Australian Capital Territory

Planning and Development (Environmental Significance Opinion – Coree Solar Farm and Grid Connection, Blocks 76, 34, 62, 210 & 211 Coree and Blocks 504 & 508 Stromlo) Notice 2014 (No 1)

Notifiable Instrument NI2014–230

Made under the

Planning and Development Act 2007 s 138AD (Requirements in relation to environmental significance opinions)

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1 Name of instrument

This instrument is the *Planning and Development (Environmental Significance Opinion- Coree Solar Farm and Grid Connection, Blocks 76, 34, 62, 210 & 211 Coree and Blocks 504 & 508 Stromlo) Notice 2014 (No 1).*

2 Commencement

This instrument commences on the day after notification.

3 Environmental Significance Opinion

An Environmental Significance Opinion has been prepared by the Conservator of Flora and Fauna.

The text of the opinion is shown at Annexure A.

A copy of the opinion may be obtained from ACTPLA's website:

http://www.actpla.act.gov.au/topics/design_build/da_assessment/environmental_significance_opinions

4 Completion

The environmental significance opinion and the notice including the text of the opinion expire 18 months after the day the notice is notified.

Dorte Ekelund
Environment and Sustainable Development Directorate
26 May 2014

ACT Government
Environment and Sustainable Development

Ms Dorte Ekelund
Chief Planning Executive
ACT Planning and Land Authority
Dame Pattie Menzies Building
DICKSON ACT 2602

Dear Ms Ekelund

This is to advise of my decision, under s.138AB(4) of the *Planning and Development Act 2007*, on the request for an environmental significance opinion for the installation of a solar farm on Block 76 District of Coree and the associated aerial connection to the electricity grid near the Cotter Pumping Station.

The proposal is not likely to have a significant adverse environmental impact provided the alignment of the aerial electricity connection is amended as proposed and that all works are completed in accordance with the conditions.

Please find attached the Environmental Significance Opinion and a Statement of Reasons for the decision.

Yours sincerely

Ann Lyons Wright

Ann Lyons Wright
Conservator of Flora and Fauna

16 May 2014

ENVIRONMENTAL SIGNIFICANCE OPINION

In accordance with section 138AB(4) of the *Planning and Development Act 2007*, I provide the following environmental significance opinion:

PROPONENT

Rob Purdon, Purdon Associates Pty Ltd, 3/9 McKay Street Turner on behalf of OneSun Capital Solar ACT.

LOCATION

Solar Farm - Block 76 District of Coree; adjacent to Brindabella Road and Uriarra Village

Grid Connection – Blocks 210, 211, 62, 34, and 83 District of Coree, and Blocks 504 and 508 District of Stromlo.

DEVELOPMENT PROPOSAL

The proposed development is for a 10 MW AC capacity solar farm to be located on the south east corner of Block 76 District of Coree and the associated aerial connection to the existing electricity grid at the Cotter River.

The solar farm will occupy approximately 27ha of the rural property Uriarra Station and the works will include:

- the installation of solar panels; inverters; 4 x inverter substations and associated equipment in shipping containers ;
- the installation of a 40,000 litre water tank;
- landscape planting along the Brindabella Road boundary;
- security perimeter fencing;
- two new access points off Brindabella Road; and
- an internal access road.

The aerial connection to the electricity grid is approximately 4.2 km long (as designed).

The proponent wants the application for the development approval assessed for an environmental significance opinion on the grounds that the proposal is not likely to have a significant adverse environmental impact, and has applied to the Conservator of Flora and Fauna to that effect.

OPINION

The proposal is not likely to have a significant adverse environmental impact provided that the alignment of the proposed powerline route from Pole 10 to Pole 12 is amended to avoid impacts on the remnant vegetation on the steep rocky slope. This is to be achieved by either going around the remnant vegetation or utilising a taller pole and/or locating the pole further up the hill towards the trig point to ensure that no vegetation within the remnant patch needs to be disturbed. The preferred alignment is to be determined prior to the submission of the development application for the works and clearly shown on plans to be approved.

All works are undertaken in accordance with the conditions listed below.

MANNER IN WHICH DEVELOPMENT PROPOSAL MUST BE UNDERTAKEN:

- That all works are in accordance with a Construction Environment Management Plan approved by the Environment Protection Authority and the Parks and Conservation Service;
- That all works are in accordance with the Code of Practice – Practical Guidelines and Standards for Co-Operation Between Act Parks and Conservation and ActewAGL 2009;
- Machinery and vehicles associated with the works are cleaned of any mud or organic material prior to commencement of construction and when leaving any weed infested area;
- Any mulch or fill utilised as part of the construction or restoration must be free of any significant weeds
- Any weed infestation or localised erosion resulting from construction or use of the existing tracks will be controlled or rectified as directed by the Parks and Conservation Service.
- That any trees planted as part of the revegetation works between Pole 8 and Pole 10, that may need to be removed in the future, are replaced with appropriate small trees or shrubs such as local wattles, cassinia, dodonea or pomaderris.
- Use of the preferred compound site for the powerline works is conditional on restoration of the existing plantings and other rehabilitation works.
- That all temporary access tracks, pole construction zones and compound site(s) are fully restored on completion of works to the satisfaction of the Parks and Conservation Service, including weed mitigation for a minimum of two years.

- That any trees greater than 40cm in diameter removed from the powerline alignment are to be placed in appropriate locations as directed by the Parks and Conservation Service for rehabilitation.

Attached is a Statement of Reasons for the decision.

Ann Lyons Wright
Conservator of Flora and Fauna

16 May 2014

STATEMENT OF REASONS
REASONS FOR THE DECISION

The proposed development is a proposal mentioned in Schedule 4 of the *Planning and Development Act 2007* – Development proposal for an activity requiring an EIS Schedule 4. The development proposal is mentioned in Schedule 4, part 4.3:

> Part 4.3 Item 1
> proposal that is likely to have a significant adverse environmental impact on 1 or more of the following, unless the conservator of flora and fauna produces an environmental significance opinion that the proposal is not likely to have a significant adverse environmental impact:
> (a) a species or ecological community that is endangered;
> (b) a species that is vulnerable;
> (c) a species that is protected;
>
> Part 4.3 Item 2
> the clearing of more than 0.5ha of native vegetation 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;
>
> Part 4.3, item 3,
> being development on land reserved under s. 315 for the purpose of a wilderness area, national park, nature reserve or special purpose reserve.

The proposed works (as designed):

- will have an impact on an area of Yellow Box Red Gum Grassy Woodland, listed as an endangered community under the provisions of the *Nature Conservation Act 1980*;
- involve the clearing of 5.2 ha of native vegetation; and
- parts of the works are within an area reserved as public land special purpose reserve within the Cotter Reserve.

The proponent wants the application for the development approval assessed in the merit track on the grounds that the proposal is not likely to have a significant adverse environmental impact and has applied to the Conservator of Flora and Fauna for an environmental significance opinion (ESO) to that effect.

Meaning of *significant* adverse environmental impact
An adverse environmental impact is ***significant*** if—

> (a) the environmental function, system, value or entity that might be adversely impacted by a proposed development is significant; or

(b) the cumulative or incremental effect of a proposed development might contribute to a substantial adverse impact on an environmental function, system, value or entity.

In deciding whether an adverse environmental impact is ***significant***, the following matters must be taken into account:

(a) the kind, size, frequency, intensity, scope and length of time of the impact;
(b) the sensitivity, resilience and rarity of the environmental function, system, value or entity likely to be affected.

In deciding whether a development proposal is likely to have a significant adverse environmental impact it does not matter whether the adverse environmental impact is likely to occur on the site of the development or elsewhere.

It has been determined that the proposal is unlikely to have a significant environmental impact, based on the documentation submitted and known values of the site.

Project description

OneSun Capital Solar ACT proposes to construct and operate a solar farm of 10 MW (AC) capacity on the south eastern corner of Block 76 Coree. The solar farm will occupy approximately 27ha within the rural property known as Uriarra Station and is to be sited opposite the Uriarra Village adjacent to the Brindabella Road.

The works will include:

- the installation of solar panels;
- installation of inverters; 4 x inverter substations and associated equipment in shipping containers ;
- the installation of a 40,000 litre water tank;
- landscape planting along the Brindabella Road boundary;
- security perimeter fencing;
- two new access points off Brindabella Road; and
- an internal access road.

The proposal also involves an aerial 22kV grid connection from the solar farm to the Cotter River area near the Cotter Pump Station. The grid connection will require the installation of 25 power poles and the powerline will run adjacent to an existing ACTEW 11kV powerline for most of its length. The new powerline will require a 20m easement and clear zone adjacent to the existing powerline easement and will traverse an area of special purpose reserve at the Cotter Reserve.

Installation of the power poles will require working pads of approximately 40 sq metres with four larger pads of approximately 400 sq metres (within the proposed easement) to facilitate the operation of specialist equipment required to run out the aerial cables. Some temporary tracks may need to be prepared for construction access only.

A construction compound will be located on an already cleared area adjacent to Brindabella Road.

Documentation Submitted

Reports titled:

- Report titled Application for Environmental Significance Opinion Part Blocks 34, 62, 76, 83, 210, 211, 218 Coree, Part Blocks 470, 502, 504, 508 Stromlo;
- Report for Uriarra Solar Farm Ecological Constraints Analysis September 2013 (GHD);
- One Sun Capital Powerline Ecological Assessment March 2014 (GHD);
- Report for OneSun Capital Part Block 76 Coree Bushfire Risk Assessment March 2014;
- One Sun Capital Solar Farm, Part Block 76 Coree ACT: Desktopn Cultural Heritage Study 17 march 2014 (Biosis).

Natural conservation values present

Solar Farm

Yellow Box – Red Gum Grassy Woodland, an ecological community listed under the provisions of the *Nature Conservation Act 1980,* was recorded within the southern end of Block 76 and in isolated patches across both the northern and southern parts of Block 76 where isolated paddock trees persist. All occurrences of this community are considered highly degraded as the understorey is dominated by exotic pasture species.

Evidence of six mammal species (Rabbit, Fox, Brushtail Possum, Eastern Grey Kangaroo, Common Wombat and Wallaroo); one reptile (Robust Ctenotus), three common species of frog; and common bird species (Magpie, Galah and Eastern Rosella) were recorded on the site. No threatened species were recorded.

Grid Connection

The powerline route from the proposed location of the solar farm to approximately Pole 8 traverses pine plantation where blackberry and other weeds dominate the understorey. From Pole 8 to 10 the route crosses former pine plantation that has recently been planted with a diversity and abundance of native trees and shrubs. There is also natural regeneration of native grass and herb species as well as native

shrubs and saplings. The plantings were recently undertaken as part of the Million Trees Program and Lower Cotter Catchment Restoration.

As shown in Figure 2.1 of the ecological assessment, from Pole 10 onwards for about 400m the proposed power line route passes over and through a remnant patch of Scribbly Gum – Red Stringybark Open Forest. This open forest, particularly that which occurs to the west of the Mt MacDonald summit, has a relatively high native plant diversity and supports several species that are considered rare in the ACT including Grass Tree *(Xanthorrhoea glauca subsp. Angustifolia),* Leafless Indigo *(Indigofera adesmiifolia),* Bathurst Fireweed (*Senecio bathurstianus)* and Shaggy Rock Fern (*Cheilanthes distans).* The remnant grows on a steep and rocky slope. Pole 11 would be located in an area of particular rare plant abundance. Some of the rare plants are growing within the existing cleared power line easement,

From Pole 12 to the intersection with the Cotter Dam Wall track (around Pole 19) the power line follows former pine plantation, which is either a mixture of mainly pines and blackberry or of planted and regenerating native shrubs and saplings (in which cassinia and blackberry are common). The vegetation in this section has little conservation value and it is likely that a power line could be strung over the majority of the route with only minor felling now or into the future.

From around pole 19 to 150m past Pole 22 the current plans have multiple poles and much clearing of open forest of Brittle Gum – Red Stringybark – Apple (or Bundy) Box. The open forest has high native plant diversity and few weeds (though pine wildings are fairly common) and supports a medium sized population of Grass Trees. The open forest occurs on very steep and rocky slopes, in between the dam wall and Brindabella Road and would be sensitive to disturbance. The existing power line avoids the need for clearance by stringing above these steep sides to a ridge above Brindabella road.

The last section of the power line crosses an area in which Yellow Box trees have been planted and some Yellow Box and Apple Box occur naturally. A list of 29 species typical of Box Gum woodland vegetation were found along this section of the route, including 13 native herbs of which four are considered by the Commonwealth as important species of this community. However the vegetation does not meet the definition of being Box Gum woodland or native vegetation as about 40% of the groundcover is comprised of St Johns Wort, Blackberry or seedlings of the non-local Cootamundra Wattle, as opposed to native perennial plants comprising around 25% and bare ground or litter about 35%.

Proposed compound site
The proposed compound site near poles 18 and 19, has been subject to fairly recent restoration and is quite thickly planted in parts.

The Ecological Report notes that there were 79 flora species found along the alignment of the aerial grid connection. Of these, 58 are native and 21 are introduced species. No threatened flora species were recorded.

The Report also notes that 37 fauna species (including one introduced species) were recorded along the proposed alignment. 32 native bird species were recorded but no listed species. However, one migratory species, the Satin Flycatcher, was recorded during the surveys.

No species or communities protected under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* were found.

Impact of development on these values (including offsite impacts)
Three isolated paddock trees are to be removed for the installation of the solar farm due to over shadowing of the solar panels. These trees should be *dug or pulled out* (so that the root ball remains relatively intact*)* not felled, and then "replanted" as habitat stags in the adjacent Tarpaulin Creek corridor to augment the habitat value of this corridor that runs from the Stony Creek Nature Reserve to the Lower Cotter Catchment. Currently connectivity is poor as the creek corridor vegetation is young. Dead trees are vital habitat for many species in this area and these three trees will add structure and diversity to the corridor.

The existing design shows that Pole 11 would be located in an area of particular rare plant abundance. Some of the rare plants are growing within the existing cleared power line easement but, where possible, further disturbance should be avoided. If Pole 11 was moved slightly to the north-east, it would be possible to avoid the high diversity remnant patch of Scribbly Gum – Red Stringybark Open Forest. This would involve a greater length of power line over the recently planted former pine plantation, but this is preferable to clearing and power line works within the remnant. As an alternative, it may be possible to use a taller pole and/or place it further up the hill towards the trig point so that no vegetation within the remnant patch of open forest would need to be cleared. The ESO is conditional on the proponent adjusting the alignment prior to the submission of the development application to ensure that there is little or no impacts on this remnant patch.

The poles utilised to cross the Murrumbidgee and the final connection to the pump station are in disturbed locations. However the pole should not be shifted more than 20m to the south as this is near the locations of several rare and threatened plants, including *Pomaderris pallida, Bossiaea grayi* and *Bertya rosmarinifolia*

The installation of the aerial powerline as proposed would require the removal of approximately 2.5 hectares of native eucalypt canopy vegetation for the establishment of the clear zone. This area includes about 1.5 hectares of mixed-age and mature woodland and one hectare of land of former Radiata Pine plantation but which is now dominated by regenerating native trees. Approximately 2.5 hectares of Radiata Pine plantation and regrowth will also be impacted. All trees with a growth height of more than four metres will need to be cleared for the establishment of the clear zone, except where the powerline will span gullies with the wires well above the potential growth height of the trees

Eight eucalypt trees with a diameter at breast height of 40 centimetres or greater will require removal, three of which are hollow-bearing trees.

The proposal has the potential to further fragment woodland habitat for a number of species by increasing the gaps in woodland vegetation that provides potential foraging, roosting and movement habitat. For most of its length, the proposed powerline clear zone would run adjacent to the existing powerline clear zone, increasing the existing gap of 20 metres in the canopy vegetation to a gap of about 40 metres. This increase in fragmentation is mainly limited to areas that were previously pine plantation and which now contain native vegetation regrowth. It is unlikely that the loss of regenerating trees would have an immediate impact on vegetation continuity for fauna, particularly given that shrubs would generally be retained.

The removal of three hollow bearing trees has the potential to reduce the amount of nesting, roosting, movement and foraging habitat for fauna in the study area and permanently remove known threatened species habitat from within the subject site. However, their removal is unlikely to significantly impact fauna in the area due to the small number to be removed.

The maintenance of the 40 metre clear zone will permanently retain a gap in the canopy vegetation that would become more pronounced as the surrounding trees grow and mature. It is considered unlikely that the proposed gap in the canopy vegetation of 40 metres would cause significant fragmentation for any species given that shrubs would be retained within the easements.

Any trees that are to be removed for the installation of the power line are to be placed in an appropriate location as directed by the Parks and Conservation Service for rehabilitation.

Potentially Significant Environmental Impacts
The installation of the solar farm is unlikely to have a significant environmental impact as the site is dominated by exotic pasture species.

As shrubs and woody debris will be maintained within the easement of the proposed aerial connection, and the alignment must be amended as proposed, the proposal is unlikely to have a significant impact on the movement of faunal species or ecological community.

It has been determined that the potential for a significant environmental impact is low provided works are in accordance with the conditions as imposed.