# Investment Evaluation Summary (IES)

## Project Details:

| | |
|---|---|
| **Project Name:** | Install HV and LV Conduit with other UG works (Capacity) |
| **Project ID:** | 00825 |
| **Thread:** | System Development |
| **CAPEX/OPEX:** | CAPEX |
| **Service Classification:** | Standard Control |
| **Scope Type:** | D |
| **Work Category Code:** | CAHVF |
| **Work Category Description:** | HV Feeder Upgrade - Capacity |
| **Preferred Option Description:** | Install conduit with third party works (as required) |
| **Preferred Option Estimate (Nominal Dollars):** | $0 |

| | 17/18 | 18/19 | 19/20 | 20/21 | 21/22 | 22/23 | 23/24 | 24/25 | 25/26 | 26/27 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Unit ($)** | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| **Volume** | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| **Estimate ($)** | | | | | | | | | | |
| **Total ($)** | $80,000 | $80,000 | $80,000 | $80,000 | $80,000 | $80,000 | $80,000 | $80,000 | $80,000 | $80,000 |

## Governance:

| | | | |
|---|---|---|---|
| **Project Initiator:** | Ewan Sherman | **Date:** | 30/03/2015 |
| **Thread Approved:** | Stephen Jarvis | **Date:** | 19/10/2015 |
| **Project Approver:** | Stephen Jarvis | **Date:** | 19/10/2015 |

## Document Details:

| | |
|---|---|
| **Version Number:** | 1 |

## Related Documents:

| Description | URL |
|---|---|

| | |
|---|---|
| Network Development Management Plan | - |

# Section 1 (Gated Investment Step 1)

## 1. Background

Reinforcement works on the High Voltage (HV) and Low Voltage (LV) feeder network include elements operating at 6.6 kV, 11 kV, 22 kV, 33 kV or 44 kV (including SWER), and 430/240 V (LV). The main components of HV and LV networks includes:

- Overhead conductor
- Underground cable
- Voltage regulators
- Overhead switchgear (Reclosers, Gas Switches, ABS, Fuses, Links)
- Ground mounted switchgear (generally components of Distribution Substations); and
- Distribution Substations.

This program enables future network opportunities, which includes installation of conduits with third party underground works (common trenching) for future HV and LV cable installation.

### 1.1 Investment Need

This installlation of conduit with third party works prevents the following at the time of development:

- additonal cost for civil works such as excavation and reinstatement of roads and footpaths;
- time delay due to civil works; and
- community inconvience due to civil works.

The management of the above supports TasNetworks to deliver the following outcomes:

- Safety, reliability and security of supply outcomes that meet customers' needs, by maintaining asset utilisation rates at appropriate levels at the lowest whole of life cost.

### 1.2 Customer Needs or Impact

TasNetworks continues to undertake a consumer engagement as part of business as usual and through the voice of the customer program. Consumers have identified safety, restoration of faults/emergencies and supply reliability as the highest performing services offered by TasNetworks. This project specifically addresses the requirements of consumers in the area of safety, restoration of faults/emergencies and supply reliability Customers will continue to be consulted through routine TasNetworks processes, including the Voice of the customer program, the Annual Planning Review and ongoing regular customer liaison meetings.

### 1.3 Regulatory Considerations

This project is required to achieve the following capital expenditure objectives as described by the National Electricity Rules section 6.5.7(a) 6.5.7 (a) Forecast capital expenditure (1) meet or manage the expected demand for standard control services over that period; (2) comply with all applicable regulatory obligations or requirements associated with the provision of standard control services; (3) to the extent that there is no applicable regulatory obligation or requirement in relation to: (i) the quality, reliability or security of supply of standard control services; or (ii) the reliability or security of the distribution system through the supply of standard control services, to the relevant extent: (iii) maintain the quality, reliability and security of supply of standard control services; and (iv) maintain the reliability and security of the distribution system through the supply of standard control services; and (4) maintain the safety of the distribution system through the supply of standard control services.

# 2. Project Objectives

To manage the future expenditure by leveraging off coordinated works with other service providers such TasWater, DIER, etc.

# 3. Strategic Alignment

## 3.1 Business Objectives

Strategic and operational performance objectives relevant to this project are derived from TasNetworks 2014 Corporate Plan, approved by the board in 2014. This project is relevant to the following areas of the corporate plan:

- We understand our customers by making them central to all we do.
- We care for our assets, delivering safe and reliable networks services while transforming our business.

## 3.2 Business Initiatives

The business initiatives that relate to this project are as follows:

- Safety of our people and the community, while reliably providing network services, is fundamental to the TasNetworks business and remains our immediate priority
- We care for our assets to ensure they deliver safe and reliable network services
- We will transform our business with a focus on: - an appropriate approach to the management and allocation of risk The strategic key performance indicators that will be impacted through undertaking this project are as follows:
    - Customer engagement and service – customer net promoter score
    - Price for customers – lowest sustainable prices
    - Network service performance – meet network planning standards

# 4. Current Risk Evaluation

Not Applicable

## 4.1 5x5 Risk Matrix

TasNetworks business risks are analysed utilising the 5x5 corporate risk matrix, as outlined in TasNetworks Risk Management Framework.

Relevant strategic business risk factors that apply are follows:

| Risk Category | Risk | Likelihood | Consequence | Risk Rating |
|---|---|---|---|---|
| Environment and Community | Localised environmental and community issues associated with re-excavation work including:<br>• Noise pollution<br>• Traffic management<br>• Public walkway blockage<br>• Community expectations (for not undertaking joint | Possible | Negligible | Low |

| | | | | |
|---|---|---|---|---|
| | planning of works with other planning authorities) | | | |
| Financial | High future costs for installation in regards to reinstatement s and traffic/pedestrian management | Possible | Negligible | Low |

# Section 1 Approvals (Gated Investment Step 1)

| | | | |
|---|---|---|---|
| **Project Initiator:** | Ewan Sherman | **Date:** | 30/03/2015 |
| **Line Manager:** | | **Date:** | |
| **Manager (Network Projects)<br>or<br>Group/Business Manager (Non-network projects):** | | **Date:** | |
| [Send this signed and endorsed summary to the Capital Works Program Coordinator.] | | | |

## Actions

| | | | |
|---|---|---|---|
| **CWP Project Manager commenced initiation:** | | **Assigned CW Project Manager:** | |
| **PI notified project initiation commenced:** | | **Actioned by:** | |

# Section 2 (Gated Investment Step 2)

## 5. Preferred Option:

Where there is anticipated/forecast network development requirements, install conduit (at HV or LV depths) with third party works to take advantage of strategic opportunity to avoid future re-excavation work.

### 5.1 Scope

This is a opportunisitc program to install conduit for HV and LV cables along with associated works where there are foreseeable future development requirements.

### 5.2 Expected outcomes and benefits

The program is to leveraged the oppotunity generated by third party works to install underground infrastructure with minimal civil expenditure on excavation and reinstatement of roads and footpaths, and minimal disruption impact on the community.

### 5.3 Regulatory Test

Not applicable.

## 6. Options Analysis

Assessed on a case by case basis as opportunities arise.

### 6.1 Option Summary

| **Option description** | |
|---|---|
| Option 0 | Do nothing |
| Option 1 (preferred) | Install conduit with third party works (as required) |

### 6.2 Summary of Drivers

| **Option** | |
|---|---|
| Option 0 | Full civil expenditure is required at the later stage. |
| Option 1 (preferred) | Avoid the full civil expenditure at the time of network development and manage the business risks described in Section 1.1. |

### 6.3 Summary of Costs

| Option | Total Cost ($) |
|---|---|
| Option 0 | $0 |
| Option 1 (preferred) | $0 |

## 6.4 Summary of Risk

Not Applicable

## 6.5 Economic analysis

| Option | Description | NPV |
|---|---|---|
| Option 0 | Do nothing | $0 |
| Option 1 (preferred) | Install conduit with third party works (as required) | $0 |

### 6.5.1 Quantitative Risk Analysis

Not applicable.

### 6.5.2 Benchmarking

Not applicable.

### 6.5.3 Expert findings

Not applicable.

### 6.5.4 Assumptions

Not applicable.

# Section 2 Approvals (Gated Investment Step 2)

| | | | |
|---|---|---|---|
| **Project Initiator:** | Ewan Sherman | **Date:** | 30/03/2015 |
| **Project Manager:** | | **Date:** | |

| **Actions** | | | |
|---|---|---|---|
| **Submitted for CIRT review:** | | **Actioned by:** | |
| **CIRT outcome:** | | | |