

## **Appendix 4G**

**SPI PowerNet Pty Ltd**

**Transmission Revenue Reset (TRR)  
2014/15 – 2016/17**

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**Proposed Contingent Projects for  
the 2014-17 Regulatory Control  
Period**

**28 February 2013**

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## Contingent Projects (2014-17)

### 1 Introduction and Overview

Contingent projects are capital projects that will not necessarily be required to proceed in the forthcoming regulatory control period. For this reason, these projects are not included in the capex forecast. Instead, the Rules allow TNSPs to propose these projects to apply as contingent projects for the period, which will proceed subject to a specified trigger event occurring.

SP AusNet has developed a contingent projects proposal as a means of managing uncertain outcomes for three major capital projects. Three contingent projects are proposed:

- South Morang Transformer Replacement – Stage 2
- C-I-C
- C-I-C

The proposed contingent projects were costed as part of the options analysis that was undertaken for the South Morang, C-I-C rebuilds forecast for the forthcoming regulatory control period. Therefore, the forecast costs were estimated using the same methodology and assumptions as applied to major stations projects in the capex forecast.

A summary of the proposed contingent projects for the next regulatory period is provided in Table 1.

**Table 1: Contingent Projects Proposed (\$ million, real 2013-14)**

| Project  | Trigger Event  | Total Cost |
|--|--|------------|
| South Morang transformer replacement – Stage 2 | Failure of any phase or phases of either the H1 or H2 transformers at South Morang Terminal Station. | 28.85      |
| C-I-C  | C-I-C  | C-I-C      |
| C-I-C  | C-I-C  | C-I-C      |

Note – these costs are direct.

### 2 Rules Requirements

The requirements for contingent projects are set out in NER 6A.8. This specifies that the AER must determine a proposed contingent project is a contingent project if it is satisfied that:

- The project is reasonably required to be undertaken to achieve any of the capital expenditure objectives (NER 6A.6.7).
- The proposed capex associated with the contingent project is not included in the overall capex forecast, reasonably reflects the capex criteria and takes account of the capex factors (NER 6A.6.7(e)).
- The project cost exceeds either \$10 million or 5% of the MAR for the first year of the regulatory control period, whichever is the larger amount.
- The project complies with the requirements of the submission guidelines.

Forecast MAR in the first year of the forthcoming regulatory control period is \$502.5m, and 5% of this is \$25.1m.

The Rules specify that contingent projects must feature a 'trigger event' which acts as a catalyst for the project becoming necessary. The trigger event must be:

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## Contingent Projects (2014-17)

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- Reasonably specific and capable of objective verification;
- A condition or event that generates increased costs that relate to a specific location rather than a condition or event that affects the transmission network as a whole;
- An event or condition, the occurrence of which is probable during the regulatory control period, but the inclusion of capital expenditure is not appropriate because:
  - it is not sufficiently certain that the event will occur; or
  - the costs associated with the event or condition are not sufficiently certain (subject to the cost threshold).

The reasons why SP AusNet's proposed contingent projects for the 2014-16 regulatory period satisfy these requirements are discussed below.

### 3 South Morang transformer replacement: Stage 2

#### 3.1 Background

The 330/220kV H1 and H2 transformers at South Morang were installed in the mid-1960s and have been in service for around 45 years. An assessment of the supply risk and market impact of the failure of a transformer at South Morang Terminal Station shows that it is efficient to proceed with a staged replacement of the two 700MVA 330/220kV transformers in the forthcoming and following regulatory control periods.

The South Morang Transformer Replacement: Stage 1 project involves the replacement of the H2 transformer. This is expected to be completed in 2016. The existing H2 transformer will be retained as a temporary cold spare.

Assuming no unexpected transformer failures occur, the economic timing of Stage 2 (which involves replacing the H1 transformer and installing a new permanent cold spare) is currently 2021-25. Therefore, Stage 2 is not included in the ex-ante capex forecast for the 2014-16 regulatory control period. However, if a failure of either the H1 or H2 transformer does occur, no temporary spare would remain. In this case, the expected high market impact costs of a further failure indicate that it would then become economic to proceed with Stage 2 during the 2014-16 regulatory control period.

#### 3.2 Project Description

The scope of South Morang Transformer Replacement – Stage 2 is outlined below:

- Supply and install three 330/220 kV 700 MVA single phase transformers including modifications of the footings, oil containment, bunds, fire wall, drainage, rack structure, primary and secondary connections in place of the existing H1 transformer.
- Interface the new transformer protection to the existing 220 kV circuit breaker management and interface the new protection and control schemes to the existing distribution panels.
- Demolish and dispose of the existing H1 and H2 transformers.
- Install one single phase transformer unit as a cold spare including a foundation and bunding for storage.

#### 3.3 Trigger Event

The failure of any phase or phases of either the H1 or H2 transformer at South Morang Terminal Station before the 31 March 2017.

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## Contingent Projects (2014-17)

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### 3.4 Estimated Contingent Capital Expenditure

The direct cost of South Morang Stage 2 is estimated to be \$28.85 million (\$2013-14). This estimate is in direct terms and excludes overheads, finance charges, operating expenditure and written down values.

### 3.5 Compliance with the Rules

This contingent project complies with NER 6A.8 for the following reasons:

- This project meets the cost threshold – as \$28.85m is greater than 5% of the MAR in the first year (or \$25.1m);
- The case for undertaking the contingent project during the next regulatory control period depends on an uncertain event occurring – the project only becomes economic in the uncertain event of a transformer failure at South Morang;
- The trigger event is specific, capable of verification, sufficiently uncertain and meets the other requirements set out in 6A.8.1(c) – in particular, a transformer failure meets these criteria;
- The expenditure estimates represent prudent expenditure achieve the capital expenditure objectives (NER 6A.6.7) – this project is required to maintain the reliability, safety and security of the transmission system. Expenditure has been estimated as part of the options analysis carried out to inform the design of the South Morang transformer replacement project, Stage 1 of which is included in the capital expenditure forecast. The expenditure forecasting methodology is described in Chapter 4 of the Revenue Proposal.
- The project is not otherwise provided for in the capital expenditure forecast – while Stage 1 of the South Morang transformer replacement is included in the capital expenditure forecast, no expenditure associated with Stage 2 is included.

## 4 C-I-C

### 4.1 Background

C-I-C

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## Contingent Projects (2014-17)

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### 4.2 Project Description

C-I-C

### 4.3 Trigger Event

C-I-C

### 4.4 Estimated Contingent Capital Expenditure

C-I-C

### 4.5 Compliance with the Rules

C-I-C

## 5 C-I-C

### 5.1 Background

C-I-C

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**Contingent Projects (2014-17)**

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C-I-C

**5.2 Project Description**

C-I-C

**5.3 Trigger Event**

C-I-C

**5.4 Estimated Contingent Capital Expenditure**

C-I-C



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**Contingent Projects (2014-17)**

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**5.5 Compliance with the Rules**

C-I-C