

# Investment Evaluation Summary (IES)



## Project Details:

<b>Project Name:</b>	Replace OH Swtichwire (major)
<b>Project ID:</b>	00709
<b>Thread:</b>	Public Lighting
<b>CAPEX/OPEX:</b>	CAPEX
<b>Service Classification:</b>	Alternative Control
<b>Scope Type:</b>	D
<b>Work Category Code:</b>	RLREL
<b>Work Category Description:</b>	Replace relays - RL control systems
<b>Preferred Option Description:</b>	Replace switch wire
<b>Preferred Option Estimate (Nominal Dollars):</b>	\$382,346

	<b>17/18</b>	<b>18/19</b>	<b>19/20</b>
<b>Unit (\$)</b>	N/A	N/A	N/A
<b>Volume</b>	231	231	231
<b>Estimate (\$)</b>			
<b>Total (\$)</b>	\$191,173	\$191,173	\$191,173

## Governance:

<b>Project Initiator:</b>	Gerard Martindill	<b>Date:</b>	27/03/2015
<b>Thread Approved:</b>	Darryl Munro	<b>Date:</b>	16/10/2015
<b>Project Approver:</b>	Darryl Munro	<b>Date:</b>	16/10/2015

## Document Details:

<b>Version Number:</b>	1
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## Related Documents:

Description	URL
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# Section 1 (Gated Investment Step 1)

## 1. Background

TasNetworks operates switchwire and pilot schemes for streetlighting for both underground and overhead systems. The underground system will be retained and maintained. The intention for the OH switchwire scheme is for it to be maintained to ensure CBD areas and arterial lighting routes are switched together from a central location and that all lights switch on and off together on a daily basis. Maintaining the OH switchwire for these routes will also assist in keeping uniformity and linkages with the UG switchwire schemes.

### 1.1 Investment Need

A road lighting inspection program for OH switchwire scheme is being carried out to identify OH switchwire that is either low in height or in poor asset condition. The investment needed is to replace the switchwire in these two cases to maintain the switchwire network for CBD areas and arterial lighting routes

### 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. This engagement seeks in depth feedback on specific issues relating to: • how it 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) • Increase 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 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

## 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: - the customer, and a strong commitment to delivering services they value - an engaged workplace with strong cultural qualities and people who will be great ambassadors for TasNetworks - a high performing culture with clear accountabilities for deliverables - an appropriate approach to the management and allocation of risk - a well run, efficient business, that delivers sustainable returns to the Tasmanian community and is resilient to future challenges. 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 • Zero harm – significant and reportable incidents • Sustainable cost reduction – efficient operating and capital expenditure

## 4. Current Risk Evaluation

Do nothing is not an acceptable option to TN's risk appetite. If nothing is done, the potential of ageing OH switchwire to fail in service. This will mean a loss of supply to a vast number of lights - affecting public safety and non compliance with the AER and has the potential to fail and hit/liven up either the public or damage public's assets.

### 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
Network Performance	Failure of lighting circuit due to faulty switch wire	Possible	Minor	Low
Safety and People	Public safety due to failure of lights and potential for live wires on ground.	Possible	Severe	High

## Section 1 Approvals (Gated Investment Step 1)

<b>Project Initiator:</b>	Gerard Martindill	<b>Date:</b>	27/03/2015
<b>Line Manager:</b>		<b>Date:</b>	
<b>Manager (Network Projects) or Group/Business Manager (Non-network projects):</b>		<b>Date:</b>	
[Send this signed and endorsed summary to the Capital Works Program Coordinator.]			

<b>Actions</b>			
<b>CWP Project Manager commenced initiation:</b>		<b>Assigned CW Project Manager:</b>	
<b>PI notified project initiation commenced:</b>		<b>Actioned by:</b>	

## Section 2 (Gated Investment Step 2)

### 5. Preferred Option:

Non-demand replacement of switch wire identified by inspection program (RLICM)

#### 5.1 Scope

Replace switch wire as identified during inspection program.

#### 5.2 Expected outcomes and benefits

Switch wire in poor condition is replaced to maintain public safety and network performance.

#### 5.3 Regulatory Test

## 6. Options Analysis

### 6.1 Option Summary

Option description	
Option 0	Do nothing
Option 1 (preferred)	Replace switch wire

### 6.2 Summary of Drivers

Option	
Option 0	Asset will fail in service resulting in loss of lighting circuit and potential for live wires on ground
Option 1 (preferred)	Maintain public safety by replacing switch wire before it fails in service.

### 6.3 Summary of Costs

Option	Total Cost (\$)
Option 0	\$0
Option 1 (preferred)	\$382,346

### 6.4 Summary of Risk

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

Option	Risk Assessment
Option 0	Medium
Option 1	Low

## 6.5 Economic analysis

Option	Description	NPV
Option 0	Do nothing	\$0
Option 1 (preferred)	Replace switch wire	\$0

### 6.5.1 Quantitative Risk Analysis

A quantitative risk analysis has not been completed for this item.

### 6.5.2 Benchmarking

Benchmarking has not been completed for this item.

### 6.5.3 Expert findings

There are no expert findings to report on this project.

### 6.5.4 Assumptions

## Section 2 Approvals (Gated Investment Step 2)

<b>Project Initiator:</b>	Gerard Martindill	<b>Date:</b>	27/03/2015
<b>Project Manager:</b>		<b>Date:</b>	

<b>Actions</b>			
<b>Submitted for CIRT review:</b>		<b>Actioned by:</b>	
<b>CIRT outcome:</b>			