

## Proposed Robertson Barracks electrical reticulation system upgrade, Darwin, Northern Territory

- 3.1 The proposed Robertson Barracks electrical reticulation project aims to provide a major upgrade to the electrical distribution system on the base in order to meet existing demand, with sufficient redundancy, and to meet future demand resulting from continuing developments on the base.
- 3.2 The primary objectives of this project are to:
- upgrade the existing high voltage power supply and distribution system so that it is reliable and has adequate redundancy to maintain power supply to essential infrastructure in the event of failure of one of the supply points; and
  - provide sufficient spare capacity to allow for future development of the base for approximately 15 years.
- 3.3 The proposal was referred to the Committee on 23 March 2011.

### Conduct of the inquiry

- 3.4 The inquiry was advertised in local and national newspapers and submissions sought from those with a direct interest in the proposal. The Committee received one submission and one confidential supplementary submission detailing the project costs. A list of submissions can be found at Appendix A.
- 3.5 The Committee undertook a site inspection, public hearing and an in-camera hearing on the project costs on 4 May 2011 in Darwin.

- 3.6 The transcript of the public hearing as well as the submissions to the inquiry are available on the Committee's website.<sup>1</sup>

## Need for the works

- 3.7 The Department of Defence stated that there has been significant growth within the base, including:
- general growth associated with changes to Army's command and operational requirements over the last 15 years;
  - construction of the 1st Aviation Regiment facilities; and
  - additional living-in accommodation.
- 3.8 The Department explained that growth within the base has led to increased demands on the electrical reticulation system throughout the base, resulting in almost no spare capacity within the existing system. The Department also stated that the system is prone to failure during tropical and electrical storms and does not provide adequate redundancy.
- 3.9 The Committee finds that there is a need for the works.

## Scope of the works

- 3.10 The proposed scope of the works is detailed in Submission 1: Defence.
- 3.11 To support the upgrade works proposed by this project, the Northern Territory's Power and Water Corporation (PaWC) has agreed to complete staged increases in the high voltage power supply to the base.
- 3.12 The on-base works will include the following:
- installation of a new intake switching station (ISS1), upgrading of an existing intake station (IS1) and upgrading two existing intake switching stations (ISS2 and ISS3);
  - extension of Feeder A from IS1 to ISS1 and interconnection of all the intake switching stations;
  - installation of high voltage cables to improve ring main configuration;
  - installation of five new substations, upgrading the equipment in five existing substations and upgrading the capacity of one substation;

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1 <[www.aph.gov.au/pwc](http://www.aph.gov.au/pwc)>

- extension of the primary and secondary high voltage distribution systems;
- upgrading the network configuration;
- increasing the existing emergency power from 1.0 MVA to 7.0 MVA by constructing a new 7.0 MVA central emergency power station (the existing 1.0 MVA central emergency power station will be decommissioned); and
- installation of new power control and monitoring systems.

3.13 Construction will commence in late 2011 and be completed in mid 2013.

3.14 The Committee finds that the proposed scope of works is suitable to meet the needs of Robertson Barracks.

## Cost of the works

3.15 The total out-turn cost for this project is \$43.4 million, excluding GST, which includes the cost of management and design fees, construction, equipment, contingencies and an allowance for escalation. The Committee received a confidential supplementary submission detailing the project costs and held an in-camera hearing with the Department on the project costs.

3.16 The Committee is satisfied that the costings for the project provided to it are adequate.

## Project issues

### Project partner

3.17 The Committee sought more detail regarding the relationship between the Department and the PaWC, in relation to this particular project.

3.18 When asked whether there were any particular difficulties foreseen in completing the work in the proposed time, in light of the need to work closely with the PaWC, the Department explained:

We do have an undertaking from Power and Water Corporation where they have indicated to us their master planning for electrical supply in that area, and we have had an exchange of

letters to the effect that we understand exactly what they are planning to do and the time frames that they are planning to do it. We have developed this project around the time frames of Power and Water Corporation. So the expectation is that we will have the infrastructure ready and in place within the base at around the same time that Power and Water Corporation are in a position where they can turn on the larger feeders to the base.<sup>2</sup>

- 3.19 The Department's project manager explained that they had been working with the PaWC for more than a year to ensure that they are abreast of all of the requirements of the Department and the base itself.<sup>3</sup>
- 3.20 The Department provided to the Committee a letter from PaWC outlining its commitment to the Department's project objectives and timelines.
- 3.21 The Department also explained that the program of works for the Robertson Barracks upgrade project is achievable, including trade and supply issues, despite a significant amount of work being conducted in the Darwin area over the next two to three years.

## Committee comment

- 3.22 Overall, the Committee is satisfied that this project has merit in respect of need, scope and cost.
- 3.23 Having examined the purpose, need, use, revenue and public value of the works, the Committee considers that it is expedient that the proposed works proceed.

## Recommendation 4

**The Committee recommends that the House of Representatives resolve, pursuant to Section 18(7) of the *Public Works Committee Act 1969*, that it is expedient to carry out the following proposed work: Robertson Barracks electrical reticulation system upgrade, Darwin, NT.**

2 Brig. D. Naumann, Department of Defence, *proof transcript of evidence 4 May 2011*, p. 4.

3 Mr. M. Wright, contractor's representative, Department of Defence, *proof transcript of evidence*, 4 May 2011, p. 5.