

Statement of Reasons

POWER AND WATER CORPORATION – WADEYE HIGH VOLTAGE INTERCONNECT TO PEPPIMENARTI AND PALUMPA PROJECT

PROPOSAL

Power and Water Corporation (PWC) (the Proponent), submitted a Notice of Intent (NOI) for the Wadeye High Voltage Interconnect to Peppimenarti and Palumpa Project (the Proposal) to the Northern Territory Environment Protection Authority (NT EPA) on 22 August 2018 for consideration under the *Environmental Assessment Act* (EA Act).

The Proponent proposes to:

- construct and install approximately 70.5 km of high voltage (22kV) powerline above ground in two sections:
 - Eastern section approximately 29.7 km from Wadeye toward Palumpa
 - Western section from Palumpa extending approximately 40.6 km to Peppimenarti
- connect the powerline to a new seven megawatt (MW) natural gas power station near Wadeye
- maintain the powerline and corridor.

Construction of the Proposal would require:

- clearing an initial 40 m wide (296 ha) corridor for powerline construction (some of which may occur in watercourses)
- extracting 135 m³ of water from PWC licensed borefields (or in accordance with a Contractor-obtained surface water extraction licence)
- placement of 420 poles (excavated to an average of 2.2 m deep), 12-20 m high and approximately 170 m apart within the powerline corridor
- rehabilitation / vegetation regrowth of 207.2 ha (area cleared for construction, but not required for permanent access during operation).

Post-construction, operation and maintenance of the powerline corridor would require:

- maintenance of a 12 m wide (88.8 ha) corridor.
- clearing or maintenance of vegetation within the corridor to below 5-10 cm height.
- extracting water from PWC licensed borefields.

Construction is anticipated to commence 2019 Dry season and is estimated to take four months.

The NOI indicates the Proposal will:

- increase efficiency and reliability of electricity services to Palumpa and Peppimenarti communities
- achieve savings in fuel, maintenance, staff and air emissions
- achieve a reduction of approximately 43,000 tonnes of carbon dioxide emissions over 20 years
- achieve 100 % reduction of nitrous oxide and 20 % reduction of particulate emissions.

The Proposal is located near Wadeye, 215 km south-west of Darwin and 80 km south-west of Daly River. The powerline would be aligned predominantly adjacent to the Daly River - Port Keats Road, 50 – 55 m offset from the road centreline.

The powerline corridor would traverse unzoned land in the Daly River-Port Keats Aboriginal Land Trust, and zoned land within the Wadeye township. The powerline corridor would pass through the *Hyland Bay and associated coastal floodplains* Site of Conservation Significance (SoCS).

CONSULTATION

The NOI has been reviewed as a notification under the EA Act in consultation with Northern Territory Government (NTG) advisory bodies (see Attachment A) and the responsible Minister under the *Electricity Reform Act* (Minister for Essential Services), in accordance with clause 8(1) of the Environmental Assessment Administrative Procedures.

JUSTIFICATION

The NOI was assessed against the NT EPA’s environmental factors and objectives. Review by the NT EPA and Northern Territory Government (NTG) advisory bodies identified potential for significant impacts to two key environmental factors: terrestrial flora and fauna, and terrestrial environmental quality (Table 1).

The NT EPA considered the importance of other environmental factors during the course of its assessment, however those factors were not identified as key. Further discussion of the NT EPA’s assessment is provided in the following sections.

Theme	Key Environmental Factor
Land	1. Terrestrial flora and fauna
	2. Terrestrial environmental quality

Table 1 Key environmental factors

1. Terrestrial flora and fauna

Objective: Protect the NT’s flora and fauna so that biological diversity and ecological integrity are maintained.

Flora

Vegetation types mapped within the proposed powerline corridor include: Eucalypt open-forest with grassy understorey, Eucalypt woodland with grassy understorey, Melaleuca forest to woodlands and Eucalypt low open-woodland with hummock grass understorey.

The Proponent identified one threatened plant species, *Cycas armstrongii* (Vulnerable, *Territory Parks and Wildlife Conservation Act* (TPWC Act)) located in several locations of *Eucalyptus miniata/tetradonta* woodland in the western (Wadeye to Palumpa) proposed clearing area. However, the Department of Environment and Natural Resources (DENR) suggests the species is more likely to be the non-threatened *Cycas maconochei* due to contemporary records indicating *C. armstrongii* is not located within 140 km of the proposal. On this basis, the proposal is unlikely to have a significant impact on *C. armstrongii*.

The Proponent identified that the threatened plants *Brachychiton sp. Wangi* and *Hibbertia muelleri* may occur within or immediately adjacent to the proposed alignment, however the

proposal area is unlikely to contain critical habitat for, or significant populations of these species. The DENR agrees with this assessment.

The proposed alignment largely avoids sensitive/significant wetlands and rainforests (including monsoon closed forests and monsoon vine thickets), although a number of waterway crossings will require limited clearing of riparian vegetation (approximately 18 ha).

The Proponent proposes to minimise the footprint of any vegetation clearing in riparian areas and implement alternative management actions for vegetation maintenance designed to minimise the ongoing disturbance of these areas during the life of the infrastructure. These measures are supported by the DENR Flora and Fauna Division.

Fauna

The Proponent has correctly identified the majority of the threatened, significant or migratory fauna species that have the potential to inhabit the general area surrounding the proposed powerline. In addition, the DENR Flora and Fauna Division advised that Gouldian finch, partridge pigeon, Mertens' water monitor, Mitchell's water monitor and yellow-spotted monitor may occur within the Proposal area, however, the area is unlikely to contain critical habitat for, or significant populations of, these species.

The DENR Flora and Fauna Division supports the conclusions of the NOI, that the risks to populations at the regional scale are likely to be low given the relatively minimal nature of the disturbance adjacent to existing linear infrastructure within a largely intact landscape.

While potential impacts to threatened fauna are not considered to be significant, the NT EPA supports recommendations from the DENR Flora and Fauna Division to further reduce impacts, including:

- retention of one large raptor nest located within the powerline corridor at a creek crossing near Peppimenarti
- avoiding or minimising the clearing of large hollow-bearing trees that may provide habitat for black-footed tree-rat and masked owl.

While there is still some uncertainty regarding the occurrence of the remaining threatened species in the Proposal area due to sparse data in this region, risks to populations of these species are likely to be low given the relatively minimal nature of the disturbance adjacent to existing linear infrastructure within a largely intact landscape.

Consistent with advice from DENR Flora and Fauna, the NT EPA accepts that risks to threatened species and sensitive/significant vegetation communities as a result of the proposal are likely to be low, and with the implementation of proposed mitigation measures, the NT EPA's objective for terrestrial flora and fauna is likely to be met.

2. Terrestrial environmental quality

Objective: Maintain the quality of land and soils so that environmental values are protected.

Potential impacts to land and soil are likely due to land clearing required for the construction and operation of the Proposal. There may be indirect impact to inland water environmental quality via erosion.

The powerline will cross the Moyle River and nine other seasonal creeks. The Proponent states that the distance between the power poles will be between 160 - 180 m to allow for flexibility to place power poles around wetland areas where possible. The NT EPA supports avoiding works around wetland areas where possible.

The powerline corridor will pass through rudosols and kandosols which are both highly erodible soils. There is a risk of erosion during both the construction and operation of the powerline. To address this risk, the Proponent has committed to developing and implementing an Erosion and Sediment Control Plan (ESCP), in accordance with the International Erosion Control Association (IECA) 2008 *Best Practice Guidelines for Erosion and Sediment Control*. The NT EPA supports this approach.

The Proposal states that 420 m³ of soil material will be excavated for the installation of the power poles. No information has been provided regarding the disposal or use of this material, however, the NT EPA acknowledges that the proposed ESCP and Construction Environmental Management Plan (CEMP) will mitigate any potential risk of sedimentation from stockpiling or disposal of soil material.

The NOI states that any vegetation removed from the powerline corridor will be stockpiled for use during rehabilitation. This stockpiled material poses an increased fire risk and the Proponent needs to be made aware of this risk so appropriate mitigation actions can be implemented.

Once construction has been completed, 88.8 ha will be maintained as cleared during operations with the remaining cleared area (approximately 207 ha) rehabilitated. Rehabilitation will be undertaken via vegetation re-spread over the remaining area and will be left to rehabilitate naturally. The NT EPA supports this rehabilitation method. The Proponent proposes to undertake an inspection 12 months post completion to assess site rehabilitation using the PWC internal Environmental Management System identified in the NOI. This is also supported by the NT EPA.

The NT EPA is satisfied that potential impacts and risks to terrestrial environmental quality can be mitigated through implementation of environmental management measures proposed in the NOI. The NT EPA considers that its environmental objective for terrestrial environmental quality is likely to be met.

CONCLUSION

The NT EPA considers that significant environmental impacts are unlikely due to the limited disturbance footprint and construction methods can be adequately managed by measures outlined in the NOI. The NT EPA considers that the potential environmental impacts and risks associated with the Project are not significant and that the Project does not require assessment under the EA Act.

Comments from NTG advisory bodies have been provided to the Proponent to ensure that potential impacts on the environment are minimised and responsibilities under the legislation can be met.

DECISION

The proposed action, which was referred to the NT EPA by PWC, has been examined by the NT EPA and preliminary investigations and inquiries conducted. The NT EPA has decided that the potential environmental impacts and risks of the proposed action are not so significant as to warrant environmental impact assessment by the NT EPA under provisions of the *Environmental Assessment Act*. Environmental management of the potential environmental impacts is the responsibility of PWC through preparation and implementation of procedures and management plans specified in the NOI.

This decision is made in accordance with clause 8(2) of Environmental Assessment Administrative Procedures, and subject to clause 14A the administrative procedures are at an end with respect to the proposed action.



DR PAUL VOGEL

CHAIRMAN

NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

30 NOVEMBER 2018

Attachment A: Northern Territory Government Advisory bodies consulted on the Notice of Intent

Department	Division
Department of Environment and Natural Resources	Flora and Fauna Water Resources Weeds Environment Bushfires NT Rangelands
Department of Infrastructure, Planning and Logistics	Lands Planning Infrastructure Transport
Department of Primary Industry and Resources	Fisheries Mining Compliance Petroleum Primary Industry
Department of Tourism and Culture	Heritage Tourism NT Arts and Museums Parks and Wildlife
NT Police, Fire and Emergency Services	Business Improvement and Planning
Department of Health	Environmental Health Medical Entomology
Department of Trade, Business and Innovation	Economics and Policy Strategic Policy and Research
Department of Housing and Community Development	Maintenance Planning Housing supply
Power and Water Corporation	
Aboriginal Areas Protection Authority	Technical
Department of the Attorney-General and Justice	Commercial Division NT Worksafe
Land Development Corporation	
Department of the Chief Minister	Economic and Environmental Policy