

NEED/OPPORTUNITY STATEMENT (NOS)



Buildings Capital Works Program

NOS- 000000001453 revision 1.0

Ellipse project no.: P0008471

TRIM file: [TRIM No]

Project reason: Support the business - Facilities upgrade or replacement

Project category: Prescribed - Asset Renewal Strategies

Approvals

Author	Kenson Ho	Property & Facilities Strategy Team Leader
Endorsed	Heather Wagland	Property & Environment Asset Manager
Review	Azil Khan	Investment Analysis Manager
Approved	Lance Wee	M/Asset Strategy
Date submitted for approval	9 November 2016	

Change history

Revision	Date	Amendment
0	28 June 2016	Initial issue
1	7 July 2016	Update to 2016/17 dollars
2	9 November 2016	Update to format

1. Background

TransGrid owns and manages an extensive building portfolio. TransGrid has a business objective to ensure its building portfolio is maintained to a required standard while minimising its risk and maximising efficiencies in its delivery. Substation buildings are primarily required to ensure that housed network equipment is in a secure, weatherproof environment. The potential consequences from a water leak could range from a minor disturbance within the staff amenities to a major loss of load if network equipment is damaged.

Condition assessments for 97 properties were performed during late 2015 and early 2016, which provided condition data for each sites as well as establish indicative timeframes for when each site will require work in the short, medium or long term to ensure business objectives are met.

This high level review of the condition data provided the basis to develop a list for ranking each site's priority for building works to ensure the protection and weatherproofing of the sites. A more detailed review was undertaken in consultation with the condition report consultants to refine the ranking of all sites. This was followed by a criticality review as well as the input of a life span ranking when the building works were required. Based on our analysis and consultation with respective field services representatives a list of 12 substation sites were identified having priority and requiring further consideration for the 2019-23 regulatory period.

2. Need/opportunity

Twelve substation site buildings were identified as requiring further consideration following the analysis as outlined above. These sites have a greater priority for further attention to minimise potential risks to the housed network equipment for the life of those assets. The list of the identified 12 sites that will require works over this period due to condition and ongoing water ingress to the buildings are listed in Attachment 1.

3. Related Needs/opportunities

Many of the sites highlighted within this request may be subject to other works including substation refurbishments, secondary system replacements and unregulated communication projects. Further investigations will allow a more complete consideration of the interrelated Needs and users for each site, and to identify delivery efficiencies and cost savings as oppose to work being grouped as individual programs.

4. Recommendation

It is recommended that options be considered to address the identified Need.

Attachment 1 – Risk costs summary

Table 1 – Sites requiring significant roof remediation/replacement by 2023 (\$ thousand)

Site Location	Pre-Investment Risk Cost
Cowra	111
Narrabri	239
Wellington	176
Wallerawang 330	695
Narrabri	239
Wellington	176
Sydney South	201
Dapto	222
Cowra	111
Bayswater	117
Mt Piper 500	115
Newcastle	118
Sydney East	92
Tumut	45
Sydney North	105
	2,236

The pre-investment risk cost considers the following;

- > Probability of failure is based on the condition of the asset.
- > Consequence considers the hazards, uncontrolled electrical discharge and structure collapse. This is moderated by extremely low likelihood of consequence percentage.