

Investment Evaluation Summary (IES)



Project Details:

| | |
|---|---|
| Project Name: | Replace/relocate High Voltage Overhead due to Vegetation Issues |
| Project ID: | 00675 |
| Thread: | Overhead |
| CAPEX/OPEX: | CAPEX |
| Service Classification: | Standard Control |
| Scope Type: | B |
| Work Category Code: | REHVE |
| Work Category Description: | Replace/relocate HV OH (Vegetation) |
| Preferred Option Description: | Relocate assets away from heavily vegetated areas. |
| Preferred Option Estimate (Nominal Dollars): | \$1,000,000 |

| | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Estimate (\$) | | | | | | | | | | |
| Total (\$) | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 |

Governance:

| | | | |
|---------------------------|------------------|--------------|------------|
| Project Initiator: | James Fitzgerald | Date: | 26/03/2015 |
| Thread Approved: | David Ellis | Date: | 02/11/2015 |
| Project Approver: | David Eccles | Date: | 30/10/2015 |

Document Details:

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

Related Documents:

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

Section 1 (Gated Investment Step 1)

1. Background

The aim of this program is to address the issue of high vegetation maintenance costs in certain areas. Historically, there have been cases where it is more efficient to relocate assets around vegetation rather than managing the vegetation near the assets such as areas where vegetation is protected (national parks) or where there are community or environmental considerations or where there are onerous vegetation management requirements due to bushfire risk management.

This program has been in place for a number of years but as part of Replace HV Feeders (Safety) and Fire Mitigation asset replacements.

There are no major changes to this program however the budget will be developed in response to incoming work only.

1.1 Investment Need

The driver for this program is minimising costs to customers and managing business operating risks (fire).

1.2 Customer Needs or Impact

TasNetworks continues to undertake consumer engagement as part of business as usual and through the Voice of the Customer program. This engagement seeks in depth feedback on specific issues relating to:

- How its prices impact on its services
- Current and future consumer energy use
- Outage experiences (frequency and duration) and expectations
- Communication expectations
- STPIS expectations (reliability standards and incentive payments)
- Increasing understanding of the electricity industry and TasNetworks

Consumers have identified safety, restoration of faults/emergencies and supply reliability as the highest performing services offered by TasNetworks.

Consumers also identified that into the future they believe that affordability, green, communicative, innovative, efficient and reliable services must be provided by TasNetworks.

This project specifically addresses the requirements of consumers in the areas of:

- safety, restoration of faults/emergencies and supply reliability
- affordability, green, communicative, innovative, efficient and reliable services

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 and operational expenditure objectives as described by the National Electricity Rules section 6.5.7(a) and 6.5.6(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 relocate assets away from heavily vegetated areas.

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 enable our people to deliver value; and
- 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
 - Culture and people engagement – Culture score
 - Zero harm – significant and reportable incidents
 - Network service performance – meet network planning standards
 - Network service performance – outcomes under service target performance incentive schemes
 - Sustainable cost reduction – efficient operating and capital expenditure

4. Current Risk Evaluation

Do nothing is not an acceptable option to TasNetworks' risk appetite. The level of risk identified above is such that a treatment plan is required to reduce the risks to a tolerable level, in line with TasNetworks' Risk Management Framework.

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 | Risk of vegetation contacting conductor and starting a bushfire resulting loss to property. | Unlikely | Severe | High |
| Reputation | Risk of vegetation contacting conductor and starting a bushfire resulting with significant media coverage. | Possible | Major | High |
| Safety and People | Risk of vegetation contacting conductor and starting a bushfire resulting in injury or death to member of the public. | Unlikely | Severe | High |

Section 1 Approvals (Gated Investment Step 1)

| | | | |
|---|------------------|--------------|------------|
| Project Initiator: | James Fitzgerald | Date: | 26/03/2015 |
| Line Manager: | | Date: | |
| Manager (Network Projects) or 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:

To relocate assets away from heavily vegetated areas.

5.1 Scope

The work to be undertaken shall be the relocation of assets to alleviate excessive vegetation trimming or removal.

5.2 Expected outcomes and benefits

1. Reduced environmental and safety risk
2. Reduced replacement cost (since not reactive)

5.3 Regulatory Test

6. Options Analysis

6.1 Option Summary

| Option description | |
|----------------------|--|
| Option 0 | Do nothing |
| Option 1 (preferred) | Relocate assets away from heavily vegetated areas. |

6.2 Summary of Drivers

| Option | |
|----------------------|--|
| Option 0 | Unacceptable risk to the public and environment from vegetation contacting conductors. |
| Option 1 (preferred) | Mitigation against the risk of vegetation contacting conductors. |

6.3 Summary of Costs

| Option | Total Cost (\$) |
|----------------------|-----------------|
| Option 0 | \$0 |
| Option 1 (preferred) | \$1,000,000 |

6.4 Summary of Risk

This section outlines an overall residual asset risk level, for each of the options.

| Option | Risk Assessment |
|----------|-----------------|
| Option 0 | High |

| | |
|----------|--------|
| Option 1 | Medium |
|----------|--------|

6.5 Economic analysis

| Option | Description | NPV |
|----------------------|--|-------------|
| Option 0 | Do nothing | \$0 |
| Option 1 (preferred) | Relocate assets away from heavily vegetated areas. | \$1,000,000 |

6.5.1 Quantitative Risk Analysis

6.5.2 Benchmarking

6.5.3 Expert findings

6.5.4 Assumptions

Section 2 Approvals (Gated Investment Step 2)

| | | | |
|---------------------------|------------------|--------------|------------|
| Project Initiator: | James Fitzgerald | Date: | 26/03/2015 |
| Project Manager: | | Date: | |

Actions

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