

Your reference 10/14379-2
Our reference: DOC10/31942
Contact: Lisa Farrell

31 August 2010

Mr Osborne
Manager – Energy and Water
Infrastructure Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Dear Mr Osborne

**Sydney CityGrid Project – Stage 2A (i) City East Zone Substation
Application Reference: 10_0071**

I refer to your letter dated 15 July 2010 requesting the Department of Environment Climate Change and Water (DECCW) to provide a written submission on the Environmental Assessment (EA) for Stage 2A(i) of the City East Zone Substation Project.

DECCW has reviewed the EA and provides the following comments (Attachment A) to assist the Director-General's evaluation of the Substation Project.

DECCW has concerns regarding the construction noise and vibration impacts of the project:

If you have any queries regarding the attached information, please contact Lisa Farrell on 9995 6807.

Yours sincerely,



Giselle Howard
Director Metropolitan
Environment Protection and Regulation

Attachment A - [Sydney CityGrid Project City East Zone Substation Stage 2A \(i\) DECCW comments for Project Approval](#)

Attachment A

Sydney CityGrid Project City East Zone Substation Stage 2A (i) DECCW comments for Project Approval

Sydney CityGrid Project City East Zone Substation Stage 2A(i)

Background

The Sydney CityGrid Project City East Zone includes demolition of the existing building at 33 Bligh Street and construction of a stub tunnel connection to Bent Street, for which project approval is being sought. A separate project approval application is to be prepared at a later time for Stage 2A(ii), which involves construction of a new substation at 33 Bligh Street.

Current Position

Project Approval Application – City East Zone Substation (CEZS) and stub tunnel connection to Bent Street

The CEZS involves demolition of the existing building at 33 Bligh Street, “Kindersley House”, and excavation works to eventually build a commercial development that incorporates a substation. In terms of construction noise, it is no different to any other large scale building works in the CBD, with the exception that it incorporates a tunnel construction from the site extending in a northerly direction to City East Cable Tunnel (CECT) at Bent Street, running underneath O’Connell Street (approximately 150m). Whilst there appears to be no readily apparent reason for any extensive out of hours construction activities, including tunnelling, DECCW notes that the predicted noise levels from tunnelling works do not exceed the ground borne noise objectives. Therefore evening and night time ground borne noise objectives are recommended for tunnelling works.

The below ground works associated with the stub tunnel are proposed to occur 24hours per day, whilst the surface works such as loading into trucks are proposed to occur during standard construction works.

Construction works such as demolition and excavation are proposed to occur between 7am and 7pm Monday to Friday and 7am to 5pm Saturday.

Noise intensive works such as rock breaking are intended to occur between 7am and 12pm Monday to Saturday and 2pm to 5pm Monday to Friday.

The following conditions of project approval are recommended;

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

- (a) identification of the specific activities that will be carried out and associated noise sources at the premises,*
- (b) identification of all potentially affected sensitive receiver premises,*
- (c) quantification of the rating background noise level (RBL) for sensitive receivers, as part of the CNVMP, or as undertaken in the EA,*
- (d) the construction noise, ground-borne noise and vibration objectives outlined in these conditions of approval,*
- (e) assessment of potential noise, ground-borne noise and vibration levels from the proposed construction methods expected at sensitive receiver premises against the objectives identified in these conditions of approval,*
- (f) 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,*
- (g) description of management methods and procedures, and specific noise mitigation treatments that will be implemented to control noise and vibration during construction,*
- (h) where the objectives cannot be met, additional measures including, but not necessarily limited to the following should be considered and implemented where practicable; reduced hours of construction, the provision of respite from noisy / vibration intensive activities, an acoustic enclosure over the excavation site, alternative excavation methods or other negotiated outcomes with the affected community,*
- (i) 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 shall be submitted to the Director General for approval prior to commencement of works,

- (j) procedures for notifying residents of construction activities that are likely to effect their noise and vibration amenity,*
- (k) measures to monitor noise performance and respond to complaints.*

2. All construction work at the premises, other than below ground tunnelling works and noise intensive activities such as rock breaking, may be conducted between 7am and 7pm Monday to Friday and between 7am and 5pm Saturdays and at no time on Sundays and public holidays. Below ground tunnelling works may be conducted 24 hours per day. 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 or in other conditions and include:

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

3. The Construction noise objective for the project is to manage noise from Construction activities (as measured by a LAeq(15minute) 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 in accordance with the Construction Noise and Vibration Management Sub Plan. The Proponent must implement all feasible and reasonable noise mitigation and management measures 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.

4. 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" and in accordance with the CNVMP.

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

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

In addition to the conditions above, it is normal practice for DoP to impose "Construction Noise Management" conditions, for example conditions 31-35 in the; "MAJOR PROJECT ASSESSMENT: City West Cable Tunnel Director-General's Environmental Assessment Report Section 75I of the Environmental Planning and Assessment Act 1979 January 2007" (http://www.planning.nsw.gov.au/asp/pdf/05_0178_dgreport.pdf). These conditions are also recommended for imposition in any project approval for the City East Zone Substation project.