

8 August 2014

Mr Warwick Anderson General Manager - Networks Branch Australian Energy Regulator GPO Box 3131 Canberra ACT 2601

Dear Mr Anderson

RE: SUBMISSION TO NSW 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) deliberation over the regulatory proposals, submitted by New South Wales electricity Distribution Network Service Providers (DNSPs) under the National Electricity Rules (NER), to determine their revenue allowances for the period 2015-19.

During the 2009-14 regulatory period the NSW DNSPs made unprecedented investments in expanding, augmenting and renewing their networks. This led to electricity prices increasing at a rate exceeding that of largely all other consumer items over the same period.¹ These investments were made in part in the expectation that average demand and consumption would continue to grow strongly. Instead, a pronounced downtrend occurred.

The NSW Government responded to concerns about increases in network prices by identifying some \$5.4 billion of expenditure reductions from among the three NSW DNSPs over five years.² In parallel, policy makers reviewed the rules governing the setting of network revenues in the National Electricity Market (NEM), moving to ensure greater clarity in the decision-making process and to improve the scope for comparison between networks in terms of their efficiency. Lastly, the NSW Government amended the licence conditions that specify security standards and reliability levels the NSW DNSPs are required to meet, determining lower standards to be more in line with customer expectations.³

The DNSPs reported returns on equity in the range 19 to 20 percent in the most recent year,⁴ in contrast to a regulator-approved return on equity of 11.82 percent. This robust profitability, exceeding that of some of Australia's most profitable banks⁵, should be considered in the context of improved network reliability outcomes and the weighted average cost of capital (WACC) proposed for the next period.

The WACC is the most important single input in terms of revenue outcomes. The proposed WACC of 8.83 percent appears excessive given the DNSPs are providing an essential service with no volume risk, with extensive pass through provisions to deal with unexpected cost increases, and

Productivity Commission, *Electricity Network Regulatory Frameworks*, Inquiry Report Volume 1, pp.106-8
 NSW Trade and Investment, <u>www.resourcesandenergy.nsw.gov.au/energy-consumers/energy-</u>

sources/electricity/removal-of-electricity-price-regulation, accessed 8 July 2014

 ³ Reliability and Performance Licence Conditions for DNSPs, Anthony Roberts, Minister for Energy, 1 July 2014
 ⁴ Ausgrid Annual Report 2012/13, p. 7; Essential Energy Annual Report 2012/13, p.28; Endeavour Annual Report, 2012/14, p.3

⁵ Commonwealth Bank of Australia's ROE in 2013 of 18.2 percent (Annual Report, p.6); ANZ's ROE in 2013 of 15.5 percent (2013 Results Media Release, p.1

geared at (at least) 65 percent.⁶ Origin has specific concerns with key elements of the proposed WACC: the beta does not reflect the risk of a fixed revenue business; the market premium exceeds analysts' consensus views, and the DNSPs have proposed substantial increases average cost of debt in the five months since their transitional revenue proposals for FY15, even though this is based on a ten year trailing debt indicator.

Origin acknowledges that under the NER the benchmark rate the AER approves may differ from the actual cost of capital a network faces, but we highlight that significant divergence distorts investment incentives and drives customer prices to inefficient levels. Origin urges the AER to exercise its judgement when setting input to select parameters at the bottom of ranges permitted within the framework where these estimates would more closely approximate the networks' true funding cost.

While the DNSPs propose to reduce their capital expenditure programs relative to the previous period the program remains considerable: \$8.8 billion over four years, of which some 42 percent is replacement expenditure. Origin notes all three networks have reduced the frequency of outages⁷ even as spending has fallen below levels approved in the last review, suggesting there is now latent capacity in the networks and some replacement expenditure may not be warranted. Origin urges the AER to apply rigorous scrutiny to capital expenditure proposals and to defer capital expenditure to the extent possible while maintaining the safety of the network. Origin's analysis of capital overheads also suggest further efficiency gains in these costs may be available.

In terms of operational expenditure the DNSPs propose levels largely in line with recent years. This seems inconsistent with a much reduced capital expenditure program, a network that has benefitted from significant investments in renewal should require less maintenance, a reform program targeting inefficient spending and the removal of well in excess of \$500 million⁸ in metering costs, which are now classed as an Alternative Control Service (ACS).

In particular, Origin questions proposals for a loss of synergy costs, stranded labour costs, certain vegetation management costs and forecasts for wages growth for technical workers at levels above long term averages. Origin also has concerns about some of the meter exit fees and ancillary service charges proposed by the networks. It is important that meter exit charges do not act as a barrier to the uptake of competitive metering. Equally, Origin questions some ancillary service fees, such as a proposed meter test fee of \$633⁹ on Ausgrid's primarily suburban network, which would have a significant impact on customers, making it harder for them to contest their bills.

Under the current proposals residential customers face small increases in nominal terms. Networks NSW has gone some way towards improving the efficiency of the NSW DNSPs. Networks NSW has gone some way towards improving the efficiency of the NSW DNSPs and their proposals recognise the lower growth capex now required. However following the significant change in demand conditions, the revision of licence requirements, the strong commitment to improved efficiency, as well as the substantial investments already undertaken, it is reasonable to expect a reduction in network charges rather than the increase proposed. Origin supports a pared-back revenue allowance that recognises changing circumstances in the sector, price pressures customers currently face and the new investments already locked into the regulated asset base.

Origin considers that to promote constructive and informed contributions to the regulatory process the information supporting the DNSPs proposals must be presented to stakeholders in a transparent and comparable form across each of the regulatory reporting documents and over time. Origin has been unable to reconcile the supporting Regulatory Information Notices (RINs) with the Regulatory Proposals and requests that the AER address this inconsistency. Origin also

⁹ Including GST

⁶ Ausgrid gearing at 30 June 2013, Annual Report 2012/13; cf. Origin's gearing of 32 percent at 30 June 2013, being [net debt to (net debt + shareholders' equity)], Origin Energy Annual Report 2013, p.17

⁷ Ausgrid Regulatory Proposal, p.31; Essential consolidated RIN, sheet 6.2, Endeavour consolidated RIN, sheet 6.2

⁸ Endeavour identify \$302M in costs reductions over the 2014-19 regulatory period from reclassification of metering and ancillary services whereas Essential Energy identify \$204M. Ausgrid has not identified similar reductions as a result of the reclassification of these services in its RIN. Source - RIN 2.17

looks forward to responding to the benchmarking data that the AER will make available in October.

For the AER's consideration Origin attaches a report from consultants Oakley Greenwood, jointly commissioned by Origin, AGL and EnergyAustralia, which analyses operational expenditure and metering exit fees proposed by the DNSPs.

If you have any questions regarding this submission please contact Steven Macmillan in the first instance on (02) 9503 5005.

Yours sincerely

R. K. h. Zdut_

Keith Robertson Manager, Wholesale and Retail Regulatory Policy

Ausgrid, Endeavour, Essential Initial 2015-19 Initial Regulatory Proposals

Origin Submission

August 2014

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1. Presentation of data

To support their regulatory proposals DNSPs are required to lodge completed Regulatory Information Notices (RINs). Origin considers that to promote constructive and informed contributions from stakeholders it is imperative that the data and information that underpin a regulatory review process be presented to stakeholders in a manner that is, to every extent practicable, transparent and comparable across each of the regulatory reporting documents and over time.

In Origin's experience a direct comparison of the categories of capital expenditure in the DSNPs' regulatory proposals, the RINs and the Post Tax Revenue Model (PTRM) was, in most instances, not possible. This problem was accentuated when the DNSPs explanatory and supporting information was targeted to the quantitative information in their respective proposals.

This is best captured in Ausgrid's response to the AER Reset RIN where it stated that:

Ausgrid has forecast its capex and opex for the regulatory proposal consistent with the cost drivers and cost categories we use in the day-to-day running of the business. The requirements of the RIN (or notice) to categorise costs in different ways mean that simply adding up the expenditure presented in the templates will not immediately reconcile to the forecast expenditure in our regulatory proposal, which is anticipated by the RIN.¹⁰

Origin recognises that producing clearly defined reporting data categories to ensure consistency and comparability of data across DNSPs is likely to be an ongoing process of refinement. However, Origin considers that this objective should be a matter of priority for the AER to empower stakeholders to contribute. In the interests of an informed and balanced outcome, the DNSPs should be required to improve the consistency of their data prior to the networks releasing their revised proposals.

 $^{^{\}rm 10}\,$ Ausgrid, Response to AER Reset Regulatory Information Notice, p.27

2. Cost of capital

The AER's *Rate of Return Guideline* makes clear that the AER must estimate the WACC of an efficient network business. The result is an estimate of the financial costs of a typical network business with an efficient capital structure that does not consider the individual circumstances of any particular firm.

Origin acknowledges that the NER and associated guidelines allow the regulated WACC to differ from the actual WACC of the regulated business in question. However, it is vital that the AER set the regulatory WACC as close to its actual level as it is permitted to do so by the regulatory framework, because the WACC is intended to create an incentive for network businesses to source debt and equity financing efficiently, while considering the financial risks associated with different financial strategies. If the regulated WACC diverges significantly from the actual cost of capital faced by the regulated businesses this will distort the investment decisions of the networks and increase customer prices beyond efficient levels, and no other network input has as large an impact on the efficiency of end prices customers pay.

At a high level Origin believes that the NSW electricity DNSPs:

- sell an essential service under monopoly provisions
- benefit from a significant number of pass-through events that mitigate the risk of unforeseen costs;
- will operate under a revenue cap that eliminates all volume risk over the five year period.

As a result of these factors Origin considers that an efficient benchmark cost of capital for these firms is more comparable to a corporate bond rate than that of a company like Origin that manages a diverse array of risks domestically and internationally in several fuels, in a competitive environment, across an integrated supply chain.

Origin would appreciate the AER taking the following issues into consideration in its review and estimation of the regulatory WACC, and exercising its judgement where possible to select values for WACC inputs towards the lower end of acceptable ranges, reflecting the apparent divergence between the WACC proposed by the DNSPs and other reputable data points in the market.

A number of external indicators provide useful context in which to consider the networks' proposed WACC and WACC parameters. These indicators suggest a disparity between the networks proposals and what would reasonably be expected for comparable businesses.

Productivity Commission analysis

The Productivity Commission's *Electricity Networks Regulatory Frameworks* report compares the actual borrowing costs of firms with the forecast cost of debt used in the revenue determinations. For the fourteen network businesses the regulatory cost of debt exceeds the actual cost of debt by between 0.29 and 3.04 percentage points.¹¹

Beta for businesses under a Revenue Cap

The NSW DNSPs will move to a revenue cap under this determination. This effectively removes their exposure to volume risk. The pool of Australian regulated distribution network companies from which the AER drew its estimate of beta all face volume risk under price caps. Origin believes an adjustment should be made to the beta to reflect this reduction in risk. The consultants to the DNSPs¹² examine 59 companies outside Australia, with their advisors acknowledging that differences such as the difference between revenue cap and price cap are "as likely as any differences between regulation of Australian and US businesses to lead to differences in systemic risk exposure".

¹¹ Productivity Commission 2013, *Electricity Network Regulatory Frameworks*, p. 205

¹² Attachment 7.21 to Ausgrid's Regulatory Proposal: CEG, Equity beta issues paper: International comparators, May 2014

Differences between the 2014-15 transitional proposal and the current 2014-19 proposal

The following table summarises the networks' proposed WACC and WACC parameters for the 2014-15 transition proposal and the current 2014-19 regulatory proposal:

Table 7.1 Differences between	2014/15 transition	al proposal and c	urrent proposal	
	2009-14, AER approved	2014-15 Transitional, network proposed	2014-15 Transitional, AER approved	2015-19 Network proposed
WACC, %	10.02	8.52 (8.52-9.11)	8.1 (7.6-8.1)	8.83 (8.83-9.44)
Cost of debt, %	8.82	7.55-7.84	6.77-7.5	7.98 (7.98-8.06)
Cost of equity, %	11.82	9.98-11.02	8.9	10.11 (10.11-11.50)
Risk free rate, %	5.82	4.78-5.17	4.3	4.78
Market risk premium, %	6	6.5	6.5	6.5
Equity beta	1	0.8	0.7	0.82
Value of imputation credits (gamma)		0.25	0.5	0.25

The transitional proposal was submitted in January 2014 and the current proposal was submitted in May 2014. The networks have proposed an increase in a number of the parameters from the transitional proposal to the current proposal. Given this, Origin asks that the AER examine whether the networks have provided an adequate explanation for the revised parameters as only a few months had passed between the two proposals.

Total Shareholder Return (TSR) for listed utility infrastructure businesses¹³

For the regulatory period covering the last five years, the businesses generated a TSR of 20-33% p.a., materially outperforming the S&P/ASX 100 index TSR of 11.6 percent p.a. Over a longer timeframe of eight years (which includes the global financial crisis), the utility infrastructure players continue to outperform but to a lesser extent returning 6.7-11.4 percent p.a. compared to the S&P/ASX 100 index TSR of 5.7 percent p.a. While some of this outperformance may relate to underspend, the magnitude of the divergence suggests that the networks' WACC has been too generous over the regulatory period.

Other WACC parameters

The DNSPs used the assumption that the benchmark entity has a BBB+ rating up to 2008 and a BBB rating from 2009 onwards. We note that the Guideline sets a BBB+ benchmark credit rating. A preliminary analysis using a 10-year average swap rate of 5.33 percent plus a margin of 2.25 percent gives a cost of debt of 7.58 percent. The margin is a conservative debt margin for a BBB+/BBB rated company and could be as low as 1.70 percent. This simplistic estimate indicates that the networks' proposal of 7.98 percent is overstated, especially given its BBB+/BBB rating.

We note that the networks' annual reports give a gearing ratio of between of 66.8 percent and 68.8 percent in 2013.¹⁴ Several comparable listed Australian network infrastructure companies have gearing in the range of 68-76 percent.¹⁵ This should be taken into consideration in establishing the appropriate gearing ratio as a parameter to the WACC. Approving a gearing

¹³ Spark Infrastructure, SP Ausnet, Duet, APA Group and Envestra

¹⁴ Ausgrid 2013, Annual Report 2012-2013, p. 56; Endeavour Energy 2013, Annual Report 2012-13, p. 62; Essential Energy 2013, Annual Report 2012-13, p. 65

¹⁵ Net debt to regulated asset base: Spark Infrastructure Annual Report 2013, p.16, SP AusNet Half Year 2014 Results Release and Presentation, p.15

structure more aligned with the networks' actual gearing structure could reduce the WACC by approximately 20 basis points.

3. Implications of a Revenue Cap

Origin notes the AER's decision to move to a revenue cap for the NSW DNSPs. Origin has argued in the past for maintaining a price cap. Under the price cap in the prior regulatory period the network carried risk for volumes when these turned out below forecast, although this was mitigated in some cases by tariff re-balancing. The move to a revenue cap means that the volume risk will move from the network to the customer just as volumes have begun to decline. In addition, there is no incentive under a revenue cap to reduce spending to match declines in demand or consumption. Origin's support for a price cap notwithstanding, we acknowledge the AER's decision, made in part to remove perverse incentives for DNSPs in relation to balancing prices under the weighted average cap.

It is critical that all stakeholders have a clear understanding of the relationship between consumption and the annual regulatory revenue allowance under a revenue cap, i.e. that as consumption falls further than forecast (as it has consistently in recent years) price must increase faster than originally approved by the AER.

Origin considers that the decision to employ a revenue cap as the control mechanism means that:

- Demand forecasts set at the beginning of the period must be rigorously assessed, as these drive revenue allowances that will be collected independently of any subsequent change in the demand outlook over the period 2015-19;
- The cost of capital should be reduced, to reflect the fact that the DNSPs face virtually no volume risk, relative to the degree of risk under the price cap in the prior period. The pool of five companies¹⁶ the AER has relied upon when setting the WACC in its guideline¹⁷ all manage distribution businesses that have operated under and continue to operate under price caps. The consultants to the DNSPs examine in addition some 59 companies outside Australia,¹⁸ with their advisors acknowledging that differences such as the difference between revenue cap and price cap are "as likely as any differences between regulation of Australian and US businesses to lead to differences in systemic risk exposure".

 ¹⁶ SP Ausnet, Duet Group, Envestra, Spark Infrastructure and APA Group.
 ¹⁷ Henry, O., 2009. "Estimating B," prepared for the Australian Energy Regulator, 23 April 2009

¹⁸ Attachment 7.21 to Ausgrid's Regulatory Proposal: CEG, Equity beta issues paper: International comparators, May 2014

4. Demand forecasts

a) General comments

Forecasts of maximum demand are a key input in the development of forecast capital expenditure, particularly augmentation.

A key issue for the AER is making the appropriate distinction between trend demand and localised demand growth. Origin considers that following a period of significant investment, a degree of latent capacity may now be built into the respective networks thereby mitigating the need for significant growth capex for a number of years. As a result Origin expects that the principal driver of growth capex will come from localised demand growth. Demand forecasts should be reviewed on a discrete basis with clear evidentiary links between the driver of demand and proposed augmentation.

Growth in peak demand is forecast to be minimal over the period, driven by select pockets of growth, largely in new connections. Key drivers of growth in peak demand in existing dwellings are reaching saturation, most notably air-conditioning load. It is vital that the AER satisfy itself that projected rates for growth in new connections have been established on a reasonable basis, and where this is not the case that growth and augmentation capex are adjusted downwards commensurately.

b) Specific observations

Endeavour relies on historic peak demand recorded at each of its 159 zone areas and this provides an indication of trends in demand growth at different points in the network.¹⁹ Endeavour states that in recent years air-conditioning load has started to reach saturation point and as a consequence, peak demand growth from existing connections no longer present a significant driver of network expenditure in the 2015-20 regulatory period.²⁰ Localised demand rather than organic growth will also drive its capacity investment²¹ and should be scrutinised on a discrete evidentiary basis.

While Origin lacks adequate information to analyse demand at a disaggregated level within the networks we can provide context around demand at a broader level that may assist the AER in its consideration of the networks' proposals.

Maximum demand

The Australian Energy Market Operator's (AEMO's) 2014 National Electricity Forecasting Report (NEFR) forecasts a 0.5 percent increase in NSW maximum demand over the short term (2013-14 to 2016-17).²² This is a reduction on the 2013 NEFR forecast of 0.8 percent. AEMO forecasts a continuation of this energy trend throughout the medium-term because of industrial weakness. Lower industrial production is anticipated due to weaker commodity prices, other cost pressures and energy efficiency opportunities. The below figure gives a comparison of AEMO's forecast maximum demand for NSW against the forecast maximum demand for each of the networks.

¹⁹ Endeavour, Key Assumptions Underlying Capital and Operating Expenditure Forecasts, p.4

²⁰ Endeavour, Regulatory Proposal, 2014, p. 46

²¹ Endeavour, Key Assumptions Underlying Capital and Operating Expenditure Forecasts, p.3.

²² AEMO 2014, National Electricity Forecasting Report, p. 4-1



The figure shows the forecast average maximum demand growth rates for the three DNSPs, alongside AEMO's own forecasts. Ausgrid and Endeavour's rates exceed AEMO's 2014 NEFR forecast. Given Ausgrid and Endeavour represent the bulk of NSW load, there is a strong argument that the forecasts should be more aligned.

Energy efficiency and solar PV

Origin notes that the DNSP's proposals do not discuss the anticipated impacts of energy efficiency and solar PV on their demand or consumption forecasts. Residential and commercial customers are increasingly moving towards more energy efficient appliances in their homes and workplaces and also more energy efficient buildings. This is evident in terms of both new residential and commercial builds but also for commercial refits of existing buildings. For example, businesses are becoming more aware of energy usage and as a result are increasingly attracted to buildings with a high rating under the National Australian Built Environment Rating System (NABERS).

AEMO forecasts strong growth of 23.6 percent annually in rooftop PV installations and of 10 percent annually in total energy efficiency savings, with key contributions from air conditioning, refrigeration and electronics over the short-term.²³ This is shown in the figure below.



²³ AEMO 2014, National Electricity Forecasting Report, p. 2-1

It would be useful to understand how these trends are captured in the networks' forecast demand, particularly as fluctuations in consumption will flow through to price rises under the revenue cap.

5. Operational Expenditure

a) Principles

The National Electricity Rules (NER) requires that the AER must accept a DNSP's proposed forecasts of total operating expenditure (opex) if it is satisfied they reasonably reflect each of the opex criteria as set out in the NER.

These criteria are (clause 6.5.6(c)):

- (1) the efficient costs of achieving the operating expenditure objectives; and
- (2) the costs that a prudent operator would require to achieve the operating expenditure objectives; and
- (3) a realistic expectation of the demand forecast and cost inputs required to achieve the operating expenditure objectives.

The NER defines the capital expenditure objectives as:

- (1) meet or manage the expected demand for standard control services over that period;
- (2) comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;
- (3) to the extent that there is no applicable regulatory obligation or requirement [...] maintain the quality, reliability and security of supply of standard control services; and maintain the reliability and security of the distribution system through the supply of standard control services;
- (4) maintain the safety of the distribution system through the supply of standard control services.

In deciding whether or not it is satisfied with an opex proposal the AER must have regard to a number of factors set out in the NER including the benchmark operating expenditure that would be incurred by an efficient DNSP over the relevant regulatory control period, the relative prices of operating and capital inputs.

b) Adjustments due to the reclassification of services

In terms of operational expenditure the DNSPs propose levels largely in line with recent years. Origin has been unable to reconcile the proposed transfer of in excess of \$500M²⁴ in metering costs which are now classed as an Alternative Control Service (ACS). In particular Origin questions proposals for loss of synergy costs, stranded labour costs, certain vegetation management costs and forecasts for wages growth for technical workers at levels above long term averages.

Furthermore, the DNSPs have indicated that increases in their opex proposals are attributable to initiatives aimed at driving longer term efficiency. However, there is no transparent quantification of how these benefits outweigh the proposed costs or that these initiatives are delivering lower opex over this regulatory period.

c) Reporting of step changes

The NSW DNSPs have identified a number of step changes that represent activities that are outside of the normal recurrent and non-recurrent activities of the business. However, there is a significant variation in the level of step change costs identified across the DNSPs. On one hand Endeavour has identified \$461 million in step change cost over 9 programs and Essential Energy

²⁴ Endeavour identify \$302M in costs reductions over the 2014-19 regulatory period from reclassification of metering and ancillary services whereas Essential Energy identify \$204M. Ausgrid has not identified similar reductions as a result of the reclassification of these services. Source - RIN 2.17

\$126 million over 6 programs. Ausgrid on the other hand has identified \$16 million in one program.

There is a clear inconsistency in how step changes are reported across the NSW DNSPs which appears contrary to the purpose of the RINs, the AER's expenditure forecast assessment guidelines and the intent for consistency of reporting of regulatory costs.

For this reason, Origin urges the AER to ensure consistent and transparent reporting of material step change costs to allow stakeholders to make informed contributions to the regulatory review.

d) Base year variation - average vs marginal cost

Ausgrid and Essential Energy have calculated variations from the base year for a number of categories (including systems maintenance expenditure) by taking an average cost per task in the base year and them multiplying this average by a forecast of the volume of tasks. This approach uses average cost rather than marginal cost and hence will overstate the cost of these tasks to the extent that cost categories from the base year include fixed costs.

There appears to be a significant difference between Ausgrid's²⁵ revealed marginal cost (for conducting additional inspections in 2013-14, relative to 2012-13), and the average cost that they are using in their forecasting methodology. Taking the three largest expenditure categories as examples:

Ausgrid has forecast:

- the average cost per inspection for Distribution Substations as \$499 per inspection in FY2014 dollars²⁶, whereas, the marginal cost (being the change in volume divided by the change in total cost between 2012-13 and 2013-14) that they are revealing in 2013-14 is \$40 per inspection²⁷;
- the average cost per inspection for Distribution Mains as \$103 per inspection in FY2014 dollars²⁸, whereas, the marginal cost (being the change in volume divided by the change in total cost between 2012-13 and 2013-14) that they are revealing in 2013-14 is \$32 per inspection²⁹; and
- the average cost per inspection for Zone Substations as \$314 per inspection in FY2014 dollars³⁰, whereas the marginal cost (being the change in volume divided by the change in total cost between 2012-13 and 2013-14) that they are revealing in 2013-14 is \$32 per inspection³¹.

Unless Ausgrid's costs are entirely incremental, which they do not appear to be, then their adopted approach appears unlikely to produce efficient estimates of costs in line with Section 6.5.6(c) of the NER.

e) Actuarial adjustment to base year relating to employment provisions

All three DNSPs propose to make adjustments to their base year with a view to correcting for changes in the present value of their employee entitlement obligations. The DNSPs have chosen to forecast the liabilities that will accrue under leave entitlements, rather than the cash impact to be paid out in the next five years, whereas the AER's preferred approach has focussed on the forecast cash impact. It is not clear to Origin whether adjusting for changes in provisions that

 $^{^{\}rm 25}$ Due to time constraints, we have not assessed Essential Energy's 'revealed' marginal costs

²⁶ Ausgrid, System Maintenance Operating Expenditure Plan for the 2014-19 period, page 60

²⁷ Based on information on pages 18 and 19 of Ausgrid's System Maintenance Operating Expenditure Plan for the 2014-19 *period* ²⁸ Ibid, page 58

²⁹ Based on information on pages 18 and 19 of Ausgrid's System Maintenance Operating Expenditure Plan for the 2014-19 period

Ibid, page 55

³¹ Based on information on pages 18 and 19 of Ausgrid's System Maintenance Operating Expenditure Plan for the 2014-19 period

relate to periods other than the regulatory period in question is in compliance with the NER. Origin's preference is for the opex allowance to focus on actual costs that will be incurred in meeting obligations with respect to accrued employee entitlements.

f) Accounting changes

Essential Energy has identified \$64 million of costs resulting from changes to either actuarial adjustments or accounting changes where overhead costs are no longer allocated to opex or capex. Origin is concerned that changes in the accounting treatment of costs are resulting in changes in overhead rates and not the physical costs. Origin understands that the principle of overhead costs is that they should be fully attributable to either capex or opex applying the approved Cost Allocation Method (CAM). If costs are no longer allocated to a functional activity then this raises the question of whether they are efficient or appropriate costs to be allocated to regulated activities at all.

g) Growth rates - Labour

The DNSPs have proposed significant escalation on wage costs on a per unit basis for both internal and external labour.³² Origin understands from the presentation by Networks NSW at the AER's Public Forum³³ that the DNSPs intend to rely increasingly on externally contracted labour as a means to bring down their labour costs. Ausgrid notes that increases in wages are a key factor influencing the level of opex.³⁴

The DNSPs have based internal labour costs on existing employment agreements (EBAs) until their expiry, and then on the forecasts of Independent Economics (IE) in the remaining years of the regulatory period. Ausgrid's employment agreement is due to expire in December 2014³⁵ and Essential's in June 2015. In Endeavour's case it is not clear when the current agreement expires and this information should be provided.³⁶

For external costs the DNSPs have relied on the estimate of IE. Given the short periods remaining on the agreements of Ausgrid and Endeavour the IE forecasts are the primary driver of escalation for both internal and external wage costs.³⁷

IE's estimates of wages growth in the utilities sector in the latter years of the period are above long term averages, with forecast increases in the wage price index for the utilities industry in NSW of 4.3, 4.8 and 4.8 percent in financial years 2017, 2018 and 2019 respectively. This compares with long term average growth in the Wage Price Index (WPI) in utilities of 4.1 percent nationally.³⁸

Growth in wages in Australia is currently below long term averages, reflecting softer consumer demand and more subdued economic conditions generally. Growth in the wage price index in NSW from March quarter of 2013 to the March quarter of 2014 was 2.6 percent, ³⁹ compared with average growth in the state over the prior ten years of 3.7 percent. This effect has been more pronounced in New South Wales due to the economy's greater reliance on tertiary sector employment and lesser reliance on investment associated with resource exports. By contrast, as noted above, wages growth in the utilities sector has been above the level of the overall

³² Ausgrid Regulatory Proposal, Table 31.

³³ Networks NSW presentation to the AER forum on the NSW DNSPs' proposals, V.Graham, Menzies Hotel, Sydney, July 10

³⁴ Ausgrid Regulatory Proposal, Table 31.

³⁵ Ausgrid Regulatory Proposal, p.36

³⁶ Equally, it is unclear why Ausgrid in Tables 30 and 31 had divided internal labour and external labour into utilitiesspecific and general labour respectively, unless the outsourcing strategy is confined to non technical workers, which is not otherwise stated. Essential's Table 6-6 groups derives all forecasts for external labour services as coming Independent Economics.

³⁷ Ausgrid has a separate category of "Contracted services", which are escalated at CPI - it is also unclear why these contracted services are separate from the costs of hiring external labour, which are forecast to increase well above CPI.
³⁸ Ausgrid Regulatory Proposal, p.50

³⁹ Australian Bureau of Statistics; note the ABS does not release an individual figure for ordinary hourly rates of pay for utilities in NSW

economy, supported by strong demand in the mining and resources sectors and an unprecedented boom in network investment in Western Australia and Queensland.

IE predict a recovery in wages growth nationally driven by increases in consumption, dwelling investment and business investment.⁴⁰ The effect of this recovery is predicted to be more pronounced in NSW than in the rest of the country, due to that state's greater weighting towards tertiary sectors and lesser reliance on the mining sector. Parallel to this, Independent Economics predict that growth in wages for workers in the utilities sector will continue as the "mining industry transitions from the investment phase of the mining boom to the production/export phase".⁴¹

Origin questions this conclusion. While a recovery in wages growth in the tertiary sector in NSW over the medium term is not implausible this does not translate into higher wages for specialised workers in the utilities sector. Mining and resources investment is a primary reason that wages for technical workers in the utilities sector have grown more quickly than in the other sectors over the last ten years. It is broadly agreed that as the construction phase on the major liquid natural gas projects draws to a close this will result in a release of workers into the economy, since the production export/phase is *less* labour intensive than the construction phase. Equally, it is evident that Australia's rapidly escalating cost base has increasingly prompted investors to curtail many projects that had been planned or were under contemplation. The Reserve Bank of Australia noted in its Statement of Monetary Policy in February 2014 that:

Mining employment has also been little changed over the past year and a half after earlier strong growth. These developments are consistent with the transition toward the less labour-intensive production phase of the resources boom, as well as a continued focus by mining-related businesses on containing costs.⁴²

Furthermore, some of the largest employers of workers in electricity distribution within NSW (if not the largest) are the DNSPs themselves and all three entities will be engaged in a coordinated and sustained program to reduce reliance on internal staff over the regulatory period⁴³, which will of itself free up technical workers, putting further downward pressure on wages in the private contracting market.

As a result, multiple years of below trend growth in wages seem more probable than on-going growth above long term averages. Origin requests that the DNSPs revise their escalator for both internal and external labour to reflect this.

h) Loss of synergy costs

All three businesses have factored in an allowance for costs relating to loss of synergies into their opex budgets: some \$225 million across the three businesses over the period, associated with the loss of revenue from the Transitional Service Agreements (TSA) following the sale of the former retail business and the loss of scale from the sharing of these services over distribution and retail arms. Origin notes that the businesses have "offset" these costs by efficiencies but there is no evidence that these offsets are predicated on the winding down of the TSA or that they couldn't have occurred independently.

Ausgrid has stated it has supplied transitional services to EnergyAustralia since the sale of its retail business in 2011. The TSA has a maximum term until 31 December 2015.

Ausgrid state that upon the termination of the TSA its operational and fixed support costs of providing Standard Control Services (SCS) will increase due to the loss of scale and scope of being an integrated retail/network business. The cessation of the TSA has direct impact on

⁴⁰ Independent Economics, Labour cost escalators for NSW, the ACT and Tasmania, February 2014, p.19

⁴¹ Op cit., p.26

⁴² Reserve Bank of Australia, *Statement of Monetary Policy: Labour Market*, February 2014

⁴³ Ausgrid Regulatory Proposal, p.59; Networks NSW presentation to the AER forum on the NSW DNSPs' proposals, Menzies Hotel, Sydney, July 10

operational areas of data operations and contact centre as well as support areas such as IT. Ausgrid has indicated that overall impact of the loss of synergy is \$65 million.⁴⁴

Ausgrid has made a commitment to offset the full annual impact of the TSA loss of synergy by the end of the next regulatory period to minimise the impact on customer pricing.

Similarly, Endeavour state that the sale of the retail business results in the regulated network services being allocated a greater share of the (reduced) residual corporate and overhead costs. The last year in which the network business provided any retail support services was 2012-13 and the 2013-14 financial year is the first year in which Endeavour fully crystallised dis-synergy costs. For the 2015-19 regulatory period it appears that Endeavour have included dis-synergy costs of \$64 million.⁴⁵

Essential Energy's retail business was sold to Origin Energy on 1 March 2011. Under the terms of the sale, a TSA was agreed between Essential Energy and Origin Energy. The last of the services provided by Essential Energy to Origin Energy under the TSA concluded on 3 January 2014.

Essential Energy states that on the termination of the TSA, its costs of providing standard control services increased due to the loss of scale and scope associated with being an integrated network and retail business. Costs of \$177 million⁴⁶ for loss of synergy have been factored into the forecast operating expenditure for the 2014-19 regulatory control period.

Origin considers that where the sale of the retail business has resulted in transaction costs, the buyer and seller should bear their respective transaction costs and that these should not be borne by customers.

Furthermore, as these costs are not associated with the provision of SCS, Origin considers that they do not meet the expenditure criteria requirements of the NER and should not be included in the respective regulatory allowances of the DNSPs.

Origin questions whether costs arising from the sale of the retail business should be borne by users for the following reasons:

- The AER was presumably treating the DNSPs as benchmark standalone networks in the prior determinations, not as stapled network/retail businesses and hence their costs should have already have been set at the level of a standalone network (and hence need no adjustment);
- The owners of the business were compensated for the loss of their retail cashflows • through the proceeds of the sale of the retail customer accounts in 2011, they were also compensated through payments under the transitional service agreements; and
- The businesses have had a long lead time to prepare for the end of the TSA. It is hard to see how with appropriate planning there would be a substantial stranded cost.

Origin strongly questions the case for "dis-synergy" costs in light of the above circumstances.

i) Security changes

Endeavour has identified savings of \$92.3 million in capital expenditure in 2014-15 attributable to the removal of the prescriptive security standards from its licence. However, it is not clear why these savings only accrue in 2014-15 rather than over the entire period.

In addition, Endeavour also identifies savings of \$137.5 million over the 2014-19 regulatory period attributable to changes arising from network reform initiatives to achieve commonality in network standards. Origin has assumed these reductions are already factored into the respective capex programs. This notwithstanding Origin considers that it would be beneficial for

⁴⁴ Ausgrid Regulatory Proposal, Table 26, p.51

⁴⁵ RIN Template 2.17, note this conflicts with the value of \$43m provided in Endeavour's Regulatory Proposal, Table 22, p.74 ⁴⁶ Essential Regulatory Proposal, Table 6-7, p.77

stakeholders if all the NSW DNSPs similarly identified savings attributable to the change in security standards as well as from the reduction in forecast demand.

j) Drivers for inspection Opex

Ausgrid⁴⁷ and Endeavour⁴⁸ have adopted approaches to forecasting inspection costs based on the number of assets. Neither DNSP has provided evidence to support the relationship. In Origin's view the requirement to inspect should be based on modelling of the risk of failure, not the absolute number of assets. The riskiness of the assets should have fallen considerably given the spend undertaken in the last period. Essential Energy notes:

When assets at the end of their lives are either refurbished or renewed it is reasonable to expect a reduction in OPEX associated with these assets within the current regulatory period

Origin sees no evidence of how these types of savings have been factored into the drivers for inspection opex. Further, Endeavour's proposed expenditure of \$157 million looks very high relative to the other two DNSPs (as well as other comparable regulated DNSPs in Australia).

k) Materials

The DNSPs project growth in material prices of CPI. This is based on assumptions about changes in global prices of commodities such as copper and aluminium as well as the relationship between these prices and the price for network material inputs.

Origin notes that the DNSPs rely on a forecast from consultants for copper prices made in December showing a very gradual decline in real terms throughout the period. The forecasts of the Competition Economists Group (CEG) are based on futures prices until early 2016 then on the forecasts of Consensus Economics. CEG notes:

Consensus Economics also provides a 'long-term' forecast in nominal and real US dollar terms. Unlike with the shorter term forecasts, Consensus does not disclose how many or which institutions contributed to the forecasts nor does it give any information on the range of forecasts. Moreover, it is unclear what the definition of 'long-term' is...⁴⁹

Some uncertainty evidently surrounds these forecasts. CEG may also need to update their forecast to reflect changes in the interim: in March the Bureau of Resources and Energy (BREE) noted a fall in copper prices on the London Metal Exchange (LME) of 13 percent in the first three months of 2014. The International Monetary Fund and the World Bank both predict the price of copper will fall in nominal terms throughout the period, as outlined in Figure 4.1.⁵⁰

⁴⁷ Ausgrid, Regulatory Proposal, p.55

⁴⁸ Endeavour Energy Regulatory Proposal, p.9

⁴⁹ Competition Economists Group, *Material Escalation Report*, p.20

⁵⁰ Bureau of Resources and Energy Economics, *Resources and Economics Quarterly*, March Quarter 2014, p.89



l) Vegetation Management - Endeavour

Endeavour underspent its allowance for vegetation management by \$136.5 million in the prior period. Endeavour is proposing to reset its opex allocation for vegetation management at levels they were initially set in 2009. They state that they:

- Underspent in the last period because their contractors underperformed.
- Need more funds this time to "target further improvements to conformance with their standards" which results in contractors quoting higher prices.

It is unclear whether Endeavour met their standard last time or not. If they did not, it is unclear why they underspent their allowance. If they did, then it is clear they can reach this standard at the revealed levels of opex (which were consistently underspent throughout the period). It is not clear on what basis their contractors are demanding a higher rate for work when they underperformed in the last period, and it is also unclear why Endeavour are targeting improved compliance when their customers have said they do not wish to pay more to improve reliability and neither of the other two DNSPs have proposed increased budgets in this area. Lastly, Endeavour is not proposing to return the underspend from last period and so this efficiency saving could be directed towards vegetation management in the next period. Endeavour could have foreseen that additional activity would be required to compensate for any under-delivery in the 2009-14 period and it would have been prudent to ear-mark these funds for that purpose.

m) Emergency Response - Endeavour

Endeavour has proposed an increase of around 18 percent over the period for Emergency Response opex. Endeavour has not provided details of the drivers for this increase. Nor has it been linked to expenditure in other categories (such as vegetation management) which might be expected to offset the need for emergency response expenditure. Equally, system reliability has improved, which should lead to less need for emergency response.

n) Private mains inspection program - Ausgrid

Ausgrid has proposed \$17.3 million over the regulatory period for inspecting private mains. The owners of private mains remain responsible for the inspection, testing and maintenance of their powerlines and poles at regular intervals. Ausgrid maintains that *Electricity Supply (Network Safety and Management) Regulation 2008* require Ausgrid to ensure that customers carry out these inspections and this extends to establishing a \$12 million dollar routine inspection maintenance and inspection plan.

Origin questions whether the provision of testing and maintenance services to individual customers fits within the category of a standard control service, or should be a fee for service, since they do not contribute to the RAB. It is also inequitable for all customers to fund these investments.

o) "Stranded" Opex costs - Essential Energy, Ausgrid

Essential Energy claim that as part of winding down their capital expenditure program they must recover certain operating costs which are one or both of:

- Labour costs that were capitalised in the prior period but that will not be in the 2014-19 period;
- Implementation costs associated with the reductions in staff.

There is little detail on the breakdown or magnitude of these costs, which would be necessary to assess them more readily. However, on the basis of the limited information provided, Origin notes Essential Energy could have foreseen this change in workforce requirements, in light of changes to licence conditions and other factors, and should have been managing its labour requirements to achieve fewer stranded assets. To the extent the labour strategy was inefficient it should not be included in the cost base. Managing changes in economies of scale relating to changes in the program of work is a core responsibility of the network.

It is reasonable that Essential must balance its obligations to its employees and to customers, but its employees are not considered in the National Electricity Objective and hence are a concern for its shareholders. To the extent Essential has mismanaged its staffing levels customers should not be expected to fund any decision Essential makes with respect to its staff that go beyond its legal obligations.

Ausgrid has also claimed \$54 million in restructuring costs which we understand reflects the cost of winding down their capital program. Origin does not think that it is reasonable for customers to bear the cost of Ausgrid stepping up its capital program to the extent this was done based on inflexible labour arrangements that Ausgrid now indicates will take up to five years to wind down.

6. Capital Expenditure

a) Principles

The NER requires that the AER must accept a DNSP's proposed forecasts of total capex if it is satisfied they reasonably reflect each of the capex criteria as set out in the NER.

These criteria are (clause 6.5.7(c)):

- (1) the efficient costs of achieving the capital expenditure objectives;
- (2) the costs that a prudent operator would require to achieve the capital expenditure objectives; and
- (3) a realistic expectation of the demand forecast and cost inputs required to achieve the capital expenditure objectives.

The NER defines the capital expenditure objectives as:

- (1) meet or manage the expected demand for standard control services over that period;
- (2) comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;
- (3) where no obligations exist maintain the quality, reliability or security of standard control services and the distribution network; and
- (4) maintain the safety of the distribution system through the supply of standard control services.

In deciding whether or not it is satisfied, the AER must have regard to a number of factors set out in the NER including the benchmark capital expenditure that would be incurred by an efficient DNSP over the relevant regulatory control period, the relative prices of operating and capital inputs and the extent the DNSP has considered, and made provision for, efficient and prudent non-network alternatives.

b) AER Expenditure Assessment Guidelines

The AER has released expenditure forecast assessment guidelines setting out the process, techniques and associated data requirements for how it will set efficient expenditure allowances for network businesses as part of the next round of network regulatory determinations.

As part of this approach, the AER has stated that it will assess capital expenditure in the following standardised categories:

- repex;
- augex;
- connection and customer driven works capex; and
- non-network capex.

The AER has also stated that it may further disaggregate these costs into subcategories to improve its ability to independently test distinct expenditure (cost and volume) drivers.

The AER considered that lower level analysis of standardised categories will allow it to better control for differences across businesses and to understand how expenditure is affected by the different cost drivers of the DNSPs. The AER considered that this should help it form a view about whether the total forecast capex reasonably reflects the capex criteria and considered

this information could also allow DNSPs to identify potential areas of inefficiency in their operations and target these areas for performance improvement.

As outlined under 1. Presentation of Data above, Origin does not believe the objectives of standardised and transparent data have been effectively achieved. This severely impedes efforts to compare across DNSPs in NSW and if it is not rectified in the revised proposal will impede the AER's efforts to benchmark in subsequent access arrangement re-sets.

c) Operating environment

In its previous regulatory decision, the AER approved (\$2008-09) \$7,837 million, \$3,862 million and \$2,721 million for capex for Ausgrid, Essential Energy and Endeavour respectively.⁵¹ These approvals represented a significant increase on any previous regulatory allowance.

However, since the AER's decision, there have been considerable changes to the regulatory and operating environments of the NSW DNSPs.

Over the previous regulatory period, commercial and industrial consumption and demand growth weakened considerably as a result of the global financial crisis while residential consumption reduced in response to higher electricity prices, energy efficiency measures and the penetration of alternative sources of supply such as solar.

In addition, during the regulatory period the Minister for Resources and Energy made amendments to the licence conditions of each of the NSW businesses which relaxed prescribed security of supply standards for each of the NSW DNSPs.

These factors curtailed the need for a number of approved capital projects to proceed. This resulted in actual expenditure for each of the NSW DNSPs being significantly lower than originally allowed for by the AER. Furthermore, these issues will continue to impact the operations of the DNSPs during the 2014-19 regulatory period. Despite the fact that the DNSPs did not undertake the originally allowed capex program in full, there was nevertheless significant expenditure on the networks.

This expenditure has resulted in increased distribution network security and improved performance and these benefits will continue for a number of years. Moreover, through the course of the DNSPs' consumer engagement, customers have expressed a preference that future improvements in reliability are not required, particularly at the expense of higher prices.⁵²

Origin considers that the capex allowances put forward by the DNSPs should reflect a program of work that a prudent operator would undertake to maintain current security and reliability, by optimising the improved utilisation in whole and in sections of their respective networks.

d) Network Utilisation

A major driver of capital expenditure is utilisation across a DNSP's network. Each of the NSW DNSPs acknowledge that the significant capital investments made in their respective networks over the 2009-14 regulatory period has resulted in significant improvements in network utilisation.

Origin considers that it is necessary for the AER to establish how the current levels of utilisation compare with prudent industry practice. This analysis should inform the AER regarding the capability of the networks to maintain licence conditions in light of consumer preferences for reliability price tradeoffs. In addition, it should also inform the AER on whether there has been appropriate consideration of alternative investment options/solutions such as mobile substations and generators that may not have been effective under a regime of higher security standards but may be the least cost option under this regime.

⁵¹ AER, NSW distribution determination 2009-10 to 2013-14, Final Decision, 28 April 2009, p. 143-145.

⁵² See respective Regulatory Proposals: Endeavour, p. 47, Ausgrid, p. 12 and Essential Energy, p. 42.

e) Systems Capital Expenditure

In response to the reduction in security standards and lower maximum demand the DNSPs have made significant reductions to their respective capex programs most notably in the areas of augmentation and connections.

Origin considers that a key challenge for the AER is to determine direct and indirect benefits of the substantial program of work over the 2009-14 period on the operations of the business and their networks and the ability for these benefits to be sustained in the least cost manner going forward. Origin is of the view that the DNSPs could achieve cost reductions over and above what has been proposed by utilising the benefits of the previous spend without compromising their ability to meet regulatory license obligations.

Origin has made a number of observations regarding the proposed capex programs of each DNSP below. In addition, Origin seeks clarification on a number of items that were not clear in the information presented by the DNSPs, which are:

- why is public lighting, as an alternative control service (ACS), included in the replacement capex for Endeavour and Ausgrid but not included in the replacement capex of Essential Energy (see RIN Template 2.2);
- Ausgrid changed its capitalisation policy for pole replacements as part of the 2004-09 review. It is not clear whether the historic and forecast expenditure is presented applying a consistent capitalisation approach, which would be necessary to ensure consistent comparisons of this expenditure over time.⁵³
- Ausgrid replacement capex RIN Template 2.2 does not reconcile to its total expenditure summary. As a result it is not possible to accurately or confidently assess the expenditure sub categories as anticipated in the AER's expenditure forecast assessment guidelines;
- Ausgrid non-network capex (RIN Template 2.6) does not reconcile to the total nonnetwork capex contained in Expenditure Summary Template 2.1 and therefore does not allow for accurate assessment of its sub categories; and
- why has Ausgrid and Endeavour included metering and public lighting in the network overhead cost category when it is an ACS and where Essential Energy has not (RIN Template 2.10).

Ausgrid

Ausgrid has proposed a 27 percent decrease in forecast capital expenditure for the 2014-19 regulatory period relative to actual expenditure for the 2009-14 period. Based on the program presented at RIN Template 2.1, Ausgrid has proposed a decrease in each of its capex categories relative to the 2009-14 period with the exception of replacement capex.

Ausgrid highlights that despite significant expenditure made over the 2009-14 regulatory period the average age of its assets has increased and the large investment program was in response to significant under-investment in the past. During IPART's 2004 review Ausgrid (then EnergyAustralia) stated that a legacy of IPART's 1999 Determination was the deferral of required replacement capex and higher operating and maintenance expenditures resulting from unplanned asset ageing, because replacement expenditure was deferred to fund growth.⁵⁴As a result, Ausgrid proposed to catch-up this under spending as part of the 2004-09 replacement program.⁵⁵ (Origin reiterates that there is no evidence of a commensurate reduction in opex in line with this capex catch up in the last period.)

A part of AER's first review of NSW DNSPs Ausgrid stated that a substantial part of its capital program was replacement which was in large part targeted at assets that are fully

⁵³ EnergyAustralia, *Regulatory Proposal*, 2010, p. 130

⁵⁴ EnergyAustralia, *Regulatory Proposal*, 2010, p. iv

⁵⁵ EnergyAustralia, *Regulatory Proposal*, 2010, p. 15

depreciated.⁵⁶ Ausgrid stated that the 2009-14 program was just the start of a renewal phase that was forecast to take 15-20 years.⁵⁷

Origin accepts that it may be prudent to undertake a significant renewal program over several regulatory periods. In doing so the program should target those assets at greatest risk of failure and that present a risk to the safety of the community. On the basis that the issue of asset replacement has been persistent for a number of regulatory periods, Origin would expect those assets categories at greatest risk should have largely been addressed prior to the 2014-19 regulatory period.

Origin notes that expenditure on underground cables is forecast to decrease by \$248 million relative to the previous regulatory period (presumably having being prioritised as the most high risk replacement activity during the last period). Conversely, switchgear, poles and 'other items' are forecast to increase by \$248 million, \$139 million and \$130 million respectively⁵⁸. Origin also notes that spending on replacing Supervisory Control and Data Acquisition hardware (SCADA) is also forecast to increase by over 160 percent.

Origin questions whether significant increases across multiple asset categories are justified when this does not appear to have occurred previously. Origin urges the AER to interrogate the underlying risks of the proposed program and whether expenditure levels either consistent with the 2009-14 period or below this would be more appropriate, given historic performance. This approach of targeted prioritised replacement would also support a stable expenditure profile into the next (2020-25) regulatory period.

Endeavour

Endeavour has proposed a reduction of 28 percent in its capital expenditure relative to the 2009-14 regulatory period in nominal terms. Notwithstanding this reduction, like the other DNSPs, replacement capex is forecast to increase in nominal terms. Endeavour's replacement capex program is characterised by a \$150 million reduction in SCADA, network control and protection systems expenditure relative to the 2009-14 regulatory period. As a result, this reduction overshadows increases in all other categories of replacement expenditure.

Most notably, expenditure on service lines has nearly tripled relative to the 2009-14 regulatory spend with other asset groups demonstrating increases ranging from 20 percent to 60 percent in nominal terms. Consistent with our views on the other NSW DNSPs, Origin questions whether a more targeted program that addresses highest risk programs and defers lesser risk programs would deliver more stable costs over multiple regulatory periods and is a more appropriate to managing this program. This approach would balance risk, customer expectations, lend itself to economies of scale and support deliverability.

f) Capex-related overheads

Origin recognises that there will be timing differences between when the NSW DNSPs will be able to adjust their support costs following the reduction in their system program of work. However, the respective capex programs have been decreasing for the two years prior to the commencement of the 2014-19 regulatory period. As a result Origin expects that a full transition to efficient support activities should have now occurred.

Figure 5.1 outlines the ratio of capex-related overheads to overall capex net of capital contributions.

⁵⁶ EnergyAustralia, *Regulatory Proposal*, 2010, p. 27

⁵⁷ EnergyAustralia, *Regulatory Proposal*, 2010, p. 36

⁵⁸ 2013/14 dollars



Figure 5.1 shows that none of the three networks propose to return to levels of efficiency achieved in the period 2009-14.

Origin considers Ausgrid's overhead ratio should reflect efficient levels and, in the absence of an efficient benchmark, should be reduced to rates that it has achieved previously in 2011-12.

While Essential operates in a considerably different environment from that of the other NSW DNSPs, differences should largely manifest in direct costs rather than overhead activities. Origin considers there is insufficient evidence to support an overhead rate in excess of 30 percent when its NSW peers are operating at or below 20 percent. Essentials rate also does not appear to incorporate gains from the NSW Government's efficiency program, where some gain could be expected in this area.

Endeavour's overhead rate is forecast to progressively worsen over the next regulatory period, reaching a maximum rate of 20.35 percent in 2018-19.

Furthermore, the DNSPs have also claimed stranded opex costs as a result of the reduce capex program. As stated previously, it is not clear what these costs specifically relate to. In the event that these were previously "overheads", this would further accentuate the inefficiency levels of the DNSPs capex overhead rates.

Origin requests that the three DNSPs substantiate these increases in their capex overhead ratios or reduce their proposed spend on overheads to levels consistent with their performance over the prior period.

g) Balancing item

Origin seeks clarification of the costs that are included in the "balancing item" for the 2014-19 regulatory period. The magnitude of the item is of concern, given that costs should be fully allocated for the purposes of a regulatory proposal. Origin highlights that it raised this issue with the networks and the AER at the Stakeholder Forum but is yet to receive a response with respect to these costs. It would be of concern if these were not appropriately and transparently allocated and released to coincide with the release of the Draft Decision, in order to allow stakeholders an opportunity to review these costs and respond appropriately.

Specifically, for Ausgrid this item is a negative value in the order of 3 percent of annual capex whereas for Endeavour and Essential it is a positive value in some years accounting for up to 23 percent of total capex.

If the balancing item is not a direct capex item this would suggest that overhead and balancing items for Endeavour can account for as much as 40 percent of capex in certain years and as much as 35 percent for Essential Energy.

As a result, the balancing item will have a significant impact on the efficiency of certain cost once properly allocated. For this reason, Origin considers it is necessary for the AER to ensure these costs are appropriately allocate prior to any regulatory assessment or benchmarking.

h) Non-network support activities

Support costs account for around 11 percent of the total capex for Essential and Endeavour respectively and around 13 percent for Ausgrid. In an environment with a reducing program of work, there should be a commensurate reduction in the level of support activities such as fleet, property and IT. While the reduction may not always be in proportion, where there is a material reduction in the direct spend there should nevertheless be a significant and observable reduction in support activities.

Origin is concerned that the DNSPs' support activities do not capture the magnitude of reductions that should have been achieved. Furthermore, the NSW reform agenda indicates that the DNSPs should be realising efficiencies in the size of their overall workforce which should also result in reduction in support costs.

In terms of fleet expenditure, Origin considers that optimal expenditure should be demonstrated through life cycle costing models that balance key inputs such as the quantum and composition of the program of work, fit for purpose vehicle selection, vehicle maintenance costs and replacement cycles. While the RIN data should be an output of these models, Origin expects that any decision on the appropriateness of fleet expenditure must be made following an examination of the DNSPs' life cycle cost models.

The AER define IT and communications capex as directly attributable to the replacement, installation and maintenance of IT and communications system (excluding SCADA and network control systems).

Recurrent IT and communications expenditure will include all hardware, software, licensing and support costs associated with personal computers, recurrent communications and any other costs the NSP considers recurrent.

Total costs (opex and capex) for fleet and IT are summarised in Figure 5.2, below. This data reveals a wide discrepancy in support costs between the proposed spending of NSW DNSPs. Even before looking at cost metrics (attempting to adjust for differences in output) the varied relative composition of the costs across the network is curious, given they would be procuring the goods and services in the same markets. Origin understands that the AER has collected detailed benchmarking data on all of the DNSPs activities. Origin considers that variations of this magnitude warrant closer scrutiny to ensure these costs are appropriate and meet the NER criteria.



Based on the data in RIN Template 2.6 Origin has calculated a number of high level indicators to assist in its understanding of the efficiency of the proposed costs. These are outlined for each DNSP below. Origin considers these may assist in identifying areas that warrant closer AER scrutiny.

Ausgrid - Fleet

Ausgrid's passenger vehicles are leased by Ausgrid from a contracted fleet services provider and associated costs are included in opex whereas its light commercial; heavy vehicle and plant fleet are funded through capex.⁵⁹

As part of the network reform program Ausgrid has stated that there has been a focus on driving down the costs of delivering capex through refinement of design standards and improvements in procurement, logistics and the cost of support activity such as fleet and IT.⁶⁰ Coupled with a much reduced capital program, the combined impact of these two factors should be to drive down spending on fleet relative to the last period.

To the contrary, as shown in Figure 5.3, average annual spend will increase across multiple categories in real terms. Marginal increases in opex on EWP and heavy commercial are somewhat offset by significant capex reductions. However:

- passenger vehicle opex under Ausgrid's outsourced model will increase, when the need for such vehicles should decline commensurate with lower staffing levels, and
- increases in heavy commercial vehicle costs are forecast across both opex and capex categories, whereas the latter might have been expected to fall if the former was to increase.



⁵⁹ Ausgrid, Overview of Fleet Capex Plan 2014-19, p. 3

¹⁰ Ausgrid, *Regulatory Proposal*, 2014, p. 35.

Figure 5.4 equally suggests the inefficiency of Ausgrid with respect to passenger vehicles and that there may be more efficiencies to gain relative to the other networks, particularly as Ausgrid's is the most urban network.



Figure 5.5 below plots a number of cost metrics for Ausgrid's fleet. With the exception of capex on heavy commercial vehicles and EWPs (where the latter has not been graphed as the fluctuation is so great it appears there has been an error in its reported data⁶¹), all cost metrics are forecast to deteriorate over the period.



The data in Figure 5.4 is not commensurate with a DNSP that is driving increased efficiencies from its fleet. While these indicators are at a high level, Origin considers there is sufficient

⁶¹ With respect to specialist fleet, the unit acquisitions forecast by Ausgrid (Template 2.6) for EWP are fifteen to twenty fold higher than the other NSW DNSPs with no accumulative increase in fleet numbers. Origin considers this data may contain an error and as a result distorts any meaningful peer comparison

evidence to warrant the AER examining Ausgrid's life cycle costing modelling and a number of Ausgrid's inputs in greater detail.

Essential - Fleet

Essential's proposed capex spend on its heavy commercial fleet shows considerable volatility relative to a largely stable program of work. The overall trend in the cost metric is upwards, as it is for opex for the same fleet sub-category. This outlined in Figure 5.6, below.



This category of fleet related expenditure should be most closely aligned with the capital program, which is being significantly reduced, hence the cost

Comparison with Ausgrid in the heavy commercial category appears difficult due to uncertainty about Ausgrid's figure. Nevertheless, Origin considers there is sufficient evidence to warrant the AER examining Essential Energy's proposed fleet expenditure in further detail than presented in the RIN.

Endeavour - Fleet

As shown in Figure 5.8 below, Endeavour's passenger and light commercial fleet opex are forecast to remain stable in real terms, as are as shown in Figure 5.8 below (dotted lines), even as efficiency is either maintained or deteriorates marginally, both in terms of cost per car (sold lines) and cost per kilometre (dashed lines). This does not appear commensurate with a program of increased efficiency and Origin considers that this warrants further scrutiny.



IT spend

With respect to IT spend Ausgrid demonstrates an improvement in forecast expenditure over the 2014-19 regulatory period and proposes a further improvement in the period 2015-19 when considered on the basis of IT spend per employee and spend per user of the IT systems, as outlined in Figure 5.9, below. However, the non-network costs presented in RIN Template 2.6 are \$190 million lower than the costs reported in the expenditure summary template over the 2014-19 regulatory period.

Endeavour and Essential show scarcely any improvement in the efficiency of their IT based on the same metrics. Furthermore, the wide discrepancy between these metrics across the networks is of concern.



7. Metering charges

The NSW DNSPs have proposed metering charges in response to the AER re-classification of metering services. In addition to the four sub-categories set out in the AER Framework and Approach paper, the DNSPs have also proposed charges to recover their existing RABs as well as exit charges where a customer installs alternative meters.

Origin is particularly concerned about the different assumptions and input values used by the DNSPs in the calculation of metering service charges and exit fees.

In particular, Origin recognises that the NSW DNSPs are currently monopoly providers of Type 5 and 6 meters. However, they have adopted different assumptions regarding the recovery of the existing metering RAB through metering service charges. In the absence of a commencement date for contestability it is not clear why DNSPs should be charging for the accelerated recovery of their RAB nor why the timing should differ across the DNSPs.

Furthermore, Origin questions whether the cost of a replacement meter should reflect charging arrangements that will apply under an ACS environment rather than a charge derived by bundling replacement capex into the short-lived metering RAB as currently proposed.

In terms of exit fees, the DNSPs appear to have also adopted different assumptions resulting in significant differences in the proposed charges. Figure 6.1 compares the metering exit fees proposed by the DNSPs. Origin considers that variances of this magnitude will act as a barrier to the introduction of advanced metering technology in certain networks and regions which will stifle the development of tariff reform. Origin's concerns regarding the respective approaches are detailed below. At a high level, Origin questions the basis for an exit fee to the extent the meter can be redeployed. If the meter has a value to the business when it is changed, then this should be realisable either by redeploying it in the field or selling it on, to the extent it has disposal value.



Ausgrid

Origin understands that during the 2009-14 regulatory period Ausgrid has installed Type 5 meters for reactive replacement and in considerable number of cases to allow customers to move to time of use tariffs (ie, replacing meters that were still functional and did not need to be replaced). In the latter case Ausgrid subsequently reversed its decision to move customers to time of use tariffs. Furthermore, from 1 July 2014 Ausgrid reverted to a like for like basis for meter replacement.

To Origin's knowledge Ausgrid was not directed to install Type 5 meters for all new and replacement meters, nor was it required to do so in order to move customers to time-of-use tariffs. This was a unilateral decision based on an assessment of the value of the technology, and the other two networks did not take this decision.

Origin notes that these meters:

- Have a forecast life ten years shorter than the Type 6 meters;⁶²
- Need to be replaced much sooner than the Type 6 meters they replaced;⁶³
- Cost more to run (Type 5 were the sole driver of additional opex in metering in the 2009-14 period⁶⁴)
- Are currently providing no benefit beyond those of a Type 6 meter.

Ausgrid's unilateral decision to replace Type 6 with Type 5 meters has resulted in higher costs for customers without any demonstrable customer benefit or deferral of network expenditure. Hence:

- In the event this replacement was not prudent (and Ausgrid's decision to revert to its initial strategy of using Type 6 meters in all cases suggests they no longer believe it was), Ausgrid's exit fee should reflect *no more than* the appropriately depreciated value of a Type 6 meter; and
- Conversely, in the event that the investment brought benefits to customers in terms of network deferral then:
 - Ausgrid should demonstrate these benefits; and
 - the cost of these benefits should be allocated to the RAB overall and recovered through DUOS, since they relate to standard control services, not metrology.

To the extent that meter exit fee reflects no more than the depreciated value (or opportunity cost) of a Type 6 meter, Origin notes that Ausgrid has over 1 million Type 6 meters over 25 years of age.⁶⁵ Origin understands this represents well over half the Type 6 meter stock, which should be fully depreciated and hence attract no exit fee.

As stated above, while the NSW DNSPs retain monopoly status for the provision of meters Origin considers that the provision of meters should be priced consistent with their status as an ACS. Origin questions whether the existing approach of rolling these assets into the metering RAB to develop a weighted average bundled price is consistent with this intent.

In terms of Ausgrid's replacement capex program, Origin seeks confirmation that where an asset is being replaced prior to the end of its economic life Ausgrid is making the necessary writedown of its RAB before including the value of the replacement meter, otherwise there will be a double counting of asset values.

Furthermore, Ausgrid states that under the current NSW arrangements Accredited Service Providers (ASP) are responsible for installing meters provided by the DNSPs. On that basis, Origin seeks confirmation that only the physical value of the meters have been included in the RAB and not any capitalised installation costs, as these would have already been paid by the customer to the ASP. The inclusion of any installation costs will have resulted in an artificially high RAB and will have meant that customers will have historically paid higher charges as well as distorting the calculation of any exit fees going forward.

Ausgrid has developed an exit fee based on the full recovery of stranded costs. Ausgrid define stranded costs as including both metering assets and supporting assets involved in the provision of metering services based on the Type 5 and Type 6 Metering RAB.

This exit fee comprises the proportion of the RAB attributable to each NMI plus an administration cost. However, Origin considers the use of NMIs is incorrect and artificially

⁶² Ausgrid, Adjustment of RAB for Type 5 & 6 Metering Services - 2014, Attachment 4.05, sheet "RAB 3.1 Direct Type 5-6 Assets"

⁶³ Ausgrid, Type 5 & 6 Metering Services Proposal, May 2014, p.7

⁶⁴ Ausgrid, Metering Services operating expenditure plan for 2014-19 period, Attachment 6.10, May 2014, p.4

⁶⁵ Ausgrid, Metering Attachment 8.21, Energeia review of Ausgrid's metering tariffs, May 2014

inflates the exit fee. Specifically, Ausgrid has 1.6 million NMIs, whereas it has 2.4 million meters.⁶⁶

As a result, using the NMI data provides for an exit fee of around \$160 per meter but if the RAB is apportioned to actual meter numbers, this reduces to about \$110 per meter. Origin can see no justification for using data other than actual asset numbers. To do otherwise distorts the calculation of the exit fee and results in an outcome where NMI sites with single meters are effectively subsidising NMI sites with multiple meters.

Essential Energy

Essential Energy is proposing a metering services charge to recover the existing RAB. This is calculated over an accelerated period of 7 years.

In addition, Essential Energy include an annual allowance of capex for the provision of new metering assets at new or upgraded premises and the reactive replacement of meters to be included in the Metering PTRM.⁶⁷

It is not clear why the recovery of the RAB is being accelerated over seven years.

In addition, Essential Energy will introduce an upfront charge for new meters and these will not be added to the RAB.⁶⁸ Origin questions why there is an inconsistent treatment of new and replacement capex. This approach is also inconsistent with the approach adopted by Ausgrid.

In addition, to the extent that replacement capex is added to Essential Energy's RAB, it does not appear that there is a corresponding disposal of the asset being replaced, particularly if it is prior to the end of its economic life.

Furthermore, because the RAB has a finite life of seven years, the replacement capex in later years is being depreciated over an even shorter period. As a result, Origin considers that this effectively maintains an unnecessarily high exit fee for the full seven year life of the RAB.

It is also not clear whether certain customer are worse off under an accelerated recovery of the RAB and replacement capex because they are paying potentially higher charges and are limited in their ability to obtain alternative metering services.

In terms of the exit fee, Origin notes that Essential Energy proposes using asset numbers, unlike Ausgrid that has proposed NMIs. Origin considers that the use of asset number is the correct method.

Endeavour

Endeavour has proposed a metering service charge to recover the value of its RAB over 5 years. As a result, each DNSP has applied a different approach to the recovery of costs associated with the existing RAB and replacement and new capex.

Furthermore, it is not clear whether Endeavour has removed meters from its RAB that are being replaced ahead of the end of their economic life.

In addition, it is not clear whether Endeavour's charging arrangements for new meters reflect an upfront charge similar to Essential Energy or whether these continue to be bundled in the RAB.

In terms of the exit fee, Endeavour has proposed an administration overhead rate of 205 percent. This compares with its capex overhead rate of around 30 percent and a metering overhead rate proposed by Essential Energy of 41.25 percent. However, Endeavour also proposes an hourly labour rate and utilisation rate that is lower than the other DNSPs.

⁶⁶ Ausgrid, Type 5 & 6 Metering Services Proposal, May 2014, p. 2

⁶⁷ Essential Energy, Types 5 and 6 Metering Services Proposal, May 2014, p. 9

⁶⁸ Essential Energy, Types 5 and 6 Metering Services Proposal, May 2014, pp. 10 -11

Given the significant differences in input values between the DNSPs, Origin considers that the AER should appropriately test the efficiency of these values against relevant efficient benchmarks.

In addition, it is not clear from Endeavour's Metering Model whether it has applied meter numbers or NMI numbers have been used to calculate its exit charge.

8. Service Target Performance Incentive Scheme and Efficiency Benefit Sharing Scheme

Service Target Performance Incentive Scheme (STPIS)

Origin supports a STPIS based on measures that are:

- Objectively verifiable; and
- Relate to service outcomes customers value.

In this context the AER should consider broadening the scope of the scheme in future to include measures reflecting services more highly valued by customers. The focus on network reliability has lessened and in Origin's experience customers are increasingly focused on the quality and predictability of associated service provision. Two examples of areas to which the AER could consider extending the STPIS are outlined in Table 8.1, below.

Table 8.1 Measures of service of value to customers not currently captured in scheme						
Measure Timeframe required to visit a customer's premise/ Reliability of visits to customer's premise	 Customer impact Customers are currently required to put a full day aside for a service to be completed. Feedback suggests customers find this inconvenient, given other service providers manage to provide 2 hour windows and 					
Re-billing caused by metering errors	 communicate via mobiles when 30 minutes away Customers are required to follow up bills they believe to be inaccurate Distributors are proposing substantial increases in charges for meter testing In the event customers' bills are wrong due to faulty metering customers should not bear the cost of this 					

In both examples outlined above it would be feasible for the AER to estimate the value customers put on improved services and thereby to ascribe a value to this under the STPIS scheme. Both examples would serve the National Electricity Objective to the extent they improved the efficiency and reliability of distribution network services. Origin encourages the AER to consider broadening the scope of the STPIS in future access arrangements.

Efficiency Benefit Sharing Scheme

Origin supports an Efficiency Benefit Sharing Scheme to the extent it provides incentives for networks to reduce spending to efficient levels and rewards customers where this occurs. However, Origin cautions that the scheme must be carefully calibrated with the rest of the regulatory framework to avoid creating perverse incentives, specifically through non-consistent cost allocation over time.

This is important with respect to past spending but is perhaps more pertinent for the networks' current spending proposals. The AER must ensure that the DNSPs have appropriately allocated costs in spending proposals for the coming period as these will serve not only as the basis for the EBSS over the coming years but also inform the AER's view of the benchmark efficient firm in future. In this vein, Origin highlights that the discrepancies between the Regulatory Proposal documents, the RINs and the PTRMs are of considerable concern.

9. Ancillary charges

Fee increases

Origin has concerns around the proposed increases in certain ancillary services, which are very significant. Charges for meter tests and disconnection and reconnection will increase significantly across all networks. Proposed increases for meter tests and disconnection are shown in Table 9.1.

Service	Current fee,	Proposed fee,
	2014-15	2015-16
Ausgrid		
Meter test fee	82.31	633.79
Disconnection, non technical	99.22	159.20
Disconnection pillar/pole	166.87	852.78
Endeavour		
Meter test fee	82.50	702.65
Disconnection at meter box	99.00	241.43
Disconnection at pole	167.2	473.86
Essential		
Meter test fee	82.31	498.38
Disconnection at meter box	99.22	140.35
Disconnection at pole	166.87	517.59

All fees expressed on a nominal basis inclusive of GST; note Essential charge for FY16 was expressed in dollars of FY14 in its proposal

Origin questions whether meter test fees in excess of \$600 on the predominantly urban networks can be cost reflective, noting that Ausgrid proposes for 2015-16 \$11.13 for a special metering read and \$47.60 for a site visit to disconnect a customer. Origin is unaware of any reason why testing a meter should cost in excess of \$500 in addition to the cost of sending personnel to the site. Also, the discrepancy between Endeavour and Ausgrid is of concern given they have similar geographic areas and urban/regional mix of customers.

Equally, for disconnections at the pole, Origin questions how Ausgrid's fee can be close to double Endeavour's, and significantly higher than Essentials when the latter reflects the cost of an average travel time across a geographically expansive network.

If Essential's disconnection fee of \$140 reflected only the average cost of travel across its geographically expansive network then this suggests up to \$490 of Ausgrid's meter test fee relates to labour hours. At average weekly earnings for a technician⁶⁹ this suggests around fourteen hours of labour to test the meter. Origin would like to understand under which circumstances this can be the average time required to test a meter and what is involved. Similar questions surround Endeavour's estimate.

Furthermore, an increase in excess of 600 percent in one year poses a number of problems:

- There is no transition, hence customers will be given no opportunity to adjust, which will drive more complaints, which retailers must handle;
- The cost could be so high as to deter customers from getting their meter tested until the amount in dispute is in excess of \$600. A dispute of \$600 is significant for a small customer and it is difficult to see how this is serves the national electricity objective in terms of efficiency; and
- A significant portion of customers are likely to see these fees as punitive and some will object or refuse to pay, which will drive bad debts for retailers.

⁶⁹ ABS, see Independent Economics, Labour cost escalators for NSW, the ACT and Tasmania, p.33

In light of the above concerns, Origin proposes that the AER closely scrutinise the claims supporting the fee increases and only approve them if the basis for the increases has been transparently and compellingly established.

Timeframe for services

Origin consistently receives feedback from its customers that the timeframes networks provide within which they will attend a customer's premises to carry out requested services are too wide, as customers are typically expected to be available for a full business day (8 am to 5 pm). Given advances in mobile communications it is now reasonable to expect a tradesperson to commit to a two or three hour window and to notify a customer when they are 30 minutes away. Origin understands that the AER does not regulate these matters directly, but provides this feedback in light of the networks' new increased emphasis on customer consultation. Customers are considerably inconvenienced by the need to stay at their premises for up to a full day and so if the networks could revise this approach this would increase customer satisfaction as well as the efficiency of network services provided.

Mains switch process for re-energisation

Ausgrid currently will not re-energise a site unless the customer is present. All other networks where Origin is active request customers to turn off supply at the mains prior to re-energisation, and then are able to re-connect the power safely in the customer's absence. Origin understands Ausgrid sees this approach as not feasible due to safety concerns.

Origin understands the AER does not regulate this matter directly, but provides this feedback for similar reasons as those outlined in relation to the appointment window above. Adapting an approach that works effectively on other networks would significantly reduce inefficiencies for customers and increase the efficiency of the network service provided.