Woodside Solar Facility

Proposal Content Document

Table 1: General proposal content description

Proposal title	Woodside Solar Facility
Proponent name	Woodside Energy Pty Ltd
Short description	The Proposal is to construct and operate the Woodside Solar Facility in the Maitland Strategic Industrial Estate, located approximately 15 km south-west of Karratha, in the Pilbara region of Western Australia. The Proposal will generate electricity from a large-scale Solar PV Farm, complemented by battery storage facilities. Electricity will be delivered to industrial customers via the North-West Interconnected System (NWIS) which provides for connection of new generators and loads.

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Solar PV Farm	Located in the buffer zone of the Maitland Strategic Industrial Estate. See Figure 3-1 of the Referral Supporting Document	Disturbance of up to 942.7 ha of native vegetation within a 942.7 ha development envelope.
Solar Plant Supporting Infrastructure (SPSI)	Located on the Eastern Boundary of the Maitland Strategic Industrial Estate. Figure 3-1 of the Referral Supporting Document	Disturbance of up to 32.9 ha of native vegetation within a 157.6ha development envelope.
Construction elements		
Solar PV Farm	Figure 3-1 of the Referral Supporting Document	Installation of the following infrastructure, across one or more phases; • Approximately 1,000,000 solar panels each approximately 1 m by 2 m each attached to mounting structures (fixed or tilting) positioned 0.5 – 4 m above ground,

		with output of up to 500 $MW_{(AC)}$ in total. • Unsealed access tracks • Supporting infrastructure such as inverters, cabling, battery energy storage system and electrical substations / transformers. Supporting facilities that may include a maintenance workshop, laydown areas, office, ablutions and crib facilities.
Solar Plant Supporting Infrastructure (SPSI)	Figure 3-1 of the Referral Supporting Document	Installation of the following infrastructure, across one or more phases; • Supporting infrastructure including a battery energy storage system, electrical substation and access road. • Supporting facilities that may include a maintenance workshop, laydown areas, office, ablutions and crib facilities.
Operational elements		
Solar PV Farm	Figure 3-1 of the Referral Supporting Document	Operation of a Solar PV Farm capable of generating up to 500 $MW_{(ac)}$ of electricity from Solar PV including a battery energy storage system delivered to industrial customers via the North West Interconnected System.
Solar Plant Supporting Infrastructure (SPSI)	Figure 3-1 of the Referral Supporting Document	Operation of infrastructure supporting the Solar PV Farm.
Proposal elements with greenhouse gas emissions		
Construction elements:		
	Scope 1 – Construction would occur in phases, with the installation of 100 MW of Solar PV and supporting infrastructure generating up to 1.5 ktCO2e. The disturbance to up to 975.6 ha of vegetation may result in the loss carbon storage potential in soil and vegetation of approximately 72.6 kt CO_2e.	
	Scope 2 – There will be no scope 2 emissions associated with construction of the Proposal.	
	Scope 3 – Each 100 MW of Solar PV and supporting infrastructure may result in emissions of approximately 212 kt CO2e associated with the manufacture and transport of equipment.	
Operational elements:		

	Scope 1 – Each 100MW of installed solar PV would require annual emissions of approximately 0.5 ktCO2e/annum from fuel consumed in onsite vehicle use.	
	Scope 2 – Each 100MW of installed solar PV will reduce customer electricity emissions by approximately 100 ktCO2e/annum.	
	Scope 3 – There are no significant Scope 3 emissions associated with ongoing operation of the Proposal	
Rehabilitation		
At the completion of each construction phase, any temporary construction/laydown areas will be rehabilitated. The only permanent disturbance associated with the Proposal will be where infrastructure such as roads, inverters, batteries or solar panel mounting hardware is installed. Low vegetation will regrow amongst the rows of Solar PV panels, but due to shading the composition of the vegetation may be different to that which currently is in place.		
Commissioning		
There are no environmental impacts specific to commissioning.		
Decommissioning		
At the end of project life, all physical infrastructure associated with electricity generation components of the proposal will be removed. Certain infrastructure components, such as roads or culverts may remain in place, depending on future land uses. A decommissioning and rehabilitation management plan will be prepared at a minimum of five years prior to the last planned electricity generation activity on the site. Traditional Owners will be consulted when preparing decommissioning plans and provided opportunities to participate in rehabilitation management activities.		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	Up to 70 years.
	Construction phase	The Proposal will be developed in phases. The indicative construction period for each 100 MW of solar PV and supporting infrastructure is expected to be 6 – 9 months.
	Operations phase	Up to 70 years.
	Decommissioning phase	Included in maximum project life.

** Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).*