



**PRELIMINARY  
POSITION**

**ElectraNet  
Contingent Project**

**Project EnergyConnect**

December 2020

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## Executive Summary

Project EnergyConnect is a proposed new interconnector between South Australia at Robertstown and New South Wales (NSW) at Wagga Wagga, together with a spur line linking to Victoria at Red Cliffs. It will be jointly constructed and managed by ElectraNet (South Australia) and TransGrid (NSW).

ElectraNet's forecast capital expenditure for the South Australian component of the project is \$468.6 million (\$2017-18). This component of the project is proposed to be completed by March 2023.

On 30 September 2020, ElectraNet applied to the Australian Energy Regulator (AER) to increase its revenue allowance to fund construction of the South Australian component of the project. This is the final step in the regulatory process before ElectraNet is entitled to begin recovering the costs of the project from customers.

Our role is to determine the incremental revenues that will be added to ElectraNet's revenue allowance, and the forecast prudent and efficient capital expenditure (capex) and operating expenditure (opex) required to deliver the project.

We have considered the matters set out in ElectraNet's application. Table 1 sets out our preliminary views on the forecast capex required to undertake the project, the incremental revenues that ElectraNet will be able to charge customers, and the estimated impact on the transmission component of residential customer electricity bills in South Australia. We also estimated these impacts under changes to the rules being proposed by ElectraNet to support its ability to finance the project.

**Table 1 Project EnergyConnect contingent project — preliminary assessment of forecast capex, revenues and bill impact**

	Current rules	Proposed rule change
Forecast capex reasonably required to construct the project	\$456.8 million	\$456.8 million
Incremental revenue to be recovered from customers in 2018–23	\$10.3 million	\$23.8 million
Indicative increase in residential electricity bills in SA in 2018–23	\$2 p.a.	\$6 p.a.
Indicative increase in residential electricity bills in SA in 2023–28	\$15 p.a.	\$19 p.a.

Source: AER analysis.

While we have formed preliminary views on ElectraNet's application, it would be premature for us to make a determination to increase ElectraNet's allowed revenue so that it can begin recovering the project costs from customers. This is because we are not satisfied that ElectraNet's Board has committed to proceed with the project.

## The project trigger event has not occurred

We are only required to determine the expenditures and incremental revenue required to deliver a contingent project, and allow ElectraNet to recover costs from customers, if we are satisfied that the trigger event has occurred. This is because consumers should not be charged for new significant projects, such as Project EnergyConnect, until the cost is reasonably known and it is certain the project will proceed.

ElectraNet's project trigger for Project EnergyConnect involves three elements:

- successful completion of the South Australian Energy Transformation RIT-T with the identification of a preferred option or options: (i) demonstrating positive net economic benefits; and/or (ii) addressing a reliability corrective action.
- determination by the AER that the proposed investment satisfies the RIT-T
- ElectraNet Board commitment to proceed with the project subject to the AER amending the revenue determination pursuant to the Rules.

In September 2020, the ElectraNet Board committed to proceed with the South Australian section of the project subject to:

- the AER awarding incremental regulated revenue commensurate with the capital and operating costs for ElectraNet's section of the project
- ElectraNet obtaining funding as necessary and on terms satisfactory to it, and
- the Board of TransGrid making a firm commitment to proceed with the NSW component of the Project following the AER's revenue determination on its corresponding application.

TransGrid's Board made a similar resolution to commit to the project, subject to a number of conditions, including TransGrid obtaining debt and equity funding on terms satisfactory to it.

We are not satisfied that the project trigger event has occurred. This is because we are not satisfied that the ElectraNet Board has yet committed to proceed with the project if we were to amend its revenue determination pursuant to the National Electricity Rules (NER). This is required to satisfy the third element of the trigger event.

We consider that the ElectraNet Board has not yet committed to the project because its September 2020 resolution makes it clear that the commitment of ElectraNet's Board to proceed with the project is subject both to obtaining finance on satisfactory terms and to a further firm commitment by the Board of TransGrid.

The TransGrid Board has expressed a view that it requires a change to the NER in order to obtain debt and equity funding for Project EnergyConnect on terms satisfactory to it. On 1 October 2020, it proposed a rule change to the Australian Energy Market Commission (AEMC). On 23 October 2020, ElectraNet also submitted a rule change to support the financeability of Project EnergyConnect.

On 5 November 2020, the AEMC stated that it expects to publish a determination on TransGrid and ElectraNet's rule change proposals on 31 March 2021. While this rule change process remains unresolved, it is not clear that TransGrid's Board and ElectraNet's Board are committed to the project.

### **The forecast costs of Project EnergyConnect**

The key component of ElectraNet's application and driver of the incremental revenues that would be recovered from consumers following a contingent project determination is the forecast amount of capex reasonably required to construct the project.

ElectraNet's application proposed \$468.6 million (\$2017-18) in capex to undertake the Project EnergyConnect contingent project. We have examined ElectraNet's proposed capex forecast and our preliminary view is that a reasonable estimate of prudent and efficient capex required to deliver the project is \$456.8 million (\$2017-18). This is 3 per cent less than ElectraNet's proposal.

The majority of ElectraNet's forecast capex would be incurred by an efficient and prudent operator to deliver this project. Approximately 78 per cent of the forecast capex has been market tested through a competitive tendering process. While this process is ongoing, ElectraNet's forecast capex is likely, in large part, to reflect a realistic expectation of actual costs that can be delivered by the market. The proposed scope of the project that is reflected in the tendered costs reflects the necessary works to construct and install new transmission lines and deliver the needs of the project.

We note that ElectraNet has not yet concluded its market tendering for the transmission lines and substation works. The forecast capex in its contingent project application reflects the weighted average of several tendered bids received. While the tendering process has been competitive and has assisted in determining a reasonable estimate of costs, we consider that there remains scope for ElectraNet to lower overall project costs as it finalises both the tender process and the project design. In particular, there remain opportunities to find further cost savings and efficiencies in transmission design and construction methods compared to those proposed by ElectraNet.

We also consider that ElectraNet has overstated project risk. ElectraNet has adopted a reasonably transparent and prudent probabilistic approach to identifying and quantifying project risks. However, in the context of this project, we consider that ElectraNet has systematically overstated the likelihood of risks occurring.

### **Next steps**

We expect to be able to make a determination on ElectraNet's contingent project application after the project trigger event occurs. We are well placed to do this given the substantial work undertaken to date.

For the trigger event to occur ElectraNet and TransGrid will need to resolve the project financing issues highlighted in their rule change proposals to the AEMC. This appears unlikely to happen before the AEMC publishes its final determination on the rule change proposal, which is expected on 31 March 2021.

In the interim, we welcome feedback from interested stakeholders on our preliminary assessment of forecast capex in this document, and the occurrence of each element of the defined project trigger event. We will take this into account as we finalise our assessment and make a determination once we are satisfied that the trigger has occurred.

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# 1 Project EnergyConnect contingent project

Project EnergyConnect is a proposed \$2.4 billion (\$2017-18) contingent project to construct a new high voltage interconnector over a route of approximately 860 km between the electricity networks of South Australia at Robertstown and New South Wales at Wagga Wagga.

ElectraNet proposes that the construction of the South Australian component of the interconnector will be completed by March 2023. ElectraNet is seeking \$14 million in incremental revenues over the 2018–23 regulatory control period to construct its component of the project. The actual project capex would then be added to ElectraNet's regulatory asset base (RAB) at the end of the regulatory control period.

The forecast expenditure associated with this project was not included in ElectraNet's revenue determination for the 2018–23 regulatory control period.

## The regulatory process to date

Project EnergyConnect is the preferred option identified in the *South Australia Energy Transformation* Regulatory Investment Test for Transmission (RIT-T) process. This process has been undertaken by ElectraNet to explore options for reducing the cost of providing secure and reliable electricity to SA in the near term, while facilitating the longer-term transition of the energy sector across the National Electricity Market.

In February 2019, ElectraNet published its final report that identified a new SA-NSW interconnector as the preferred option that maximised the net economic benefits. As this project involves interconnection with NSW, it is a joint project with TransGrid. At this time, the total project cost was estimated at \$1.5 billion.

On 24 January 2020, we determined under clause 5.16.6 of the NER that the preferred option identified by ElectraNet's RIT-T satisfies the RIT-T.

The majority of the benefits of the project are associated with avoiding high cost gas generation in South Australia. While we accepted the majority of inputs and assumptions used by ElectraNet in its RIT-T as reasonable, we considered that ElectraNet likely overstated estimated gas fired generation usage. We considered that the net economic benefits of the project were likely to be around \$269 million.

As part of our determination, we stated that if updated costs and benefits of the project differ materially from the analysis in the RIT-T, ElectraNet (the RIT-T proponent) should consider whether there has been a material change in circumstances such that the preferred option may no longer maximise the positive net economic benefits.

On 29 June 2020, TransGrid provided an initial contingent project application for its component of the project. This application proposed a significantly higher estimate of capital costs for the NSW component of the project than was assumed in the RIT-T. AEMO also published its final 2020 ISP in July 2020.



ElectraNet conducted an updated cost benefit analysis using the updated 2020 ISP inputs and assumptions and took into account the updated capital costs for the project. This updated analysis was conducted for the central scenario and indicated that the net benefits of the project are likely to be positive.

ElectraNet provided this updated analysis to us seeking our confirmation that the outcome demonstrated that Project EnergyConnect remains the preferred option and therefore there is no need to reapply the RIT-T.

On 28 September, we advised ElectraNet that its updated cost benefit analysis, which relies on AEMO inputs and assumptions from the 2020 ISP, provides a not unreasonable basis for ElectraNet's opinion that Project EnergyConnect remains the preferred option. However, we highlighted that the net benefits remain finely balanced and there is a significant zone of uncertainty associated with the benefits. In particular:

- The analysis is sensitive to gas price forecasts that are uncertain.
- There is uncertainty about whether large scale batteries may contribute to managing system security risks in SA in the absence of the interconnector.

Since September 2020, there have been a number of developments in the NEM that could potentially impact on the net benefits from Project EnergyConnect. These developments include:

1. The Australian Government's commitment to finance up to 1,000MW of gas generation in the Hunter Valley by April 2021.
2. The NSW Government's recently passed legislation (referred to as the *NSW Electricity Infrastructure Bill 2020*) targeting 12GW of renewable energy across a number of designated renewable energy zones with associated transmission upgrades and 2GW of long duration storage by 2030 as well as facilitating the installation of dispatchable capacity.
3. The Victorian Government's budget announcements about the creation of new renewable energy zones and completion of tendering for the System Integrity Protection Scheme (i.e. a new battery service).
4. The passing of legislation for the Tasmanian Renewable Energy Target to double Tasmania's renewable generation to 200 per cent of current needs by 2040.
5. The announcement by AGL on its intention to build a 250MW battery at Torrens Island in South Australia by 2024.

These developments may increase or decrease the net benefits of the project, and are not reflected in the 2020 ISP. If a material change in circumstances has occurred which, in ElectraNet's reasonable opinion, means that Project EnergyConnect is no longer the preferred option, then the NER requires ElectraNet to reapply the RIT-T unless the AER determines otherwise.

## The contingent project process

The next step in the regulatory process is the AER's decision on ElectraNet's contingent project application. This will be the final step before ElectraNet will be entitled to begin charging customers for the costs of the project.

Under the NER, contingent projects are significant network augmentation projects that may arise during a regulatory control period, but the need, timing and/or cost of the project is uncertain. As such, project costs are not provided for in expenditure forecasts for a regulatory control period. Rather, contingent projects are linked to unique investment drivers, which are defined by a 'trigger event' set by the AER when it determines to accept a proposed contingent project in a revenue proposal.<sup>1</sup>

On 30 September 2020, ElectraNet submitted a contingent project application to the AER seeking an increase in its allowed revenue to construct the South Australian component of the new interconnector. TransGrid also submitted a contingent project application for the NSW component of the project.

### *Our role in assessing ElectraNet's contingent project application*

Our role is to assess ElectraNet's contingent project application in accordance with clause 6A.8.2 of the NER, which specifies the process we must undertake and the determination we must make on a contingent project application.

First, to be eligible to seek approval of the funding for a contingent project, ElectraNet must demonstrate that the specified trigger event has occurred and that the project costs exceed a materiality threshold.

Second, if we are satisfied these conditions have been met, we must determine:

- the total capex that is reasonably required for the project and the amount of capex for each remaining year of the regulatory control period
- the incremental opex for each remaining year of the regulatory control period
- the incremental revenue which is likely to be required by ElectraNet for each remaining regulatory year as a result of the efficient capex and opex for the contingent project, and
- the likely commencement and completion dates.

In making our determination, we are required to consider whether we can accept ElectraNet's proposed revenues and project expenditure included in its application. This includes considering if its proposed project costs are prudent and efficient. If we are not satisfied that we can accept ElectraNet's forecast revenues and project costs, we are able to determine a different forecast.

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<sup>1</sup> NER, cl. 6A.8.1(c).

## Financeability rule change

Since submitting their contingent project applications, TransGrid and ElectraNet have both sought changes to the NER to support the financeability of the project. The impact of the proposed rule changes is to bring forward the timing of revenues into the current regulatory period to support the businesses in obtaining financing for the project, and other major ISP projects, on satisfactory terms.

ElectraNet's updated contingent project application shows the impact of its proposed rule change on the incremental revenues for its component of Project EnergyConnect in the 2018-23 regulatory control period. It shows that incremental revenues would be \$34 million, which is around 140 per cent higher than under the current rules.

We understand that the AEMC expects to make a determination on the rule change proposals in March 2021.

## 2 The project trigger event

In order for ElectraNet to be able to apply to amend its revenue determination to increase allowed revenues for a contingent project, the specified trigger event must have occurred. We are only required to determine the expenditures and incremental revenue required to deliver the contingent project if we are satisfied that the trigger event has occurred.

As noted in section 1, contingent projects are significant network augmentation projects that may arise during a regulatory control period, but the need and or timing of the project is uncertain. As such, project costs are not provided for in expenditure forecasts as part of the revenue determination for a regulatory control period. In this context, consumers should not be charged for new significant projects until the cost is reasonably known and it is certain the project will proceed.

In our final decision on ElectraNet's 2018–23 revenue determination, we set out three elements of an event that would trigger the Project EnergyConnect contingent project. Table 2 outlines these trigger elements.

**Table 2 Project EnergyConnect contingent project trigger elements**

Element	Description of trigger element
1	Successful completion of the South Australian Energy Transformation RIT-T with the identification of a preferred option or options: (i) demonstrating positive net economic benefits, and/or (ii) addressing a reliability corrective action.
2	Determination by the AER that the proposed investment satisfies the RIT-T.
3	ElectraNet Board commitment to proceed with the project subject to the AER amending the revenue determination pursuant to the Rules.
4	Clauses 1 and 2 do not apply if a change in the law occurs that allows the inclusion of the proposed investment in ElectraNet's maximum allowed revenue under this revenue determination even if a RIT-T is not carried out.

Source: AER, *ElectraNet transmission revenue determination, Attachment 6 - Capital expenditure*, May 2018.

Before we can make a decision approving a contingent project application for Project EnergyConnect, we must be satisfied at the time of that decision that all three elements of the trigger event have occurred. This includes remaining satisfied, as required by the first element of the trigger event, that the RIT-T process has been successfully completed.

In relation to the second element of the trigger event, we made a determination on 24 January 2020 that the preferred option identified by ElectraNet's *South Australian Energy Transformation RIT-T* satisfies the RIT-T. As discussed in detail below, the third element of the trigger has not yet occurred. This is because it appears that the

ElectraNet Board has not yet committed to proceed with the project if we were to amend its revenue determination in accordance with our preliminary assessment.

Because the third element of the trigger had not occurred at the time ElectraNet and TransGrid submitted their contingent project applications, and still has not occurred, those applications did not meet, and still do not meet, the pre-requisites for the decision making process under the NER to commence. This means we are not yet required to make a determination on ElectraNet's contingent project application.

### **ElectraNet Board resolution to commit to the project**

ElectraNet's application stated that, on 29 September 2020, the ElectraNet Board committed to proceed with the South Australian section of the project subject to:

- the AER awarding incremental regulated revenue commensurate with the capital and operating costs for ElectraNet's section of the project
- ElectraNet obtaining funding as necessary and on terms satisfactory to it, and
- the Board of TransGrid making a firm commitment to proceed with the NSW component of the Project following the AER's revenue determination on its corresponding application.

In our view, this does not satisfy the project trigger event. Based on the information available to us, we are not satisfied that a determination by us to amend ElectraNet's revenue determination, in accordance with this preliminary assessment and pursuant to the current rules, will be sufficient at this time for ElectraNet's Board to make a final investment decision and proceed with the project.

This is primarily because ElectraNet's Board resolution makes it clear that the commitment of ElectraNet's Board to proceed with the project is subject both to obtaining finance on satisfactory terms and to a further firm commitment to the project by the Board of TransGrid.

The TransGrid Board's 29 June 2020 resolution to commit to Project EnergyConnect was made subject to obtaining debt and equity funding on terms satisfactory to it.

On 1 October 2020, TransGrid sought a rule change with the AEMC to alter the revenue recovery timing of Project EnergyConnect and other major ISP projects. TransGrid's rule change request states that:<sup>2</sup>

In the course of our assessment of PEC ... we have identified there are features of the regulatory framework that have significant implications for the financeability of large scale projects with long asset lives, such as PEC.

TransGrid's contingent project application explains that it has sought the rule change due to concerns about the financeability of the project:<sup>3</sup>

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<sup>2</sup> TransGrid, *Rule Change Proposal – Making ISP Projects Financeable*, 1 October 2020, p. 3.

This Rule change is required because the current regulatory arrangements result in a misalignment between when a network service provider (NSP) incurs costs and when it recovers revenues, particularly in the early years of projects. For Major ISP Projects, this means that an NSP cannot achieve the benchmark credit rating and gearing assumptions in the AER's 2018 Rate of Return Instrument, which are used by the AER to calculate the rate of return. This in turn undermines an NSP's ability to access efficient debt finance and therefore the financeability of these projects.

It also states:<sup>4</sup>

Our Financeability Rule change proposal is being made in good faith, ahead of the changes to 2022 Rate of Return Instrument, to facilitate the delivery of PEC in line with the timing set out in the Final 2020 ISP and to meet Government and other stakeholders' timing expectations.

The AEMC's consultation paper on the rule change similarly noted that without the rule change, TransGrid considered that there is a "serious risk that the ISP projects may not be delivered, or are not delivered in a timely fashion."<sup>5</sup> TransGrid considered that its rule change request should be considered as urgent because "it is required to enable us to establish finance for the ISP projects in time to ensure they are delivered consistent with maximising benefits to customers."<sup>6</sup>

On 23 October 2020, ElectraNet also submitted a rule change to support the financeability of Project EnergyConnect. ElectraNet was of the view that it shares the challenges faced by TransGrid,<sup>7</sup> and its request stated:<sup>8</sup>

... the Rule change will address the risk that actionable ISP projects may not proceed because finance is either unavailable or too expensive.

ElectraNet also stated that it supports TransGrid's view that the rule change is urgent because a timely investment decision regarding Project EnergyConnect is required.<sup>9</sup>

The Major Energy Users also made an observation about the rule change:<sup>10</sup>

The proponents have commented that unless these changes are implemented then the project is not financeable based on the current approach to setting of the WACC for networks. The MEU considers that this implies that the project has undergone a material change due to the need for

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<sup>3</sup> TransGrid, *Letter to AER - TransGrid Final Capex for PEC*, 30 September 2020, p. 2.

<sup>4</sup> TransGrid, *Letter to AER - TransGrid Final Capex for PEC*, 30 September 2020, p. 3.

<sup>5</sup> AEMC, *Participant derogation – financeability of ISP projects, Consultation paper*, 5 November 2020, p. 8.

<sup>6</sup> TransGrid, *Rule Change Proposal – Making ISP Projects Financeable*, 1 October 2020, p. 7.

<sup>7</sup> AEMC, *Participant derogation – financeability of ISP projects, Consultation paper*, 5 November 2020, p. 15.

<sup>8</sup> AEMC, *Participant derogation – financeability of ISP projects, Consultation paper*, 5 November 2020, p. 20.

<sup>9</sup> ElectraNet, *Rule Change Proposal: Making ISP Projects Financeable*, 23 October 2020, p. 4.

<sup>10</sup> Major Energy Users, *Submission on Project EnergyConnect contingent project applications*, 28 October 2020, p. 3.

changes to the regulatory approach in order to allow the project to be financeable. As a material change, the AER should require the project to be exposed to further detailed review by stakeholders.

TransGrid's statements indicate that it considers the rule change is required to obtain satisfactory debt and equity funding, which is a condition of TransGrid's Board to commit to the project. ElectraNet's own statements also indicate the rule change is seen by ElectraNet to be necessary in order to make an investment decision on Project EnergyConnect.

In the absence of a rule change, and prior to the AEMC making its decision on ElectraNet and TransGrid's rule change proposals, we do not consider that TransGrid and ElectraNet will make a further final investment decision or otherwise commit to proceeding with the project. Until their financing is resolved, we cannot be satisfied that the project trigger event has occurred.

The AEMC is currently assessing TransGrid and ElectraNet's rule change proposals. TransGrid and ElectraNet had proposed that their rule change requests be expedited as an "urgent rule" under the National Electricity Law. On 5 November 2020, the AEMC advised in its consultation paper on the rule change request that it does not consider that the rule change requests meet the test for an "urgent rule". The final outcome of the rule change proposals will therefore likely not be resolved until at least the end of March 2021. The AEMC has stated that it expects to publish a determination on the rule change proposals on 31 March 2021, with a draft determination expected on 21 January 2021.<sup>11</sup>

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<sup>11</sup> AEMC, *Participant derogation – financeability of ISP projects, Consultation paper*, 5 November 2020, p. 2.

### 3 Prudent and efficient project expenditure

This section outlines our consideration of ElectraNet's proposed forecast capex and opex for Project EnergyConnect, and our preliminary views on the likely estimate of the prudent and efficient expenditure necessary to undertake the project.

We are not, at this time, amending ElectraNet's revenue determination to account for a forecast of expenditure required to deliver Project EnergyConnect. However, the analysis set out in this section provide an indication of the prudent and efficient costs we consider would be reasonably required to undertake the project.

These forecasts of capex and opex are building block inputs to determine the incremental revenue ElectraNet may recover in the current regulatory control period. They will also be added to the target capex and opex for ElectraNet's expenditure incentive schemes.<sup>12</sup> Any incentive rewards and penalties ElectraNet receives as a result of under or overspending on the project will be applied as additional revenue adjustments in the next regulatory control period.

#### 3.1 Forecast of capital expenditure

Table 3 sets out our indicative view on the total capex required for the project and the capex for each year of the 2018–23 regulatory control period based on our analysis to date. We have not accepted ElectraNet's proposed forecast capex and have estimated a different forecast.

**Table 3 AER preliminary estimate of forecast capex (\$m, 2017-18)**

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
ElectraNet's proposal	5.0	4.1	30.6	175.1	253.8	468.6
AER estimate	5.0	4.1	29.9	171.3	246.5	456.8
Difference (%)	0.0%	0.0%	-2.0%	-2.2%	-2.9%	-2.5%
Difference (\$m)	-	-	-0.6	-3.9	-7.3	-11.8

Source: AER analysis.

Note: Numbers may not add up due to rounding.

ElectraNet's contingent project application forecasts that the project will require \$468.6 million (\$2017-18) in capex.<sup>13</sup> This forecast is comprised of:<sup>14</sup>

<sup>12</sup> The Capital Expenditure Sharing Scheme (CESS) and the Expenditure Benefit Sharing Scheme (EBSS).

<sup>13</sup> ElectraNet's initial application proposed \$471 million (\$2017-18) in forecast capex. On 24 November 2020, ElectraNet advised that as a result of the change in the timing of the capital expenditure and revenue required to deliver the project and other minor adjustments, the updated forecast capital expenditure for the purpose of the application is slightly reduced at \$468.6 million (\$2017-18).



- \$366.7 million in new transmission lines and substation upgrades, which is being outsourced to an external contractor or contractors via competitive tender processes
- \$31.9 million in ElectraNet's project overheads to oversee the contractor(s) and ensure overall project delivery
- \$18.9 million for a special protection scheme to manage electricity imports and exports across the interconnector
- \$16.3 million for project risk allowance
- \$13.9 million for internetwork testing
- \$11.1 million for land and easement acquisition
- \$7.2 million for stakeholder and cultural heritage engagement
- \$3.0 million for environmental offsets.

ElectraNet's contingent project application included a range of supporting documents. This includes a detailed scope of work document, a summary of its procurement process and a detailed break-down of the project cost elements. It also provided a detailed 'risk register' that sets out the detailed information supporting the calculation of the project risk allowance.

We have examined ElectraNet's proposed capex forecast and found based on our analysis of the information available that a prudent and efficient estimate of the forecast capex for the South Australian component of Project EnergyConnect is \$456.8 million (\$2017-18). This is 3 per cent less than ElectraNet's proposal.

We were supported by our consultants, Energy Market Consulting associates (EMCa), which applied its technical and engineering expertise to examine the capex forecast, identify key areas of ElectraNet's application that required further analysis, and assess the prudence and efficiency of the forecast.

Our key preliminary conclusions are:

- The competitive tender process ElectraNet has undertaken to date means that the estimated costs for transmission lines and substation works reasonably reflect a competitive market outcome for the scope of the project as specified by ElectraNet in its procurement process.
- The proposed scope of the project that is reflected in the tendered costs reflects the necessary works to construct and install new transmission lines and deliver the needs of the project.
- ElectraNet's project delivery costs are reasonably required for a project of the size and complexity of Project EnergyConnect.

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<sup>14</sup> ElectraNet. *Project EnergyConnect contingent project application - update*, 24 November 2020, p. 3.

- ElectraNet has reasonably estimated the land and easements necessary to locate the new transmission lines and substations, and the environmental offsets required along the route.
- ElectraNet's forecast costs for its special protection system and internetwork testing are reasonably estimated.

We note that ElectraNet has not yet concluded its market tendering for the transmission lines and substation works. The forecast capex in its contingent project application reflects a weighted average of several tendered bids received. While the tendering process has been comprehensive and competitive, we consider that there remains scope for ElectraNet to lower overall project costs as it finalises the tender process and the project design. In particular, there remain opportunities to find further cost savings and efficiencies in transmission design and construction methods compared to those proposed by ElectraNet.

We also consider that ElectraNet has overstated project risk. ElectraNet has adopted a reasonably transparent and prudent probabilistic approach to identifying and quantifying project risks. However, in the context of this project, we consider that ElectraNet has systematically overstated the likelihood of risks occurring.

Table 4 sets out our preliminary assessment of ElectraNet's capex components and how we arrived at our estimate of total capex for the project.

**Table 4 Preliminary assessment of capex components (\$m, 2017-18)**

Capex component	ElectraNet estimate	AER estimate	Adjustment
Transmission lines	258.4	248.0	-10.4
Substations	108.3	108.3	0.0
Property and easements	11.1	11.1	0.0
Environmental	10.2	10.2	0.0
Project delivery costs	31.9	31.9	0.0
Special Protection Scheme	18.9	18.9	0.0
Internetwork testing	13.4	13.4	0.0
Project risk	16.3	14.9	-1.4
<b>Total project capex</b>	<b>468.6</b>	<b>456.8</b>	<b>-11.8</b>
Difference			-2.5%

Source: AER analysis, *ElectraNet. Project EnergyConnect contingent project application - update*, 24 November 2020, p. 3.

Note: Numbers may not add up due to rounding.

The remainder of this section sets out our preliminary findings in more detail about ElectraNet's:

- tendered costs for transmission lines and substation works
- opportunities for cost savings in transmission line design and construction costs
- project delivery costs, and
- project risk allowance.

### **Tendered costs for transmission lines and substation works**

The largest components of ElectraNet's forecast capex for Project EnergyConnect are \$258.4 million for designing, constructing and installing the new transmission towers and conductors, and \$108.3 million for upgrades to ElectraNet's substations. Together these costs comprise 78 per cent of the total project costs.

ElectraNet is proposing to outsource the design, construction and delivery of the transmission lines and substation works to multiple third party contractors. It has estimated the costs for these works through a competitive tendering and procurement process it has been conducting since early 2019.<sup>15</sup> ElectraNet has substantially progressed its procurement process, but it does not have firm contract prices on which to base the cost estimate. The estimated capex for its transmission lines reflects the weighted average of bids from shortlisted tenderers (transmission lines) and the initial market bids it has received to date (substations).<sup>16</sup>

ElectraNet is expecting to execute fixed price design-and-construct contracts with contractors in 2021. These contracts will include the final allocation of risk between ElectraNet and the contractors. Nonetheless, ElectraNet considers that its capex forecast represents a prudent and efficient estimate of the project costs based on the information available at this point in time. Its risk mitigation activities, weighted average pricing methodology, the procurement process to date and the next steps of competitive tendering together with its detailed risk assessment combine to provide a high level of confidence in the capex forecast.<sup>17</sup>

We consider that the majority of ElectraNet's forecast capex for transmission lines and substations is likely to reasonably reflect the efficient costs that would be incurred by a prudent operator. This is because:

- ElectraNet's competitive tendering process means that the materials and construction costs have been market tested and reflect a realistic expectation of costs that can be delivered. This competitive process is expected to continue throughout the remainder of the procurement process.

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<sup>15</sup> ElectraNet, *Project EnergyConnect Cost Estimates Report PUBLIC*, 30 September 2020, p. 9.

<sup>16</sup> ElectraNet, *Project EnergyConnect Cost Estimates Report PUBLIC*, 30 September 2020, pp. 15-19. The weighted average methodology is set out in the confidential version of ElectraNet's report.

<sup>17</sup> ElectraNet, *Project EnergyConnect Cost Estimates Report PUBLIC*, 30 September 2020, p. 17.

- ElectraNet's approach in applying a weighted average of the market bids received to date should reflect a more reasonable estimate of the likely project cost than simply taking an average, or using a lower weighting factor.
- ElectraNet's proposed scope of the project that is reflected in the tendered costs reflects the necessary works to construct and install new transmission lines and deliver the needs of the project.

We also consider that ElectraNet's choice of project delivery model should provide opportunities for ElectraNet and the contractors to identify efficiencies in design as they finalise the contracting process, and each efficiently allocate their design and delivery risk. While there is likely to be a risk associated with dealing with multiple contractors, the benefit in delivery of an efficient design and costs are expected to outweigh the additional costs and risks.

As set out below, we consider that ElectraNet can do more to identify and capture potential further cost savings in the delivery of the project in its capex forecast.

### **Allowance for savings opportunities in the delivery of the project**

The tendered costs for transmission lines largely reflect ElectraNet's standard design for transmission towers and overhead line construction. This is consistent with Australian design and construction standards. However, there are different transmission structure designs which may be deployed to prudently reduce cost.

ElectraNet's capex proposal identifies and quantifies approximately \$6 million in cost savings that may be realised in the final tendered amounts. It included these potential cost savings as negative adjustments within its forecast capex.

These cost savings relate to design optimisation and construction efficiencies in:

- the design, through tower heights, span lengths, and/or the use of structures other than free standing towers for the transmission line (e.g. guyed towers)
- the use of spoil from tower foundations as fill on the substation site
- the use of third party telecommunication assets to provide a radio path.

ElectraNet's proposed cost savings are contained within its project risk register. As for its project risks, ElectraNet's methodology to determine potential savings involves a detailed evaluation and probabilistic assessment (likelihood of saving being realised x consequence cost) of known opportunities that reflect the stage of the project in the delivery cycle and complexity of the works involved. We consider the remainder of the project risks in the section below.

We consider that ElectraNet has adopted a prudent approach in attempting to measure and capture potential cost savings opportunities in its capex forecast. However, we consider that the likelihood that ElectraNet's contractors will be able to realise these specific opportunities is greater than ElectraNet has proposed.

We consider that a reasonable estimate of likely project cost savings opportunities is \$10.4 million (\$2017-18). In arriving at this estimate, we have adopted ElectraNet's

methodology to quantify cost savings opportunities, including the specific types of technical efficiencies and unit costs. However, we have applied a higher likelihood that these savings will be achieved to estimate the probable efficiency benefits that ElectraNet should be able to realise through its ongoing tender process.

ElectraNet applied a relatively low likelihood of achieving its identified opportunities for cost savings. We consider that ElectraNet is likely to achieve the identified savings, and have applied a likelihood of rating consistent with the midpoint of ElectraNet's probability range for 'likely' risks to estimate the probability weighted savings. This increases the total estimate of cost savings. This is consistent with our approach to assessing project risks, as discussed further below.

Our view is informed by EMCA which used its expert engineering judgement and expertise to evaluate the basis for each savings opportunity and the likely probability of occurrence and the financial impact. It stated that:

Based on our understanding of the outcomes from TransGrid's procurement process, design and construction efficiencies could reasonably be expected to be achieved for the SA component of PEC from the balance of ElectraNet's competitive procurement process. These options could include tower spacing, tower height, tower design, type of structure used, tower construction, line construction and line stringing, along with other aspects of design and construction such as footing type and design.

We recognise that the same efficiencies may not be present for a range of factors given the status of design, local conditions etc and therefore all efficiencies gained by TransGrid may not be realised to the same magnitude by ElectraNet. However, the assumptions included by ElectraNet in the risk register are likely to under-estimate the level of design and construction efficiency for transmission lines that may be achieved.

As part of its analysis, EMCa reviewed information provided by ElectraNet which suggested that ElectraNet's forecast capex for transmission lines benchmarked well when compared against TransGrid's tendered costs for transmission lines for Project EnergyConnect. ElectraNet stated that, given its comprehensive tendering process, TransGrid's market pricing represents the current benchmark for the delivery of large scale 330kV transmission line assets in Australia.<sup>18</sup>

EMCa reviewed the information and noted that, whilst it expected that the economies of scale for the NSW component would result in a lower line construction cost per kilometre than evident from ElectraNet's cost estimate for the SA component, other cost factors were present in TransGrid's costs that may not have been present in ElectraNet's costs. This included potentially greater risk margin in the tendered costs, the specific economic and labour conditions in NSW compared to South Australia, and differences in tower spans.

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<sup>18</sup> ElectraNet, *Response to AER assessment of risk allowance received 6 November 2020 (Confidential)*, 17 November 2020, p. 7.

We also note that there are potentially additional opportunities for further line design and construction efficiencies that may be available to ElectraNet. These include:

- screw piles or micro-piles which are less environmentally intrusive and materially less expensive than concrete foundations due to the speed of installation and no curing time, batching plants, major excavation work or waste water management
- aerial construction methods and aerial stringing which are faster and reduce construction time and hence costs despite the offsetting costs of helicopter use, particularly on long line constructions; and
- tower design choices which are still available to ElectraNet (spacing, height, material sizing versus cost, insulator material and construction).

While we have not yet been able to form a view on the quantum of these further opportunities based on the information available to us, we encourage ElectraNet to fully explore any remaining opportunities to reduce project costs to the extent possible in finalising its contracting process. Where ElectraNet and the contractor are able to identify any further design and/or construction techniques that lower the overall project costs, these costs savings should be reflected in any revised contingent project cost estimate and/or in the final contract price. The majority of these lower costs will then be passed through to consumers when actual project costs are added to the RAB at the start of the next regulatory control period.

### Project delivery costs

ElectraNet forecast \$31.9 million (\$2017-18) in project delivery overhead costs for its component of Project EnergyConnect. This forecast is based on a bottom-up build of additional staff required to deliver the project, such as project management, planning and engineering.<sup>19</sup> It also includes costs that have been incurred to date.

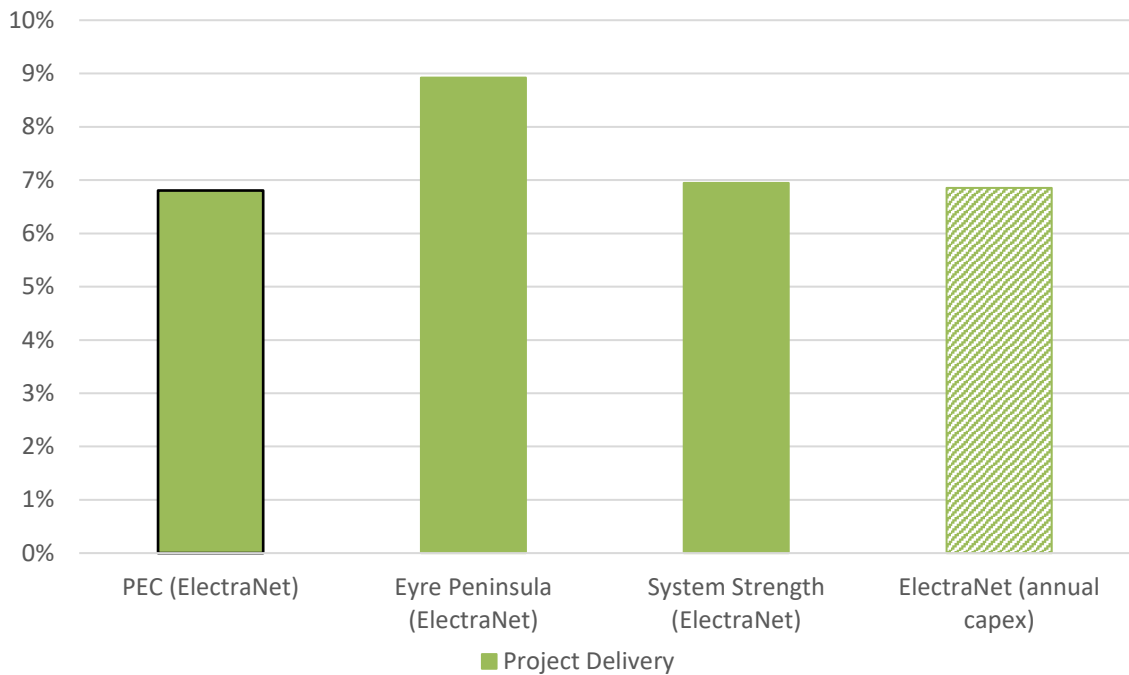
We have benchmarked ElectraNet's project delivery costs against other historical projects and its annual capital expenditure between 2009 and 2019. As shown in Figure 1, ElectraNet's project delivery costs, as a proportion of total project costs, for Project EnergyConnect are significantly less than recent contingent project Eyre Peninsula Reinforcement project and similar to the System Strength project. It is also similar to its annual capitalised overheads.<sup>20</sup>

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<sup>19</sup> ElectraNet, *Project EnergyConnect Cost Estimates Report PUBLIC*, 30 September 2020, pp. 20-25

<sup>20</sup> We note that ElectraNet have stated that the network and corporate overhead information reported by ElectraNet in the annual RINs relates to only a portion of the total overhead cost which is allocated to internal labour costs, and excludes other overheads, labour on costs and salary costs. ElectraNet states that the full project delivery cost on average across delivered projects over this period is therefore significantly higher than this figure (typically over 15%) reflecting the relatively large number of small scale and complex projects undertaken over this period, which increases the proportion of efficient delivery costs required on each project. See ElectraNet, *Response to AER information request received 18 October 2020*, 4 November 2020, p. 4

**Figure 1 Capitalised overheads as proportion of total capex**



Source: ElectraNet, AER analysis.

Note: ElectraNet's project delivery costs for Project EnergyConnect and the Eyre Peninsula Reinforcement do not include costs related to land purchase, environmental offsets management, and stakeholder and community engagement related to land and environment. This ensures we can compare project delivery costs on a like-for-like basis with the other brownfields projects.

These results align with our expectations of forecast project delivery costs from a prudent operator in these circumstances. While the project is more complex than a typical brownfields project (such as System Strength) in terms of planning and project management, this is offset by the size of the project and the ability to spread fixed costs over a larger amount of material and contracting costs. This is supported by EMCa, which noted:

We consider that the top-down benchmarks of project delivery costs suggest to us that ElectraNet has proposed a project delivery cost at a level that is lower than its historical performance, and this is in part due to the likely economies of scale of a large project.

Importantly, ElectraNet has proposed lower project delivery costs than its allowance for the Eyre Peninsula Reinforcement project (8.9 per cent), and significantly below its forecast project delivery costs in its contingent project application for that project (10 per cent). These two projects are similar as they involve the construction of new transmission lines and towers and are similar in length. The primary reason that ElectraNet's forecast capex for Project EnergyConnect is higher is due to the inclusion of capex for a new substation.



We have also sought advice from EMCa to examine ElectraNet's assumptions about project staffing, forecast unit costs (e.g. wages and corporate overheads) and its project delivery plan. This supported our top-down benchmarks by reviewing the forecast from a bottom-up perspective.

EMCa found that ElectraNet's forecast is likely to be reasonable when considering the performance from a top-down perspective and the estimating accuracy associated with forecasting project delivery costs. However, it did identify some high cost elements of ElectraNet's forecast. In particular:

- ElectraNet has generally forecast salaries for the project, and corporate overhead allocation that is at the higher end of the range typically applied by electricity companies in Australia.
- ElectraNet's proposed resourcing for its final project testing phase is likely more than is reasonably required to undertake the work.

### Allowance for project risk

ElectraNet's forecast capex included \$16.3 million (\$2017-18) in allowance for project risk costs.<sup>21</sup> The project risk allowance reflects the potential impact of 21 individual risks. ElectraNet categorised these as risks that relate to a realistic latent condition with the site(s) and risks associated with the actions or requirements of a third party that are not under contractual arrangement with ElectraNet and hence the risk is not able to be addressed through enforcement of contract terms.<sup>22</sup>

ElectraNet evaluated each risk item by estimating the likelihood of occurrence, mitigation strategies and range of potential cost impacts. It assessed and quantified each risk using its expert judgement. It then applied a probabilistic approach (likelihood x consequence) to calculate the risk cost.

We consider that ElectraNet's methodology and process for calculating its risk allowance is transparent, logical and well documented, and its use of probabilistic calculations should, depending on the inputs and assumptions applied, result in an overall allowance that reasonably reflects the likelihood of the project risks occurring

We also consider that the risks proposed by ElectraNet, except the risk related to adverse exchange rate movements, are appropriate and reasonable to be included in a risk allowance for a project of this nature. In relation to exchange rate risk, we consider this is a risk that is likely to be transferred to the contractor at contract award and/or mitigated through hedging. Prior to contract award, this is a

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<sup>21</sup> This amount includes both potential risk costs that add costs and potential opportunities for cost savings that reduce costs. Excluding the offsetting opportunities for savings, ElectraNet's proposed total project risk cost is approximately \$22.1 million.

<sup>22</sup> ElectraNet, *Project Energy Connect Cost Estimate Report (public)*, 30 September 2020, p. 30.



symmetrical risk. ElectraNet has not shown that the risk of adverse exchange rate movements is more likely to occur than beneficial movements.<sup>23</sup>

However, while we accept all but one of ElectraNet's identified risks, we found that ElectraNet's risk assessment overstates the likelihood of each risk occurring. ElectraNet applied the upper bound of the likelihood range assigned to each risk to calculate the risk cost (likelihood x consequence) for each risk item. This systematically overstates the probabilities that the risks will occur and therefore overstates the calculation of overall risk costs. This approach is also not consistent with the approach applied by ElectraNet for the Eyre Peninsula Reinforcement contingent project or Main Grid System Strength contingent project risk costs.

We consider that applying the mid-point of ElectraNet's likelihood range is more likely to result in a reasonable and unbiased estimate of prudent and efficient risk costs for the project. This results in an indicative estimate of \$14.9 million (\$2017-18) in total project risk cost.

This amount does not include opportunities to realise potential savings and efficiencies in the delivery of the project. Our preliminary assessment of these opportunities to realise potential savings is discussed in the allowance for savings opportunities section of this paper.

### 3.2 Forecast of operating expenditure

Table 5 sets out our preliminary assessment of the incremental opex for each year of the 2018–23 regulatory control period.

We have made no adjustment to ElectraNet's proposed opex. ElectraNet expects to incur minor incremental operating expenditure in advance of the commissioning of the project. The project will lead to higher maintenance expenditure once commissioned, but the incremental costs associated with maintenance are not expected to occur until the next regulatory control period.<sup>24</sup>

**Table 5 Proposed incremental opex forecast (\$m, 2017-18)**

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Total opex	0.0	0.0	0.0	0.1	0.3	0.5

Source: ElectraNet, *Project EnergyConnect, Contingent Project Application - Update, 24 November 2020*, p. 4.

<sup>23</sup> Current exchange rate futures forecasts show an upward trend of the Australian dollar against the \$US and cross rates from December 2020 to June 2021 when ElectraNet can hedge against exchange rate variations.

<sup>24</sup> ElectraNet, *Project EnergyConnect Contingent Project Application*, 30 September 2020 p. 26.

## 4 Calculation of incremental allowed revenues

This section calculates the incremental revenue that ElectraNet would recover from customers to account for our preliminary assessment of efficient project costs. We have applied an annual building block revenue approach, in accordance with clause 6A.8.2(h) of the NER. ElectraNet's application is consistent with this approach.

We are not, at this time, amending ElectraNet's revenue determination to account for a forecast of expenditure required to deliver Project EnergyConnect. The preliminary analysis set out in this section provides an indication of the incremental revenue likely to be required by ElectraNet as a result of undertaking the project, reflecting the efficient building block costs discussed in section 3.

### Incremental revenues under the current rules

Table 6 shows that ElectraNet would be entitled to recover \$10.3 million (\$ nominal) in additional revenues from customers over the 2018–23 regulatory control period. As a result of recovering these revenues, we estimate that the transmission component of average residential electricity bill in South Australia would increase by \$2 per year for the 2018–23 regulatory control period. This would increase to \$15 per year for the next 2023–28 regulatory control period.

**Table 6 Incremental revenue calculation (\$m, nominal)**

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Return on capital	0.0	0.5	0.7	2.6	13.4	17.2
Return of capital	0.0	–0.1	–0.2	–1.1	–5.8	–7.3
Straight-line depreciation	0.0	0.1	0.1	0.1	0.1	0.3
Less: inflation indexation on opening RAB	0.0	0.2	0.3	1.1	5.9	7.5
Operating expenditure	0.0	0.0	0.0	0.2	0.4	0.6
Revenue adjustments	0.0	0.0	0.0	0.0	0.0	0.0
Net tax allowance	0.0	–0.1	–0.1	–0.1	0.2	–0.1
Annual building block revenue requirement (unsmoothed) <sup>a</sup>	0.0	0.2	0.4	1.6	8.1	10.4
<b>Annual expected maximum allowable revenue (smoothed)</b>	0.0	0.0	0.0	3.3	7.0	10.3
Increase to annual expected MAR (smoothed) (%)	0.0%	0.0%	0.0%	1.0%	2.0%	0.6%

Source: AER analysis.

Note: The incremental revenue requirements for 2019–20 and 2020–21 do not flow into the expected MAR for these years and are instead smoothed into the expected MARs for 2021–22 and 2022–23.

Numbers may not add up due to rounding.

The return of capital or regulatory depreciation is equal to the straight-line depreciation less the inflation indexation on the opening RAB.

The straight-line depreciation increases from 2019–20 and is due to the triggering of 2018–19 equity raising costs.

The inflation indexation on opening RAB increases from 2019–20 and is due to the as-incurred PEC capex which begins to enter the RAB from the end of 2018–19.

Table 7 shows the effect of the resultant incremental increase in revenues on ElectraNet's total annual building block revenue requirement (unsmoothed), expected maximum allowable revenues and the X-factor for each regulatory year of the remainder of the regulatory control period.

**Table 7 Annual building block revenue requirement, expected MAR and X-factors (\$m, nominal)**

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Annual building block revenue requirement (unsmoothed)	286.1	314.8	327.3	351.1	362.8	1,642.1
Annual expected MAR (smoothed)	305.3	312.5	322.3	340.1	358.7	1,639.0
X-factors	n/a	0.1%	–0.7%	–3.0%	–3.0%	n/a

Source: AER analysis.

The calculations in Table 6 and Table 7 reflect our standard approach which combines a nominal rate of return with an indexed RAB, and a negative revenue adjustment for the inflation indexation of the opening RAB. Because compensation for inflation is provided through both the RAB and rate of return, the negative revenue adjustment is needed to prevent double compensation for inflation. We make this revenue adjustment through the return of capital component.

The return of capital component therefore comprises straight-line depreciation and a negative revenue adjustment for the inflation indexation of the opening RAB. For TNSPs, straight-line depreciation of forecast capex is calculated on an as-commissioned basis, while the opening RAB used in the inflation indexation calculation is rolled forward with as-incurred capex.

ElectraNet's incremental straight-line depreciation for the current regulatory control period is relatively small because the as-commissioned project capex is allocated to 2022–23 and so would not begin to depreciate until year 1 of the next regulatory control period (2023–24). This increase to straight-line depreciation is more than offset by the increase to the component for the inflation indexation on the opening

RAB, which begins in 2019–20 and increases over the remaining 3 years because the PEC (as-incurred) capex begins to enter the RAB at the end of 2018–19.

### Incremental revenues under the proposed rule change

As discussed in sections 1 and 2, ElectraNet has requested a rule change with the AEMC to alter the revenue recovery timing of Project EnergyConnect.

The effect of this rule change, if made, would be to bring forward the timing of revenues associated with the project into the current regulatory control period. This will increase incremental revenues in the current regulatory period because the proposed rule change seeks to:

- remove the indexation of the RAB when calculating the return of capital component. This will remove the negative revenue adjustment for inflation indexation that we apply under the current rules and increase incremental revenues relative to the current approach.
- calculate straight line depreciation using a 'capex as-incurred' approach. As explained above, capex is currently depreciated as it is commissioned, which will be from the start of the next regulatory period. If depreciation is instead calculated as capex is incurred, this will be within the current regulatory control period. This will increase incremental revenues relative to the current approach.

Table 8 shows the incremental revenues and indicative impact on customer bills if the financeability rule change were made as proposed by ElectraNet.

**Table 8 Incremental revenues and pricing impacts under rule change**

	Proposed rule change	Comparison to current rules
Incremental revenue in 2018–23	\$23.8 million	+\$13.4 million
Indicative increase in customer bills in 2018–23	\$6 p.a.	+\$4 p.a.
Indicative increase in customer bills in 2023–28	\$19 p.a.	+\$4 p.a.

Source: AER analysis.

### Other issues: Standard asset life for 'Equity raising costs' asset class

As part of our preliminary analysis of incremental revenues, we reviewed ElectraNet's proposed asset lives for the different types of assets for the project. ElectraNet's proposed asset lives are broadly consistent with the standard asset lives in previous regulatory determinations and contingent projects. However, as part of our preliminary analysis of incremental revenues, we have applied alternative asset lives for equity raising costs.

ElectraNet's contingent project application forecast equity raising costs for the 2018–23 regulatory control period but did not include a standard asset life for this asset class.<sup>25</sup> Similarly, it did not include a standard tax asset life.<sup>26</sup>

A standard asset life is required for amortising the equity raising costs over the appropriate economic life. The 'Equity raising costs' asset class should reflect the lives of the mix of assets making up the approved forecast net capex, because the equity raising cost benchmark is associated with that forecast.

We have applied a standard asset life of 43.1 years to the 'Equity raising costs' asset class for regulatory depreciation purposes. This reflects the weighted average (by forecast net capex) of the standard asset lives for each depreciating asset class over the 2018–23 regulatory control period. This is consistent with our approach in previous regulatory determinations.

We also applied a standard tax asset life of 5 years to the 'Equity raising costs' asset class for tax depreciation purposes. A standard tax asset life of 5 years is consistent with our previous regulatory determinations and contingent project decisions, and the ATO tax rules.<sup>27</sup>

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<sup>25</sup> ElectraNet, *ElectraNet\_Project EnergyConnect Contingent Project\_PTRM - PUBLIC - Nov2020 - Draft*, received 24 November 2020.

<sup>26</sup> ElectraNet, *ElectraNet\_Project EnergyConnect Contingent Project\_PTRM - PUBLIC - Nov2020 - Draft*, received 24 November 2020.

<sup>27</sup> ATO, Taxation Ruling TR2020/3– Income tax: effective life of depreciating assets (applicable from 1 July 2020).

## A Submissions

Interested parties were invited to provide submissions on TransGrid and ElectraNet's contingent project applications by 30 October 2020. We have considered these submissions in the course of our preliminary assessment of ElectraNet's contingent project application. Table 9 provides a summary of the key issues raised in the submissions received and responses to those issues.

**Table 9 Summary of submissions to contingent project applications**

Issue	AER consideration
<b>NSW and South Australia costs and benefits</b>	
<p><i>Sam Trinca</i></p> <p>A majority of the benefits of Project EnergyConnect accrue to South Australia. However, given that the majority of the length of the proposed line lies in NSW, a disproportionate share of the costs will ultimately be borne by the NSW consumer.</p>	<p>Currently, the NER allocate the costs of inter-regional transmission investments geographically. We note that inter-regional transmission charging and cost recovery arrangements continue to be subject to review, however amending these arrangements is not within the scope of the AER's review of contingent project applications.</p> <p>We note that TransGrid's modelling of customer bill impacts in NSW suggests a net benefit from the project to NSW customers.</p>
<p><i>Public Interest Advocacy Centre</i></p> <p>PIAC recommends revisiting the current inter-regional transmission cost allocation to more fairly share costs between NSW and SA consumers from Project EnergyConnect.</p>	
<b>Benefits of the project</b>	
<i>Major Energy Users</i>	
<p>While supportive in principle, the MEU has concerns about the latest information used to justify the long term benefits of the project given the current costs.</p> <p>It considers that the AER needs to investigate the project more fully and get formal stakeholder input into whether the project does deliver the net benefits claimed, and remains concerned over key inputs such as gas prices and discount rates.</p>	<p>We note that ElectraNet's updated cost benefit analysis continues to show a positive economic case for the project based on inputs aligned with the 2020 ISP. However, the net benefits remain finely balanced and there is a significant zone of uncertainty associated with the benefits.</p>
<p><i>Public Interest Advocacy Centre</i></p> <p>PIAC is concerned that the project does not present a reasonable "return on investment" for consumers under the current regulatory framework. The most recent modelling paints a picture of a project with high costs and comparatively small net benefits.</p> <p>PIAC recommends pausing the regulatory process for Project EnergyConnect to reconsider whether it is in the long-term interests of consumers for it to proceed under the current regulatory framework.</p>	<p>Since September 2020, there have been a number of developments in the NEM that may affect the net benefits of the project, and are not reflected in the 2020 ISP. If a material change in circumstances occurs which, in ElectraNet's reasonable opinion as the project proponent, means that Project EnergyConnect is no longer the preferred option, then the NER requires ElectraNet to reapply the RIT-T unless the AER determines otherwise.</p> <p>We have reviewed the prudent and efficient costs of delivering the Project in accordance with the contingent project assessment process under the NER. While we are not making a determination at this time as we are not satisfied that the project trigger has occurred, we have set out our preliminary analysis and conclusions on the prudent and efficient costs we consider to be reasonably required to undertake the project.</p>
<p><i>ENGIE</i></p> <p>The latest costs appear to exceed the value of the net benefits determined by the AER in the RIT-T. The proponents have also claimed additional benefits, with TransGrid submitting a report from FTI Consulting that</p>	<p>We do not accept ElectraNet's proposed forecast capex and have estimated a different forecast which we</p>

assessed so-called “wider benefits”. ENGIE is concerned over the sharp rise in costs on the project and urges the AER to do whatever it can within its powers to impose appropriate cost discipline on the proponents and ensure only efficient costs are allowed.

#### *Origin*

Capital costs have risen and the net benefits of the project are now marginal at \$148 million in the central scenario, with the breakeven cost of the project being \$2.7 billion. This implies that an 11% increase in costs would make the interconnector uneconomic.

It is important that the AER is confident that the latest cost estimates are robust and reasonable given the updated analysis was not carried out under the full robustness of the RIT-T process.

consider reasonably reflects prudent and efficient costs. Our forecast is approximately 3 per cent lower than ElectraNet’s estimate.

### **Project not financeable**

#### *Major Energy Users*

The project is not financeable based on the current approach to setting of the WACC, therefore the MEU considers that this implies a material change to the regulatory approach for the project to be financeable and should require further review by stakeholders.

The financeability rule change proposals submitted by ElectraNet and TransGrid are subject to the rule making process administered by the AEMC. The AEMC has advised that it expects to make a determination on TransGrid and ElectraNet’s requests in March 2021.

In June 2020, TransGrid’s Board resolved to commit to the project, subject to TransGrid obtaining debt and equity funding on terms satisfactory to it. TransGrid’s statements indicate that it considers the rule change is required to obtain satisfactory debt and equity funding.

In September, ElectraNet’s Board resolved to commit to the project subject both to obtaining finance and to a further firm commitment by the Board of TransGrid. This means that the TransGrid and ElectraNet Boards are unlikely to be committed to the project until the rule change process, and subsequently the project financing arrangements, are resolved.

We are not satisfied that the project trigger event has occurred. This is because we are not satisfied a determination by us to amend ElectraNet’s revenue determination, in accordance with this preliminary assessment and pursuant to the current rules, will be sufficient at this time for ElectraNet’s Board to make a final investment decision and proceed with the project. This commitment is required to satisfy project trigger.

### **Risk and cost sharing**

#### *Public Interest Advocacy Centre*

PIAC recommends examining alternative options for risk and cost allocation for the project in order to allocate risks to parties better able to manage them and to recover costs on a more beneficiary-pays basis.

Consumers are not well-placed to manage the risk of cost increases or the failure to deliver the modelled benefits of Project EnergyConnect. An alternative could include PIAC’s risk and cost sharing model for Renewable Energy Zones to recover some costs from connecting generators as Project EnergyConnect is expected to enable new renewable generation connection along its path.

We note that there is currently no provision for the recovery of the costs of the project from generators or other parties under the rules applicable to our determination on the Project EnergyConnect contingent project.