Belmore Park

Zone Substation & Commercial Development Project

Submissions Response & Preferred Project Report

May 2009

……
Wilma Penrose

Manager – Area Development, CBD

……
Craig Moody

Executive Manager- Project Development & Approvals

EnergyAustralia

570 George Street
Sydney

NSW 2000

Australia

Author:

Julian Ardas

Director – PlanCom Consulting Pty Ltd

Date: 13/5/09
Reference:
Status: Final

Table of Contents

Appendices

Tables

Figures

Executive Summary

An Environmental Assessment Report (EAR) was prepared for the Sydney CityGrid project by EnergyAustralia in support of Concept Application No MP 08_0075 and submitted to the Department of Planning for public exhibition between 17 December 2008 and 16 February 2009. Concurrently, a Project Application was exhibited for Belmore Park Zone Substation and Commercial Development Project (the Project), which would be the first component of the Sydney CityGrid project to be constructed. Similarly, this Submissions Response is being prepared concurrently with the Submissions Response for the Sydney CityGrid project.

The EAR was prepared under Part 3A of the Environmental Planning and Assessment Act (1979) (the EP&A Act) and following exhibition of the EAR, a number of submissions were received from various Government agencies, City of Sydney (CoS) Council and the general public.

This Submissions Response and Preferred Project Report (Report) supports the Environmental Assessment of the Project Application MP 08_0075 by providing a response to matters raised during the public exhibition period as well as providing additional Project information in regard to design changes made to the substation since the EAR was exhibited. This Report also:

- Provides an updated Statement of Commitments to accommodate the responses to issues raised in the submissions and to provide updated information generally; and
- Provides a list of preliminary hazards and risks associated with the Project as a result of an omission during the compilation of the exhibited EAR (see section 2.4).

It is noted that this Project Application (and associated EAR) for the Belmore Park Zone Substation and Commercial Development Project is being assessed concurrently with the Sydney CityGrid Concept Application and is the first component of the Sydney CityGrid Project to be constructed. Similarly this Report is being prepared concurrently with the Submissions Response and Preferred Project Report for the Sydney CityGrid Project.

This Report acknowledges that because of the global financial crisis, the current property market is uncertain and therefore the timing of the commercial component of the Belmore Park Project is difficult to predict. With this in mind, the gap between the two staged development (i.e the zone substation would be built ahead of the commercial development) may in fact be greater, perhaps up to five years and beyond. Therefore measures have been adopted to build a more permanent temporary façade treatment for the stand alone zone substation.

EnergyAustralia has also decided to amend the exhibited substation design by changing transformer technology from sulfur hexafluoride gas (SF6) insulation to oil, which has resulted in minor building structural changes to accommodate the alternative transformers as well as the addition of other measures (e.g. fire suppression systems) to mitigate against potential risks introduced as a result of this change. Notably, the risks relating to the use of SF6 that were previously raised and addressed are now superseded. EnergyAustralia has also amended the façade treatments and landscaping for the substation component of the Project, to account for a change in the timing of the construction staging and provides the following information updates:

- Statement of Commitments to accommodate the responses to issues raised in the submissions;
- A staging plan to indicate the landscape treatment for the substation only and for the integrated commercial development;
- Design modifications to the substation and architectural façade treatments for the stand alone substation;
- Revised noise and vibration assessment;
- Revised greenhouse gas and air quality assessment; and
- Revised list of hazards and risks associated with the design modifications.

EnergyAustralia considers that this Report adequately addresses the issues raised in the submissions received.

1. Introduction

1.1 Background

An Environmental Assessment Report (EAR) was prepared for the Belmore Park Zone Substation and Commercial Development Project (the Project) by EnergyAustralia and submitted to the Department of Planning (DoP) for public exhibition between 17 December 2008 and 16 February 2009. The EAR was prepared under Part 3A of the *Environmental Planning and Assessment Act (1979)* (the EP&A Act). Following exhibition a number of submissions were received from various government agencies, Sydney of City (CoS) Council and the general public.

1.2 Purpose and Structure of this Report

This Submissions Response and Preferred Project Report (Report) supports the Environmental Assessment of the Project Application MP 08_0075 by providing a response to matters raised during the public exhibition period as well as providing additional Project information, in regard to changes made to the Project since the EAR was exhibited.

The Report provides an updated assessment of environmental impacts and hazards and risks associated with the Project as a result of recent design changes and a revised Statement of Commitments to accommodate the responses to issues raised in the submissions and the design changes detailed in the Preferred Project Information section of this Report.

A total of seven submissions were received in response to the Project EAR.

The main project revisions made since exhibition of the EAR relate specifically to a change in transformer technology. This has lead to the need to amend the substation design to accommodate the different transformer technology. The benefits to EnergyAustralia resulting from the changes are outlined in Section 4.1. The Report also acknowledges that in the current uncertain property market, construction of the commercial component of the integrated development may be delayed beyond the one to two years initially contemplated in the EAR. A revised staging plan has been introduced to cater for the possibility that the new zone substation stands alone for a period of perhaps five to ten years. These changes to the Project Application are also addressed in the Preferred Project Information section of this Report (Section 4).

This Report is divided into the following five sections:

1) **Project Overview and Consultation (Section 2):** Overview of the Project and consultation undertaken for the Project, including the public exhibition phase

2) **Response to Submissions (Section 3):** Details the proponents response to submissions made by:

   - NSW State Government Agencies;
   - City of Sydney Council; and
   - The general public.

3) **Preferred Project Information (Section 4):** Provision of additional Project information relating to:

   - Change in transformer technology;
   - Changes to the substation building;
   - Additional noise and vibration assessment;

- Additional air quality and greenhouse gas assessment;
- Updated hazards and risks assessment; and
- Amended landscape and façade treatments for staged construction of the stand alone substation and integrated commercial development.

4) Statement of Commitments (Section 5): Revised Statement of Commitments.

5) Conclusion (Section 6).

1.3 Approvals Process

1.3.1 Decisions and Assessments

On 11 February 2008 the Minister for Planning declared the EnergyAustralia Sydney CityGrid project is to be a project to which Part 3A of the EP&A Act applies.

Director General's requirements were issued for the Project on 10 June 2008.

The EAR was submitted to the DoP for adequacy review prior to public exhibition.

The EARs for the Sydney CityGrid project and the Belmore Park Zone Substation were publicly exhibited between 17 December 2008 and 16 February 2009.

In accordance with Section 75H(6) of the EP&A Act, the Director-General may require the proponent to submit to the Director-General:

(a) a response to the issues raised in those submissions, and

(b) a Preferred Project Report that outlines any proposed changes to the Project to minimise its environmental impact, and

(c) any revised statement of commitments.

The DoP evaluates the EAR, the Submissions Response and the Preferred Project Report giving consideration to submissions received during the exhibition period and any subsequent changes.

EnergyAustralia may proceed with the Project if it is approved by the Minister for Planning.

2. Project Overview and Consultation

2.1 Overview of the Project

The Project which is the subject of the EAR, is the construction of the proposed Belmore Park Zone Substation including integrated commercial / retail development on or in conjunction with the zone substation.

The zone substation would be equipped with five transformers and a multi-section busbar enabling 132kV interconnection between the Haymarket Bulk Supply Point (BSP), the City South and Rose Bay zone substations and the Riley Street sub-transmission switching station (STSS).

The 132kV cables would be installed in the existing City South Cable Tunnel (CSCT), which runs directly beneath Campbell Street. A shaft and stub tunnel connection from Belmore Park Zone Substation would facilitate access to the CSCT to enable up to eight new feeders (a feeder consists of three individual electrical transmission cables (phases) bundled together) to be connected at the substation. Once complete, the zone substation would act as a central point for the 11kV distribution network in the southern Sydney CBD.

2.2 Consultation Program during EAR Preparation

A Planning Focus Meeting was held on 28 May 2008. The following government agencies attended:

- RailCorp;
- EnergyAustralia;
- Ministry of Transport;
- Transport Infrastructure Development Corporation;
- Department of Water and Energy;
- City of Sydney Council;
- Department of Planning;
- Department of Environment and Climate Change;
- Roads and Traffic Authority; and
- Department of Planning (Heritage Branch).

The issues raised by these government agencies informed the preparation of the Director General's Requirements.

Table 2.1 provides a summary of the consultation activities undertaken by EnergyAustralia during the preparation of the EAR.

EnergyAustralia consulted with the local community in relation to the Belmore Park Zone Substation during the preparation of the EAR. Activities undertaken included:

- Distributing a community newsletter around the Belmore Park Site;
- Holding two community information displays in relation to Belmore Park Site;
- Advertising in the Sydney Morning Herald and Australian Chinese Daily in relation to Belmore Park Site;
- Establishing project information on EnergyAustralia's website;
- Answering phone calls and emails about the Belmore Park site; and
- Distributing a notification letter regarding geotechnical investigation work around the Belmore Park Site.

Table 2.1 - Summary of the Consultation Activities Undertaken During EAR Preparation

Stakeholder	Mechanism						
	Personal Meeting	Newsletter	Group Meeting	Correspondence	Ad in Local Paper	Ad in Regional Paper	Website
Neighbours	✓	✓	✓				✓
Department of Water and Energy	✓						✓
RailCorp	✓						✓
Community and environmental groups		✓	✓		✓		✓
TransGrid	✓						✓
NSW Fire Brigade							✓
Broader community		✓	✓				✓
NSW Department of Environment and Climate Change	✓			✓			✓
Department of Planning	✓			✓			✓
NSW Heritage Office	✓			✓			✓
NSW Roads and Traffic Authority			✓				✓
Transport Infrastructure Development Corporation	✓						✓
Sydney Water Corporation			✓	✓			✓
Sydney Light Rail				✓			✓

2.3 Public Exhibition Period

A number of public consultation activities were undertaken by EnergyAustralia during the public exhibition period.

Public consultation was focused on the Belmore Park Project Application Assessment.

The following activities were undertaken:

- In December 2008 Community Newsletter No.2 was distributed to around 800 businesses and residents in the vicinity of Belmore Park Zone Substation. It provided details including a project update, why the substation is required, approval process, environmental assessment, exhibition locations, submissions on the EAR and next steps.
- Community information sessions were held on Monday 12th and Wednesday 14th January 2009, where people could attend, view the EAR and ask any questions they may have. The dates were advised in Community Newsletter No.2. These were held in the foyer of Roden Cutler House (24 Campbell Street).

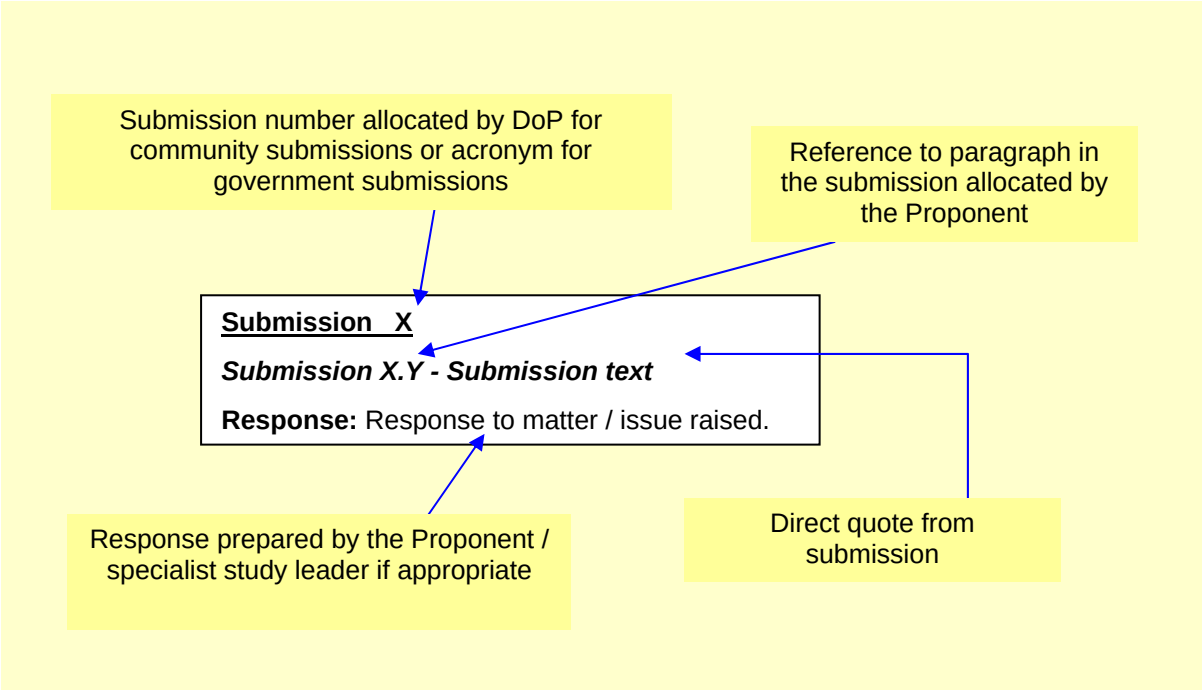
3. Response to Submissions

3.1 Introduction

This Section provides a response to each of the government and community submissions received by DoP regarding the Project.

In order to provide a detailed response to submissions, extracts of each submission where issues have been raised are reproduced below in ***bold italics*** referenced with the submission number it was given by the DoP for community submissions and the acronym of the agency for the government agency responses. In the interests of privacy, personal contact details of the submitters have not been presented. For ease of reference, each extract is then consecutively numbered. A response prepared by the Proponent is then presented below each paragraph or suite of paragraphs if they relate to one matter. **Figure 3-1** below illustrates the referencing system.

Figure 3-1 Illustration of Referencing Used In This Report



3.2 Community Submissions

3.2.1 Submission 1

1.1 - The proposed commercial development has nothing to do with a new power substation.

Response: The commercial development plays an important role in justifying the economic viability of the substation development within a high land value Central Business District location, including optimising space in keeping with existing planning controls.

1.2 - The architecture of the proposed construction in no way matches or compliments the surrounding buildings, with the aesthetic value being decidedly second rate.

1.3 - A strong glare would potentially result from the reflective glass, which will cover this installation.

1.4 - The Project will block views of Belmore Park for current and future residents and businesses (and their customers/clients).

1.5 - An unnecessarily tall three-storey glass ceiling will obscure Belmore Park views.

1.6 - The feeling of having breathing space in this important precinct around the park and Capitol Theatre will be severely diminished.

Response: In response to 1.2 to 1.6 above, the design is in keeping with existing planning controls for the site with a 50 metre limitation on the Campbell Street side and 25 metres on the Hay Street side thus allowing the sun's rays to reach Belmore Park. Further, a design review process was undertaken to address issues such as those raised above. Details of the design review process can be found in Section 8.2.3 of the EAR.

The proposed commercial development would not cause adverse glare for vehicles or pedestrians at surrounding locations as a result of the proposed glazing elements. These elements would have a reflectivity coefficient of less than 20%, Furthermore, the proposed stand alone substation would also not cause adverse glare to vehicles or pedestrians at surrounding locations as the facade materials have low specular reflectivity.

The substation is of low height, which benefits solar access between the morning to noon period, and is shielded by surrounding commercial and residential buildings.

3.3 Government Agencies and Local Government Submissions

3.3.1 Submission 2 - Sydney Metro

2.1 - Due to similar program timeframes, there is potential for cumulative truck movements associated with the CBD Metro in the vicinity of Central Station in Pitt Street and Belmore Park.

Response: A review of Table 4.1 of the Preliminary Environmental Assessment for the CBD Metro (now known as Sydney Metro) identified traffic, transport, parking & access as construction and operational issues for the Project. Closer examination of the construction issues identified for Central Station in Table 4.2 of the Preliminary Environmental Assessment for the Sydney Metro indicated that the key impacts were further to the south of the site around the perimeter of Central Station.

At this stage Sydney Metro has not confirmed its construction programme. However, during the development of the design and the Construction Environmental Management Plan for Belmore Park Zone Substation, EnergyAustralia would liaise with Sydney Metro to gain a better appreciation of its construction activities and endeavour to mitigate any impacts wherever possible arising from the Sydney Metro in the vicinity of Central Station in Pitt Street and Belmore Park. If necessary a cumulative impact statement would be prepared.

3.3.2 Submission 3 - Department of Water and Energy

3.1 – The Department of Water and Energy note that as the proposed construction involves excavations, any groundwater works, including bores and excavations for the purpose of investigation, extraction, dewatering, testing or monitoring must be approved under Part 5 of the Water Act 1912 and a licence obtained from Department of Water and Energy prior to such works/installation.

Response: Should the Project require a licence under Part 5 of the Water Act 1912 a licence would be obtained from the Department of Water and Energy.

3.3.3 Submission 4 - Sydney Regional Development Advisory Committee

The Sydney Regional Development Advisory Committee raised no objection to the proposal. However, the following comments were provided to the Department of Planning for consideration in its determination:

4.1 - The layout of the proposed car parking areas associated with the subject development should be in accordance with AS2890.1 – 2004.

4.2 - The required sight lines to pedestrians or other vehicles in or around the entrance and car park are not to be compromised by landscaping or signage.

4.3 - The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as maneuverability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to the DoP for approval, which shows that the proposed development complies with this requirement.

4.4 - The car parking area and substation entry/exit points need to be clearly delineated through line marking and signage to ensure smooth, safe traffic flow.

4.5 - Parking is to be in accordance with Council's requirements.

4.6 - Consideration should be given to providing bicycle parking facilities either within the development or close to it, as well as end trip facilities such as showers, changing rooms etc to encourage bicycle use for travelling to and from the development.

4.7 - All vehicles should enter or exit the site in a forward direction.

4.8 - All vehicles should be wholly contained on site before being required to stop.

4.9 - All works associated with the proposal will be at no cost to the RTA.

Response: In relation to 4.1 – 4.9 above, these requirements are noted by EnergyAustralia and would be incorporated in the detailed design as appropriate. In regards to Issue 4.3 there may be extraordinary events where the delivery of bulky electricity infrastructure may be required. Approvals would be obtained for such events. A traffic management plan would be developed as part of the CEMP and OEMP addressing detailed traffic management measures and include measures to address:

- Safety;
- Potential hazards;
- Cumulative impacts with other movements for quarries.

3.3.4 Submission 5 - Department of Environment & Climate Change

5.1 - The proponent will need to comply with the provisions of the environment protection legislation, including the Protection of the Environment Operations Act 1997, the National Parks and Wildlife Act 1974 and the Threatened Species Conservation Act 1995 during the construction and operation of the project.

5.2 - If, during construction, the proponent becomes aware of any heritage items or archaeological material, all works likely to affect the site(s) shall cease immediately and the relevant authorities, including Department of Environment & Climate Change, be notified immediately before work progresses further.

5.3 – The Department of Environment & Climate Change recommends that project approval be conditional upon the proponent preparing and implementing a detailed Construction Noise and Vibration Management Plan (CNVMP).

5.4 – The Department of Environment & Climate Change recommends restrictions on construction working times as a condition of Project Approval.

5.5 – The Department of Environment & Climate Change recommends the imposition of construction noise, regenerated noise and vibration objectives as a condition of Project Approval

5.6 – The Department of Environment & Climate Change recommends the imposition of Operational Noise Objectives as a condition of Project Approval.

5.7 – The Department of Environment & Climate Change recommends the inclusion of Project Approval conditions that address issues related to Greenhouse Gas Potential and Air Quality impacts resulting from the Project

5.8 – The Department of Environment & Climate Change requests the inclusion of a Project Approval condition that the proponent comply with Section 120 of the Protection of the Environment Operations Act in regard to the treatment and discharge of infiltrated groundwater. Department of Environment & Climate Change would also request that appropriate conditions are also applied that relate to the assessment of treatment techniques to the infiltrated groundwater prior to discharge as well as post discharge monitoring and reporting.

5.9 – The Department of Environment & Climate Change requests that approval for the Project include conditions that address issues related to the appropriate management and disposal of spoil resulting from the Project.

Response: In relation to items 5.1 – 5.9 above, EnergyAustralia has reviewed the requirements of the Department of Environment and Climate Change and agrees in principle with them.

3.3.5 Submission 6 - City of Sydney Council

General

A number of City of Sydney (CoS) Council's comments contain requirements that do not relate to a Part 3A application under the EP&A Act, such as various approvals requiring a construction certificate from CoS Council. Under Part 3A the Project would be assessed and determined by the Minister for Planning and not CoS Council.

However, EnergyAustralia propose that in lieu of having to obtain Council's approval, Energy Australia would demonstrate that it has liaised with Council as required and obtained acceptance. This would be endorsed by the Environmental Management Representative (EMR) as part of satisfying the construction compliance report. In the event that acceptance was not forthcoming and EnergyAustralia believed it had met its obligations with respect to the CoS Council then DoP would decide what further actions, if any, were required.

6.1 - Visual Link

City of Sydney Council is not convinced that the proposed "visual" through site link offers any real benefit and further information in relation to this matter is requested. A landscape plan should be submitted with the detailed documentation.

Response: In response to the above points, the benefit of the "visual" through site link on the eastern boundary of the site is that it creates a buffer for the neighbour to the east, opens up the separation of buildings and allows greater visibility between Hay Street and Campbell Street. The neighbour to the east holds a restrictive covenant over a six metre wide strip of land along the boundary which precludes EnergyAustralia from constructing building structures above ground level unless agreed otherwise with the neighbour. It is EnergyAustralia's intention to provide a landscaped treatment along this boundary which improves the amenity for the general public and is acceptable to the eastern neighbour. The proposed landscape treatment is provided in Appendix C.

6.*2 - Pedestrian Link*

- City of Sydney Council notes that the intention of the pedestrian through site link is not made clear on any of the plans submitted with the application. City of Sydney Council requires further clarification on exactly how the link is intended to work.

- City of Sydney Council requests further information/clarification on ownership / arrangements for public access to the pedestrian link and whether the link will be gated and/or locked at certain times.

- City of Sydney Council requests further clarification on whether there will be an easement or positive covenant associated with the pedestrian link, and how the link will be activated.

- City of Sydney Council requests clarification on the extent of public art in the pedestrian link and notes that public art should be considered for the substation facade as well.

- City of Sydney Council requests further information and resolution of the pedestrian link in the context of the retail development, including proposed finishes and clear widths for the intended pedestrian circulation.

Response: In response to the above points, these matters would be dealt with during the detailed design phase and prior to the construction of the commercial building. However, EnergyAustralia intends incorporating a covenant into the sale agreement for the development's residual land to include provision of a pedestrian link between Hay and Campbell Streets. The form of activation would depend on the future site owner, although it is envisaged that shops and cafes would occupy this space. Public art in the pedestrian link is expected to take the form of several sculptures placed along its length. Public art is not considered appropriate for the substation façade. The proposed landscape treatment is provided in Appendix A.

6.*3 - Public Domain Treatments*

- City of Sydney Council notes that public domain 'activation' in the location of the substation building, fronting Campbell and Hay Streets, is virtually non-existent. Further consideration of the proposed treatment should be considered during the detailed design development phase and that the integration of public art should be explored.

Response: In response to the above point, the nature of substation design and function and the optimisation of space on this site creates limited opportunity to activate the public domain. Consideration however would be given to enhancing the visual aesthetics of the building fronting Campbell and Hay Streets and incorporating crime prevention through environmental design (CPTED) requirements.

6.4 - The plans contain a number of public domain treatments that may not be supported, such as inclusion of a flagstone trim on the footway. Further detail is required for the public domain treatments and these issues should be addressed through the inclusion of a condition requiring a Public Domain Plan.

Response: EnergyAustralia notes the requirement for a public domain plan. Public domain treatments would be further developed and presented as part of the detailed design process for the site.

6.5 - The Public Domain Plan and Landscape plans accompanying the development application are not approved. Three copies of a detailed Public Domain Plan must be prepared by an architect, urban designer or landscape architect and must be lodged with Council's Public Domain Section and approved by Council prior to a Construction Certificate being issued for any new building work.

Response: The Project is subject to the provisions of Part 3A of the EP&A Act and the Minister for Planning approves the Project. Public domain and landscape treatments would be further developed as part of the detailed design process for the site and submitted to the DoP for approval by the Minister or the delegate prior to the commencement of work. EnergyAustralia met with CoS Council (29 April 2009) to review proposed landscape treatments and would submit the plans provided in Appendix C of this Report to Council for review by its Design Advisory Panel on 19 May 2009.

6.6 - The City of Sydney Council notes that the public domain works must be staged in accordance with the proposed construction staging of the substation and commercial buildings. A staging plan must be prepared and submitted in conjunction with the Public Domain Plan, and must be approved by Council prior to any Construction Certificate being issued. The staging plan must clearly show the proposed extent of public domain works for the substation and the commercial building, to cater for the possible staging of the building construction.

Response: The Project is subject to the provisions of Part 3A of the EP&A Act requiring approval by the Minister for Planning. The proposed staging of the substation and integrated development are described in Section 4.1 of this Report. A preliminary staging plan showing the extent of public domain works for the substation (Stage 1) and the commercial building (Stage 2) is provided in Appendix C of this Report. This plan would be further developed as part of the detailed design process for the site and submitted to the DoP for approval by the Minister or the delegate prior to the commencement of work. EnergyAustralia met with CoS Council (29 April 2009) to review proposed landscape treatments and would submit the plans provided in Appendix C of this Report to Council for review by its Design Advisory Panel on 19 May 2009.

6.7 - Prior to the issue of any Construction Certificate, footpath alignment levels for the building, including the public domain and through-site link, must be submitted to, and approved by Council.

Response: The Project is subject to the provisions of Part 3A of the EP&A Act requiring approval by the Minister for Planning. Footpath alignment levels for the building, public domain and through-site link would be further developed as part of the detailed design process for the site and submitted to the DoP for approval by the Minister or the delegate prior to the commencement of work.

6.8 - Prior to the issue of a Construction Certificate the owner of the site must provide a bank guarantee for security for rectification of any damage to the public way.

Response: EnergyAustralia is a statutory entity and as such no bank guarantee for security for rectification of any damage to the public way is required.

6.9 - The surface of any material used or proposed to be used for the paving of colonnades, thoroughfares, plazas, arcades and the like which are used by the public must comply with AS/NZS 4586:2004 " Slip resistance classification of new pedestrian surface materials"

Response: EnergyAustralia notes Council's requirements and would incorporate as appropriate.

6.10 – Landscaping

The Landscape Plan accompanying the application is not approved.

- A detailed Landscape Plan, drawn to scale, by a landscape architect or approved landscape consultant must be submitted to and approved by the Certifying Authority prior to a

Construction Certificate being issued.

- A maintenance plan is to be submitted for approval of the Certifying Authority and to be complied with during occupation of the property.

- The proposed species for new street tree planting must be revised for the Campbell and Pitt Street frontages. Flindersia sp is not approved for these frontages. This must be addressed in the submission of the Public Domain Plan.

Response: In response to the above points, a preliminary landscape plan for Stage 1 and Stage 2 of the Project is provided in Appendix C of this Report. This plan would be developed further during the detailed design process. Landscaping maintenance would be undertaken as part of the site's operational requirements. Liaison would take place with CoS Council to confirm appropriate tree species for the Campbell and Hay Street frontages. EnergyAustralia met with CoS Council (29 April 2009) to review proposed landscape treatments and would submit the plans provided in Appendix C of this Report to Council for review by its Design Advisory Panel on 19 May 2009.

6.11 - Public Art

- High quality art work must be provided within the development in publicly accessible locations, including near main entrances, in lobbies and on street frontages, in accordance with the Central Sydney DCP 1996 and the Public Art Policy. Details of the art work must be submitted to and approved by Council prior to a Construction Certificate being issued.

Response: The Project is subject to the provisions of Part 3A of the EP&A Act requiring approval by the Minister for Planning. Public art would be considered for the commercial development only.

6.12 - Stormwater and Drainage

City of Sydney Council notes that on-site detention, treatment and re-use is encouraged.

- Prior to a Construction Certificate being issued, details of the proposed stormwater disposal and drainage from the development including a system of on-site stormwater detention in accordance with Council's standard requirements and details must be submitted and approved by Council.

- Any proposed connection to the Council's underground drainage system will require the owner to enter into a Deed of Agreement with the Council and obtain registration on Title of a Positive Covenant prior to Construction Certificate being issued.

- The requirements of Sydney Water with regard to on-site detention of stormwater must be ascertained and complied with. Evidence of Sydney Water approval must be submitted prior to a Construction Certificate being issued.

- An "Application for Approval of Stormwater Drainage Connections" must be submitted to the Council at the time of lodgement of the proposal for connection of stormwater to the Council's drainage system.

Response: In response to the above points, the Project is subject to the provisions of Part 3A of the EP&A Act requiring approval by the Minister for Planning. EnergyAustralia would liaise with Sydney Water Corporation to ascertain its requirements for the stand alone substation and comply accordingly. Similarly, the future proponent of the commercial development would be conditioned to liaise with Sydney Water to ascertain its requirements for the commercial development.

6.13 - Proposed Construction and Fit-out with Food Premises

Details of the commercial kitchen, and food preparation and storage areas must be prepared by a suitably qualified person and certified in accordance with Standard 3.2.3 of the Australian and New Zealand Food Standards Code under the Food Act 2003 and AS4674 prior to construction certificate being issued.

- The construction, fitout and finishes of the food premises must comply with Standard 3.2.3 of the Australian and New Zealand Food Standards Code under the Food Act 2003 and

AS4674.

Response: These requirements are acknowledged and approvals would need to be obtained by the proponent for the commercial development prior to the commencement of operations.

6.14 - Stand alone substation without Commercial Development proceeding

Prior to issue of any Construction Certificate, if approved, a detailed plan for the site must be prepared and approved by the Certifying Authority, documenting the proposed treatments for the substation building and adjacent land in the event that the commercial component of the development is not constructed within 3 months of the substation building. The plan must include:

- Details of the proposed substation facades, in particular the western façade

- Details of the proposed green wall / screen as indicated on Dwg SK-LS-04 prepared by Kann Finch Group.

- Detailed drawings demonstrating how the planting screen is constructed including proposed materials, planter dimensions, and integration into the support structure

- Location, numbers, type and size of plant species

- Drainage, irrigation and waterproofing details

- Details of how maintenance access to the planter boxes will be provided

- A maintenance plan, detailing how access to the planting will be provided and outlining the intended strategy for de-commissioning the planting works should plants fail.

The proponent must provide details of the proposed adjacent land use and treatment between the substation building and Pitt Street.

City of Sydney Council recommends a condition of approval be imposed requiring further consultation with Council and a further design review workshop to discuss relevant design issues as outlined.

Response: In response to the above points, EnergyAustralia has given further consideration to the western façade in light of the current and anticipated property market conditions and has decided not to provide a "green" wall. EnergyAustralia recognises that the lag between construction of the substation and the commercial development may exceed the previously assumed one – two years and as such it would be impractical from a maintenance perspective to have a "green" wall. EnergyAustralia is now proposing to provide temporary façade treatments for each face of the building which would be a cladded system. This façade would later be removed and replaced by the treatments indicated for the integrated development. Drawings and photomontages showing the stand alone substation are provided in Appendix A.

A meeting was held with CoS Council on 29 April 2009 to discuss the proposed temporary treatments presented in Appendix A. These drawings would be submitted to CoS Council for review by its Design Advisory Panel on 19 May 2009 in lieu of having a further design review workshop.

EnergyAustralia considers CoS Council's proposed condition that in the event the commercial component of the development is not constructed within three months of the substation building, the temporary façade must be erected, is unrealistic. The commercial component can only commence after the substation's Principal Contractor has handed over the site to EnergyAustralia. Fit out of the substation would continue after completion of the civil construction and the site would not be handed over to EnergyAustralia for approximately 12 months after completion of the civil construction.

EnergyAustralia proposes to construct the temporary façade if the commercial development is not likely to commence construction within 12 months of completion of the substation civil works. Thus if a proponent for the commercial development is not identified by completion of the civil works then the temporary façade would be erected as fit out proceeds. If however, a proponent is identified by completion of the civil works then construction of the commercial component would continue on from the completion of the substation (including fit out) and the temporary façade treatment would not be

erected.

6.15 - Traffic

- The plans for the commercial component do not show a designated loading area and it appears that the trucks load and unload from the circulation aisle. This would prevent other vehicles from circulating and may cause traffic to back onto the public way, which is not considered acceptable. A designated loading area must be identified and must not interfere with vehicle circulation.

- The swept path analysis for the commercial component shows a car requiring the entire width of the circulation path to exit the ramp and turn onto the circulation path, this will prevent two vehicles from passing on the tight corner. The proponent must provide further details of how they plan to remove this potential vehicle conflict.

Response: In response to the above points, there are two designated loading areas for cars, vans and station wagons. All other truck deliveries would occur on-street as discussed in the Traffic and Transport Assessment and Belmore Park Traffic Impact Assessment report (Appendix C, Vol. 2 of the Belmore Park EAR) and this is considered appropriate having regard for the site constraints, as well as the low frequency of visits by trucks. The notable exception is garbage collection, which is the subject of a separate Management Plan. This should rely on the smallest truck possible and the frequency would be low and managed to avoid conflicts.

An exiting car needs to use the full width of the ramp and this local one-way arrangement is acceptable in view of the moderate volumes. It is recommended that a convex safety mirror be installed to maximise safety at all northern aisles, with exiting vehicles on the ramp provided with a sign displaying the words "give way to entering traffic" or similar.

- A separate Construction Traffic Management Plan must be submitted for approval by City of Sydney Council prior to the construction commencing on site. The Traffic Management Plan is to be prepared for the approval of the Sydney Traffic Committee.

Response: The Project is subject to the provisions of Part 3A of the EP&A Act requiring approval by the Minister for Planning. A construction traffic management plan (CTMP) would be submitted to the DoP for approval by the Minister or the delegate.

- City of Sydney Council notes that the proponent should have reviewed the City's adopted Cycle Strategy and Action Plan 2007 - 2017 as this report identified all future cycleways within the City of Sydney LGA.

Response: The development is compatible with the cycle strategy and there are no existing or planned cycleways adjacent to the site. End-user facilities would be considered in the detailed design phase.

- All road closures are subject to separate application and will require Sydney Traffic Committee approval.

Response: No road closures are proposed. The CTMP would include a traffic control plan for any partial closures (road occupancies) that may be temporarily required. In the event of a road closure being required, prior approval would be obtained from the relevant authority or authorities.

- Potential bus stop relocations would need to be approved by the STA prior to any works beginning on site.

Response: Bus stop relocations can be conditioned if they are required. Kerbside parking allocations (cars, trucks, buses taxis) would be appropriate, with approval of CoS Council's traffic committee.

- If streets including the pedestrian footway are proposed to be closed the proponent will be required to pay a fee for any work zones in accordance with Council's standard fees and charges schedule. Any construction areas will be required to be declared work zones. Access to properties would also need to be maintained at all times so as to minimise any impacts on residents and businesses in all areas where works are proposed.

Response: In the event of a road closure or pedestrian footway being required prior approval would

be obtained from the relevant statutory authority or authorities. Access to properties would be maintained at all times.

- A plan for preferred truck access routes for spoil disposal shall be submitted to the Sydney Traffic Committee, as part of the Traffic Management Plan, for approval. These routes are to be designed to avoid going through residential precincts.

Response: Truck access routes for spoil disposal would form part of a CTMP that would be approved by the Minister or the delegate. Residential precincts would be avoided wherever possible.

- Construction programs are to take into account the general ban of construction activities in the City due to special events in the month of December.

Response: This consideration would be taken into account by EnergyAustralia.

6.16 – Community Consultation

- A site specific community consultation plan should be prepared and approved by the consent authority prior to any works commencing.

Response: A community consultation strategy as part of the CEMP would be prepared and submitted to the Minister or the delegate for approval prior to implementation.

6.17 – Construction Noise and Vibration

- A Noise Management Plan (NMP) as part of the Construction Environmental Management Plan (CEMP) should be submitted to Council. All recommendations detailed in the Heggies Pty Ltd Report dated 9 December 2008 are to be implemented.

Response: The Project is subject to the provisions of Part 3A of the EP&A Act requiring approval by the Minister for Planning. The CEMP (including noise and vibration management requirements) would be approved by the Minister or the delegate.

6.18 – Street Trees

- Street trees shall be protected at all times during construction, in accordance with the Council's tree preservation order. Approval for the removal of any tree will also be required.

6.19 – Remediation Works Footpaths

- Any damage arising to footpaths as a result of the proposed construction works is to be made good and reinstated in accordance with City of Sydney's public domain standards and specifications. Full costs are to be borne by the proponent.

6.20 – Property Acquisition

- Greater detail is required in regard to the process for acquisition of strata of underground three-dimensional parcels of land and its effect on Council assets.

6.21 – Public Domain General

Key issues for consideration from a public domain point of view should be:

- the need to make good any damage caused during construction

- the need for localised upgrades to the public domain in conjunction with any building development

- the need to address alignment levels issues in conjunction with any building and public domain works.

6.22 – Waste

- Prior to exportation of waste in the vicinity of Borehole No 108 from the site, the material should be classified in accordance with NSW DECC Waste Classification Guidelines, such that

excavated spoil can be disposed of appropriately.

Response: The requirements 6.18 to 6.22 are acknowledged by EnergyAustralia and would be complied with as appropriate.

6.23 – Hours of Work and Noise in the CBD

- Hours of Work within and outside the CBD must be in accordance with the restrictions noted by City of Sydney in its submission.

Response: Construction work hours would be in accordance with the Minister for Planning's Conditions of Approval for the Project.

6.24 – Air Pollution

- A detailed air pollution monitoring plan should be prepared by a suitably qualified environmental consultant before any building work is commenced.

Response: The Project is subject to the provisions of Part 3A of the EP&A Act requiring approval by the Minister for Planning. The CEMP (including air pollution management and monitoring requirements) would be approved by the Minister or the delegate.

6.25 - Electromagnetic Fields

-The EMF emissions from the substation should be assessed by a suitably qualified and experienced electrical engineer on completion of the proposal.

Response: EnergyAustralia submitted a preliminary EMF report with the EAR (Volume 2, Appendix I) which is based on the proposed final substation configuration. EnergyAustralia would assess the EMF emissions from the substation during the detailed design and also confirm the emissions during the operational phase of the Project, consistent with its approach to other facilities and infrastructure owned by EnergyAustralia**.**

6.26 - Microbial Control

- All cooling towers and hot/cold water systems must be operated and maintained in accordance with AS 3666.2: 1995 (or AS 3666.3:2000 subject to prior notification to Council) the Public Health Act 1991, and Public Health (Microbial Control) Regulation 2000.

- A true copy of the annual certificate as stipulated in Clause 9(2) of the Public Health (Microbial) Regulation 2000 must be submitted to Council prior to the period ending 30 June each year.

- Prior to commencement of use, the owner or occupier must apply to Council for the registration of water systems installed on the premises in accordance with the Public Health (Microbial Control) Regulation 2000.

Response: These requirements above are acknowledged by EnergyAustralia and would be complied with as appropriate.

3.3.6 Submission 7 - RailCorp

7.1 – The noise and vibration assessment does not appear to address the potential impact of works on rail infrastructure (particularly vibration) or the acoustic impact of rail operations on the future developments, particularly the Belmore Park site.

Response: In relation to the Belmore Park Zone Substation Project, Section 11 of the Heggies Noise and Vibration report (Volume 2, Appendix D) recommends a range of noise and vibration management measures including mitigation and monitoring during the construction and operational phases of the Project. The noise and vibration report has been revised to include reference to potential impact of rail infrastructure and is provided in Appendix E of this Report.

In addition the Department of Environment and Climate Change (Submission 5) recommended a number of conditions relating to noise and vibration management. EnergyAustralia notes these recommended conditions and would comply as appropriate.

7.2 – Geotechnical investigations and mitigation measures were undertaken by Douglas Partners. These measures may address impact on the existing infrastructure during excavation and construction activities and would need close consultation with RailCorp's own geotechnical and structural engineers as well as tunnel access.

Response: The proposed commercial development is a minimum of 11 metres from RailCorp's infrastructure. For the commercial building component close consultation with RailCorp's own geotechnical and structural engineers, as well as tunnel access, is acknowledged and would occur. However, the substation is in excess of 20 metres from RailCorp's assets and the requirement for similar close consultation is not considered necessary for stage 1 (substation only) of the development. EnergyAustralia would consult with RailCorp and provide relevant project information but does not consider it necessary to access or install monitoring equipment in the tunnel for Stage 1 development.

7.3 – Artist's impressions provided for the Belmore Park proposal raises the possibility of sighting interference issues for train drivers on the above ground corridor as it is shown as being highly reflective. The proponent needs to address this issue and satisfy RailCorp's concern.

Response: The proposed commercial development would not cause adverse glare for vehicles or pedestrians at surrounding locations as a result of the proposed glazing elements. These elements would have a reflectivity coefficient of less than 20%. Furthermore the proposed stand alone substation would also not cause adverse glare to vehicles or pedestrians at surrounding locations as the facade materials have low specular reflectivity.

The substation is of low height, which benefits solar access between the morning to noon period, and is shielded by surrounding commercial and residential buildings.

A reflectivity report would be undertaken during the detailed design phase.

7.4 – The Electric and Magnetic Field report will need to be reviewed and endorsed by RailCorp's Electrical, Signal and Telecommunications sections prior to construction commencing.

Response: This electrolysis report was issued to RailCorp in April 2009. EnergyAustralia would continue to liaise with RailCorp throughout the design process for the substation in relation to electrolysis issues.

7.5 – In RailCorp's submission dated 12 May 2008, concerns were raised that there would be impacts to the existing rail corridor and tunnels at Eastern Suburbs Railway – Tunnels near Belmore Park (which will also impact on the existing Metro Light Rail corridor in Hay Street).

Response: The Stage 1, substation works, is in excess of 20 metres from the ESR tunnel and EnergyAustralia considers there will be no adverse impact resulting from its proposed Stage 1 works. However, the proximity of the ESR tunnels would be considered in the detailed design and construction. EnergyAustralia would consult with RailCorp (and Metro Light Rail) and provide relevant project information but considers it may not be necessary to access or install monitoring equipment in the tunnel for Stage 1 development. EnergyAustralia would undertake to determine the extent of monitoring and dilapidation survey requirements based on structural and geotechnical engineering advice.

The proponent of the commercial development which extends to within 11 metres of rail infrastructure would likewise consult with RailCorp during the Stage 2 design to determine appropriate mitigation measures to avoid adverse impact on the rail infrastructure.

7.6 – RailCorp's submission dated 17 September 2008 and referred to in the submission dated 9 March 2009, recommended the following:

- A new electrolysis report for the proposed Belmore Park Zone and Commercial Development Project to extend to earthing and bonding considerations for the Project and the potential impact on existing rail electrical services.

Response: This electrolysis report was issued to RailCorp in April 2009. EnergyAustralia would continue to liaise with RailCorp throughout the design process for the substation in relation to electrolysis issues.

- As part of acoustic investigations, confirm that the distance from the existing rail tunnel to the proposed excavation would be 11 metres.

- The 20mm/second peak particle velocity criterion applies where there are no existing vibration sensitive installations in the affected sections of the rail tunnel. RailCorp's City Region Office would need to verify and advise EnergyAustralia of this aspect.

- A geotechnical report for the site indicated there would be some ground movement due to stress relief and that the effect would be significant for structures at the ground surface level.

Response: In response to the above points, the proponent for the commercial development would consult with RailCorp during the detailed design stage and agree with RailCorp on measures to address these issues.

7.7 – Recommended Conditions of Approval

The following conditions relevant to Belmore Park substation were recommended in RailCorp's submission dated 9 March 2009:

1. Acoustic/vibration treatment may need to be assessed for any impact from rail operations on the proposed CityGrid tunnel.

2. Vibration monitoring of the rail tunnels may be required during the works should they come in close proximity to existing rail infrastructure.

3. An electrolysis report may be required for those areas of the proposed works within sixty (60) metres of the existing electrified rail network.

4. Where the proposed works are to be located within 25 metres of existing rail infrastructure geotechnical and structural reports will be required to be submitted for review.

5. Depending on the results of the above reports it may be necessary for track possessions and power outages to be arranged, particularly if access to rail tunnels is required.

6. Construction methodologies, risk assessments, safe work method statements and any monitoring regimes applicable to rail infrastructure will be required to be submitted for review.

7. Details of any cranes proposed to be set up over rail infrastructure will be required to be submitted for review.

8. Environmental issues will need to be taken into account to prevent any contaminants entering into the rail corridor. This will include possible stormwater ingress.

The following conditions were recommended in RailCorp's submission dated 17 September 2008 and referred to in the submission dated 9 March 2009:

9. A dilapidation survey is to be carried out within the tunnel prior to commencement of works.

10. Detailed drawings for the proposed development, particularly the basement excavation and associated shoring, are to be submitted for review.

11. Safe work method statements, risk assessments and proposed work methodologies are to be provided.

12. No intrusion of rockbolts/anchors should occur within the rail tunnel easement from the tunnel face (assuming there are no rockbolts installed in the tunnel).

Response: In response to the above points, EnergyAustralia proposes that the Minister conditions the works separately into Stage 1 works relating to the proposed zone substation and Stage 2 works

relating to the commercial development. Stage 1 works would not be required to meet the obligations described under 1 to 12 above as the excavation is in excess of 20 metres distant from the rail infrastructure. Note that EnergyAustralia considers the distance of 25 metres distance referred to in point 4 above to be unnecessarily onerous.

EnergyAustralia would undertake to continue to liaise with RailCorp in relation to design and construction issues and to agree on necessary measures required to ensure the safety and integrity of RailCorp's infrastructure.

The future proponent for the commercial development would liaise with RailCorp to determine its requirements in regard to the proposed conditions.

4. Preferred Project Information

4.1 Project Amendments

4.1.1 General

EnergyAustralia has decided to amend the exhibited Belmore Park Zone Substation design by changing transformer technology from sulfur hexafluoride gas (SF6) insulation to oil. This amendment has been made following a detailed project review which considered and re-evaluated the technical, economic and operational merits of the proposed scheme compared to various alternatives

EnergyAustralia carried out a review of the Project in light of the current and forecast property market conditions to test if the original economic evaluation remained valid. This review included current and forecast residual land values for the sale of the adjacent land and the air space above the substation, required for the integrated development. The review concluded that land value projections in the current market and over the next several years are likely to be significantly lower than assumed in the original economic evaluation, which was therefore no longer valid.

EnergyAustralia determined that it was possible to use oil based transformers which included traditional mineral oil and FR3 oil (FR3 is a trade name for a fire resistant natural ester based dielectric coolant). A risk assessment identified that for a substation integrated with a commercial development in the CBD, the potential risk of fire would require mitigation measures to be designed into the building such as fire-rated enclosures around the transformers, a fire suppressant deluge system, oil containment tanks and structural strengthening in order to meet Building Code of Australia standards.

An economic analysis found that the additional building costs associated with fire risk mitigation measures were more than offset by the savings achieved from using oil based transformers.

It is EnergyAustralia's preference to use oil based transformers for a number of reasons, including:

- EnergyAustralia has considerable experience with the technology;
- It allows greater flexibility in the future should a transformer require replacement;
- Maintenance does not require specialists, potentially leading to out of service delays;
- Eliminates the need for site specific OH&S issues related to SF6;
- Lower potential impact on the environment compared to SF6;
- Natural ventilation can be used in lieu of expensive radiator type cooling methods;
- Lower cost compared to SF6;
- Shorter delivery lead time on oil transformers compared to SF6 gas; and
- Less restricted supplier market for oil transformer technology compared to SF6 gas transformers.

The change in transformer technology has meant changes to the internal civil and structural general arrangement. There are relatively minor external consequences to the appearance of the stand alone substation, however, the louvre area available for ventilation has reduced on the Hay and Campbell Street façades and increased at low level along the east façade. These changes are shown on the drawings provided in Appendix A and Appendix B.

4.1.2 Temporary Substation Façade Treatment

In the current economic climate it is not possible to predict the property market with any degree of certainty. EnergyAustralia acknowledges that it may not find a developer to construct the proposed commercial development in the originally anticipated time frame of one to two years following construction of the zone substation and that it may be five to ten years before the integrated development is realised. The temporary façade treatments and landscaping has therefore been revised to account for the following two stages:

Stage 1 – Stand alone substation only.

Stage 2 – Integrated commercial development.

In Stage 1 the substation façade treatments are consistent with the exhibited design with modifications to suit the revised transformer technology. In addition, EnergyAustralia has consulted with the eastern neighbour and with CoS Council to obtain and incorporate its views on the proposed façade treatments where possible. It is proposed to provide temporary facades for the building to be removed in the future when the integrated development is constructed. The temporary façades would extend down to within approximately 3.5 metres of the footpath level. The lower 3.5 metres would have a permanent honed granite cladded finish as indicated on the drawings and photomontages contained in Appendix A. It is proposed to use a cladding material with a nominal design life of 10 to 15 years, although it is not anticipated that it would be required for that length of time.

The west façade has been designed to provide visual interest to an otherwise blank wall. It responds to the colour of the surrounding built landscape with an accent on the sandstone and red brick tones. The otherwise flat relief is broken by a rectangular area of recessed cladding which is further emphasised by creative illumination within this recess feature at night time. The cladding terminates approximately 3.5 metres above ground level. A “green” landscape wall would be provided along this lower apron to provide further interest and to provide continuity with the adjacent Belmore Park.

The north, south and east faces of the substation would feature prefinished metallic light silver cladding as an appropriate neutral background to the natural landscape of the adjacent Belmore Park with the coloured cladding referred to above as infill to provide continuity around the building and to create a bold contrast with the light silver cladding. The wall cladding up to approximately 3.5 metres height to the north and south-street frontages and returning partly into the east façade would be a honed black granite cladding. The Stage 2 integrated design remains as per the original drawings exhibited in the EAR. The intention is that the future owner and EnergyAustralia would remove the temporary cladding and replace with the finish described in the exhibited EAR.

In recognition of the semi-permanent nature of the temporary façade and as suggested by CoS Council at a meeting on 29 April 2009, EnergyAustralia intends to continue the consultation process and obtain advice from CoS Council’s design advisory panel in lieu of a design review panel workshop as was used for the integrated building.

4.1.3 Modified Design

The change in transformer technology necessitates revision of the building structure. There would be minimal change to the external building envelope to that proposed in the exhibited EAR. The main changes to the internal structure being:

1. Deletion of the radiator cooling floor and construction of naturally vented air shafts from the transformer bays
2. Addition of oil spillage containment including; bunding, capture tank and basement overflow system
3. Addition of high velocity deluge fire sprinklers to the transformer bays
4. Segregation of the transformers in separate fire rated enclosures
5. Provision of substation overpressure venting from the transformer bays, to the transformer roadway and eastern set back area.

Drawings are provided in Appendix B which show the revised cross-sections and plans.

The change in transformer type impacts the noise and vibration assessment report, the greenhouse gas and air quality assessment report and the hazards and risks assessment. The revised reports are discussed in sections 4.2, 4.3 and 4.4 respectively.

4.1.4 Landscape Staging and Public Domain Plan

Staging plans and a Public Domain plan have been produced to show the proposed landscape treatments for Stage 1 – stand alone substation, and Stage 2 - the final integrated development. The drawings are contained in Appendix C.

Stage 1 – Stand alone substation

Stage 1 treatments consist of a strip along the eastern boundary where an approximately 3.5 metre high “green” mesh fence would be constructed to act as a screen for the lower substation louvres and to provide interest when viewed by the eastern neighbour. Lighting would be used to provide further interest at night time. The fence would be sinusoidal in plan, supporting climbers. Trees would be planted in the “peaks” and “troughs” to add further screening and to soften the boundary between the properties.

This strip is intended to be permanent and would provide a visual through site link between Hay and Campbell Streets but would not be accessible to the public for security reasons (as agreed at the earlier design review meetings with CoS Council and DoP, and as exhibited in the EAR). A toughened, etched glass wall is proposed at either end of the strip to prevent public access to this area.

Also included in Stage 1 is a “green wall’ along the bottom of the west façade. This would comprise a mesh fence with climbers up to about three metres in height. The purpose of this wall is to provide a soft edge to the public car park and further contrast to the substation façade. It would also minimise the potential for graffiti and vandalism. This wall is intended to be temporary (or semi-permanent) until the commercial development commences.

In addition to the above treatments, a number of temporary trees would be located within and around the car park perimeter in planter boxes.

Public Domain trees would be planted along Hay and Campbell Streets adjacent to the substation building as shown in the drawings in Appendix C and the photomontages in Appendix A.

Stage 2 – Integrated Development

Stage 2 would feature the final landscape treatments, which in addition to the visual through site link would include additional trees around the commercial development to supplement the Public Domain trees.

4.2 Air Quality & Greenhouse Gas Assessment

4.2.1 Background

EnergyAustralia previously proposed the use of Sulfur Hexaflouride (SF6) gas cooled transformers for Belmore Park Zone Substation but as discussed in section 4.1.1 following a recent review it was concluded that oil cooled transformers would be used instead.

The revised air quality and greenhouse gas assessment provided in Appendix D includes an assessment on the impacts associated with the use of alternative transformer insulation technologies including SF6, FR3, or other ester type oils and traditional mineral oil.

4.2.2 Methodology and Criteria

The work undertaken in compiling the revised assessment involved the following tasks:

- Review of stakeholder submissions;
- Technology review;
- Review of air quality and greenhouse gas assessment; and
- Produce updated report.

4.2.3 Summary of Assessment

Of relevance to Belmore Park Zone Substation, EnergyAustralia investigated the use of the following dielectric fluid coolants within transformers:

- Mineral oil; and
- FR3 or other ester type oils.

Each dielectric fluid and its potential air quality and greenhouse gas impacts are detailed in Table 4.1 below.

Table 4.1 – Dielectric^ Mediums and Associated Air Quality and Greenhouse Gas Impacts

Dielectric Medium	Potential Air Quality Impacts	Potential Greenhouse Impacts
Mineral oil	No known air quality impacts from the use of mineral oils as a dielectric medium.	No direct emissions from the use of mineral oils. Indirect greenhouse gas emissions would be associated with the manufacturing, transportation and disposal of mineral oils.
FR3 or other ester type oils	No known air quality impacts from the use of FR3 or ester type oils as a dielectric medium.	No direct emissions from the use of FR3 or other ester type oils. Indirect greenhouse gas emissions would be associated with the manufacturing, transportation and disposal of FR3 or other ester type oils.

^ Dielectric means – a material or a medium that does not conduct electricity but can sustain an electric field

The revised air quality and greenhouse gas assessment concludes that there would be no direct impacts on air quality as a result of using the alternate dielectric mediums for transformer cooling purposes. Similarly, the report concludes that the use of alternate oil technologies would result in no direct emissions of greenhouse gas.

In light of the revised assessment, EnergyAustralia concludes that the use of alternate oil technology for transformer cooling purposes provides an enhanced result in regard to air quality and greenhouse gas, when compared to the previously proposed SF6 insulation.

4.3 Noise & Vibration Assessment

4.3.1 Background

The revised noise and vibration assessment included in Appendix E provides an assessment on the impacts associated with the use of transformer technologies FR3 or ester type oils and mineral oil for transformer insulation.

4.3.2 Methodology and Criteria

- Review stakeholder submissions;
- Technology review;
- Review air quality and greenhouse gas assessment; and
- Produce updated report.

4.3.3 Summary of Assessment

It should be noted that the revised noise and vibration report has been amended only in regard to the assessment of operational noise impacts associated with the use of alternate oil technology. All other construction and operational noise impacts remain unchanged from the report included in the exhibited EAR.

Table 4.2 details the amended predicted noise levels from the substation building as a result of the use of oil transformer technology.

Table 4.2 – Computed Noise Level without Mitigation

Receivers/ Addresses	Floor Level[1]	Criteria (INP Amenity)			Received Noise Level – dBA[2]
		Day	Evening	Night	4 Transformers operating ODAI and 1 Transformer ONAN
Meriton Mosaic 36 Campbell Street	Floor 3	54	53	50	44
317-321 Castlereagh Street	Floor 11	54	53	50	46
428 Pitt Street	Floor 2	59	59	59	44
431 Pitt Street	Floor 3	59	59	59	37
441 Pitt Street	Floor 2	59	59	59	34
323 Castlereagh Street	Floor 4	59	59	59	50

Note 1: Noise levels were predicted at all receiver levels, with the floor shown where the highest levels were predicted.
Note 2: No tonal penalty is applied as the received noise level is dominated by the fans in ODAF mode.

Note:

The predicted results presented in Table 4.2 show compliance for the worst case scenario (four transformers operating ODAF (oil directed, air forced) and one transformer operating ONAN (oil natural, air natural) at all receiver locations).

The revised noise and vibration assessment – updated to account for the proposed change in transformer technology concludes that noise levels for the operation of the substation component of the development are predicted to comply with the design noise goals.

For compliance of the integrated development, basement ventilation system and Level 14 plant

equipment, control measures would need to be developed during detailed design of that component to ensure compliance with noise targets.

4.4 Hazard & Risk Assessment

4.4.1 General

The pertinent risks associated with the use of alternate oil transformer technology are the risk of fire / deflagration and adverse environmental effects associated with potential spillage of oil from the transformer bays. It should be noted that EnergyAustralia utilises oil transformers in the majority of its existing substations including its CBD substations and is highly experienced in the management of hazards and risks associated with this equipment.

Appendix F includes an amended Hazard and Risk Table, updated to include proposed mitigation measures to address these potential risks associated with the alternate transformer technology.

Specifically, the mitigation measures proposed to address these risks include:

- Fire-rated enclosures around all transformer bays to mitigate against risks associated with fire and transformer deflagration and security of the adjacent transformer;
- Amended ventilation design to address air intake / exhaust and overpressure venting from transformer bays;
- High-velocity deluge fire sprinklers to the transformer bays to mitigate against fire associated with oil transformers;
- Spillage containment measures to mitigate against the risks associated with oil spillage or leaks. Measures include bunding around the transformer bay, capture tank and basement overflow system; and
- The development of operating procedures to address the removal and transport of oil collected in substation containment systems.

EnergyAustralia considers that the hazards and risks associated with the use of oil transformers can be adequately managed through stringent design, as well as the implementation of existing operating protocols adopted in other substations that utilise oil transformers.

5. Statement of Commitments

The following Tables 5.1 and 5.2 update Tables 16.1 and 16.2 of Volume 1 of the EAR.

Table 5.1 – Statement of Commitments Construction Phase

Key Issue	Commitment
Visual Amenity and Design (Stage 1 and 2)	Stage 1 – Stand alone substation If construction of the commercial building is not commenced or is not likely to commence within 12 months of completion of the substation the cladding finish for the stand alone substation discussed in section 4.1.2 of this Report would be constructed. EnergyAustralia would provide drawings of the temporary façade treatment to the CoS Council Design Advisory Panel for its meeting on the 19th May 2009. Following issue of Minister's Approval of the Project, EnergyAustralia would continue the design review process for the temporary façade treatment with CoS Council. EnergyAustralia would also consult with the eastern neighbour and incorporate its comments where reasonably possible. Stage 2 – Integrated Development The Belmore Park Integrated Development is designed to be in keeping with the locality and maintain its identity as a bold, modern addition to the area. The design of the development has been guided by the development parameters of the Central Sydney Local Environment Plan 2005 and the Central Sydney Development Control Plan 1996 to achieve an appropriate contemporary image for the development with the exception of: ◗ street frontage heights and setbacks; ◗ building exterior; and ◗ building height restrictions in the restrictive covenant on site.
Traffic and Access (Stage 1 and 2)	◗ Construction traffic would be restricted to separate entry and exit accesses with a one-way flow through the site. Entry would be off Campbell Street and exit to Hay Street. This would mitigate and reduce congestion and manoeuvring, particularly by heavy vehicles. ◗ Advance warning signage to identify the construction site, and warn of construction traffic and changed traffic conditions would be provided on all approaches to the construction site area, for example, Pitt Street (north of Campbell Street and south of Hay Street), Hay Street (west of Castlereagh Street), Campbell Street (west of Castlereagh Street). ◗ Suitable traffic management and controls (to be detailed by the contractor prior to commencing works) would be maintained at all times during construction to aid heavy vehicles turning into and out from the site on Campbell Street and Hay Street. ◗ Provide warning and guidance signage and detours for pedestrians along the southern side of Campbell Street and the northern side of Hay Street in the vicinity of site vehicle accesses. In conjunction with this, provide pedestrian management while vehicles are entering and leaving the site. ◗ A Construction Traffic Management Plan (CTMP) would be prepared prior to the commencement of construction works and incorporated into the construction programme. The CTMP would be prepared in consultation with relevant stakeholders and as part of the Construction Environmental Management Plan (CEMP). ◗ The CTMP sub-plan would detail how impacts of the construction activities would be managed or minimised. It would be consistent with EnergyAustralia's environmental policy, specifications and procedures to ensure compliance with any specific conditions of approval, licence conditions, and any other permits and approvals.

Key Issue	Commitment
	◗ A detailed CTMP would be developed and incorporated into the construction programme for the proposed Project. The CTMP would include detailed consideration of the following issues: ◗ identification of designated heavy vehicle routes including the likely number of heavy vehicle movements during the construction period; ◗ identification of other vehicle access routes, signage and site access arrangements; ◗ measures to ensure that road network performance would not be affected; ◗ spoil movement would occur, where practicable, outside background peak traffic periods in order to minimise traffic conflicts; ◗ measures to address queuing and heavy vehicle site access, including the management and control of construction vehicles to ensure that the impact on traffic flows along adjacent streets is minimised; ◗ during construction activities, general public access would not be precluded to surrounding land uses including nearby retail, commercial and residential areas. All sites would maintain either existing access or provide suitable alternative temporary access; ◗ all loading and unloading associated with the construction would occur within the site where possible, or within designated construction zones. If required, an approved construction zone(s) for activities that cannot be accommodated within the site (eg. special loading and unloading during construction or the approved use of cranes in the street) would be established. This would be subject to a separate application and approval by Council / RTA; ◗ the site would be suitably fenced including the accesses, which would be secured against unauthorised entry; and ◗ measures to protect pedestrians, cyclists and other motorists in the vicinity of the construction sites. ◗ The CTMP would cover any road and site access civil works, warning and guidance signage, linemarking and management of traffic generating activities. The following assumptions would be incorporated into the Traffic Management Plan: ◗ all proposed traffic control measures would be installed and removed in accordance with standard procedures outlined in RTA's "Traffic Control at Work Sites" manual and specified in "AS 1742.3: 2002, Traffic Control Devices for Works on Roads"; ◗ in addition to relevant Australian Standards and RTA guidelines, all traffic management would also conform to Workcover NSW "Code of Practice for Working Near Traffic and Mobile Plant"; ◗ barriers approved by the RTA and/or City of Sydney Council would be provided between the construction sites and trafficable areas. Pedestrian and cycle diversions would be required during the works; ◗ when working on RTA and/or Council controlled roads, obtaining approval from RTA and/or Council before commencing work; ◗ site access points would be covered in the CTMP, particularly with respect to the interaction and conflict between construction vehicles and pedestrians / cyclists at site accesses; and ◗ road dilapidation reports would be prepared, prior to commencement of construction and after construction is complete, for all local roads nominated in the CTMP and likely to be used by construction traffic. Road and footpath damage that may be attributable to construction traffic would be reinstated to a standard at least equivalent to that existing prior to the damage. ◗ Provision would be made within the CTMP for adequate parking of construction and project staff vehicles so that surrounding on-street parking is not adversely affected. ◗ Contractors would be required to monitor and report any road dilapidation, and to maintain roads to the standards required to provide a satisfactory motoring and cycling surface.

Key Issue	Commitment
Noise and Vibration **(Relevant to Stage 1 and 2)**	◗ Where possible, plant would be located and orientated to direct noise away from sensitive receivers. ◗ Works would be carried out within standard Construction Hours, except as permitted by Conditions of Consent. ◗ For out of hours work the noisiest construction activities should take place before 10:00 pm wherever feasible, and endeavour to undertake as much preparation work as feasible in the day-time hours. ◗ Deliveries would be carried out within standard Construction Hours, except as permitted by Conditions of Consent. ◗ Plant and equipment would be selected to minimise noise emission, in-so-far-as possible whilst maintaining efficiency of function. Residential-grade silencers would be fitted and all noise control equipment would be maintained in good order. ◗ Works would be carried out within specified Rock Breaking Hours. ◗ Works must be completed using non-percussive piles. If percussive piles are proposed to be used, approval of the Environmental Management Representative or Director General of the Department of Planning must be obtained following consultation with the DECC. ◗ Non-tonal reversing beepers must be fitted and used on all construction vehicles and mobile plant used for any out of hours work. ◗ Mobile plant and trucks operating on site for a significant portion of the Project would have reversing alarm noise emissions minimised in-so-far-as possible, recognising the need to maintain occupational safety. ◗ General safe working distances for rock breaking and vibratory compaction are described in Table 10.7 of the EAR. Where required monitoring would be carried out to confirm these buffer zones at locations where buildings are closest. ◗ Fixed plant would be provided with noise controls to comply with the NSW Industrial Noise Policy. ◗ PA systems to be used within standard Construction Hours, except in emergency situations. ◗ Where noise barriers are effective and reasonable, solid hoardings and/or site sheds would be erected on work site boundaries or around critical work areas on the sites. ◗ Noise monitoring would be carried out to determine compliance with airborne construction noise goals; in response to complaints; and to conduct plant noise audits. ◗ Vibration monitoring would be carried out where vibration intensive activities (eg rockbreaking or vibratory compaction) are required to be carried out within the established buffer zones, or where there is considered to be a risk that levels may exceed the relevant structural damage criteria. ◗ All trucks regularly used for the Project (eg spoil trucks) are to have mufflers and any other noise control equipment in good working order. Trucking routes would use main roads where feasible.. ◗ A programme of community liaison and complaint response would be implemented, including letter-box drops of proposed noisy activities, progress reports, etc. ◗ Site induction training would include a noise awareness component. ◗ Attended noise monitoring during relevant periods of construction. To be conducted from receivers near the Belmore Park Substation site at

Key Issue	Commitment
	intervals not exceeding 30 actual days worked. ◗ Conduct plant noise audits at intervals not exceeding 60 actual days worked. ◗ Conduct routine vibration monitoring as well as vibration monitoring in response to complaints. ◗ Conduct buffer distance vibration testing at the commencement of work with potentially vibration inducing equipment.
European Heritage and Aboriginal Archaeology **(Stage 1 and 2)**	◗ The Belmore Park site should be monitored during initial earthworks to determine whether any remains dating to the brickfield period are present. ◗ No further Aboriginal archaeological investigation is required for the Project. ◗ The limited potential for remnant and dispersed Aboriginal artefacts to occur should be considered when excavations associated with the proposed tunnel connections and/or extensions for the proposed Project occur. An appropriately trained archaeologist should be available (on call) during excavations to identify Aboriginal Objects and provide advice where necessary. ◗ In the unlikely event that Aboriginal Objects are uncovered by construction or excavation works, it is recommended that the following response strategy be adopted and incorporated into contingency management plans prior to the commencement of works. ◗ Stop all impactive works or actions which may disturb the area of the find or exposed Aboriginal Object (objects may include: stone artefacts, bones, midden shells and hearth remnants). ◗ Contact project archaeologist and organise for inspection of site/material. ◗ Consult with the Department of Environment and Climate Change, regarding an appropriate course of action. ◗ Consult with the Metropolitan Local Aboriginal Land Council regarding an appropriate course of action. ◗ Carry out any requirements indicated by the DECC and the Metropolitan Local Aboriginal Land Council. ◗ Three copies of Navin Officer's report (Volume 2, Appendix F of the EAR) should be forwarded to the NSW DECC. ◗ One copy of this draft report should be forwarded to the following Aboriginal group for their consideration and comment: Mr Allen Madden, Sites Officer, Metropolitan Local Aboriginal Land Council, PO Box 1103 Strawberry Hills NSW 2012.
Spoil and Waste Management **(Stage 1 and 2)**	◗ Wherever practicable spoil would be reused as part of the Project. ◗ Sites for the disposal of surplus soil would be selected according to the rate of development activity and the volume of material generated elsewhere. ◗ Spoil that is not VENM would be transported to approved landfill sites and/or off-site recycling depots. ◗ Spoil haulage routes identified in Chapter 9 of the EAR would be used. ◗ Testing of the fill material would have to be undertaken prior to it being acceptable for waste disposal purposes; ◗ As part of the CEMP a Spoil Handling and Management Sub Plan would be prepared which would identify how spoil would be handled, stockpiled, re-used and disposed. It would address the principles of all relevant legislation.

Key Issue	Commitment
	◗ All work associated with contaminated spoil, including the preparation of reports, would be carried out in accordance with DECC guidelines and guidelines prepared by the Australian and New Zealand Environment and Conservation Council and the National Health and Medical Research Council. ◗ As part of the CEMP a detailed Waste Management and Re-use Sub Plan would be prepared. The Sub Plan would be framed using the waste minimisation hierarchy principles of avoid-reduce-reuse-recycle-dispose. The Sub Plan would address the management of wastes during the construction and operation stages respectively. It would be prepared prior to construction and would be consistent with the Waste Avoidance and Resource Recovery Act 2001, and DECC's Environmental Guidelines: Assessment, Classification of Liquid and Non- Liquid Wastes. It would: ◗ identify requirements for waste avoidance; reduction; re-use; and recycling; ◗ provide details of requirements for handling; stockpiling; disposal of wastes (specifically, contaminated soil or water, concrete, demolition material, cleared vegetation, oils, grease, lubricants, sanitary wastes, timber, glass, metal, etc.); ◗ identifying any site for final disposal of any material and any remedial works required at the disposal site before acceptance of the material; and ◗ Any waste material that is unable to be recycled would be disposed at a landfill licensed by DECC to receive that type of waste. ◗ As part of the Sub Plan, an Action Plan would be prepared to promote the use of recycled materials, including construction and landscape materials. The Plan would detail how the proposal gives consideration and support to the NSW Government's Waste Reduction and Purchasing Policy. The Plan would also include details on measures to implement energy conservation best practice.
Hazards and Risks **(Stage 1 and 2)**	◗ The risks and hazards can be managed through the development of construction phase risk management planning and operation phase risk management planning. ◗ EnergyAustralia would identify the services potentially affected by construction activities to determine requirements for diversion, protection and/or support. EnergyAustralia would ensure that existing cathodic protection systems are not adversely affected and that appropriate measures are put in place to minimise stray currents. ◗ EnergyAustralia's contractor would prepare and implement a Construction Safety Sub Plan to manage hazardous incidents and public safety during the construction of the Project.
Property, Land Use and Settlement **(Stage 1 and 2)**	◗ Foundations of the Central Square building should be checked prior to excavation as they may require underpinning if they are not founded on sound, medium or high strength sandstone. ◗ The use of excavator mounted saws or milling heads can overcome overbreak problems. However, the development of unstable wedges along the lines of excavation sometimes can occur unless appropriate precautions are taken to identify their likely occurrence and to allow for pinning, bolting or anchoring, where necessary, to secure the blocks ahead of the bulk excavation work. ◗ Regular inspections of the excavation works by an experienced engineering geologist/ geotechnical engineer are suggested as a means of greatly reducing the risk of overbreak and other problems resulting from the bulk excavation works. ◗ A dilapidation survey of any structure that could reasonably be affected is recommended. ◗ It would be necessary to provide temporary support to the sides of excavation during construction, as well as long term support in the form of

Key Issue	Commitment
	retaining walls. ◗ Wherever practical, impacts on potentially affected properties would be avoided or reduced by design measures. ◗ Settlement monitoring would be undertaken during the construction phase. ◗ Vibration monitoring would be required whilst excavation work proceeds, and recommend a minimum of four (4) monitoring stations located in nearby buildings and structures. The need for additional vibration monitoring stations in the nearby Railcorp railway tunnels would be agreed with RailCorp as necessary for each of Stage 1 and Stage 2. ◗ EnergyAustralia would continue to liaise with RailCorp through out the design process for the substation and provide relevant information as necessary. ◗ The proponent for the commercial building would liaise with RailCorp during the design of that component to agree on measures required to ensure the safety and integrity of rail infrastructure. ◗ It is proposed to undertake an extensive dilapidation survey of all adjacent footpaths and roadway which could be affected by stress relief rock movements. The initial survey would be undertaken prior to commencement of construction, a follow-up survey on completion of excavation, and a final survey at the completion of construction.
Surface and Groundwater Management **(Stage 1 and 2)**	◗ A Soil and Water Management Sub Plan would be prepared as part of the CEMP for the Project. This would detail how soil and surface water and groundwater mitigation measures would be implemented at the various construction stages. ◗ The Sub Plan would be prepared in accordance with the Department of Housing's guideline Managing Urban Stormwater - Soils and Construction. ◗ The plan would be developed in consultation with stakeholders to ensure the appropriate mitigating measures and safeguards are incorporated and would be updated as the Project progresses. ◗ The Plan would include identification of any proposed use of existing drainage infrastructure and the means of minimising any adverse impacts, including capacity limitations within the drainage system.
Air Quality **(Stage 1 and 2)**	As part of the CEMP a Construction Air Quality Management Sub Plan would be prepared. The following mitigation measures should be observed during demolition and construction, in order to minimise impacts as much as possible: ***Site Clearance*** ◗ Sheet and screen buildings with suitable material and where possible strip inside buildings before demolition begins; ◗ Ensure that any asbestos is removed by a specialist contractor before demolition; ◗ Waste or materials for recycling should be removed from site as soon as possible. If stored, techniques to avoid emissions should be employed; ◗ Avoid explosive blasting where possible and consider using appropriate hand or mechanical alternatives; and ◗ Bag and remove any biological debris or damp down before demolition. ***Construction***

Key Issue	Commitment
	◗ Access to construction sites would be via existing sealed roadways and the surface of trafficked areas within sites shall be sealed with bitumen or gravel; ◗ Wheels of all site plant and vehicles would be cleaned so that material with potential to generate dust is not spread on surrounding roads; ◗ Sealed roads around construction sites would be swept to remove deposited material with potential to generate dust, if necessary; ◗ Water shall be used to suppress particles potentially generated during the erection of boundary fences, barriers, screens and other ancillary structures; ◗ Areas of disturbed soils would be minimised during the construction period; ◗ Water may be used to suppress dust emissions during dry windy periods (as required); ◗ The height from which dust generating material is dropped would be minimised; ◗ Loaded trucks carrying spoil shall be covered at all times; ◗ The cutting/grinding of materials on site shall be kept to a minimum, but if necessary equipment and techniques to minimise dust would be used; ◗ Earthworks would be kept damp, as required, especially during dry weather; ◗ The tunnelling excavation face would be kept damp, as required, to minimise dust generation; ◗ Spoil stockpiles would be damped as necessary; ◗ Longer term spoil stockpiles would be treated with surface binding agents or sealed by seeding with vegetation or covered with secured tarpaulins; ◗ Potentially dusty materials would be handled as little as possible; ◗ Exhaust emissions would not discharge straight at the ground; ◗ Construction plant and vehicles would be well maintained and regularly serviced. Visible smoke from plant should be avoided. Defective plant would not be used; ◗ Engines would be switched off when vehicles are not in use and refuelling areas would be away from areas of public access; ◗ Loading and unloading would take place within the site; and ◗ All waste would be removed from site and disposed to an appropriately licensed waste facility.
Cumulative Impacts (Stage 1 and 2)	◗ EnergyAustralia would endeavour to ensure that cumulative impacts can be avoided through coordination and consultation with other projects and communication with other authorities.

Table 5.2 - Statement of Commitments – Operational Phase

Key Issue	Commitment
Noise and Vibration **(Stage 1 and 2)**	EnergyAustralia undetakes to commit to achieving compliance with the sound criterion based on the DECC guidelines. Mitigation measures such as acoustic absorption or quieter plant would be provided if necessary to reduce the sound power levels to within the specified levels. Control measures would be incorporated into the building structure to minimise vibration transmitted into the substation and into the elevated supporting concrete structure.
Hazards and Risks **(Stage 1 and 2)**	◗ EnergyAustralia would prepare and implement an Operation Emergency Sub Plan to manage emergency events that may arise in relation to operation of the Project. ◗ EnergyAustralia would prepare and implement an Operation Security and Crime Management Strategy to prevent unauthorised public access to relevant components of the proposal during its operation, and to minimise the potential for crime in the vicinity of cable infrastructure (e.g. vandalism, loitering, illegal dumping etc). The Strategy would be generally in accordance with the principles outlined in the former Department of Urban Affairs and Planning publication entitled “Crime Prevention and the Assessment of Development Applications” dated 2001.
Surface and Groundwater Management **(Stage 1 and 2)**	◗ Water treatment of groundwater would comply with the Australian and New Zealand Environment and Conservation Council (2000) guidelines before discharge into Cockle Bay.

6. Conclusions

The Submissions Response and Preferred Project Report supports the EAR for the Belmore Park Zone Substation and Commercial Development (Application Number: MP08-0075) by responding to issues raised during the public exhibition period, providing further information where the design has been amended and assessing the environmental impacts of those design amendments.

The main issues raised in the submissions related to:

- The need for continued liaison with key stakeholders during the detailed design, construction and operational phases of the Project; and
- Further details regarding the proposed sequencing of the substation and the future commercial development.

Since the public exhibition of the EAR design amendments have been made to the substation building to address a change in transformer technology from SF6 gas insulation to traditional oil or FR3 type ester oil. In addition, EnergyAustralia acknowledges that due to the global economic crisis the current and forecast commercial property market is uncertain and the gap in time between completion of the substation and commencement of the commercial building cannot be predicted. This Report provides information to describe the substation design amendments, the temporary façade treatments for the stand alone substation and the corresponding landscape and public domain plans for the staged construction.

The Report also addresses the following potential environmental impacts associated with the proposed amendments:

- Noise and vibration;
- Greenhouse gas and air quality; and
- Hazards and risk

The investigations identified that the potential environmental impacts could be adequately managed through the implementation of the Statement of Commitments presented in Section 5.

EnergyAustralia considers that this Report adequately addresses the issues raised in the submissions received and reinforces EnergyAustralia's commitment to ongoing liaison with affected stakeholders.

Appendix A – Design Modifications - Architectural

Appendix B – Design Modifications - Engineering

Appendix C – Staging Plans and Landscaping

Appendix D – Air Quality and Greenhouse Gas Assessment

Appendix E – Noise and Vibration Assessment

Appendix F – Hazards and Risk Assessment