The Parliament of the Commonwealth of Australia

Report 2/2010

Referrals made February to March 2010

Centre for Accelerator Science and extension to facilities for the Australian Nuclear Science and Technology Organisation, Sydney, NSW

Fitout of new leased premises for the Department of Climate Change and Energy Efficiency of the New Acton Nishi Building, Canberra, ACT

Construction of housing for Defence at Voyager Point, Liverpool, NSW

Construction of housing for Defence at Muirhead, Darwin, NT

Pawsey High Performance Computing Centre for SKA Science, Perth, WA

Parliamentary Standing Committee on Public Works

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Membership of the Committee

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List of abbreviations

ANSTO	Australian Nuclear Science and Technology Organisation
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
CAS	Centre for Accelerator Science
DHA	Defence Housing Australia
DCCEE	Department of Climate Change and Energy Efficiency
HPC	High Performance Centre
NABERS	National Australian Built Environment Rating System
NCA	National Capital Authority
SKA	Square Kilometre Array

List of recommendations

2 Centre for Accelerator Science and extension to facilities for the Australian Nuclear Science and Technology Organisation, Sydney, NSW

Recommendation 1

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: construction of a Centre for Accelerator Science and extension to facilities for the Australian Nuclear Science and Technology Organisation, Sydney, NSW.

3 Fitout of new leased premises for the Department of Climate Change and Energy Efficiency at the New Acton Nishi building, Edinburgh Avenue, Canberra City, ACT

Recommendation 2

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: fitout of new leased premises for the Department of Climate Change and Energy Efficiency at the New Acton Nishi building, Edinburgh Avenue, Canberra City, ACT.

4 Construction of housing for Defence at Voyager Point, Liverpool, NSW

Recommendation 3

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: construction of housing for Defence at Voyager Point, Liverpool, NSW.

5 Construction of housing for Defence at Muirhead, Darwin, NT

Recommendation 4

The Committee recommends Defence Housing Australia take the opportunity to provide resources about living in a tropical climate for personnel who are new to living in Darwin.

Recommendation 5

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: construction of housing for the Department of Defence at Muirhead, Darwin, NT.

6 Pawsey High Performance Computing Centre for SKA Science at Kensington, WA

Recommendation 6

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: construction of the Pawsey High Performance Computing Centre for SKA Science at Kensington, WA.

1

Introduction

1.1 Under the *Public Works Committee Act 1969* (the Act), the Parliamentary Standing Committee on Public Works is required to enquire into and report on public works referred to it through either house of Parliament. Referrals are generally made by a delegate of the Minister for Finance.

1.2 All public works that have an estimated cost exceeding $15 million must be referred to the Committee and cannot be commenced until the Committee has made its report to Parliament and the House of Representatives receives that report and resolves that it is expedient to carry out the work.[1]

1.3 Under the Act, a public work is a work proposed to be undertaken by the Commonwealth, or on behalf of the Commonwealth concerning:

- the construction, alteration, repair, refurbishment or fitting-out of buildings and other structures;
- the installation, alteration or repair of plant and equipment designed to be used in, or in relation to, the provision of services for buildings and other structures;
- the undertaking, construction, alteration or repair of landscaping and earthworks (whether or not in relation to buildings and other structures);

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1 *Public Works Committee Act 1969* (the Act), Part III, Section 18(8). Exemptions from this requirement are provided for work of an urgent nature, defence work where is would be contrary to the public interest to conduct an open inquiry, repetitive work, and work undertaken by prescribed authorities listed in the regulations to the Act.

- the demolition, destruction, dismantling or removal of buildings, plant and equipment, earthworks, and other structures;
- the clearing of land and the development of land for use as urban land or otherwise; and
- any other matter declared by the regulations to be a work.[2]

1.4 The Act requires that the Committee consider and report on:

- the purpose of the work and its suitability for that purpose;
- the need for, or the advisability of, carrying out the work;
- whether the money to be expended on the work is being spent in the most cost effective manner;
- the amount of revenue the work will generate for the Commonwealth, if that is its purpose; and
- the present and prospective public value of the work.[3]

1.5 The Committee pays attention to these and any other relevant factors when considering the proposed work.

Matters addressed in this report

1.6 Works considered in this report were referred to the Committee between February and March 2010.

1.7 In considering the works, the Committee analysed evidence presented by the proponent agency, public submissions and evidence received at public and in-camera hearings.

1.8 In consideration of the need to report expeditiously as required by Section 17(1) of the Act, the Committee has only reported on major issues of concern.

1.9 The Committee appreciates, and fully considers, the input of the community to its inquiries. Those interested in the proposals considered in this report are encouraged to access the full inquiry proceedings available on the Committee's website.[4]

1.10 Chapter 2 addresses the proposed construction of a Centre for Accelerator Science, and the extensions to the Bragg Institute and OPAL Reactor buildings, for the Australian Nuclear Science and Technology Organisation (ANSTO) at an estimated cost of $62.5 million (including GST).

2 The Act, Section 5.

3 The Act, Section 17.

4 <aph.gov.au/pwc>

1.11 Chapter 3 addresses the proposed fitout of new leased premises for the Department of Climate Change and Energy Efficiency (DCCEE) at the New Acton Nishi building, Canberra City at an estimated cost of $20.5 million (excluding GST).

1.12 Chapter 4 addresses the proposed construction of housing for the Department of Defence at Voyager Point, Liverpool, New South Wales, by Defence Housing Australia (DHA) at an estimated cost of $45.1 million (including GST).

1.13 Chapter 5 addresses the proposed construction of housing for the Department of Defence at Muirhead, Darwin, Northern Territory, by Defence Housing Australia (DHA) at an estimated cost of $43.5 million (including GST).

1.14 Chapter 6 addresses the proposed construction of the Pawsey High Performance Computing Centre for Square Kilometre Array Science in Kensington, Western Australia at an estimated cost of $66.0 million (excluding GST).

1.15 Submissions are listed at Appendix A and Appendix B lists inspections, hearings and witnesses.

2

Centre for Accelerator Science and extension to facilities for the Australian Nuclear Science and Technology Organisation, Sydney, NSW

2.1 The proposed construction of a Centre for Accelerator Science, and the extensions to the Bragg Institute and OPAL Reactor buildings for the Australian Nuclear Science and Technology Organisation (ANSTO), aim to provide facilities for new Accelerator Mass Spectrometry and Ion Beam Analysis, as well as additional offices, laboratories workshops and assembly areas at ANSTO's Lucas Heights site in Sydney, NSW. The estimated cost of the project is $62.5 million (including GST).

2.2 The proposal was referred to the Committee on 25 February 2010.

Conduct of the inquiry

2.3 The inquiry was advertised in *The Australian* and submissions sought from those with a direct interest in the project. The Committee received four submissions and two confidential supplementary submissions detailing the project costs. A list of submissions can be found at Appendix A.

2.4 The Committee undertook a site inspection, public hearing and an in-camera hearing on the project costs on 9 April 2010 in Sydney. The hearings were held in the council room of the Australian Institute of Nuclear Science and Engineering, publicly accessible and adjacent to the ANSTO visitors centre.

2.5 The transcript of the public hearing as well as the submissions to the inquiry are available on the Committee's website.[1] Plans for the proposed works are detailed in Submission 1: ANSTO.

Need for works

2.6 The ANSTO submission states the need for works as:

- the Centre for Accelerator Science (CAS) will house two new world-class accelerators, along with associated laboratories, workshops and offices. The accelerators will be used to conduct research that is prominent within the National Research Priorities;
- the Bragg Institute extensions will provide sufficient office, laboratory, assembly, amenity and meeting-room space to service planned new Neutron Beam Instruments, as well as allowing for the consolidation of deuteration facilities currently spread across the site; and
- the OPAL Reactor building extensions will accommodate all parts of Reactor Operations in the Reactor building, which will improve efficiency of staff, provide space for increased production of radioisotopes, as well as vacate ageing buildings scheduled for demolition.

2.7 The Committee finds that there is a need for the proposed works.

Scope of works

2.8 The proposed scope of the works is detailed in Submission 1: ANSTO. In short the project proposes the following:

Centre for Accelerator Science

2.9 The Centre for Accelerator Science will comprise two buildings, incorporating:

- accelerator hall and associated plant rooms, control room, technical work areas and user laboratories (total 1986 m^2);
- Accelerator Mass Spectrometry Chemistry laboratories, including office space and staff common areas (total 912 m^2);
- Uranium Series Laboratories, including instruments (total 394 m^2); and

1 <aph.gov.au/pwc>

- visitor display area, particularly for school and tour groups to view facilities.

2.10 During the site inspection, the Committee noted that ANSTO had not made a final determination about the number of buildings to be constructed for the CAS. At the hearing, the Committee was told that ANSTO was awaiting architectural costings to determine the most cost-efficient building solution.[2]

2.11 ANSTO has since made a supplementary submission advising the Committee of its final decision regarding the layout of the Centre, outlined above. It is fundamental that projects are developed to an appropriate level of detail when referred for inquiry, particularly as failure to do so can delay the Committee reporting on projects.

Bragg Institute

2.12 The Bragg Institute project comprises major extensions to the Neutron Guide Hall and Bragg Institute building, (building numbers 82 & 87 respectively) entailing:

- 3250 m^2 of floor space, providing accommodation for approximately 150 people;
- assembly areas, laboratories and offices;
- a basement which will house a future carpark; and
- a new enclosed linkway between buildings 83 and 87.

OPAL Reactor

2.13 The OPAL Reactor project comprises:

- an extension to the existing OPAL Reactor building (building number 80), providing an additional 2388 m^2 floor space, and 283 m^2 of minor refurbishment;
- within those areas laboratory, workshop and office accommodation for:
  - ⇒ Engineering and Maintenance Facilities (including the Instrument and Control group);
  - ⇒ Nuclear Analysis group;
  - ⇒ IT Services group;

2 Dr A. Paterson, Chief Executive Officer, ANSTO, *Transcript of Evidence*, 9 April 2010, p.9.

- ⇒ Technical Support group;
- ⇒ Target and Canning group;
- ⇒ Training group; and
- ⇒ Utilisation group.

2.14 Construction is due to commence in December 2010 and be completed in late 2012.

2.15 The Committee finds that the proposed scope of works is suitable to meet the needs of the ANSTO project.

Cost of works

2.16 The total estimated out-turn cost for this project is $62.5 million including GST. The Committee received a confidential supplementary submission detailing the project costs and took evidence in the in-camera hearing regarding the project costs.

2.17 The Committee notes that, if project savings are made, they will be delivered back to ANSTO's central fund. The Committee understands that there are extensions to the project scope that could then be funded, such as an increase in the voltage of accelerators for the new Centre for Accelerator Science.[3]

2.18 The Committee is satisfied that the costings for the project provided to it are adequate, and suitable contingency planning is in place to ensure budget overruns in any one area do not compromise the project as a whole.

Project issues

Strategic planning

2.19 During its site inspection and public hearing, the Committee discussed ANSTO's internal planning structures. In particular, ANSTO has recently developed a 'site plan' for the next 45 years, that is until 2055.[4] The plan will enable ANSTO to make prudent site-wide decisions about the

3 Dr A. Paterson, CEO, ANSTO, *Transcript of Evidence*, 9 April 2010, p.5.

4 Dr A. Paterson, CEO, ANSTO, *Transcript of Evidence*, 9 April 2010, p.11.

footprint of new buildings, and the Committee is pleased to note that the three projects currently under consideration form part of the 45-year plan.

2.20 While it is concerning that ANSTO has never before had such a plan, the Committee is pleased to note its inception and is encouraged by the enthusiastic acceptance of it by staff. This kind of long-term planning is particularly important for an organisation like ANSTO, as its research equipment generally has a long lifetime, and some low-level radioactive waste is produced and stored onsite.[5]

2.21 Scientific research organisations develop and maintain equipment and infrastructure that is often unique in Australia. In addition, scientific instruments are generally built at the 'bleeding edge' of design.[6] For these reasons, such organisations must often rely on internal expertise and collaboration, making organisational planning absolutely fundamental to the success of new equipment and infrastructure. This planning is also crucial to ensure that publicly funded research is sustainable and provides value for money. The Committee commends ANSTO on its renewed attention to long-term planning.

Committee comment

2.22 The research undertaken by ANSTO spans a wide range of fields, including:

- climate and environmental science, nuclear safeguards and forensics, human history;[7]
- materials science and structural biology; [8] and
- life sciences, medicine, chemistry, engineering science, medical, physical and radiation physics.[9]

2.23 As well as its scientific research, ANSTO makes significant contributions to medicine. The most important of these contributions is the production of Molybdenum-99, which is a precursor material to Technetium-99m, used for medical nuclear-imaging in hospitals around the world. Whilst

5 Dr A. Paterson, CEO, ANSTO, *Transcript of Evidence*, 9 April 2010, p.14.
6 Dr A. Paterson, CEO, ANSTO, *Transcript of Evidence*, 9 April 2010, p.6.
7 Dr A. Paterson, CEO, ANSTO, *Transcript of Evidence*, 9 April 2010, p.2.
8 Submission 1b, ANSTO, p.2.
9 Submission 1c, ANSTO, p.4.

much of the world's supply of Molybdenum-99 has to date been produced in Canada, there is a looming international shortage.[10]

2.24 ANSTO indicated at the public hearing that it would be seeking regulatory approval from the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) to produce more Molybdenum-99 in the short term.[11] ANSTO also indicated its desire to be a bigger contributor to radiopharmaceutical production in the long-term.[12]

2.25 The Committee reiterates the importance of the scientific research carried out by ANSTO, and also underlines the practical contribution ANSTO makes to medicine. The proposals before the Committee all contribute to ANSTO's ability to continue its research and production, and highlight the contribution made by public research organisations to Australia and the world.

2.26 Overall, the Committee is satisfied that this project has merit in terms of need, scope and cost.

2.27 Having examined the purpose, need, use, revenue and public value of the work, the Committee considers that it is expedient that the proposed works proceed.

Recommendation 1

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: construction of a Centre for Accelerator Science and extension to facilities for the Australian Nuclear Science and Technology Organisation, Sydney, NSW.

10 Dr A. Paterson, CEO, ANSTO, *Transcript of Evidence*, 9 April 2010, p.15.

11 Dr A. Paterson, CEO, ANSTO, *Transcript of Evidence*, 9 April 2010, p.15.

12 Dr A. Paterson, CEO, ANSTO, *Transcript of Evidence*, 9 April 2010, p.17.

3

Fitout of new leased premises for the Department of Climate Change and Energy Efficiency at the New Acton Nishi building, Edinburgh Avenue, Canberra City, ACT

3.1 The proposed fitout of new leased premises for the Department of Climate Change and Energy Efficiency (DCCEE) at the New Acton Nishi building, Canberra City, ACT aims to provide new, contemporary office accommodation, with a 5-star National Australian Built Environment Rating System (NABERS) rating, showcasing practical leading edge environmental initiatives. The estimated cost of the project is $20.5 million (excluding GST).

3.2 The proposal was referred to the Committee on 11 March 2010.

Conduct of the inquiry

3.3 The inquiry was advertised in *The Australian* and submissions sought from those with a direct interest in the project. The Committee received nine submissions and one confidential supplementary submission detailing the project costs. A list of submissions can be found at Appendix A.

3.4 The Committee undertook a site inspection, public hearing and an in-camera hearing on the project costs on 10 May 2010 in Canberra.

3.5 The transcript of the public hearing as well as the submissions to the inquiry are available on the Committee's website.[1] Plans for the proposed

1 <aph.gov.au/pwc>

works are detailed in Submission 1: Department of Climate Change and Energy Efficiency.

Scope of the inquiry

3.6 The Parliamentary Standing Committee on Public Works can only inquire into works that are referred to it. The present inquiry was conducted into the fitout works proposed by the Department of Climate Change and Energy Efficiency. The construction of the Acton Nishi building itself is not a 'public work', as defined by the *Public Works Committee Act 1969*, and was not referred to the Committee for inquiry.

3.7 When the Committee conducts an inquiry into a proposed fitout, the inquiry does not include the building in which the fitout is housed. Elements of the building may be relevant to the Committee's consideration, but the Committee must confine its consideration to elements (if any) that have a practical impact on the fitout.

3.8 Whilst there is considerable community disquiet about the Acton Nishi building, the Committee cannot investigate the question of the building's approval by the relevant government authority, the National Capital Authority (NCA). Such approval has been given, and the Committee will restrict its report to consideration of the proposal referred by the Parliament for inquiry.

Need for works

3.9 The DCCEE submission states that the works are needed as:

- the current accommodation, principally at number 2 Constitution Avenue Canberra and number 20 Allara Street Canberra, have fitouts that are mostly more than 20 years old, in poor condition, and designed for previous tenants;
- the Department currently leases two additional short-term workspaces, and the dispersal of departmental offices across four locations is inefficient and disrupts collaborative work practices;
- current accommodation is of poor quality, dysfunctional and incapable of economical refurbishment to contemporary standards; and
- the Department ideally needs accommodation that effectively reflects its mandate as the lead agency for the development and implementation of the Government's climate change framework, including the reduction of greenhouse gas emissions.

3.10 The Committee inspected current premises at 2 Constitution Avenue and agrees that the facilities are in very poor condition.

3.11 The Committee finds that there is a need for the proposed works.

Scope of works

3.12 The proposed scope of the works is detailed in Submission 1: Department of Climate Change and Energy Efficiency. In short, the project proposes the following works, integrated into the construction of the base building:

- open plan office accommodation;
- allocated office space for Senior Executive Service, and the departmental Secretary;
- breakout spaces and kitchens;
- meeting, quiet, carers and first-aid rooms;
- utility, storage, conference and training facilities;
- supplementary air-conditioning for rooms with abnormal cooling and ventilation requirements;
- bicycle racks, showers and locker facilities;
- security measures, both internal and external;
- car/motorcycle parking, including electric-car charging facilities; and
- provision of photovoltaic solar-electricity panels to reduce consumption of grid-electricity.

3.13 Construction is due to commence in August 2010 and be completed by August 2012.

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

Cost of works

3.15 The total estimated out-turn cost for this project is $20.5 million (excluding GST). The Committee received a confidential supplementary submission detailing the project costs and held an in-camera hearing with DCCEE on those costs.

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

Project issues

Building Approval

3.17 The Committee is not charged with inquiring into the building's approval, however, at the time of referral,[2] and indeed by the date of the public hearing, the NCA had not granted works approval.[3] The NCA advised the Committee that its decision would be taken after the project was considered by the Department of the Environment, Water, Heritage and the Arts (DEWHA),[4] primarily relating to the preservation of heritage in nearby buildings. This approval process was the subject of a number of submissions to the Committee, centred on the view that there was a significant risk that the building would not be approved or that the base building would require substantial amendments by the planning authorities.

3.18 The Committee offers no comment on the building approval itself. However, the Committee is concerned that this referral was made to it prior to building approval being granted and therefore with potential significant risks attached to the project. Under the Act, works must not be referred until 'all particulars of the work substantially affecting its cost have been determined.'[5]

3.19 The risks posed by basing estimated fitout costs on a building which has not been approved by local authorities is significant. Of course, agencies can enter negotiations with building planners at an early stage, particularly as integrated fitouts are now common practice and have cost benefit to agencies. The Committee noted that DCCEE's agreement with the building owner stipulated that, should the building not be approved that the builder would be responsible for DCCEE's costs to that point.[6] Nonetheless, the Committee does not want to be put in a position of being seen to pressure local planning authorities to approve works that may have serious community concerns attached.

3.20 Works approval was granted by the NCA on 24 May 2010 and on this basis, the Committee now reports.

2 Submission 2, National Capital Authority.

3 Mr M Snare, Project Manager, Project Point Management, *Transcript of Evidence*, 10 May 2010, p.5.

4 Submission 2, NCA.

5 The Act, Section 18(9).

6 Mr M. Snare, Project Manager, Project Point Management, *Transcript of Evidence*, 10 May 2010, p.5.

Community Submissions

3.21 A large number of submissions were made to the inquiry by groups opposed to this proposal being approved by the Committee. Significant concerns were raised, including:

- heritage implications;[7]
- land-use and zoning under the National Capital Plan;[8]
- public consultation in the NCA's approvals process;[9]
- referral to the PWC before works approval was granted;
- costs and the consideration of other options;[10]
- changes to DCCEE; and
- sustainability.[11]

3.22 The Committee notes that those who made submissions to this inquiry are prominent supporters of maintaining the *Griffin Legacy* and the integrity of the landscape, architecture and heritage of the National Capital in keeping with the spirit of the original plan for the city, the *Griffin Plan.* The Committee also notes the willingness of these submitters to work with the NCA and developers to achieve outcomes that are in keeping with the *Griffin Legacy.*

3.23 While some of these issues are beyond the scope of this inquiry, the Committee acknowledges that the concerns raised by the community deserve serious consideration. As the primary tenant, the Committee considers that DCCEE has an obligation to work with its future neighbours and the community of Canberra to ensure that there is an understanding of how the above concerns were addressed in the building approval process.

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7 Submission 3, Australian Academy of Science; Submission 4, Owners Corporation of Units Plan 3063; Submission 5, National Trust of Australia (ACT); Submission 6, Walter Burley Griffin Society Inc, Canberra Chapter; Submission 8, Walter Burley Griffin Society Inc.

8 Submission 4, Owners Corporation of Units Plan 3063; Submission 8, Walter Burley Griffin Society Inc.

9 Submission 4, Owners Corporation of Units Plan 3063.

10 Submission 6, Walter Burley Griffin Society Inc, Canberra Chapter; Submission 8, Walter Burley Griffin Society Inc.

11 Submission 8, Walter Burley Griffin Society Inc.

Machinery of government changes

3.24 The Department's main submission to the inquiry notes that machinery of government changes announced in February 2010 would alter the size and activity of the Department.[12] In particular, the Department undertook functions previously carried out by DEWHA. At the public hearing, the Department advised the Committee that this resulted in an additional 512 departmental staff, but that this number would fall significantly as the home insulation programme is wound down.[13]

3.25 The Department also advised the Committee that the delayed commencement of the Australian Climate Change Regulatory Authority would have an impact on staffing levels. The Department advised the Committee that eventual employee numbers will be around 750.[14]

3.26 Whilst the Department has negotiated an agreement for lease under which it can access additional space in the building, the Committee is concerned that the Department is committing to long-term accommodation arrangements when its size and structure is in a state of flux. The Committee nevertheless acknowledges that the Department is in urgent need of new accommodation, and is responding to factors largely outside its control.

3.27 Nonetheless, DCCEE is reminded of its obligation to seek Public Works Committee approval for any changes in scope and cost prior to works proceeding.

Building design

3.28 The current proposal includes a number of measures which will reduce the use of energy by building occupants. These measures include:

- operable windows for staff use to moderate temperature;
- mechanical louvres for night-time cooling;
- exposed structural concrete, using the thermal mass of the building to reduce temperature fluctuations;
- underfloor air distribution, to increase airflow and efficiency; and

12 Submission 1, Department of Climate Change and Energy Efficiency, p.8.

13 Ms P. Weir, First Assistant Secretary, DCCEE, *Transcript of Evidence*, 10 May 2010, p.3.

14 Ms P. Weir, FAS, DCCEE, *Transcript of Evidence*, 10 May 2010, p.2.

- 400-kilowatt solar electricity panel on the roof, the largest in Australia, which will reduce consumption of grid-electricity by 30 per cent.[15]

3.29 The Committee is extremely pleased that this tenancy to be held by the Australian Government will have such forward thinking and sustainable features. Some of these are extremely simple, and others rely on developing technology, but together they demonstrate the need for both creative thinking and innovation in order to improve the sustainability of the built environment.

3.30 The Committee commends DCCEE for securing accommodation with such high environmental standards, and encourages other agencies to build on this example in their own activities.

Committee comment

3.31 Overall, the Committee is satisfied that this project has merit in terms of need, scope and cost.

3.32 Having examined the purpose, need, use, revenue and public value of the work, the Committee considers that it is expedient that the proposed works proceed.

Recommendation 2

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: fitout of new leased premises for the Department of Climate Change and Energy Efficiency at the New Acton Nishi building, Edinburgh Avenue, Canberra City, ACT.

15 Mr M. Snare, Project Manager, Project Point Management, *Transcript of Evidence*, 10 May 2010, p.7.

4

Construction of housing for Defence at Voyager Point, Liverpool, NSW

4.1 The proposed construction of housing for the Department of Defence at Voyager Point, Liverpool, NSW, by Defence Housing Australia (DHA) aims to provide housing for members of the Australian Defence Force (and their families) serving in the Liverpool area. The estimated cost of the project is $45.1 million (including GST).

4.2 The proposal was referred to the Committee on 18 March 2010.

Conduct of the inquiry

4.3 The inquiry was advertised in *The Australian* and submissions sought from those with a direct interest in the project. The Committee received two submissions and one confidential supplementary submission detailing the project costs. A list of submissions can be found at Appendix A.

4.4 The Committee undertook a site inspection, public hearing and an in-camera hearing on the project costs on 8 April 2010 in Sydney.

4.5 The transcript of the public hearing as well as the submissions to the inquiry are available on the Committee's website.[1] Plans for the proposed works are detailed in Submission 1: Defence Housing Australia.

Need for works

4.6 The DHA submission states that the works are necessary because, whilst the demand for DHA houses in the Liverpool area will decline

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1 <aph.gov.au/pwc>

significantly over the next ten years, much of the current stock does not conform with the Department of Defence's housing standards, and some leases for rented properties will expire. As a result, DHA needs an additional 65 dwellings in the Liverpool area between 2012/13 and 2013/14.

4.7 The Committee finds that there is a need for the proposed works.

Scope of works

4.8 The proposed scope of the works is detailed in Submission 1: DHA. In short the project proposes the following:

- subdivision of Lot 7 of Deposited Plan 803038, on Sirius Road, Voyager Point, into 120 freehold lots, including 17 lots suitable for duplex dwellings;
- provision of a new 11 kilovolt electricity supply connecting the site with existing electricity infrastructure on the neighbouring Department of Defence site;
- construction of 59 houses comprising:
  - ⇒ 25 detached houses; and
  - ⇒ 34 semi-detached duplexes;
- sale of the expected 78 surplus unbuilt lots.

4.9 Construction is expected to commence in March 2011 and be completed by December 2013.

4.10 The Committee finds that the proposed scope of works is suitable to meet the needs of the Voyager Point project.

Cost of works

4.11 The total estimated out-turn cost for this project is $45.1 million (including GST). The Committee received a confidential supplementary submission detailing the project costs and held an in-camera hearing with DHA on the project costs.

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

Project issues

Housing for people with disability

4.13 In its seventh report of 2009, regarding a proposal for Defence housing at the Gordon Olive Estate in McDowall, Brisbane, the Committee recommended DHA designate a proportion of its housing to be accessible by people with disability.[2] When an expediency motion relating to that project was moved by the Hon Dr Mike Kelly MP, Parliamentary Secretary for Defence Support, in the House of Representatives, he advised the House that DHA accepted and would implement this recommendation made by the Committee.[3]

4.14 However, DHA's submission to this inquiry states that the recommendation regarding housing for people with disability 'is currently under consideration by Defence and DHA'.[4] The Committee is aware that DHA and the Department of Defence manage housing for thousands of members of the Australian Defence Force and their families, and does not wish to prejudice the effective and efficient provision of housing for these individuals and families. Nonetheless, it is imperative that these agencies implement the Committee's recommendations in a timely manner. The Committee looks forward to seeing a workable application of its recommendations to DHA's planning and construction activities in the near future.

4.15 In discussions during the site inspection and hearing, DHA told the Committee that a small percentage of clients needed disability-access housing. However, such housing also enables elderly relatives and friends to visit. The Committee encourages DHA to take a broader view of the value of 'accessible housing' to their clients.

4.16 The Committee is also concerned by DHA's suggestion that its clients 'without special needs' would not be satisfied if they were 'required to live in a house that incorporates facilities for the disabled' (when not used by a client needing disability-access).[5] This reinforces a stereotype that disability-access housing is inferior or substandard. The Committee has

2 Parliamentary Standing Committee on Public Works, *Report 7/2009 Referrals made August to October 2009*, November 2009, Canberra, p.9.

3 Dr the Hon Mike Kelly MP, Parliamentary Secretary for Defence Support, *Official Hansard*, House of Representatives, 25 November 2009, 13 000.

4 Submission 1, Defence Housing Australia, p.23.

5 Submission 1, DHA, p.23.

previously reported on the integration of universal accessibility into housing, resulting in no reduction of amenity or aesthetics. The Committee encourages DHA to work to reverse the perception that accessible houses are by their very nature less aesthetically pleasing.

4.17 The Committee is undertaking to have further discussions with DHA on this issue.

Site contamination

4.18 The project site was remediated when DHA acquired it from the Department of Defence, and according to DHA's submission, the entire site has been investigated by environmental consultants,[6] and has an environmental audit certificate stating that the site is suitable for residential use.[7]

4.19 DHA nonetheless advised the Committee that there remains the possibility of contaminants existing on the site (such as asbestos fragments from demolished buildings). It is paramount that future residents have absolute confidence in the safety of the site, and underlines the fundamental importance of DHA rigorously attending to any possible contaminants on site. DHA advised the Committee that the contractor will provide a management plan for contaminants found during construction works.[8]

Road access

4.20 The DHA project at Voyager Point will add to an existing suburb, and the Committee is concerned that DHA adequately provide for safe road access into and out of the site. Whilst there will be only one paved road connecting this subdivision to the rest of the Voyager Point, DHA will also provide an emergency access road which will connect to an existing Voyager Point paved road. Under an agreement with the local government authority, this road must 'be four metres wide, has to be able to take a 13-tonne fire appliance and has to have vertical clearance of six metres at all times to allow movement of appliances.'[9]

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6 Submission 1, DHA, p.7.

7 Mr R. Bollen, National Manager, Land Provisioning, DHA, *Transcript of Evidence*, 8 April 2010, p.8.

8 Mr R. Bollen, National Manager, Land Provisioning, DHA, *Transcript of Evidence*, 8 April 2010, p.8.

9 Mr V. D'Arcy, Development Manager, DHA, *Transcript of Evidence*, 8 April 2010, p.9.

4.21 The Committee notes that access to the suburb of Voyager Point is currently by an un-signalised intersection with Heathcote Road. The Committee is aware that this is primarily a matter for the local government authority, and encourages DHA to be proactively involved in any future provision of additional road access to Voyager Point.

4.22 According to DHA's submission, there is a possibility that the intersection of Heathcote Road and Macarthur Drive (near Voyager Point) will in the future need to be reconfigured with traffic signals. At the public hearing, DHA indicated that it has made an allowance in the project budget to contribute to such road works if necessary.[10] The Committee commends DHA on this prudent and responsible provision which will ensure that DHA will contribute to the upgrading of local infrastructure where necessary.

Committee comment

4.23 Overall, the Committee is satisfied that this project has merit in terms of need, scope and cost.

4.24 Having examined the purpose, need, use, revenue and public value of the work, the Committee considers that it is expedient that the proposed works proceed.

Recommendation 3

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: construction of housing for Defence at Voyager Point, Liverpool, NSW.

10 Mr R. Bollen, National Manager, Land Provisioning, DHA, *Transcript of Evidence*, 8 April 2010, p.6.

5

Construction of housing for Defence at Muirhead, Darwin, NT

5.1 The proposed construction of housing for the Department of Defence at Muirhead, Darwin, NT, by Defence Housing Australia (DHA) seeks to build new housing for Australian service personnel and their families based in the Darwin area. The estimated cost of the project is $43.5 million (including GST).

5.2 The proposal was referred to the Committee on 18 March 2010.

Conduct of the inquiry

5.3 The inquiry was advertised in local and national newspapers and submissions sought from those with a direct interest in the project. The Committee received five submissions and one confidential supplementary submission detailing the project costs. A list of submissions can be found at Appendix A.

5.4 The Committee undertook a site inspection, public hearing, community statement session and an in-camera hearing on the project costs on 15 April 2010 in Darwin.

5.5 The transcript of the public hearing as well as the submissions to the inquiry are available on the Committee's website.[1] Plans for the proposed works are detailed in Submission 1: Defence Housing Australia.

1 <aph.gov.au/pwc>

Need for works

5.6 The DHA submission states that the works are necessary to maintain appropriate levels of housing for Defence in Darwin. Whilst DHA expects reduced demand for its housing in Darwin over the next five years, it will need to replace existing properties in its portfolio. This is due to both lease expiries and the Department of Defence's *New Housing Classification Policy*, which renders a significant amount of DHA housing substandard.[2]

5.7 The Committee is aware that Darwin's rental market is particularly tight which is an additional factor contributing to DHA's decision to construct new houses, rather than relying on leasing existing properties.

5.8 The Committee finds that there is a need for the proposed works.

Scope of works

5.9 The proposed scope of the works is detailed in Submission 1: DHA. In short, the project proposes the following:

- development of 18.4 hectares (stage one) to produce 166 building lots, of which 12 could be used for duplex homes;
- construction of 50 homes;
- offer of 25 lots to the Northern Territory Government as 'affordable and community housing lots'; and
- sale of the remaining lots to the public.[3]

5.10 Construction is expected to commence in March 2011 and be completed in June 2012.

5.11 The Committee finds that the proposed scope of works is suitable to meet the needs of the Muirhead project.

Cost of works

5.12 The total estimated out-turn cost for this project is $43.5 million (including GST). The Committee received a confidential supplementary submission detailing the project costs and held an in-camera hearing with DHA on the project costs.

2 Submission 1, Defence Housing Australia, p.2.

3 Submission 1, DHA, p.3.

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

Project issues

5.14 The Committee held a community statement session in Darwin on 15 April 2010, in order to take evidence from members of the community concerned about this project. The Committee also provided an opportunity for representatives from DHA to participate in discussions with the community about the proposal. As a result, DHA was able to make a supplementary submission, in which it indicated that numerous suggestions from these community groups could be considered in this and future projects. Significant issues raised by the community will be addressed below.

Block size

5.15 The Planning Action Network Inc. submission directs attention to the lot sizes being proposed by DHA for Muirhead. In particular, it points out that the usual single-dwelling lot size under the Northern Territory Planning Scheme is a minimum of 800 square metres.[4] At the public hearing, DHA gave evidence that an 'integrated residential development' may in fact have lot sizes smaller than 800 square metres, subject to approval. In addition, DHA stated that the Muirhead project had been developed as part of a 'specific use zone', SD23.

5.16 In short, the Northern Territory Government has created particular planning rules for this specific parcel of land, including lot size requirements that are different from the general planning scheme. The Committee accepts DHA's assurance that its proposal is within the rules of SD23, and no evidence was given to the contrary.

5.17 During the public hearing and community statement session, it was clear that the central issue regarding block size is the appropriateness of particular sizes in Darwin. The Committee is not tasked to consider local government planning instruments that have been developed and implemented at a local level.

4 Submission 4, Planning Action Network Inc., para 4.

5.18 The Committee notes that DHA has compelling reasons for providing a range of block sizes, of which some are considerably smaller than 800 square metres. Among these reasons are:

- the expressed preference of spouses of service personnel not to have large blocks requiring significant maintenance, particularly when their spouse is serving overseas;[5]
- the 'chronic shortage' of residential land close to Darwin and Defence bases;[6] and
- the goal of providing diverse communities, with varying block sizes, housing styles, residents and densities.[7]

5.19 The Committee is satisfied that DHA's proposed subdivision will satisfy the needs of the project and will be cost effective.

Tropical house design

5.20 As part of its site inspection, the Committee toured a new 'Troppo House' recently completed by DHA in Darwin. This tropical-style house features passive building features that greatly increase its energy efficiency and occupants' comfort. DHA advised the Committee at the public hearing that, across the entire Muirhead project (the current proposal and future proposals), it plans to build 330 tropical-style houses.[8] DHA noted that it is trying to encourage more of this kind of construction in Darwin.

5.21 The Committee commends DHA for its investment in climate-specific and more sustainable housing, and for its efforts to develop the necessary skills base in Darwin's construction industry. The Committee considers this move towards more liveable tropical design to be a significant and welcome improvement.

5.22 In respect of the present proposal, DHA has indicated that it will implement a covenant system to ensure that all buildings take advantage of prevailing breezes for cooling, through:

- mandatory breezeway separations through individual building envelopes; and

5 Mr P. Howman, Chief Operating Officer, DHA, *Transcript of Evidence*, 15 April 2010, p.20.
6 Mr P. Howman, COO, DHA, *Transcript of Evidence*, 15 April 2010, p.7.
7 Mr M. Doonar, Director, Tract Consultants Pty Ltd, *Transcript of Evidence*, 15 April 2010, p.21.
8 Mr P. Howman, COO, DHA, *Transcript of Evidence*, 15 April 2010, p.22.

- lot arrangement so that the maximum number of lots are oriented north-south.[9]

5.23 At the public hearing, COOLmob suggested that Defence personnel who were new to living in the tropics would benefit from its publication, *Greenhouse friendly habits in the top end*, as it provides practical advice about household habits in tropical Australia.[10]

5.24 COOLmob made an extensive submission, and provided oral evidence, outlining a number of measures potentially open to DHA that would increase the energy efficiency and comfort of homes in Muirhead. The Committee asked DHA to respond to these suggestions and is pleased that DHA has agreed to consider a number of them.

Recommendation 4

The Committee recommends Defence Housing Australia take the opportunity to provide resources about living in a tropical climate for personnel who are new to living in Darwin.

Committee comment

5.25 Overall, the Committee is satisfied that this project has merit in terms of need, scope and cost.

5.26 Having examined the purpose, need, use, revenue and public value of the work, the Committee considers that it is expedient that the proposed works proceed.

Recommendation 5

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: construction of housing for the Department of Defence at Muirhead, Darwin, NT.

9 Submission 1, DHA, p.17.

10 < coolmob.org>

6

Pawsey High Performance Computing Centre for SKA Science at Kensington, WA

6.1 The proposed construction of the Pawsey High Performance Computing Centre (HPC) for Square Kilometre Array (SKA) Science (the Pawsey Centre) at Kensington, WA proposes to provide facilities for researchers in high-end computation and data-intensive science. The estimated cost of the project is $66.0 million (excluding GST).

6.2 The Pawsey Centre was referred to the Committee on 18 March 2010.

Conduct of the inquiry

6.3 The inquiry was advertised in *The Australian* and submissions sought from those with a direct interest in the project. The Committee received sixteen submissions and three confidential supplementary submissions detailing the project costs and addressing questions raised by the Committee. A list of submissions can be found at Appendix A.

6.4 The Committee undertook a site inspection, public hearing and an in-camera hearing on the project costs on 16 April 2010 in Perth.

6.5 The transcript of the public hearing as well as submissions to the inquiry are available on the Committee's website.[1] Plans for the proposed works are detailed in Submission 1: CSIRO.

1 <aph.gov.au/pwc>

Need for works

6.6 Australia currently has one HPC system and greater capacity is needed to ensure Australian remains internationally competitive. The CSIRO submission states that the works are needed to extend research in the fields of radio astronomy and other areas of computation and data-intensive science. The CSIRO states:

> Supercomputers are of the highest and most pervasive strategic importance, as a major contributor to the development of science and technology, and to the economic competitiveness of oil, gas and mineral resources, and medical and pharmaceutical industries.[2]

6.7 The Committee was told that the proposed centre will meet the needs of science research as well furthering commercial scientific discovery. The proposed centre will:

- provide internationally significant HPC capability, and associated data support, to prioritised radio astronomy data analysis and physical sciences research endeavours;
- develop and operate a resource allocation system that gives priority research on-demand access to allocated resources;
- support meritorious research in all fields through the provision of 'capability' quality computational services which specifically require petascale HPC processing; and
- provide the opportunity to develop world-class HPC expertise among high-end researchers.[3]

6.8 The Committee recognises that supercomputers are an essential resource for scientists in the modern research environment in order for Australia to remain innovative and competitive in international research and development. In addition, the Committee received twelve submissions to this inquiry from a wide range of organisations strongly supporting the proposal.[4]

6.9 The Committee finds that there is a need for the proposed works.

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2 Submission 1, CSIRO, p.5.

3 Submission 1, CSIRO, p.4-5.

4 Submission 2, Department of Innovation, Industry, Science and Research; Submission 4, Astronomy Australia Ltd.; Submission 5, Australian Computer Society; Submission 6, Edith Cowan University; Submission 8, International Centre for Radio Astronomy Research; Submission 10, University of Western Australia; Submission 11, Western Australian Marine Science Institution; Submission 12, Integrated Marine Observing System; Submission 13, Western Australian Satellite Technology Applications Consortium; Submission 14, IBM Australia; Submission 15, City of South Perth; Submission 16, Murdoch University.

Scope of works

6.10 The proposed scope of the works is detailed in Submission 1: CSIRO. In short the project proposes the following:

- Pawsey Centre building to house the high performance computing facility including:
  - ⇒ single story building with 4 000 square metres gross floor area providing working accommodation for administrative and ancillary support, computer hall and plant rooms;
  - ⇒ mechanical services;
  - ⇒ electrical services;
  - ⇒ hydraulic services; and
  - ⇒ landscaping.
- high performance computing (HPC) facility will comprise:
  - ⇒ high performance computing subsystem;
  - ⇒ disk storage subsystem; and
  - ⇒ tape storage subsystem.[5]

6.11 Construction is due to commence in late 2010 and be completed by late 2011. The HPC system is due to be completed in 2013.

6.12 The Committee finds that the proposed scope of works is suitable to meet the needs of the Pawsey Centre project.

Cost of works

6.13 The total estimated out-turn cost for this project is $66.0 million comprising $26 million in building works and $40 million for the HPC system.

6.14 In addition to the works presented to the Committee in this proposal, $14 million has been allocated to expand the HPC capacity at existing iVEC locations. Legal advice to the Department of Innovation, Industry, Science and Resources (the funding department) confirmed that this project component was not subject to the PWC Act.[6]

5 Submission 1, CSIRO, p.10-11.

6 Dr Alex Zelinsky, Group Executive, Information Sciences, Communications and Science Strategy, CSIRO, *Transcript of Evidence,* 16 April 2010, p. 6.

6.15 The Committee is satisfied that, on the evidence provided to it for the Pawsey Centre building, the costings for the project provided to it are adequate.

Project issues

Risk management

6.16 The Pawsey Centre is being delivered by the CSIRO, but established and operated by iVEC – an unincorporated joint venture between the CSIRO, Curtin University of Technology, Edith Cowan University, Murdoch University and the University of Western Australia – aimed at allowing the science and technology community to access high performance computing.[7]

6.17 The Committee had some concerns about the project management processes and who would bear the project risk given this method of project delivery.

6.18 Representatives from iVEC and the CSIRO told the Committee that a steering committee comprising representatives from both iVEC and the CSIRO with expertise in building delivery and management will be responsible for managing the project delivery and associated risks. Procurement processes will be in accordance with CSIRO policies, which comply with Commonwealth regulations.[8]

6.19 Nonetheless, the legal risk, and eventual ownership, of the project remains with the CSIRO.[9] Representatives from both the CSIRO and iVEC gave the Committee assurances that they had confidence in the agreement put in place between the two entities regarding the management and delivery of the Pawsey Centre.[10]

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7 Submission 1, CSIRO, p.1.

8 The Hon Dr Mal Bryce, Chair, iVEC Board, *Transcript of Evidence,* 16 April 2010, p.3.

9 Ms Clare McLaughlin, Manager, eResearch, Research Infrastructure Branch, Science Infrastructure Division, Department of Innovation, Industry, Science and Research, *Transcript of Evidence,* 16 April 2010, p.8.

10 The Hon. Dr Mal Bryce, Chair, iVEC Board, *Transcript of Evidence,* 16 April 2010, p.3; Dr Alex Zelinsky, Group Executive, Information Sciences, Communications and Science Strategy, CSIRO, *Transcript of Evidence,* 16 April 2010, p.3, 8.

Environmental impact

6.20 The CSIRO acknowledged that the energy usage of the Pawsey Centre will be high and there are currently no rating systems (such as Green Star) for computer centres. However, initiatives to reduce environmental impact will be incorporated into the building where possible, such as:

- selection of materials with low volatile organic compound emissions and those of a proven sustainable manufacture;
- selection of materials with consideration of their embodied energy;
- module selection of building materials to minimise waste;
- incorporation of water saving devices on hydraulic fittings and fixtures to reduce water consumption; and
- flexibility of the core design so that it does not become obsolete and can adapt to changing needs in the future.[11]

6.21 A significant environmental and financial cost to running the centre will be cooling for the system. The CSIRO told the Committee that it is looking at utilising the geothermal energy of the Perth Basin to reduce the impact of cooling in the building.[12] Subsequently, the Government has announced funding for the construction of geothermal and solar power generation and distribution infrastructure at the Murchison Radio-Astronomy Observatory and the Pawsey High Performance Computing Centre.[13]

6.22 In addition, the CSIRO is working with the Department of Climate Change and Energy Efficiency to develop energy targets for high-demand science facilities such as laboratories, data centres and computer centres.

6.23 The Committee commends the CSIRO for these initiatives.

Childcare

6.24 The CSIRO Staff Association raised concerns about an increase in staff numbers and the provision of childcare.[14] The Committee was told that given the low staff numbers associated with the Pawsey Centre (sixteen) it was not seen to be necessary to link childcare to this proposal. However, the CSIRO acknowledged that childcare is an issue of concern for staff

11 Submission 1, CSIRO, p.16.

12 Dr Steve Harvey, Deputy Business Unit Leader, Earth Science and Resource Engineering, CSIRO, *Transcript of Evidence,* 16 April 2010, p.11.

13 The Hon Julia Gillard MP, Deputy Prime Minister and Senator the Hon Kim Carr, Minister for Innovation, Industry, Science and Research, Joint Media Release, 9 June 2010, *Rudd Labor invests in Western Australian students and researchers.*

14 Submission 9, CSIRO Staff Association.

across Perth more broadly and has plans in place to address these need in the coming months.[15]

Committee comment

6.25 Overall, the Committee is satisfied that this project has merit in terms of need, scope and cost.

6.26 Having examined the purpose, need, use, revenue and public value of the work, the Committee considers that it is expedient that the proposed works proceed.

Recommendation 6

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: construction of the Pawsey High Performance Computing Centre for SKA Science at Kensington, WA.

Senator the Hon Jan McLucas
Chair
17 June 2010

15 Mr Trevor Moody, General Manager, Property Services, CSIRO, *Transcript of Evidence,* 16 April 2010, p.3.

A

Appendix A – List of Submissions

Construction of Centre for Accelerator Science and extension to facilities for the Australian Nuclear Science and Technology Organisation, Sydney, NSW

1. Australian Nuclear Science and Technology Organisation
    1.1. Confidential
    1.2. Supplementary
    1.3. Confidential
    1.4. Supplementary
2. Department of Innovation, Industry, Science and Research
3. Australian Neutron Beam Users Group
4. Department of Climate Change and Energy Efficiency

Fitout of new leased premises for the Department of Climate Change and Energy Efficiency at the New Acton Nishi building, Edinburgh Avenue, Canberra City, ACT

1. Department of Climate Change and Energy Efficiency
    1.1. Confidential
    1.2. Department of Climate Change and Energy Efficiency
    1.3. Confidential
2. National Capital Authority
3. Australian Academy of Science

4. Owners Corporation of Units Plan 3063
5. National Trust of Australia (ACT)
6. Walter Burley Griffin Society Inc, Canberra Chapter
7. Molonglo Group
8. Walter Burley Griffin Society
9. Department of Climate Change and Energy Efficiency

Construction of housing for Defence at Voyager Point, Liverpool, NSW

1. Defence Housing Australia
    1.1. Confidential
2. Department of Climate Change and Energy Efficiency

Construction of housing for Defence at Muirhead, Darwin, NT

1. Defence Housing Australia
    1.1. Confidential
    1.2. Supplementary
2. Department of Climate Change and Energy Efficiency
3. Mr Steve Beagley
4. The Planning Action Network Inc
5. COOLmob

Pawsey High Performance Computer Centre for SKA Science at Kensington, WA

1. CSIRO: The Pawsey High Performance Computing Centre for SKA Science
    1.1. Confidential
2. Department of Innovation, Industry, Science and Research
3. Department of Climate Change and Energy Efficiency
4. Astronomy Australia Ltd
5. Australian Computer Society

6. Edith Cowan University
7. Curtin University of Technology
8. International Centre for Radio Astronomy Research
9. CSIRO Staff Association
10. University of Western Australia
11. Western Australian Marine Science Institution
12. Integrated Marine Observing System
13. Western Australian Satellite Technology Applications Consortium
14. IBM Australia
15. City of South Perth
16. Murdoch University
17. Confidential
18. Confidential

B

Appendix B – List of Inspections, Hearings and Witnesses

Construction of Centre for Accelerator Science and extension to facilities for the Australian Nuclear Science and Technology Organisation, Sydney NSW

Friday, 9 April 2010 – Lucas Heights, NSW

Site Inspection

Australian Nuclear Science and Technology Organisation's current offices and proposed extensions, Lucas Heights, Sydney, NSW

Public Hearing

Australian Nuclear Science and Technology Organisation (ANSTO)

Professor John Dodson, Head of Institute, ANSTO

Mr Con Lyras, General Manager, Engineering and Technical Services, ANSTO

Dr Adrian Paterson, Chief Executive Officer, ANSTO

Dr Jamie Schultz, Operations Manager, Bragg Institute, ANSTO

Dr Greg Storr, General Manager, Reactor Operations, ANSTO

In-camera hearing

Five witnesses

Fitout of new leased premises for the Department of Climate Change and Energy Efficiency at the New Acton Nishi building, Edinburgh Avenue, Canberra City, ACT

Monday, 10 May 2010 – Canberra, ACT

Site Inspection

Current premises, 2 Constitution Ave, Canberra City and proposed location, Edinburgh Ave, Canberra City, ACT

Public Hearing

Department of Climate Change and Energy Efficiency (DCCEE)

Mr Robert Ireland, Director, Corporate Support Division, DCCEE

Mr Michael Snare, Project Manager, New Accommodation Project, DCCEE

Mr Graham Tanton, Assistant Secretary, Corporate Support Division, DCCEE

Ms Penny Weir, First Assistant Secretary, Corporate Support Division, DCCEE

Arup Pty Ltd

Mr Paul Sloman, Principal

Community Statement Session

Walter Burley Griffin Society

Mr Brett Odgers, Member

Professor James Weirick, President

In-camera hearing

Four witnesses

Construction of housing for Defence at Voyager Point, Liverpool, NSW

Thursday, 8 April 2010 – Revesby, NSW

Site Inspection

Voyager Point, Liverpool, Sydney, NSW

Public Hearing

Defence Housing Australia

Mr Roger Bollen, National Manager, DHA

Mr Vy D'Arcy, Development Manager, DHA

Parsons Brickerhoff

Mr Adam Shaw, Civil/Environmental Engineer and Project Manager

RPS Group

Miss Belinda Lewis, Planner

In-camera hearing

Two witnesses

Construction of housing for Defence at Muirhead, Darwin, NT

Thursday, 15 April 2010 – Darwin, NT

Site Inspection

Muirhead, Darwin, NT

Public Hearing

Defence Housing Australia

Mr Peter Howman, Chief Operating Officer, DHA

Mr Neil Morris, Project Director, DHA

dKO Architecture

Mr David Randerson, Director

SMEC Urban

Mr Carl Wilkinson, General Manager

Tract Consultants Pty Ltd

Mr Mark Doonar, Director

Mr Peter Nelson, Associate and Urban Designer

Community Statement Session

Environment Centre, NT

Ms Robin Knox, Project Manager

Planning Action Network Inc

Ms Margaret Clinch, Convenor-Plan

Pawsey High Performance Computer Centre for SKA Science at Kensington, WA

Friday, 16 April 2010

Site Inspection

Proposed site, Bentley Park, Kensington, Perth, WA

Public Hearing

Commonwealth Scientific and Industrial Research Organisation

Dr Brian Boyle, Portfolio Leader, Astronomy and Space Science

Dr Steve Harvey, Deputy Business Unit Leader, Earth Sciences and Resource Engineering

Mr Trevor Moody, General Manager, Property Services

Dr Alex Zelinsky, Group Executive,

iVEC Board

The Hon. Dr Mal Bryce, Independent Chair

Professor Andrew Rohl, Chief Executive Officer

Department of Innovation, Industry, Science and Research

Ms Claire McLaughlin, Manager, eResearch