Environmental Protection Authority

GOVERNMENT OF WESTERN AUSTRALIA

EPA REFERRAL FORM **PROPONENT**

Referral of a Proposal by the Proponent to the Environmental Protection Authority under Section 38(1) of the *Environmental Protection Act 1986*.

PURPOSE OF THIS FORM

Section 38(1) of the *Environmental Protection Act 1986* (EP Act) provides that where a development proposal is likely to have a significant effect on the environment, a proponent may refer the proposal to the Environmental Protection Authority (EPA) for a decision on whether or not it requires assessment under the EP Act. This form sets out the information requirements for the referral of a proposal by a proponent.

Proponents are encouraged to familiarise themselves with the EPA's *General Guide on Referral of Proposals* [see Environmental Impact Assessment/Referral of Proposals and Schemes] before completing this form.

A referral under section 38(1) of the EP Act by a proponent to the EPA must be made on this form. A request to the EPA for a declaration under section 39B (derived proposal) must be made on this form. This form will be treated as a referral provided all information required by Part A has been included and all information requested by Part B has been provided to the extent that it is pertinent to the proposal being referred. Referral documents are to be submitted in two formats – hard copy and electronic copy. The electronic copy of the referral will be provided for public comment for a period of 7 days, prior to the EPA making its decision on whether or not to assess the proposal.

CHECKLIST

Before you submit this form, please check that you have:

	Yes	No
Completed all the questions in Part A (essential).	Y	
Completed all applicable questions in Part B.	Y	
Included Attachment 1 – location maps.	Y	
Included Attachment 2 – additional document(s) the proponent wishes to provide (if applicable).	Y	
Included Attachment 3 – confidential information (if applicable).	N/A	
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but excluding confidential information.	Y	

Following a review of the information presented in this form, please consider the following question (a response is optional).

Do you consider the proposal requires formal environmental impact assessment? ☐ Yes ☒ No ☐ Not sure
If yes, what level of assessment? ☐ Assessment on Proponent Information ☐ Public Environmental Review

PROPONENT DECLARATION (to be completed by the proponent)

I, **Maurice Ryan**, declare that I am authorised on behalf of **Horizon Power** (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

Signature	Name (print) :Maurice Ryan
Position: Project Director Onslow	Company: Horizon Power
Date: 21 July 2014	

PART A - PROPONENT AND PROPOSAL INFORMATION

(All fields of Part A must be completed for this document to be treated as a referral)

1 PROPONENT AND PROPOSAL INFORMATION

1.1 Proponent

Name	Regional Power Corporation t/a Horizon Power
Joint Venture parties (if applicable)	N/A
Australian Company Number (if applicable)	57 955 011 697
Postal Address (where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State)	PO Box 817 Karratha WA 6714
Key proponent contact for the proposal: ♦ name ♦ address ♦ phone ♦ email	Alastair Trolove PO Box 1066 Bentley DC WA 6983 (08) 6310 1815 alastair.trolove@horizonpower.com.au
Consultant for the proposal (if applicable): ♦ name ♦ address ♦ phone ♦ email	NA

1.2 Proposal

Title	Onslow Power Infrastructure Upgrade Project (OPIUP)
Description	In September 2011 Chevron Australia Propriety Limited (CAPL) and the State of Western Australia, executed an agreement (Ashburton North State Development Agreement (Wheatstone Project) (SDA)) that required CAPL, amongst other things, to develop and execute a project to deliver power infrastructure, including the construction of a power station with a capacity of 9 MW net generation capacity. This project is referred to as the Onslow Power Infrastructure Upgrade Project (OPIUP). After completion of the works the assets will be handed-over to Horizon Power (HP) for ongoing

	ownership and operation. To accommodate redundancy and short term expansion, the power station will have an *installed capacity* of 18 MW. The *net generation capacity* output when commissioned and connected to the town feeders in 2016 is not expected to exceed 10.8 MW. To define, *Installed capacity* is the sum of the MW nameplate ratings of the generating sets installed at the power station, while the *net generation capacity* is the MW output at the terminals of the power station once redundancy, site de-rating, power station parasitic loads and auxiliary loads are taken into account. With reference to Figure 1 (at the end of Section 2.1.4 of this document), the OPIUP will consist of: ♦ Power station on Lot 555 on Plan 74894 including five 2 MW natural gas and four 2 MW diesel fired reciprocating engines. ♦ Natural gas custody transfer facility and infrastructure including pigging equipment, above ground pipeline and metering station ♦ 16 km 33 kV double circuit overhead transmission line to deliver electricity from the power station to a new zone substation at Lot 185.This will be constructed parallel to Onslow road, linking Lot 555 to Lot 185 ♦ Zone substation at Lot 185 Not included in this proposal is the natural gas supply infrastructure to the OPIUP fence line, which will be provided by the Dampier Bunbury Pipeline Services Development Group (DDG). HP, as end owner and operator of the facilities, is the proponent the OPIUP under Part IV of the Environmental Protection Act, 1986 (EP Act).
Extent (area) of proposed ground disturbance.	The OPIUP project area is 326 ha which includes Lot 555, the infrastructure corridor* and Lot 185. The power station infrastructure will be contained within an area of 175 m x 126 m^2.The substation will feature two

	transformers and will likely occupy a 50 x 50 m^2 parcel of land. The transmission line will distribute electricity through 16 km of overhead lines. *Infrastructure corridor for the OPIUP is defined as the 25 metre wide clearance zone around the transmission line.
Timeframe in which the activity or development is proposed to occur (including start and finish dates where applicable).	Pending finalisation of Front-End Engineering and Design (FEED), construction is anticipated to commence in April 2015. The operational phase is anticipated to commence in July 2016.
Details of any staging of the proposal.	This proposal includes the construction, commissioning and operation of five 2 MW gas and four 2 MW diesel reciprocating engines. The facility includes for minor provisions for future expansion, however any expansion would be the subject of a separate referral.
Is the proposal a strategic proposal?	No
Is the proponent requesting a declaration that the proposal is a derived proposal? If so, provide the following information on the strategic assessment within which the referred proposal was identified: ♦ Title of the strategic assessment; and ♦ Ministerial Statement number.	No
Please indicate whether, and in what way, the proposal is related to other proposals in the region.	HP understands that a desalinisation plant and associated infrastructure will be constructed on Lot 556 as part of the Onslow Water Infrastructure Upgrade Project (OWIUP) which will be operated by the Water Corporation. The operating desalinisation plant will provide potable water to the Power Station fire system, crib room and other amenities. The power station will supply power to the operating desalinisation plant. The requirement for the OWIUP is not dependent upon the development of the OPIUP, and as such, the Water Corporation has submitted a separate Environmental Referral for the OWIUP.
Does the proponent own the land on which the proposal is to be established? If not, what other arrangements have been established to access the land?	No. <u>Power Plant & associated infrastructure on Lot 555</u>

	The Department of Lands recently subdivided Lot 524 into three smaller Lots: 555, 556, and 557. Lot 555 is currently Unallocated Crown Land and the Department of Lands has commenced a process to secure Lot 555 and grant the land to HP for the Power Station and associated infrastructure. This process involves a Notice Of Intention To Take land (NOITT) with Lot 555 to become a Crown Reserve with a Management Order issued to Horizon Power. <u>Site access road to the Power Plant</u> A site access road will be constructed to the power plant site on Lot 555 via: ♦ Wheatstone Access Road (PR-1); Lot 519 (currently a Pastoral Lease to Forrest and Forrest with other interest holders. Lot 519 will be vested to Main Roads Western Australia (MRWA) in the future).; and ♦ Traversing Lot 557 (Unallocated Crown Land proposed to be vested to LandCorp.); and ♦ Traversing Lot 556 (Unallocated Crown Landproposed to be vested to Water Corporation). Arrangements will be made with MRWA, other interest holders, Water Corporation and LandCorp. to establish access to the land required for the site access road. <u>Infrastructure Corridor (see definition above)</u> The transmission line will generally be installed within the road reserve for Onslow Road. MRWA is proposing to widen the road reserve for this purpose. A small section of the transmission line will be placed in Crown Reserves under management of the Shire of Ashburton. The section of transmission line affecting the Shires land will be covered by a registered easement over the reserves. Power will be transmitted from Lot 555

	to Lot 185 via the infrastructure corridor, traversing though:: ♦ Lot 556 (Unallocated Crown Land proposed to be vested to the Water Corporation); ♦ Lot 557 (Unallocated Crown Land proposed to be vested to LandCorp.) and Lot 558 (Lot currently vested to LandCorp.); ♦ Existing section of Main Roads Western Australia (MRWA) Onslow / Mt Stuart Rd road reserve; and ♦ Proposed new sections of MRWA Onslow / Mt Stuart Rd road reserve. MRWA has commenced the process to widen, where required, the existing Onslow / Mt Stuart Rd road reserve to accommodate the transmission line. Arrangements will be made with LandCorp. to facilitate the installation of the transmission line through Lot 557 and Lot 558. <u>Substation site</u> Lot 185 is currently a Crown Reserve, vested to the Water Corporation. The Department of Lands, with the consent of the Water Corporation, will be excising a portion of the reserve which will be reallocated to HP to accommodate the substation.
What is the current land use on the property, and the extent (area in hectares) of the property?	BHPB has a temporary license issued by the Department of Lands to access portions of Lot 555 (14.7 ha), Lot 556 (15.4 ha) and Lot 557 (4.8 ha) in order to access an existing artesian bore (MDW4) extracting water from the Birdrong Aquifer and associated facilities (access road, pipeline, pumping station, storage pond). The Access Road will be located entirely within Lots 519 (2.3 ha) and 556. Lot 185 is an existing Crown Reserve, vested to the Water Corporation. It is noted that a wastewater treatment plant is currently being operated on Lot 185 (Reserve 47957) by the Water Corporation The plant treats wastewater to a secondary standard and consists of one series of primary and secondary treatment ponds. The portion of Lot 185 that will be

	reallocated to HP for the substation is not currently utilised for the wastewater treatment plant and consists of sparse vegetation only. Onslow Salt also has an interest over the area in the form of General Purposes Leases – these areas will not be impacted by the proposed works. Lands within the proposed infrastructure corridor are Crown Reserve, or subject to the Minderoo pastoral lease. The Infrastructure Corridor will be located entirely within the proposed expansion to the MRWA Road Reserve and the Multi-User Access and Infrastructure Corridor (MUAIC) section of the Ashburton North Strategic Industrial Area (ANSIA).

1.3 Location

Name of the Shire in which the proposal is located.	Shire of Ashburton
For urban areas: ♦ street address; ♦ lot number; ♦ suburb; and ♦ nearest road intersection.	N/A
For remote localities: ♦ nearest town; and ♦ distance and direction from that town to the proposal site.	<u>Lot 555</u> The nearest town is Onslow which is located ~18 km north east of Lot 555. <u>Lot 185</u> Location of zone substation, situated approximately 2 km from the town of Onslow. The transmission line will be constructed between these two lots.
Electronic copy of spatial data - GIS or CAD, geo-referenced and conforming to the following parameters: ♦ GIS: polygons representing all activities and named; ♦ CAD: simple closed polygons representing all activities and named; ♦ datum: GDA94; ♦ projection: Geographic (latitude/longitude) or Map	Enclosed?: Yes

Grid of Australia (MGA); ♦ format: Arcview shapefile, Arcinfo coverages, Microstation or AutoCAD.	

1.4 Confidential Information

Does the proponent wish to request the EPA to allow any part of the referral information to be treated as confidential?	No
If yes, is confidential information attached as a separate document in hard copy?	N/A

1.5 Government Approvals

Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.		No.	
Is approval required from any Commonwealth or State Government agency or Local Authority for any part of the proposal? If yes, please complete the table below.		Yes. The approvals required for the Project include environmental, land tenure and other regulatory approvals such as planning approvals, works approvals, permits and licences. A list of likely approvals is provided below.	
Agency/Authority	**Approval required**	**Application lodged** **Yes / No**	**Agency/Local Authority contact(s) for proposal**
Department of Commerce	Registration of the Design of items of Plant	No	Energy Licensing Phone: (08) 9422 5200 Email: energylicensing@commerce.wa.gov.au
Department of Commerce	Type B Gas Appliance Approvals	No	Energy Licensing Phone: (08) 9422 5200 Email: energylicensing@commerce.wa.gov.au
Department of Environment Regulation	Geotechnical Native Vegetation Clearing Permit	Yes	DER Native Vegetation Conservation Branch Phone: 9219 8744
Department of Environment Regulation	Construction Native Vegetation Clearing Permit	No	DER Native Vegetation Conservation Branch Phone: 9219 8744
Department of Environment Regulation	Works Approval	No	DER Industry Licensing System Email: ils@dec.wa.gov.au
Department of Environment	Approval to Transport Solid	No	DER Industry Licensing System Email: ils@dec.wa.gov.au

Regulation	and Liquid controlled Waste		
Department of Environment Regulation	Licence to Operate CATEGORY 84	No	DER Industry Licensing System Email: ils@dec.wa.gov.au
Department of Health (DoH)	Poisons Permit	No	DoH Phone: (08) 9222 6883 Email: poisons@health.wa.gov.au
Department of Indigenous Affairs (DIA)	Section 18	No	Register of Aboriginal Sites Phone: 1300 651 077 Email: register@dia.wa.gov.au
Department of Lands (DoL)	Easement in Gross	No	Kevin Emrose Manager Major Projects Kevin.Emrose@lands.wa.gov.au
Department of Mines and Petroleum	Dangerous Goods License	No	Dangerous Good Phone: (08) 9358 8001 Email: dgsb@dmp.wa.gov.au
Department of Lands (DoL)	Management order/ Freehold Title to Horizon Power	No	DoL Phone: (08) 6552 4400
Department of Lands (DoL)	Section 91 for investigative works	Yes	Kevin Emrose Manager Major Projects Kevin.Emrose@lands.wa.gov.au
Economic Regulation Authority	License to construct and operate an electricity network pursuant to *Electricity Industry Act 2004*	No	Mr Paul Kelly Executive Director Licensing Phone 6557 7900
Main Roads WA	Permission to install infrastructure within a Main Road Corridor	No	Ernie Reynolds Network Manager Gascoyne Region 9941 0718
Shire of Ashburton	Permit to Use Ablutions	No	Principal Health Officer: Rob Paull Email: rob.paull@ashburton.wa.gov.au
Shire of Ashburton	Planning Approval (including transmission lines)	No	Principal Town Planner: Lee Reddell Email: Lee.Reddell@ashburton.wa.gov.au
Shire of Ashburton	Application to Construct Effluent Storage Tanks	No	Principle Health Officer

PART B - ENVIRONMENTAL IMPACTS AND PROPOSED MANAGEMENT

2. ENVIRONMENTAL IMPACTS

Describe the impacts of the proposal on the following elements of the environment, by answering the questions contained in Sections 2.1 to 2.11:

2.1 Flora and vegetation;
2.2 Fauna;
2.3 Rivers, creeks, wetlands and estuaries;
2.4 Significant areas and/ or land features;
2.5 Coastal zone areas;
2.6 Marine areas and biota;
2.7 Water supply and drainage catchments;
2.8 Pollution;
2.9 Greenhouse gas emissions;
2.10 Contamination; and
2.11 Social surroundings.

These features should be shown on the site plan, where appropriate. For all information, please indicate the:

a) Source of the information; and
b) Currency of the information.

2.1 Flora and Vegetation

2.1.1 Do you propose to clear any native flora and vegetation as a part of this proposal?

[A proposal to clear native vegetation may require a clearing permit under Part V of the EP Act (Environmental Protection (Clearing of Native Vegetation) Regulations 2004)]. Please contact the Department of Environment and Conservation (DEC) for more information.

(please tick)	X Yes	If yes, complete the rest of this section.
	☐ No	If no, go to the next section

2.1.2 How much vegetation are you proposing to clear (in hectares)?

The Project Area is 326 ha, however it is anticipated that the final quantity of vegetation cleared will be less than 100 ha following finalisation of detailed design. Existing disturbed areas will be used where practicable.

2.1.3 Have you submitted an application to clear native vegetation to the DEC (unless you are exempt from such a requirement)?

X Yes ☐ No

If yes, on what date and to which office was the application submitted of the DEC?

On 17 October 2013, Chevron received from the Department of Environment Regulation (DER) a Native Vegetation Clearing Permit (NVCP). The permit authorises Chevron to clear 30 hectares of vegetation in order to conduct geotechnical, contaminated land, cadastral, heritage and other site investigations.

If the OPIUP is not assessed under Part IV of the EP Act as expected, CAPL will apply for an NVCP to cover construction activities. The application will be finalised on completion of detailed design and will be a subset of the Project Area identified in this document.

2.1.4 Are you aware of any recent flora surveys carried out over the area to be disturbed by this proposal?

X Yes ☐ No

If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey(s).

If no, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.

Over seven flora and vegetation surveys have been conducted over the last five years in the OPIUP Project Area locality. The results of these surveys, along with recent database searches, have been summarised in the attached supporting documentation and Biota Environmental Services (Biota) report. As shown on Figure 1, the Biota report encompasses a Survey Area of 1669 ha. The Project expects to disturb less than 100 ha of the 326 ha Project Area.

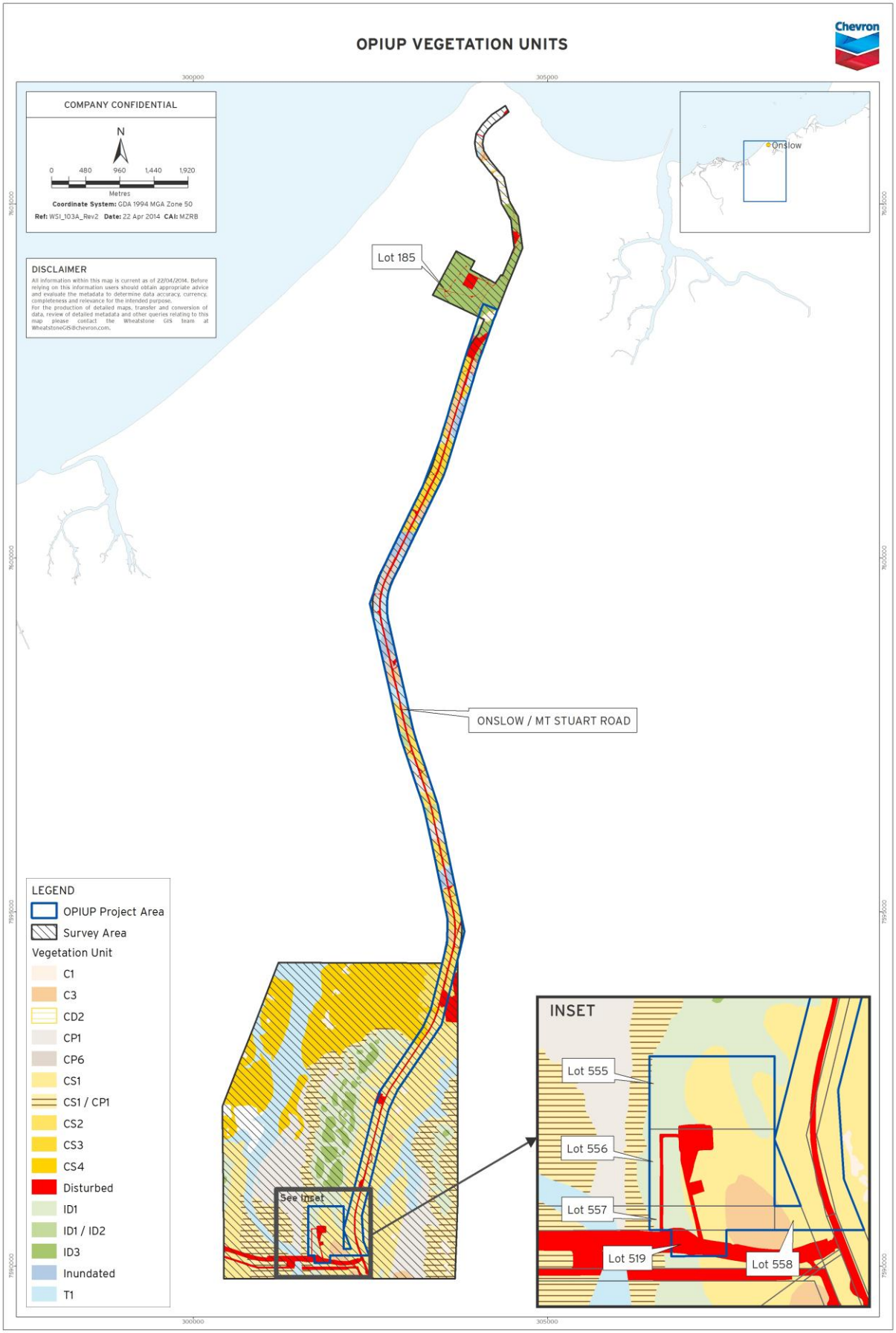

Figure 1: Vegetation units in the OPIUP Project area

2.1.5 Has a search of DEC records for known occurrences of rare or priority flora or threatened ecological communities been conducted for the site?

X Yes ☐ No

If you are proposing to clear native vegetation for any part of your proposal, a search of DEC records of known occurrences of rare or priority flora and threatened ecological communities will be required. Please contact DEC for more information.

2.1.6 Are there any known occurrences of rare or priority flora or threatened ecological communities on the site?

X Yes ☐ No

If yes, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

The DEC Rare Flora database search was conducted as part of the attached Biota 2013 report. No Threatened Flora listed under the *Environment Protection Act 1986* was recorded in the Project Area, or the wider Survey Area.

Using a ranking system (see Biota 2013) three vegetation units of High conservation significance were identified in the Survey Area. They include:

High Significance:

- The inland sand dune vegetation units (ID1 and ID2) potentially support Priority flora (*Eremophila forrestii* subsp. *viridis* and *Triumfetta. echinata*), as well as other species of interest (*Aenictophyton* aff. *reconditum*), while the dune landform is particularly susceptible to erosion and weed invasion following disturbance to the soil profile (Biota 2010a).

- The samphire shrublands (C3) may contain a number of poorly recognised *Tecticornia* species whose distributions in the region are also difficult to determine. This vegetation unit has the potential to contain the Priority flora species *Eleocharis papillosa*, which is listed as Vulnerable under the EPBC Act (Biota 2010a).

One species listed as Priority Flora (*T. echinata* [Priority 3]) is known to occur within the Project Area (Lot 556). This species has been recorded on a ridge of red sand dunes within the Project Area, typical of the known habitat for the species (Biota 2013). Although the species is not protected by legislation, a precautionary approach to minimise impacts on *T. echinata* will be adopted, through the protection of potential habitat for the species where practicable. This habitat (ID1 and ID2 vegetation units) is not restricted to Lot 556 and is common and widespread in the locality as shown in Table 1. The species has also been recorded from numerous locations outside of the Project Area (Chevron 2010).

Table 1: Expected impact of OPIUP on High Conservation Significant vegetation units

Vegetation Unit Code	Description	Amount in Project Area	Amount in Survey Area (as shown on Figure 1)	Additional unit mapped by other surveys	Percentage of known extent to be cleared
ID1	*Grevillea stenobotrya* tall open shrubland over	14.97 ha plus 4.93 ha in mosaic	136.25 ha, plus 4.91 ha in mosaic	140.29 ha	14.18%

Vegetation Unit Code	Description	Amount in Project Area	Amount in Survey Area (as shown on Figure 1)	Additional unit mapped by other surveys	Percentage of known extent to be cleared
	Crotalaria cunninghamii, Trichodesma zeylanicum var. *Grandiflorum* open shrubland over *Triodia epactia* open hummock grassland	with unit ID2	with unit ID2		
ID2	*Grevillea stenobotrya* tall open shrubland over *Crotalaria cunninghamii, Hibiscus brachychlaenus* open shrubland over *Triodia schinzii, (T. epactia)* open hummock grassland	4.93 ha, occurs only in mosaic with unit ID2	4.91 ha, occurs only in mosaic with ID1.	197.20 ha	3.51%

A search of DEC's Threatened Ecological Community and Priority Ecological Community database showed that there were no occurrences of Threatened or Priority Ecological Communities within 35 km of the Project Area. The nearest ecological community of conservation significance is the Priority 1 Peedamulla (Cane River) Swamp Community located 50 km away.

2.1.7 If located within the Perth Metropolitan Region, is the proposed development within or adjacent to a listed Bush Forever Site? (You will need to contact the Bush Forever Office, at the Department for Planning and Infrastructure)

☐ Yes **X** No **If yes**, please indicate which Bush Forever Site is affected (site number and name of site where appropriate).

2.1.8 What is the condition of the vegetation at the site?

The Project Area is characteristic of the Carnarvon bioregion, comprised mainly of sparse *Acacia* shrubs over dense *Triodia* grasslands (Biota 2013). The Project Area has a long history of pastoralism and associated weed proliferation. Approximately 14% of the Project Area has been mapped as disturbed, including the majority of the services easement, which is subject to frequent disturbance due to its close proximity to the Onslow road.

The condition of vegetation in flora survey quadrats intersecting with the wider Survey Area were assessed using a modified vegetation condition scale adapted from the BushForever guidelines (Biota 2013). Vegetation condition derived from the flora surveys determined that the vegetation ranged from Completely Degraded to Very Good on the vegetation condition scale, generally depending on the level of weed proliferation. Sites assessed as Completely Degraded have vegetation structure that is almost completely without native species. Sites assessed as Very Good have vegetation structures largely intact with only occasional weed species. The majority of the vegetation units within the Project Area all contain the aggressive environmental weed *Cenchrus ciliaris* from occasional records through to significant proportions of the grassland strata. None of the vegetation units within the Project Area were assessed as Excellent (pristine).

2.2 Fauna

2.2.1 Do you expect that any fauna or fauna habitat will be impacted by the proposal?

(please tick) **X** Yes — **If yes**, complete the rest of this section.

☐ No — **If no**, go to the next section.

2.2.2 Describe the nature and extent of the expected impact.

The greatest impact to fauna as a result of implementing this proposal will be due to vegetation clearing. Whilst vegetation clearing (less than 100 ha) will remove some fauna habitat, significant habitat, consistent with that which will be disturbed, exists outside of the Project Area. Temporary disturbances include noise, light and increased human presence. These impacts are expected to be minor at a population scale. Disturbance to fauna from construction activities will be of a short-term nature and are not expected to impact the populations of any fauna.

2.2.3 Are you aware of any recent fauna surveys carried out over the area to be disturbed by this proposal?

X Yes ☐ No

If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey(s).

If no, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.

Over nine terrestrial fauna surveys have been conducted over the last five years in the OPIUP Project Area locality. These works include surveys focussing on terrestrial vertebrate fauna, invertebrate fauna (including claypan fauna and short-range endemic species) and migratory birds. The results of these fauna surveys, along with recent database searches, have been summarised in the attached supporting documentation and Biota 2013 report.

2.2.4 Has a search of DEC records for known occurrences of Specially Protected (threatened) fauna been conducted for the site?

X Yes ☐ No (please tick)

The search of DEC records determined that there are no known occurrences of specially protected fauna likely to be restricted to the Project Area (Biota 2013).

2.2.5 Are there any known occurrences of Specially Protected (threatened) fauna on the site?

☐ Yes **X** No

If yes, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

There are no known occurrences of any specially protected (threatened) fauna from within the Project Area. Fauna species of conservation significance that are known to occur in one or more of the habitats present within the wider study area include the Little Northern Freetail Bat *Mormopterus loriae cobourgensis*, Australian Bustard *Ardeotis australis*, Short-tailed Mouse *Leggadina lakedownensis*, *Lerista planiventralis*, Bush Stone Curlew *Burhinus grallarius*, Eastern Curlew *Numenius madagascariensis* and the Peregrine Falcon *Falco peregrines* (Biota 2013).

None of these highly mobile species are likely to be affected by the proposed development, due to the small proportion of suitable habitat cleared relative to their wider distribution within the region (Biota 2013).

2.3 Rivers, Creeks, Wetlands and Estuaries

2.3.1 Will the development occur within 200 metres of a river, creek, wetland or estuary?

(please tick) **X** Yes **If yes**, complete the rest of this section.

☐ No **If no**, go to the next section.

2.3.2 Will the development result in the clearing of vegetation within the 200 metre zone?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact.

2.3.3 Will the development result in the filling or excavation of a river, creek, wetland or estuary?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact.

2.3.4 Will the development result in the impoundment of a river, creek, wetland or estuary?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact.

2.3.5 Will the development result in draining to a river, creek, wetland or estuary?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact.

2.3.6 Are you aware if the proposal will impact on a river, creek, wetland or estuary (or its buffer) within one of the following categories? (please tick)

Conservation Category Wetland	☐ Yes	X No	☐ Unsure
Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998	☐ Yes	X No	☐ Unsure
Perth's Bush Forever site	☐ Yes	X No	☐ Unsure
Environmental Protection (Swan & Canning Rivers) Policy 1998	☐ Yes	X No	☐ Unsure
The management area as defined in s4(1) of the Swan River Trust Act 1988	☐ Yes	X No	☐ Unsure
Which is subject to an international agreement, because of the importance of the wetland for waterbirds and waterbird habitats (e.g. Ramsar, JAMBA, CAMBA)	☐ Yes	X No	☐ Unsure

2.4 Significant Areas and/ or Land Features

2.4.1 Is the proposed development located within or adjacent to an existing or proposed National Park or Nature Reserve?

☐ Yes **X** No **If yes**, please provide details.

2.4.2 Are you aware of any Environmentally Sensitive Areas (as declared by the Minister under section 51B of the EP Act) that will be impacted by the proposed development?

☐ Yes **X** No **If yes**, please provide details.

2.4.3 Are you aware of any significant natural land features (e.g. caves, ranges etc) that will be impacted by the proposed development?

☐ Yes **X** No **If yes**, please provide details.

2.5 Coastal Zone Areas (Coastal Dunes and Beaches)

2.5.1 Will the development occur within 300metres of a coastal area?

(please tick) ☐ Yes **If yes**, complete the rest of this section.

X No **If no**, go to the next section.

2.5.2 What is the expected setback of the development from the high tide level and from the primary dune?

NA

2.5.3 Will the development impact on coastal areas with significant landforms including beach ridge plain, cuspate headland, coastal dunes or karst?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact.

2.5.4 Is the development likely to impact on mangroves?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact.

2.6 Marine Areas and Biota

2.6.1 Is the development likely to impact on an area of sensitive benthic communities, such as seagrasses, coral reefs or mangroves?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact.

2.6.2 Is the development likely to impact on marine conservation reserves or areas recommended for reservation (as described in *A Representative Marine Reserve System for Western Australia*, CALM, 1994)?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact.

2.6.3 Is the development likely to impact on marine areas used extensively for recreation or for commercial fishing activities?

☐ Yes **X** No **If yes**, please describe the extent of the expected impact, and provide any written advice from relevant agencies (e.g. Fisheries WA).

2.7 Water Supply and Drainage Catchments

2.7.1 Are you in a proclaimed or proposed groundwater or surface water protection area?

(You may need to contact the Department of Water (DoW) for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)

☐ Yes **X** No **If yes**, please describe what category of area.

2.7.2 Are you in an existing or proposed Underground Water Supply and Pollution Control area?

(You may need to contact the DoW for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)

☐ Yes **X** No **If yes**, please describe what category of area.

2.7.3 Are you in a Public Drinking Water Supply Area (PDWSA)?

(You may need to contact the DoW for more information or refer to the DoW website. A proposal to clear vegetation within a PDWSA requires approval from DoW.)

☐ Yes **X** No **If yes**, please describe what category of area.

2.7.4 Is there sufficient water available for the proposal?

(Please consult with the DoW as to whether approvals are required to source water as you propose. Where necessary, please provide a letter of intent from the DoW)

X Yes ☐ No (please tick)

2.7.5 Will the proposal require drainage of the land?

X Yes ☐ No **If yes**, how is the site to be drained and will the drainage be connected to an existing Local Authority or Water Corporation drainage system? Please provide details.

Uncontaminated storm water will be managed and released through a controlled outflow to the environment.

2.7.6 Is there a water requirement for the construction and/ or operation of this proposal?

(please tick) **X** Yes **If yes**, complete the rest of this section.

☐ No **If no**, go to the next section.

2.7.7 What is the water requirement for the construction and operation of this proposal, in kilolitres per year?

Construction water estimated to be approximately 500,000 KL spread over 13 months. Main water uses during construction will include dust suppression and use in general bulk earthworks. Expected water usage during normal operation will be minimal and associated with domestic use e.g. toilets, sinks etc.. Fire water tanks are expected to be around 110,000L in total storage. All potable water to be sourced from the adjacent Water Corporation facility.

2.7.8 What is the proposed source of water for the proposal? (e.g. dam, bore, surface water etc.)

The proposed source of water for the construction of Project is from production bore MDW4 (currently owned by BHPB) located on Lot 556. OWIUP will provide water to the Project during operation.

2.8 Pollution

2.8.1 Is there likely to be any discharge of pollutants from this development, such as noise, vibration, gaseous emissions, dust, liquid effluent, solid waste or other pollutants?

(please tick) **X** Yes **If yes**, complete the rest of this section.

☐ No **If no**, go to the next section.

2.8.2 Is the proposal a prescribed premise, under the Environmental Protection Regulations 1987?

(Refer to the EPA's *General Guide for Referral of Proposals to the EPA under section 38(1) of the EP Act 1986* for more information)

X Yes ☐ No **If yes**, please describe what category of prescribed premise.

Category 52 - *Electric power generation: premises (other than premises within category 53 or an emergency or standby power generating plant) on which electrical power is generated using* a fuel. 20 MW or more in aggregate (using natural gas) 10 MW or more in aggregate (using a fuel other than natural gas).

2.8.3 Will the proposal result in gaseous emissions to air?

X Yes ☐ No **If yes**, please briefly describe.

Emissions to air will likely result from gas and diesel fuel combustion. The primary air pollutants of concern regarding the power plant include carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter (PM10) and volatile organic compounds (VOCs).

2.8.4 Have you done any modelling or analysis to demonstrate that air quality standards will be met, including consideration of cumulative impacts from other emission sources?

X Yes ☐ No **If yes**, please briefly describe.

An original air assessment (AECOM 2012a) was compiled on the basis of a proposed power plant designed to be capable of delivering 9 MW net generation, with an installed capacity of 20 MW, at a site adjacent to Onslow Airport.

Based on a revised location for the Project Area and increased net generation output, an Addendum to the original air assessment was prepared (AECOM 2012b). This addendum investigated the potential air quality impacts of locating the proposed power plant at an alternative site within the recently subdivided Lot 524 approximately 18 km south of Onslow. In addition to the alternative location, the potential impacts from increasing the power plant's operating capacity to 40 MW net generation, with an installed capacity output of 60 MW were assessed.

Atmospheric dispersion modelling was undertaken using CALPUFF. The pollutants assessed were NO_2, fine particulate matter ($PM_{2.5}$, PM_{10}), CO and volatile organic compounds (VOCs) and were forecast at ground level locations across a 30 km x 30 km grid. Due to the remote location of Lot 555, no sensitive receptor locations were identified. The forecast concentrations indicate that the proposed power plant will comply with the ambient air quality standards at all emission intensities modelled.

2.8.5 Will the proposal result in liquid effluent discharge?

☐ Yes **X** No **If yes**, please briefly describe the nature, concentrations and receiving environment.

2.8.6 If there is likely to be discharges to a watercourse or marine environment, has any analysis been done to demonstrate that the State Water Quality Management Strategy or other appropriate standards will be able to be met?

☐ Yes **X** No **If yes**, please describe.

2.8.7 Will the proposal produce or result in solid wastes?

X Yes ☐ No **If yes**, please briefly describe the nature, concentrations and disposal location/ method.

The construction and operation of the OPIUP is expected to result in the production of general solid waste streams. This waste will be managed through a Waste Management Plan.

2.8.8 Will the proposal result in significant off-site noise emissions?

☐ Yes **X** No **If yes**, please briefly describe.

2.8.9 Will the development be subject to the Environmental Protection (Noise) Regulations 1997?

X Yes ☐ No **If yes**, has any analysis been carried out to demonstrate that the proposal will comply with the Regulations?

Please attach the analysis.

The modelling predictions of the noise emissions from the 9 MW firm capacity power plant and its substation were conducted using the CONCAWE algorithm, as implemented by SoundPLAN 7.0 noise modelling software suite (2012c). The modelling assessment concluded that with the provision of relevant buffer zones and implementation of noise control measures for the power plant and substation,

the cumulative noise impacts from the station and the substation on the adjacent affected areas are expected to comply with relevant noise criteria.

Noise modelling incorporating final detailed designed will be undertaken prior to construction of the OPIUP and the implementation of noise control measures will be assessed to ensure the Environmental Protection (Noise) Regulations are met.

2.8.10 Does the proposal have the potential to generate off-site, air quality impacts, dust, odour or another pollutant that may affect the amenity of residents and other "sensitive premises" such as schools and hospitals (proposals in this category may include intensive agriculture, aquaculture, marinas, mines and quarries etc.)?

☐ Yes **X** No **If yes**, please describe and provide the distance to residences and other "sensitive premises".

2.8.11 If the proposal has a residential component or involves "sensitive premises", is it located near a land use that may discharge a pollutant?

☐ Yes **X** No ☐ Not Applicable

If yes, please describe and provide the distance to the potential pollution source

2.9 Greenhouse Gas Emissions

2.9.1 Is this proposal likely to result in substantial greenhouse gas emissions (greater than 100 000 tonnes per annum of carbon dioxide equivalent emissions)?

☐ Yes **X** No **If yes**, please provide an estimate of the annual gross emissions in absolute and in carbon dioxide equivalent figures.

2.9.2 Further, if yes, please describe proposed measures to minimise emissions, and any sink enhancement actions proposed to offset emissions.

2.10 Contamination

2.10.1 Has the property on which the proposal is to be located been used in the past for activities which may have caused soil or groundwater contamination?

☐ Yes **X** No ☐ Unsure **If yes**, please describe.

It is noted that a wastewater treatment plant is currently being operated on Lot 185 Reserve 47957 by the Water Corporation (license L7463/1991/7). The plant treats wastewater to a secondary standard and consists of one series of primary and secondary treatment ponds.

2.10.2 Has any assessment been done for soil or groundwater contamination on the site?

☐ Yes **X** No **If yes**, please describe.

2.10.3 Has the site been registered as a contaminated site under the *Contaminated Sites Act 2003*? (on finalisation of the CS Regulations and proclamation of the CS Act)

☐ Yes **X** No **If yes**, please describe.

2.11 Social Surroundings

2.11.1 Is the proposal on a property which contains or is near a site of Aboriginal ethnographic or archaeological significance that may be disturbed?

☐ Yes ☐ No **X** Unsure **If yes**, please describe.

Heritage surveys of the project area will be undertaken prior to construction to confirm whether the property contains or is near a site of Aboriginal ethnographic or archaeological significance. If heritage monitors identify items or sites of cultural significance that cannot be avoided, a Section 18 licence to disturb an Aboriginal site under the *Aboriginal Heritage Act 1972* will be applied for.

2.11.2 Is the proposal on a property which contains or is near a site of high public interest (e.g. a major recreation area or natural scenic feature)?

☐ Yes **X** No **If yes**, please describe.

2.11.3 Will the proposal result in or require substantial transport of goods, which may affect the amenity of the local area?

☐ Yes **X** No **If yes**, please describe.

3. PROPOSED MANAGEMENT

3.1 Principles of Environmental Protection

3.1.1 Have you considered how your project gives attention to the following Principles, as set out in section 4A of the EP Act? (For information on the Principles of Environmental Protection, please see EPA Position Statement No. 7, available on the EPA website)

1. The precautionary principle.	**X** Yes	☐ No
2. The principle of intergenerational equity.	**X** Yes	☐ No
3. The principle of the conservation of biological diversity and ecological integrity.	**X** Yes	☐ No
4. Principles relating to improved valuation, pricing and incentive mechanisms.	**X** Yes	☐ No
5. The principle of waste minimisation.	**X** Yes	☐ No

3.1.2 Is the proposal consistent with the EPA's Environmental Protection Bulletins/Position Statements and Environmental Assessment Guidelines/Guidance Statements (available on the EPA website)?

X Yes ☐ No

3.2 Consultation

3.2.1 Has public consultation taken place (such as with other government agencies, community groups or neighbours), or is it intended that consultation shall take place?

X Yes ☐ No **If yes**, please list those consulted and attach comments or summarise response on a separate sheet.

An overview of stakeholder consultation is provided in Section 5.0 of the supporting report.