Our Ref: D13/5506
Your Ref:

18 February 2013

Mr Warwick Anderson
General Manager
Network Regulation
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Dear Warwick

Submission to the AER's draft decision for ElectraNet's revenue determination

Transend welcomes this opportunity to lodge a submission in response to the AER's draft decision for ElectraNet for the period 1 July 2013 to 30 June 2018 and ElectraNet's revised proposal. Whilst the decision raises a number of important company-specific issues, Transend's particular interest is focused on matters that raise issues of regulatory precedent and approach. With this focus in mind, our submission addresses the following issues:

- Network optimisation;
- Capex prudency adjustment;
- Cost estimation risk factors;
- Capex/opex trade-off;
- Corrective maintenance and operational refurbishment step changes;
- Opex efficiency factor;
- Removal of capitalised provisions from the regulated asset base; and
- Grandfathering provisions contained in clause 11.6.11 of the National Electricity Rules (Rules).

Each of these matters is addressed in turn in our attached submission. We trust that the AER will carefully consider the matters raised in this letter in the course of making its final decision. Should you wish to discuss or clarify any of the matters raised, please contact Michael Sward, Revenue Regulation Manager on 03 6274 3964.

Yours sincerely

Bess Clark
Executive Manager Corporate Strategy and Compliance

Transend Networks Pty Ltd
ABN 57 082 586 892
PO Box 606 MOONAH TAS 7009
Phone 1300 361 811
Fax (03) 6274 3872
www.transend.com.au

Transend Submission: ElectraNet draft revenue determination

Network optimisation

Transend understands that ElectraNet's original proposal included a new category of operating expenditure termed 'network optimisation'. ElectraNet explained that the purpose of this expenditure is to improve the capability of the network in order to realise additional capacity from existing assets and defer the need for capital investment. The proposed network optimisation program included two components:

- Minor substation primary plant and secondary systems works to remove bottlenecks and similar minor expenditure on transmission lines to improve network transfer capability.
- Minor works to address transmission line non-compliance issues.

In the Draft Decision, the AER noted that its consultant, EMCa, accepted ElectraNet's proposed network optimisation expenditure on a 'bottom up' basis. However, the AER rejected the proposed operating expenditure on a 'top down' basis. The AER made the following comments:

> *"EMCa consider that it is appropriate that ElectraNet has established network optimisation as a new opex category. The AER agrees with EMCa that this is 'expenditure that is expected to deliver outcomes that meet ElectraNet's objective of improving the capability of the transmission ElectraNet' [sic]. However, the AER has not accepted this category of expenditure as a 'new' category (step change) in ongoing requirements. [….] Further, ElectraNet proposed this category because it will achieve capex-opex deferrals but ElectraNet have not identified which projects will be deferred, by how much and within what timeframe."*

Transend notes that ElectraNet's revised proposal now only includes the transmission line component of the network optimisation expenditure. Consequently, the only outstanding issue is whether this additional operating expenditure should be accepted by the AER.

Transend notes that ElectraNet's revised proposal explains that the driver for the transmission line works is public safety and compliance with mandatory minimum clearance heights for aerial transmission lines. ElectraNet also explains that the requirement for this operating expenditure has only recently become known following the completion of an aerial laser survey of its entire overhead transmission line network.

From Transend's perspective, expenditure to address public safety and compliance obligations is non-discretionary. It is legitimate for the AER to test the quantum of the proposed operating expenditure to ensure that the forecast expenditure satisfies the Rules requirements. However, it is not appropriate to reject the operating expenditure on the grounds that it should already be included in the base year operating expenditure if, in fact, this is not the case.

Capex prudency adjustment

The AER's Draft Decision applied a capital expenditure prudency adjustment to ElectraNet's replacement and refurbishment capital expenditure. The AER explained that its approach is based on analysis and sampling undertaken by its consultant, EMCa:

> *"EMCa reviewed a representative sample of projects. The sample included eight of ElectraNet's proposed replacement projects (47 per cent of the total replacement capex in value) and EMCa was able to quantify $11.5 million ($2012–13) of potential prudency gains. For example EMCa noted that several concept phase substation replacement projects included large increases in transformer capacity. EMCa considered ElectraNet had the ability to undertake prudent measures such as altering the power factor at these connection points to allow the deferral of these projects and thereby produce more efficient options. Such measures would not compromise ElectraNet's ability to maintain a reliable, safe and secure transmission system.*
>
> *The $11.5 million ($2012–13) of potential prudency gains represents 7 per cent of the total capex of the replacement projects reviewed. EMCa concluded that its sample review is statistically representative and this level of efficiency and prudency gain should be achievable across all of ElectraNet's proposed replacement and refurbishment capex. EMCa considered this is consistent with its findings on ElectraNet's management of its capex over the 2008–13 regulatory control period.*
>
> *The AER agrees with EMCa and considers a $31.7 million ($2012–13) reduction should be applied to ElectraNet's proposed replacement and refurbishment capex. The AER considers ElectraNet's forecast replacement and refurbishment capex is in excess of the expenditure to form part of a total capex that will enable ElectraNet to achieve the capex objectives."*

Transend notes that ElectraNet's revised proposal has challenged each of the cases where EMCa claims to have identified efficiency improvements. Transend cannot comment on the specific case studies that are being disputed. However, there are some important issues of principle and approach that should be noted.

EMCa's claim that its sample is 'statistically valid' is not substantiated. The question as to whether a sample is 'statistically valid' depends on the use to which that sample is put. EMCa claims that efficiency gains are achievable in relation to 3 projects, and has then extrapolated this percentage saving to ElectraNet's total population of replacement and refurbishment projects. In Transend's view, EMCa is incorrect to assume that the efficiency savings can be extrapolated in this way.

Transend notes the following potential sources of error in EMCa's approach:

- The source of the efficiency gain may be unique to the particular project(s) examined and not replicable across other projects.
- The assumed magnitude of the efficiency gain may reflect the specific circumstances and characteristics of a particular project, and may not be appropriate for other projects.

It appears from ElectraNet's revised revenue proposal that EMCa has probably made both types of errors. In particular:

- In relation to the unit asset replacement project, EMCa's criticism that the scope is high-level appears to reflect the specific characteristics of that project. EMCa has failed to demonstrate whether similar high level scoping has occurred across the project population. Without further evidence to support EMCa's contention, it is inappropriate to extrapolate its conclusions. Transend also notes that ElectraNet disagrees with EMCa's contention that the project has not been appropriately scoped. This difference of view supports our observation that EMCa should have identified other examples before extrapolating its finding.
- In relation to the Kanmantoo substation project, EMCa concluded that the proposed 2 x 10 MVA transformer solution was in excess of the applicable reliability standard and a potential $5 million saving could be achieved. However, that even if EMCa is correct in its analysis – a matter that ElectraNet contests – the size of the savings specifically relates to the difference between ElectraNet's proposed solution and EMCa's alternative solution. The magnitude of the saving is project-specific. EMCa has provided no evidence to suggest that the same percentage saving could be achieved in relation to all other replacement and refurbishment projects.

For the reasons outlined above, Transend is concerned that EMCa's approach is not valid because it has failed to establish that it is reasonable to assume that its suggested efficiency savings can be extrapolated to other projects. Transend also notes that ElectraNet's revised proposal appears to have addressed EMCa's concerns in relation to each of these projects, which again underlines the importance of a more considered approach.

Cost estimation risk factors

ElectraNet proposed a cost estimation risk factor of 4.9 per cent, based on independent advice from Evans & Peck. The AER's Draft Decision did not approve this aspect of ElectraNet's proposal. The AER summarised its conclusions as follows:

> *"Given that ElectraNet is focusing on improving and developing its data collection and estimating processes it should be able to provide more robust and accurate forecasts over the 2013–18 regulatory control period. On this basis and given the sound systems and processes available to ElectraNet, its cost estimation risk factor should not be above that from the AER's 2008 transmission determination….*
>
> *…Given ElectraNet's ability to forecast with greater accuracy, and its knowledge of replacement and refurbishment capex, the AER considers the proposed cost estimation risk factor is not a realistic expectation of the demand forecast and cost inputs required. The AER considers ElectraNet's proposed cost estimation risk factor is in excess of expenditure required to achieve the capex objectives. Based on its expert opinion, EMCa considered that no cost estimation risk factor should be applied to ElectraNet's forecast replacement capex. For these reasons, the AER does not accept ElectraNet's proposal, and it substituted 0 per cent for replacement and refurbishment capex."*

Transend is particularly concerned that the AER has accepted EMCa's advice that a zero cost estimation risk factor should be applied to replacement and refurbishment capital expenditure. In its Draft Decision for Powerlink, the AER similarly argued that the company's cost forecasts should already account for risk:

> *"The AER concludes that Powerlink's annual BPO [Base Planning Objects] update accounts for risks faced in the past. Good project management, planning and risk mitigation should minimise risks and cost overruns. A service provider's capex forecasts must appropriately account for risks likely to be experienced during a regulatory control period. The AER considers that the cost estimation risk factor represents a premium above forecasts that already include adjustments based on previous experience, including risk."*

As noted in relation to Powerlink's Draft Decision, Transend considers that the AER has mischaracterised the purpose of the cost estimation risk factor. The cost estimation risk factor is intended to reflect systematic and asymmetric cost estimation errors that are unavoidably present in cost forecasts of capital projects that are scheduled to commence a number of years into the future.

Transend notes that in the AER's Final Decision for Powerlink, it accepted that asymmetric risk warrants the application of a cost risk estimation factor. It is therefore somewhat surprising that EMCa advised that no allowance for asymmetric risk is appropriate for replacement and refurbishment capital expenditure. Transend can confirm ElectraNet's view that brownfield projects often encounter significant issues in the delivery phase due to unforseen factors including unexpected below ground conditions and services (e.g. water, gas, telecommunications or similar).

Transend is also concerned that the AER's approach to the cost estimation risk factor is to base the allowance on the amount provided in the previous regulatory period. There is no regulatory precedent for simply basing a regulatory allowance in the next regulatory period on the regulatory allowance in the previous period. The question that should be addressed is whether the allowance in the forthcoming regulatory period is appropriate. This should be informed by the actual outcomes in the previous period, but the regulatory allowance for that period is much less relevant.

In summary, the cost risk estimation factor is a well-substantiated, standard forecasting method applied by all TNSPs, and it has previously been accepted by the AER. In view of these considerations, Transend submits that the AER should carefully review the further information provided by ElectraNet and ensure that the allowance provided is appropriate.

Capex/opex trade-off

The AER's Draft Decision imposed a $50 million reduction in ElectraNet's capital expenditure forecast to reflect the impact of higher operating expenditure. The AER summarised its findings as follows:

> *"ElectraNet's high level management decisions have not yet been fully informed by its integrated asset management framework and therefore expenditures have not been adequately justified under its comprehensive governance systems.*
>
> *The higher costs incurred by ElectraNet in developing and applying its new system cannot stand alone without considering the benefits that are likely to arise.*

ElectraNet has not assessed the economic benefits of its asset management framework. It has also not assessed the economic benefits of reducing maintenance expenditure by undertaking targeted replacements. Nor has it shown the economic benefits of deferring replacements by increasing opex.

The AER has approved scope changes to ElectraNet's field maintenance opex category. This has resulted in an opex allowance increase above the revealed cost trend. At the same time, the AER expects that ElectraNet's expanded and improved field maintenance program in combination with its asset management framework ought to lead to lower replacement capex in the future.

The AER considers that ElectraNet should to be able to defer at least $50 million ($2012–13) of replacement / refurbishment capex in the 2013–18 regulatory control period. The AER has therefore made a capex/opex trade off adjustment. The AER considers that increased opex (due to integrated asset management framework) and reduced capex (benefits of integrated asset management framework) allowances are interrelated. The higher costs incurred in developing and applying the new system cannot stand alone without considering the benefits that are likely to arise.

In the absence of this capex adjustment, ElectraNet will not only recover the implementation cost of this program but also recover the economic benefits inherent in the capex/opex trade off which it has not accounted for in its expenditure forecast. The AER considers that such an approach is inconsistent with the NEO, in that, it does not recognise the long term interests of consumers."

In Transend's view the AER's principle is correct that if customers finance increased operating expenditure in relation to either field maintenance or to improve condition monitoring, customers must also obtain the benefit from these initiatives. However, while the AER's principle is correct, in its Draft Decision for ElectraNet the execution of this principle appears to contain the following errors:

- There is a disagreement regarding the magnitude of the additional operating expenditure that customers are providing. Transend notes that this is a factual issue that the AER should be able to resolve.
- There is a disagreement about the extent to which the known efficiencies from the additional operating expenditure have been included in the capital expenditure forecasts. ElectraNet argue that all known savings are already included in the forecasts, and therefore the additional adjustments proposed in the Draft Decision are not warranted. Transend also regards this as a factual question to be resolved by the AER but notes that it would be reasonable for the forecast to already factor in known efficiencies.
- The AER has assumed that the benefits from the increased operating expenditure will be expressed in terms of capital expenditure savings. In Transend's view, this is an error in the AER's approach because it is equally possible that improved information regarding asset condition could lead to increased capital expenditure. In these circumstances, the benefit of the additional operating expenditure translates into reduced reliability issues and improved risk management, including reduced loss of supply.
- The AER assumes that the benefits from increased operating expenditure will be converted into equivalent capital expenditure savings in the next regulatory period. In Transend's view, this is also an error in the AER's approach. There

is no reason to suppose that the benefits will be achieved over the forthcoming regulatory period. In fact, it is much more likely that the benefits (which include reliability and risk management) will arise in future periods as the assets concerned have long lives that span many regulatory control periods.

- The AER's approach assumes that customers will only obtain a benefit of capital expenditure efficiencies if these are reflected in the forecast capital expenditure at the start of the regulatory period. However, this is not correct. Customers will benefit through the lower regulated asset base value in future reviews, even if the efficiency savings were not forecast at the commencement of a particular regulatory period.
- It appears that the AER's Draft Decision has disallowed operating expenditure in relation to condition monitoring, but assumed that capital expenditure savings will be achieved. This is an error in terms of consistency, because benefits cannot be achieved without first allowing the investment to take place.

In summary, Transend accepts the principle outlined in the Draft Decision but the AER's application of this principle appears to contain a number of errors. Some of these errors relate to ElectraNet's particular circumstances, while others are errors of approach. Transend would welcome the AER's clarification of these issues in ElectraNet's Final Decision.

Corrective maintenance and operational refurbishment step changes

The AER rejected ElectraNet's proposed operating expenditure in relation to corrective maintenance and operational refurbishment. Instead, the AER adopted an operating expenditure approach that reflected the 'revealed costs' in the base year.

In relation to corrective maintenance, the AER did not accept ElectraNet's defect rates. The AER disagreed with ElectraNet's view that the decreasing trend in defect rates is offset by the 'bath tub effect', where maintenance costs increase at the start and end of asset life. The AER commented that:

> *"Modern substation equipment generally minimises this effect because it is modular, prefabricated and pretested and therefore reduces 'start of life' defects. Also, warranty provisions may provide for the supplier or contractor to bear the costs of any 'start of life' defects."*

Transend notes that warranty provisions generally cover the equipment costs and not the installation and defect management costs associated with defects, and in many instances this is a high portion of corrective maintenance costs. Further, the timing of warranties generally start from date of delivery of the equipment not from installation date. Consequently, even for costs covered by warranty, the warranty may not cover the full early service life of an asset that is susceptible to higher risk.

Given the detailed nature of the issues arising, Transend cannot express any particular views on whether ElectraNet's forecast for corrective maintenance and refurbishment expenditure is reasonable. This is a matter that should be resolved through careful review by the AER, its consultants and ElectraNet. However, there are a number of important principles noted in ElectraNet's revised revenue proposal that Transend supports:

- It is not appropriate to adopt a base year 'revealed cost' approach if there is evidence that this approach will not satisfy the Rules requirements. It is widely accepted that transmission networks are subject to lumpy patterns of expenditure, and therefore a simplistic and mechanistic 'revealed cost' approach could produce unacceptable outcomes.
- The criticism that ElectraNet has not considered the 'correct later' option is misplaced if the potential failure of an asset raises serious safety, compliance or performance issues. ElectraNet's revised proposal has explained that its corrective maintenance expenditure forecast includes asset defects that have required response times well short of the end of the 2013-2018 regulatory control period, and therefore, there is no prudent 'correct later' option for addressing these defects beyond the 2013-2018 period.
- There are significant risks in deferring planned refurbishment works, especially as unknown defects may be revealed though these programs. It is important that any decision to defer refurbishment takes proper account of these risks, especially given the increased prevalence of bushfires in recent years.

As already noted, the detail of an appropriate operating expenditure allowance for ElectraNet is a matter for the AER to resolve. However, in terms of approach, Transend cautions against an over-reliance on a 'revealed cost' base year forecasting approach. A prudent and efficient TNSP must forecast corrective maintenance and refurbishment capital expenditure on the basis of a forward-looking assessment of the network issues.

Opex efficiency factor

The AER's Draft Decision concluded that ElectraNet's forecast operating expenditure does not reasonably reflect the efficient costs of achieving the operating expenditure objectives because the base year operating expenditure includes inefficiencies. The AER therefore accepted EMCa's advice that an efficiency factor of 2.5 per cent should be applied. The AER commented as follows:

> *"The AER does not agree with ElectraNet's claim that allowing for the removal of inefficiencies in the regulatory forecasts would weaken the incentive properties of the regulatory regime. The EBSS incentive regime operates on variances in controllable opex relative to the allowance assessed for regulatory purposes. The incentive is not affected by the level at which controllable opex was assessed for regulatory purposes. Moreover, the AER's efficiency adjustment does not undermine the incentive regime because the AER is removing only the existing identified inefficiencies. ElectraNet's ongoing management effort would achieve further efficiencies over the regulatory control period, and they would be part of the EBSS."*

Transend notes that ElectraNet has provided a detailed response to the AER's proposed adoption of a 2.5 per cent efficiency factor, including advice from Jeff Balchin of PWC. Transend concurs with Jeff Balchin's analysis, which essentially concludes that the AER's approach is inconsistent with the design of the EBSS and the concept of 'revealing' efficient operating expenditure.

A particular point of concern from Transend's perspective is the AER's comment that the EBSS incentives are not affected by the level at which the operating expenditure allowance is set. Transend does not accept this proposition because

setting an inadequate operating expenditure allowance will not only affect the TNSP's financial performance throughout the 5 year regulatory period, but it will also produce an EBSS penalty at the start of the next period. This inappropriate outcome is not consistent with providing TNSPs with an incentive to outperform.

More importantly, the position adopted by the AER is at odds with the Revenue and Pricing Principles, which require the AER to provide network service providers with a reasonable opportunity to recover at least their efficient costs. It is essential that the AER revisits its approach to the efficiency factor, and ensures that the incentive properties and the design principles of the regime are preserved, and accord with the requirements of the Law.

Removal of capitalised provisions from the regulated asset base

The AER's Draft Decision adopts an unprecedented approach in relation to capital expenditure provisions by making an adjustment to the regulated asset base. The AER explains its approach as follows:

> *"The AER considers capitalised provisions should not be included in the RAB as capex, because ElectraNet has not yet paid out (incurred) the expenses to which the provisions relate."*

From Transend's perspective, the AER approach raises a number of serious concerns because it seeks to adopt a definition of capital expenditure that differs from the accounting standards. As section 2.2 of the AER's Submission Guidelines note:

> *"(c) The regulatory information requirements should be completed according to applicable Australian accounting standards except where these guidelines or other AER guidelines prescribe otherwise or no relevant Australian accounting standard exists."*

Transend is not aware of any AER guideline specifying the present AER approach to provisions, and the approach not only creates issues in terms of business systems and the accounting treatment of costs, but it does so without any discernible regulatory or customer benefit.

In particular, capitalised provisions for labour costs correctly capture the annual leave and other expenses that relate to each particular capital project. If these accrued expenses are not recognised properly as capital expenditure, then the cash costs will be accounted for as an operating expense. On this view, the AER's approach will shift costs from capital expenditure to operating expenditure with a consequential increase being required in the operating expenditure allowance.

It should be noted that without a compensating adjustment to the operating expenditure forecast, the effect of the AER's approach is a wealth transfer from the TNSP to network users. Such an outcome would not be consistent with fostering investor confidence and investment incentives, and this would be to the detriment of the long term interests of consumers. It would also be inconsistent with the Revenue and Pricing Principles in the Law. Overall, while perhaps well-intentioned, the AER's approach contradicts its own submission guidelines and does not appear to promote the achievement of the National Electricity Objective.

Grandfathering provisions contained in clause 11.6.11 of the Rules

In its Draft Decision, the AER agreed with ElectraNet's proposal to replace assets providing connection services that are grandfathered as prescribed connection services. Primarily due to the age and condition, the connection assets (mainly substation assets), require replacement. In its Draft Decision, the AER noted that the grandfathering arrangements in the Rules meant that it had limited scope to make adjustments to ElectraNet's proposal, and accepted ElectraNet's proposed replacement for these assets.

The AER concluded in its Draft Decision that clause 11.6.11 of the National Electricity Rules appears to prevent an incentive to promote prudent and efficient replacement capex decisions and recommended that clause 11.6.11 be reviewed.

Transend has also observed that transmission customers with connection services that are grandfathered as prescribed services may be reluctant to amend the contract demand specified in their connection agreement. This is because the change would trigger the connection service to convert from a grandfathered prescribed connection service to a negotiated service. This change in service can potentially increase connection charges for some customers (even those proposing lower contract demand) due to the relatively short term of the connection agreement compared to the remaining life of the connection assets. That is, the cost of the asset must be recovered over the life of the connection agreement.

Grandfathering of connection arrangements may therefore extend longer than anticipated by the Rule maker, with unintended consequences for efficient investment decisions. Transend therefore supports the AER's recommendation to review clause 11.6.11.