

Investment Evaluation Summary (IES)



Project Details:

Project Name:	Rectification of Transformers (LAP)
Project ID:	00740
Thread:	Reliability
CAPEX/OPEX:	CAPEX
Service Classification:	Standard Control
Scope Type:	D
Work Category Code:	PRTXI
Work Category Description:	Rectification work multi visit transformers
Preferred Option Description:	Installation and/or relocation of distribution transformer
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	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:	Ewan Sherman	Date:	27/03/2015
Thread Approved:	Stephen Jarvis	Date:	19/10/2015
Project Approver:	Stephen Jarvis	Date:	19/10/2015

Document Details:

Version Number:	1
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Related Documents:

Description	URL
Network Development Management Plan	-

Section 1 (Gated Investment Step 1)

1. Background

Network development works associated with addressing and maintaining reliability performance includes:

- Addressing the worst performing HV feeders;
- Addressing the poorest performing Reliability Communities.
- Maintaining Reliability Category performance at a system level (refer TEC).

This program includes the installation of new, or the relocation of existing distribution transformer to manage the localised reliability issues that result in poor levels of service as experienced by customers, but may not be captured effectively at the HV system level (feeder and community performance).

1.1 Investment Need

The installation of new or relocation of existing distribution transformer are required to manage:

- poor levels of services as experienced by customer in terms of reliability; and
- customer inconvenience due to the frequent outages caused by local problems (such as faulty distribution transformer).

The management of the above risks support TasNetworks to deliver the following:

- Compliance with regulatory obligations; and
- 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. 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); and
- 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.

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:
 - the quality, reliability or security of supply of standard control services; or
 - the reliability or security of the distribution system through the supply of standard control services, to the relevant extent:
 - maintain the quality, reliability and security of supply of standard control services; and
 - 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

Maintain reliability performance at a local level to:

- Maintain network performance;
- Manage business operating risks; and
- comply with regulatory, contractual and legal responsibilities; in

accordance with the TasNetworks Reliability Strategy and Network Development Management Plan

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.
- Rectify identified performance issue such that the reliability performance at a local level is maintained

3.2 Business Initiatives

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

- 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 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:
 - Price for customers – lowest sustainable prices
 - Network service performance – meet network planning standards
 - Network service performance – outcomes under service target performance incentive schemes

4. Current Risk Evaluation

The current risk evaluation is Medium depending on specific element location within the network

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
Customer	Material Supply Interruption, and contribution towards: <ul style="list-style-type: none"> • substandard performance (SAIFI and SAIDI) • unavailability of network services • negative impact on community values and expectations • Increased customer complaints 	Likely	Negligible	Low

	<ul style="list-style-type: none"> • Reputation damage 			
Environment and Community	<p>Significant localised environmental impact with short-term effects where there is an Increased risk of conductor clashing or failure leading to interruptions and fire ignition and explosion and expulsion of oil, particular in regards to:</p> <ul style="list-style-type: none"> • High bushfire risk areas; • Area's of environmental significance 	Likely	Minor	Medium
Financial	Higher cost associated with repairing equipment under fault, compensation payments, under regulatory regime - STPIS outcomes;	Likely	Negligible	Low
Network Performance	<p>Running the system in an insecure state or above its capability that may lead to consequential failures</p> <p>Protection operation initiated interruptions to supply</p> <p>Rotational interruptions to supply to manage equipment loading and downed networks</p>	Likely	Minor	Medium
Regulatory Compliance	<p>Non-compliance with obligations, resulting in:</p> <ul style="list-style-type: none"> • Minor fine, or • breach of code and standard or licence for TEC, NER, connection agreements, legislation and regulation; 	Likely	Negligible	Low
Reputation	<p>Non-sustained state press coverage including wider social media coverage, particularly in regards to:</p> <ul style="list-style-type: none"> • High bushfire risk areas; • Area's of environmental significance 	Likely	Negligible	Low
Safety and People	<p>Explosion, or decreased operating clearances resulting in:</p> <ul style="list-style-type: none"> • Increasing risk of third party contact • Electric shock or electrocution • Physical damage or harm. 	Likely	Negligible	Low

Section 1 Approvals (Gated Investment Step 1)

Project Initiator:	Ewan Sherman	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:

Installation and/or relocation of Transformers to maintain reliability performance at a local level in accordance with the TasNetworks Reliability Strategy and Network Development Management Plan

5.1 Scope

Undertake minor HV rectification works associated with distribution transformers

5.2 Expected outcomes and benefits

In determining the scope of work required for network reinforcement work, TasNetwork assess the constraint and assessed options in conjunction with:

- the Network Development Management plan;
- the Asset Management plans; and
- Area Strategy reports;

This ensures opportunity or 'bring-forward' investment by TasNetworks is managed sustainably.

5.3 Regulatory Test

Not applicable.

6. Options Analysis

The following tables provide a brief summary of the options considered as part of a desk top assessment and in accordance with the Network Development Management plan

6.1 Option Summary

Option description	
Option 0	Do nothing
Option 1 (preferred)	Installation and/or relocation of distribution transformer

6.2 Summary of Drivers

Option	
Option 0	Continued poor level of service to localised customers.
Option 1 (preferred)	Local reliability has a marginal impact on community and state wide category performance. The preferred option (from the available options detailed in the Options Summary) will rectify the localised reliability issue such that the reliability performance at a local level is maintained; providing some benefit on maintaining reliability performance at a Community and state wide category level in accordance with TasNetworks Reliability Strategy.

6.3 Summary of Costs

Option	Total Cost (\$)
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Option 0	\$0
Option 1 (preferred)	\$0

6.4 Summary of Risk

As a result of the program the target risk assessment will be Low.

6.5 Economic analysis

Option	Description	NPV
Option 0	Do nothing	\$0
Option 1 (preferred)	Installation and/or relocation of distribution transformer	\$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:	27/03/2015
Project Manager:		Date:	

Actions

Submitted for CIRT review:		Actioned by:	
CIRT outcome:			