement capex of $1,773M ($2014-15), which represents a 66% increase relative to actual expenditure for 2010-15.

Energex determines asset replacement options using predictive, preventive, and reactive maintenance methodologies. These methodologies are applied either independently or in combination using a risk based approach to deliver the lowest whole of life cost.

Energex has stated that the majority of its asset replacement program has used condition based risk management (i.e. predictive methodology) to identify assets nearing the end of their lifecycle and not otherwise being replaced in the course of network capacity upgrades.

A breakdown of the Energex's replacement program is set out in table 1.[8]

Table 1: Energex's Disaggregated Replacement Capex

	Total 2010-15 $M	Total 2015-20 $M	Difference $M	Difference %
Poles	143	253	110	77
Pole Top Structures	64	81	16	25
Overhead Conductors	94	124	31	33
Underground Cables	101	36	(65)	(64)
Service Lines	2	60	58	2,522
Transformers	103	126	23	23
Switchgear	156	153	(3)	(2)
SCADA & Comms	41	125	84	205
Other	38	281	243	638

The largest contributors to the increase in Energex's replacement capital program are poles, SCADA and 'other' expenditure items.

In terms of poles and pole tope structures, Origin notes that Energex has adopted a preventative strategy supported by routine maintenance.[9] The maintenance and inspection frequency rates identify replacements as required. Under Energex's preventative methodology, it states that an asset is replaced when an inspection has identified the asset as having an intolerable risk on the basis of asset condition.[10] Origin considers that an increase of this magnitude (77%) can only be driven by either a dramatic increase in inspections, unit costs or a change in Energex's risk appetite. Origin considers that the AER needs to examine what is driving the increase in pole replacement capex and the prudency of the proposed program.

[7] Ergon, Forecast Expenditure Summary – Customer Initiated Capital Works, p.9.
[8] Taken from Reset RIN, 'Repex Worksheet'.
[9] Energex, p.21.
[10] Energex, p. 12.

Energex has historically developed its own SCADA and Automation systems. Energex states that, while the current core capability of its SCADA and Automation system is sufficient to operate the network now, additional capability and performance is required to respond to the demands of the network and the needs of customers. Energex has concluded that the most economically and operationally efficient solution is to transition to an off-the-shelf intelligent Remote Terminal Unit (RTU) platform.

The Energex SCADA and automation strategic plan 2015-20 includes an analysis of delivery risk. However, Origin considers that there is an absence of risk in the decision making process to decide to upgrade the SCADA. This is particularly deficient considering the magnitude of the spend.

In terms of the 'other' category, there is no basis with which to compare the proposed increase of $243M.

Given the similar operating environments between Energex and Ausgrid (i.e. improved network utilisation, reduced performance standards and lower demand growth) Origin would expect a degree of comparability between the trends in efficient replacement expenditure between the businesses. We would therefore expect to see either a reduction in the replacement program to better reflect improvements in network utilisation and downgraded demand and security of supply requirements, or alternatively, a stronger evidentiary risk based case from Energex at a category level that supports its higher expenditure program.

3.3 Ergon Replacement Capex

Ergon has proposed a replacement capex program of $1,358M, which represents a 33% increase relative to actual expenditure for 2010-15.

Ergon uses a proactive approach to determine replacement activities where an asset is replaced when the risks of failure exceed the replacement cost; a run-to-failure replacement approach is used where the risk would not justify the cost of replacement.

A proactive approach is undertaken typically for high-value assets such as transformers, where Ergon holds plant information and condition data. Ergon has established Condition Based Risk Management (CBRM) models for these assets as well as condition monitoring tools and processes to identify the balance between proactive and reactive asset replacement. Where CBRM models have not yet been developed (such as for lines), Ergon uses net present value analysis and risk assessments that consider the safety, history, performance, cost, and other business delivery factors, in order to inform its decisions about proactive end-of-economic-life replacement and life-extension refurbishment works.

Low-value assets where it is not economic to collect and analyse condition data are allowed to run-to-failure, with minimal or no intervention. These assets are managed generally through an inspection regime to identify and replace assets that are expected to fail before their next inspection. Low-value assets that have higher than expected failure rates, or high levels of risk upon failure, may also be subject to targeted replacement programs.

A breakdown of the Ergon's replacement program is set out in table 2.[11]

[11] Taken from Reset RIN, 'Repex Worksheet'.

Table 2: Ergon Disaggregated Replacement Capex

	Total 2010-15 $M	Total 2015-20 $M	Difference $M	Difference %
Poles	115	76	(38)	(34)
Pole Top Structures	57	103	46	79
Overhead Conductors	157	195	38	24%
Underground Cables	6	15	9	151
Service Lines	37	56	19	53
Transformers	170	177	7	4
Switchgear	17	70	53	311
SCADA & Comms	119	163	45	38
Other	36	38	2	7

The largest contributors to the increase in Ergon's replacement capital program are overhead conductors, transformers and SCADA.

Ergon highlights that changes to the network planning criteria, lower than forecast maximum demand growth and demand management reduced the need for augmentation in the 2010-15 regulatory control period. The deferral of augmentation has meant that older existing assets have remained in service rather than being replaced by newer, higher-capacity assets. These assets will be subject to continued inspection and maintenance commensurate with their aged condition and result in higher levels of expenditure to replace, refurbish or maintain than they would otherwise require. In this regard, Origin would expect evidence of an observable and verifiable trend in increased failure rates for these assets.

In relation to its high cost assets, Ergon has expressed service performance outcomes as risk elements, and actively sought to maintain the same level of overall risk currently experienced in the current regulatory control period (2010-15).[12] Origin considers that it is important for the AER to review closely Ergon's application of service as risk, on the basis of the change in minimum service standards (MSS) and security of supply obligations, and to ensure these are appropriately applied in indentifying the timing of replacement.

With respect to Ergon's pole tops, conductors and distribution transformers, Ergon uses a simple projection of the trend in historical failures to forecast replacement volumes and uses unit cost rates to develop expenditure forecasts.[13] Origin questions how changes in the level of service are incorporated into Ergon's methodology on the basis that Ergon expresses service as risk elements.

Unlike Energex, Ergon does not appear to have included its engineering business case to support its SCADA expenditure. The largest driver of the SCADA spend is the annual replacement of field devices, which is significantly higher than Energex on an annual basis; since 2008-09, it has exceeded Energex's expenditure threefold. In the absence of sufficient supporting documentation, Origin considers these costs warrant specific examination.

[12] Ergon Energy, Forecast Expenditure Summary, Asset Renewal 2015 to 202, Summary, P.14.
[13] Ergon Energy, Forecast Expenditure Summary, Asset Renewal 2015 to 202, Summary, p. 33.

4 Forecasts Opex

Following changes to the NER, the AER has adopted a more holistic approach to assessing the proposed costs of regulated businesses. The most relevant aspect of the AER's assessment is the application of its economic benchmarking techniques.

While Origin recognises that benchmarking will be the principal method to determine allowed opex and capex, we also consider certain programs and cost items contained in the DNSPs' proposals warrant specific interrogation.

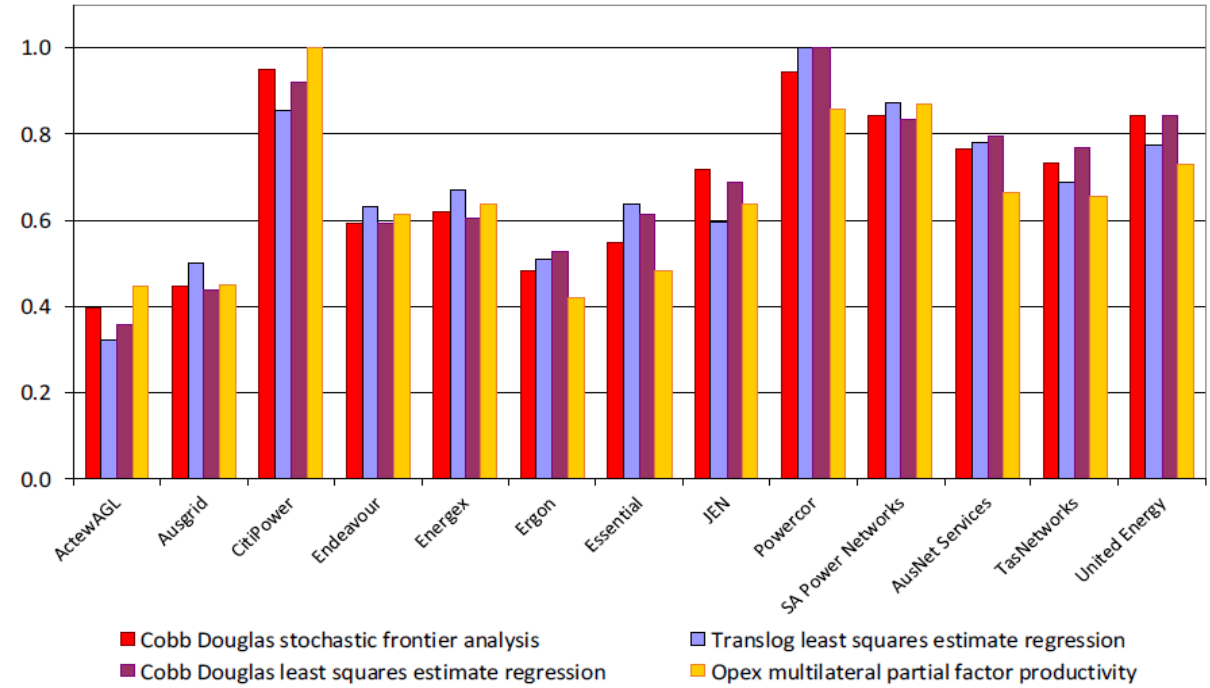
4.1 Current AER Benchmarking

In its assessment of the NSW DNSPs, the AER applied a number of benchmarking techniques to compare the relative efficiency of the base opex proposed by the businesses to their peers. These measures included multilateral total factor productivity (MTFP), multilateral partial factor productivity (MPFP) as well as a number econometric modelling methods.

A summary of the AER benchmarking results is reproduced in figure 1. The results indicate that, on average, Energex and Ergon are relatively less efficient than the most productive DNSP. Furthermore, they are broadly comparable to Endeavour and Essential Energy and slightly more productive than Ausgrid.

Given the AER's draft determination for NSW DNSPs, all things being equal, this would indicate there is the provision for productivity improvements in the performance of the Queensland DNSPs.

Figure 1: Comparison of outputs from AER benchmarking techniques



Source: AER, Draft decision Ausgrid distribution determination 2014-19 Attachment 7: Operating expenditure, p.64

Origin has specific concerns about the level of overhead costs and information and communication technology (ICT) and considers these may be key drivers of inefficiency.

4.2 Overheads

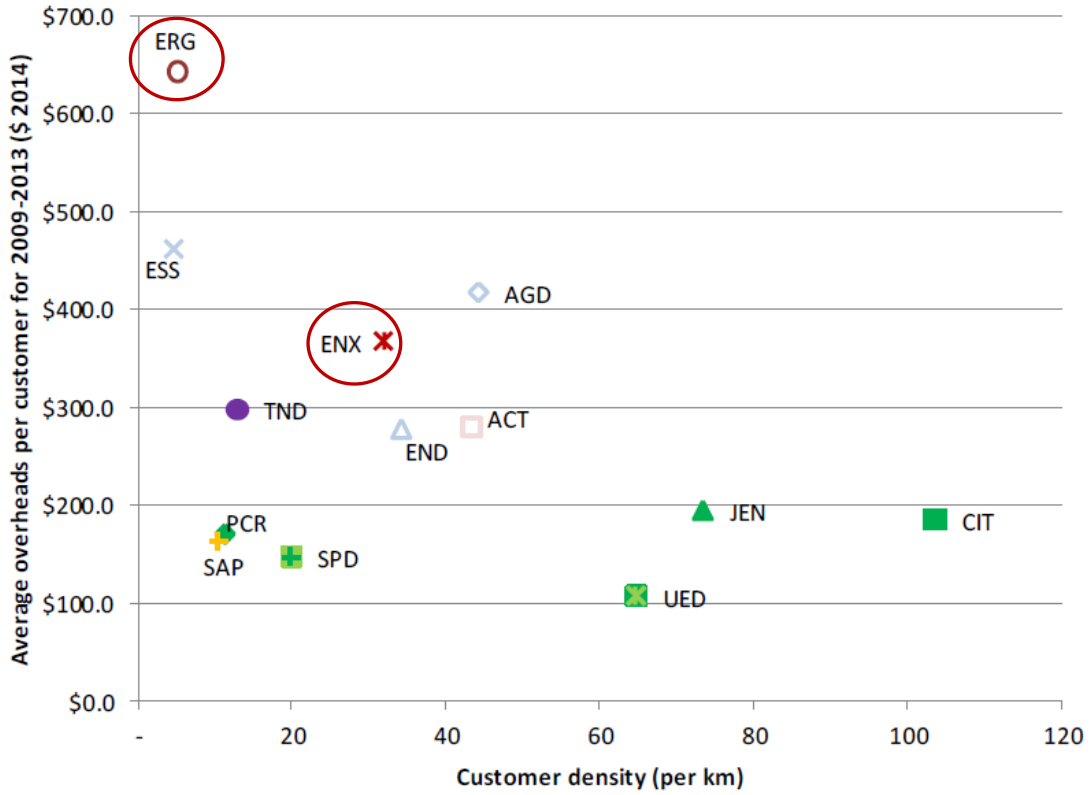
Origin understands that corporate overheads are allocated to either capital or maintenance activities according to a DNSP's approved cost allocation method (CAM).

Origin considers that it is essential that overheads are measured in their totality because DNSPs may have different capitalisation and allocation policies that will influence the comparability of overheads between capex and opex.

The AER undertook specific analysis of overhead costs in its assessment of the NSW DNSPs. A summary of the AER's results regarding its assessment of total overheads is reproduced in figure 2.

The AER's analysis shows that Energex appears to have high costs relative to all Victorian service providers and SA Power Networks, while Ergon appear to have very high costs relative to most of its peers. While Ergon's relative inefficiency is explained in part due to its low customer density, the AER noted that with respect to Essential Energy differences in customer density can only account for part of the cost difference.

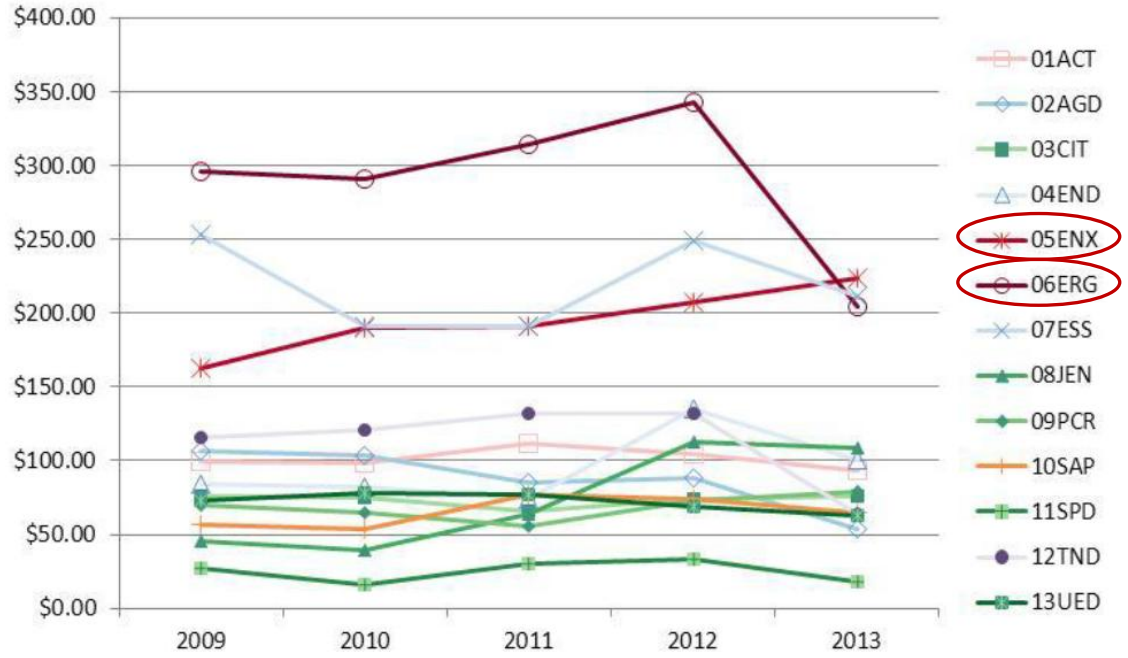
Figure 2: Comparison of Total Overheads costs per customer



Source: AER, Draft decision Ausgrid distribution determination 2014-19 Attachment 7: Operating expenditure, p. 82

Total overhead efficiency analysis is a combination of corporate and network overheads. Origin has particular concerns with the level of corporate overheads of the Queensland DNSPs. This is reinforced by the AER's corporate overhead analysis which is reproduced in figure 3.

Figure3: Comparison of Corporate Overheads per customer



Source: AER, Draft decision Ausgrid distribution determination 2014–19 Attachment 7: Operating expenditure, p. 80

The AER's analysis shows that the corporate overhead cost metric for both Energex and Ergon are well above most DNSPs and on par with only Essential Energy.

Origin has undertaken a comparison of the total overhead costs of the NSW DNSPs with the Queensland DNSPs based on the costs reported in their respective reset regulatory information notices (RINs). This data is presented in table 3.

Table 3: Comparison of Corporate Overheads per customer

DNSP	2014/15	2015/16	2016/17	2014/18	2018/19	2019/20
Endeavour - Network OH % capex	8.8	10.0	11.3	11.2	11.7	n/a
Endeavour - Corporate OH % capex	5.7	6.4	8.1	8.0	8.5	n/a
Endeavour Total OH % capex	***14.5***	***16.4***	***19.4***	***19.2***	***20.2***	n/a
Essential - Network OH % capex	10.2	10.7	10.8	11.0	11.2	n/a
Essential - Corporate OH % capex	14.7	15.2	15.1	15.6	15.7	n/a
Essential Total OH % Capex	***24.9***	***25.9***	***25.9***	***26.6***	***26.9***	***n/a***
Ausgrid - Network OH % capex	14.5	14.5	14.5	14.5	14.5	n/a
Ausgrid - Corporate OH % capex	2.1	2.1	2.1	2.1	2.1	n/a
Ausgrid Total OH % Capex	***16.5***	***16.5***	***16.5***	***16.5***	***16.5***	n/a
Ergon - Network OH % capex	n/a	14.1	14.4	15.4	16.1	16.13
Ergon - Corporate OH % capex	n/a	13.8	14.0	15.0	15.7	15.71
Ergon Total OH % Capex	***n/a***	***27.9***	***28.3***	***30.4***	***31.8***	***31.84***
Energex - Network OH % capex	n/a	13.2	12.7	13.2	13.3	13.04
Energex - Corporate OH % capex	n/a	17.7	17.0	17.3	17.7	17.05
Energex Total OH % Capex	***n/a***	***30.9***	***29.7***	***30.6***	***31.0***	***30.09***

The comparison demonstrates that the network overhead costs of the Queensland DNSPs are comparable to the overhead rates of the NSW DNSPs. However, when comparing the corporate overhead rates, Energex and Ergon are materially inefficient (with the exception of a comparison with Essential). This is also in the context of the reductions made by the AER to the overhead costs of all of the NSW DNSPs (including reductions to bring Essential into line with the efficient benchmark) on the basis that their total overheads were considered to be high to very high when compared to their peers.

On this basis we would expect the AER to make similar reductions to the corporate overhead costs proposed by Energex and Ergon.

4.3 ICT Expenditure

Within the corporate overhead category, Origin considers that a significant source of inefficiency is ICT costs. Costs relating to the provision of these services are showing progressive increases despite an environment supporting cost reductions. On this basis, Origin considers the service model adopted by Energex and Ergon needs to be examined to ensure it is delivering the most prudent and efficient ICT solution.

Energex and Ergon procure ICT services from SPARQ, a jointly owned subsidiary.

Over the previous regulatory period, Energex exceeded its regulatory allowance for ICT opex by 12%[14] while Ergon underspent its allowance by 26%.[15]

These differences are in the context of a substantially lower capex program over the same period and the recommendations of the ENCAP and IDC reviews.

For the 2015-20 regulatory period, Energex is proposing an ICT opex allowance of $536.4M ($2014-15) and capex of $22.3M ($2014-15), while Ergon is proposing an opex allowance of $471M ($2012-13) and a capex allowance of 23.6M ($2012-13).

This represents an increase for Energex relative to the 2010-15 regulatory period of 14%[16] and for Ergon a sizable increase of 55%.[17]

As part of the DNSPs' Business Efficiency Programs in response to the Government's Independent Review Panel on Network Costs (IRP), they identified the following key areas of cost saving opportunity:[18]

- reducing overheads as the Program of Work (PoW) reduces;
- rationalising corporate support functions;
- reducing the ICT headcount; and
- reducing overtime.

The IRP also identified incongruent ICT strategic planning between Energex and Ergon and found few instances where the DNSPs have chosen to work together to minimise ICT costs.[19]

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[14] Based on data contained in the Energex ICT Strategic Plan at Appendix 32 of Regulatory Proposal, see p. 20.
[15] Based on data contained in Ergon's Forecast Expenditure Summary: Information, Communication and Technology 2015 to 202, see p. 14.
[16] Based on the figures contained in the Energex ICT Strategic Plan at Appendix 32 of Regulatory Proposal.
[17] Based on converting the forecast figures Ergon's Forecast Expenditure Summary: Information, Communication and Technology 2015 to 202 into nominal dollars.
[18] Independent Review Panel on Network Costs, Electricity Network Costs Review Final Report, pp, 50-52.
[19] Independent Review Panel on Network Costs, Electricity Network Costs Review Final Report, p.54.

Origin also notes that the IRP considered that the services currently provided by SPARQ may be delivered more efficiently by external service providers. To this end, it recommended that the DNSPs test the provision of these services by competitive tender. Through this market testing, the most cost effective use of in-house and third party ICT service provision should be employed, while maintaining appropriate service levels. This would assist the DNSPs in their regulatory submissions to the AER.[20]

In this regard, Origin considers that the Service Level Agreement and the manner with which the ICT program is identified (we consider that the DNSP should be responsible for identifying its need and not the external service provider), costed and appraised must be rigorously assessed both through benchmarking and qualitative investigation to ensure it represents and delivers services consistent with good operating practice.

ICT cost are included in the DNSPs corporate overhead costs and allocated to opex and capex according to their respective cost allocation methods (CAM).

On the basis that current AER benchmarking analysis reveals that the Queensland DNSPs are already at the higher end of corporate overhead inefficiency, Origin considers that the proposed increases will only accentuate this inefficiency especially when direct expenditure is proposed to decrease.

4.4 Other Opex

Origin acknowledges that the AER's benchmarking techniques will be the principal method to determine the efficiency of the proposed opex allowance. However, Origin considers that when undertaking category analysis to support its benchmarking the AER should examine further whether Energex and Ergon have improved the strategic management of property and fleet and whether this has delivered improved levels of utilisation and savings in these areas.

In this regard, it is essential that the AER tests not only whether frameworks and processes are documented but that they are operating as intended.

[20] Independent Review Panel on Network Costs, Electricity Network Costs Review Final Report, p.54.

5 WACC

5.1 Queensland Proposals

Both DNSPs have proposed respective returns significantly higher than the AER's recent decision for NSW DNSPs. Energex has proposed a nominal vanilla WACC of 7.75% whereas Ergon has proposed a slightly higher return of 8.02%. This compares with the AER's NSW decision of 7.15%.

The DNSPs have implemented the AER's trailing average approach in accordance with the AER's proposed transitional arrangements. Origin supports the AER's move to a trailing average approach applying a simply average over a post tax revenue model based weighting.

The DNSPs have departed from the AER's Rate of Return Guidelines to derive their respective returns on equity. The resulting higher WACC for Ergon translates into an increase in revenue of $610M over the regulatory period; for Energex, this value represents an increase of $781M. In each case, the DNSPs have deviated from the AER's preferred WACC with no corresponding increase in services.

The key departures from the Rate of Return Guidelines relate to the estimation of the equity beta and market risk premium (MRP).

5.2 Equity Beta

The NER requires that the return on equity for a regulatory control period must be estimated such that it contributes to the achievement of the allowed rate of return objective.

The Queensland DNSPs have proposed an equity beta point estimate of 0.91. This is well in excess of the equity beta of 0.82 proposed by the NSW DNSPs and the AER's NSW draft decision of 0.7.

The equity beta proposed by the DNSPs is based on the analysis of their consultants (SFG), which developed a weighted average of estimates of equity betas from relevant evidence and financial models.

Origin considers that the financial risk exposure faced by regulated businesses is relatively low, largely due to the minimal risks that exist in the current regulatory framework (i.e. the businesses carry no volume risk under a revenue cap) and the ability of the businesses to effectively pass on borrowing costs to consumers.

The AER's consultants on its NSW Draft Determination (McKenzie and Partington) also noted that given the low default risk in regulated energy network businesses, the financial risk effects are 'unlikely to be substantive in normal market conditions'. McKenzie and Partington concluded:[21]

> …it is hard to think of an industry that is more insulated from the business cycle due to inelastic demand and a fixed component to their pricing structure. In this case, one would expect the beta to be among the lowest possible and this conclusion would apply equally irrespective as to whether the benchmark firm is a regulated energy network or a regulated gas transmission pipeline.

The AER has defined the benchmark efficient entity as a pure play regulated energy network business operating within Australia.

Origin agrees that given the regulatory framework and its influence on business and financial risk that it is entirely appropriate to use available Australian data rather than an international sample where these businesses may not be subject to the same low risk environment as the Australian regulatory framework.

[21] AER Draft Decision, Attachment 3: Rate of Return, p. 236.

For its NSW decision, the AER accepted the equity beta estimates derived by its consultant (Henry 2014). This empirical analysis used a comparator set of nine Australian energy network firms, using available data from 29 May 1992 to 28 June 2013 and showed an extensive pattern of support for an empirical equity beta within a range of 0.3 to 0.8.

The AER considered the equity beta estimates presented by Henry were generally consistent with other empirical studies based on Australian energy network firms. The AER also considered that international comparators were less representative of the benchmark efficient entity and therefore should not be used as the primary determinant of the equity beta range or point estimate.

The AER did, however, consider that the international evidence provides some limited support for an equity beta point estimate towards the upper end of its empirical range.

The regulatory framework which applies to Australian regulated network businesses creates a very low business and financial risk environment that Origin considers is unparalleled. For these reasons, Origin endorses the AER's approach to determine systematic risk based on empirical studies of Australian energy network firms. Origin also agrees that international comparators should not be used as primary determinants of risk to the extent that the risks faced by these firms are not directly comparable to Australian conditions.

Origin also notes that the Henry data supports an argument for an equity beta lower than the upper range adopted by the AER. However, Origin considers that a beta of 0.7 is balanced on the basis it is a modest step down from previous regulatory determinations, provides a certain and predictable outcome for investors, and provides a balance between the views of consumer groups and the DNSPs.

5.3 Market Risk Premium

The AER's Rate of Return Guidelines sets out its proposed approach to estimating the expected return on equity, including the relevant material that it proposes to use to inform its final estimate of the expected return on equity.

Both Energex and Ergon have proposed a MRP estimate of 7.57% based on the outputs of a weighting scheme of historic averages, dividend discount model and independent valuation reports.

Origin considers that the DNSPs have drawn on the same data and information considered by the AER in determining its estimate.

However, the material relied upon by Energex and Ergon produces an estimate of the MRP that is significantly higher than the historic decisions by regulators, including decisions by jurisdictional regulators across multiple regulated industries.

The material relied upon by the AER produces an estimate that is stable and consistent with historic decisions.

Taking into account that the information considered by both the DNSPs and the AER is consistent, Origin considers that with respect to the MRP, the material relied upon by the AER produces an estimate that better reflects the efficient financing costs of a business exposed to the level of risk that applies to an Australian regulated DNSP and should be preferred over the estimated provided by Energex and Ergon.

6 Metering Services

As part of the AER's Framework and Approach for Queensland DNSPs, it proposed the following changes to the classification of meters:

- all type 6 metering related services, other than metering investigation requested by customers, from standard control to alternative control services; and
- all type 5 metering related services from negotiated to alternative control services.

The classification of these services as alternative control opens up the potential for competition in the provision of these services. Origin considers that there are two barriers to promoting competition in metering services. The first are the existence of exit fees that act as a constraint to customers switching to an alternative service provider and the second is opaque unbundled meter charges that do not allow customers to make fully informed decisions on the benefits of switching to an alternative provider.

In setting efficient prices, Origin encourages the AER to consider costs that fall within an efficient range that also ensure the annual metering charges for existing meters are compatible with encouraging entry into the market for meter provision. Promoting efficient market entry will allow customers to obtain advanced metering infrastructure from a range of competitive providers and therefore benefit from products and services that they could not otherwise access.

6.1 Exit Fees

In its Draft Determination for NSW, the AER decided not to impose an exit fee for customers who switch to an alternative metering provider. As a result, it chose to classify residual metering costs as a standard control service and to recover these costs through network tariffs.

Under this approach, the annual charge for existing customers will include capital cost recovery. The metering charge for a new customer on the other hand will not include a capital cost as they will have made an upfront capital contribution for the installation of an alternative meter. In this instance, the capital cost of the meter will be transferred into the RAB and recovered through network charges. As a result, the customer will not be exposed to a metering exit fee.

Origin supported this decision as we consider it will promote competition in unregulated metering services. Origin considers that this decision should also extend to Queensland DNSPs.

6.2 Annual Metering Fees

Energex and Ergon have proposed a building block approach as the basis for developing revenues and charges for metering services.

The annual metering charge is designed to recovers the following specific elements:

- recovery of the residual capital costs of the existing meter;
- maintenance to cover works to inspect, test, maintain, repair and reactive meter replacement;
- reading for the quarterly or other regular reading of Type 5 and 6 meters; and
- meter data services for the collection, processing, storage and delivery of metering data and the management of relevant NMI Standing Data in accordance with the NER.

The charges developed by Energex and Ergon are presented in tables 4 and 5 respectively.

Table 4: Energex's Proposed Annual Metering service Charges ($ nominal)

Tariff Type	2015/16	2016/17	2014/18	2018/19	2019/20
Primary	$39.17	$40.49	$41.86	$43.27	$44.73
Load Control	$11.75	$12.15	$12.56	$12.98	$13.42
Solar PV	$27.42	$28.34	$29.30	$30.29	$31.31
Primary + Load Control	$50.92	$52.64	$54.41	$56.25	$58.15
Primary x 2	$78.34	$ 80.98	$83.71	$86.54	$89.46
Primary + Load Control x 2	$62.67	$64.78	$66.97	$69.23	$71.57
Primary + Load Control+ Solar PV	$78.34	$80.98	$83.71	$86.54	$89.46
Primary + Solar PV	$66.59	$68.83	$71.16	$73.56	$76.04

Table 5: Ergon's Proposed Annual Metering service Charges ($ 2014-15)

Tariff Type	2015/16	2016/17	2014/18	2018/19	2019/20
Primary	$85.31	$83.56	$81.87	$80.23	$78.66
Primary and controlled load	$116.68	$114.28	$111.97	$109.73	$107.58
Primary and solar	$106.52	$104.33	$102.22	$100.18	$98.22

Origin considers that the charges proposed by Energex are comparable to the charges approved by the AER for NSW. The charges proposed by Ergon are relatively higher, which is not unexpected given its geographic and operational differences.

Both DNSPs included detailed information regarding the material and labour costs for a new installation. However, it is not clear how these translate into a metering charge for a new or upgraded meter that is provided by the DNSP. Origin considers that Energex and Ergon need to provide not just an annual metering charge for existing meters but also an unbundled annual non-capital charge for customers who pay upfront for their own meter that is provided by the DNSPs and the charges for new and upgraded meters by meter type.

Furthermore, for the avoidance of doubt, Origin seeks confirmation of any non-capital charges that will be levied by the DNSPs on customers in the event that a customer switches from their existing meter to an unregulated meter provided by a third party meter provider.