Investment Evaluation Summary (IES)

Project Details:

Project Name:	Install Service Connections (New Installations)
Project ID:	00759
Thread:	Connection Assets
CAPEX/OPEX:	CAPEX
Service Classification:	Alternative Control
Scope Type:	B
Work Category Code:	SCNEW
Work Category Description:	Install Service Connections (New Installations)
Preferred Option Description:	Install and reinforce service connections
Preferred Option Estimate (Nominal Dollars):	$24,000,000

	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
Unit ($)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Volume	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Estimate ($)										
Total ($)	$2,400,000	$2,400,000	$2,400,000	$2,400,000	$2,400,000	$2,400,000	$2,400,000	$2,400,000	$2,400,000	$2,400,000

Governance:

Project Initiator:	Darryl Munro	**Date:**	30/03/2015
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 program is based on historical data and dependant on the housing and general economy. New services are installed when new dwellings and businesses are connected to the Distribution System. This category also includes upgrades of services to cater for a change in the customers load requirements.

Currently approximately 213,000 installations are connected to the network via overhead service conductors.

1.1 Investment Need

This customer initiated program is for the installation and upgrade of service conductors and fuses required for connection of new and upgraded customer installations.

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 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)
- 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 and affordability.

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

(2) comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;

(4) Maintain the safety of the distribution system through the supply of standard control services.

2. Project Objectives

Installation and reinforcement of LV service connection assets to facilitate connection of customers to the network.

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

The strategic key performance indicators that will be impacted through undertaking this project are as follows:

- 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 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
Network Performance	Power quality issues due to overloaded service assets. Failure to connect customers to GSDs.	Possible	Minor	Low
Regulatory Compliance	Failure to connect customers to network.	Almost Certain	Moderate	High
Reputation	Negative publicity resulting from poor customer service and failure to connect customers to network.	Almost Certain	Moderate	High

Section 1 Approvals (Gated Investment Step 1)

Project Initiator:	Darryl Munro	**Date:**	30/03/2015
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 reinforcement of LV service connection assets to facilitate connection of customers to the network.

5.1 Scope

1 Work to be undertaken The work to be undertaken shall be the installation / upgrading of service wires and service fuses (including U/G service fuses) for customer power supply connections up to 100A per phase.

2 Particular methodology to undertake the work:

a) Customers mains box will be inspected to ensure serviceability

b) The work will generally involve the installation of new services as requested by electrical contractors. This may also include the installation of additional fuses in underground turrets or streetlight columns as required.

c) A new service shall include all components from the pole to the customers main box or equivalent (including service conductor, fuse holder, fuse cartridge and tails into the mains box)

d) Service and service wire installation work to be completed in accordance with TasNetworks customer charter & KPI requirements meeting agreed customer connection date.

e) Construction work to be co-ordinated with Works & Services Delivery and be completed by agreed customer connection date.

f) Service Installation will include the fitting of the house bracket (anchoring point) as required.

g) In addition to work performed, and prior to leaving the site, all connections on a pole and/or point of attachment where work is undertaken shall be checked and tightened/replaced where required, e.g. check the service fuse, mains box, service tails, PG clamps, D's & T's, visual inspection of TX neutral earth's etc.

h) In addition to work performed a visual inspection of the immediate site shall be undertaken to ensure minimum clearance standards are maintained for all overhead conductors.Details of the New and upgraded installations shall be recorded, including address, Pole ID serviced off, size of cable, type and number of service fuse, size of service fuse cartridge, type of strain clamp at POA, if raiser bracket used, fascia material. This electronic data shall be capable of being attached to a Pole ID in WASP

5.2 Expected outcomes and benefits

This capital expenditure is required to:

- Install new service connection assets in response to customer requests to connect to the network; and
- Reinforce service connection assets assets in response to customer upgrades

5.3 Regulatory Test

6. Options Analysis

Option 0: Do nothing
Advantages

- Less expenditure than option 1.

Disadvantages

- Non compliance with NER due to failure to connect customers to network.
- Increased power quality issues resulting form overloaded connection assets.
- Poor customer service resulting in complaints and negative publicity.

Option 1: Install and reinforce service connections
Advantages

- Connects customers to network and therefore complies with NER.
- Enables reinforcement activities to be in response to customer upgrades.
- Assets upgraded in response to customer upgrades reduces potential for power quality issues relating to overloading of the connection assets.
- Enables good customer service in response to customer requested work.

Disadvantages

- More expensive than option 0.

6.1 Option Summary

Option description	
Option 0	Do nothing
Option 1 (preferred)	Install and reinforce service connections

6.2 Summary of Drivers

Option	
Option 0	• Install new service connection assets in response to customer requests to connect to the network - No • Reinforce service connection assets assets in response to customer upgrades - No
Option 1 (preferred)	• Install new service connection assets in response to customer requests to connect to the network - Yes • Reinforce service connection assets assets in response to customer upgrades - Yes

6.3 Summary of Costs

Option	Total Cost ($)
Option 0	$0
Option 1 (preferred)	$24,000,000

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	Low

6.5 Economic analysis

Option	Description	NPV
Option 0	Do nothing	$0
Option 1 (preferred)	Install and reinforce service connections	$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

No expert findings have been used for this item.

6.5.4 Assumptions

Volumes and expenditure are based on historical trend over the past 7 years.

Section 2 Approvals (Gated Investment Step 2)

Project Initiator:	Darryl Munro	**Date:**	30/03/2015
Project Manager:		**Date:**	

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