



APPENDIX E – SUBMISSIONS RECEIVED





Planning

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Mr Craig Moody
Executive Manager - Project Development & Approvals
EnergyAustralia
570 George Street
SYDNEY NSW 2000

Our ref: 10/12381-3

Your ref:

Dear Mr Moody

North Sydney Zone Substation Redevelopment (MP 10_0092) - Submissions

The exhibition of the Environmental Assessment for the above project ended on 22 October 2010. All submissions received by the Department during the exhibition of the project are available on the Department's website at the following location:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=4047.

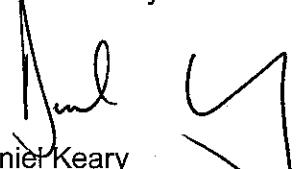
In accordance with section 75H of the *Environmental Planning and Assessment Act 1979*, the Director-General requires the Proponent to respond to the issues raised in these submissions in a Submissions Report.

Based on its assessment of the project to date, the Department has also identified a number of matters requiring further clarification (refer Attachment A) and requires that the Submissions Report also provide additional assessment on these issues.

If there are any proposed changes to the project to minimise its environmental impact, a Preferred Project Report may be required. The Statement of Commitments may also need to be revised to reflect any proposed changes to the project.

Please do not hesitate to contact Ms Dinuka McKenzie, the contact officer for this project should you have any enquiries or require any clarification on this matter.

Yours sincerely

 25/10/10
Daniel Keary
Director, Infrastructure Projects
as delegate for the Director-General

Attachment A: Further Assessment Issues

Visual

1. The visual impact assessment presented in the Environmental Assessment has considered visual impacts from the new substation to existing residential receptors at 144 -150 Walker Street, however has not specifically considered impacts to the approved mixed use development at this location. The Submissions Report should provide details of the mixed use development approved at 144 -150 Walker Street (including whether any residential floors face the substation) and discuss any potential for visual impacts at this future landuse with consideration to set back distances and potential for over-shadowing.
2. The Submissions Report must document additional investigations undertaken since the Environmental Assessment was placed on exhibition to determine any changes that could be made to the design to further reduce predicted visual and electro-magnetic field impacts at the current approved mixed use tower at 136-140 Walker Street (DA 195/2008).

New Impacts at 136-140 Walker Street

3. The Department understands that a new development application (DA 316/2010) has been submitted with North Sydney Council for 136-140 Walker Street, which proposes changes to the current approved design for a mixed use tower at this location (DA 195/2008). The Submissions Report must provide assessment of any changed impacts associated with the project on this revised development application, including visual, electro-magnetic fields and noise considerations. The Department understands that the revised development application is proposing to replace floors that are currently approved as commercial/ amenities spaces to additional residential units. The Submissions Report must specifically consider any changed impacts with respect to electro-magnetic fields on these proposed residential floors.

Cumulative Noise

4. The Department understands that the new substation and existing substation may operate on a simultaneous basis for some years prior to the existing substation being fully decommissioned, as the full transfer of capacity from the existing substation to the new substation is dependent on a number of separate cable upgrade works being completed in time. The Submissions Report must assess any cumulative noise impacts that may arise from this period of simultaneous operations at nearest sensitive receptors.

Your reference 10/12381-2
Our reference: DOC10/43090
Contact: Lisa Farrell – 9995 6807

Ms Dinuka McKenzie
Senior planner – Water & Energy
Infrastructure Projects
Department of Planning
GPO BOX 39
SYDNEY NSW 2001

Dear Ms McKenzie

RE: North Sydney Zone Substation Redevelopment (MP10_0092) Environmental Assessment - Exhibition.

I refer to your letter dated 20 September 2010 inviting The Department of Environment, Climate Change and Water (DECCW) to make a submission on the environmental assessment (EA) for the above mentioned Project and any additional information DECCW considers appropriate to address shortcomings in the EA.

DECCW has undertaken a detailed review of the EA and considers that it adequately addresses the Director General's Requirements. The key environmental impacts associated with the proposal relate to noise and vibration during construction.

While DECCW supports approval of the project it is strongly recommended that the conditions in (Attachment A) are included in any consent.

If you wish to discuss any of the issues raised in this letter, please contact Lisa Farrell on 9995 6807.

Yours sincerely

Giselle Howard 25/10/10
Giselle Howard
Director Metropolitan
Environment Protection and Regulation

Attachment A: DECCW comments on the EA for the North Sydney Zone Substation Redevelopment – (MP10_0092)



Attachment A: DECCW comments on the EA for the North Sydney Zone Substation Redevelopment (MP 10_0092)

Noise and vibration Impacts

1. Background noise levels

The construction noise objective for the project is to manage noise from construction activities (as measured by a LAeq (15 minute) descriptor) so it does not exceed the background LA90 noise level by more than 10 dB (A) for works during standard construction hours; and by more than 5 dB (A) for works outside standard construction hours.

Background noise levels are those identified in the EA or otherwise identified in the Construction Noise and Vibration Management Plan.

Any activities that have the potential for noise emissions that exceed the objective must be identified and managed through the implementation of feasible and reasonable noise mitigation and management measures, to be outlined in a Construction Noise and Vibration Management Plan, with the aim of achieving the construction noise objective.

If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the NSW Industrial Noise Policy), 5dB (A) must be added to the measured Construction noise level when comparing the measured noise with the construction noise objective.

2. Construction noise management plan

The proponent must prepare and implement a detailed Construction Noise and Vibration Management Plan (CNVMP) that includes, but is not necessarily limited to:

- identification of the specific activities that will be carried out and associated noise sources at the premises;
- identification of all potentially affected sensitive receiver premises;
- quantification of the rating background noise level (RBL) for sensitive receivers, as part of the CNVMP, or as undertaken in the EA;
- identification of the construction noise, ground-borne noise and vibration objectives;
- assessment of potential noise, ground-borne noise and vibration levels from the proposed construction methods expected at sensitive receiver premises against the construction noise objectives;
- where the objectives are predicted to be exceeded, an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts;
- description of management methods and procedures, and specific noise mitigation treatments that will be implemented to control noise and vibration during construction,
- where the objectives cannot be met, additional measures including, but not necessarily limited to the following should be considered for implementation where practicable:
 - reduced hours of construction
 - the provision of respite for 1 or 2 nights per week from noisy / vibration intensive activities,
 - an acoustic enclosure over the excavation site,
 - alternative excavation methods
 - other negotiated outcomes of respite or compensation with the affected community;
- where it is determined that the works cannot be undertaken in a manner that satisfies the construction noise and vibration objectives, a report justifying that the construction noise and vibration measures (including management measures) consistent with current best

practice should be submitted to the Director General for approval prior to commencement of works,

- procedures for notifying residents of construction activities that are likely to effect their noise and vibration amenity,
- publication of a 24 hour contact number for community complaints;
- measures to monitor noise performance and respond to complaints.

Note: community notification alone (such as letter box drops) is an inadequate response to high noise impacts. Management measures should include the provision of respite and alternative accommodation to affected receivers.

3. Construction hours

All construction work at the premises, other than noise intensive activities such as rock breaking, may be conducted between 8am and 6pm Monday to Friday and between 8am and 5pm Saturdays and at no time on Sundays and public holidays. Noise intensive activities such as rock breaking must be conducted between 9am and 12pm Monday to Saturday and between 2pm and 5pm Monday to Friday and at no time on Sundays and public holidays.

Works outside these hours are not permitted except as explicitly specified below, with strong justification and include:

- the delivery of materials which is required outside these hours as requested by Police or other authorities for safety reasons;
- emergency work to avoid the loss of lives, damage to property and/or to prevent environmental harm;
- other works expressly approved by the Director General.

In considering applications for Out of Hours works the Director General should give consideration to the following:

- the likely effectiveness of any acoustic enclosure or alternative excavation methods in reducing noise levels to impacted sensitive receivers
- the need for respite periods for night works extending past 5 consecutive nights
- the need to limit all rock breaking and noise sensitive activities to before 10pm unless there is clear evidence of community support for an alternative approach as a result of negotiations between the proponent and representatives of potentially affected noise receivers.

4. Vibration

Vibration caused by construction and received at any sensitive receiver outside the proposal must be assessed against the guidelines contained in the DECC publication "Environmental Noise Management - Assessing Vibration: a technical guideline".

Regenerated noise from construction works must not exceed the following criteria as measured at the nearest sensitive receptor:

- 40 dB(A) between the hours of 6:00 pm and 10:00 pm; and
- 35 dB (A) between the hours of 10:00 pm and 7:00 am.

Ms Dinka McKenzie
Senior Planner – Water & Energy
Infrastructure Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Re: North Sydney Zone Substation Redevelopment (MP 10_0092) – Environmental Assessment Exhibition

Dear Ms Dinka,

Thank you for the opportunity to comment on the Environmental Assessment (EA) for the proposed substation to be built at 3-11 Ward St, North Sydney. I would like to comment on two components of the EA prepared for the project; Electromagnetic fields (EMF) generated by the facility and noise impacts.

EMF – health effects

The health effects of EMF has been extensively studied in recent years and current scientific opinion is well summarized in the Environmental Health Criteria (EHC) document no. 238 Extremely Low Frequency fields (ELF) published by the World Health Organization in 2007. The health effects can be classified as acute or chronic;

a) Acute effects

The above document states that “Acute biological effects have been established for exposure to ELF electric and magnetic fields in the frequency range up to 100 kHz that may have adverse consequences on health. Therefore, exposure limits are needed.” ARPANSA issued a Draft Standard on “Exposure Limits for Electric and Magnetic Fields (0Hz to 3kHz)” for public comment. This Draft Standard proposes a 24-hour magnetic field exposure limit for the general public of 1000 mG and is designed to protect against established biological effects.

b) Chronic effects

The international Agency for Research on Cancer classifies ELF magnetic fields as a possible human carcinogen (Group 2B). The following is a key extract from the EHC document;

Page 11 of the WHO EHC document states; “There is scientific evidence suggesting that everyday, chronic low-intensity (above 0.3–0.4 μ T) power-frequency magnetic field exposure poses a health risk and this is based on epidemiological studies demonstrating a consistent pattern of increased risk for childhood leukaemia. Uncertainties in the hazard assessment include the role that control selection bias and exposure misclassification might have on the observed relationship between magnetic fields and childhood leukaemia. In addition, virtually all of the laboratory evidence and the mechanistic evidence fail to support a relationship between low-level ELF magnetic fields and changes in biological function or disease status. Thus, on balance, the evidence is not strong enough to be considered causal, but sufficiently strong to remain a concern. “

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Hornsby Ku-ring-gai Hospital
Palmerston Road
HORNSBY NSW 2077
Telephone (02) 9477 9400 Facsimile (02) 9482 1650

Northern Sydney Central Coast Area Health Service
ABN 48 344 669 728

As the evidence for a causal relationship is limited, the WHO therefore does not recommend exposure limits based upon epidemiological evidence but does consider some precautionary measures are warranted.

EMF – exposures at North Sydney substation

The report entitled North Sydney 132kV Zone Substation, EMF Assessment Energy2UAlliance prepared by Aurecon Australia Pty Ltd dated 19 August 2010 provides a detailed assessment of EMFs exposures likely to occur as a result of the project. Due to the varying land uses around the site the most sensitive human receptors would be located in the proposed mixed commercial/resident building at 136-140 Walker Street on the eastern boundary of the site. Although EMF exposures are likely to be higher at other boundaries sensitive human receptors are unlikely to be exposed to significant EMFs for prolonged periods of time given the current land uses. As such comments will now be confined to the EMF exposures on the eastern boundary.

Figure 3.5 on p16 describes the current magnetic field levels along the eastern boundary with levels generally reported at about 0.3 mG. Figure 3.17 on p29 depicts the proposed substation facility in relation to the proposed commercial/residential development. It can be seen that some proposed residences will be located adjacent to the boundary of the proposed substation facility with those located on level 5 likely to have the greatest exposure to EMF from the proposed substation.

Figure 3.21 predicts that EMF levels for some residences on level 5 will be in the order of 6 to 9 mG and although these levels decrease with distance from the external wall they will still be approximately half of these levels at a distance of 10 metres from the outside wall. These levels are substantial higher than the existing levels of approximately 0.3 mG measured at the boundary.

In summary, the EA predicts that sensitive residential receptors will be exposed to a substantial increase in EMF exposure above currently existing levels if the substation facility is constructed as currently designed. It is recommended that the design of the project should be altered with the objective of reducing this predicted increase over background levels.

Noise

Noise exposure has been linked with significant non auditory health effects¹. As the proposed facility has the potential to generate significant noise for a prolonged period, particularly in the operational phase it is important that project specific noise levels are set and implemented strictly in accordance with relevant Department of Environment, Climate Change & Water noise policy.

Should you require any further information please contact Mr Ronnie Naicker, Environmental Health Manager, Hornsby Office on (02) 9477 9188.

Yours sincerely,

 17/10/10.

Dr Michael Staff
Public Health Physician

cc Environmental Health Branch, NSW Health.

¹ EnHealth: The health effects of environmental noise – other than hearing loss. Commonwealth of Australia 2004.



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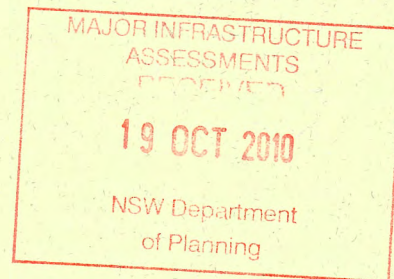
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Department of Planning
Attention: Dinuka McKenzie
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SYDNEY NSW 2001



GM (PDS)

14 October 2010

Dear Dinuka

**RE: 3-11 WARD STREET, NORTH SYDNEY
PART 3A DEVELOPMENT – DEPARTMENT OF PLANNING
REFERENCE: MP 10_0092**

The abovementioned application was the subject of a report considered by Council at its meeting held on 11 October 2010.

At this meeting Council resolved as follows:-

- A. **THAT** Council **resolves to forward a submission** to the Department of Planning with regard to the proposed Part 3A development application (MP 10_0092) at No.3-11 Ward Street and No.70-74 Berry Street, North Sydney as follows:
- 1) Suggesting modification to the finishes of the building as outlined by Council's Design Excellence Panel and *a through-site pedestrian link to Harnett Street be included.*
 - 2) The attached traffic and engineering issues be addressed through appropriate conditions.
 - 3) *If consent is granted a condition be imposed for a positive public benefit to be provided on the corner of Ward and Berry Streets following the decommissioning and demolition of the existing substation at 70-74 Berry Street such as a public accessible passive park including seating and public art.*
- B. **THAT** the future potential of No.70-74 Berry Street (current substation) be addressed in the CBD character statement as part of any Ward Street redevelopment plans.

