



**TransGrid**

# Labour and indirect costs forecast for VNI Minor Upgrade Project

Contingent Project Application for VNI  
November 2020



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# Glossary

| Term        | Description                               |
|-------------|---|
| AER         | Australian Energy Regulator               |
| Application | Contingent Project Application            |
| CAM         | Cost Allocation Methodology               |
| CPA         | Contingent Project Application            |
| CPP         | Community Partnerships Program            |
| CSEP        | Community and Stakeholder Engagement Plan |
| ERP         | Enterprise Resource Planning              |
| FTE         | Full Time Equivalents                     |
| NER         | National Energy Rules                     |
| PAI         | Principal Arranged Insurance              |
| PEC         | Project EnergyConnect                     |
| PPM         | Project Portfolio Management              |
| PSSR        | Power System Safety Rules                 |
| QNI         | Queensland New South Wales Interconnector |
| SOW         | Statement of Work                         |
| TNSP        | Transmission Network Service Provider     |
| TL          | Transmission Lines                        |
| VNI         | Victoria New South Wales Interconnector   |
| WDA         | Works Delivery Advice                     |

# 1. Purpose, structure and scope of this document

## 1.1 Purpose of this document

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This document explains and justifies our labour and indirect capital expenditure (capex)<sup>1</sup> for the Victoria New South Wales Interconnector (VNI) Minor Upgrade Project (VNI) for the 2018-19 to 2022-23 (2018-23) regulatory period. The commissioning date for the VNI December 2021, therefore the majority of the labour and indirect capex will be incurred in the 2019-20 to 2021-22 years. Some minor in-service commissioning costs are incurred after December 2021 out to March 2022.

We refer to 'TransGrid Labour Costs' as 'labour capex' and 'Corporate and Network Overhead' capex as 'indirect capex' in this document. This capex is incremental to the capex approved by the Australian Energy Regulator (AER) in its 2018-23 Revenue Determination for TransGrid. This is because it relates to activities that are additional to our normal business activities.

This document supports our Contingent Project Application (Application) for VNI and should be read in conjunction with the Application, in particular our Capex Forecasting Methodology.

All nominal and 2018-19 values in this document have been converted into real 2017-18 dollars, consistent with the 2018-23 Revenue Determination<sup>2</sup>. This document references other supporting documents for further detail.

## 1.2 Structure of this document

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This document is structured as follows:

- > Section 2 overviews our historical labour and indirect capex for VNI
- > Section 3 summarises our forecast labour and indirect capex for VNI
- > Section 4 explains and justifies our forecasting methodology for works delivery labour and indirect capex
- > Section 5 explains and justifies our forecasting methodology for project development labour and indirect capex
- > Section 6 explains and justifies our forecasting methodology for other labour and indirect capex
- > Section 7 provides a summary of the key assumptions underpinning our forecast labour and indirect capex, and
- > Section 8 lists supporting documents that provide additional information on our labour and indirect capex.

Appendix A provides details on the expected incremental labour roles required for VNI.

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<sup>1</sup> Non-network costs include property and IT costs, whilst network overhead costs include project management costs and corporate overheads include legal and regulatory costs.

<sup>2</sup> The financial values exclude *both* inflation and any real input cost escalation (e.g. labour) from 30 June 2018 onwards. Although many of the unit rates used have been applied from 1 July 2019 onwards, these have been deflated by a year of actual inflation (from 30 June 2019 to 30 June 2018) and, where appropriate, de-escalated by a year of real labour cost escalation (using the rate allowed by the AER in its determination for the 2018-23 regulatory control period for the year to 30 June 2019).

### 1.3 Scope of this document

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The scope of this document is limited to the labour and indirect capex forecast for VNI. Real labour escalation is not included as part of this report. Real labour escalation is undertaken in the Capex Forecast Model, as explained in the Capex Forecasting Methodology.

We have forecast labour and indirect capex for VNI from 1 October 2020 for the duration of the project, which will be completed in December 2021.

Forecast expenditure has been identified as either capex or opex in a manner consistent with relevant accounting standards including AASB 116. For VNI, most labour and all indirect costs have been treated as capex as they are directly linked to the VNI capital project. Maintenance related labour costs are captured separately in the operating expenditure forecast, included in the Opex Forecast Model, and explained in the Opex Forecasting Methodology.

All property, plant and equipment, and actual capitalised costs are capitalised in accordance with the aforementioned standards, as they were directly linked to the VNI capital project. These costs are audited annually for compliance with these standards and our capitalisation policy.<sup>3</sup>

The approach employed in this document is consistent with the approach we have employed in other Project costs which has been externally verified. The independent expert report from HoustonKemp, provided as an Attachment to our Application, explains that incremental capex forecast for VNI (including TransGrid labour and indirect costs) meets the National Electricity Rules' (NER) requirements.

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<sup>3</sup> Expenditure Capitalisation Procedure, TransGrid, 2018.

## 2. Historical Labour and Indirect Capex

Historical labour and indirect capex of \$2.95 million (Real 2017-18) has been incurred between 1 July 2018 and 30 September 2020 to progress VNI, as shown in Table 2-1

Historical capex is based on transactions recorded in Ellipse, which is our enterprise resource planning (ERP) system. We have allocated and attributed historical capex to VNI in accordance with our cost allocation methodology (CAM)<sup>4</sup>. We have also treated historical capex in accordance with our capitalisation policy.

**Table 2-1 - Historical labour and indirect capex from 1 July 2018 to 30 September 2020 (\$M, Real 2017-18)**

| Capex category        | 2018-19      | 2019-20     | 2020-21<br>(Qtr 1) | Total<br>capex |
|-----------------------|--------------|-------------|--------------------|----------------|
| <b>Labour</b>         | <b>0.07</b>  | <b>0.69</b> | <b>0.29</b>        | <b>1.05</b>    |
| <b>Labour-Related</b> | <b>&gt;0</b> | <b>0.06</b> | <b>&gt;0</b>       | <b>0.06</b>    |
| Comprising:           |              |             |                    |                |
| Travel and sustenance | >0           | 0.06        | >0                 | 0.06           |
| <b>Non-Labour</b>     | <b>0.20</b>  | <b>0.97</b> | <b>0.67</b>        | <b>1.84</b>    |
| Comprising:           |              |             |                    |                |
| Consulting            | 0.18         | 0.24        | 0.09               | 0.51           |
| Support costs         | 0.02         | 0.49        | 0.22               | 0.73           |
| Other                 | -            | 0.23        | 0.37               | 0.60           |
| <b>Total</b>          | <b>0.26</b>  | <b>1.71</b> | <b>0.97</b>        | <b>2.95</b>    |

<sup>4</sup> TransGrid Cost Allocation Methodology, TransGrid, 2016.

### 3. Summary of Labour and Indirect Capex for VNI

Total forecast labour indirect capex for VNI is \$4.30 million (Real 2017-18). There are three key categories of forecast indirect capex. Table 3-1 shows that:

- > Works delivery comprises \$3.38 million or around 79 per cent of the total forecast indirect capex
- > Project development comprises \$0.83 million or around 19 per cent of the total forecast indirect capex, and
- > Other indirect capex comprises \$0.09 million or around 2 per cent of the total forecast indirect capex.

This capex is incremental to our business as usual capex. The commissioning date for VNI is December 2021, therefore the majority of indirect capex will be incurred in 2020-21 to 2021-22.

**Table 3-1 Summary labour and indirect capex by category (\$M, Real 2017-18)**

| Capex category       | 2020-21<br>(1/10/20 to 30/6/21) | 2021-22     | 2022-23 | Total capex | % of total capex |
|----------------------|---------------------------------|-------------|---------|-------------|------------------|
| Works Delivery       | 1.78                            | 1.60        | -       | <b>3.38</b> | <b>79%</b>       |
| Project Development  | 0.58                            | 0.25        | -       | <b>0.83</b> | <b>19%</b>       |
| Other indirect capex | 0.04                            | 0.05        | -       | <b>0.09</b> | <b>2%</b>        |
| <b>Total</b>         | <b>2.40</b>                     | <b>1.90</b> | -       | <b>4.30</b> | <b>100%</b>      |

The total indirect capex of \$7.23 million for the 2018-23 regulatory period is detailed in Table 3-2 - .

**Table 3-2 - Summary total capex – actuals and forecast (\$M, Real 2017-18)**

| Capex category  | 2018-19     | 2019-20     | 2020-21     | 2021-22     | 2022-23 | Total       |
|-----------------|-------------|-------------|-------------|-------------|---------|-------------|
| <b>Actuals</b>  | 0.26        | 1.71        | 0.97        | -           | -       | <b>2.95</b> |
| <b>Forecast</b> | -           | -           | 2.40        | 1.90        | -       | <b>4.30</b> |
| <b>Total</b>    | <b>0.26</b> | <b>1.71</b> | <b>3.37</b> | <b>1.90</b> | -       | <b>7.25</b> |

Recognising that, on average, roughly 70% of TransGrid's capitalised labour and labour related costs are direct in nature, gives the split shown in Table 3-3. This assumption is discussed in section 7.5.

**Table 3-3 - Summary total capex – direct cost and overhead split (\$M, Real 2017-18)**

| Capex category      | 2018-19     | 2019-20     | 2020-21     | 2021-22     | 2022-23 | Total       |
|---------------------|-------------|-------------|-------------|-------------|---------|-------------|
| <b>Direct costs</b> | 0.05        | 0.52        | 1.78        | 1.28        | -       | <b>3.63</b> |
| <b>Overheads</b>    | 0.22        | 1.19        | 1.59        | 0.62        | -       | <b>3.62</b> |
| <b>Total</b>        | <b>0.26</b> | <b>1.71</b> | <b>3.37</b> | <b>1.90</b> | -       | <b>7.25</b> |



## 4. Works Delivery Capex

This section explains and justifies our forecasting methodology for works delivery capex for VNI (i.e. capex associated the construction of VNI). We have forecast works delivery capex based on the additional Project Delivery labour (i.e. Full Time Equivalents (FTEs)) and approved standard labour rates. Works Delivery FTE's are required to:

- > Undertake project and contract management and project controls functions in accordance with our project management delivery model
- > Undertake civil, electrical, environmental and safety inspections to ensure that work, completed by the contractors, satisfies contractual requirements
- > Provide qualified oversight of contractors for pre-commissioning checks and in-service commissioning activities of new equipment, and
- > Provide qualified staff to manage interfaces between exiting equipment and systems with the new equipment and systems.

The table below shows that our total forecast works delivery indirect capex is \$3.38 million (Real 2017-18).

### 4.1 Summary

Table 4-1 - Summary of forecast capex for Works Delivery (\$M, Real 2017-18)

| Category                    | Total capex | Report Reference |
|-----------------------------|-------------|------------------|
| <b>Labour</b>               | <b>2.61</b> | 4.2              |
| <b>Labour related costs</b> | <b>0.73</b> |                  |
| Comprising:                 |             |                  |
| Sustenance                  | 0.32        | 4.3.1            |
| Training                    | 0.01        | 4.3.2            |
| Travel                      | 0.24        | 4.3.4            |
| Recruitment                 | 0.14        | 4.3.3            |
| IT Hardware                 | 0.02        | 4.3.5            |
| <b>Non-Labour costs</b>     | <b>0.04</b> |                  |
| Comprising:                 |             |                  |
| Equipment and hire          | 0.04        | 4.4.1            |
| <b>Total Works Delivery</b> | <b>3.38</b> |                  |

## 4.2 Labour

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The VNI project schedule underpins the works delivery capex forecast. This identifies that 13 roles will be required to deliver VNI. The project schedule identifies the incremental effort by role over the duration of the project. The peak labour requirement occurs in July 2021 with the equivalent of 11 FTEs effort required. The labour requirements are incremental to our business as usual operations.<sup>5</sup>

The number of incremental FTEs required for VNI is based on current practices, the complexity and timeframes of the project, plus relevant legislative requirements.

The commencement of FTEs is phased over the duration of the project as per the project schedule<sup>6</sup>.

### 4.2.1 Labour rates

Standard labour rates, effective 30 June 2018<sup>7</sup>, have been applied to calculate the works delivery capex forecast for VNI. These rates were used to calculate the capex forecast for the 2018-23 regulatory period. These rates are detailed in section 7.2.1 of this document and reflect reasonable market conditions and constraints within NSW.

Overtime payments have been calculated for each FTE type. This contributes to around 23 per cent of the total works delivery labour and indirect capex forecast. This approach is consistent with good industry practice.

Real labour escalation is not included as part of this report. Real labour escalation is undertaken in the Capex Forecast Model, as explained in the Capex Forecasting Methodology.

## 4.3 Labour related capex

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### 4.3.1 Sustenance Allowances

We have forecast a total sustenance allowance of \$315,950 (Real 2017-8) for works delivery staff. This relates to work related travel expenses such as food and accommodation. The forecast sustenance allowance is in line with the Australian Tax Office (ATO) Reasonable Allowance amounts based on a salary of \$108,810 and below.

Sustenance allowances are provided under the following conditions under our Enterprise Agreement:

- > Overnight absences from home – when employees are transferred to a temporary headquarters and the temporary transfer requires them to be absent from their usual place of residence overnight, we must provide them with accommodation wherever practicable at our expense. For each night's absence, employees must be paid an allowance of:
  - \$15.80 when interstate, or
  - \$12.70 when intrastate

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<sup>5</sup> The total number of incremental FTEs has been calculated as an annualised average of the incremental FTEs over the duration of the VNI project.

<sup>6</sup> All scheduling and resource forecasting for VNI has been undertaken utilising TransGrid's established systems and tools through PPM. The PPM tool is utilised for all of TransGrid's prescribed capital projects and regulatory submissions.

<sup>7</sup> 30 June 2018 labour rates have been calculated using standard rates as at 30 June 2019, which have been adjusted to 2017-18 rates through removing labour escalation and CPI inflation.

- > Where accommodation is not provided, employees may arrange their own accommodation in which case we will pay for the following allowances:
  - Capital Cities – ATO reasonable allowance amounts tabled below based on a salary of \$108,810.
  - Other than Capital Cities – Relevant ATO reasonable allowance amount for High Cost Country Centre, Tier 2 Country Centre or Other Country Centre as per ATO Ruling.<sup>8</sup>

**Table 4-2 - Sustenance allowance rates applicable at 30 June 2018 (\$, Nominal)**

| Location | Overnight Breakfast | Overnight Lunch | Overnight Dinner | Overnight All meals |
|----------|---------------------|-----------------|------------------|---------------------|
| City     | 25.90               | 29.15           | 49.65            | 104.70              |
| Country  | 23.20               | 26.50           | 45.70            | 95.40               |

All sustenance expenses are claimed through timesheets, with the provision of tax receipts and require formal approval by a line manager.

The sustenance allowance set out in Table 4-2 applies only to Works Delivery staff. A different travel allowance is applicable for Project Development, Land and Environment and Stakeholder Engagement staff, in accordance with the allowances per salary band of \$124,481 to \$221,550 within the ATO Guidelines and travel requirements for these teams. This is discussed in section 7.2.8.

#### 4.3.2 Training

We have included an allowance for training of new Works Delivery FTEs at the standard rate of \$1,500 per person, per annum in line with the methodology set out in section 7.2.2. The total forecast capex for training of Works Delivery staff is \$13,373.

#### 4.3.3 Recruitment

We have included an allowance for recruitment costs of Works Delivery FTEs based on the methodology set out in section 7.2.3. The total forecast capex for recruitment of Works Delivery FTEs is \$136,329. This is based on historical experience and current market conditions.

#### 4.3.4 Travel for Works Delivery

In addition to the sustenance allowance, a forecast capex of \$237,290 (Real 2017-18) for flights for Works Delivery staff has been included. This is set out in Table 4-3 below.

**Table 4-3 – Works Delivery - Travel Cost**

| Category                            | Travel   |
|-------------------------------------|--|
| Capex category                      | Works Delivery / Labour related Costs                                  |
| Nature of capex                     | > All flights for Works Delivery Staff Travel as detailed within 7.2.8 |
| Forecast capex (\$, Real 2019-2020) | \$241,063  |

<sup>8</sup> ATO, TD 2019,11.

| Category                      | Travel   |
|-------------------------------|--|
| Forecast capex (Real 2017-18) | \$237,290  |
| Assumptions and methodology   | > Forecast capex for flights has been determined in line with the project schedule |

#### 4.3.5 Works Delivery IT capex

Table 4-4 - Works Delivery - IT Costs

| Category                            | Travel   |
|-------------------------------------|--|
| Capex category                      | Works Delivery / Labour related Costs  |
| Nature of capex                     | <p>IT hardware costs for Works Delivery staff:</p> <ul style="list-style-type: none"> <li>&gt; IT Hardware bundle includes:</li> <li>&gt; Laptop (Standard issue)</li> <li>&gt; Single monitor</li> <li>&gt; Lock</li> <li>&gt; Keyboard</li> <li>&gt; Mouse</li> <li>&gt; Backpack</li> <li>&gt; Standard issue mobile phone</li> </ul> <p><b>Total cost per standard IT Bundle - \$2,650</b></p>               |
| Forecast capex (\$, Real 2019-2020) | \$24,001   |
| Forecast capex (Real 2017-18)       | \$23,625   |
| Assumptions and methodology         | <ul style="list-style-type: none"> <li>&gt; Total IT hardware cost is based on actual costs of IT hardware at current rates</li> <li>&gt; Total IT Cost was determined through establishing a set IT hardware bundle required for Works Delivery FTEs (total calculated based on number of FTEs requiring hardware phased across the lifetime of the project)</li> <li>&gt; Excludes IT support costs</li> </ul> |



## 4.4 Non-labour capex

### 4.4.1 Works Delivery Equipment and hire costs

Table 4-5 - Works Delivery - Equipment and hire costs

| Category                            | Travel  |
|-------------------------------------|---|
| Capex category                      | Works Delivery / Non-Labour Costs   |
| Nature of capex                     | <b>Costs Include:</b> <ul style="list-style-type: none"><li>&gt; Elevating Work Platform hire</li><li>&gt; Mobile plant hire</li><li>&gt; Cabling</li><li>&gt; Miscellaneous equipment held on site</li></ul> |
| Forecast capex (\$, Real 2019-2020) | \$38,298  |
| Forecast capex (Real 2017-18)       | \$37,830  |
| Assumptions and methodology         | <ul style="list-style-type: none"><li>&gt; Forecast capex is based on current available market rates and recent historical data</li></ul>   |

### 4.4.2 Other assumptions

We have not included any additional non-labour costs (e.g. property) in the works delivery capex for VNI. No additional office space is required for the new FTE's, who will largely operate on the VNI Project site.

## 5. Project Development Capex

This section explains and justifies our forecasting methodology for project development capex for VNI. Project development capex relates to the set up and ongoing project management of VNI.

The majority of this forecast capex relates to incremental labour. Table 5-2 below outlines the additional roles required, including:

- > 6 roles for Project Management within the VNI Project Team
- > 11 roles resourced to specifically support the VNI Program
- > 5 roles allocated from the core team of the Major Projects Division
- > 19 other support and corporate roles allocated from the Major Projects Division.

Resources outlined above will be backfilled as per the methodology detailed in section 7.2.5. For roles which work across multiple major projects, we have allocated their costs between the VNI Project and other major projects on which they are also working, using the total expected capex for each project as the allocator. This is discussed further in section 7.1.1.

We have forecast project development capex based on the incremental FTE and our approved standard labour rates.<sup>9</sup> In addition, there are non-labour costs for consultant and professional fees as set out in the table below. The table below shows that the total forecast capex for Project Development is \$0.82 million (Real 2017-18).

### 5.1 Summary

Table 5-1 - Project Development Cost Estimate Summary (\$M, Real 2017-18)

| Category                           | Total capex | Report Reference |
|------------------------------------|-------------|------------------|
| <b>Labour</b>                      | <b>0.55</b> | <b>5.2</b>       |
| Comprising:                        |             |                  |
| VNI Core - Project Management Team | 0.41        |                  |
| Major Projects Team                | 0.05        |                  |
| Other VNI Incremental Resources    | 0.09        |                  |
| <b>Labour related costs</b>        | <b>0.19</b> |                  |
| Comprising:                        |             |                  |
| Training                           | <0          | 5.3.1            |
| Recruitment                        | 0.09        | 5.3.2            |
| Office & IT costs                  | 0.02        | 5.3.3            |

<sup>9</sup> Labour and Support Cost Rates Effective July 2019. These rates are adjusted to 2017-18 dollars by removing real labour cost escalation and CPI inflation.

| Category  | Total capex | Report Reference |
|---|-------------|------------------|
| Travel and Sustenance – VNI Project Management Team | 0.08        | 5.3.4            |
| <b>Non-Labour costs</b>                             | <b>0.10</b> |                  |
| Comprising:   |             |                  |
| Consultant and Professional fees                    | 0.10        | 5.4.1            |
| <b>Total Project Development</b>                    | <b>0.83</b> |                  |

## 5.2 Labour

As outlined below in Table 5-2, we require resource effort across 41 incremental roles for VNI and the Major Projects Division. These roles have been categorised across three functions as shown in the table below.

**Table 5-2 - Project Development - Resource requirements (\$M, Real 2017-18)**

| Role  | Responsibility  | Number of roles | Allocation to VNI                  | Total labour cost attributable to VNI |
|---|---|-----------------|------------------------------------|---------------------------------------|
| VNI – Core Team (Project Management)                                      | Directly manage VNI for TransGrid   | 6               | Based on scheduled hours           | <b>0.39</b>                           |
| VNI – Design, Engineering and Support                                     | Responsible for specific VNI design and owners engineering activities                                   | 11              | Based on scheduled hours           | <b>0.02</b>                           |
| Major Projects Division – Core team                                       | Small team to support across Major Projects   | 5               | Based on Major projects allocation | <b>0.05</b>                           |
| Major Projects Division - Other Support and Corporate roles <sup>10</sup> | Other roles supporting VNI including engineering, regulatory, spatial, finance, HR, ongoing procurement | 19              | Based on Major projects allocation | <b>0.09</b>                           |
| <b>Total</b>  |   | <b>41</b>       |                                    | <b>0.55</b>                           |

The full listing of these roles is available within the Appendix A (see section A.1.1).

<sup>10</sup> Other Support and Corporate Roles are a mix of existing TransGrid FTEs reallocated to the Major Project Division, where a backfill resource has been recruited and new labour hired specifically for the purposes of supporting the Major Projects Division.

### 5.2.1 Rates

Labour rates have been estimated using our salary ranges and labour rates as at 30 June 2018.<sup>11</sup> We have not applied labour cost escalation or CPI inflation to these rates. The labour rate methodology is consistent with the labour rate methodology detailed in section 7.2.1.

Where the FTEs are expected to work across Major Projects and Engineering and Support, we have allocated two per cent of their cost to VNI (using a share of total capex as the allocator). This methodology is detailed in section 7.1.1.

## 5.3 Labour related capex

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### 5.3.1 Training

We have included an allowance for training costs of new Project Development FTEs at the standard rate of \$1,500 per person, per annum in line with the methodology as detailed at section 7.2.2. The total forecast capex for training of Project Development staff is \$2,946 (Real 2017-18).

### 5.3.2 Recruitment

We have included an allowance for recruitment costs relating to the new Project Development FTEs, based on the methodology set out in section 7.2.3. The total estimated cost for recruiting Project Development staff is \$87,104 (Real 2017-18). This cost includes a 2 per cent allocation of major projects labour recruitment costs. Recruitment cost estimates are based on historical experience and current market conditions.

### 5.3.3 Office Lease Costs

#### 5.3.3.1 Property

Additional short-term office space is required to accommodate the Major Projects Division Team and the VNI Project Team. Our current head office at Haymarket does not have sufficient facilities including desk space, meeting rooms and video conferencing facilities to accommodate the new Project Development FTEs. We are currently renting additional meeting room space in order to meet the requirements of the current workforce.

In order to accommodate the additional FTEs for VNI, we have shortlisted six suitable properties within the vicinity of our Haymarket office. The evaluation of potential suitable property options was determined based on the following criteria:

- > Proximity to existing premises
- > Price
- > Capacity
- > Facilities – including meeting rooms, video conference capacity and collaboration space.

Based on the above criteria, we consider that a new office space at [REDACTED] is the most efficient and prudent option to meet our growing needs. This option includes 50 workstations, two meeting rooms (including VC and audio set up) and one private office.

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<sup>11</sup> 30 June 2018 labour rates have been calculated using standard rates as at 30 June 2019 which have been adjusted to 2017-8 dollars by removing labour escalation and CPI inflation.



We have allocated two per cent of the costs of the new office space to VNI as per the methodology explained in section 7.1.1 for the period up until project commissioning.

All property costs have been forecast using the preferred option identified in our Short Term Office Leasing Report<sup>12</sup>.

**Table 5-3 - Project Development – Property costs**

| Criteria                            | Property – Office Space   |          |
|-------------------------------------|---|----------|
| Capex category                      | Project Development / Labour Related Costs  |          |
| Forecast capex (\$, Real 2019-2020) | Office space estimate   | \$17,415 |
| Forecast capex (Real 2017-18)       | Total - \$17,142  |          |
| Nature of capex                     | > Our current head office space is at capacity and therefore new office space is required for new FTEs.   |          |
| Assumptions and methodology         | > \$500,000 per annum rent plus \$250,000 per annum office outgoings charge applied at two per cent allocation to VNI, adjusted to 2017-18 dollars. |          |
| Basis/Source of Estimate            | > Forecast capex is based on current available market rates and recent historical data  |          |

### 5.3.3.2 IT costs

Additional IT hardware and connectivity is required for the new FTEs. We have based these costs on quotes from existing suppliers at current rates. Costs relate to hardware and IT requirements for the establishment of the Major Projects Division Office (lap-tops, phones, VC set up etc.). We have not included any IT support costs in our capex forecasts, as per our Expenditure Capitalisation Procedure.<sup>13</sup>

Only two per cent of these costs will be allocated to VNI as per the methodology outlined in section 7.1.1.

**Table 5-4 - Project Development – IT costs**

| Criteria                            | IT fit out costs                                      |
|-------------------------------------|---|
| Capex category                      | Project Development / Labour Related costs            |
| Forecast capex (\$, Real 2019-2020) | Office Network Connectivity Data and Voice – \$72,000 |
|                                     | Hardware - \$30,000                                   |
|                                     | ██████ IP Desktop Phones - \$28,000                   |
|                                     | Laptop and Desk set up – \$87,500                     |
|                                     | VC Set up - \$45,000                                  |
|                                     | Conference Phones - \$2,600                           |

<sup>12</sup> TransGrid Short Term Office Preliminary Options Report V2 20191016.

<sup>13</sup> Expenditure Capitalisation Procedure, TransGrid, 2018.

| Criteria                      | IT fit out costs  |
|-------------------------------|---|
|                               | <div> <div></div> Multifunction Printer – \$5,000 </div>  |
|                               | Total – \$270,100 ( <b>\$1,741 allocated to VNI</b> )   |
| Forecast capex (Real 2017-18) | <b>Total - (\$1,714 allocated to VNI)</b>   |
| Assumptions and methodology   | <ul style="list-style-type: none"> <li>&gt; Office Network Connectivity Data and Voice total cost is based on a \$1,200 monthly recurring fee as per similar arrangements currently in place</li> <li>&gt; Costs for <div></div> IT Desktop phones and Laptop and desktop set up are estimated for 50 workstations within the Major Projects Office (including the VNI Team)</li> <li>&gt; All IT set up costs and network connectivity costs will be attributed at 5 per cent to VNI</li> </ul>  |
| Basis/Source of Estimate      | <ul style="list-style-type: none"> <li>&gt; Forecast capex is based on current available market rates and recent historical data</li> </ul>   |
| Nature of capex               | <b>Costs Include:</b> <ul style="list-style-type: none"> <li>&gt; Office Network Connectivity Data and Voice (<div></div>) – \$72,000 (rate is for \$1,200 per month (cost allocated to VNI until 31 March 2022)<sup>14</sup></li> <li>&gt; Hardware – includes Router, 48 Port Switch stack, inverter and Wifi AP</li> <li>&gt; Laptop and Desktop set up includes – Laptop, Single Monitor, Docking Station, Mouse, Keyboard, Lock and Backpack \$1750 per employee (for 50 workstations)</li> <li>&gt; <div></div> Desktop Phone total cost – Estimated at \$560 per unit, for 50 units (1 per workstation)</li> </ul> |

### 5.3.4 Travel and Sustenance

Forecast capex for air travel (flights) and sustenance expense for Project Development staff is \$76,895 (Real 2017-18). This has been forecast in accordance with the ATO Standard Guidelines and TransGrid Sustenance Rates. This is discussed further in section 7.2.8.

Table 5-5 - Project Development – Travel costs

| Criteria        | VNI Project Development Team Travel & Expenses  |
|-----------------|---|
| Capex category  | Project Development / Labour Related Costs  |
| Nature of capex | <b>Costs Include:</b> <ul style="list-style-type: none"> <li>&gt; All travel, flights, accommodation and expenses for VNI Development team for the duration of the project</li> </ul> |

<sup>14</sup> Allocation of costs from the Major Projects Office – Including labour, property and IT until 30 September 2021 as a proportion of the capital value of projects within the Major Projects Portfolio, as outlined in 7.1.1.

| Criteria                          | VNI Project Development Team Travel & Expenses  |
|-----------------------------------|---|
| Forecast capex (\$, Real 2019-20) | \$78,118  |
| Forecast capex (Real 2017-18)     | \$76,895  |
| Assumptions and methodology       | <ul style="list-style-type: none"> <li>&gt; Non-recurring capex</li> <li>&gt; Aligned with ATO Standard Guidelines as explained in section 7.2.8</li> <li>&gt; Excludes car hire</li> </ul> |

## 5.4 Project Development - Non-Labour capex

Forecast non-labour Project development capex is \$0.10 million (Real 2017-18). Forecast capex is based on recent historical costs and is consistent with our procurement and governance processes.

### 5.4.1 Consulting Fees – application preparation

Specialist consultants have been engaged to support us prepare our Application and supporting documents for the VNI Project. As set out in the table below, these consultants have provided:

- > Drafting assistance and specialist knowledge and skills for specific tasks, and
- > Independent verification of project costing.

Table 5-6 - Project Development – Consulting fee costs

| Cost Category                     | Consulting Fees – application preparation   |
|-----------------------------------|---|
| Capex category                    | Project Development / Non-Labour / Consulting Costs   |
| Forecast capex (\$, Real 2019-20) | \$101,465   |
| Forecast capex (Real 2017-18)     | \$100,225   |
| Assumptions and methodology       | <ul style="list-style-type: none"> <li>&gt; Non-recurring capex</li> <li>&gt; Based on fees expected to be incurred over the course of the project, excluding those included in actual costs (i.e. incurred up to 30 September 2020)</li> </ul>   |
| Basis/Source of Estimate          | <ul style="list-style-type: none"> <li>&gt; Based on actual costs incurred to date and fee proposals from suppliers</li> <li>&gt; Where specific fee proposals have not been provided by suppliers, estimates have been made based on agreed rates under master service agreements</li> </ul> |

**Table 5-7 - Project Development - Summary of Consulting Cost Estimate**

| <b>Cost Category</b>                           | <b>Detail</b>  | <b>Total capex</b> |
|--|--|--------------------|
| Independent Verification and regulatory advice | Independent verification of the proposed costs for the VNI Project with the NER requirements and regulatory advice | ████████           |
| <b>Forecast capex (\$, Real 2019-20)</b>       |  | ████████           |
| <b>Forecast capex (Real 2017-18)</b>           |  | ████████           |



## 6. Other Labour and Indirect Capex

This section explains and justifies our forecasting methodology for other labour and indirect capex for VNI, which includes:

- (i) Forecast capex for land and environment
- (ii) Forecast capex for stakeholder and community engagement, and
- (iii) Forecast capex for insurance during construction.

### 6.1 Forecast capex for Land and Environment

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Whilst there is a larger Land and Environment team allocating time to VNI, this has been resourced using existing internal resources apportioning less than 25 per cent of their time during the course of the project. Accordingly, as per section 7.2.5 these costs have not been included in the forecast capex.

No external consulting costs in relation to Land and Environment have been projected for the period from 1 October 2020 to 31 March 2022.

### 6.2 Forecast capex for Stakeholder and Community Engagement

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Forecast capex for Stakeholder and Community Engagement for VNI is \$6,308 (Real 2017-18).

A portion of one FTE (a Media & Communications Manager) is required for the period 1 October 2020 – 31 March 2022. This new FTE will work across the Major Projects Division. We have therefore allocated two per cent of the cost of this FTE to the VNI Project in line with the methodology in section 7.1.1.

We will leverage our existing community and stakeholder engagement team to undertake all other stakeholder activities.

### 6.3 Forecast capex for Insurance during construction

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Forecast capex of [REDACTED] for insurance during construction is based on incremental premium costs [REDACTED]  
[REDACTED]

We will require additional insurance to cover the risk associated with “construction” activities during the substation and transmission line uprating works scheduled within the VNI project schedule<sup>15</sup>. The provision of additional insurance coverage has been scoped as Principal Arranged Insurance and includes contract works material damage and general liability insurance.

As noted, these costs relate to the construction phase of the project and are additional to our current operational insurance [REDACTED]. On completion of the project, the assets will impact our ongoing

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<sup>15</sup> Section 2.1 and 2.2 of P0016469 – Victoria & New South Wales Interconnector (VNI), TransGrid 2019 details the nature of construction works to be performed.

insurance requirements. These additional ongoing costs are not included in this document, rather they are incorporated into the opex forecast (as detailed in the VNI Opex Forecasting Methodology).

For accounting purposes, we have applied our Expenditure Capitalisation Procedure<sup>16</sup> in conjunction with the accounting standards requirements set out in AASB 116 Property, Plant and Equipment.

The cost of property, plant and equipment under AASB 116 includes any cost that is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

The construction risk insurance costs for the project are considered to be directly attributable costs in this respect. This treatment is consistent with our capitalisation of the principal arranged insurance (PAI) costs for our constructed assets.

**Table 6-1 - Forecast capex for insurance during construction**

| <b>Cost</b>                                | <b>Insurance</b>   |
|--|--|
| <b>Capex category</b>                      | Insurance  |
| <b>Nature of capex</b>                     | <b>Costs Include:</b> <ul style="list-style-type: none"> <li>&gt; PAI contract works (Material Damage)</li> <li>&gt; PAI contract works (General Liability)</li> </ul>   |
| <b>Forecast capex (\$, Real 2019-2020)</b> | [REDACTED]   |
|  | [REDACTED]   |
|  | [REDACTED]   |
| <b>Forecast capex (Real 2017-18)</b>       | <b>Total - \$82,800</b>  |
| <b>Assumptions and methodology</b>         | <ul style="list-style-type: none"> <li>&gt; Insurance costs cover all construction in relation to substations and transmission lines for the duration of the VNI Project</li> <li>&gt; All amounts tabled are subject to variation</li> <li>&gt; Any additional provisions for insurance must be estimated separately (this includes, Construction All Risks Delay in Start Up, Marine Cargo Delay in Start Up, Workers Compensation, Motor Vehicle Insurance and Professional Indemnity Insurance – which have been excluded from estimates above)</li> </ul> |
| <b>Basis/Source of Estimate</b>            | > [REDACTED]   |

<sup>16</sup> Expenditure Capitalisation Procedure, TransGrid 2019.

# 7. Key Assumptions

This section explains and justifies the key assumptions and calculation underpinning our direct labour and indirect capex.

## 7.1 Cost Allocation

### 7.1.1 Costs associated with the Major Projects Division

The establishment of a Major Projects Division is required in order to coordinate and deliver major Integrated System Plan (ISP) projects including VNI, Hume Link (Snowy 2.0), Project EnergyConnect (PEC) and Queensland New South Wales Interconnector (QNI).

The cost estimates associated with the Major Projects Division have been allocated between each of the major projects based on the indicative total capex forecast for each project (until commissioning). We have applied the percentage allocations below in this Application:

Table 7-1 - Allocation rates between Major Projects – January 2020 estimate

| #            | Major Projects Portfolio                        | % of Portfolio |
|--------------|---|----------------|
| 1            | Project EnergyConnect (PEC)                     | 46%            |
| 2            | Hume Link (Snowy 2.0)                           | 46%            |
| 3            | Queensland New South Wales Interconnector (QNI) | 6%             |
| 4            | Victoria New South Wales Interconnector (VNI)   | 2%             |
| <b>Total</b> |   | <b>100%</b>    |

The allocation rates used in the PEC and QNI contingent project applications were based on the forecast cost estimates available at the time of submission. These have been updated to reflect the latest capex forecast for VNI resulting in a lower allocation of costs to VNI.

We have applied the following assumptions and methodologies to derive our direct labour and indirect capex forecast for VNI:

- > All costs (both labour and non-labour) that are directly attributable to VNI will be 100 per cent allocated to VNI
- > An allocated two per cent of all costs associated with the Major Projects Office are apportioned to VNI, which includes:
  - Labour – Major Projects Division Core and Support Team
  - Property and Facilities – Major Projects office (including office rental, maintenance and outgoing costs)
  - IT – support costs, licencing and hardware for the Major Projects Office

- Expenses and Travel – Major Projects Division Staff
- Training – Major Projects Division Staff
- > All cost estimates will only be allocated once
- > Actual costs will be allocated across projects as per the AER-approved CAM and our accounting policies and practices.

## 7.2 Labour

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Labour cost estimates associated with Project Development and Works Delivery have been calculated based on the following:

- > Standard labour rates apply
- > Training expenses are required for all staff and contractors on an annual basis
- > Recruitment costs are incurred to recruit new staff and contractors
- > Labour on-costs will be incurred for all staff and contractors
- > Resources seconded from existing business as usual roles to VNI will be backfilled in most cases
- > External contractor rates will be sourced from those contracts where appropriate
- > No real labour cost escalation is included in the rates (as this is applied subsequently in the VNI Capex Forecasting Methodology)
- > Standard travel and related expense allowances apply for expected VNI-related travel.

These conditions are explained further below.

### 7.2.1 Standard Labour Rates

Labour rates and role classifications were aligned to our 2019 Standard labour rates<sup>17</sup> and our Employee's Agreement.<sup>18</sup> These are consistent with the approved 2018 determination allowances. The labour rates were restated to 30 June 2018 labour rates using a discount factor.<sup>19</sup> Escalation rates have not been applied to subsequent years of the project.

Labour including our internal staff, contractors and external labour hire have been classified into a series of salary bands and the corresponding labour rate has been used to estimate costs.

Proportional Effort of Existing FTE charged to Project Work Order:

In accordance with our approved CAM:<sup>20</sup>

- > All project staff will timesheet and charge to a Work Order
- > Actual times (logged to work orders) will be used to determine labour costs

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<sup>17</sup> Labour and Support Cost Rates Effective July 2019.

<sup>18</sup> TransGrid Employees Agreement 2016.

<sup>19</sup> 30 June 2018 labour rates have been calculated using standard rates as at 30 June 2019 which have been adjusted to 2017/8 rates through removing labour escalation and CPI inflation.

<sup>20</sup> TransGrid, Cost Allocation Methodology, 14 December 2016.



- > In limited cases, where an employee is an existing staff member allocating a significant proportion (25% or more) of time to the VNI Project, only the time charged to the Work Order will be used to calculate the cost
- > The significant portion of time spent by existing team members is considered an incremental cost due to the required backfill of these roles.

## 7.2.2 Training

Training costs for staff within Project Development, Works Delivery, Land & Environment teams are based on our standard allowance of \$1,500 per person, per annum in 2018/9 dollars to be consistent with the QNI contingent project application. This allowance is for all FTEs that are Contract Officers or under an Enterprise Agreement (Award).

The allowance for training has been applied on a per FTE basis. The total training costs have been allocated using the cost allocation approach described above. For example, if the role is 100 per cent attributable to VNI, then the costs are directly attributed to VNI. In contrast, where an FTE works across all four major projects then 2 per cent of their costs are allocated to VNI as per the method outlined in section 7.1.1.

The nature of training provided includes, mandatory field training, soft skills and development training, professional development, and industry specific training for each role.

A Learning and Development resource (one FTE) has also been included in the incremental resources relating to major projects. This FTE will be responsible for identifying learning and development needs, coordinating formal learning requirements including induction of the incremental and seconded resources and will be shared across major projects.

The training costs that have been included in the estimates for Works Delivery, Project Development and Land and Environment are in line with the categorisation of labour as explained in this report.

## 7.2.3 Recruitment

In order to account for the recruitment of the additional resources required for VNI and the Major Projects Division, an allocated recruitment cost has been included in the forecasted additional labour costs in Works Delivery, Project Development and Land and Environment.

We have employed a Talent Acquisition Advisor to coordinate the engagement with external recruitment agencies and to facilitate the on-boarding process for successful candidates across the Major Projects portfolio. This cost is included within the Project Development labour costings and has been allocated at two per cent to VNI.<sup>21</sup>

In addition, we expect to incur an agency fee of 15 per cent of the value of the first year's annualised salary where a recruitment service provider is used.

Based on historical experience, it is anticipated that 50 per cent of the new FTEs (including backfilled roles) will be employed directly and the remaining 50 per cent will require recruiter assistance. These rates will be based on the procurement panel utilising vendor negotiated rates.<sup>22</sup>

The recruitment costs are applied on the following basis:

$$\text{Recruitment fees} = \text{sum of annualised salary of incremental employees} \times 50\% \times 15\%$$

<sup>21</sup> 1 FTE tabled under project development costs – Major Projects Division - see **Error! Reference source not found..**

<sup>22</sup> Agency Contact Details- Q42\_18 Recruitment Services, TransGrid 2019 – Document details TransGrid's Recruitment Panel Service providers and negotiated rates for recruitment fees. Given the commercial sensitivity of information included within the document, it has not been included as an attachment to this report, but may be available upon request.

This has been applied consistently across as Project Development, Works Delivery and Land and Environment cost estimates.

#### 7.2.4 Labour On-Costs

A labour on-cost rate has been applied to the base labour costs in line with standard practice and our policies.

Table 7-2 - Labour on-cost rates

| Labour On Cost Rate  |          |  |
|--|----------|--|
| Type   | Rate (%) | Breakdown  |
| Employees under Award – Enterprise Agreement                     | 40%      | Annual Leave – 10%   |
|  |          | Long Service Leave – 7%  |
|  |          | Payroll Tax – 7%   |
|  |          | Superannuation – 16%   |
| Employees on individual employment contracts – Contract Officers | 24%      | Annual Leave – 10%   |
|  |          | Long Service Leave – 7%  |
|  |          | Payroll Tax – 7%   |
|  |          | *Superannuation is included in the base rate for Contract Officers |

#### 7.2.5 Resource Backfill and Evidence

The following assumptions have been applied in this document:

- > Where an existing employee takes on a new role that is required for VNI, it is assumed that their previous role will be backfilled using the existing standard labour rate and level.
- > Where 25 per cent (or more) of an existing employees' time is expected to be required to support VNI or the Major Projects Office, it is assumed that their previous role will be backfilled, and hence this cost is incremental and would not be incurred if VNI did not proceed.

#### 7.2.6 External Contractor Rates

The rates applied for external contracted labour have been determined based on documentation provided by the external party detailing fees, rates and charges. These rates have been provided by the external party at current rates, being 2019-20 dollars. These costs have been converted into real 2017-18 dollars for this document.

#### 7.2.7 Escalation Factors

No escalation factors have been applied. It is noted that the labour rates have been restated to 30 June 2018 rates.

## 7.2.8 Travel and Expenses

All costs in relation to Travel and Expenses (including accommodation, meal allowances and other expenses) have been determined in accordance with ATO Guidelines TD 2019/11.<sup>23</sup> The application of these standard rates and calculation methodologies are summarised in the table below:

**Table 7-3 - Travel and expenses methodology and assumptions**

| Labour Type                | Calculation Methodology, Assumptions and Application  |
|----------------------------|---|
| TransGrid VNI Project Team | <p>Allowance for travel costs has been determined in accordance with the following assumptions in relation to travel frequency, duration, and location:</p> <ul style="list-style-type: none"> <li>&gt; Estimation methodology includes scheduled frequency and duration of visits per role and grade</li> <li>&gt; Estimated total is averaged to allow for – monthly travel of 2 to 4 FTE across the duration of the project for a series of roles across Project Development as indicated in <b>Error! Reference source not found.</b></li> <li>&gt; Flight allowance has been determined using average flight costs for Sydney to regional areas between November 2019 and September 2021. This cost estimate was completed prior to COVID-19 restrictions.</li> <li>&gt; All expenses and accommodation allowances have been aligned with ATO TD 2018/19</li> <li>&gt; Estimate is based on average trip duration of 2-3 nights, with an allowance of \$293.65 per night</li> <li>&gt; Expenses and accommodation allowances have been determined utilising a salary grade of \$124,481 – \$221,550 for all FTEs (including Executive staff)</li> <li>&gt; All expense amounts have been calculated using the Tier 2 Country Cost Centre classification provided by the ATO</li> <li>&gt; Cost includes car hire estimated at \$125 per day, based on current market rates.</li> </ul> |
| Works Delivery Labour      | <ul style="list-style-type: none"> <li>&gt; All travel costs have been integrated into the labour rates for Works Delivery with a detailed breakdown provided in 4.3.1</li> <li>&gt; Flights – are estimated as a total cost for flights on a per FTE basis for the duration of the construction period</li> <li>&gt; All estimates have been aligned to the ATOs standard rules and our Sustenance earnings code list</li> <li>&gt; Estimates are based on assumptions provided for each role within VNI schedule.</li> </ul>  |

## 7.3 External Advice – Consulting Fees and Other Services

Where possible, costs in relation to consulting fees and legal advice were sourced directly from external party documents that detail fees, rates and charges. All rates are assumed to have been provided at current rates

<sup>23</sup> ATO, TD 2019,11.

which are assumed to be in dollars as at 31 March 2020. No escalation for CPI inflation or real rate escalation has been applied.

Details regarding the nature of anticipated costs and activities have been detailed in the relevant sections of this report. Where documentation has not been provided within the required time frame for the delivery of this report, we have used our experience from previous projects to estimate the costs of external advice.

## 7.4 IT

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As the proposed office facility will house employees operating across the four major projects, all IT set up costs and network connectivity costs associated with the new office space will be attributed at five per cent to VNI as per section 7.1.1. Our approach to IT for Major Projects is consistent with our IT Strategy. All cost estimates are based on the selected preferable option noted in 5.3.3.1.

## 7.5 Direct Labour Costs Assumption

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In practice, some labour and labour-related costs are reported as direct costs for regulatory purposes. The QNI contingent project application did not split the forecast labour and labour-related costs between direct and overhead components. Recognising the AER's concerns with the level of forecast indirect costs for QNI,<sup>24</sup> forecast TransGrid labour and labour-related costs for VNI have been split between direct and overhead costs.

For the 2018-19 financial year, 71.7% of TransGrid capitalised labour and labour related costs were reported as direct costs within the category analysis RIN response.<sup>25</sup> Based on this, we have assumed that 70% of forecast TransGrid labour and labour-related costs for VNI are direct in nature.

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<sup>24</sup> See: AER, *Final Decision – TransGrid Contingent Project, QNI Minor Upgrade*, April 2020, pp. 17–21.

<sup>25</sup> That is, \$52.6 million of the reported \$209.2 million in capex for prescribed services was labour and labour related costs. Of those labour and labour related costs, \$37.7 million fell within the direct capex categories (e.g. replacements, connections, augmentation, non-network), or 71.7%.

## 8. Reference Material

Agency Contact Details- Q42\_18 Recruitment Services, TransGrid 2019

ATO, TD 2019,11

CPP, TransGrid, 2019

GHD Independent Verification Assessment Report, 2020

Expenditure Capitalisation Procedure, TransGrid, 2018

Indirect Costs – Contingent Project Application for Project EnergyConnect, TransGrid 2020

Labour and Support Cost Rates Effective July 2019

VNI capex forecast - project schedule, TransGrid, 2020

VNI Workpapers- VNI TransGrid labour and indirect costs spreadsheets – CONFIDENTIAL, TransGrid, 2020

TransGrid Cost Allocation Methodology, TransGrid, 14 December 2016

TransGrid Employees Agreement 2016

TransGrid Short Term Office Preliminary Options Report V2 20191016

# Appendix A

## A.1.1 VNI Project Team

| VNI Project Team     |   |                        |   |
|----------------------|---|------------------------|---|
| Category             | Requirement/Responsibilities  | Role                   | Duration  |
| 1 Project Management | Provides overall oversight and management of resources, contracts and risks across the VNI program.   | Project Director       | Duration of the project (April 2020–March 2022) |
| 2 Project Management | Overall project administration and technical support activities for VNI team  | Plant Engineer         |   |
| 3 Project Management | Role will provide management oversight and support to Project Director on delivery project managers, governance, reporting and strategic planning and commercial management throughout the project lifecycle. | Senior Project Manager |   |
| 4 Project Management | Provides support for the development of contract establishment and ongoing administration of the contracts throughout the delivery project phase.   | Contract Administrator |   |
| 5 Project Management | Role provides hands-on development of risk models, insuring controls are operating effectively and providing ongoing project research and analytical support.   | Risk Manager           |   |
| 6 Project Management | Assist in the development and management of the ACT Development application and provide ongoing environmental site support and advice.  | Environmental Officer  |   |



### A.1.2 VNI Other supporting incremental roles

| VNI Project Team                          |   |                                   |  |
|---|---|-----------------------------------|--|
| Category                                  | Requirement/Responsibilities  | Role                              | Duration   |
| 1 VNI Other supporting incremental roles  | Roles identified by the VNI core project team as attributing time during the course of VNI, requiring backfill as per section 7.2.5 | Senior Designer - Protection      | Phased across duration of the project<br>(April 2020 – March 2022) |
| 2 VNI Other supporting incremental roles  |   | Senior Designer - HV              |  |
| 3 VNI Other supporting incremental roles  |   | Civil Designer                    |  |
| 4 VNI Other supporting incremental roles  |   | Control Design Manager            |  |
| 5 VNI Other supporting incremental roles  |   | HV Design Manager                 |  |
| 6 VNI Other supporting incremental roles  |   | Protection Design Engineer        |  |
| 7 VNI Other supporting incremental roles  |   | TL Design Manager                 |  |
| 8 VNI Other supporting incremental roles  |   | Senior Designer –TL               |  |
| 9 VNI Other supporting incremental roles  |   | Telecommunications Design Manager |  |
| 10 VNI Other supporting incremental roles |   | IT Program Manager                |  |
| 11 VNI Other supporting incremental roles |   | IT Project Manager                |  |

### A.1.3 Works Delivery Labour

| Works Delivery                          |   |  |   |
|---|---|--|---|
| Category                                | Requirement/Responsibilities  | Role                                     | Duration  |
| 1. Project Management – Works Delivery  | Project Wide Delivery Management  | Project Manager – Works Delivery         | Phased across the duration of VNI<br>(April 2020 – March 2022)                      |
| 2. Project Management – Works Delivery  | Responsible for program management, contracts and commercial management and project controls.             | Senior Program Manager                   |   |
| 3. Project Management – Works Delivery  | Responsible for scheduling of Works Delivery labour required for VNI                                      | Project Scheduler                        |   |
| 4. Project Management – Works Delivery  | Responsible for project management and oversight of all works   | Project Manager – Works Delivery         |   |
| 5. Project Management – Works Delivery  | Responsible for implementing safety protocols at VNI site   | Safety Officer                           |   |
| Substation resources                    |   |  |   |
| Category                                | Requirement/Responsibilities  | Role                                     | Duration  |
| 1 Substation Resources – Works Delivery | Roles based on VNI project schedule required during the course of VNI and incremental to current resource | Senior Site Manager - Substations        | Phased across the duration of VNI Construction Phase<br>(October 2020 - March 2022) |
| 2 Substation Resources – Works Delivery |   | Site Manager - Substations               |   |
| 3 Substation Resources – Works Delivery |   | Senior Site Manager - Transmission Lines |   |
| 4 Substation Resources – Works Delivery |   | Control Technician                       |   |
| 5 Substation Resources – Works Delivery |   | Substation Fitter                        |   |
| 6 Substation Resources – Works Delivery |   | Secondary Systems Tech                   |   |
| 7 Substation Resources – Works Delivery |   | Telecommunications Technician            |   |

#### A.1.4 Major Projects Core Team

| Major Projects <sup>26</sup> |  |                    |                        |                          |
|------------------------------|--|--------------------|------------------------|--------------------------|
| Category                     | Requirement/Responsibilities   | Role               | Cost Allocation to VNI | Duration                 |
| 1 Major Projects             | Leadership across all four major projects. Ensuring that each project remains on track to deliver within project budget and timelines. Leadership and sponsorship of program of works. | Executive          | 2%                     | October 2020– March 2022 |
| 2 Major Projects             | Responsible for supporting the Executive in the oversight of all works within the Major Projects portfolio.  | Assistant          | 2%                     |                          |
| 3 Major Projects             | Coordination of activities across all four major projects. Interdependencies and interactions identified and managed.  | PMO                | 2%                     |                          |
| 4 Major Projects             | Responsible for implementing safety protocols across the four major projects.  | Safety Manager     | 2%                     |                          |
| 5 Major Projects             | Responsible for commercial management across all four major projects including the implementation of policies and execution of business strategy.                                      | Commercial Manager | 2%                     |                          |

#### A.1.5 Major Projects - Support Team

| Major Projects - Other incremental Corporate costs   |  |                     |                        |                          |
|--|--|---------------------|------------------------|--------------------------|
| Category   | Requirement/Responsibilities   | Role                | Cost Allocation to VNI | Duration                 |
| 1 Major Projects - Other incremental Corporate costs | Management of Engineering Team function  | Engineering Manager | 2%                     | October 2020– March 2022 |
| 2 Major Projects - Other incremental Corporate costs | Engineering Team responsible for design inputs, approvals, development of inspection test plans, testing and commissioning of construction | Engineering - Lines | 2%                     |                          |

<sup>26</sup> All Major Projects Resources have been allocated to VNI as per the allocation methodology outlined within 7.1.1

| Major Projects - Other incremental Corporate costs    |   |                                       |                        |          |
|---|---|---------------------------------------|------------------------|----------|
| Category  | Requirement/Responsibilities  | Role                                  | Cost Allocation to VNI | Duration |
| 3 Major Projects - Other incremental Corporate costs  | works within the contingent project portfolio.  | Engineering - Civil Lines/Substations | 2%                     |          |
| 4 Major Projects - Other incremental Corporate costs  |   | Engineering - Civil Lines/Substations | 2%                     |          |
| 5 Major Projects - Other incremental Corporate costs  |   | Engineering - Substations             | 2%                     |          |
| 6 Major Projects - Other incremental Corporate costs  |   | Engineering - Structural              | 2%                     |          |
| 7 Major Projects - Other incremental Corporate costs  |   | Engineering - Communications          | 2%                     |          |
| 8 Major Projects - Other incremental Corporate costs  |   | Engineering - Secondary Systems       | 2%                     |          |
| 9 Major Projects - Other incremental Corporate costs  |   | Engineering - System Planning         | 2%                     |          |
| 10 Major Projects - Other incremental Corporate costs | Role required to perform inputs in relation to System planning, testing and commissioning for projects within the contingent project portfolio.   | Spatial Systems Data team             | 2%                     |          |
| 11 Major Projects - Other incremental Corporate costs | Delivery and oversight of all regulatory requirements for contingent project portfolio. Including the development and execution of all regulatory documentation and reporting   | Regulatory                            | 2%                     |          |
| 12 Major Projects - Other incremental Corporate costs | Responsible for developing budgets and estimates across all four projects. Tracking and reporting on financial performance across projects. Ensuring consistency of financial reporting. Providing support for decision making. | Finance Business Partner              | 2%                     |          |

| Major Projects - Other incremental Corporate costs    |  |  |                        |          |
|---|--|--|------------------------|----------|
| Category  | Requirement/Responsibilities   | Role                                   | Cost Allocation to VNI | Duration |
| 13 Major Projects - Other incremental Corporate costs | Significant increase in headcount, creates a need for additional HR support across HR business partnering, payroll and recruitment. <sup>27</sup>  | HR, Payroll and Recruitment            | 2%                     |          |
| 14 Major Projects - Other incremental Corporate costs | Coordination of training for VNI employees including induction training of new staff.  | Training                               | 2%                     |          |
| 15 Major Projects - Other incremental Corporate costs | Role to provide internal audit of VNI whilst in construction phase. The nature of the project requires specialist skills in this domain.   | Audit                                  | 2%                     |          |
| 16 Major Projects - Other incremental Corporate costs | Other Support Resources  | Risk Management, Workshops & Modelling | 2%                     |          |
| 17 Major Projects - Other incremental Corporate costs | Required to respond to incremental procurement activity as a result of the four major projects. The combined cost estimate of the major projects is \$3.2bn and will require procurement of goods and services from new and different suppliers. | Procurement Manager                    | 2%                     |          |
| 18 Major Projects - Other incremental Corporate costs |  | Procurement Manager                    | 2%                     |          |
| 19 Major Projects - Other incremental Corporate costs |  | Procurement Specialist                 | 2%                     |          |

<sup>27</sup> Talent Acquisition Advisor – Position Description – Project Based, TransGrid, 2019 – provides role description and responsibilities for the FTE.