

LOWY INSTITUTE
FOR INTERNATIONAL POLICY

19 August 2010

Director General
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Dear Sir

**RE: CITY EAST ZONE SUBSTATION PROJECT APPLICATION 2A(i)
20-26 O'CONNELL STREET AND 33-35 BLIGH STREET, SYDNEY**

We are writing in regard to the above project application lodged with the Minister for Planning and currently on public exhibition.

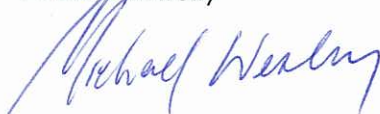
We have reviewed the plans and are extremely concerned about the impact of the development upon the heritage listed Lowy Institute for International Policy premises (previously known as the New South Wales Club). In a previous development application made to the Sydney City Council, the opening up of views to the Lowy Institute building from Richard Johnson Square were embraced by the development. This took place following the comprehensive design competition processes within Sydney Council's statutory planning legislation and after very extensive meetings and negotiations with the previous owners, Investa Property Group. The proposal then embraced a lobby area to the ground which was set back by a podium and allowed the Lowy Institute building to be seen in the round, as is very desirable for major and significant heritage items.

Our concerns have been previously expressed to Energy Australia consultants but the decision has been made by them to lodge a Project Application for the subject site as Stage 2A(i) of the Concept Plan approval.

We have engaged Ingham Planning Pty Ltd to undertake a comprehensive planning review of the current project application and a copy of their submission with technical input from an expert heritage consultant, electrical engineer and acoustic and vibration consultant is attached with relevant illustrative material. In dialogue with Energy Australia, you will note that this submission also provides credible alternative design solutions, which could accommodate the key concerns of the Lowy Institute.

We strongly object to the current proposal and request that no further consideration of this project is undertaken until the matters addressed within the attached submission are addressed.

Yours faithfully



DR MICHAEL WESLEY
Executive Director



Our ref: 10081

19 August 2010

Director General
Department of Planning
GPO Box 39
SYDNEY NSW 2001

By Email: information@planning.nsw.gov.au

**RE: CITY EAST ZONE SUBSTATION PROJECT APPLICATION 2A(i)
20-26 O'CONNELL STREET AND 33-35 BLIGH STREET, SYDNEY**

We act on behalf of the Lowy Institute of International Policy located in the former heritage listed NSW Club Building at 31 Bligh Street, Sydney. We are writing this submission as an objection to the current major project application known as the City East Substation Project Application 2A(i) lodged by Energy Australia with the Department of Planning.

Background

We understand that the Department of Planning in September 2009 approved a Concept Plan for the upgrade of the main electricity supply to the Sydney CBD through zone substations and a network of electricity feeder tunnels known as the Sydney City Grid Project. A separate project application approval was issued at the same time for Stage 1 known as Belmore Park Zone substation that is required to be commissioned by 2012.

The Concept Plan stated that *"EnergyAustralia was considering options for a new City East Zone Substation"*. The report states that:

"At present a preferred location for the new City East Zone Substation has not been identified, however EnergyAustralia is considering a site in the vicinity of Phillip, Bent, Bligh and O'Connell Streets."

The Concept Plan approval did not specifically identify that 33-35 Bligh Street would be the site for the new City East Substation. Figure 1 below is an extract of Concept Plan and illustrates a *"potential site for proposed City East substation"* being adjacent to Bent Street and located between Phillip and Bligh Street immediately adjoining the proposed alignment of City East Cable Tunnel (CECT) easement (Option 1).

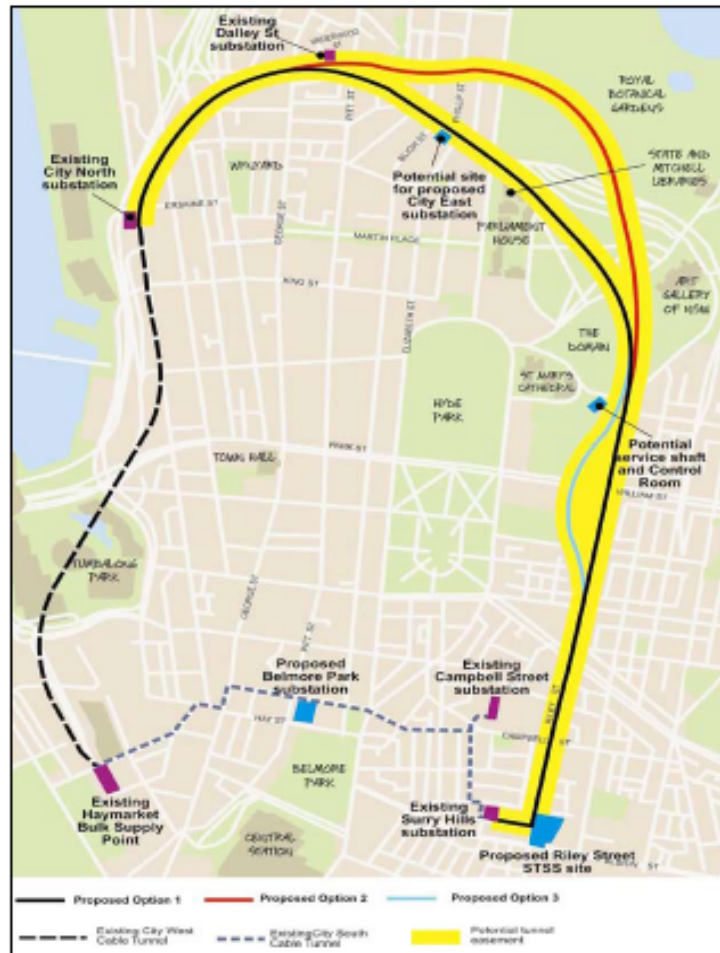


Figure 1- Sydney CityGrid Project location plan

Source: Energy Australia - Concept Environmental Assessment Report

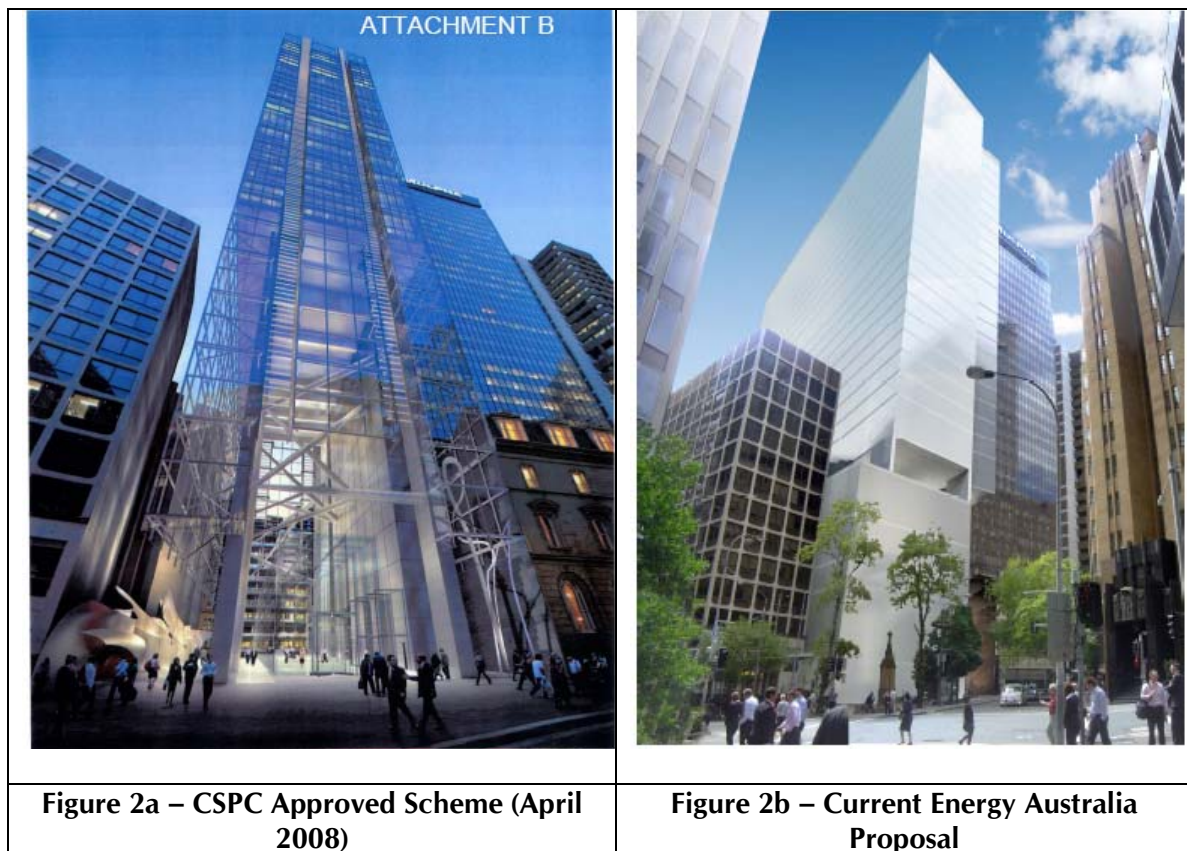
It is noted that all other substations (apart from the existing Dalley Street substation) are located generally on the periphery of the CBD precinct while the proposed City East Substation is located within the heart of the city centre with significant site constraints including issues relating to heritage, built form, public domain and pedestrian amenity.

Subsequent to the Concept Plan approval, Energy Australia contacted the Lowy Institute in May this year and undertook preliminary consultations in regard to the future development of a new substation and commercial building on the site immediately adjoining the Lowy Institute known as 33-35 Bligh Street and 20-26 O'Connell Street, Sydney.

We have reviewed preliminary plans and advised Energy Australia in July 2010 of our concerns about the impact of the development upon the heritage building now known as the Lowy Institute (previously the New South Wales Club).

In a previous development application approved by the Central Sydney Planning Committee, the opening up of views to the heritage listed Lowy Institute building from heritage listed Richard Johnson Square were carefully embraced within the sensitively designed development for this site. This took place following the comprehensive design competition processes within Sydney Council's statutory planning legislation and after very extensive meetings and negotiations with the previous owners, Investa Property Group and Sydney City Council. The proposal then embraced a lobby area to the ground which was set back and allowed the Lowy Institute building to be seen in the round, as is very desirable for major and significant heritage items. The proposal also embraced significant upgrades to the pedestrian environment and public domain including the enhancement of the Richard Johnson Square as required in accordance with the design requirements for the site.

A comparison between the previously approved scheme and the proposed City East Zone substation development is illustrated in the attached photomontages (**Figure 2a and 2b**).



Despite identifying our concerns to Energy Australia, the current project application, referred to as Stage 2A(i) has been placed on public exhibition by the Department of Planning that seeks approval for a building envelope and structural foundation works that will frame the ultimate built form on the site.

It is our opinion that the site is inappropriate for the new City East Zone substation given the significant site constraints discussed in the following sections of this submission. Notwithstanding, it is our understanding that Energy Australia has purchased the site and is committed to the development of the City East Zone substation on the land.

Following our review of the submitted documentation and assessment of the application we provide the following grounds of objection to the current proposal:

1. The proposed splitting of the environmental assessment and determination of Stage 2A into two substages ie. 2A(i) and 2A(ii) is unlawful.

The Concept Plan consent for the Sydney CityGrid Project provides a clearly defined process for the environmental assessment and determination of the subsequent stages of the development.

Condition 1.3 of the Concept Plan approval clearly defines the components of the concept plan approval. Stage 1 comprises the works in and around the Belmore Park Zone substation and Stage 2 being the balance of the works required for the concept plan, including Stages 2A, 2B, 2C, 2D and 2E.

The new City East Substation is referred to in the Concept Plan as Stage 2A. The Concept Plan approval issued by the Department of Planning identifies Stage 2A as *“being the construction and operation of the City East Zone substation in the vicinity of Phillip, Bent, Bligh and O’Connell Street.”*

Condition 2.2 and 2.3 of the Concept Plan approval specifically relates to the future project application and specific requirements for Stage 2 Development as follows:

“2.2 The construction and operation of Stage 2 (including Stage 2A, 2B, 2C, 2D and 2E) is subject to further assessment under Part 3A of the Environmental Planning and Assessment Act 1979.

2.3 In seeking approval for Stage 2 works, the Proponent may submit an application for Stage 2 in its entirety, or may submit separate applications for each sub-stage (Stage 2A, 2B, 2C, 2D and 2E) or any combination of these sub-stages.”

The Concept Plan Approval therefore allows for the further assessment of each sub-stage (or combination of sub-stages) as separate project applications but not the splitting of substages into further components.

Condition 3 of the Concept Plan approval provides the general and specific issue assessment requirements for the preparation and consideration of each sub-stage of the project.

Energy Australia is currently proposing to split Stage 2A City East Substation into two components and “pick and choose” the assessment requirements seen as relevant to the application. The two components are:

Stage 2A(i) involving demolition of the existing building on the site, and subsurface construction works including bulk excavation of the substation basement, excavation and construction of 150 m stub tunnel under Bligh Street, and construction of bridging structure over the alignment of the tunnels for the CBD Metro Stage 1.

The application also seeks consent in sub-Stage 2A(i) for a building envelope and proposed stratum subdivision for the City East Zone Substation and commercial tower.

Stage 2A(ii) involves construction and operation of the City East Zone substation and associated commercial tower located above the tower.

It is considered that the 2A(i) application currently on exhibition fails to undertake the proper design process, consultations or environmental assessment required by the Concept Plan Approval. It attempts to establish a building envelope, subsurface foundational works and stratum subdivision of the substation and commercial tower without undertaking the correct and required environmental assessment process established within the Concept Plan approval. This process is considered to be flawed and unlawful.

A copy of legal advice received from Adrian Galasso in respect to this matter is attached for further information (see **Appendix A**).

2. *Energy Australia have failed to undertake a Competitive Design Process in accordance with the Concept Plan approval and principles of Sydney LEP 2005.*

Condition 3.2 of Concept Plan Approval states as follows:

*“a) a **design review process** for the proposed City East Zone Substation and Dalley Street Zone Substation shall form part of the Environmental Assessment. The outcome of this design review process shall be provided in the Environmental Assessment. This design review process shall be based on the principles of the design review competition of the Sydney Local Environmental Plan 2005, and include consultation with Council.”*

As discussed previously, unlike the majority of other substations which are generally located on the periphery of the CBD precinct, the proposed City East Substation (and Dalley Street Zone Substation) is located within the heart of the city centre with

significant site constraints including issues relating to heritage, built form, public domain and pedestrian amenity.

Any design solution on the subject site will have a long standing impact on the urban fabric of this central CBD location and requires careful planning, consultation and design. Any development (be it public or private investment) should respect the same design principles and controls on development that apply within the Sydney CBD.

The principles of Sydney LEP 2005 require a competitive design process where a number of architects prepare concepts for the development for the site with the view of presenting the best design solution. We are not aware of any competitive design review process that has been undertaken of alternate schemes with the current proposal.

Energy Australia have simply engaged Kann Finch to prepare a building envelope solution that is supported by an Urban Design report written by Kann Finch. There has been no peer review or competitive design element within the development of this significant site as per the statutory requirements of Sydney LEP 2005.

In comparison the previously approved scheme was the result of extensive consultation and a competitive design process that was undertaken in 2002. The founding design objectives for the development of the site required by Sydney City Council competition included:

- *Generate a high quality design solution for the site and introduce a building that respects and integrates well with its immediate context, including the heritage significance of surrounding buildings and spaces, and provides a distinctive architectural contribution to the area and the city's skyline;*
- *Improve the quality and definition of the public domain of the site and Richard Johnson Square;*
- *Provide a high level of pedestrian amenity with through site access between O'Connell Street and Bligh Street and active uses at ground level*
- *Ensure that design proposals are compatible with other established approved developments and respond to the city's planning framework*
- *Conserve and respect existing heritage and archaeological items or streetscapes within and adjacent to the site;*
- *Generates a design solution which creates ground level vitality, results in an integrated design solution and consciously and positively responds to setback issues from the public streets and other towers."*

The three architectural concepts provided within the competitive design process responded to these objectives in varying ways but all included an improved integration of the development site at ground level with the adjoining heritage items and all embraced a through site link between Bligh and O'Connell Street.

The concept by Rice Daubney for the Investa Property Group site was the preferred design from the competition process and the project went on to be further refined and ultimately approved by the Central Sydney Planning Committee in 2008. The approved ground level and photomontage of the previous scheme is reproduced in **Appendix B**.

The current proposal by Energy Australia has made no reference to the previous competition design process nor has it undertaken, as required by the Minister, any competitive design process as part of the preparation of the building envelope for the site.

There is nothing to suggest that the design principles defined for the subject site by Sydney City Council should be ignored. To do so would be to completely disregard and overturn over 5 years worth of technical urban design expertise on the site.

Furthermore, the design review process condition of the Concept Plan Approval requires consultation to be undertaken with Sydney City Council as part of any environmental assessment of a project application for any stage of the development. We are aware that Sydney City Council has required that a design competition process be undertaken for the City East Zone substation but no such process has been initiated by Energy Australia.

It is considered that the 2A(i) application currently on exhibition fails to undertake the proper design process, consultations or environmental assessment required by the Concept Plan Approval. It attempts to establish a building envelope, subsurface foundational works and stratum subdivision of the substation and commercial tower without undertaking the competitive design review process established within the Concept Plan approval. In this regard the application is considered to be flawed and unlawful as detailed in the legal advice by Adrian Galasso SC (refer **Appendix A**).

3. *Impact on heritage significance of the NSW Club Building.*

The Lowy Institute for International Policy (former NSW Club Building), is located at 31 Bligh Street, and was designed by William Wardell and constructed in 1884.

The building is listed under the following statutory instruments:

- Heritage Act - State Heritage Register (02 Apr 99);
- Central Sydney Heritage Local Environmental Plan 2000; and
- Register of the National Estate (21 Mar 78).

The Statement of significance included in the State Heritage Inventory describes the building as follows:

The former NSW Club is of high significance for the quality of its facade and for its Victorian interiors, partially reconstructed in the 1978 refurbishment of the building. It has historic, aesthetic and social significance and is rare as the early Victorian period club theme surviving in Sydney in largely intact form and as the finest Italian Palazzo style facade surviving from the Victorian period in Australia. The building is of significance as one of the first buildings to be "saved" following the 1976 NSW Heritage Act.

An *Historical Outline and Statement of Heritage Significance – Former NSW Club Building* was prepared by Peter McKenzie of Jackson Teece Architects in March 2004. The assessment of the building's heritage significance was based upon the five tier system identified in the NSW Heritage Office publication *Assessment of Heritage Significance* (2000). It was concluded that the following components of the building fall within the category "Tier 1 – Exceptional significance" and should be conserved within the terms of the Burra Charter:

- the views to and from the original building;
- the setting of the building in Bligh Street; and
- the overall four-storey form, its massing and its materials

Accordingly, our concerns regarding the proposed development centre on these factors.

Furthermore, Richard Johnson Square, which is also listed as a Archaeological/Townscape/Landscape Item In Sydney Heritage LEP 2000, is also located adjacent to the site. Richard Johnson Square is historically and culturally significant as an important example of 20th Century civic planning which commemorates the first Church in 1793 by the colony's first Chaplain, Reverend Richard Johnson. The Square also contains an elaborate Gothic Revival style monument erected in 1925.

Whilst it is acknowledged that the existing building is constructed to the street boundary, it is considered that the setback of any future proposed building on the site should assist in re-establishing the original street alignment, and provide for views to and from the former NSW Club Building.

It is noted that an extensive analysis of the relationship of the two adjoining heritage items and the subject site was undertaken as part of the previously approved Central Sydney Planning Committee (CSPC) scheme in 2008. The CSPC report dated 3 April 2008 states that:

- "36. Whilst the proposal employs differing materials to the adjoining "NSW Club Building" and "AFT House", being predominantly glass and is of a differing scale, it provides a respectful contrast to both of these heritage items. Through providing increased setbacks and a high level of transparency at the lower levels of the proposed building, views to and from both of the adjoining heritage items

are greatly improved by revealing the sides of these buildings. Furthermore, the contrast of the glass building to the heritage items, allows them to read as the 'solid' within the streetscape, therefore reinforcing their significance.

37. *At ground level, the design extends and integrates the heritage listed Richard Johnson Square with the site which gives a sense of place to the currently dwarfed public space area, which achieves a greater level of significance for Richard Johnson Square within its context."*

The proposed building envelope indicated within the current Stage 2A(i) application will provide a substantial built mass to the street frontage that will reinforce the substation as the 'solid' within the streetscape, will further dwarf the heritage listed public open space area and obscure views to the heritage listed Lowy Institute building from Bligh Street and Richard Johnson Square. The proposed substation building is an unarticulated box which is being 'dumped' within this sensitive streetscape.

The eight storey high vertical slot currently proposed adjacent to the Lowy Institute building is a tokenistic attempt to address heritage issues that will appear as a 'mass scar' in the built form along Bligh Street rather than enhance the quality and definition of public domain that integrates with Richard Johnson Square and complements the adjoining significant heritage building within the streetscape. It is not an appropriate through site link between Bligh and O'Connell Streets as it does not directly connect between the two streets and has no activity along its length.

In addition, the heritage requirements within the Concept Plan Approval require consultation with the Heritage Council of New South Wales to be undertaken as part of any environmental assessment of a project application for any stage of the development.

We are not aware of any consultation that has been undertaken with the Heritage Council in respect to the building envelope proposed for the subject site. (refer Heritage Assessment Report in **Appendix C**).

Furthermore, it is considered that the current project application is inconsistent with the established planning principle of the Land and Environment Court in respect to the consideration of building envelopes on sites adjacent to a heritage item.

In this regard, the judgement of Roseth SC in *Anglican Church Property Trust v Sydney City Council* (Proceedings 10822 of 2003) states that in the context of a heritage listed site within a heritage streetscape a building envelope provided within a staged application does not provide enough information to properly assess the impact of the development ie. *"building envelopes, within which buildings of any shape or design might emerge, are not sufficient to make a proper assessment."*

It is considered that the 2A(i) application currently on exhibition fails to undertake the proper design and consultation process in relation to heritage issues required by the

Concept Plan Approval. In this regard the application is considered to be flawed and unlawful.

The issues relevant to the heritage implications of the proposed development have been further addressed by heritage consultant Stephen Davies from Urbis (refer **Appendix C**).

4. The internal design of the proposed substation can be modified to significantly improve design outcome.

One of the key components of the proposed building envelope on the site is the proposal to establish 5 transformers at ground level with vehicle access from O'Connell Street. The Energy Australia proposal includes the design of these 5 transformers in one line extending from the O'Connell Street frontage to the Bligh Street frontage of the site as illustrated in the extract from the application in Figure 3 below.

We understand that the 5 transformers are required within the new substation to ensure compliance with a recently upgraded (N-2) security of supply requirements that allow the substation to operate under emergency conditions when two (2) transformers are out of service.

The concept plan includes the provision for an access service road into the substation building off O'Connell Street as well as provision for a driveway to tenant parking off O'Connell Street for the commercial development above the substation.

Despite raising our concerns with respect to the design of the substation with Energy Australia in July this year the application has been lodged for assessment with no attempt to respond to the planning constraints of the site.



Figure 3 – Conceptual floor plan for lobby at Ground level Bligh Street

Source: Energy Australia – Stage 2A(i) Environmental Assessment Report



The Lowy Institute have engaged an electrical engineer consultant Professor Alex Baitch to review the substation design and provide alternate design solutions that would assist in achieving a built form that would respond to the setting of the heritage item. The report is attached as **Appendix D**.

Notwithstanding the above, we understand that the Concept Plan Approval allows for the replacement or refurbishment of the existing substation on the Dalley Street site which is located behind Bridge Street between George and Pitt Streets. Professor Alex Baitch has indicated that in addition to the concepts outlined in his report that the loading and operation of a new substation within this central CBD location could be split by establishing 3 new transformers on the subject site and 3 new transformers on the existing Dalley Street site. This would ensure compliance with the N-2 security of supply requirements while at the same time freeing up a large area of the subject site to better respond to the planning opportunities and constraints. For example, a concept for three centrally located transformers on the site would allow for appropriate setbacks, improved access arrangements and streetscape setting from both O'Connell and Bligh Street and allow for a through site link in accordance with the established design principles for the land.

In addition, there has been no information provided within the application for this this major new public utility of any consideration of alternate sites. For example, the Concept Plan approval indicated the potential City East Substation site being on land immediately adjacent to Bent Street but no information is provided as to why this site has not proceeded. There is no information of other sites that have been explored within the vicinity identified within the Concept Plan approval.

We request that prior to any further assessment of the current application or any consideration of a building envelope on the site that Energy Australia provide an alternate design solution that responds more appropriately to the significant planning constraints of the site.

5. The issue of human health relating to the potential emission of Electromagnetic radiation from this major new substation in the heart of Sydney CBD needs to be fully examined.

It is our opinion that the health and safety issues related to constructing and operating a major new substation in the heart of the Sydney CBD needs to be carefully examined and assessed prior to any further consideration of the development of this site.

For example, in regard to the issue of electric and magnetic fields (EMF) and exposure to the general public, Energy Australia have stated within the Concept Plan approval that they design infrastructure in accordance with the principle of prudent avoidance

The Stage 1 approval for Belmore Park Zone Substation indicates that mitigation measures to protect the public from potential EMF related concerns include:

- *“restricting access to the Site to limit exposure to higher fields within the substation to the general public;*
- *where possible, equipment which produces the highest magnetic fields such as cables, busbars, transformers and switchgear, have been positioned furthest away from adjoining property boundaries;*
- *where possible, cable trays will be positioned away from adjacent adjoining property boundaries;*
- *five transformers positioned in a single line (single loaded) to reflect the optimum location furthest away from neighbouring buildings on both sides of the Site.”*

In comparison to the Belmore Park Zone Substation, the proposed transformers on the subject site are squeezed into a space between two commercial office buildings with little opportunity for refining design to achieve setbacks from adjoining boundaries. The proposal is within a significantly denser locality being in the heart of the CBD and surrounded by commercial development and public plaza areas. The proposal seeks to bring people into the site for the commercial development and includes a public foyer space and lifts immediately adjacent to the substation.

The Concept Plan approval states that *“independent studies would be carried out on the EMF impact for each element of the proposal.”* We are not aware of any detailed study on the issue of EMF with this current application and believe that, prior to any further consideration of this project on this site, an appropriate independent study is undertaken and exhibited for public comment. The public need to be aware of any health risks with this substation, or working in an environment adjacent to this substation prior to any works proceeding.

6. There are significant noise and vibration implications on the heritage listed Lowy Institute Building at 31 Bligh Street, Sydney

The building that houses the Lowy Institute for International Policy was built for the New South Wales Club founded in 1886. Located in Bligh Street in Sydney’s central business district, it is classified by the National Trust and was one of the first buildings to be saved from demolition under the 1976 Heritage Act. It has a fine grain Italian Palazzo façade surviving from the Victorian period in Australia and is built from classic sandstone construction. It has Pyrmont brick joinery, slate roof and fine Victorian interiors.

The Lowy Institute for International Policy provides a high quality forum for discussion of Australian foreign policy and international policy through debate, seminars, lectures, dialogues and conferences.



The Institute draws on experience from international speakers and academics from across the world and provides a high quality forum for meetings, presentation and public broadcasting of events.

In view of the above both the physical structure and the internal use of space within the Lowy Institute for International Policy is extremely sensitive to any noise and vibration associated with both the construction and operation of the proposed substation on the subject site. In this regard, the Lowy Institute for International Policy have engaged Acoustic Logic to undertake a peer review of the acoustic and vibration assessment analysis provided with the application (see **Appendix E**)

It is considered that given the sensitivity of the structure and operations of the adjoining heritage building the most stringent best practice procedures should be implemented during the construction and operation of the proposed development.

CONCLUSION

It is our opinion that the site is inappropriate for the new City East Zone substation given the significant site constraints discussed in the following sections of this submission. Notwithstanding, it is our understanding that Energy Australia has purchased the site and is committed to the development of the City East Zone substation on the land.

It is our opinion that the current application placed on exhibition is flawed and illegal. The applicant has failed to undertake the design and assessment of the project application in accordance with the provisions set down in the Concept Plan approval by the Minister for Planning.

The proposal is a poor response to the planning constraints that apply to the site and does not respect the statutory design processes or urban design principles that have comprehensively assessed and been consistently applied to this sensitive location in the heart of the CBD.

There has been no consideration of alternate opportunities or design even though earlier consultation has raised the significant issues of concern with respect to this project.

In view of the above, we formally object to this proposal.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Neil Ingham', written over a light blue rectangular background.

NEIL INGHAM



APPENDIX A

LEGAL OPINION FROM ADRIAN GALASSO SC



APPENDIX B

CSPC APPROVED SCHEME (April 2008)
by Rice Daubney Architects



APPENDIX C

HERITAGE IMPACT REPORT
by Stephen Davies (URBIS)



APPENDIX D

ELECTRICAL ENGINEER ASSESSMENT
by Professor Alex Baitch



APPENDIX E

ACOUSTIC AND VIBRATION REVIEW
by Acoustic Logic Pty Ltd