Adelaide Central Reinforcement Project

Contingent Project Application

9 October 2009

ElectraNet Corporate Headquarters
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Contents

Executive Summary

The Adelaide Central Reinforcement (ACR) project is being undertaken to provide an additional point of transmission supply into the Adelaide Central Business District (CBD) by 31 December 2011, as required by the South Australian Electricity Transmission Code (ETC). The project consists of the establishment of a new 275/66 kV City West substation adjacent to the Adelaide CBD, and an 18km underground transmission line connecting the substation to a source of supply at Torrens Island.

The line works component of this project was identified as a contingent project in the Australian Energy Regulator's (AER's) revenue determination that applies to ElectraNet in the current regulatory control period from 2008-09 to 2012-13 (the "ACR line works contingent project").

This contingent project application is submitted to the AER to amend the revenue determination that applies to ElectraNet in the current regulatory control period[1] to include incremental revenue for the ACR line works contingent project, in accordance with the provisions of Rule 6A.8.2 of the National Electricity Rules (NER).

The incremental revenue is based on capital and incremental operating expenditure that is reasonably required for the contingent project in each year of the regulatory control period.

ElectraNet commenced briefings with the AER early in February 2009 and provided further detailed information on the contingent project following conclusion of the Regulatory Test assessment process in July and August 2009.

ElectraNet received a detailed information request from the AER on 31 August 2009 outlining specific information required in support of the application. The information requested includes details of tendering processes, terms and conditions and costs, which for reasons of commercial sensitivity cannot be publicly disclosed[2]. Accordingly, a separate confidential supplementary report has been prepared to accompany this application. .

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1 "ElectraNet transmission determination 2008-09 to 2012-13", Final Decision, 11 April 2008 as amended by the AER in accordance with orders of the Australian Competition Tribunal made on 28 January 2009.

2 A key reason for the commercially sensitivity is that tendering processes are still underway.

1. Introduction

This contingent project application is submitted to the Australian Energy Regulator (AER) to amend the revenue determination[3] that applies to ElectraNet in the current regulatory control period from 2008-09 to 2012-13 in accordance with the provisions of Rule 6A.8.2 of the National Electricity Rules (NER).

The Adelaide Central Reinforcement (ACR) project is being undertaken to provide an additional point of transmission supply into the Adelaide CBD by 31 December 2011, as required by the South Australian Electricity Transmission Code (ETC). The ETC establishes the jurisdictional reliability standards applicable in South Australia under the NER.

The project consists of a new 275kV/66kV City West substation to be established adjacent to the Adelaide CBD, and an 18 km underground transmission line connecting the substation to a source of supply at Torrens Island.

The AER in its revenue determination for the current regulatory control period accepted the substation component of the project as part of the approved ex-ante capex allowance, but transferred the line works component of the project to a contingent project due to the degree of uncertainty over the final route and cost of the transmission line.

As the defined trigger events for the contingent project have now occurred, this application presents the required information for the AER to make a determination to amend ElectraNet's revenue determination under Rule 6A.8.2 of the NER.[4]

The remainder of this application is structured as follows:

- Chapter 2 describes the ACR Project and the proposed contingent project. It also provides a summary of the Regulatory Test that ElectraNet has completed in respect of the project;
- Chapter 3 sets out the regulatory requirements for the application;
- Chapter 4 sets out the forecast capital expenditure requirements;
- Chapter 5 sets out the forecast incremental operating expenditure to the end of the regulatory control period;
- Chapter 6 discusses the cost of capital; and
- Chapter 7 sets out the incremental revenue required to the end of the regulatory control period as a result of the contingent project.

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3 "ElectraNet transmission determination 2008-09 to 2012-13", Final Decision, 11 April 2008 as amended by the AER in accordance with orders of the Australian Competition Tribunal made on 28 January 2009.

4 Rule 6A.8.2(b)(3) sets out the information requirements for a contingent project application.

2. Project Summary

2.1 Project Scope

The requirement for the ACR project is the result of the creation of a new reliability standard for the Adelaide CBD in the ETC by the Essential Services Commission of South Australia (ESCOSA). Under this new standard (Category 6), ElectraNet is required to establish a new substation to the west of King William Street that is capable of independently supplying the Adelaide Central region in the event that supply from the existing East Terrace substation is not available.

It is also a Category 6 load requirement that supply must be uninterrupted should any single transformer or transmission line supplying that region fail and that the 275kV supply to the new substation must be from a source independent of the one which presently supplies the East Terrace substation.

To meet these requirements, ElectraNet will establish a 275/66kV substation at Keswick on the city fringe. This will be known as the City West substation. Supply to the new substation will be provided by a single circuit, 275kV underground cable from the Torrens Island (TIPS) 275kV switchyard, which is located approximately 18 kilometres to the north-west of the Adelaide Central region. The route for the line mainly follows Port Road.

From the new City West substation, ETSA Utilities will provide a 66kV connection to the Adelaide Central 66kV network at Whitmore Square substation.

The scope of this contingent project application is the line works from TIPS to the new City West Substation and the necessary supporting infrastructure, including the provision of telecommunications, line reactors and other line end works.

The substation component of the ACR project has already been included in the revenue cap approved by the AER as noted earlier and therefore is excluded from this application.

2.2 Regulatory Test

The Final Report published under the Regulatory Test[5] contains a complete discussion on the analysis of options for the ACR project.

Four technically feasible 275kV supply sources were available for the new substation; TIPS switchyard to the north-west, Kilburn to the north, Magill to the east, and Happy Valley to the south. Analysis revealed that supply from Magill, Happy Valley or Kilburn would each require additional costly reinforcement to ensure that the underlying transmission network supplying those substations had sufficient capacity and security to deliver reliable supply to the new substation.

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5 "Proposed New Large Network Asset – Adelaide Central Region", Regulatory Test Final Report, 10 July 2009 available at http://www.electranet.com.au/project_detail.php?id=27

The Regulatory Test analysis was applied to a combination of the four supply source options and three short-listed potential substation site options. The results of the analysis demonstrated that supplying the new City West substation from TIPS was the preferred option.

The TIPS line corridor option was then subjected to further detailed investigation, and seven alternative line route options, involving a variety of corridors and construction methods, were identified and subjected to detailed economic analysis. These included both overhead line and underground cable options.

During the course of the assessment, ElectraNet engaged closely with the Electricity Supply Industry Planning Council (ESIPC) as the independent jurisdictional planning body in South Australia on the technical aspects of the project. This involved an extensive review process, including detailed capital cost comparisons and sensitivity analysis of the feasible options.

Present value analysis of the seven line route options between Torrens Island and City West revealed that an all underground cable solution mainly following Port Road, was the preferred line route option by a clear margin. When key input assumptions were tested, this outcome was robust to all sensitivities conducted, including changes to the discount rate, operating and maintenance costs, relative changes in the capital cost of overhead and underground solutions and demand growth assumptions.

Consequently, ElectraNet identified this solution as the one which satisfied the requirements of the Regulatory Test at a total combined project cost of $216.5m. ESIPC endorsed the preferred line route option as follows:

> "It is the Planning Council's considered view that ElectraNet's preferred line option, namely, an underground cable running predominantly along Port Road from Torrens Island to the new City West substation, meets the requirements of the Regulatory Test and the South Australian Transmission Code."[6]

ElectraNet is now proceeding to deliver the ACR project in accordance with this option, with a view to completion by 31 December 2011.

3. Regulatory Requirements

The regulatory requirements for contingent projects are contained in Rule 6A.8.2 of the NER and are expanded on in the "Process Guideline for Contingent Project Applications under the National Electricity Rules" released by the AER in September 2007.

The key requirements for the purposes of this application are as follows.

3.1 Amendment of Revenue Determination for Contingent Project

Rule 6A.8.2 of the National Electricity Rules sets out the requirements for making an application to amend a revenue determination to include a contingent project.

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[6] Letter from David Swift, ESIPC to Rainer Korte, ElectraNet, dated 8 May 2009.

Clause 6A.8.2(b)(3) sets out the information that the application must provide, specifically:

- an explanation that substantiates the occurrence of the trigger event;
- a forecast of the total capital expenditure for the contingent project;
- a forecast of the capital and incremental operating expenditure, for each remaining regulatory year which the Transmission Network Service Provider considers is reasonably required for the purpose of undertaking the contingent project;
- how the forecast of the total capital expenditure for the contingent project meets the Rule threshold;
- the intended date for commencing the contingent project (which must be during the regulatory control period);
- the anticipated date for completing the contingent project (which may be after the end of the regulatory control period); and
- an estimate of the incremental revenue which the Transmission Network Service Provider considers is likely to be required to be earned in each remaining regulatory year of the regulatory control period as a result of the contingent project being undertaken.

Clause 6A.8.2(f) includes a requirement that the AER must accept the relevant amounts in the application if it is satisfied that the amounts of forecast capital expenditure and incremental operating expenditure reasonably reflect the capital expenditure criteria and operating expenditure criteria, taking into account the capital expenditure factors and operating expenditure factors, in the context of the contingent project.

Chapters 4 and 5 of this application set out the capital and incremental operating expenditure requirements for this contingent project respectively, together with the assumptions and methodology used to arrive at these forecasts. The incremental revenue required for this project is set out in Chapter 6. The remaining regulatory requirements are addressed in the remainder of this section.

For convenience, Appendix A includes a checklist of the above regulatory requirements with references to the relevant sections of this application that address these requirements.

3.2 Trigger Events

As noted above, the AER determined the following trigger events for this project:

- successful completion of the Regulatory Test; and
- receipt of development approval.

A contingent project application must be lodged as soon as practicable after the occurrence of the applicable trigger event(s).

Clause 6A.8.2(b)(3)(i) requires ElectraNet to substantiate the occurrence of these trigger events.

Regulatory Test

The first trigger event, the successful completion of the Regulatory Test, has now occurred, with the Final Report published on 10 July 2009. The dispute notification period expired on 24 August 2009 without any objections being raised. A copy of the Final Report is available on the ElectraNet website at:

http://www.electranet.com.au/project_detail.php?id=27

Development Approval

On 23 September 2009, ElectraNet received development approval for the ACR line works contingent project from the Department of Planning and Local Government, thereby satisfying the second trigger event. This approval applies to the northern 2.3 km section of the underground cable subject to 'coastal processes'. The remaining transmission cable route to the new substation at Keswick is exempt from Development Approval. A copy of the approval is provided in Appendix B.

3.3 Project Timing

While the trigger events for the contingent project were concluded in September 2009, the ACR project (including the transmission line component) commenced earlier in order to meet the 31 December 2011 delivery timeframe mandated in the ETC. For the purposes of this application, the applicable dates of contingent project commencement and completion are as follows:

- Date for commencing the contingent project – 1 July 2008; and
- Anticipated date for completing the contingent project is the date by which the project is required to be delivered under the ETC – 31 December 2011.

3.4 Pre-lodgement Consultation

The AER's "Process Guideline for Contingent Project Applications under the National Electricity Rules" encourages transmission companies to engage with the AER prior to lodgement of a contingent project application to assist both the AER and TNSP to satisfy the NER requirements.

ElectraNet commenced the pre-lodgement process early in February 2009 with briefings to assist the AER with the overall assessment process and to assist ElectraNet in satisfying the regulatory requirements. Further detailed information was supplied to the AER on the outcome of the Regulatory Test assessment process in July and August 2009.

ElectraNet received a detailed information request from the AER on 31 August 2009 outlining specific information required in support of the application. The information requested included details of tendering processes, terms and conditions and costs, which for reasons of commercial sensitivity cannot be publicly disclosed. Accordingly, a separate confidential supplementary report has been prepared to accompany this application.

4. Forecast Capital Expenditure

This chapter presents the forecast capital expenditure for the ACR line works contingent project in accordance with clauses 6A.8.2(b)(3)(ii), (iii) and (iv) of the NER.

In accordance with the relevant NER provisions, the forecast capital expenditure detailed in this chapter is considered by ElectraNet to be reasonably required to undertake this project, taking into consideration the capital expenditure criteria and capital expenditure factors set out in the NER.

4.1 Basis for estimates

Where possible, ElectraNet has based capital expenditure forecasts on tenders received and cost estimates provided by suppliers. Where this has not been possible, ElectraNet has estimated costs in line with the AER revenue determination applicable in the current regulatory control period or through independent valuations.

By far the largest component of the ACR line works contingent project is the supply and installation of the cable. ElectraNet has based the estimates for this work on the tender information received to date.

Estimates for remote end line works, telecommunications, easements and supplies of plant and equipment are based on cost estimates submitted by contractors or independent valuations. Project delivery costs have been forecast on a benchmark basis, consistent with benchmarks accepted by the AER during previous revenue determination processes. An appropriate project risk allowance has been calculated based on an established risk management methodology and ElectraNet's detailed evaluation of known residual risks.

Incremental equity raising costs have been calculated by reapplying the benchmark cash flow analysis adopted by the AER in its Post Tax Revenue Model (PTRM). In the AER's final decision on ElectraNet's revenue determination, the AER concluded that:

> "…when a contingent project is triggered and an application is made to amend a revenue determination, it would be appropriate to consider the impact of the associated capex on the benchmark equity raising requirement by reapplying the benchmark cash flow analysis… When a contingent project is triggered and an application made to amend a revenue determination, the additional capex is included in the PTRM and the incremental benchmark debt and/or equity raising cost may be calculated." [7]

The incremental equity raising costs determined following this approach are to be capitalised to the RAB consistent with the approach taken in the AER's revenue determination.[8]

While it is not possible to release confidential tender documents submitted by potential suppliers, summary information is presented in confidential documents

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7 AER, "Final Decision: ElectraNet Transmission Determination 2008-09 to 2012-13", 11 April 2008, p87.

8 Ibid, p18.

accompanying this submission. This information remains commercially sensitive, particularly while tendering processes are still underway. Consequently, it is not possible to provide capital costs at a detailed breakdown level for public release in this application.

Table 4.1 which follows provides a summary breakdown of the capital cost components and the basis of the forecast costs.

Table 4.1: Breakdown of forecast capital expenditure and basis of estimation

Capex Item	Basis for Forecast Expenditure
Cable supply and installation	Tender pricing
Cable – cost items excluded from tender pricing	Budget estimates
Line works – City West	Tender pricing
Remote end line works – TIPS	Tender pricing, contractor budget estimates and period contract pricing
Reactor spare	Tender pricing
Telecommunications	Contractor budget estimate
Easements	Independent valuations
Project risk	Detailed probabilistic risk assessment
Project delivery costs	Benchmark costs
Equity raising costs	Benchmark costs calculated using the PTRM

4.2 Capex Forecast by Year

The capital expenditure forecast for the contingent project is as follows:

Table 4.2: Capital expenditure forecast ($m 2007-08)

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Total Capex	4.8	15.2	93.6	22.4	-	136.1

4.3 Regulatory Test Comparison

This capital expenditure forecast compares favourably to the capital cost estimate included in the Regulatory Test assessment, indicating a cost forecast reduction in the order of $30m.

Table 4.3: Forecast and Regulatory Test capex comparison ($m 2007-08)

Forecast	Regulatory Test[9]	Contingent Project Application
Capex for line works component	152	119

Note: The Regulatory Test Final Report excluded some costs common to all options being compared, such as project management costs.

4.4 Capital Expenditure Threshold

To qualify as a contingent project, the proposed capital expenditure must exceed either $10m or 5% of the maximum allowed revenue for the first year of the regulatory control period, whichever is the greater.

For ElectraNet, the AER determined maximum allowed revenue for the first year of the current regulatory control period of $229.99m[10]. Therefore, the relevant threshold for a contingent project is $11.5m. As the total estimated cost of the ACR contingent project far exceeds this figure, the threshold requirements of clause 6A.8.2(b)(3)(iv) of the NER are satisfied.

4.5 Conclusion

The total forecast capital expenditure for the ACR line works contingent project is $136.1m.

ElectraNet is confident that this forecast is both efficient and prudent (in accordance with the capital expenditure criteria) and that it meets the required capital expenditure objectives set out in the NER. In reaching this conclusion, ElectraNet notes that the Regulatory Test analysis supports the ACR line works and the estimated costs are lower than indicated in the Regulatory Test.

5. Forecast Incremental Operating Expenditure

This chapter presents the forecast incremental operating expenditure required for the ACR line works contingent project in accordance with the requirements of Clause 6A.8.2 (b)(3)(iii) of the NER.

9 "Proposed New Large Network Asset – Adelaide Central Region", Regulatory Test Final Report, 10 July 2009, p30.

10 AER statement on updates for ElectraNet transmission determination 2008-09 to 2012-13, dated February 2009.

The forecast incremental operating expenditure detailed in this chapter is considered by ElectraNet to meet the operating expenditure criteria and operating expenditure factors set out in the NER.

5.1 Basis for estimates

ElectraNet has determined the incremental operating expenditure for the contingent project by using the same methodology and models accepted by the AER in its revenue determination applicable to the current regulatory control period. The AER described this methodology as "a sound basis for determining the efficient opex required by a prudent operator in the circumstances of ElectraNet"[11].

The methodology is a combination of a zero based (or bottom up) approach for routine maintenance, and an asset growth escalation factor on base year approach for field support, operations, asset manager and corporate support.

ElectraNet has determined the routine maintenance work required to maintain the new assets. The costs and escalators associated with these work items are the same as used in the revenue determination. The incremental operating expenditure for all other controllable cost categories is derived from the asset growth modelling accepted by the AER in its revenue determination.

Incremental debt raising costs are derived from the AER's Post Tax Revenue Model (PTRM).

5.2 Incremental Opex Forecast

The incremental operating expenditure forecast for the contingent project is summarised as follows.

Table 5.1: Incremental Operating Expenditure ($m 2007-08)

	2008-09	2009-10	2010-11	2011-12	2012-13	Total
Controllable opex	-	-	-	0.24	0.50	0.75
Debt raising costs	-	-	0.01	0.06	0.07	0.14
Network support	-	-	-	-	-	-
Total Opex	-	-	0.01	0.30	0.57	0.88

5.3 Conclusion

The total incremental operating expenditure for the contingent project in the remaining years of the regulatory control period is $0.88m.

ElectraNet is confident that this forecast is both efficient and prudent and that it meets the operating expenditure objectives and criteria set out in the NER.

[11] AER Final Decision p.74.

6. Incremental Revenue Requirements

Clause 6A.8.2(b)(3)(vii) of the NER requires ElectraNet to provide an estimate of the incremental revenue likely to be required for each remaining regulatory year of the regulatory control period as a result of the ACR contingent project being undertaken.

The incremental revenue sought by ElectraNet is consistent with the actual capital expenditure incurred in 2008-09 and the forecast capital and incremental operating expenditure for the remaining regulatory years as described in chapters four and five above.

ElectraNet has modelled the required incremental revenue on a nominal basis using the AER's PTRM based on the annual capital and incremental operational expenditure forecasts presented in this application.

In accordance with clause 6A.8.2(b)(3)(v) of the NER, the capital expenditure forecast has been classified in a manner consistent with the AER's roll forward model to allow for the calculation of the Regulated Asset Base at the close of the current regulatory control period.

6.1 WACC

Clause 6A.8.2(b)(4)(ii) of the NER requires ElectraNet to model its incremental revenue requirements on the basis of the rate of return determined by the AER for the current regulatory control period. The WACC used by ElectraNet for this contingent project application satisfies this NER requirement, and is provided in the table below.

Table 6.1: AER WACC Parameters.

Parameter	AER Final Decision
Risk-free rate (nominal)	6.20 %
Risk-free rate (real)	3.48 %
Expected inflation rate	2.63 %
Debt risk premium	3.42 %
Market risk premium	6.00 %
Gearing	60 %
Equity beta	1.00
Nominal pre-tax return on debt	9.61 %
Nominal post-tax return on equity	12.20 %
Nominal vanilla WACC	10.65 %

6.2 Depreciation

Clause 6A.8.2(b)(4)(iii) of the NER requires ElectraNet to calculate the estimated incremental revenue consistent with depreciation as calculated under clause 6A.6.3.

The incremental annual regulatory depreciation figures shown in Table 6.2 below have been calculated using the PTRM applied by the AER in its revenue determination for ElectraNet applicable to the current regulatory control period.

Table 6.2: Incremental Regulatory Depreciation ($m nominal).

Year	2008-09	2009-10	2010-11	2011-12	2012-13	Total
Regulatory depreciation	-	-0.13	-0.56	-3.34	-0.03	-4.06

6.3 Tax allowance

The incremental annual net tax allowance figures shown in Table 6.3 below have been calculated using the PTRM applied by the AER in its revenue determination for ElectraNet applicable to the current regulatory control period.

Table 6.3: Incremental Net Tax Allowance ($m nominal).

Year	2008-09	2009-10	2010-11	2011-12	2012-13	Total
Net tax allowance	-	0.02	0.09	0.51	0.72	1.34

6.4 Incremental revenue requirements for each year to end of period

Based on the estimates provided above and using the PTRM, ElectraNet has estimated incremental annual building block revenue requirements for the contingent project as shown in Table 6.4.

Table 6.4: Incremental annual building block revenue requirement ($m nominal).

Year	2008-09	2009-10	2010-11	2011-12	2012-13	Total
Return on capital	-	0.55	2.33	13.57	16.68	33.13
Regulatory depreciation	-	-0.13	-0.56	-3.34	-0.03	-4.06
Opex allowance	-	0.01	0.01	0.33	0.65	1.00
Net tax allowance	-	0.02	0.09	0.51	0.72	1.34
Annual revenue requirement (unsmoothed)	-	0.44	1.87	11.08	18.02	31.41

6.5 Amended maximum allowed revenue

The AER's final decision on the annual building block revenue requirement for the current regulatory control period[12] is set out in Table 6.5 together with the calculation of the amended maximum allowed revenue required for the contingent project.

Table 6.5: Amended annual building block revenue requirement ($m nominal).

Year	2008-09	2009-10	2010-11	2011-12	2012-13	Total
AER annual building block revenue requirement	229.99	245.26	269.29	288.59	306.43	1339.57
Incremental revenue requirement	-	0.44	1.87	11.08	18.02	31.41
Amended annual revenue requirement (unsmoothed)	229.99	245.70	271.16	299.67	324.46	1370.98

Table 6.6 sets out the updated maximum allowed revenue and X factors for the regulatory control period.

Table 6.6: Amended maximum allowed revenue ($m nominal).

Year	2008-09	2009-10	2010-11	2011-12	2012-13	Total
MAR (smoothed)	229.99	250.12	272.01	295.81	321.70	1369.64
X factor	-	-5.97%	-5.97%	-5.97%	-5.97%	

In accordance with ElectraNet's approved Transmission Pricing Methodology, recovery of the incremental revenue approved by the AER will commence in 2010-11. The incremental revenue requirement for 2009-10 will contribute to a revenue under-recovery in the current financial year, which will be carried forward for recovery in 2010-11.

7. Conclusion

This contingent project application for the Adelaide CBD line works component has been prepared in accordance with Rule 6A8.2 of the NER for the AER to amend the revenue determination that applies to ElectraNet in the current regulatory control period from 2008-09 to 2012-13 to include incremental revenue for the contingent project.

The incremental revenue set out in this application is based on capital and incremental operating expenditure which is reasonably required for the contingent project in each year of the regulatory control period.

[12] As amended by the AER in accordance with orders of the Australian Competition Tribunal made on 28 January 2009.

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Adelaide Central Reinforcement Project

Appendices

9 October 2009

Appendix A Requirements Checklist

The purpose of this table is to demonstrate compliance with the contingent project application information content requirements specified in clause 6A.8.2(b)(3) of the NER.

Rule 6A.8.2(b)(3) requirements	**Reference in Application**
(i) an explanation that substantiates the occurrence of the *trigger event*;	Section 3.2 and Appendix B
(ii) a forecast of the total capital expenditure for the *contingent project*;	Section 4.2
(iii) a forecast of the capital and incremental operating expenditure, for each remaining *regulatory year* which the *Transmission Network Service Provider* considers is reasonably required for the purpose of undertaking the *contingent project*;	Sections 4.2 and 5.2
(iv) how the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);	Section 4.4
(v) the intended date for commencing the *contingent project* (which must be during the *regulatory control period*);	Section 3.3
(vi) the anticipated date for completing the *contingent project* (which may be after the end of the *regulatory control period*); and	Section 3.3
(vii) an estimate of the incremental revenue which the *Transmission Network Service Provider* considers is likely to be required to be earned in each remaining *regulatory year* of the *regulatory control period* as a result of the *contingent project* being undertaken as described in clause 6A.8.2(b)(3)(iii); and	Section 6.4 and 6.5

Appendix B Development Approval

Government of South Australia
Department of Planning and Local Government

Application Number: 010/V315/09
Contact: Simon Neldner
Telephone: (08) 8303 0735
Facsimile: (08) 8303 0753
Email: simon.neldner@sa.gov.au

23 September 2009

Mr Hoang Nguyen
ElectraNet Pty Ltd
PO Box 7096
Hutt Street Post Office
ADELAIDE SA 5000

Dear Mr Nguyen

Application Number:	010/V315/09
Applicant:	ElectraNet (sponsored by OMPI – DTEI)
Proposed Development:	Adelaide Central Reinforcement (ACR) Project – Installation of an underground high voltage (275kV) transmission cable along the Grand Trunkway / North Arm Bridge at Torrens Island.
Subject Land:	Grand Trunkway / North Arm Bridge, Torrens Island

Please find attached a Decision Notification Form.

Any request for an extension of time must be lodged with the Development Assessment Commission.

Yours sincerely

Roger Freeman
PRINCIPAL PLANNER, ASSESSMENT BRANCH
DEPARTMENT OF PLANNING AND LOCAL GOVERNMENT
As delegate of the
MINISTER FOR URBAN DEVELOPMENT AND PLANNING
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South Australia – Sections 49 and 49A Development Act, 1993

CROWN DEVELOPMENT AND PUBLIC INFRASTRUCTURE
AND
ELECTRICITY INFRASTRUCTURE DEVELOPMENT
DECISION NOTIFICATION FORM

Development Number
010/V315/09

FOR DEVELOPMENT APPLICATION

DATED: 27 July 2009
REGISTERED ON: 27 July 2009

TO: ElectraNet Pty Ltd
PO Box 7096
Hutt Street Post Office
ADELAIDE SA 5000

LOCATION OF PROPOSED DEVELOPMENT:

Lot No	Section No.	Street	Suburb	Hundred	Title Reference
301 in DP55734	n/a	Grand Trunkway	Torrens Island	Out of Hundreds	CT 5998/70
20 in DP55734	n/a	Grand Trunkway	Torrens Island	Out of Hundreds	CT 5973/20
50 in DP41577	n/a	Grand Trunkway	Torrens Island	Out of Hundreds	CT 5906/437

NATURE OF PROPOSED DEVELOPMENT: Adelaide Central Reinforcement (ACR) Project – Installation of an underground high voltage (275kV) transmission cable along the Grand Trunkway / North Arm Bridge at Torrens Island.

From: **MINISTER FOR URBAN DEVELOPMENT AND PLANNING**

I hereby **APPROVE** the above-mentioned application under the *Development Act 1993.*

You may therefore proceed in accordance with your plans, as submitted, subject to thirteen (13) conditions as shown on the attached sheets.

Building works may commence only when a Certificate of Compliance with Building Rules has been received from a Private Certifier, subject to any conditions imposed by the Minister for Urban Development and Planning (or his delegate) and the Certifier.

Roger Freeman
PRINCIPAL PLANNER
Delegate of the Minister for Urban Development and Planning

Date of Decision: 23 September 2009

[2] Sheets Attached

DEVELOPMENT APPLICATION NUMBER 010/V315/09

CONDITIONS OF APPROVAL

1. That except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development shall be established in strict accordance with the details and plans submitted in Development Application number 010/V315/09.

2. That the proponent shall develop and implement a traffic and recreational boating management plan - in consultation with the City of Port Adelaide Enfield and the Transport Services Division (DTEI) - that maintains access for all vehicles – including emergency vehicles - crossing the North Arm Bridge (i.e. travelling north-south along the Grand Trunkway to and from Torrens Island Power Station) AND to ensure the safe navigation of marine vessels travelling beneath the North Arm Bridge during the construction phase. An electronic (CD) copy of this plan shall be forwarded to the Development Assessment Commission prior to the commencement of trenching works and/or cable installation.

3. That an appropriate Soil Erosion and Drainage Management Plan (SEDMP) (as described in the "Stormwater Pollution Control, General Code of Practice for Local, State and Federal Government") shall be prepared and implemented which includes a range of strategies that minimises the discharge of sediments into the marine environment or stormwater system during trenching, cable installation and site remediation works. An electronic (CD) copy of this plan shall be forwarded to the Development Assessment Commission prior to the commencement of trenching works and/or cable installation. *(Note: the SEDMP can form part of the final CEMP).*

4. That an appropriate Construction Environment Management Plan (CEMP) which addresses the mitigation or minimisation of impacts (e.g. soil erosion, noxious weed dispersal, acid sulphate soils, dust suppression etc) during the construction phase shall be prepared and implemented in accordance with recognised industry standards and environmental best practices. An electronic (CD) copy of this plan shall be forwarded to the Development Assessment Commission prior to the commencement of trenching works and/or cable installation.

5. That any imported substrate material or engineered fill to be used within that portion of the project identified as being subject to coastal processes shall be free of weeds and pathogens to ensure that noxious weed or contamination sources are not introduced into a sensitive coastal / marine environment.

6. That all earthworks shall be restricted to only those which are shown on the approved plan as required for trenching and/or access purposes.

7. That excavated materials and stockpiles shall be appropriately classified and managed in accordance with the Environment Protection Authority (EPA) Guideline: *Waste derived fill protocol for the production and use of waste derived fill (April 2009).*

8. That any excavated areas for the installation of underground transmission cables shall be stabilised and reinstated and exposed areas of top soil or engineered fill seeded or planted with natural grasses or ground covers. This requirement shall be incorporated as part of the Construction Environment Management Plan *(Note: It is envisaged that upon the successful installation of each section of underground cable – approximate length 700-900m – the reinstatement and remediation of exposed areas will be undertaken. The selection of any native grasses or ground cover species suitable for the coastal location should be undertaken in accordance with advice from the Native Vegetation Council – DWLBC and/or Coastal Management Branch - DEH*).

9. That all excess stockpiles of top soil, fill and/or other organic or marine material removed as part of the trenching process must be removed within one (1) month after the successful installation of each section of underground cable.

10. That a complaints management procedure shall be developed to ensure that the general public, marine users and/or owners of land can directly report any construction or environmental issues to the successful contractor and/or operator during the installation of the transmission cable.

11. That existing state agency or council maintained infrastructure located along the proposed route of the transmission cable that is demolished, altered, removed or damaged during its installation shall be reinstated to council or state agency specifications. All costs associated with these works shall be met by the applicant (ElectraNet). *(Note: The applicant is advised to prepare a Dilapidation Report and to further consult with each relevant stakeholder, landowner, state agency and/or local authority on these matters prior to the commencement of siteworks. It is assumed that critical service infrastructure will be repaired or reinstalled to agency or council specifications within 24 hours and that other reinstatement timeframes are those indicated in the application documentation or will be the subject of separate agreements or memorandums of understanding between relevant stakeholders).*

12. That all hard construction materials shall be secured during cable installation works.

13. That current clearance levels for marine and recreational craft underneath the North Arm Bridge shall be maintained (i.e. the installation of the cable tray and associated works do not decrease clearance levels with the addition of any structures *below* the existing pylons / spans).

OBLIGATIONS PURSUANT TO THE DEVELOPMENT ACT 1993 AND DEVELOPMENT REGULATIONS 2008:

i. Pursuant to Section 49(14) of the *Development Act 1993* before any building work is undertaken, the building work is to be certified by a private certifier, or by some person determined by the Minister for the purposes of this provision, as complying with the provisions of the Building Rules (or the Building Rules as modified according to criteria prescribed by the Regulations).

ii. The development must be substantially commenced within 12 months of the date of this Notification, unless this period has been extended by the Minister for Urban Development and Planning.

iii. You are also advised that any act or work authorised or required by this Notification must be completed within 3 years of the date of the Notification unless this period is extended by Minister for Urban Development and Planning.

iv. You will require a fresh consent before commencing or continuing the development if you are unable to satisfy these requirements.

ADVISORY NOTES:

a. A current list of Registered Private Certifiers in South Australia is available from the Planning SA web site *http://www.planning.sa.gov.au/go/building/professional-information/register-of-private-certifiers* Advisory Notices.

b. At completion of the project all certified documents should be retained by the responsible agency for the life of the asset.

c. For additional information relating to certification of government building projects, contact Stan Fuller, Building Surveyor, DAIS Building Management, (telephone 8226 5225) Level 8, Wakefield House, 30 Wakefield Street, Adelaide.

d. Any request for an extension of time must be lodged with the Development Assessment Commission prior to the time periods specified above.

e. Construction should be carried out so that it complies with the construction noise provisions of Part 6, Division 1 of the *Environment Protection (Noise) Policy 2007*. A copy of the Policy can be seen at the following site: http://www.legislation.sa.gov.au

f. The applicant is reminded of its general environmental duty, as required by Section 25 of the Environment Protection Act, to take all reasonable and practical measures to ensure that the activities on the whole site, including during construction, do not pollute the environment in a way which causes or may cause environmental harm.

g. Any information sheets, guidelines documents, codes of practice, technical bulletins etc. that are referenced in this response can be accessed on the following web site: *http://www.epa.sa.gov.au/pub.html*

h. The applicant is advised that any works (e.g. stormwater connections, driveways, pedestrian crossings etc) undertaken on Council owned land or local roads under its care and control will require the approval of Council's Technical Services Department, prior to any works being undertaken. Further information may be obtained from the Technical Services Department on telephone 8405 6600.

i. The City of Port Adelaide Enfield has advised that further consultation be undertaken prior to the determination of the final location of the underground high voltage transmission cable– including the route approval process with DTEI.

j. The waters over which the cable will be located fall within the area covered be the *Adelaide Dolphin Sanctuary Act 2005*. The object of this Act is to protect the dolphin population and their natural habitat. The applicant and contractors should be made aware of the Adelaide Dolphin Sanctuary Act and their associated duty of care.

k. The land over which the development is situated may have the potential to develop acid sulfate conditions if exposed to oxygen. The Coast Protection Board have guidelines which should be followed, titled "Coast Protection Board (2003), Coastline No 33: A Strategy for Implementing CPB Policies on Coastal Acid Sulfate Soils in South Australia". This document is available at: http://www.environment.sa.gov.au/coasts

l. The applicant is advised that the Register of Aboriginal Sites and Objects is not a comprehensive record and that sites or objects may exist in the proposed development area. Aboriginal Sites and objects are protected under the *Aboriginal Heritage Act 1988*. It is an offence to damage, disturb or interfere with any Aboriginal site or damage any Aboriginal object without the authority of the Minister for Aboriginal Affairs and Reconciliation (the Minister). The discovery of any Aboriginal sites, objects or remains, discovered on the land, need to be reported to the Minister.

m. The provisions of the *Environment Protection (Site Contamination) Amendment Act* – now incorporated within the *Environment Protection Act 1993* - have commenced and many of the provisions contained are retrospective. The applicant is advised to liaise with the EPA in respect to any site contamination issue identified by trenching activities or earthworks associated with the installation of high voltage transmission cabling long the proposed route.

n. Conditions 2-12 (inclusive) only apply to the 2.3km section of the underground cable / transmission route subject to "coastal processes" – as the remaining transmission cable route to the Keswick substation is exempt from development approval. However, the SEDMP and CEMP documentation required by Conditions 3 and 4 can be delivered as part of the wider project (as outlined by the SCEMP contained within the planning report). Similarly, the complaints management procedure outlined in Condition 10 will also form the basis of a project wide initiative as outlined by the SCEMP. The proponent should also include a requirement for the successful contractor to inspect reinstated / remediated areas (i.e.

backfilled cable trenches) to address any residual soil subsidence, stabilisation and weed infestation issues within six months of the installation of each section of transmission cable.

o. Any excavation of inland waters or the seabed in the marine environment and possible discharges of turbid waters from construction activities will require an EPA licence for the activities of dredging and/or earthworks drainage as prescribed under Schedule 1 Part A, Activities – *Environment Protection Act 1993.*

p. The *Environment Protection (Water Quality) Policy 2003* requires any person who is undertaking an activity, or is an occupier of land to take all reasonable and practicable measures to avoid the discharge or deposit of waste from that activity or land into any waters or onto land in a place from which it is likely to enter any waters (including the stormwater system). The policy also creates offences that can result in on-the spot fines or legal proceedings. The following information is provided to assist with compliance with this legislation:

i Building and construction must follow sediment control principles outlined in the "Stormwater Pollution Prevention – Code of Practice for the Building and Construction Industry (EPA, 1999). Specifically, the applicant must ensure:

During construction no sediment should leave the building and construction site. Appropriate exclusion devices must be installed at entry points to stormwater systems and waterways.

A stabilised entry/exit point should be constructed to minimise the tracking of sand, soil and clay off site. However, should tracking occur, regular clean-ups are advised.

ii Litter from construction sites is an environmental concern. All efforts should be made to keep all litter on site. The applicant should ensure that bins with securely fitted lids, capable of receiving all waste from building and construction activities, are placed on site.

iii All building and construction wastewaters are listed pollutants under the *Environment Protection (Water Quality) Policy 2003* and as such must be contained on site.

It is important that the applicant familiarise themselves with the terms of the Policy and ensure that all contractors engaged by the applicant are aware of the obligations arising under it. For further information the applicant may contact the Environment Protection Authority on telephone (08) 8204 2004.

Roger Freeman
PRINCIPAL PLANNER
as delegate of the
Minister for Urban Development and Planning