

# MODIFICATION REQUEST: Potts Hill Reservoir Redevelopment Modification to Civil Works Stage 2 (MP 08\_0116 MOD 1)



# **Description of Modification Request**

 Relocation of an overhead 132 KV electrical main to existing overhead electrical power lines along Cooper Road, Birrong.

Director-General's
Environmental Assessment Report
Section 75W of the
Environmental Planning and Assessment Act 1979

August 2011

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NSW Government Department of Planning and Infrastructure

## **EXECUTIVE SUMMARY**

This report is an assessment of an application by Landcom (the proponent) seeking modification of the Civil Works Stage 2 Project Approval (MP08\_0116) to allow the relocation of an overhead 132 kV electrical main from the rear of properties 15 to 33 Cooper Road, Birrong, to the existing overhead electrical power lines at the front, and associated replacement of power poles.

The Environmental Assessment (EA) for the modification was made publicly available on the Department's website, and at Bankstown City Council from 11 April 2011 to the 25 April 2011. The department received four (4) submissions from Public Authorities, including Bankstown City Council, Energy Australia, Sydney Water and NSW Health. No submissions were received from the general public. Issues raised in submissions included consultation with affected landholders, consideration of Energy Australia Network Standards, potential impacts on an existing underground Sydney Water main, and potential public health impacts.

The department has assessed the merits of the proposed modification and considers the key issues to be electromagnetic risk, construction impacts and visual impacts. These issues have been assessed in detail and the department is satisfied that they can be adequately mitigated and managed.

The department considers that the proposed modification should be approved subject to the imposition of an additional condition requiring compliance with Energy Australia Network Standards.

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## 1. BACKGROUND

#### 1.1 The Site

The site is known as the Potts Hill Sydney Water Reservoir Site and is located in Bankstown Local Government Area. The site is legally described as Lot 105 in DP 1149790. The modification relates to the north-west border of the site along properties 15 to 33 Cooper Road, Birong (see Figure 1 below).

Land uses surrounding the site are detailed below:

- To the north of the site is a railway line corridor, water supply pipeline and residential development;
- To the east of the site is Rookwood Road, Sydney Water Office and Warehouse, NSW Police Office and Graf Avenue. This was part of the original Concept Plan site, but has been separately subdivided and developed.
- To the south of the site is Brunker Road and an employment precinct; and
- To the West of the site is Cooper Road, residential development and Birrong Girls High School (see Figure 1 below).

Figure 1: Potts Hill Reservoir Site (excluding business park land)

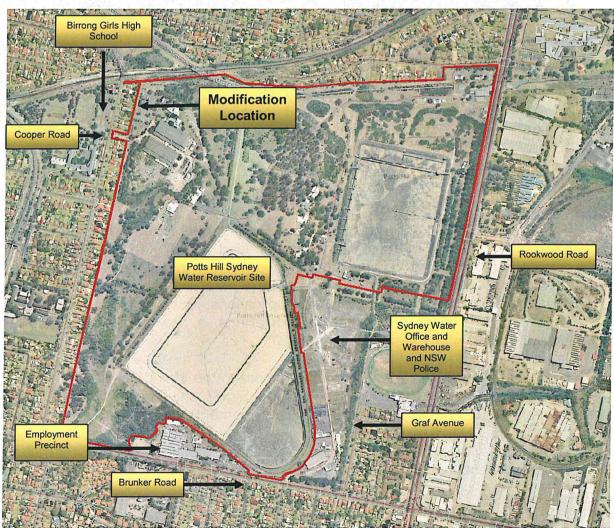
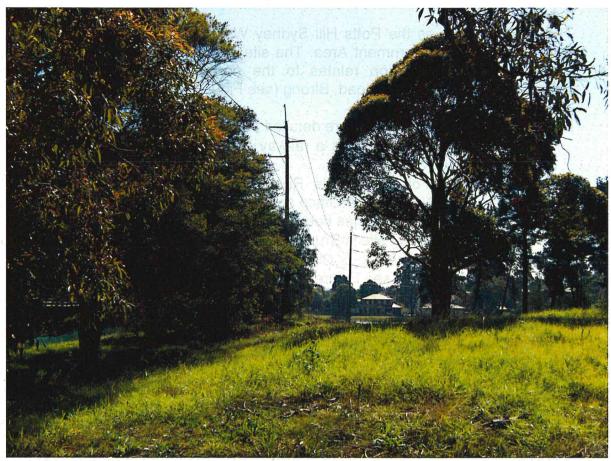


Figure 2: Looking north at existing alignment of 132kV lines at the rear of properties 15 – 33 Cooper Road.



## 1.2 Approval History

## Concept Plan (MP07 0099)

On 27 April 2009, the (then) Minister for Planning approved a concept plan for the redevelopment of the Potts Hill Reservoir land (MP07\_0099). The concept plan provided a broad overview of proposed development of the land for residential, employment and open space purposes, and established a framework for detailed development of the site through future applications. Forty hectares of the site is to be developed to provide more than 400 dwellings, a new business park and three separate open space areas (see Figure 3).

Additionally, on 27 April 2009, an amendment to the Major Development SEPP was gazetted which listed Potts Hill as a State Significant Site in Schedule 3 of State Environmental Planning Policy (Major Development) 2005 (MD SEPP) and rezoned the site for a mixture of residential, employment and public recreation uses. The listing was subsequently removed and the planning provisions transferred to Bankstown Local Environmental Plan 2001.

'Railway Park' 'Canal Park'

'Cooper Rd Park' 'Brunker Rd Park'

KEY Potts Hill site boundary Railway station Railway inc 1111111111 Proposed surplus land - residential Proposed surplus land - business park Proposed public open space Key new sits road RESERVOIR 1 Vehicular access points SWC controlled access conta Extent of existing reservoirs Lots with frontage to park or views Meas through to RESERVOIR 2 Existing vegetation to be retained where possible Sign alised intersection Pedestian Ink **Proposed Parks** 

Figure 3: Concept Plan Land Uses

Civil Works Stage 1 (MP08 0069)

On 26 November 2008, the (then) Minister for Planning approved a project application for Stage 1 Civil and Infrastructure Works (MP08\_0069). The project application is Stage 1 of the concept plan for the redevelopment of the Potts Hill Reservoir land, and the approval of the project application preceded the approval of the concept plan for the site.

#### The approval provided for:

- subdivision of the entire Potts Hill Reservoirs land into nine Torrens Title lots to form the Eastern Precinct, Brunker Street site, Western (Residential) Precinct, Sydney Water retained lands, Bagdad Street side and associated lands; and
- civil works in the proposed employment lands and the Bagdad Street site including site remediation, demolition of 21 existing built structures, removal of existing vegetation, bulk excavation and earthworks, construction of two roads and upgrading drainage infrastructure and utilities.

## Sydney Water Facility (MP08 0049)

On 7 January 2009, the (then) Minister for Planning approved a project application for a Sydney Water office and warehouse facility (MP08 0049).

- a two storey office building with a floor area of 5,914m2 and a maximum building height of nine metres;
- a warehouse and attached two storey office with a total floor area of 6,147m2 and a maximum building
- height of 12 metres;
- parking for 509 vehicles including spaces for trucks and trailers;
- outdoor storage areas; and
- · surrounding hardstand areas and landscaping.

## Sydney Water Facility Modification 1 (MP08 0049 MOD 1)

On 22 May 2009, under delegated authority, the Director General of the former Department of Planning approved a request to modify the project approval for the Sydney Water Facility (MP08\_0049 MOD 1) under S75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

## The approval provided for:

- Increase in the size of the warehouse by extending it 25m to the north and minor changes to finished floor and eaves level;
- Increase in the size of the office building by extending it 3m to the east and west, repositioning slightly to the east and minor changes to finished floor and eaves levels and internal layouts;
- New storage sheds approximately 286m2 and 6.56m high adjacent to the north west boundary; and
- Minor changes to plant/equipment location, landscaping, stormwater, car parking layout and sediment and erosion control measures.

## Civil Works Stage 1 Modification 1 (MP08 0069 MOD 1)

On 16 January 2009, under delegated authority, the (then) Executive Director, Strategic Sites and Urban Renewal of the Department of Planning approved a request to modify the project approval for Civil Works Stage 1 (MP08\_0069 MOD 1) under S75W of the EP&A Act.

#### The approval provided for:

- additional earthworks within the western precinct of the site for the purpose of the eastern precinct civil works; and
- amendments to the existing conditions of approval concerning the development description, road design and dedication requirements and dust control.

#### NSW Police Facility (MP08 0050)

On 22 June 2009, under delegated authority, the Director General of the former Department of Planning approved a project application for a NSW Police Facility (MP08 0050).

- an administration building and two warehouse buildings with a total gross floor area of 11,679m2;
- a maximum building height of 14.23m;
- 181 'at grade' vehicle parking spaces;
- a designated storage yard approximately 1,618m2 in area; and
- a helipad and two telecommunications towers.

## Civil Works Stage 1 Modification 2 (MP08 0069 MOD 2)

On 12 February 2010, under delegated authority, the (then) Director, Government Land and Social Projects, of the Department of Planning approved a request to modify the project approval for Civil Works Stage 1 (MP08\_0069 MOD 2) under S75W of the EP&A Act.

## The approval provided for:

- demolition and remediation works to be undertaken on the western residential precinct,
- amendments to the proposed plan of subdivision to reflect the current boundary alignments and sequence of plan registration in relation to the eastern employment precinct,
- amendments to the landscape plan to incorporate entry statements at both the Cooper Road and Rookwood Road intersections in relation to the eastern employment precinct, and
- appropriate stability and erosion management measures to be addressed on an individual site basis in relation to the eastern employment precinct.

## Civil Works Stage 1 Modification 3 (MP08 0069 MOD 3)

On 2 August 2010, under delegated authority, the (then) Director, Government Land and Social Projects, of the Department of Planning approved a request to modify the project approval for Civil Works Stage 1 (MP08\_0069 MOD 3) under S75W of the EP&A Act.

The approval provided modification to the Conditions to allow for:

- the subdivision of the Bagdad Street site (Lot 108) into two lots (referred to as Lots 1001 and 1002);
- bulk earthworks on the Bagdad Street site with cut and fill to parts of proposed Lots 1001 and 1002 to ensure Lot 1001 is above the 1 in 100 year flood level;
- stormwater management and drainage works on proposed Lots 1001 and 1002, including the construction of a stormwater channel and a retaining wall to facilitate future development of proposed Lot 1001; and
- landscaping works in the proposed drainage channel (Lot 1002).

## Civil Works Stage 2 (MP08 0116)

On 4 September 2010, under delegated authority, the Deputy Director-General of the former Department of Planning approved a project application for further Stage 2 civil and infrastructure works (MP08\_0116).

- Three-staged subdivision of the subject site into 226 lots to accommodate a maximum of 450 future dwellings, including:
  - o 217 low-density lots;
  - o Two (2) medium-density residential lots;
  - Seven (7) lots for open space.
- Dedication of roads, stormwater infrastructure and public domain areas to Bankstown City Council at registration of the subdivision plans;
- Site establishment works, bulk earth works and striping and stockpiling works;
- Construction of roads and associated infrastructure;

- Embellishment and construction of all public domain areas and structures; and
- Establishment of all stormwater quality management and on-site detention facilities, to be dedicated to Bankstown City Council, including the provision of servicing infrastructure to residential lots.

## NSW Police Facility Modification 1 (MP08 0050 MOD 1)

On 28 January 2011, under delegated authority, the Director of the former Government Lands and Social Projects Branch of the Department of Planning approved a request to modify the project approval for the NSW Police Facility (MP08 0050 MOD 1) under S75W of the EP&A Act.

- the addition of a small gate house building and associated boom gates at the main vehicular entry to the site; and
- Minor road works.

## 2. PROPOSED MODIFICATION

## 2.1 Modification Description

The proposal is a modification to the project approval for Civil Works Stage 2 (MP08\_0116). The proposed modification seeks to relocate an approved and installed 132 kV main power line from the rear of residential properties 15 to 33 Cooper Road, Birrong, to an existing line along the front of the same residential allotments. The existing alignment of the 132kV line is illustrated in the approved plans for the project approval for Civil Works Stage 2. The proposal will also involve the installation of a new power pole in front of 15 Cooper Road and the replacement of existing power poles along Cooper Road. Poles will be placed in the same location as the existing poles along Cooper Road.

The proponent has indicated that the approved location of the 132kV overhead lines is no longer appropriate as new homes proposed with the Potts Hill residential subdivision would enclose the lines within their backyards, making them inaccessible for the energy provider for maintenance purposes. The proposed modified alignment is consistent with the existing alignment of the 132kV line along Cooper Road to the south of 33 Cooper Road. The approved power line location and the proposed modified alignment is illustrated below in Figure 4.

Basin No.1 17 Existing **Alignment** Modified 23 **Alignment** Birrong Girls High 25 Potts Hill Sydney Water Reservoir Site **Existing** 31 132kV line continues 33 south along Cooper Road

Figure 4: Existing and Proposed Alignment of Power Line

### 3. STATUTORY CONTEXT

## 3.1 Modification of the Minister's Approval

Section 75W(2) of the EP&A Act provides that a proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval of a modification is not required if the project as modified would be consistent with the original approval. As the proposed modification seeks to relocate an overhead 132 kV electrical main within the project approval, the modification will require the Minister's approval.

Section 75W(3) of the EP&A Act provides the Director General with scope to issue Environmental Assessment Requirements (DGRs) that must be complied with before the matter will be considered by the Minister. Environmental Assessment Requirements were not issued for the proposed modification as the Proponent had addressed the key issues in the modification request.

## 3.2 Delegated Authority

Under the Minister's Instrument of Delegation dated 28 May 2011, the Planning Assessment Commission (PAC) is the determining authority for modification applications, other than for major infrastructure development where the Proponent is a public authority or critical infrastructure. The proposed modification is not major infrastructure development, nor is it 'critical infrastructure'. However, the delegation also works in conjunction with the delegation given to senior Department staff under the Ministerial Delegation issued 25 January 2010. This allows Directors in the Major Projects Assessments Division to determine modification applications where there are fewer than 10 public submissions in the nature of objections. The delegation is not exercised where the Council has made an objection.

The modification application received fewer than 10 submissions in the nature of objections, and received no objection from Bankstown City Council. The Director, Metropolitan and Regional Projects North can therefore determine the modification application under delegated authority.

### 4. CONSULTATION AND SUBMISSIONS

#### 4.1 Exhibition

In accordance with Section 75X(2)(f) of the EP&A Act and Clause 8G of the EP&A Regulation 2000, the modification request was made publicly available on the Department's Website.

### The Department also:

- Publicly exhibited the modification EA from 11 April 2011 until 25 April 2011 (14 Days) at Bankstown City Council;
- Notified land owners in the vicinity of the proposal about the exhibition, including the owners of 15 – 33 Cooper Road Birrong, and Birrong Girls High School; and
- Notified relevant state Government Authorities, including Bankstown City Council, Department of Education, Department of Housing, Energy Australia and Sydney Water.

The Department received four (4) submissions from public authorities during the exhibition of the modification request, and no submissions from the general public.

## 4.2 Public Authority Submissions

None of the four (4) submissions received from Public Authorities objected to the proposal, however three provided comments and recommendations.

## **Bankstown City Council**

Bankstown City Council has raised no objection to the proposal, however provided the following comments and recommendations:

- Council must be assured the all appropriate measures have been taken to consult with affected landholders adjoining Cooper Rd (specifically landowners between No.'s 17 to 33 Cooper Rd) and their comments and concerns be addressed.
- As noted in the Application, all works must be undertaken in accordance with the Energy Australia Network Standards, which outline compulsory procedures for such activities.

## **Sydney Water**

Sydney Water has raised no objection to the proposal, however provided the following comments and recommendations:

- Sydney Water have identified that the 3000mm trunk water main is within the vicinity of the site, and may be affected by the proposal.
- Clearances are to be maintained in accordance with the Water Supply Code of Australia and Sewerage Code of Australia (Sydney Water Editions).

## **Energy Australia**

Energy Australia provided a submission, however raised no objection to the proposal, and provided no comment on the proposal.

#### **NSW Health - Sydney South West Public Health Unit**

NSW Health raised no objection to the proposal, however provided the following comments and recommendations:

- NSW Health identified that the health effects from EMF exposure have been documented in scientific literature.
- NSW Health notes the increase in magnetic field emission to the affected properties.
- Both the NSW Government and NSW Health advocate a policy of prudent avoidance with regard to EMF exposure, and this policy has not been demonstrated in the proposal.
- It is recommended that the design of the project incorporate all reasonable and feasible measures with the objective of reducing this predicted increase in EMF levels over background levels, or that the relocation is reconsidered.

#### 4.3 Public Submissions

The owners of properties 15 to 33 Cooper Road, Birrong, were notified of the proposed modification, however, no submissions were received from the public.

## 5. ASSESSMENT

The Department considers the key issues for the proposed modification to be:

- Electromagnetic Risk;
- · Construction Impact; and
- Visual Impact.

## 5.1 Electromagnetic Risk

The proposed modification involves the relocation of a 132kV overhead power line from the rear of the residential allotments 15 to 33 Cooper Road, Birrong, to an existing line along the front of the properties. Electromagnetic fields (EMF's) are emitted from transmission lines, therefore the proposed modification will result in a redistribution of the EMF levels across the site. The potential health effects of EMF's emitted from transmission lines are a common public health concern, however there are currently no Australian Standards regulating exposure to these fields.

An electro/magnetic risk assessment (EMF Report) accompanied the EA which provided an analysis of the EMF levels associated with the existing power line alignment, compared with the EMF levels associated with the proposed modified alignment. In particular, the EMF Report provided an analysis of the EMF levels affecting properties 15 to 33 Cooper Road, Birrong, and Birrong Girls High School. The EMF analysis was based on 85% of the expected maximum winter current for the year 2014 and the results are identified in Table 1 below.

Table 1: EMF Calculations of Existing and Proposed Alignment of Power Line

Location	Front	5m	10m	15m	20m	30m	40m	Back Fence
	Fence	_						92 0 2
House No 33		14				Э	a sest	
- Existing	2.3mG	2.8mG	3.2mG	3.4mG	3.7mG	4.4mG	6.4mG	7.4mG
- Proposed	6.8mG	4.4mG	2.7mG	1.7mG	1.1mG	0.6mG	0.3mG	0.2mG
House No 31	e e			w.			200	
- Existing	0.7mG	0.9mG	1.0mG	1.1mG	1.3mG	2.0mG	4.2mG	7.4mG
- Proposed	6.8mG	4.5mG	2.7mG	1.7mG	1.2mG	0.6mG	0.4mG	0.2mG
House No 29	,		e, e x 1 , = 7 7	= , ,			2 8 8 8 8	
- Existing	0.4mG	0.5mG	0.6mG	0.7mG	0.9mG	1.6mG	3.9mG	7.3mG
- Proposed	6.8mG	4.5mG	2.8mG	1.7mG	1.2mG	0.6mG	0.4mG	0.2mG
House No 27		The state of	9 9 V	ត ខ្លាំងនៅ		7 ,1 8	1,4	
- Existing	0.3mG	0.3mG	0.4mG	0.5mG	0.7mG	1.5mG	3.7mG	7.3mG
- Proposed	6.8mG	4.6mG	2.9mG	1.8mG	1.2mG	0.6mG	0.4mG	0.3mG
House No 25		int to					12	:
- Existing	0.3mG	0.3mG	0.4mG	0.5mG	0.7mG	1.5mG	3.7mG	7.3mG
- Proposed	6.8mG	4.6mG	2.9mG	1.8mG	1.2mG	0.6mG	0.4mG	0.3mG
House No 23	*			3			90.00	
- Existing	0.3mG	0.3mG	0.4mG	0.5mG	0.7mG	1.5mG	3.7mG	7.3mG
- Proposed	6.8mG	4.6mG	2.9mG	1.8mG	1.2mG	0.6mG	0.4mG	0.3mG
House No 21	Sala.					1 5 Be - 4		1. T
- Existing	0.3mG	0.3mG	0.4mG	0.5mG	0.7mG	1.5 mG	3.7mG	7.3mG
- Proposed	6.8mG	4.6mG	2.9mG	1.8mG	1.2mG	0.6mG	0.4mG	0.3mG
House No 19	21 7 h 1.		9 Z 8	27.15%	1 8 4 6 6 7			"
- Existing	0.2mG	0.3mG	0.4mG	0.5mG	0.6mG	1.4mG	3.6mG	7.4mG
- Proposed	7.0mG	4.8mG	3.0mG	2.0mG	1.4mG	0.9mG	0.7mG	0.6mG
House No 17	a.				1			
- Existing	0.2mG	0.3mG	0.3mG	0.4mG	0.6mG	1.9mG	3.4mG	7.6mG
- Proposed	7.4mG	5.6mG	3.9mG	2.9mG	2.3mG	1.0mG	1.7mG	1.6mG
House No 15			*					
- Existing	0.1mG	0.2mG	0.3mG	0.3mG	0.5mG	1.0mG	2.4mG	7.3mG
- Proposed House No:15 has been removed for public walkway								

The EMF Report concluded that the highest magnetic field produced by the transmission line is well below the highest safe magnetic field exposure level for the general public as recommended by the national and international guidelines. Additionally, the EMF Report concluded that the relocation of the power line from behind the property line to the front of the property line in Cooper Road would not significantly increase the EMF level within Birrong Girls High School, and the increase is well below the limit at which an association between the long-term exposure to EMF and childhood leukaemia was reported in scientific literature.

NSW Health, Sydney South West Public Health Unit (NSW Health) provided a submission on the proposed modification and identified that the current scientific option on the health effects of EMF are summarised in the *Environmental Health Criteria document no. 238 Extremely low frequency fields* published by the World Health Organisation in 2007 (WHO Document). The WHO Document categorises the potential health effects from EMF exposure as acute or chronic.

The WHO Document identified that acute biological effects have been established for exposure to extremely low frequency EMF levels in the frequency range up to 100kHz that may have adverse consequences on health, and therefore exposure limits are needed. The WHO Document also proposes a 24 hour magnetic field exposure limit for the general public of 1000mG which is designed to protect against established biological effects.

Additionally, the WHO Document identified that everyday, chronic low-intensity (above 3-4mG) power frequency magnetic field exposure poses a health risk, and this is based on the epidemiological studies demonstrating a consistent pattern of increased risk of childhood leukaemia. Notwithstanding the above correlation, 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 fails to support a relationship between extremely low frequency EMF levels and changes in biological function or disease status. On balance, the evidence is not strong enough to be considered casual, but sufficiently strong to remain a concern. Consequently, the WHO Document does not recommend exposure limits based on epidemiological evidence but does consider some precautionary measures are warranted.

In view of the above information, the NSW Government and NSW Health advocate a policy of prudent avoidance with regard to EMF emission. NSW Health identified that the policy of prudent avoidance has not been demonstrated in the proposed modification. Further, NSW Health identified that the proposed modification will result in a substantial increase in EMF exposure above current existing levels for sensitive residential receptors. Additionally, it was recommended that the design of the project incorporate all reasonable and feasible measures with the objective of reducing the predicted increase over background levels, or that the relocation is reconsidered.

In response to the concerns raised by NSW Heath, the proponent has provided additional information which identified that, prior to lodgement of the modification application, the proponent and Ausgrid evaluated three options for the relocation of the 132kV line, namely:

- 1. Consolidate with existing overhead lines along Cooper Road (option proposed in the modification application):
- 2. Re-align overhead lines within the Potts Hill site; and
- 3. Relocate lines underground.

The existing approval of the Civil Works Stage 2 Project Approval (MP08\_0116) includes the subdivision of residential allotments along the rear property boundary of 15 to 33 Cooper Road as illustrated below in Figure 5.

440 262 m 4.10 576.6 m ROAD 409 61 408 522 m 424 83,5 m² 17 429 403 84 B 15-33 Cooper Road, 53 5% 905 No.2 (16.6 WIDE) 52 275 405 522 m. Potts Hill Sydney ZZ Water Reservoir Site ROAD No.3 (17.4 404 522 m² 67 25 403 415 420 31 402 522 m 33 4.15 86 m 613 186 m 15. 15. 18. 107

Figure 5: Subdivision Alignment Civil Works Stage 2 Project Approval

The proponent has indicated that the existing location of the 132kV overhead lines is no longer appropriate as the residential development proposed at Potts Hill would enclose the lines within backyards, making them inaccessible to Ausgrid for maintenance purposes.

The proponent has also identified that Option 2 was not considered favourable as the subdivision setbacks within the Potts Hill site are typically less than the current setbacks along Cooper Road, and therefore the EMF levels within the affected houses are likely to be higher than those under the alignment proposed in the modification application. Further, the proponent identified that Option 3 was not considered favourable as Ausgrid advised that relocating electrical cables underground for short sections (i.e. less than 2km) was technically unfeasible and would not necessarily abate EMF impacts.

In considering the potential EMF impacts of the proposed modification, the Department notes that the changes in EMF levels resulting from the modification are well below the WHO Document's recommended 24 hour magnetic field exposure limit for the general public of 1000mG. Additionally, the department notes that residences along Cooper Road are sited approximately 5m from the front property boundaries. The expected EMF levels at 5 m from the front property boundaries marginally

exceeds the WHO Document's recommended 3-4mG chronic low-intensity EMF level. Notwithstanding, the department notes that the EMF levels reduces below the recommended 3-4mG mG level as the distance increases from the front property boundaries. Accordingly, the department considers that the expected EMF levels within houses and backyards along Cooper Road are acceptable.

The department also notes that the proposed modified alignment of the transmission lines is consistent with the existing alignment of the 132kV line along Cooper Road to the south of No. 33 and that the proponent has acquired 15 Cooper Road to create the necessary easement for the transmissions line. The proponent has indicated that 15 Cooper Road will be dedicated to Bankstown City Council as part of the open space for the proposed Potts Hill development.

Accordingly, the department has formed the opinion that the evaluation of options considered above, and acquisition of property 15 Cooper Road to facilitate an easement, demonstrates that the proponent has investigated all reasonable and feasible options for accommodating the proposed power lines, with the objective of containing potential increases in EMF emission. Additionally, the department considers that the option chosen is acceptable in the context of the surrounding locality, and the expected EMF emission levels are acceptable.

## 5.2 Construction Impacts

The proposed modification involves the removal of existing power lines and poles from the rear of residential allotments 15 to 33 Cooper Road and the installation of power lines, replacement of poles and installation of a pole along the existing overhead power line at the front of the residential properties along Cooper Road. To ensure that the proposed works are undertaken in accordance with the Energy Australia's standard work practices, the department has recommended a condition that the proposed works are to be undertaken in accordance with Energy Australia Network Standards.

## 5.3 Visual Impact

As detailed previously in this report, there are existing 132kV overhead electrical lines located along Cooper Road to the south of No. 33 Cooper Road. The line currently changes direction at the corner of No. 33, running east adjacent to the side boundary of No. 33, before continuing along the rear of 15 to 33 Cooper Road. The alignment of the existing electrical line is shown in Figure 4 previously, while the arrangement of overhead electrical lines at the southern corner of No. 33 is shown in Figure 6 below.

33 Cooper Road, Birrong

Figure 6: Looking south east at existing 132kV line at the corner of 33 Cooper Road

The proposed modification will result in additional electrical lines being located along the existing overhead power line along Cooper Road. The existing overhead electrical line at the front of properties 15 to 33 Cooper Road is illustrated below in Figure 7.

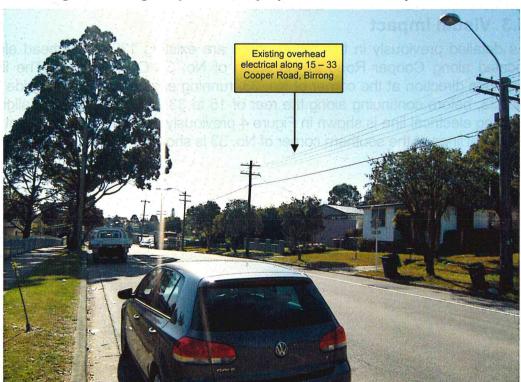


Figure 7: Looking North along Cooper Road at properties 15 to 33 Cooper Road

The additional lines will run parallel to existing lines along the network. The department considers that the proposed modification will result in a negligible visual impact from the additional lines located along the Cooper Road network. Further, the department considers that the removal of overhead powerlines from the rear of the residential properties will improve the visual outlook from the rear of these properties. The department considers that there will be no adverse visual impacts as a result of the proposed development.

## 7. RECOMMENDATIONS

It is recommended that the Director, as delegate for the Minister for Planning and Infrastructure:

- a) Consider the findings and recommendations of this report; and
- b) **Approve** the modification, subject to conditions, under section 75W of the *Environmental Planning and Assessment Act, 1979,* and;
- c) Sign the attached instrument of modification approval (Tag A).

Ben Eveleigh

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