Investment Evaluation Summary (IES)

Project Details:

Project Name:	Remove redundant OH Switchwire
Project ID:	00725
Thread:	Public Lighting
CAPEX/OPEX:	OPEX
Service Classification:	Alternative Control
Scope Type:	B
Work Category Code:	RLDEC
Work Category Description:	Decommission lighting assets:
Preferred Option Description:	Remove redundant OH Switchwire
Preferred Option Estimate (Nominal Dollars):	$8,695,886

	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Unit ($)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Volume	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Estimate ($)								
Total ($)	$624,525	$624,525	$624,525	$624,525	$624,525	$624,525	$624,525	$624,525

Governance:

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

Document Details:

Version Number:	1

Related Documents:

Description	URL

Section 1 (Gated Investment Step 1)

1. Background

This is a newly formed program. This program is driven by the auditing program RLICM: Road lighting Inspection – OH Switchwire (minor). The auditing program will identify the aged asset condition and spans that are low and non compliant. Switchwire has never been proactivley conditioned assess since installation.

As a general rule, no new pilot wire/switch wire is installed in green field installations. The common practice is install LV cabling with individual luminaires controlled by PE cell. The exemption to this rule is if modification to an existing pilot wire/switch wire scheme is required. This ensures all luminaires are controlled by the one control method.

As part of the bulk lamp replacement (BLR) program, all new luminaires installed are controlled directly to the low voltage system (overhead systems only). In some cases this involves removing the connection from the switch wire and re connecting it the low voltage network. The BLR program does not cover the removal of the switch wire.

1.1 Investment Need

The investment required for the remove of OH switchwire for minor lights covers of:

- Removing redundard siwtchwire remaining on TasNetworks' distrubtion system.
- Removal of all assoicated equipment that supports the OH siwtchwire network including relays
- Assessing any remaining streetlights connected to switchwire and arrange their removal and connection to the LV mains.
- Safety concerns for when working on the distrubtion network and our customer's safety.

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 • 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

Forecast operating expenditure 6.5.6 (a) (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

Remove redundant OH Switchwire from the network from lights classified as 'minor' lights (under 100W each load)

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. • 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 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
Reputation	OH switchwire being hit by car TN reputation as a Zero Harm organisation	Unlikely	Moderate	Medium
Safety and People	OH switchwire failing and coming into contact with public	Unlikely	Major	Medium

Section 1 Approvals (Gated Investment Step 1)

Project Initiator:	Gerard Martindill	**Date:**	27/03/2015
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:

Remove redundant OH Switchwire from the network from lights classified as 'minor' lights (under 100W each load)

5.1 Scope

Remove OH switchwire from network where: - it is below min. heigh requirements - where asset condition of switchwire is demeed to be unsafe Remove other redundant related equipment

5.2 Expected outcomes and benefits

Removal of non compliant OH switchwire and removal of aging OH switchwire that is at its end of life resulting in increased safety to the public.

5.3 Regulatory Test

6. Options Analysis

6.1 Option Summary

Option description	
Option 0	Do nothing
Option 1 (preferred)	Remove redundant OH Switchwire

6.2 Summary of Drivers

Option	
Option 0	• Low OH switchwire is hit and comes down. Live or dead can be a safety hazzard. • Redundant equipment not being maintained and will eventually fail.
Option 1 (preferred)	• Low clearances • Ageing assets still in service or on poles • Safety issues to public

6.3 Summary of Costs

Option	Total Cost ($)
Option 0	$0
Option 1 (preferred)	$8,695,886

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)	Remove redundant OH Switchwire	$0

6.5.1 Quantitative Risk Analysis

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

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)

Project Initiator:	Gerard Martindill	**Date:**	27/03/2015
Project Manager:		**Date:**	

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