Appendix A

Director General's Requirements and statutory correspondence



Contact: Swati Sharma Phone: (02) 9228 6221

Fax: (02) 9228 6355

Email: swati.sharma@planning.nsw.gov.au

Our ref: S07/01887

Mr Craig Moody Executive Manager - Major Projects and Engineering EnergyAustralia GPO Box 4009 SYDNEY NSW 2001

Dear Mr Moody

Proposed Sydney CityGrid Project – Director-General's Environmental Assessment Requirements (Application: 08_0075)

I refer to EnergyAustralia's request for the Director-General's requirements for the preparation of an Environmental Assessment for the above project. I note that you are seeking Concept Approval for the whole proposal and Project Approval for the Belmore Park Substation.

The Director-General's Environmental Assessment Requirements are attached, pursuant to section 75F(2) of the *Environmental Planning and Assessment Act 1979*. It should be noted that the Director-General's requirements have been prepared based on the information provided to date. Under section 75F(3) of the Act, the Director-General may alter or supplement these requirements if necessary and in light of any additional information that may be provided prior to the Proponent seeking approval for the project.

The Environmental Assessment should be prepared using valid and accepted technical and scientific tools and methodologies, focussing on key environmental impacts and robust mitigation measures to address potential impacts from the project. You should also ensure that you consult with the Department prior to submission of a draft Environmental Assessment to determine:

- fees applicable to the application;
- consultation and public exhibition arrangements that will apply; and
- number and format (hard-copy and/or CD-ROM) of the Environmental Assessments that will be required.

If your proposal includes any actions that could have significant impact on matters of National Environmental Significance, it will require an additional approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Department of the Environment, Water, Heritage and the Arts to determine if an approval under EPBC Act is required for your proposal (6274 1111 or http://www.environment.gov.au).

Please note that the Commonwealth Government has accredited the NSW environmental assessment process for assessing impacts on matters of National Environmental Significance. As a result, if it is determined that an approval is required under the EPBC Act, please contact the Department immediately.

Once you have lodged the Environmental Assessment, the Department will consult with the relevant authorities to determine the adequacy of the Environmental Assessment. Following this review period the Environmental Assessment will be made publicly available for a minimum period of 30 days.

You should keep the contact officer for this project, Swati Sharma ((02) 9228 6221 or swati.sharma@planning.nsw.gov.au), up to date with the progress of preparation of the

Environmental Assessment, and seek clarification of any issues that may be unclear or may arise during this process.

Yours sincerely

10.6.08

Chris Wilson

Executive Director

Major Project Assessments
As delegate for the Director-General

SYDNEY CITYGRID PROJECT-CITY OF SYDNEY LOCAL GOVERNMENT AREA

ENVIRONMENTAL ASSESSMENT REQUIREMENTS UNDER PART 3A OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Project	Concept Plan Application: New/upgraded/refurbished substations and the replacement of old high voltage cables within the Sydney CBD, including: construction and operation of up to three new zone substations (including, as necessary, the demolition and/or refurbishment of existing zone substations, and the construction and use of commercial and/or retail developments on. Adjacent to, or integrated with, the new zone substations); refurbishment and augmentation of existing zone substations; replacement of, and upgrades to, EnergyAustralia's existing high voltage cable network; construction and use of tunnels for the installation and operation of high voltage cables and associated cables and other infrastructure; construction, operation and use of associated works, including ventilation shafts and access structures. Project Application: Stage 1 of the above works including: Belmore Park Zone Substation, including commercial/retail development; and stub tunnel connection from the existing City South Cable Tunnel to Belmore Park Zone Substation.
Site	Land within the City of Sydney local government area.
Proponent	EnergyAustralia
Date of Issue	10 June 2008
Date of Expiration	10 June 2010
General Requirements	 The Environmental Assessment must be prepared to a high technical and scientific standard and must include: an executive summary; a detailed description of the Belmore Park Substation component of the proposal, including construction, operation, and any staging. Sufficient information must be provided on the stages requiring concept approval to enable a clear understanding of these components; an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below; consideration of relevant guidelines including the Department's draft Network Electricity Systems and Facilities Guidelines (2002) and ANZECC 2000 Guidelines for Fresh and Marine Water Quality and associated guidelines under the National Water Quality Management Strategy; justification for undertaking the project with consideration of the benefits and impacts of the proposal; a draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project; and certification by the author of the Environmental Assessment that the information contained in the Assessment is neither false nor misleading.
Key Assessment Requirements	The Environmental Assessment must include an assessment of the following key issues: • Project Need and Justification - the Environmental Assessment must provide: - a strategic assessment for the project, including justification of the need, scale, scope and location of the project in relation to predicted electricity demand, predicted transmission constraints, alternative strategies, and the strategic direction of the region and the State regarding the State electricity supply and demand and electricity generation technologies; - a strategic planning consideration of the project and an analysis of the suitability of the proposed tunnel route alignments with respect to potential land use conflicts with existing and future surrounding land uses including other proposals in the vicinity of the project area (e.g. proposed metro rail line(s)). This must include identification of potential impacts to existing and future road and rail infrastructure and early liaison with those agencies

governing such infrastructure.

an assessment of the potential impacts of the project to influence changes to future land use character in proximity of the site.

• Visual Amenity Impacts— the Environmental Assessment must include an assessment of the visual impacts associated with the project, including the impact on local and regional views by the substations and related infrastructure. A design review process for the new electricity infrastructure associated with this project must form part of the Environmental Assessment. The outcome of this design review process for Belmore Park Substation must be provided in the Environmental Assessment. This design review process should be based on the principles of the design review competition of Sydney Local Environmental Plan 2005, and include consultation with Sydney City Council.

Preliminary visual and design information for the other substations must also be included, such as proposed locations, characteristics of the surrounding environment, potential visual impacts and design limitations. The Environmental Assessment must detail the methodology and scope of the design review process for these elements of the project.

 Traffic and Access Impacts – the Environmental Assessment must identify transport routes to and from the construction sites and impacts on affected streets and intersections. This must include consideration of disruption to recreational/business activities and vehicle movements/bus services, including safety impact. Restrictions on access to properties should be identified. Proposed measures/arrangements for minimising impact on these activities must be discussed.

Noise and Vibration Impacts - the Environmental Assessment must include an
assessment of the noise and vibration impacts during both the construction and
operation of the project, in accordance with relevant NSW Government and
DECC policies and guidance current at the time of the assessment.

• Heritage and Archaeological Impacts - the Environmental Assessment must include an assessment of impacts on Aboriginal cultural heritage, in accordance with Guidelines for Aboriginal Heritage Impact Assessment and Community Consultation to identify any Aboriginal heritage issues. The Environmental Assessment must also include an assessment of the potential for the project to impact on known items of non-Aboriginal heritage significance. The likelihood of encountering archaeological material during construction and management of such must also be considered.

 Spoil and Waste Management Impacts - the Environmental Assessment must estimate the likely spoil generation and type (including identification of known or potential contamination issues), disposal/recycling sites and management of all types of waste material.

Hazards and Risk - the Environmental Assessment must include a screening of potential hazards on site to determine the potential off site impacts, particularly at the substations, and any requirement for a Preliminary Hazards Analysis (PHA). The Environmental Assessment must also include an identification of any contaminated land affected by the project. Storage of all materials, fuels and chemicals including management of runoff, containment and disposal must be included. The Environmental Assessment must also include an assessment of the risk to human health from Electric and Magnetic Fields associated with the project, with reference to Australian Radiation Protection and Nuclear Safety Agency standards.

 Property (including settlement) – the Environmental Assessment must identify all existing land uses in the vicinity of the proposal sites and the potential impacts to these land uses during construction and operation of the project. Proposed control/mitigation measures must be included.

• General Environmental Risk Analysis - notwithstanding the above key assessment requirements, the Environmental Assessment must include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), proposed mitigation measures and potentially significant residual environmental impacts after the application of the proposed mitigation measures. Where additional environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of this additional key environmental impact must be included in the Environmental Assessment.

Consultation Requirements

You must undertake an appropriate and justified level of consultation with the following parties during the preparation of the Environmental Assessment:

- City of Sydney Council
- · Central Sydney Planning Committee;
- Sydney Harbour Foreshore Authority;
- NSW Department of Environment and Climate Change;
- Department of Water and Energy;
- NSW Roads and Traffic Authority;
- Transport Infrastructure Development Corporation;
- RailCorp;
- Sydney Water Corporation;
- NSW Heritage Office;
- NSW Fire Brigade;
- TransGrid;
- Royal Botanic Gardens and Domain Trust; and
- any other relevant agencies and service providers/utilities.

In addition, appropriate consultation with the local community should be undertaken. The Environmental Assessment must clearly indicate issues raised by stakeholders during consultation, and how those matters have been addressed in the Environmental Assessment.



Meeting:	Design Review Workshop
Mooting.	Pre Environmental Assessment Submission (EAR)
	EnergyAustralia Belmore Park Integrated Substation and Commercial Development- 430-450 Pitt St,
	Sydney NSW

Location: Rydges Hotel 'Meeting Room' at World Square

Corner of Liverpool St and Pitt St, Sydney NSW

Purpose of the Meeting

The purpose of the meeting was to:

 carry out a design review, to assess the visual impacts, including impacts on local and regional views; and

 assess the design for the Belmore Park Zone Substation as an integrated development, i.e. a new 132kV/11kV zone substation and a new 'A' grade, 5 Green Star commercial office.

The desired outcomes of the meeting were:

• to agree and record that the design, as presented, exhibits design excellence with regards to the following matters:

a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved;

the form and the external appearance of the building will improve the quality of the amenity of the public domain; and

the new development does not detrimentally impact on view corridors identified in the relevant development control plan.

Date: Friday, 22 August 2008

Start Time: 9:00am Finish Time: 2:30pm

Chair: Wilma Penrose

Invitees: EnergyAustralia (EA): Wilma Penrose

Santo Ragusa Sarika Sundar

Architectural Peers (AP): Richard Johnson

Peter Poulet

City of Sydney (CoS): Nicholas Horiatopoulos

Jeremy Swan

NSW Department of Planning (DoP): Shannon Truloff

Brad Vale Swati Sharma Winston Yang

Kann Finch (KF): Bob Nation

Ian Armstrong
Joseph Paonessa

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Topic:

Item	Minute		Action
1	Throug	nh Site Link	
	0	CoS raised a concern that the laneway on the eastern side of the site seems to be a dead space, which could be dangerous at night. This is seen to be mainly due to a lack of activation of the space. (Post meeting note from EA: the space would not be activated after 5pm if coffee shops or other premises existed along the laneway, thus activation would not be the answer.)	
	0	KF and EA pointed out that the location of the laneway is based on existing easements.	
	0	EA noted that architectural lighting has been proposed for the laneway.	
	0	CoS asked whether the laneway would become a public space or not. KF advised the laneway would be transferred to council ownership.	
	0	DoP questioned whether the substation could be moved further east or not. KF and EA pointed out that this is not possible due to ventilation requirements of the substation, including transformer and switchgear layout and the additional easement of the turning bay for the adjacent Central Square property.	
	0	KF proposed that giving up the laneway to landscaping might be a better option instead of having a through site link. AP agreed that this would be a better option.	
2	Future	Energy Demands	
	0	AP questioned the future need for zone substations in this area in the next 20 years. EA advised that no additional zone substations other than those included in the CityGrid Project are planned in this area in the next 20 years.	
3	Staging	g of construction works	
	0	AP raised the concern that construction of the commercial development may not occur directly after the construction of the zone substation. AP requested that drawings showing proposed treatment of the standalone substation be provided.	
	0	KF advised that there is a possibility that the remainder of the site could be used as an urban amenity after substation construction and before commercial development construction, however, this is speculative at this stage and subject to EA reviewing its plans for the residual land in the short term.	
	0	EA advised that drainage and façade treatments would be considered. Some treatment options have already been considered.	
	0	EA agreed to provide drawings of the standalone substation including possible façade treatments and landscaping.	EA & KF
	0	AP advised that the above drawings would be required in order for them to carry out a full design review. AP stated that the community would want to know what the site would present over the medium to long term.	

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Topic:

Item	Minute	Action
4	Sequencing of works	
	CoS asked how much of the building would be built by EA. EA advised that only the substation and possibly the car park would be built by EA. The commercial development can not be built by EA due to the high risk factors that impact on the regulated areas of the electricity supply business.	
	 CoS asked whether the project application would be lodged as a staged development. EA advised that they are requesting approval for the entire site, although construction may be sequenced. 	
	AP noted that there is a strong argument for an integrated development, however the possible delay before construction of the commercial development commences could be an issue. EA advised that there is a tight timeframe for the completion of the zone substation (2012) and that once this has been completed the construction of the commercial development could quite comfortably dovetail the completion of the zone substation.	
	 EA advised that an EOI for the commercial development would be issued shortly. 	
	O EA advised that the building management statement would include strict controls for construction sequencing and design. The design would be sold "as is" due the integration of the substation with the commercial development. EA noted that the substation puts several constraints on the commercial development that would be outlined in the building management statement.	
	 EA noted the current design of the commercial development has been developed in conjunction with a reputable developer. 	
5	Substation Hazards	
	 AP raised concerns about substation hazards including fire, EMF and noise etc. EA advised that studies are being conducted on these hazards and the substation would meet the required standards. These issues would be addressed in the environmental assessments. 	
6	Architectural treatments	
	 AP advised that further refined drawings including the proposed colour, glass technology and louvers to be used are required before agreement can be given that the design exhibits 'design excellence'. A concern about the use of black glass was raised. AP advised that a more silvery tone would be preferable, similar to that shown in the photomontage presented. AP also advised that a black façade could affect the ESD performance of the building. 	EA & KF
	 EA advised that the proposed colour of the building would be reviewed. AP questioned whether any other roof designs had been considered. KF advised that outdoor gardens on each floor were considered but ruled out. 	LAQNI
	 AP asked if the roof can be kept free of vents. KP advised that the roof would not contain any vents. 	

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Topic:

Item	Minute		Action
7	Energy	Rating	
	0	AP advised that there is a large demand for buildings with a 6 star ESD rating. Most tenants require a minimum of 5 stars and some require 6 star. Although a 6 star rating would increase costs for façade treatments.	
	0	CoS advised that 5 star buildings have become the norm, although in some instances 6 stars is now aimed at.	EA & KF
	0	EA advised that a 6 star rating would be reviewed.	LAQNI
8	Atrium		
	0	AP advised that the atrium should be made larger. This would provide ESD benefits. Though the net letable area (NLA) would be decreased, the dollar value per square metre of floor would be increased by aiming for a 6 star rating.	EA O KE
	0	EA and KF advised that the atrium size would be reviewed.	EA & KF
9	Pedestr	rian Interface	
	O	CoS expressed an opinion that the retail level currently shows a single storey cantilever height. Because the Pitt St frontage is a major pedestrian access this may be an issue.	
		CoS questioned the façade treatments and whether they would allow the building to turn the corners with a common theme. AP advised that turning of the corner at ground level would be improved by using double storey space for the cantilevered area. KF agreed to review.	EA & KF
10	Retail S	Space Space	
	0	CoS queried how Retail Space 3 would be used. KF advised this could be used as a separate retail space or integrated with the adjoining retail space.	
11	Summa	ry	
	0	AP stated that they were happy with the scale and form of the building. They congratulated EA for taking a holistic view of the development site and integrating the commercial and substation uses.	
	0	AP noted that the development needs to embody the concepts represented in the original design sketch on the cover of the DRP documents.	
	0	AP noted that the concept design had the potential to achieve design excellence.	
	0	AP agreed that they were not in a position to endorse the design on the day and that another meeting should be reconvened once EA and KF had addressed the comments presented. It was agreed that the future meeting would have the peers and one representative from each party.	

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Topic:

Item	Minute		Action	
12	Actions	Actions for EA & KF		
	О	Review treatments for the through site link – including a link within the retail area of the commercial component.	EA & KF	
	0	Review a double height space for the cantilevered section fronting Pitt St.		
	0	Review colour of the building.		
	0	Increase the size of the atrium.		
	0	Provide detail and treatment of the stand alone substation.		
	0	Set a date for the second meeting (approximately three weeks hence) and send out invitations.		

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Meeting:	Design Review Workshop 2
mooning.	Pre Environmental Assessment Submission (EAR)
	EnergyAustralia Belmore Park Integrated Substation and Commercial Development- 430-450 Pitt St,
	Sydney NSW

Location: EnergyAustralia HOB

Room 403, 570 George St, Sydney NSW

Purpose of the Meeting

The purpose of the meeting was to:

Review actions from meeting of the DRP 1 held on 22 August 2008.

• Discuss incorporation of items.

• Summarise and note additional actions if required.

The desired outcomes of the meeting were:

• Determine whether the design for Belmore Park Integrated Substation and Commercial Development- 430-450 Pitt St, meets Design Excellence.

Date: Tuesday, 7 October 2008

Start Time: 9:00am Finish Time: 10.30am

Chair: Wilma Penrose

Attendees: EnergyAustralia (EA): Wilma Penrose

Santo Ragusa Sarika Sundar

Architectural Peers (AP): Peter Poulet
City of Sydney (CoS): Tony Smith
NSW Department of Planning (DoP): Shannon Truloff

Kann Finch (KF):

Bob Nation

Joseph Paonessa

Apologies: Architectural Peers (AP): Richard Johnson

Topic:		
Item	Minute	Action
	General	
	KF tabled a booklet of A3 size presentation drawings and images of the revised proposals (issue B / 07 October 2008) including:	
	 A4 size document regarding LEP/DCP, design statement and Waterman AHW ESD letter subsequently issued as: issue C/07.10.2008 	
	 Updated physical model scale 1:500 nom 	
	3 x glass samples provided by MFT and Viridian	

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Topic:

Item	Minute	Action
1	Through Site Link O KF advised that the proposed through site link at the eastern end of the site has been deleted in favour of a landscaped solution that creates a visual link. The through site link is now proposed through retail area 3 in the future commercial building	
2	Atrium O KF noted that the atrium has been increased in size (now redesigned to be longer). This has marginally decreased the net lettable area of the building but has improved the natural light to the office floor plates that also contributes to the 5+ star Green Star rating (also see note 4 below).	
3	 Stand-alone Substation KF presented the proposal for the stand-alone substation. This incorporates a green wall on the western façade of the substation. KF and EA noted that this will only occur if there is a substantial lag between the completion of the substation construction and the commencement of the commercial development construction. DoP commented that further plans should be provided to detail the standalone substation solution. KF and EA advised that more drawings have been produced and will be included in the Belmore Park EAR. 	
4	 Façade detail by Meinhardt Façade Technology KF presented details of the double glazed vented façade noting that Meinhardt Façade Technology advised that this technology has been used successfully in Hong Kong and that it may be successfully used in Australia. MFT provided a written statement to this effect to KF. KF noted that this technology may be considered as innovation by Waterman AHW for the Green Star rating. KF and EA advised that a 5+ Star Green Star rating is forecast for the Belmore Park development as per Waterman AHW ESD statement. 	

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Topic:

Item	Minute	Action
5	Building Façade	
	 KF noted that soft grey silver glass, as close to transparent as possible will predominantly be used. Glass samples were tabled. 	
	 KF noted the glass will be 1200mm centres, silicone jointed with a silver spacer. 	
	o KF advised that the retail glazing with be clear and as frameless as possible.	
	 KF noted the sloping roof will be transparent and less reflective incorporating the City Council reflectivity standards. 	
	 KF pointed out that the substation outline is ghosted; behind the façade glazing. There is the possibility of using lighting/artwork on the substation wall which may be visible through the glazed facade. 	
	 AP and CoS raised concerns regarding the reflective glass. CoS noted they have limits on reflectivity. AP and CoS indicated that reflectivity studies would be required. KF and EA advised that these studies are already planned for next design phase. KF and EA also noted the reflective glass is intended to reflect Belmore Park. 	
6	Design Excellence	
	 AP and DoP noted that EA and KF have addressed and incorporated the following items from the Design Review meetings: 	
	 Review treatments for the through site link- including a link within the retail area of the commercial component. 	
	 Review a double height space for the cantilevered section fronting Pitt St. 	
	 Review colour of the building. 	
	 Increase the size of the atrium. 	
	 Provide detail and treatment of the stand alone substation. 	
	 KF noted that the DoP, AP and CoS review has had a positive impact and contributed to the project. 	
	 AP, CoS and DoP noted that feedback from Richard Johnson is required however in their view the design meets Design Excellence. 	
	ODP noted that at this conceptual stage the project has attained design excellence, however the attainment of excellence in the built form outcome will depend largely on a thorough interrogation of façade detailing, to ensure a liveliness in its perception day and night so as not to read as a bland wall adjacent to Belmore Park but as a <i>little jewelled object with vibrant facades</i> in the city. DoP also noted the strong landscape plans/sections and visualisations at the Environmental Assessment stage will assist the case should the substation be a stand-alone building for some time.	

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Topic:

Item	Minute		Action
7	Further	Further Actions	
	0	KF to provide Richard Johnson with the revised design details presented today and to seek review and comments for CoS, AP and DoP. Furthermore, RJ's review that the design meets Design Excellence is requested. CoS, AP, RJ and DoP to provide written advice confirming the design meets Design Excellence.	KF CoS/AP/DoP
	0	EA to incorporate additional plans detailing the interim standalone substation solution within the Environmental Assessment.	EA

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NOTES OF A MEETING BETWEEN ENERGY AUSTRALIA AND THE CITY OF SYDNEY IN RELATION TO LOT 1, DP 844119 & LOT 11, DP 873017, CNR OF PITT STREET, CAMPBELL STREET & HAY STREET, SYDNEY.

Meeting Date & Time: Friday 23rd February 2007, 10.00am – 10.50am.

Venue: Town Hall House.

Present: Sally Grebe – Acting Area Planning Manager, City of Sydney.

Peter Orr – Planner, City of Sydney.

Grant Greene-Smith – Manager Property Portfolio, Energy Australia. Wilma Penrose – Development Manager CBD Major Projects, Energy Australia.

Doug Sneddon, Consultant Town Planner for Energy Australia.

Purpose of Meeting: The meeting was requested by Energy Australia to inform the City of Sydney of the purchase of Lot 1 DP 844119 and Lot 11 DP 873017 for the purposes of constructing a new electricity substation to provide electricity supply to the Sydney CBD on part of the site and to seek the council's comments and advice regarding the construction of this infrastructure facility and the long term use of the balance of the land.

Key Points Raised:

- DA 2005/631 was approved by the council during 2005 for the erection of a 15 storey mixed use development comprising basement car parking; basement supermarket; 3 level retail podium; 108 residential apartments; and 167 bedroom hotel;
- The site is located within the "Rail Corridor Referral Area" where any development below ground level must be referred by the Council to the Rail Corporation of NSW and any comments of the Corporation must be taken into consideration by the Council. Energy Australia advised that it was already in discussion with RailCorp in relation to the construction of electricity infrastructure tunnels throughout the city;
- The Council requires the location/design of any electricity substation at ground level to present 'activated' street frontages (i.e. retail and other such uses) and to avoid the presentation of extensive blank walls to the street front. If the street front cannot be fully activated, the area of blank walls should be minimised. This is an urban design issue to achieve sympathetic treatment of the public domain;
- In relation to the future development potential of the site for purposes other than an electricity substation, Sydney Local Environmental Plan 2005 (LEP 2005) enables the development of a wide range of residential, retail, commercial, recreational, tourist and other purposes within the 'City Centre

Zone" which applies to the site. Council however actively opposes the further development of public car parking stations;

- The principal constraint on building height is the need to fully comply with "Sun Access Plane" maximum building height contours through the site provided by LEP 2005 (the purpose of the sun access plane is to prevent the overshadowing of Belmore Park during winter). This shows a maximum building height of 25m along the Hay Street frontage. Any building may then rise in height towards Campbell Street consistent with the height contours in LEP 2005. Council's CBD 'model makers' can assist with the calculation of sun planes, if required;
- Design excellence is particularly important for development sites exceeding 1500m2 (the subject site is approximately 3,500m2). For sites >1500m2 the floor space ratio of a site must be determined by an approved development plan. This involves a two stage approval process, with the first stage involving approval of a building envelope and the second stage involving detailed building design through a design competition;
- Council officers did not consider that it would be appropriate to seek approval
 of the proposed electricity substation as an amendment to the existing
 development consent DA 2005/631 under Section 96 of the Environmental
 Planning and Assessment Act 1979, thereby also preserving the existing
 development consent. It was indicated that the existing consent is for two
 years and lapses on 31st October 2007. This may be extended by a further
 period of 12 months on lodgement of the required application and
 accompanying fee.

Note: Energy Australia is advised that upon obtaining ownership of the property it would be prudent to seek a 12 month extension of the existing consent (DA 2005/631) under Section 95A of the Environmental Planning and Assessment ACT 1979. The application would need to be lodged sufficiently in advance of the lapsing of the consent on 31st October 2007.;

Following conclusion of the meeting, I had a phone call from Sally Grebe who advised that she had discussed Energy Australia's proposal to construct an electricity substation on part of the site with her Director, Giovanni Cirillo, who advised that any electricity substation should be constructed underground. This raises a fundamental design issue for Energy Australia in relation to the construction and operation of the substation and the potential relationship of the substation with the future use and development of the site for a multi storey mixed use building of major commercial value.

Doug Sneddon Planning Consultant 23rd February 2007.





Rail Corridor Management Group

Level 16, 55 Market Street Sydney NSW 2000 Tel: (02) 9224 2349 Fax: (02) 9224 4805

17 September 2008

Wilma Penrose

Manager – Major Project Development - CBD

Level 13, 570 George Street

SYDNEY NSW 2000

Dear Wilma,

SYDNEY CITYGRID PROJECT - PROPOSED BELMORE PARK ZONE SUBSTATION PROJECT

With reference to my letter dated 12 May 2008, addressed to Neville Osborne at Department of Planning, copy to yourself, please note that the above site has been the subject of prior investigation. This previous review involved Mr Rob Thomas of Incoll as the main interface person for the then site owner and I understand that you have also had dialogue with Mr Thomas as part of your own investigation.

It is not known if Mr Thomas' involvement also includes provision of previous submissions for this particular site. However, a number of very general comments that would also apply to a number of other sites in the Sydney CBD have been identified and repeated below as a general guide.

An Electrolysis Report advised that tests carried out nominally indicated activity around the surface at this location. There are actually two DC electrical traction systems in the area that may be subject to stray current activity. These are the Eastern Suburbs Railway tunnels beneath Belmore Park and Hay Street, as well as the main rail network between Central Station and the Goulburn Street Carpark and the Metro Light Rail corridor along Hay Street.

It has been advised that the conditions for electrolysis can and sometimes do change over a period of time. Bearing this in mind it would be prudent to isolate all steel reinforced concrete surfaces from the ground by using a good quality membrane (ie vapour barrier 2mm or more in thickness). Electrical insulating board may also be utilised where appropriate.

At the time it was recommended that isolation should <u>at least</u> extend the full length of the building along the Pitt St and Hay St sides and completely underneath the basement slab. This action should assist in minimisation or mitigation of any possible future effects.

However, any new proposal would need to be assessed on its own design merits and a fresh Electrolysis Report would need to be carried out to address the specific situation. There was a recent meeting (9 September 2008) between RailCorp Electrolysis Engineers, Stephen Palmer of Safearth and Gareth Evans of Energy Australia (**EA**) to discuss such issues and assist Mr. Palmer in preparing a strategy for EA.

Part of the investigation into electrical impacts would probably also extend to earthing and bonding considerations for the Substation and the potential impact on existing rail electrical services.

An Acoustic Report was also prepared which apparently assumed a distance of 11 metres between the existing rail tunnel and the proposed excavation. However, there is an apparent clearance of approximately 5.683m from the tunnel to the property boundary and it will be necessary to confirm that the distance from the tunnel to the excavation will still be 11 metres.

In general (and subject to specific site conditions permitting) a maximum 20mm/sec peak particle velocity (**ppv**) should not be exceeded. Although this is generally correct, it needs to be pointed out that this level represents a "Stop Work" event. Prior to this level being attained a "buffer" level, generally set at 15mm/sec ppv, may need to be applied as a "Warning Level". A Safe Work Method Statement (**SWMS**) would need to be prepared which should also define the methodology for enabling works to recommence.

The 20mm/sec ppv applies only where there is no existing vibration sensitive installations in the affected section of the tunnel. This aspect will need to be verified by our City Region Office and you will be advised accordingly.

It is understood that a Geotechnical Report was prepared already for this site that indicated there would be some ground movement due to stress relief and that the effect will be significant for structures at the ground surface level.

Therefore, the following points need to be revisited during future reviews based on an up to date design:

- The effects on the existing ESR tunnels will mainly depend on how close the excavation face and depth are to the tunnel and will need to be confirmed in final design drawings.
- 2. The effects on the existing Metro Light Rail corridor and, in particular, the Overhead Wiring support structures needs to be clarified.
- The anticipated magnitudes of displacement in the tunnel due to excavation should be indicated and, if required, should be assessed by a structural engineer for any distress in the lining.
- 4. The proposed works will require a degree of monitoring that will need to be identified and refined following a detailed review and processing of Safe Work Method Statements, Risk Assessments and proposed work methodologies.

It should be noted that RailCorp has issued a location plan based on a survey carried out for an adjacent development and extrapolated to this subject site. If you wish to receive a copy of this drawing please advise. Any drawings indicating the rail tunnels should include all easements and exclusion zones and be signed off by a Registered Surveyor.

Further recommendations have been made as follows:

- A Dilapidation Survey is to be carried out within the tunnel prior to commencement of works.
- b) Detailed drawings for the proposed development, particularly the Basement excavation and associated shoring, are to be submitted for review.

- Safe Work Method Statements, Risk Assessments and proposed work methodologies are to be provided as above.
- d) 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).

Should you wish to contact the writer at any time during normal working hours please call on telephone number (02) 9224 2352.

Yours faithfully,

Peter Bayde Peter Boyden

Access Coordinator

Rail Corridor Management Group, RailCorp.

Design Services Roden Cutler House 24 Campbell Street Sydney NSW 2000

Address all mail to GPO Box 4009 Sydney NSW 2001 Australia

Telephone +61 2 13 1525 Facsimile +61 2 9272 6296 17 September 2008

Water Services Coordinator, KR Stubbs & Associates, Suite 6, 33 Ryde Rd, Pymble, NSW, 2060

Attention: Mr. Neville Stubbs



RE: Proposed Belmore Park Zone Substation – EnergyAustralia Reference: NIG_10824 Lot 1 / DP 844119 & Lot Pt 2 / DP 1109323

Dear Neville

EnergyAustralia is currently in the design development / documentation stage of a new 132/11kV Zone Substation facility located at 430-450 Pitt St Sydney (cnr Hay & Campbell Sts). The site is proposed to be redeveloped as an electricity substation and integrated commercial building. The site will be developed in 3 stages. The first stage will involve bulk excavation for the substation and this is scheduled to commence in March 2009. The second stage will involve the construction of the substation building, scheduled for completion in 2012. The third stage will be development of the commercial building by a commercial property developer (yet to be determined).

On the 22nd of February 2008, the Minister for Planning declared the Sydney City Grid Project (which includes the Belmore Park Zone Substation) to be a project to which part 3A of the EP&A Act applies. On 10 April 2008 a Preliminary Environmental Application (No. 08_0075) was lodged with the Department of Planning. Concept Approval and Director General's requirements were issued on 10th June 2008. EnergyAustralia is presently submitting an Environmental Assessment to the Department of Planning under Part 3A of the Environmental Planning and Assessment Act, 1979 (EP&A Act) for approval of the proposed Belmore Park Zone Substation as part of the larger Sydney City Grid project. The Environmental Assessment document can be made available to Sydney Water if required. Project approval is expected to be received December 2008.

Section 72 (1) of the Sydney Water Act, 1994 provides that if an "approval" has been given with respect to land within the Sydney Water Corporation's area of operations and the developer to whom the approval has been given is required, or wishes, to obtain a compliance certificate (section 73), the developer may apply to the Corporation for a compliance certificate. EnergyAustralia is applying as the proponent for the development which is being assessed by the Department of Planning under Part 3A of the EP&A Act.

The design drawings prepared by Acor Consultants form an integral component of the Part 3A legislative planning process documentation. EnergyAustralia is bound by this legal process and documentation.

Accordingly, we now wish to make application to Sydney Water for a Section 73 compliance certificate for the specified design and consideration of any impact of the development upon Sydney Water's infrastructure.

If you require further information or clarification regarding any matter raised I am available on (02) 9272 6253, my mobile 0410 602 599 or email sragusa@energy.com.au.

Yours faithfully

Santo Ragusa

Snr Design Development Manager

Design Services Branch - Development Services



Telephone9269 7244

Our Ref: n:\cbd\1.2 belmore park\1.2.d stakeholder consulation\1.2.d.08 - sydney water\letter to sydney water corporation.doc

1 July 2008

Sydney Water Corporation 115-123 Bathurst St Sydney NSW 2000

Dear Ms Davies

Thank you for the letter of 25 June 2008 from Mr Wickham. EnergyAustralia (EA) is committed to working cooperatively with Sydney Water during the redevelopment of the Belmore Park site as part of our City Grid project.

As a preliminary matter, EA is unsure how section 73 of the *Sydney Water Act 1994* applies to projects under Part 3A. We do not know how a section 73 certificate can be applied for or be granted given the definitions of "developer" and "approval" that apply to the section 73 process.

Notwithstanding the above, EA has no objection to meeting Sydney Water's requirements as if the section 73 process applies, as long as those requirements are reasonable in the circumstances. This could be achieved by the parties treating the process as if section 73 applies but with no certificate being issued at the end of the process. Please let us know if such a process is acceptable and provide us with an estimate of the lead times required for the process to be carried out.

In terms of the 375mm sewer that traverses the southwest corner of the Belmore Park site (as referred to in the final paragraph of Mr Wickham's letter), can Sydney Water suggest a water servicing coordinator with appropriate expertise from which EA can obtain an estimate to carry out this work?

Yours sincerely,

Phil Gates Major Projects



11/07/2008 01:19 PM

To Santo

Ragusa/CommServ/energyAustralia/AU@energyAustralia, Hesham Saad/Network/energyAustralia/AU@energyAustralia

cc Wilma

Penrose/Network/energyAustralia/AU@energyAustralia, tony.fullelove@artifexgroup.com.au

bcc

Subject Belmore Park: Telstra Consultation Meeting #1

Santo/ Hesham,

Further to our site meeting on Tuesday 8 July with Sam Angeloni of Telstra, please find below some notes and agreed actions:

- 1. Telstra will organise and carry out blocking off of its two tunnels at the site boundary.
- 2. Telstra will provide a quotation for doing the work and will recover cost from EA.
- 3. Telstra is not certain if any cables are currently located in the tunnel.
- 4. Telstra provided drawings to EA from a previous project which did not eventuate. The drawings provide detail of the tunnels, V768 nearest Campbell St and V791 nearest Hay St. and the proposed method of blocking them off. The dimensions of the reinforced concrete tunnels are shown to be approx. 1100mm x 1500mm with an arched roof. The depth below street level to the tunnel roof is approximately 1m (V768) and 2.1m (V791).
- 5. Telstra indicated the work can be carried out within about 1 month of EA providing instruction to proceed and it will arrange for all permits etc.
- 6. Telstra need to know the leasable floor area of the commercial development in order to work out cabling requirements. Sam will arrange for Power Coordination personnel to contact EA.
- 7. EA to provide Telstra with details of the site retention system in particular the rock anchors if used and measures to be taken to avoid damage to its existing infrastructure.
- 8. Telstra cables beneath Campbell St footpath will service the Belmore Park substation.
- 9. Cables from Pitt St via the tunnel(s) will service the commercial development.

ACTIONS

- 1. EA to provide Sam with email requesting quotation for doing the tunnel block up work. (GE)
- 2. EA to instruct the work to proceed once IPD has been approved. (WP)
- 3. EA to mark out survey line along Pitt St site boundary to indicate limit of piles. (SR/HS)
- 4. EA to provide Sam with leasable floor area of commercial development. (SR/HS)
- 5. EA to liaise with Telstra about site retention and anchors. (SR/HS)

Please advise if you wish to add or amend any points.

Regards,

Gareth Evans
Snr Project Development Manager
Network Major Project Development CBD
Level 13, 570 George Street
Sydney NSW 2000
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Appendix B

Belmore Park landscape design statement



LANDSCAPE DESIGN STATEMENT

DECEMBER 2008 REVISION 3

8th December 2008

ENVIRONMENTAL ASSESSMENT REPORT EA BELMORE PARK ZONE SUBSTATION INTEGRATED DEVELOPMENT 430-450 PITT STREET, SYDNEY NSW. Our Reference 08-065s Rev 3.

Introduction:

The landscape design for the project, prepared by Taylor Brammer Landscape Architects Pty Ltd, provides a new streetscape to the proposed zone substation building with a landscape component to the eastern side of the proposed building, forming a visual amenity in the form of a landscape buffer between the proposal and the existing building to the east of the site. This is clearly noted on the landscape plans that form part of this application in Volume 3, Appendix F. The landscape drawings in Volume 3, Appendix O represent the 'stand alone' case should there be a time lag between construction of the commercial development and completion of the zone substation. Note that the eastern visual link will be constructed at the completion of the zone substation irrespective of the program for construction of the zone substation.

The overall landscape design aims to provide an appropriate urban open space solution in keeping with the City of Sydney Council requirements and has been achieved through an integration of the City of Sydney Council guidelines for the streetscape of this precinct combined with appropriate planting to the eastern façade of the building.

Design Principles:

The main landscape design principle for the project is to provide an integrated streetscape that addresses the public domain issues of the area combined with a visual landscape buffer to the east of the proposal. This is designed to lessen the impact of the necessary infrastructure and unify the open space components through material selection consistent with the public domain guidelines.

The design principles are outlined as follows:

- An appropriate public domain solution in the spirit of City of Sydney requirements in relation to street tree planting and footpath material selections;
- Provide for safe and secure pedestrian amenity in the publicly accessible areas adjacent to the

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Sydney

proposal through the use of lighting schemes consistent with accepted public domain guidelines including post top lights to City of Sydney standards. Further, to the visual link between Hay Street and Campbell Street this area will be subtly lit by ground level up-lights illuminating the eastern façade of the proposal and highlighting the textural quality of landscape treatment to this area. This will provide an appropriate and positive nightscape amenity that will enhance the proposal and its surroundings.

- Allow for future development of the site and provide for ease of access to existing and proposed service facilities and infrastructure within the site;
- Recognition of the use of landscape as a design element to complement the distinctive architecture of the proposal in its location adjacent to Belmore Park.

Design Elements:

The principal design elements of the landscape scheme are the integration of public domain guidelines for the City of Sydney in this precinct. The public domain consists of Austral stone edging with asphalt infill and tree surrounds incorporating permeable aggregate, Austral Stone edging and watering facility.

The street trees are consistent with the City of Sydney guidelines being *Flindersia* sp. (Hay and Campbell Streets) and *Ficus* sp. (balled on the Pitt Street frontage).

The eastern landscape zone forms an interstitial space that creates a visual link between Hay and Campbell Streets. The landscape elements of this portion of the site will create a contained urban canopy using appropriate species and a structured base.

Proposed Sequencing of the Construction Process:

As council is aware, there is a multiple function for the proposal being for a commercial office building integrated with an Energy Australia zone substation. These different functions have the potential to create a time interphase between the building of the zone substation and the completion of the commercial office space. During the building of the zone substation, a substantial portion of the London Plane trees on site are anticipated to be retained until the instigation of the commercial office space. Should there be a delay between these two building programs the public domain will be initially upgraded to City of Sydney public domain guidelines as stated above being Austral stone edging with asphalt infill and on completion of the commercial building the public domain will be facilitated with Austral stone across the public domain.

Conclusion:

The landscape design approach for the proposal has emerged from the guiding principles of unification, innovation, safety and security. The landscape design acknowledges and incorporates the City of Sydney guidelines, integrating this development into the overall fabric of place. The eastern visual link provides a welcome visual element to this part of the CBD encouraging a contrast of texture and form by incorporating a subtle and appropriate landscape form that refers to the dominant typology of the area.