30 August 2018

Sebastian Roberts
General Manager Networks
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3000

Dear Mr Roberts

RESPONSE TO AER ISSUES PAPER - NSW ELECTRICITY DISTRIBUTION DETERMINATIONS 2019-24

I am writing to outline proposed revisions to the capital expenditure forecast in Endeavour Energy's revenue proposal for the 2019-24 period.

As you aware, since our proposal was lodged on 30 April 2018 we have continued to engage with stakeholders to understand their views on our proposal, including via the AER's consultation on the 27 June Issues Paper on the 2019-24 regulatory proposals from Ausgrid, Endeavour Energy and Essential Energy.

While our objective from the outset has been to take stakeholder and customer views into account, we acknowledged at the end of our deep dive process that we had not secured the consensus on our capital forecast we strove for. We therefore committed to engage further on our capital forecast following the lodgement of our regulatory proposal. Having further reflected on the feedback provided and the outcomes of our ongoing engagement, we propose to reduce our 2019-24 capex forecast from $2.16 billion (real, 2018-19) to $1.70 billion (real, 2018-19), a 21 per cent reduction.

This reduction will be achieved by changing our capital contribution policy, which will reduce our connection capex by 62 per cent, and by reducing our repex and augex forecasts by 26 per cent and 16 per cent respectively. These changes will deliver a reduction in network tariffs in real terms over the 2019-24 period of one per cent.

We note that these are material reductions which will put additional pressure on us to achieve the reliability outcomes customers expect. It will also put upward pressure on our opex forecast given the increased maintenance and non-network costs that will be required to achieve the repex and augex reductions. Nevertheless, we consider that this updated forecast is necessary to balance our ability to efficiently manage the costs and risks of running the network with the feedback we have heard from customers and their representatives.

This letter outlines in detail our proposed changes to our regulatory reset proposal, and provides context to how the most recent engagement has tested our views and prompted further consideration of some aspects of our proposal.

Background

In December 2017, Endeavour Energy requested AER approval to extend the submission date for our 2019-24 regulatory proposal from 31 January 2018 to 30 April 2018. This request was made due to the extraordinary circumstances of the lease process which diverted resources away from the AER determination process and associated customer consultation.

51 Huntingwood Drive Huntingwood NSW 2148
PO Box 811 Seven Hills NSW 1730
T: 131 081 • F: 61 2 9853 6000
www.endeavourenergy.com.au
ABN 11 247 365 823

The AER granted this extension subject to the following key elements proposed by Endeavour Energy:

- Endeavour Energy's commitment to applying the AER's 2013 Rate of Return Guideline;
- Use of the AER's base-step-trend approach to forecasting opex for 2019-24 with base opex at, or below, the AER's 2017-18 forecast as in the AER's 2015 Determination;
- Endeavour Energy's acceptance of stakeholders' feedback in framing the stakeholder engagement plan included in our extension request; and
- Endeavour Energy's commitment to conducting a series of detailed investigations of our 2019-24 capex investment plans with interested stakeholders.

During the extension period, we engaged extensively with stakeholders on both our 2014-19 remittal proposal and our 2019-24 capex proposal. We ran a well-received series of four full day ('deep dive') stakeholder engagement sessions that also addressed our TSS and opex proposals. At the conclusion of this program there was a detailed understanding of both our proposal and stakeholders' views.

In finalising our proposal, we sought to respond to the concerns raised by stakeholders by amending various aspects of our TSS proposal and reducing our capex proposal by $80 million (real; 2018-19), split principally between a $30 million reduction to augex and a $50 million reduction to our proposed repex.

Despite extensive discussion at the deep dives and with individual groups, we were unable to resolve issues relating to our recently amended capital contribution policy. This was a key point of contention during our deep dive sessions and we committed to engaging further on this issue.

At the AER public forum, stakeholders reiterated concerns with our capex proposal and raised concerns with other aspects of our proposal. As a result, our proposal was not acceptable to stakeholders who were disappointed with this outcome given the significant investment of time and resources made by all parties during the pre-lodgement consultation period.

We are committed to submitting a proposal that is agreed to be in the long-term interests of customers

Rather than waiting and responding to the AER's Draft Determination we have sought to engage further with the AER and stakeholders on these matters. We do not believe it is in customers' long-term interests to leave these matters unresolved at this point in time. We favour a more transparent and responsive approach that reduces regulatory costs and provides greater certainty for customers.

As such, we have come to the view that the long-term interests of customers would be best served by amending our capex proposal. In doing so we have considered the feedback provided to us by stakeholders and the AER. Our amended position represents a positive outcome for customers and reinforces the growing importance and possibilities of engagement.

We note that we cannot formally revoke or revise our regulatory proposal under the Rules unless directed to by the AER to address a matter of non-compliance (cl 6.9.1). We therefore submit this material as part of the consultation on our regulatory proposal in accordance with the Rules (cl 6.9.3©) for the AER's consideration. The use of terms like "amend", "revised" and "re-submit" are therefore colloquial, rather than formal, in nature.

We have updated our capex forecast in response to feedback

In consideration of the feedback we have received from the AER and stakeholders to date, our amended capex forecast is $1.70 billion (real, 2018-19). This is a 21 per cent reduction to our 2019-24 capex proposal of $2.16 billion (real, 2018-19). As a consequence of the amendment made to our connections capex forecast, our capital contributions forecast of $535 million (real, 2018-19) has now increased to $726 million (real, 2018-19).

A breakdown of the forecast is provided in the table below. We note that some stakeholders may have differing views as to which projects and categories the reductions should be made. We consider the approach below balances addressing the primary concerns raised by stakeholders to date without compromising our ability to deliver a safe and reliable service to customers and efficiently accommodating customer growth.

Table 1: Updated capex and capital contributions forecast compared to 2019-24 proposal

$m, real 18-19	2019 to 2024 Proposal	Updated 2019 to 2024 Forecast
Repex	801	600
Augex	417	350
Connections	309	119
Other network	41	41
Reliability	20	20
Overheads	400	400
Non-network total	170	170
Total net capex[1]	**2,158**	**1,700**
Capital Contributions	**535**	**726**

In the sections below we detail our rationale for the updated capex at a total and category level.

Overall capex forecast

Our 2019-24 proposal contained a capex forecast of $2.16 billion (real, 2018-19). This was an increase from our expected 2014-19 capex of $1.62 billion (real, 2018-19). At the time of submitting our 2019-24 proposal we considered this amount was reasonable and necessary to meet the significant customer growth forecast across our network and the ongoing ageing of our existing asset base.

These capital pressures, customer growth and ageing assets, remain unchanged from our initial forecasts. However, stakeholders have raised concerns with the overall level of capex and do not consider an increase is required from existing levels for various reasons, including but not limited to the following:

- RAB growth: some stakeholders consider RAB growth to be an important indicator of the long-term affordability of a capex proposal. There are concerns that our proposed capex program will result in RAB growth and 'lock in' a requirement for customers to fund

[1] Excluding equity raising costs

traditional network solutions that may not be required in the longer-term in light of the technological transformation that is expected to occur over the coming decades.

- Current period performance: some stakeholders have noted that we have serviced significant growth during the 2014-19 period for a lower augex spend and are likely to underspend our repex allowance while maintaining existing service levels (i.e. reliability performance). On this basis they have questioned whether an increase from existing levels is required.
- Expected efficiencies: in our proposal we have noted recent changes that have been made to our capital delivery approach, i.e., the Alliance and Major Project Unit (MPU). In addition, we have commenced a major transformation of our ICT systems and capabilities. In light of these changes, some stakeholders consider that Endeavour Energy should be able to deliver the required capex program and associated outcomes at a lower cost than proposed.

As detailed in our 2019-24 proposal, we consider our proposed capex of $2.16 billion (real, 2018-19) is well substantiated. Our forecast was lower than various modelled results and bottom-up/conditioned based plans. With respect to the RAB, we proposed a more cost-reflective depreciation approach to reduce RAB growth in the long-term.

However, we accept that the AER and some key stakeholders are not convinced that our proposed capex program is in the long-term interests of customers. In recognition of the concerns outlined above we propose a lower capex forecast of $1.70 billion (real, 2018-19), a 21 per cent reduction to our initial forecast. We consider this will address the key concerns raised above:

- Reducing RAB per customer: our $2.16 billion capex proposal was forecast to result in real RAB growth per customer over the 2019-24 period totalling 1.5 per cent. Under our amended forecast of $1.70 billion the RAB per customer will now reduce by 4.7 per cent over the period. Our RAB utilisation per customer at the end of the period will now be more efficient by approximately 5% than it was at the end of the current period. Customers will now pay less per RAB due to the efficiencies included in the revised forecast.

Table 2: RAB per customer by driver

$, real 18-19	Proposal	Revised Forecast
Opening RAB	**$6,380**	**$6,380**
Regulatory depreciation	-$1,234	-$1,234
Higher customer utilisation of existing asset base	-481	-481
Asset management capex	$1,156	$1,007
Customer growth capex	$657	$411
Closing RAB	**$6,478**	**$6,083**

- No capex ‘step change’: our amended forecast is 3.2 per cent below our 2014-19 capex allowance and represents a modest increase of 5.0 per cent on our forecast 2014-19 capex spend (compared to 33.3 per cent increase as per our initial 2019-24 proposal). We will now be essentially maintaining existing capex levels during a period of increasing customer connections, network utilisation and ageing assets.
- Further efficiencies: our amended forecast is a 21 per cent reduction to cost rather than service outcomes. Our capex forecast now reflects more aggressive assumptions about the project delivery and asset optimisation efficiencies associated with our new delivery model and technology program.

To be clear, reducing our capex from that proposed will increase the risk we are required to manage. We will need to deliver the same for less, in order to maintain our existing risk position as proposed.

We consider these amendments provide prima facie evidence that our amended capex forecast is efficient and prudent and in the long-term interests of customers. Below, we detail our response to category specific feedback.

Replacement expenditure (Repex)

Our proposed repex for the 2019-24 period was based on a combination of modelled and unmodelled repex. For modelled repex, we primarily relied on the AER's repex model to develop our forecast. For unmodelled repex we developed individual business cases to justify expenditure at a sub-category level.

Our modelled repex approach was independently assessed and verified by Dr Brian Nuttall, as per Attachment 10.21 to our regulatory proposal. The various repex scenarios were developed and calibrated according to the AER's historical approach to applying the repex model.

In consultation with the AER during our 'deep dive' sessions and post-submission it has been made clear that the AER are considering alternative repex model calibration approaches. We have engaged Dr Nuttall on an ongoing basis to act as an 'honest broker' and modelling expert to understand, test and validate the AER's new approach. Throughout our consultation with stakeholders we have noted that we will accept the outcomes of this process. Based on the preliminary feedback we have received to date from Dr Nuttall we know better understand the approach and are prepared to apply this revised approach proposed by the AER.

Accordingly, our amended modelled repex position reflects the AER's preferred repex modelling approach. Our unmodelled repex has also been amended to incorporate feedback provided by the AER (and its consultant EMCa) on sub-category level forecasts and individual business cases.

These changes result in a 25 percent overall reduction of repex from $800.5 million (real, 2018-19) to $600.0 million (real, 2018-19).

Augmentation expenditure (Augex)

Our proposed augex for the 2019-24 period was split between catering for demand growth in existing parts of the network (brownfield) and to accommodate new customer connections (greenfield growth). Our proposal represented a 63 percent increase from 2014-19, primarily due to a culmination of the following:

- Customer growth: the unprecedented rate of customer growth in our network area is forecast to continue over the 2019-24 period. Our network area contains a significant number of the NSW Government's priority growth areas.
- Existing network limitations: customer growth is occurring in areas remote from existing parts of the network. Alternatively, it is impractical or more costly to utilise existing capacity from surrounding locations.
- Staging approach: we stage our augex investment to provide additional opportunities to investigate non-network solutions, to observe the actual growth in an area and to provide supply on a just-in-time basis. Over the 2019-24 period several growth areas will progress from earlier stage solutions (e.g. temporary supply, modify 11kV network, utilise nearby capacity) to final stage investment (e.g. zone substations) which is relatively more expensive and a key driver of the increase in augex from 2014-19.

Our proposal also reflected the expected impacts of increasing customer energy efficiency and distributed energy resources via the post-modelling adjustments used to develop our global demand forecast and the After Diversity Maximum Demand (ADMD) values used for zone substation planning purposes. The forecast also reflected a probabilistic assessment of the level of development that would occur over the period with several proposed development and growth areas excluded from our forecast.

In consulting further with the AER and stakeholders we consider there is general acceptance of our customer growth forecasts. However, there remain concerns with the forecast level of augex required to service this growth. Our understanding of the primary concerns are as follows:

- Demand management: there is insufficient evidence that our augex forecast reflects a realistic expectation of the demand management opportunities that will be available over the period. Traditional network solutions could be deferred further if Endeavour Energy more aggressively and genuinely investigated and pursued non-network solutions, albeit this will be more difficult in greenfield applications.
- Staging approach: some stakeholders are unconvinced that our staging approach is the most efficient model of augex investment.
- Augex 'step change': it has been noted that significant growth has been accommodated over the 2014-19 period for a lower volume (and therefore cost) of network investment.
- Key metrics: some stakeholders have highlighted our declining performance against key metrics like asset utilisation and augex per new customer or per unit of MVA.

We remain committed to servicing and supporting the economic development and customer growth occurring in our network area. However, we accept that it is important that this is done at an efficient cost. We have considered the feedback provided by the AER and stakeholders and accept that a reduction is warranted in recognising the above concerns.

As a result, we have reduced our augex forecast by 16 percent from $416.8 million (real, 2018-19) to $350.0 million (real, 2018-19).

Connections capex and capital contributions

Our connection capex forecast was a key driver of the increase in our capex between periods. This was due to a change made in the application of our capital contribution policy in September 2017 that resulted in an increase in Endeavour Energy's contribution to connection assets (i.e. our connection capex). The rationale for this change is detailed in our regulatory proposal.

In summary, it was a shift from a 'causer pays' principle to a 'beneficiary pays' approach whereby connecting customers wholly funded network assets dedicated to them and the existing customer base wholly funded network assets that could/would provide a shared benefit to existing/future customers. Based on benchmarking analysis, this amended approach was more in line with the remainder of the NEM (excluding NSW) and our overall connection cost per customer was amongst the lowest in the NEM.

This change was a key point of contention with stakeholders during the 'deep dive' sessions. An agreed position was not reached during this engagement and as such we submitted our 2019-24 proposal on the basis of our 'new' approach. We committed to engaging further with stakeholders on this issue in order to reach a resolution.

In doing so, very clear feedback has been provided to us in favour of returning to our 'old' approach (i.e. our approach as at the start of the 2014-19 period) for the following reasons:

- Lack of consultation: stakeholders were critical of Endeavour Energy for making these changes prior to the submission of our 2019-24 proposal and felt the decision was too strongly focussed on developers, councils and ASPs. We should have engaged more broadly than this in assessing whether the change was in the long-term interests of residential customers.

- Price and RAB growth: during the ‘deep dive’ sessions we were transparent that for existing customers the changes would result in a decrease in prices during the 2019-24 period followed by an increase in prices in future periods (all else being equal on account of the RAB growth). While for new customers, the costs of connecting to the network would be reduced. Stakeholder groups are not supportive of this trade-off and consider RAB (and therefore price) growth to be unacceptable in the longer term.
- Cross-subsidy: the AER and stakeholders expressed concerns that the change in policy results in existing customers cross-subsidising connecting customers and/or developers (the latter if the connection cost reduction is not passed through). Questions have been raised as to whether this is consistent with the ‘user pays’ principle of the Rules.

Based on these concerns, we understand that the majority of stakeholders consider we should return to our previous practice as they consider it to be more efficient and fair. We note that in making the changes our intention was to implement a fairer capital contribution policy for customers as a whole. We thought we had developed a policy that was consistent with the Rules and achieved this objective. However, we have heard clear feedback from stakeholders that a return to our previous policy would better serve the long-term interests of electricity customers.

As such, we have reduced our connection capex forecast by 62 percent, from $309.4 million (real, 2018-19) to $118.7 million (real, 2018-19). The lower amount reflects a return to our previous policy including the impacts of committed connection capex under our current policy based on the historical time lag from connection application to capitalisation. We have provided updated workings to the AER for review.

We have developed alternate connection capex forecasts based on two potential implementation dates, 1 January 2019 and 1 July 2019. This is because time is required to revise our internal policies and systems and to communicate these changes to affected stakeholders. These implementation dates (and the intervening period) result in a range of $118 million to $138 million for connection capex over the 2019-24 period.

We have selected the soonest practicable date to implement these changes and therefore the lower forecast. We consider this to be a conservative estimate as it does not account for the likely spike in applications we will receive immediately prior to the change in policy.

As a result of these changes to our connection capex forecast an equal increase has been made to our capital contributions forecast as new customers will instead fund these connection costs. This results in an increase in our capital contribution forecast of 36 percent for 2019-24 from $534.7 million (real, 2018-19) to $725.5 million (real, 2018-19).

We maintain our position that our operating expenditure forecast is efficient

The reductions made to our capex program will put increased pressure on our opex forecast. It is likely that the reductions made to our repex program will increase our maintenance costs while both the repex and augex reductions will need to be achieved, in part, by non-network (i.e. opex) solutions. Despite this, we propose to maintain our existing opex forecast and bear the additional risks and cost pressures associated with the capex reductions. We will accept this challenge within the revenue allowance that results from the changes outlined in the section above, noting the finely balanced interrelationship between capex and opex as a whole.

However, we note that stakeholders have raised concerns with our opex forecast. We consider our opex forecast is efficient and reflective of the efficiency transformation we have undertaken over the last several years as documented in our proposal. Through a prolonged and intensive effort to reduce costs we have committed to achieving the AER's efficient level of opex by the 2017-18 base year.

Our 2017-18 opex forecast is $64.1 million (real, 2018-19) lower than it was in 2013-14. We have used this point to forecast our opex requirements over the 2019-24 period in accordance with the agreed base-step-trend method. The improvement in our base year opex was not without cost. Over the course of the current regulatory period Endeavour Energy incurred $176 million in opex above our allowances, a material portion of which related directly to the costs of reforming our workforce.

We consulted on our proposed approach to opex in our 2017 Directions Paper and during the 'deep dive' sessions. There has been broad support for our commitment to reaching the AER's opex allowance and adopting the AER base-step-trend model for forecasting purposes. We consider this approach provides a positive outcome for customers. Under our proposal, opex per customer will improve from an average of $306 in 2014-19 to an average of $274 in 2019-24.

Our opex performance is the strongest within NSW as evidenced by the AER's Annual Benchmarking Report results and the sole application of the EBSS to Endeavour Energy over the 2014-19 period. We expect our performance relative to other NEM participants will improve following the realisation of the forecast $59.6 million (real, 2018-19) reduction in opex between 2016-17 and 2017-18.

Our proposal has been made in accordance with the revealed cost framework. This incentivises incremental and continuous efficiency improvements that provide a shared benefit to customers and Endeavour Energy. We have applied the AER's base-step-trend methodology which underpins the revealed cost framework and consider this will deliver the best outcome for customers. For clarity, our position on each component of our opex proposal is outlined below.

Base year efficiency

We maintain that our 2017-18 base year forecast is efficient, the reasons for which are outlined in detail in our proposal.

Step changes

We maintain our approach to not include any positive step changes for the 2019-24 period. In preparing our proposal we estimated step changes totalling $9.5 million (real, 2018-19) per annum. We did not include these step changes in our proposal and instead committed to achieving off-setting efficiencies. This exclusion represents an implied productivity factor of 1 per cent per annum.

We will not revise this position in light of the changes we are making to our capex program. Notably, the reductions we intend to make to our capex forecast will in part be achieved through demand management solutions, i.e. non-network opex.

Real growth

We maintain our position that real price and output growth should continue to be accounted for in determining a realistic and efficient opex forecast.

Our approach to estimating real growth is consistent with the AER's base-step-trend model and consists of two components:

- Real price growth:
    - Materials: consistent with regulatory precedent we did not apply any real material price growth to our opex forecast. This exclusion represents an implied productivity factor;
    - Labour: we applied real labour price growth using a WPI forecast provided by BIS Oxford Economics for the NSW EGWWS. The nominal labour price changes were converted to real using an inflation forecast provided by CEG. The real labour price growth was applied to a benchmark proportion of labour sourced from data provided by DNSPs and relied upon by Economic Insights in developing the Annual Benchmarking Report and the AER in previous determinations.
- Real output growth: the AER's Opex model calculates this based on the forecast growth in three output factors: customer numbers, circuit length and maximum demand. These factors are weighted in accordance with advice provided by Economic Insights. Our customer number and maximum demand forecasts have been informed and/or verified by independent experts and all three factors have been reported in accordance with the requirements of the Reset RIN.

We accept that the AER may calculate a different trend factor based on differing parameter estimates. For instance, the AER typically blend the BIS Oxford Economics labour price forecast with a Deloitte forecast. We maintain our position that we will accept the outcomes of the AER's decision on the appropriate trend factors provided it is determined in a manner that is consistent with the AER's approach to date.

Productivity factor

We understand that some stakeholders consider a productivity factor is necessary in setting an acceptable opex allowance.

We are strongly of the view that our forecasts already include explicit efficiencies. For example:

- The opex cost to serve customers is approximately $30 lower in the forecast period than it is in the current period;
- Our decision to exclude positive step changes is effectively an implied productivity factor of 1 per cent per annum);
- Our decision to not escalate materials and fuel costs in our opex forecast is a forecast efficiency;
- Our decision to retain our opex forecast whilst at the same time reducing our capital forecast and absorbing any opex costs increases; and
- Our decision to accept the AER's real labour forecast (using AER's historic method) also represents an efficiency forecast.

Endeavour Energy has shown that it is responsive to incentive regulation and should continue to be allowed to do so. In the longer term we would support the AER considering this issue in more detail and in a time frame commensurate with the implications of the review.

We will accept the application of the prevailing Rate of Return Guideline

In preparing our proposal there was broad stakeholder support of our decision to apply the AER's 2013 Rate of Return guideline, as applied by the AER, without contestation. This demonstrated our continued commitment to placing customers at the centre of our decision making and prioritising affordability.

Some stakeholders have expressed concerns about our objection to the application of the 2018 guideline. For clarity, our concerns were procedural and related to the uncertainty and difficulties that will be associated with raising capital for the 2019-24 period based on the outcomes of a yet to be finalised guideline.

We note that in July, the AER released its draft Rate of Return guideline. Our position on the draft guideline will be reflected in ENA submissions and feedback provided to the AER. Our reading of amendments entered into the South Australian Parliament earlier this month is that the NEL will be amended so that the final guideline is applicable to our 2019-24 proposal.

Our 2019-24 proposal is based on the prevailing Rate of Return guideline. We will accept the application of the prevailing Rate of Return guideline to our 2019-24 determination.

Our 2019-24 proposal and updated capex position are in the long-term interests of customers

We remain committed to engaging in a transparent and genuine manner to develop an acceptable 2019-24 proposal that best serves the long-term interests of customers. Our 2019-24 proposal was well-considered and represented our best estimate of the efficient revenue required to manage our network in a safe, affordable and reliable manner.

Since lodging our proposal we have continued to engage with the AER and stakeholders with the objective of working towards an outcome that is acceptable to all parties. This submission is an attempt to address the concerns raised about our capex proposal. Based on preliminary discussions with stakeholders, it is our understanding that the proposed amendments to our capex forecast will address their concerns and therefore be acceptable.

Our proposal was to reduce network charges by one percent in real terms in each year of the 2019-24 period. This is consistent with Endeavour Energy’s pricing outcomes for residential and small business customers since 2009, where its efficiency program delivered the lowest network charges of the three electricity distributors. The revisions to capex and capital contributions outlined in this letter are mostly off-setting over the next regulatory period, but will fractionally improve this pricing outcome. In providing this updated forecast we are acutely aware of the additional cost and risk pressures it creates and the fine balance that is created with other aspects of our initial regulatory proposal as submitted.

Please contact me if you have any questions or wish to discuss our proposal further. Alternatively your staff may wish to contact our Manager Network Regulation, Jon Hocking on (02) 9853 4386.

Yours sincerely,

Andrew Schille
General Manager Regulation & Corporate Affairs
Endeavour Energy