

Investment Evaluation Summary (IES)



Project Details:

Project Name:	New Streetlight installation (design required)
Project ID:	00602
Thread:	Public Lighting
CAPEX/OPEX:	CAPEX
Service Classification:	Alternative Control
Scope Type:	D
Work Category Code:	RLOLI
Work Category Description:	Install New Roadlighting OH
Preferred Option Description:	Install lights
Preferred Option Estimate (Nominal Dollars):	\$1,950,000

	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	130	130	130	130	130	130	130	130	130	130
Estimate (\$)										
Total (\$)	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000

Governance:

Project Initiator:	Gerard Martindill	Date:	25/03/2015
Thread Approved:	Darryl Munro	Date:	16/10/2015
Project Approver:	Darryl Munro	Date:	16/10/2015

Document Details:

Version Number:	1
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Related Documents:

Description	URL
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Section 1 (Gated Investment Step 1)

1. Background

This program is for the design and construction of new public lighting for special projects such as new subdivisions, intersections and road junctions initiated by developers, municipal councils or government authorities.

For new subdivisions, the public light design is undertaken as part of the subdivision's electrical infrastructure design that includes the underground cabling and associated equipment.

1.1 Investment Need

The investment required is to install new lighting assets onto the network in new subdivisions and other miscellaneous lighting schemes. Without this funding TasNetworks would be unable to meet customer's expectations.

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

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. specifically item 1.

2. Project Objectives

To provide for the installation of luminaires, in both UG and OH areas, when requested by Public Lighting Authorities where designs are required.

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

4. Current Risk Evaluation

Do nothing is not an acceptable option to TN's risk appetite. If nothing is done, new lighting schemes will not be able to be completed and switched on. Customers expectations will not be met.

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	Community complaints if lighting not installed.	Possible	Moderate	Medium
Safety and People	public safety issue if lighting not installed.	Possible	Moderate	Medium

Section 1 Approvals (Gated Investment Step 1)

Project Initiator:	Gerard Martindill	Date:	25/03/2015
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:

Install new street lights as requested by customers where design is required eg new sub division.

5.1 Scope

Work to be undertaken:

1) Supply and erection of standard street luminaires to fulfil requests for additional street lights from public lighting authorities where design and/or alterations to the supply is required to facilitate the installation of the light. This may include but is not limited to the following:

- i) Installation of additional minor overhead street lighting switch wire or Low Voltage extensions necessary to connect the luminaires.
- ii) Installation of additional local control circuitry necessary to connect the luminaires. (ie PE cells, relay controls etc).
- iii) Installation of LV extension to supply additional lights in accordance with the current supply policy. iv) Installation of a new transformer to supply additional lights in accordance with the current supply policy.

2 Particular methodology to undertake the work:

- a) Compliance with the lighting requirements of AS 1158 as directed by the Roadlighting Authority (RLA) for a defined road category as determined by the RLA. Where the RLA elects not comply with the design requirements of AS 1158 then written confirmation is to be gained from the RLA and record kept against that project in WASP.
- b) Timeframes to undertake the work and prioritisation shall be in accordance with the Regulator and section 5.3 of TasNetworks policy NN R AM 05.
- c) Assets generated works will be either e-mailed or electronically transferred to Works and Service Delivery nominated agent. This work should be prioritised in accordance with section 5.3 of TasNetworks policy NN R AM 05 in conjunction with Works and Service Delivery generated work.

EXCLUSIONS Renewal/replacement of existing switch wire circuits undertaken as part of a program of work· Renewal/replacement of existing control undertaken as part of a program of work· Surveys of a general nature to ensure correctness of street lighting records (ie physical checks)

5.2 Expected outcomes and benefits

Lights are installed at request of a customer to maintain public safety and comply with lighting standards.

5.3 Regulatory Test

6. Options Analysis

6.1 Option Summary

Option description	
Option 0	Do nothing
Option 1 (preferred)	Install lights

6.2 Summary of Drivers

Option

Option 0	Safety issue and complaints resulting from failure to install lights as requested by customers.
Option 1 (preferred)	Lights installed according to required standards as per customer requests.

6.3 Summary of Costs

Option	Total Cost (\$)
Option 0	\$0
Option 1 (preferred)	\$1,950,000

6.4 Summary of Risk

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

Option	Risk Assessment
Option 0	Medium
Option 1	Medium

6.5 Economic analysis

Option	Description	NPV
Option 0	Do nothing	\$0
Option 1 (preferred)	Install lights	\$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

Volumes based on historical trend over last 5 years.

Section 2 Approvals (Gated Investment Step 2)

Project Initiator:	Gerard Martindill	Date:	25/03/2015
Project Manager:		Date:	

Actions

Submitted for CIRT review:		Actioned by:	
CIRT outcome:			