



APPLICATION FOR ENVIRONMENTAL IMPACT STATEMENT EXEMPTION CONSIDERATION REPORT

MOLONGLO 132KV TRANSMISSION LINE RELOCATION

FEBRUARY 2021



This report evaluates the application for an exemption under section 211 of the *Planning and Development Act 2007*, from requiring a completed Environmental Impact Statement in the development application for the Molonglo 132kV Transmission Line Relocation.

Ref no: EIS201900048

Document no: 1-2019/34275

Project: Molonglo 132kV Transmission Line Relocation

Date lodged: 27 March 2020

Proponent: Calibre Professional Services, on behalf of the Suburban Land Agency

Location: William Hovell Drive and Coulter Drive road reserves

Street address: William Hovell Drive and Coulter Drive

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Glossary and definitions

Term	Definition
ACT	Australian Capital Territory
The Authority	The planning and land authority
CEMP	Construction Environmental Management Plan
CHA	Cultural Heritage Assessment
The Conservator	The Conservator of Flora and Fauna
DA	development application
DAWE	Commonwealth Department of Agriculture, Water and Environment
EIA	environmental impact assessment: the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals before major decisions and commitments are made.
EIS	environmental impact statement: a document prepared to detail the expected environmental, social and economic effects of a development, and state commitments to avoid, mitigate or satisfactorily control and manage any potential adverse impacts of the development on the environment. In the ACT, an EIS is required for proposals in the impact track as per Section 127 of the <i>Planning and Development Act 2007</i> .
EMF	Electromagnetic field
EMP	environmental management plan
EMR	Electromagnetic radiation
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
EPSDD	Environment, Planning and Sustainable Development Directorate
ESA	Emergency Services Agency
The Heritage Council	The ACT Heritage Council
MNES	matter of national environmental significance (as per the EPBC Act)
NCA	National Capital Authority
NES Plan	the Molonglo Valley Plan for the Protection of Matters of National Environmental Significance
PCS	Parks and Conservation Service
PD Act	<i>Planning and Development Act 2007</i> (ACT)
PD Regulation	<i>Planning and Development Regulation 2008</i> (ACT)
TCCS	Transport Canberra and City Services
UTR	Utilities Technical Regulator

1. Introduction

This report is to the ACT Minister for Planning and Land Management on the assessment of the Environmental Impact Statement (EIS) exemption application in relation to the relocation of 132kV electrical transmission lines in the Molonglo Valley. The application was made by Calibre Professional Services on behalf of the Suburban Land Agency (the proponent) under section 211B of the *Planning and Development Act 2007* (the PD Act).

In accordance with section 139(h)(ii), the EIS exemption was lodged concurrently in the impact track with a development application (DA-201936352). The DA was publicly notified with the EIS exemption application between 20 April 2020 and 10 June 2020. If an EIS exemption is granted, the DA will continue to be assessed in the impact track by the planning and land authority (the Authority).

1.1. Project

On 27 March 2020, the proponent formally lodged an application for an EIS exemption under section 211B of the PD Act for the Project. The EIS exemption application applies to a small portion of a larger transmission line relocation project.

1.1.1. Overall project

The overall project includes the relocation of existing overhead high voltage 132kV electricity transmission lines in the Molonglo Valley in the ACT. The existing transmission lines to be decommissioned are above ground and are located within the Molonglo Stage 3 Future Urban Area, which is proposed for residential development over the next 25 years. The new transmission lines will be entirely underground and located on a different alignment which is more conducive to the future urban development of the Molonglo Valley.

Connection to the existing overhead transmission lines will occur at two sites, the first to the east of Kama Nature Reserve at the north-western end of the alignment, the second at the south-eastern end of the alignment (near Tuggeranong Parkway).

Specifically, the overall project will include the following:

- Construction of approximately nine kilometres of underground 132kV transmission lines (see Figure 1). This activity will include:
 - installation of conduit and cables within temporarily open trenches (up to 10 metres disturbance width);
 - backfilling trenches and revegetation works;
 - installation of numerous egress points for ongoing maintenance access; and
 - development of a 5 to 7 m wide construction and maintenance access track.
- Decommissioning and removal of approximately nine kilometres of existing overhead 132kV transmission lines, including 29 steel lattice towers.

The majority of the above works, including all the current transmission line for decommissioning, are located within the Molonglo Valley Stage 3 Urban Development area (see Figure 2). An EIS exemption application for the urban development and the relocation of the transmission lines in this area was granted on 8 May 2018.

The overall project also spans across designated land (see Figure 2). Works on designated land are subject to the requirements of the National Capital Plan and will require a separate approval from the National Capital Authority.

1.1.2. Works subject to this EIS exemption application

The current EIS exemption application applies only to the portion of the new underground transmission line that is to be located outside the existing Molonglo Valley Stage 3 Urban Development EIS exemption area (see Figure 2). The works assessed as part of this application include:

- the installation of approximately 1050 m of underground transmission lines within two 1 m wide trenches;
- construction of a permanent 5 m to 7 m wide access track;
- establishment of a 10 m easement/service corridor;
- construction of two approximately 14 m x 4.6 m jointing pits; and
- removal of fencing and filling of an existing rural dam.

1.2. Project location

This EIS exemption application relates to land located in the William Hovell Drive and Coulter Drive road reserves at the boundary between the districts of Belconnen and Molonglo Valley (see Figure 1).

The overall project is primarily located in the Molonglo Stage 3 EIS exemption area, extending from approximately the Tuggeranong Parkway in the south-east to the Kama Nature Reserve in the north-west (see Figure 2).

1.1. Legal land description and tenancy

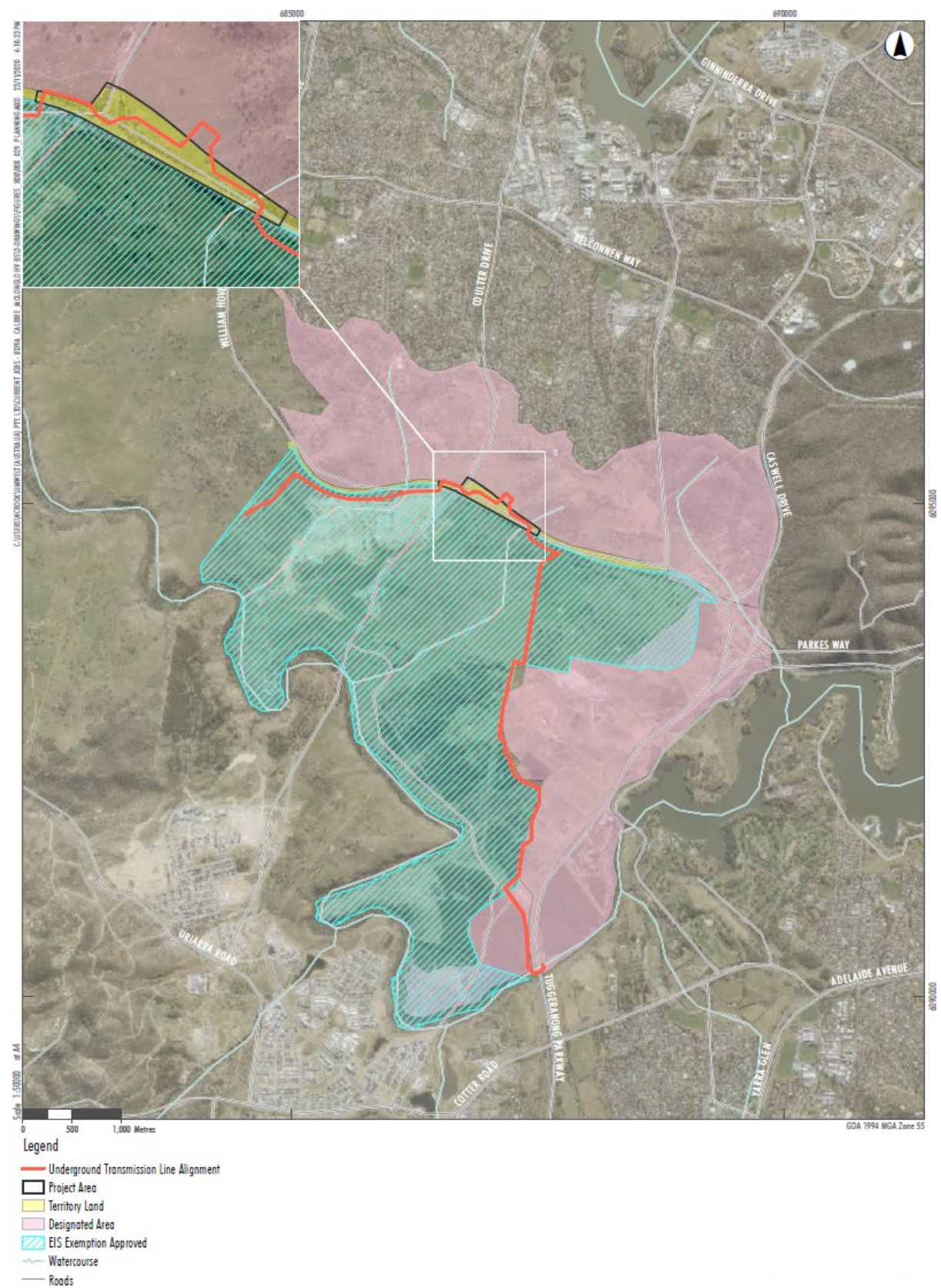
The project will directly affect the William Hovell Drive and Coulter Drive road reserves, adjacent to Block 1587, Belconnen. Table 1 shows the legal land description for all land affected by the proposal and the details of tenancy type and tenant.

Table 1 - Legal land description and tenancy

Block	District	Tenancy	Tenant or Land Custodian
William Hovell Drive road reserve	Belconnen Molonglo Valley	Unleased Territory Land	Roads ACT, TCCS
Coulter Drive road reserve	Belconnen Molonglo Valley	Unleased Territory Land	Roads ACT, TCCS

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Figure 2: Project location - EIS exemption areas



Source: Umwelt (2020)

1.2. Background

The need for urban development in the Molonglo Valley was first identified in the Canberra Spatial Plan 2004 and again in the ACT Planning Strategy 2018.

The urban development of the Molonglo Valley was subject to a strategic assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The strategic assessment resulted in the production and formal endorsement of the Molonglo Valley Plan for the Protection of Matters of National Environmental Significance (NES Plan). The NES Plan identifies and describes the required management, mitigation and offsetting requirements of the Australian Government Department of Agriculture, Water and the Environment to adequately protect matters of National Environmental Significance.

Subsequently, multiple EIS exemptions across the Molonglo Valley have been granted for the urban development of the district, including the Molonglo Valley Stage 3 Urban Development EIS exemption.

The proposal is to relocate existing overhead high voltage electricity transmission lines to a new underground alignment through the Molonglo Valley. The new alignment was selected to be more conducive to the future urban development of the district.

2. Environmental impact assessment

Environmental impact assessment processes are used to identify, predict, plan for and manage the impacts of development proposals before a decision is made about the project going ahead. An environmental impact assessment process is required to be undertaken for projects in the impact track.

Section 123 of the PD Act states that the impact track applies to a development if:

- the relevant development table states that the impact track applies;
- the proposal is of a kind mentioned in Schedule 4 of the PD Act;
- the Minister makes a declaration under section 124;
- section 125 or section 132 applies to the proposal; or
- the Commonwealth Minister responsible for the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) advises the Minister in writing that the development is a controlled action under the EPBC Act, section 76.

2.1. Impact track triggers

The project is in the impact track as it is a development of a kind mentioned in Schedule 4 of the PD Act. This proposal triggers the Schedule 4 items listed in Table 2.

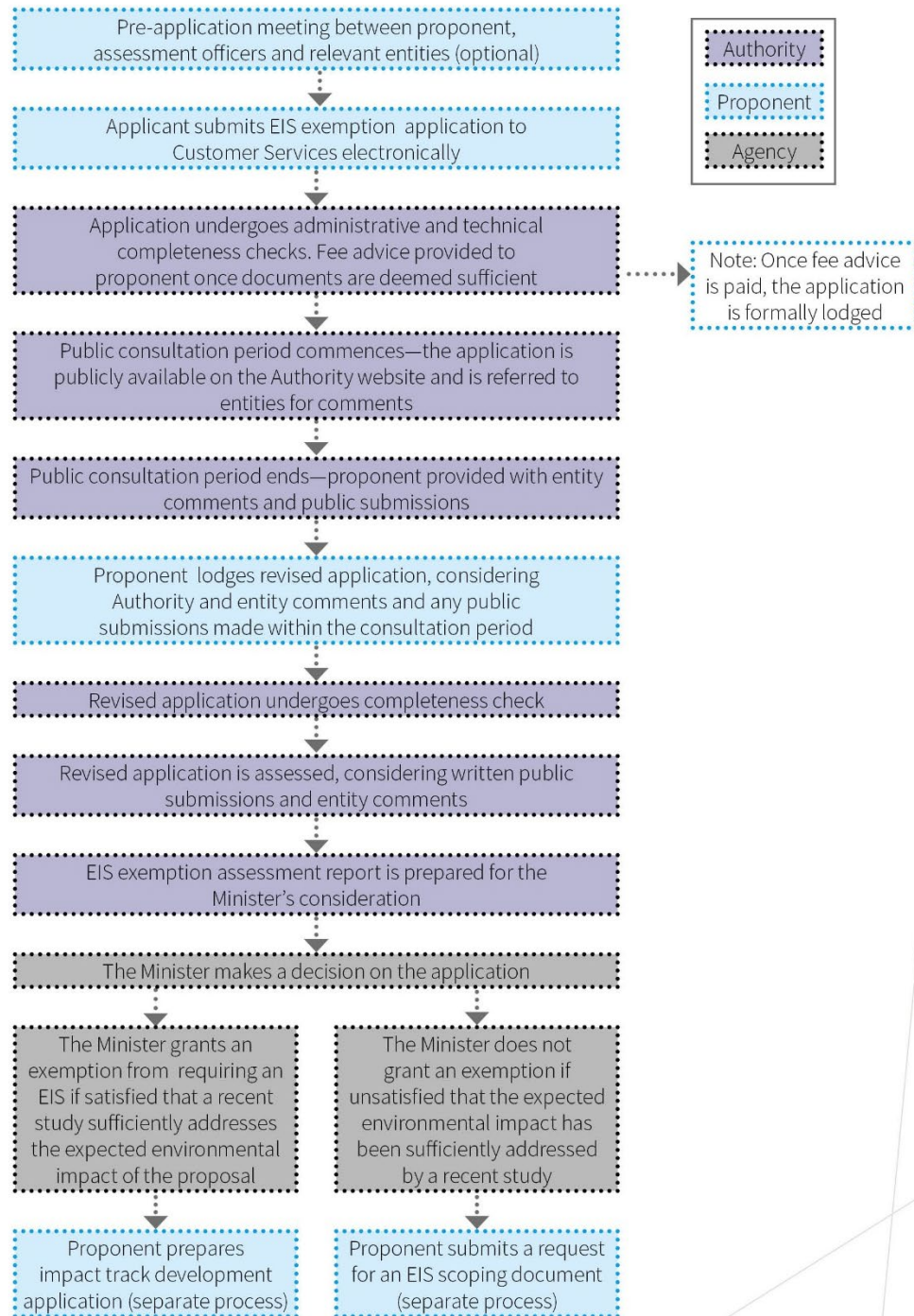
Table 2 - Impact track triggers per Schedule 4 of the PD Act

Item Number	Description	Project Component
Part 4.2, item 2	<i>proposal that involves— (a) electricity transmission line construction, including additions or realignment works, outside an existing easement or exceeding 500m in length, that are intended to carry underground or above-ground transmission lines with a voltage of 132kV or more.</i>	Construction of approximately 1050 m of 132kV high voltage transmission line.
Part 4.3, item 2	<i>proposal involving— (a) the clearing of more than 0.5ha of native vegetation in a native vegetation area, other than on land that is designated as a future urban area under the territory plan, unless the conservator of flora and fauna produces an environmental significance opinion that the clearing is not likely to have a significant adverse environmental impact.</i>	Clearing of native vegetation to construct the underground electricity transmission line.
Part 4.3, item 6	<i>proposal that is likely to have a significant adverse impact on the heritage significance of a place or object registered under the Heritage Act 2004, unless— (a) the heritage council produces an environmental significance opinion that the proposal is not likely to have a significant adverse impact.</i>	Possible impact on heritage places or objects during excavation of trenches for underground electricity transmission line construction.

2.2. EIS exemption process

The flowchart below outlines the EIS exemption application process.

Figure 3: The EIS exemption process



2.3. The EIS exemption application

In accordance with section 211B of the PD Act, the application for an EIS exemption was lodged by the Calibre Professional Services on behalf of the Suburban Land Agency to the Authority on 27 March 2020.

The application contained the following information to inform the assessment of the application:

- EIS Exemption Application Supporting Report, prepared by Umwelt, dated February 2020;
- Preliminary Risk Assessment (PRA), Appendix 1, EIS Exemption Application Supporting Report;
- Plans of the works, maps of the project site and civil design drawings, prepared by Calibre;
- Molonglo 3 Economic Consultancy Report, prepared by CBRE, dated December 2017;
- Cost Benefit Analysis of Powerline Relocation, prepared by CIE, dated March 2018;
- Molonglo Electro Magnetic Field Assessment Report, prepared by L3D, dated July 2014 and reviewed for currency of information by GHD in February 2020;
- Ecological Assessment, prepared by Umwelt, dated March 2019; and
- Cultural Heritage Assessment, prepared by Umwelt, dated December 2019.

2.4. EIS exemption decision

Section 211H of the PD Act states that the Minister may grant an EIS exemption for the proposal if satisfied that the expected environmental impact of the development proposal has already been sufficiently addressed by a recent study, whether or not the recent study relates to the particular development proposal.

In deciding whether the environmental impact of the development proposal has been sufficiently addressed by the recent study, the Minister must consider:

- (a) whether the recent study was conducted by an appropriately qualified person with relevant expertise and experience in relation to the environmental values of the land in the proposal;
- (b) if the recent study does not relate directly to the proposal—whether there is sufficient detail to allow assessment of the environmental impacts likely to occur if the proposal proceeds;
- (c) whether the part of the recent study relevant to the proposal required public consultation through a statutory process or as part of a government policy development;
- (d) if the recent study is more than 18 months old—whether the Minister is satisfied that the information in the study is current; and
- (e) any submissions received during the consultation period for the EIS exemption application.

This report documents the information presented by the proponent and information received during entity consultation and public notification to inform the Minister in making a decision.

For each impact track trigger an assessment of the supporting information will be made against the criteria above in the corresponding sub-sections under Section 3 of this report.

2.5. Consultation

Entity and public consultation were both undertaken for this application, as required by the PD Act.

2.5.1. Entity referral

Section 211E of the PD Act requires the Minister to consult with entities prescribed in the *Planning and Development Regulation 2008* (PD Regulation) about the EIS exemption application. The Minister may also seek advice from additional entities.

The Authority referred the application to the entities listed in Table 3 below. Comments were received from eleven entities during the consultation period. The Conservator of Flora and Fauna (the Conservator) and the ACT Heritage Council (the Heritage Council) also provided comments on the revised EIS exemption application. A summary of comments received is available in Table 3 below. Any matters to be considered or conditions that have been recommended by a referral entity will be included in Section 5 of this report (EIS Exemption Conditions).

Table 3 - Summary of entity comments

Referred entity	Entity response	Entity response date
ACT Health	The HPS has reviewed the application and notes the works will be subject to a Construction and Environment Management Plan (CEMP). The HPS requests the CEMP implement an unexpected finds protocol during construction. The HPS has no public health concerns in relation to the proposed development and supports the issuing of an EIS exemption.	7 May 2020
Evoenergy Electricity	No comments received.	
Conservator of Flora and Fauna	<u>Draft EIS Exemption application:</u> Requested clarification on a number of issues: • An updated plan showing the boundary of nature reserves to determine level of impact. • Clarification of impacts to the stock underpass in Block 1548 Belconnen. • Impacts on the dam in Block 1492 Belconnen. Requested a number of conditions be imposed surrounding: • access to the nature reserve; • protecting environmental offset areas during construction; • altering the construction methodology to protect mature trees and ecologically sensitive areas; • reseedling of affected areas adjacent to nature reserves; • erosion and sediment control to the drainage line within the project area; • replacement tree and shrub planting; • weed management;	11 June 2020

Referred entity	Entity response	Entity response date
	- rock excavation and reuse of rocks for habitat rehabilitation; and - impacts to recreational users of the area. <u>Revised EIS Exemption application:</u> A number of concerns raised during the draft EIS exemption application were addressed through alignment changes. Further clarification was requested on a number of issues relevant to the overall project and the area outside of the EIS exemption area. These included: - Impacts on the Kama Nature Reserve and Kama buffer during construction. - Impacts on trees throughout the alignment, including the removal of several trees that appear to be outside the proposed easement. - Justification as to why the alignment cannot be slightly amended in certain locations to avoid the removal of trees. - Updated plans to better determine the level of impact on trees and ensure areas surrounding nature reserves and environmental offsets are appropriately rehabilitated. Comments relevant to areas outside the EIS exemption will be considered and addressed at the DA stage for the overall alignment.	20 January 2021
Emergency Services Agency	No comments or objections on the proposal.	27 May 2020
Environment Protection Authority	Supports the proposal subject to conditions being added to the decision on the concurrent DA.	1 May 2020
Evoenergy Gas (Jemena)	No comments or objections on the proposal.	10 June 2020
ACT Heritage Council	<u>Draft EIS exemption application:</u> The ACT Heritage Council (the Heritage Council) did not support the draft EIS exemption application as revisions were required to be made to the heritage assessment for the project area. Further heritage assessment and other clarifications were also required for the overall alignment. This will be considered and addressed as part of the assessment of the DA.	10 June 2020
	<u>Revised EIS exemption application:</u> Following amendments being made to the project's Cultural Heritage Assessment (CHA), the Heritage Council supported the revised EIS exemption application subject to the following conditions:	20 January 2021

Referred entity	Entity response	Entity response date
	- The alignment is underbored under identified potential archaeological deposits (PADs) instead of trenching, where practicable. - Where underboring under the identified PADs is not reasonably practicable, archaeological excavation will be required. - Further advice be sought from the Heritage Council on the CHA to ensure current <i>Heritage Act 2004</i> requirements are satisfied. - A Statement of Heritage Effects (SHE) application be submitted and approved by the Heritage Council prior to works commencing. - All heritage management actions required by the SHE must be undertaken prior to works commencing. - Protective fencing must be installed around identified heritage items/places prior to works commencing. - The CEMP must describe heritage management controls to be implemented during the works and must be to the Heritage Council's satisfaction. - Any unanticipated heritage impacts during construction must be managed in accordance with the Unexpected Discovery Protocol as set out in the CHA. In addition to the above comments, the Heritage Council also noted that: - Future development proposals within the exemption area may require additional heritage assessment and management actions, in accordance with <i>Heritage Act 2004</i> requirements and Council policy. - Where future development within the exemption area may damage Aboriginal places or objects, or diminish the heritage significance of heritage places and objects, assessment is required to be undertaken with current <i>Heritage Act 2004</i> requirements and approval must be sought and obtained prior to works commencing. - Where new information on the heritage significance and conservation value of places and objects within the exemption area is identified, Council advice on appropriate management outcomes must be sought and implemented prior to any impacts occurring.	
ICON Water	<u>Draft EIS exemption application:</u> Recommends a contamination assessment be undertaken in areas outside of the EIS exemption	21 May 2020

Referred entity	Entity response	Entity response date
	area to confirm the presence of contaminants and any associated impacts to Icon Water assets. • The electrical cable must be more than 3 m from any Icon Water asset, to ensure maintenance access is maintained. • The proponent must provide modelling to Icon Water to assess the risk if there is an electrical fault. • The electrical cable must be 3.5 m clear of the sewer main through the Arboretum. The proposed electrical cable will cross a private sewer main. The owner of the private sewer main must be informed and allowed to respond to the proposed development. Comments relevant to areas outside of the EIS exemption will be considered and addressed at the DA stage. <u>Revised EIS exemption application:</u> No comments received.	N/A
National Capital Authority	No comments or objections on the proposal.	10 June 2020
Transport Canberra and City Services	No comments were provided relating to the EIS exemption area. TCCS provided some comments relating to retaining select mature trees located outside of the EIS exemption area. These will be considered and addressed at the DA stage.	13 May 2020
Utilities Technical Regulator	<u>Draft EIS exemption application:</u> • The EIS exemption application does not identify risks due to electromagnetic induction or associated hazards, particularly to nearby metallic structures. The current exemption application should consider and address these risks and propose measures to ensure mitigation of current and future risks to appropriate levels. • The EIS exemption application does not address the earth potential rise hazards associated with the future substation. UTR consider it appropriate that the zone substation is considered concurrently with the underground cabling EIS exemption and DA as earth potential rise and associated hazards can arise from faults at the zone substation or on the transmission line. The arising voltages can be hazardous to the impacted asset, workers and the public.	10 June 2020

Referred entity	Entity response	Entity response date
	UTR request that the hazards and risks associated with Electromagnetic Induction and Earth Potential Rise raised are fully addressed.	
	<u>Revised EIS exemption application:</u> Following receipt of the earthing system safety report and further clarification on the electromagnetic induction and earth potential rise hazards, the UTR did not raise any concerns or objections with the revised EIS exemption application.	20 January 2021

2.5.2. Public consultation

Section 211C of the PD Act requires the Minister to consult with the public on the EIS exemption application for a minimum of 15 working days. However, in accordance with Section 147AA of the PD Act, the public notification period for an EIS exemption lodged concurrently with a development application is 35 working days.

As the EIS exemption was lodged concurrently with a development application (DA-201936352), both the concurrent EIS exemption and DA were publicly notified together from 20 April 2020 to 10 June 2020.

No public submissions were received during the consultation period. However, two public submissions were received on the concurrent DA – these will be considered in the assessment of the DA.

The project design and supporting information has not been the subject of any public exposure in addition to the public consultation period required under section 211C of the PD Act.

2.6 Revised EIS exemption – additional studies

To respond to entity and Authority comments, the applicant lodged a revised EIS exemption application on 8 December 2020. Along with a revised report, the application included additional studies, documentation and plans to support the exemption application:

- Concept Construction Environmental Management Plan, prepared by Advitech Environmental, dated July 2020
- Dismantling of the Overhead 132 kV Line Report, prepared by Evoenergy, not dated
- Electrical design jointing pit concept plans, prepared by Evoenergy, dated March 2020
- Tree Assessment Report, prepared by Spacelab, dated September 2019
- Landscape management and protection plans, prepared by Spacelab, dated November 2020
- Earthing System Assessment Report, prepared by Safeearth, dated December 2020
- Project safety risk assessment, prepared by Calibre, dated August 2020

3. Impacts on Schedule 4 items

This section summarises the impacts of the development on the relevant items from Schedule 4 of the PD Act. A conclusion is made on whether or not the information satisfies the requirements of section 211 of the PD Act.

3.1. Schedule 4 Part 4.2 Item 2– proposal that involves electricity transmission lines with a voltage above 132kV

The proposed development is for the relocation and undergrounding of 132kV transmission lines. This poses potential electromagnetic field (EMF), electromagnetic radiation (EMR) and other electrical induction risks.

3.1.1. Impacts

The EIS exemption report and supporting Electromagnetic Field Assessment (L3D, 2014 and reviewed by GHD, 2020) assessed the hazards and impacts from EMF and EMR produced by the new underground transmission line.

These studies highlighted that the EMF produced by the underground transmission cable will be entirely contained within the underground cable. The Utilities Technical Regulator (UTR) stated in their entity comments that the risks relating to EMF had been appropriately addressed.

These studies also stated that the EMR produced by the underground transmission cable will be below the Australian Radiation Protection and Nuclear Safety Authority (ARPNSA) 24-hour limit for public exposure. These reports concluded that nearby residents and users of the area will not be exposed to EMR above the ARPNSA limit. The review of the L3D report, conducted by GHD in 2020, confirmed these findings by stating “the allowable magnetic field limits are not exceeded anywhere within or outside the 132 kV easement, during any of the operating conditions specified in the report.”

Potential electrical induction risks were raised by the UTR during the assessment of the EIS exemption application. In response to this, the proponent provided an earthing system safety report that describes that the design of the transmission lines effectively reduces the electrical hazards from the transmission lines. The EIS exemption report also includes mitigation measures to address the remaining electrical hazards. These mitigation measures have been included as recommended conditions within this consideration report to ensure they are adopted.

The UTR stated the issues raised in their comments on the draft EIS exemption were addressed appropriately in the revised application. Any remaining electrical hazards posed by the overall project will be further considered and assessed during DA assessment.

3.1.1. Residual/indirect impacts

The construction of the new transmission line alignment within the EIS exemption area is not expected to produce electrical hazards that will impact the future surrounding residents and users of the area.

3.1.2. Previous studies and investigation

The EIS exemption application included two reports which addressed impacts from high voltage electricity transmission cables in support of the EIS exemption application:

- An assessment of electromagnetic fields (EMF) adjacent to the proposed transmission cable conducted in 2014 and reviewed for currency in 2020.
- An earthing system safety assessment report of the proposed transmission cable conducted in 2020.

The information submitted by the proponent to support the application is listed and assessed for relevance against the requirements of section 211H of the PD Act in Table 4.

Table 4 - Previous studies and investigations – high voltage electricity transmission lines

TITLE & AUTHOR OF STUDY	QUALIFIED PERSON	RECENT STUDY	IF NOT RECENT STUDY, THE CONTENT IS CURRENT	INFORMATION DIRECTLY RELATED TO PROPOSAL	ADDITIONAL PUBLIC CONSULTATION REQUIRED	EXPERT/ PEER REVIEWED
Molonglo Electro Magnetic Field Assessment Report L3D (2014) Reviewer: Molonglo 132kV Line EMF Review GHG (2020)	Yes	No	Yes	Yes	No	Yes
Earthing System Assessment Report Safeearth (2020)	Yes	Yes	N/A	Yes	No	No

It is considered that these studies provide sufficient detail to allow an assessment of the environmental impacts associated with the proposal.

3.1.3. Entity referral and public comments

The UTR and Icon Water provided comments on the proposal which related to the impacts of high voltage electricity on the area surrounding the transmission line. The revised EIS exemption application provided further details addressing the comments. No public comments were received relating to this Schedule 4 item.

3.1.4. Recommended mitigation measures

The recommended mitigation measures from the Authority's assessment, entity advice and information submitted by the proponent against the impacts of the development due to high voltage electricity are included in Table 5.

Table 5 - Mitigation measures – high voltage electricity transmission lines

Number	Impact of development	Mitigation Measure
1	Electrical safety hazards	Works being undertaken under or near the overhead powerlines will be in accordance with Evoenergy protocols. Sufficient clearance will be provided between the powerlines and excavation plant via the appropriate selection of plant.

Number	Impact of development	Mitigation Measure
		If required, powerlines will be de-energised in off-peak seasons (Autumn and Spring) for 3-4 hours, with the required approvals from Evoenergy. All temporary fencing adjacent to overhead powerlines will be earthed. A standby officer from Evoenergy will be on-site to oversee the construction progress.
2	Electrical induction of surrounding infrastructure	Transfer voltages and touch voltage hazards to adjacent fences will be tested to confirm hazard is within an acceptable range. Unacceptable hazards will be mitigated through the installation of isolating sections or will be earthed, as appropriate.

3.1.5. Conclusion

The supporting studies and information in the EIS exemption application provide sufficient information on the impacts of the proposal due to high voltage electricity transmission. This was confirmed in the revised entity comments from the UTR.

Further investigation and environmental assessment of the electrical induction, radiation and earthing risks of the proposal is not required for this project. The conditions attached to this EIS exemption will be applied through conditions on any subsequent DA decision.

3.2. Schedule 4 Part 4.3 Item 2–Proposal involving clearing of more than 0.5 ha native vegetation

The project area includes 1.8 ha of native vegetation (as defined by the *Nature Conservation Act 2014*). This includes 0.2 ha of planted local woodland species, 0.4 ha of planted local and non-local woodland species and 1.2 ha of mixed pasture (native and exotic species).

The vegetation in the project area is currently in a disturbed/degraded condition invaded by exotic species. The native vegetation is similar in condition to much of the vegetation in the surrounding region. The vegetation consists mainly of plantings and the area has been disturbed from previous road/infrastructure construction. The area contains some remnant trees that may have habitat value, some patches of native grasses and areas of potential pink-tailed worm-lizard habitat.

3.2.1. Impacts

The development proposed in the project area will require the removal of approximately 1 ha of native vegetation due to construction works, including excavation of trenches for approximately 1050 m of transmission line, construction of an access track, installation of access points for maintenance, two jointing pits, temporary impacts/disturbance from soil stockpiling and vehicle parking and other associated impacts.

Remnant trees with potential habitat value are highlighted below in Figure 4. The landscape management and protection plans provided indicate the removal of approximately 10 low or medium quality trees in the EIS exemption area. Mitigation measures for the removal of remnant trees have been included in Table 7 below.

3.2.2. Residual/indirect impacts

The removal of native vegetation may also cause some indirect impacts:

Loss of potential habitat

The application identified some patches of native grasses and areas of potential pink-tailed worm-lizard habitat in the project area (see Figure 4). It is noted that the area affected by this proposal is narrow and is unlikely to become a barrier to wildlife movement/connectivity; however, construction works will likely impact these areas.

Mitigation measures have been included in Table 7 below to minimise impacts to environmentally valuable areas.

Impacts to nature reserves and offsets

The EIS exemption area is adjacent to the broader Molonglo Valley region which has been subject to a strategic assessment under the EPBC Act and numerous EIS exemptions under the PD Act. As part of these processes, the highest value vegetation and habitat areas have been protected in nature reserves and offset areas.

This includes the Molonglo River Reserve (Molonglo River Park), Kama Nature Reserve, and Molonglo Strategic Assessment National Environmental Significance Plan environmental offset areas 'Patch H', 'Patch C' and 'Patch GG' (see Figure 5). The Mount Painter Nature Reserve and Aranda Bushland Nature Reserve are also located in close proximity to the EIS exemption area. The proposed development may have some indirect impacts to these areas, including from vehicle access and erosion and sediment control.

Mitigation measures have been proposed in Table 7 below to minimise indirect impacts to adjacent reserves and offset areas.

Figure 4: Habitat tree and potential habitat location



Source: Umwelt (2020)

Figure 5: Molonglo Valley Strategic Assessment offset areas



Source: ACTMapi

3.2.3. Previous studies and investigation

The EIS exemption application included one report which addresses ecological impacts of the proposal in support of the EIS exemption application:

- Ecological Assessment, prepared by Umwelt dated March 2019

The information submitted by the proponent to support the application is assessed for relevance against the requirements of section 211H of the PD Act in Table 6.

Table 6 - Previous studies and investigations – clearing native vegetation

TITLE & AUTHOR OF STUDY	QUALIFIED PERSON	RECENT STUDY	INFORMATION DIRECTLY RELATED TO PROPOSAL	ADDITIONAL PUBLIC CONSULTATION REQUIRED	EXPERT/ PEER REVIEWED
Ecological Assessment Umwelt (2019)	Yes	Yes	Yes	No	No

3.2.4. Entity comments

The Conservator of Flora and Fauna provided comments on the proposal which related to the clearing of native vegetation. In their comments on the draft EIS exemption, the Conservator raised concerns surrounding the removal of mature trees, impacts to some potential habitat areas, and potential impacts to a stock underpass under William Hovell Drive and a nearby rural dam.

The revised EIS exemption report provided further details and proposed some minor alignment adjustments to address the comments.

However, the Conservator raised further concerns on the revised EIS exemption report which primarily relate to the removal of trees and indirect impacts to offset areas (see section 2.5.1 for details).

Many of the comments raised by the Conservator are relevant to the overall project, outside of the project area subject to this EIS exemption application. The comments relevant to the project area have been mitigated through the measures outlined in Table 7 below. The comments relating to the overall project will be considered as part of the concurrent DA assessment.

3.2.5. Recommended mitigation measures

The recommended mitigation measures from the authority's assessment, entity advice and information submitted by the proponent against the impacts of the development due to clearing of native vegetation are included in Table 7.

Table 7 - Mitigation measures – clearing native vegetation

Number	Impact of development	Mitigation Measure
1	Loss of native vegetation	Mitigation measures listed in Appendix 1 (Preliminary Risk Assessment) of the Revised EIS Exemption report (November 2020) relating to the clearing of native vegetation will be implemented.

Number	Impact of development	Mitigation Measure
		A detailed Construction Environmental Management Plan (CEMP) will be prepared and endorsed prior to works commencing. The CEMP will include measures to mitigate the loss of vegetation during construction works.
2	Removal of remnant trees	Where possible, no trenching will occur within a radius of X m (X equal to the tree height) from the trunk of remnant trees. Where this is not possible, works will be undertaken via underboring or hydrovac. The CEMP will include measures to mitigate impacts to remnant trees during construction.
3	Site management and rehabilitation	Areas which are directly disturbed by construction works will be rehabilitated and revegetated. The drainage line within the exemption area will not be significantly impacted by the works. Erosion and sediment control measures will be implemented around the drainage line. Common weed species will be sprayed across the entire project area prior to commencement of works to limit their spread during construction. Follow up weed management will also occur post construction. The CEMP will detail site rehabilitation measures, erosion and sediment controls and weed management measures.
4	Impact to nature reserves and environmental offsets	If access via adjacent nature reserves is required, construction vehicles will be cleaned and will be free of any plant material or soil and access will be contained to existing tracks. Any area in adjacent reserves or environmental offset areas indirectly impacted by construction works will be restored. Environmental offsets will not be used for access during or post construction. Site access and offsite construction impacts will be addressed as part of the CEMP.
5	Offsite/offset works	Any mature native trees that are removed will be replanted or reused in Parks and Conservation Service (PCS) restoration and management works. Native trees and shrubs that are removed as part of the proposal will be offset with additional plantings. Any boulders and rocks excavated as part of the works will be reused for rehabilitation and reserve management works.

Number	Impact of development	Mitigation Measure
		Rehabilitation works will be detailed as part of the CEMP.

3.2.6. Conclusion

The construction works, including trenching to install approximately 1050 m of electrical cables, will involve the removal of approximately 1 ha of native vegetation.

The supporting studies and information in the EIS exemption application provide sufficient information on the impacts of the removal of native vegetation in the project area. Entity comments received from the Conservator of Flora and Fauna raised some concerns. These will be mitigated through conditions in this EIS exemption and as part of the concurrent DA.

Further investigation and environmental assessment of the impact to native vegetation within the project area is not required at this stage. Any further information is able to be obtained as part of the concurrent DA. The conditions attached to this EIS exemption will also be applied through conditions on any subsequent DA decision.

3.3. Schedule 4 Part 4.3 Item 6– Proposal that is likely to have an impact on heritage

The proposal is located entirely within the William Hovell Drive and Coulter Drive road reserves. These areas are not identified as containing places or objects registered under the *Heritage Act 2004*. Despite this, a number of heritage listed sites are located in close proximity to the project area. Additionally, the Cultural Heritage Assessment (CHA) completed for the project (Umwelt, 2020) identified three newly identified isolated finds within close proximity to the project area.

3.3.1. Impacts

As mentioned above, the EIS exemption report stated that the project area does not contain any places or objects on the ACT Heritage Register. The CHA (Umwelt, 2020) noted that six Aboriginal sites or areas of potential archaeological deposits, including three newly identified isolated finds were located in proximity to the project area. None of these sites or areas are within the project area.

The CHA also noted that archaeological site patterning throughout the Molonglo Valley area suggests that there is potential for Aboriginal and historic heritage sites to occur within the project area. Although the CHA concluded that the potential for Aboriginal objects or sites to occur is low, the project area may contain artefact scatters, scarred trees, grinding grooves and flaked glass Aboriginal heritage sites.

3.3.2. Residual/indirect impacts

The CHA concludes that no known heritage items and places will be impacted by the works in the project area. The identified heritage places and objects, including the newly identified sites, will be inspected and fenced prior to construction commencing. No residual impacts are expected within the EIS exemption area.

3.3.3. Previous studies and investigation

The EIS exemption application included one report which addresses ecological impacts of the proposal in support of the EIS exemption application:

- Cultural Heritage Assessment, prepared by Umwelt, dated December 2020

The information submitted by the proponent to support the application is assessed for relevance against the requirements of section 211H of the PD Act in Table 8.

Table 8 - Previous studies and investigations – impact to heritage items and places

TITLE & AUTHOR OF STUDY	QUALIFIED PERSON	RECENT STUDY	INFORMATION DIRECTLY RELATED TO PROPOSAL?	ADDITIONAL PUBLIC CONSULTATION REQUIRED	EXPERT/ PEER REVIEWED
Cultural Heritage Assessment Umwelt (2020)	Yes	Yes	Yes	No	No

3.3.4. Entity comments

The ACT Heritage Council provided comments on likely impacts to heritage items.

The draft EIS exemption application was not supported by the Heritage Council as the Cultural Heritage Assessment (CHA, Umwelt 2019) did not provide enough information about the likely impacts to items or places of heritage significance.

The revised EIS exemption application provided further details addressing Heritage Council comments and made revisions to the CHA (Umwelt 2020). Following these amendments, the Heritage Council supported the EIS exemption, subject to conditions. The conditions proposed by the Heritage Council are included as mitigation measures in Table 9 below and are outlined in more detail in section 2.5.1 above.

The Heritage Council also recommended advice be included in any EIS exemption specifying that any future works within the project area may be subject to further assessment and approval, in accordance with the requirements of the *Heritage Act 2004* and current Heritage Council policy. This has been included as an advisory note in Table 11 which will be included in any subsequent DA decision.

3.3.5. Recommended mitigation measures

The recommended mitigation measures from the authority's assessment, entity advice and information submitted by the proponent are included in Table 9.

Table 9 - Mitigation measures – impact to heritage items and places

Number	Impact of development	Mitigation Measure
1	General impacts to heritage items and places	Mitigation measures listed in Appendix 1 (Preliminary Risk Assessment) of the Revised EIS Exemption report (November 2020) relating to heritage impacts will be implemented.

Number	Impact of development	Mitigation Measure
2	Impact to identified heritage sites	Underboring construction methods will be required within known potential archaeological deposit areas, or archaeological excavation will be required where underboring is not reasonably practicable. Prior to construction commencing, protective fencing will be installed around heritage site/s in proximity to the project area. Prior to the commencement of works, a Statement of Heritage Effects (SHE) will be endorsed by the Heritage Council for the overall project. Heritage management actions required by the SHE will be undertaken prior to works commencing. A detailed Construction Environmental Management Plan (CEMP) will be prepared and endorsed prior to works commencing. The CEMP will include heritage management controls to be implemented during construction works.
3	Impact to unidentified heritage sites	Any unanticipated heritage places or objects encountered during construction works will be managed in accordance with an endorsed Unexpected Discovery Protocol.

3.3.6. Conclusion

The project area is not identified as containing places or objects registered under the *Heritage Act 2004*. Despite this, a number of heritage listed sites are located in close proximity and there is potential for unexpected heritage items to be uncovered during construction.

The supporting studies and information in the EIS exemption application provide sufficient information on the impacts of the proposal on heritage items or places. This was confirmed in the revised entity comments from the ACT Heritage Council.

Further investigation and environmental assessment of the heritage impacts within the project area are not considered necessary. Heritage considerations of the overall project will be considered during the assessment of the concurrent DA. The conditions attached to this EIS exemption will also be applied through conditions on any subsequent DA decision.

4. Other potential environmental impacts

This section summarises the potential impacts of the development on the environment other than those impacts which are impact track triggers discussed in Section 3.

4.1. Water quality and hydrology

4.1.1. Direct and indirect impacts

As displayed in Figure 2, the proposed underground electrical cable crosses a watercourse within the EIS exemption area. The project is likely to impact the water quality of the watercourse and may indirectly impact the downstream environment. Further indirect impacts to the water quality of the drainage line and the receiving environment may also arise from:

- Increased erosion and sediment flow during and post construction from the removal of native vegetation, trees and other construction activities; and
- contaminant runoff from temporary stockpiles during construction.

4.1.2. Mitigation measures

The following key commitments and mitigation measures have been recommended to minimise the above impacts to water quality and the hydrological system:

- Temporary access tracks will be established with all-weather surface; and
- A Construction and Environment Management Plan (CEMP) will be developed and implemented during construction that includes:
 - erosion and sediment controls;
 - a waste management plan; and
 - a spill management protocol.

4.2. Conclusion

The EIS exemption application and supporting documentation provide sufficient information on the other potential environmental impacts not listed under Schedule 4 of the PD Act. These impacts were also considered in the assessment of this EIS exemption application. Should the listed mitigation measures be implemented during construction, the impacts are not considered to be major.

5. EIS exemption conditions

Table 10 details the conditions that are proposed to be set and Table 11 details advisory notes if an EIS exemption for the project is granted. These conditions should be taken into account by the planning and land authority when assessing a DA for the project. Advisory notes will also be included in any subsequent DA decision. Advisory notes are only included to provide further information to the proponent. Careful consideration of advisory notes is recommended prior to commencing works.

If a conditional EIS exemption is in force for a DA, section 128 (1)(b)(iv) of the PD Act requires the approval of any subsequent development applications to be consistent with the EIS exemption conditions.

Table 10 - Conditions for development approval

No	Condition	Endorsement/ approval	Development stage	Condition of approval
1	General	Planning and land authority and relevant agencies	Pre, during and post construction	Mitigation measures listed in Appendix 1 (Preliminary Risk Assessment) of the Revised EIS Exemption report (November 2020) and all supporting studies lodged with the revised EIS exemption application must be implemented.
2	Construction and Environmental Management Plan (CEMP)	Planning and land authority	Prior to construction	A CEMP must be submitted to and approved by the planning and land authority prior to the commencement of any work on the site. The CEMP must include the following management plans, as a minimum, to address matters raised in the EIS Exemption application: • Heritage management controls; • Tree management plan; • Rehabilitation/restoration plan; • Weed management plan; • Site-specific unanticipated discovery protocol (UDP); • Contamination management plan (CMP); • Erosion and sediment controls; • Waste management plan; and • Spill management protocol. <i>Note: Other mitigation measures mentioned in this report and the revised EIS exemption report that are not covered above must also be incorporated into the CEMP.</i>
3	Remnant trees	Planning and land authority Conservator of Flora and Fauna	Pre and during construction	Trenching must not occur within a radius of X m (X equal to the tree height) from the trunk of remnant trees. Where this is not possible, works must be undertaken via underboring or hydrovac.

No	Condition	Endorsement/ approval	Development stage	Condition of approval
4	Impacts to reserves and offset areas	Conservator of Flora and Fauna ACT Parks and Conservation Service (PCS)	During and post construction	If access via Mt Painter Nature Reserve is required, all of the following conditions apply: • Prior to entering the reserve vehicles and machinery must be cleaned and free of any plant material or soil. • Access must be wholly contained to the existing tracks. • Any area impacted within the reserve must be restored (including follow up weed control) to the satisfaction of PCS. • For any fencing removed/cut there must be a plan in place to manage the gaps outside construction hours and must be replaced prior to the site being vacated at the end of works. Environmental offset areas must not be used to access the alignment during or post construction. Any area disturbed within reserves or environmental offset areas must be restored (including replanted as required), to the satisfaction of the ACT PCS.
5	Rehabilitation and replanting	Conservator of Flora and Fauna PCS	During and post construction	Reseeding of disturbed areas must occur in all areas adjacent to nature reserves and environmental offset areas at a rate of at least 5g/m² or 50kg/ha. Native seed mix in addition to <i>Themeda triandra</i>, <i>Austrostipa scabra</i>, <i>Austrostipa bigeniculata</i>, <i>Chloris truncata</i>, <i>Rytidosperma</i> sp, <i>Aristida behriana</i>, <i>Panicum effusum</i>, <i>Calotis lappulacea</i>, <i>Chrysocephalum appiculatum</i>, <i>Leucochrysum albicans</i>, <i>Vittadinia cuneata</i>, <i>Vittadinia muelleri</i>, <i>Wahlenbergia</i> sp, <i>Plantago varians</i>, and <i>Xerochrysum viscosum</i> must be used.

No	Condition	Endorsement/ approval	Development stage	Condition of approval
				Any mature native trees removed must be retained intact and transported to the Kama Nature Reserve Buffer, to the satisfaction of PCS, to be used during restoration works. All removed native trees must be replaced at a ratio of 1:4 and all native shrubs must be replaced at a ratio of 1:2. The species and spacing of replacement trees and shrubs will be to the satisfaction of PCS. Any boulders and rocks over 80cm which are excavated as part of construction works must be transported to environmental offset areas for use in rehabilitation works, as directed by PCS.
6	Erosion and sediment control	Conservator of Flora and Fauna	During construction	The drainage line within the EIS exemption area must not be impacted by the works. Any felled wattles and eucalypts over 6m, in addition to any smaller rocks excavated and coarse woody debris must be used as erosion control to the drainage line.
7	Weed management	Conservator of Flora and Fauna PCS	During and post construction	Serrated Tussock, African Lovegrass, Chilean Needlegrass and St John's wort must be sprayed across the entire project area prior to commencement of works. Follow up weed control must be extended to 24 months post completion of works.
8	Heritage	ACT Heritage Council (the Heritage Council)	Pre and during construction	Underboring construction methods must be undertaken within WHDPAD3, WHDPAD5, MGPAD1, MGPAD2 and MGPAD3; instead of trenching construction methods. Should trenching be proposed within WHDPAD3, WHDPAD5, MGPAD1, MGPAD2 and MGPAD3, on the basis that underboring is not reasonably practicable, archaeological excavation will be required to further investigate proposed impact areas.

No	Condition	Endorsement/ approval	Development stage	Condition of approval
				Prior to the commencement of works, a Statement of Heritage Effect (SHE) application must be submitted and approved under Section 61 of the <i>Heritage Act 2004</i>. Prior to the commencement of works, heritage management actions required by the approved SHE are to be undertaken. Prior to the commencement of works, protective fencing must be installed around heritage sites MV-HVL-IF-1, MG1, MG2, MVS1, MG4, MG12, MG13, MG15 and MG16: • The protective fencing must be adequate to physically protect heritage places, such as star pickets spaced no more than 4m apart and with high visibility barrier mesh. • The protective fencing locations must be demarcated by a qualified archaeologist and RAOs, who must also confirm the adequacy of fencing once installed. • The Heritage Council must be notified in writing of completion of the above actions, by email to heritage@act.gov.au. • Protective fencing must be inspected weekly during construction works, and any identified defects are to be corrected immediately. Unexpected encounters with heritage places or objects during construction works must be managed in accordance with the endorsed Unexpected Discovery Protocol.

Table 11 - Advisory notes for development approval

No	Advisory Note	Note
1	Future development proposals	Future development proposals within the EIS exemption area may require further assessment and approval in accordance with relevant statutory provisions, as deemed appropriate by the relevant ACT government agency. <i>For example, where an additional, previously unrecorded heritage place or object is identified, or new information is identified on an existing heritage place or object, assessment and approval in accordance with the requirements of the Heritage Act 2004 and Heritage Council policy may be required prior to works commencing.</i>

6. Conclusion

Having regard to the supporting information provided by the applicant and comments received from referral entities and during the public consultation period, the Authority has assessed the Molonglo 132kV Transmission Line Relocation (approximately 1050 m within the William Hovell Drive and Coulter Drive road reserves as shown in Figure 2) as meeting the requirements for an EIS exemption under the PD Act.

It is the Authority's assessment that the proponent has provided sufficient information to the ACT Government and the community to allow an informed evaluation of potential environmental impacts which could be attributed to the proposal within the project area. The supporting information and referral entities have proposed a range of mitigation measures and conditions to manage potential environmental impacts arising from construction and operational activities associated with the project. It is considered that any potential adverse impacts can be adequately addressed by implementing the conditions outlined in this report.

The Authority's recommendation is that the supporting information submitted with the application has adequately identified and considered those matters of potentially significant impact and that further environmental assessment is not required. The expected environmental impact of the development proposal has already been sufficiently addressed by recent studies.

The Authority's recommendation is that the Minister grants the Molonglo 132kV Transmission Line Relocation an EIS exemption under section 211H of the PD Act.