

# Project Approval

## Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure under delegation executed on 25 January 2010, I approve the project application referred to in schedule 1, subject to the conditions in schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

*S Haddadi*

Director-General

Department of Planning and Infrastructure

Sydney

*27<sup>th</sup> May*

2011

### SCHEDULE 1

Application No.:

MP10\_0092

Proponent:

AusGrid

Approval Authority:

Minister for Planning and Infrastructure

Land:

3-11 Ward Street and 70-74 Berry Street, North Sydney and Ward, Harnett and Berry Streets, North Sydney

Project:

North Sydney Zone Substation Redevelopment including:

- the construction and operation of a new 132/11 kilovolt substation at 3-11 Ward Street, North Sydney;
- the installation of associated cable conduit and other infrastructure along Ward, Harnett and Berry Streets, North Sydney; and
- decommissioning and demolishing of existing 33/11 kilovolt substation at 70-74 Berry Street, North Sydney.

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## DEFINITIONS

Act, the	<i>Environmental Planning and Assessment Act, 1979</i>
Conditions of Approval	The conditions of approval for the project as provided in this instrument.
Construction	All pre-operation activities associated with the project other than pre-construction activities including survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys or other activities determined by the Environmental Representative to have minimal environmental impact such as minor access roads, minor adjustments to services / utilities, establishing temporary construction sites. Note: construction activities may continue at the existing substation site (i.e. decommissioning, demolition etc), even though the new substation may already be operational.
Council	North Sydney Council
OEH	Office of Environment and Heritage (formerly the NSW Department of Environment, Climate Change and Water)
Department, the	Department of Planning and Infrastructure
Director-General, the	Director-General of the Department of Planning and Infrastructure (or delegate).
Director-General's approval/ agreement or satisfaction	A written approval from the Director-General (or delegate).
Dust	Any solid material that may become suspended in air or deposited.
Environmental Assessment	<i>North Sydney Zone Substation Redevelopment Environmental Assessment</i> , dated September 2010 and prepared by the Energy2UAlliance
Operation	<p>Operation comprises the following, however does not include commissioning activities:</p> <ul style="list-style-type: none"> <li>➤ Stage 1 operation: when the new substation commences functioning, however the existing substation remains partially or fully operational;</li> <li>➤ Stage 2 operation: when the new substation commences functioning after the existing substation has been fully decommissioned and all external network upgrade projects (subject to Part 5 of the Act) to support the new substation functioning at design capacity, have been completed; and</li> <li>➤ Stage 3 operation: the completion of all demolition, site restoration and rehabilitation activities at the existing substation site.</li> </ul>
Reasonable and Feasible or Reasonable and Practicable	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible/ Practicable relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.
RTA	NSW Roads and Traffic Authority
Statement of Commitments	Statement of Commitments contained in the Preferred Project Report
Preferred Project Report	<i>North Sydney Zone Substation Redevelopment Preferred Project Report</i> , dated December 2010, and prepared by the Energy2UAlliance

**SCHEDULE 2**  
**PART A - ADMINISTRATIVE CONDITIONS**

**TERMS OF APPROVAL**

- A1. The Proponent shall carry out the project generally in accordance with the:
- (a) Major Project Application MP 10\_0092;
  - (b) *North Sydney Zone Substation Redevelopment Environmental Assessment*, dated September 2010 and prepared by the Energy2UAlliance;
  - (c) *North Sydney Zone Substation Redevelopment Preferred Project Report*, dated December 2010, and prepared by the Energy2UAlliance;
  - (d) the additional information on electro-magnetic field mitigation measures submitted to the Department by email on 12 April 2011; and
  - (e) the conditions of this approval.
- A2. In the event of an inconsistency between:
- (a) the conditions of this approval and any document listed from condition A1(a) to A1(c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
  - (b) any document listed from condition A1(a) to A1(c) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- A3. The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:
- (a) any reports, plans or correspondence that are submitted in accordance with this approval; and
  - (b) the implementation of any actions or measures contained in these reports, plans or correspondence.

**LIMITS OF APPROVAL**

- A4. This project approval shall lapse five years after the date on which it is granted, unless the Proponent has substantially commenced physical works on site.
- A5. To avoid any doubt, this approval does not authorise the installation of capacitor banks and associated air-core reactors in the new substation. Should these works be required in the future, they will require additional assessment and approval under the Act.

**STATUTORY REQUIREMENTS**

- A6. The Proponent shall ensure that all necessary licences, permits and approvals required for the development of the project are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such necessary licences, permits or approvals. This shall include certification requirements in accordance with section 109R of the Act.

**STAGING**

- A7. The Proponent may elect to construct the project in discrete work packages or stages. Where that occurs, these conditions of approval need only be complied with to the extent that they are relevant to that discrete work package or stage.

## PART B – PRIOR TO CONSTRUCTION

### DESIGN STANDARDS

#### **Visual Amenity Impacts**

- B1. The Proponent shall ensure that the external façade of the new substation building is implemented consistent with the design drawings provided in the Preferred Project Report and as agreed to with Council's design excellence panel, maximising the use of building materials and treatments which visually complement surrounding landuse and which minimise visual intrusion to surrounding sensitive receptors.
- B2. The Proponent shall ensure that the new substation is designed such that all external lighting associated with the project is mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, receptors and roadways. The lighting shall be the minimum level of illumination necessary and shall comply with AS 4282(INT) 1997 – *Control of Obtrusive Effects of Outdoor Lighting*.

#### **Infrastructure Works**

- B3. All works associated with the project that interface with public land (driveways, kerb and guttering, footpaths and stormwater drainage) shall be designed in consultation with and to meet the design standards and any reasonable requirement of the relevant authority (Council and/ or the RTA). All public roads disturbed or damaged as part of the project shall be designed and reconstructed in consultation with and to meet the design standards and any reasonable requirement of the relevant road authority (Council and/ or the RTA).

### PRE-CONSTRUCTION DILAPIDATION SURVEYS

- B4. Prior to the commencement of construction, the Proponent shall commission a suitably qualified expert to assess the existing condition of all private or public land (such as driveways or footpaths), which are proposed to be either directly disturbed or otherwise used during the construction of the project (such as for the manoeuvring or parking of heavy vehicles or machinery and construction vehicular access). The dilapidation survey shall also assess the existing condition of all public roads, which are proposed to be either directly disturbed or otherwise used during the construction of the project, with the exception of any streets (i.e. Ward and Harnett) which are proposed to be reconstructed in their entirety as part of this project and separate related projects to be pursued under Part 5 of the Act. The pre-construction dilapidation survey for Berry Street may be undertaken subsequent to the commencement of construction of the project, however prior to the commencement of cable vault works at this location.

The **Pre-Construction Dilapidation Report** shall be prepared in consultation with relevant authorities (Council and/ or the RTA) and submitted to the Director-General prior to the commencement of construction (or construction of the relevant stage) clearly identifying any comments made by the relevant authority and how these would be addressed. The Proponent may, with the agreement of the Director-General submit separate Pre-Construction Dilapidation Reports, prior to the commencement of construction at the new substation site and prior to the commencement of construction (decommissioning and demolition) at the existing substation site.

### ENVIRONMENTAL REPRESENTATIVE

- B5. Prior to the commencement of any construction activities, or as otherwise agreed by the Director-General, the Proponent shall nominate for the approval of the Director-General (with suitable documentation) a suitably qualified and experienced Environmental Representative(s) independent of the Environmental Assessment preparation, design, construction and operation personnel. The Proponent shall engage the Environmental Representative(s) for the duration of any construction activities. The Environmental Representative(s) shall:
- oversee the implementation of all environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
  - consider and advise the Proponent on its compliance obligations against all matters specified in the conditions of this approval and the Statement of Commitments as referred to under condition A1 of this approval, and any other relevant environmental approval, licence or permit required and obtained in relation to the project; and

- c) have the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and, failing the effectiveness of such steps, to recommend to the Proponent that relevant activities are to be ceased as soon as reasonably practicable if there is a significant risk that an adverse impact on the environment will be likely to occur.

#### COMPLIANCE MONITORING AND TRACKING

- B6. Prior to the commencement of construction, the Proponent shall develop and submit a Compliance Tracking Program to track compliance with the requirements of this approval, for the approval of the Director-General. The Program shall relate to both construction and operational stages of the project and shall include, but not necessarily be limited to:
- a) provisions for periodic review of the compliance status of the project against the requirements of this approval, Statement of Commitments and relevant environmental approvals, licences or permits required and obtained in relation to the project;
  - b) provisions for periodic reporting of compliance status against the requirements of this approval and Statement of Commitments to the Director-General including at least prior to the commencement of construction and operation of the project;
  - c) a program for independent environmental auditing in accordance with *AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing*; and
  - d) mechanisms for rectifying any non-compliance identified during environmental auditing or review of compliance.

Nothing in this approval precludes the Proponent from submitting for the Director-General's approval details of an existing compliance tracking system (or similar) administrated by the Proponent, subject to clear demonstration that the system addresses the requirements of condition B6.

#### CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- B7. The Proponent shall prepare and implement a Construction Environmental Management Plan (CEMP) prior to the commencement of construction of the project to outline environmental management practices and procedures to be followed during construction of the project. The CEMP shall include, but not necessarily be limited to:
- a) a description of all activities to be undertaken on the site during construction including an indication of stages of construction, where relevant;
  - b) identification of the potential for cumulative impacts with other construction activities and measures and protocols to be put in place to minimise and manage cumulative impacts and/ or construction conflicts;
  - c) a description of the statutory obligations that the Proponent is required to fulfil prior to and during construction including all relevant approvals, licences and permits required and applicable key legislation and policies;
  - d) evidence of consultation with relevant public authorities including Council, OEH and the RTA identifying how issues raised by these public authorities have been addressed in the plan;
  - e) a description of the roles and responsibilities for all relevant employees involved in the construction of the project including relevant training and induction provisions for ensuring that all employees, contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;
  - f) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase and details of how environmental performance would be monitored and managed to meet acceptable outcomes including what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the CEMP:
    - i) measures to monitor and manage **noise and vibration** impacts with consideration to cumulative impacts from surrounding development including:
      - i. identification of nearest sensitive receptors (including relevant residents along Walker Street and Berry Street) and relevant construction noise and vibration goals applicable;
      - ii. identification of all reasonable and feasible measures proposed to be implemented with the aim of achieving construction noise and vibration goals (including for construction traffic noise impacts and high noise generating activities). The mitigation

- measures proposed should be commensurate with the likely level of impact and risk of exceedence of relevant goals, associated with the relevant construction activity;
- iii. a detailed strategy for assessing works outside of standard construction hours under condition C6 including: justification for such works and alternatives considered, risk assessment procedure for identifying likely impacts at nearby receptors and circumstances under which an increasing range of reasonable and feasible mitigation measures would be considered (including respite period, offers of alternative accommodation or similar) and procedures for consultation with each receptor at which noise levels greater than relevant noise goals are identified to ensure that residents are aware of expected noise levels and available mitigation options (including opportunities for negotiated outcomes);
  - iv. measures for informing surrounding receptors of approved construction hours, upcoming high noise generating and vibration intensive works and works outside of standard hours;
  - v. measures for monitoring compliance with relevant noise, vibration and ground-borne noise goals, including attendant monitoring for works on Sundays and any approved night works (airborne and ground borne noise, as relevant) and for vibration intensive works to determine minimum buffer distances and compliance with goals;
  - vi. measures for responding to complaints including notification of the Director-General; and
  - vii. contingency strategy in the case that project related vibration results in damage to surrounding buildings or structures (including pre-and post construction building dilapidation surveys, where necessary);
- ii) measures to monitor and manage **traffic impacts** in consultation with relevant road authorities (Council and RTA, as relevant) including:
    - i. identification of construction traffic routes and traffic volumes along each route with measures to be taken to minimise required traffic volumes;
    - ii. details of vehicle access, manoeuvrability and parking within the construction site (including at Harnett and Ward Street) consistent with AUSTROAD standards;
    - iii. details of roads closures and other traffic disruptions likely to occur considering road safety and level of service;
    - iv. specific measures for minimising traffic disruptions and delays including alternate routes during road closures; and
    - v. identification of all required pre-construction permits that have been obtained from relevant road authorities;
  - iii) measures to monitor and manage **air quality emissions** including dust/ exhaust emissions generated by construction related traffic and construction machinery;
  - iv) measures to monitor and manage **soil, water quality and geotechnical** risks including erosion and sediment control, the identification and remediation of any contaminated land within the existing substation site, and the management of structural risks to Berry Street during the excavation of the cable vault (including submission of detailed design drawings and geotechnical reports to the RTA and measures for the monitoring of settlement impacts to Berry Street);
  - v) measures for the appropriate management and disposal of **waste generated** at the site including spoil disposal and asbestos removal and appropriate testing and classification of waste;
  - vi) details of land **restoration** measures to be undertaken at the existing substation site upon completion of decommissioning and demolition works; and
  - vii) details of **emergency and contingency** management; and
- g) procedures for the periodic review and update of the CEMP as necessary.

The CEMP shall be submitted for the approval of the Director-General prior to the commencement of construction of the project or within such period as otherwise agreed by the Director-General. Construction shall not commence until written approval has been received from the Director-General. The Proponent may, with the agreement of the Director-General submit separate CEMPs, prior to the commencement of construction at the new substation site and prior to the commencement of construction (decommissioning and demolition) at the existing substation site.

## **COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT**

### ***Complaints Procedure***

- B8. Prior to the commencement of construction of the project, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation):
- a) a telephone number on which complaints about construction and operational activities at the site may be registered;
  - b) a postal address to which written complaints may be sent; and
  - c) an email address to which electronic complaints may be transmitted.

The telephone number, postal address and email address shall be published in a newspaper circulating in the local area prior to the commencement of construction and prior to the commencement of operation of the project. The above details shall also be provided on the website required by condition B10 of this approval.

- B9. Prior to the commencement of construction of the project, the Proponent shall ensure that a Complaints Register is in place to record the details of all complaints received through the means listed under condition B8 during construction or operation. The Register shall record, but not necessarily be limited to:
- a) the date and time, where relevant, of the complaint;
  - b) the means by which the complaint was made (telephone, mail or email);
  - c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
  - d) the nature of the complaint;
  - e) any action(s) taken by the Proponent in relation to the complaint, including any follow-up contact with the complainant and the timing for implementing action and details of the action being closed out; and
  - f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Director-General upon request during the life of the project. The Complaints Register for the project may be incorporated into an existing complaints handling system managed by the Proponent if it is demonstrated to meet the requirements of condition B9.

### ***Provision of Electronic Information***

- B10. Prior to the commencement of construction of the project, the Proponent shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the project subject to confidentiality. The Proponent shall (subject to confidentiality) publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:
- a) information on the statutory context and current implementation status of the project;
  - b) the documents referred to under condition A1 of this approval;
  - c) a copy of this approval and any future modification to this approval;
  - d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;
  - e) all plans, monitoring programs and strategies required under this project approval; and
  - f) details of the outcomes of compliance reviews and audits of the project (as identified in the Compliance Tracking Program required under condition B6).

### ***Community and Stakeholder Engagement Plan***

- B11. Prior to the commencement of construction of the project, the Proponent shall prepare a Community and Stakeholder Engagement Plan for the approval of the Director-General which outlines measures for disseminating information on the development status of the project and methods for actively engaging with surrounding landowners and affected stakeholders regarding issues that would be of interest/concern to them during the construction and operation of the project. This may include distribution of community newsletters, stakeholder meetings, community consultative committees and opportunities for site visits. The Plan shall include but not be limited to:



- a) measures and procedures to work consultatively with surrounding landowners and development to minimise conflict with existing landuse, minimise and manage cumulative impacts (including conflict with other construction activities);
- b) procedures to inform the local community of planned construction activities including construction traffic routes, potential traffic disruptions, high noise generating activities and works outside of normal construction hours; and
- c) dispute resolution processes in case of disagreement between parties including provision for an independent arbitrator.

## PART C – DURING CONSTRUCTION

### NOISE IMPACTS

#### ***Vibration Impacts***

- C1. The Proponent shall ensure that the vibration resulting from the construction of the project does not exceed the preferred values vibration (for low probability of adverse comment) presented in *Assessing Vibration: A Technical Guideline* (DECC, February 2006), at any nearest sensitive receptor.

#### ***Ground-Borne Noise***

- C2. The Proponent shall ensure that all reasonable and feasible mitigation measures are implemented to ensure that any evening or night-time works undertaken as part of the project (as approved under condition C6) achieve the following (internal) ground-borne noise goals at nearest residential receptors, where ground-borne noise levels are higher than air-borne levels:
- a) Evening (6pm to 10pm):  $L_{Aeq(15min)}$  40 dB(A); and
  - b) Night (10pm to 7am):  $L_{Aeq(15min)}$  35 dB(A).

#### ***Construction Noise***

- C3. The Proponent shall implement all reasonable and feasible measures to minimise noise generation from the construction of the project consistent with the requirements of the *Interim Construction Noise Guideline* (DECC, July 2009) including noise generated by construction traffic associated with the project and with a particular focus on high noise generating activities and works outside of standard construction hours (i.e. weekend and evening/night time works). In particular, the Proponent shall ensure that high noise generating works associated with cable vault installation are minimised as far as reasonable and feasible through the implementation of construction methods involving excavation beneath a concrete slab or open excavation with hoarding.

#### ***Construction Hours***

- C4. With the exception of construction works associated with cable installation and the cable vault along Ward and Berry Streets as specified in condition C5, the Proponent shall only undertake construction activities associated with the project that would generate an audible noise at any sensitive receptor during the following hours:

##### *Non-High Noise Generating Works*

- a) 7:00 am to 6:00 pm, Mondays to Fridays;
- b) 8:00 am to 5:00 pm on Saturdays; and
- c) at no time on Sundays or public holidays.

##### *High Noise Generating Works (as identified in the CEMP)*

- a) 7am to 12.30 pm and 2.30 pm to 6pm, Monday to Fridays;
- b) 8am to 12.00 pm and 1.00 pm to 5pm Saturdays; and
- c) at no time on Sundays or public holidays.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons or emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

- C5. The Proponent shall only undertake construction activities associated with cable installation and the cable vault along Ward and Berry Streets that would generate an audible noise at any sensitive receptor during the following hours:

##### *Non-High Noise Generating Works*

- a) 7:00 am to 6:00 pm, Mondays to Fridays;
- b) 8:00 am to 5:30 pm, Saturdays and Sundays; and
- c) at no time on public holidays.

##### *High Noise Generating Works (as identified in the CEMP)*

- a) 7am to 12.30 pm and 2.30 pm to 6pm, Monday to Fridays;
- b) 8am to 12.00 pm and 1.00 pm to 5.30 pm Saturdays and Sundays; and
- c) at no time on public holidays.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons or emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

- C6. The hours of construction hours specified under condition C4 and C5 of this approval may be varied with the prior written approval of the Director-General. Any request to alter the hours of construction specified under condition C4 and C5 shall be:
- a) considered on a case-by-case basis;
  - b) accompanied by details of the nature and need for activities to be conducted during the varied construction hours including alternatives considered;
  - c) accompanied by details of the likely noise levels at nearest sensitive receptors with and without mitigation;
  - d) accompanied by details of all reasonable and feasible measures identified to minimise noise impact at nearest sensitive receptors;
  - e) accompanied by details of consultation and notification undertaken with surrounding receptors and where relevant written evidence of agreements entered into with receptors for works outside of standard construction hours; and
  - f) accompanied by written evidence demonstrating consultation with the OEH in relation to the proposed variation in construction times (including consideration of any comments made by the OEH).
- C7. A report providing details of noise complaints received during weekend or evening/ night time works approved under conditions C4, C5 or C6 shall be submitted to the Director-General on a weekly basis identifying what action has been taken by the Proponent in response to the complaints and identifying complaints that remain unresolved. The Director-General has the right to revoke or amend the hours of work approved under conditions C4, C5 or C6 in response to ongoing or unresolved complaints.

#### **SURFACE WATER QUALITY**

- C8. Except as may be expressly provided by an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters.
- C9. Soil and water management measures consistent with Landcom's Managing Urban Stormwater: Soils and Conservation shall be employed during the construction of the project for erosion and sediment control.

#### **AIR QUALITY**

##### ***Dust Generation***

- C10. The Proponent shall construct the project in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.

#### **WASTE GENERATION AND MANAGEMENT**

- C11. The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.
- C12. The Proponent shall maximise the reuse and/or recycling of waste materials generated on site as far as practicable, to minimise the need for treatment or disposal of those materials off site.
- C13. The Proponent shall ensure that all liquid and/or non-liquid waste generated on the site (including hazardous waste such as asbestos or contaminated soils) is assessed and classified in accordance with Waste Classification Guidelines (DECC, 2009), or any future guideline that may supersede that document and where removed from the site is only directed to a waste management facility lawfully permitted to accept the materials.

## EXISTING SUBSTATION SITE

### ***Future Landuse***

- C14. Prior to the commencement of the demolition of the existing substation, the Proponent shall in consultation with Council prepare a study identifying future landuse options for the existing substation site (once demolished and rehabilitated) for the approval of the Director-General. The study shall specifically consider options for parts or the whole of the site to be made available for public use (including options for landscaping). The study shall also specifically consider treatment options for the southern façade of the new substation building (including the option for public art) such that the façade poses a visually interesting and integrated view to any future landuse/ receptors and to existing receptors (including passing pedestrian/ vehicular traffic) during any interim lag between the demolition of the existing substation and establishment of new landuse.

### ***Hazardous Material***

- C15. Prior to the commencement of the demolition of the existing substation, the Proponent shall ensure that the building is assessed by an appropriately qualified person, for the presence of hazardous materials (including asbestos and lead in paint or ceiling dust). Where identified, the material shall be contained and disposed by an appropriately qualified person.

### ***Demolition***

- C16. All demolition works at the existing substation site shall be undertaken in accordance with *Australian Standard 2601: the Demolition of Structures*.

## PART D – PRIOR TO OPERATION

### PRE-OPERATION DILAPIDATION SURVEYS

- D1. Prior to the commencement of operation (unless otherwise agreed to by the Director-General), the Proponent shall commission a suitably qualified expert to assess the condition of all public roads and other private or public land (such as driveways or footpaths), either directly disturbed or otherwise used during the construction of the project (such as for construction hoarding, the manoeuvring or parking of heavy vehicles or machinery and construction vehicular access) to assess any damage associated with the construction works on this infrastructure. Pre-operation dilapidation surveys of Ward, Harnett and Berry streets are only required in the case that there has been a significant lag period between the time of these roads being reconstructed following direct disturbance (in accordance with condition B3) and the proposed commencement of operation, such that any construction works during that period have had the potential to damage the reconstructed roads.

The **Pre-Operational Dilapidation Report** shall be prepared in consultation with relevant authorities and detail the procedure or measures to be undertaken to rehabilitate any disturbance or damage caused during construction, back to existing/ reconstructed or better standards (consistent with the design standards of the relevant authorities), with the full cost borne by the Proponent. The Pre-Operational Dilapidation Report shall be submitted to the Director-General prior to the commencement of operation detailing the above, identifying the timing of when the restoration works would be undertaken (as agreed to with the relevant authorities) and clearly identifying recommendations made by the relevant authorities and how these would be addressed. The Proponent may, with the agreement of the Director-General submit separate Pre-Operational Dilapidation Reports, prior to the commencement of operation of the new substation site (Stage 1 operation) and prior to the commencement of operation of the existing substation site (Stage 3 operation).

### VISUAL AMENITY

- D2. Prior to the commencement of Stage 1 operations, the Proponent shall notify all receptors eligible for screen planting in accordance with condition D11 of their rights under the Minister's approval.

### FLORA & FAUNA IMPACTS

- D3. Prior to the commencement of Stage 1 operations, the Proponent shall replace any vegetation removed from neighbouring properties or public land with the same plant species as were removed (unless otherwise agreed to by the landowner or Council).

### OPERATION ENVIRONMENTAL MANAGEMENT PLAN

- D4. The Proponent shall prepare and implement an Operation Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during operation of the project. The Plan shall include, but not necessarily be limited to:
- a) a description of key operational and maintenance activities associated with the project;
  - b) identification of all statutory and other obligations that the Proponent is required to fulfil prior to and during operation of the project, including relevant approvals, licences and consultations;
  - c) a description of the roles and responsibilities for all relevant employees involved in the operation of the project;
  - d) an environmental risk analysis to identify the key environmental performance issues associated with the operation phase and details of how environmental performance would be monitored and managed to meet acceptable outcomes including what actions will be taken to address identified potential adverse environmental impacts. In particular, the Plan shall include:
    - i) an **Electro-Magnetic Field Monitoring Program** prepared by an appropriately qualified and experienced specialist, which details the monitoring to be undertaken to measure electro-magnetic field levels at the boundaries of the new substation to assess the operational performance of the project against the electro-magnetic field levels predicted in the document listed under condition A1(d). The Monitoring Program shall cover both the Stage 1 and Stage 2/3 phases of operation and detail the frequency and duration of monitoring to be undertaken during each phase. The monitoring at each phase shall be representative of operational scenarios for the substation including high and low load operations during day and night and during different seasons and of ultimate load conditions for Stage 2/3 operations. The Monitoring Program shall include details of how monitoring results (including

assessment of performance against predicted electro-magnetic field levels) shall be documented and reported to the Director-General. The Monitoring Program shall provide for the periodic monitoring of the new substation for the duration of its operation, unless otherwise agreed to by the Director-General following review of the performance of the substation against predicted electro-magnetic field levels;

- ii) measures to manage the **Operational Noise Performance** of the project including provision for periodic monitoring of operational noise performance (including in response to operational noise complaints); and
- iii) emergency management; and
- e) complaints handling procedures during operation in accordance with the requirements of this approval.

The Plan shall be submitted for the approval of the Director-General prior to the commencement of operation of the project, or within such period otherwise agreed by the Director-General. Operation shall not commence until written approval has been received from the Director-General. Nothing in this approval precludes the Proponent from submitting for the Director-General's approval details of an existing compliance tracking system (or similar) administered by the Proponent, subject to clear demonstration that the system addresses the requirements of condition D4.

## PART E – DURING OPERATIONS

### NOISE IMPACTS

#### **Vibration Impacts**

- D5. The Proponent shall ensure that the vibration resulting from the operation of the project does not exceed the preferred values vibration (for low probability of adverse comment) presented in *Assessing Vibration: A Technical Guideline* (DECC, February 2006), at any nearest sensitive receptor.

#### **Operational Noise**

- D6. The Proponent shall design, construct, operate and maintain the project to ensure that the noise contributions from the operation of the project do not lead to an exceedance of the noise limits specified in Table 1 (at the locations and during the periods indicated) unless subject to a negotiated noise agreement established consistent with Section 8.3 of the *New South Wales Industrial Noise Policy* (EPA, 2000). The noise limits apply:
- for the simultaneous operation of the new substation and existing operation (under normal operating conditions), during Stage 1 operations;
  - the operation of the new substation at full design capacity (under normal operating conditions) during Stage 2 and 3 operations; and
  - under wind speeds up to 3 ms<sup>-1</sup> (measured at 10 metres above ground level), or under temperature inversion conditions of up to 3 °C/ 100 metres and wind speeds of up to 2m/s at 10 metres above the ground.

**Table 1 - Operational Noise Limits**

Location	Day 7:00am to 6:00pm Mondays to Saturdays 8:00am to 6:00pm Sundays and public holidays	Evening 6:00pm to 10:00pm on any day	Night 10:00pm to 7:00am Mondays to Saturdays 10:00pm to 8:00am Sundays and public holidays	
	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>A1</sub> (1 minute)
Nearest sensitive receptor	57 dB(A)	45 dB(A)	41 dB(A)	61 dB(A)

- D7. For the purpose of assessment of noise contributions specified under condition D6 of this approval, noise from the project shall be:
- measured at the most affected point within the residential boundary or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary to determine compliance with the L<sub>Aeq</sub>(15 minute) noise limits;
  - measured at 1 metre from the dwelling façade to determine compliance with the L<sub>A1</sub> (1 minute) noise limits; and
  - subject to the modification factors provided in Section 4 of the *New South Wales Industrial Noise Policy* (EPA, 2000).

Notwithstanding the above, should direct measurement of noise from the project be impractical, the Proponent may employ an alternative noise assessment method deemed acceptable by the OEH (refer to Section 11 of the *New South Wales Industrial Noise Policy* (EPA, 2000)). Details of such an alternative noise assessment method accepted by the OEH shall be submitted to the Director-General prior to the implementation of the assessment method.

#### **Noise Monitoring**

- D8. Within 90 days of the commencement of the Stage 1 operation of the project and within 90 of the commencement of the Stage 2 operation of the project or as otherwise agreed by the Director-General, and during a period in which the project is operating under normal operating conditions, the Proponent shall undertake a program to confirm the noise emission performance of the project. Where the approved mixed use tower at 136-140 Walker Street has not been constructed at the time of noise monitoring, (unless otherwise agreed to by the Director-General), an additional program of monitoring shall be undertaken to determine noise levels from the new substation at the nearest residential receptor (or

representative location), once the development has been constructed. The program shall meet the requirements of the OEH, and shall include, but not necessarily be limited to:

- a) noise monitoring, consistent with the guidelines provided in the *New South Wales Industrial Noise Policy* (EPA, 2000), to assess compliance with condition of this approval;
- b) methodologies, locations and frequencies for noise monitoring;
- c) identification of monitoring sites at which pre- and post-project noise levels can be ascertained; and
- d) details of any entries in the Complaints Register (condition B9 of this approval) relating to noise impacts.

Unless otherwise agreed to by the Director-General, a report providing the results of the program shall be submitted to the Director-General and the OEH within 28 days of completion of the testing required under a).

- D9. In the event that the program undertaken to satisfy condition D8 of the approval indicates that the operation of the project, under normal operating conditions, will lead to greater noise impacts than permitted under condition D6 of this approval, then the Proponent shall provide details of remedial measures to be implemented to reduce noise impacts to levels required by the conditions, including (but not necessarily limited to) at-receptor acoustic screening. Where noise exceedences are identified at existing residential properties, which are covered by approved development applications for new landuses (at the time of this approval) but which have not yet been constructed on site, the Proponent shall (unless otherwise agreed to by the Director-General) detail all reasonable and feasible interim and/or temporary measures that can be implemented to reduce noise impacts to levels required by the conditions. A report providing details of the remedial measures and a timetable for implementation shall be submitted to the Director-General for approval within such period as the Director-General may require, and be accompanied by evidence that the OEH is satisfied that the remedial measures are acceptable.

#### **ELECTRO-MAGNETIC FIELDS**

- D10. In the event that the program of electro-magnetic field monitoring undertaken in accordance with condition D4d)i) identify (higher) electro-magnetic field levels from substation equipment which are inconsistent with the assumptions/ predictions in the document listed under condition A1(d) along the eastern and/ or northern boundaries of the new substation, the Proponent shall unless otherwise agreed to by the Director-General, implement all reasonable and practicable remedial measures (including, where appropriate additional magnetic shielding) to reduce the levels from substation equipment to levels consistent with the assumptions/ predictions in the document listed under condition A1(d).

#### **VISUAL AMENITY**

- D11. Unless otherwise agreed to by the Director-General, the Proponent shall at the request of existing occupiers (at the time of the date of this approval) listed under this condition (where that request is made within six months of the commencement of Stage 1 operations) implement landscape planting at the rear (western) boundaries of these properties, within a timeframe agreed to with the occupiers. The existing occupiers eligible for screen planting in accordance with this condition comprise: 136 Walker Street, 138-140 Walker Street, 142 Walker Street and the People's Telecom Building (in relation to the rear court yard only). This condition does not apply should the replacement planting undertaken in accordance with condition D3 achieve similar visual screening outcomes to the screen planting required under this condition.