

Proposal Content Document

Kalgoorlie Thermal Power Project

Table PCD-1: General proposal content description

Proposal Title		Kalgoorlie Thermal Power Project
Proponent Name	Northern Star (EGP) Pty Ltd	
Short Description	A thermal power station and supporting infrastructure to provide a long-term, reliable and lower emissions electricity supply to Kalgoorlie Consolidated Gold Mines (KCGM) and improve security and reliability of power supply to the South West Interconnected System (SWIS) and Wholesale Electricity Market (WEM). The Proposal comprises construction and operation of an approximately 140 MW thermal power station and supporting infrastructure including substations, transmission lines and grid connection, and a lateral gas pipeline.	

Table PCD-2: Proposal content elements

Proposal Element	Location / Description	Maximum Extent, Capacity or Range
Physical elements		
Development Envelope comprising of the following in the Indicative Footprint: <ul style="list-style-type: none"> Thermal Power Station Substations Transmission infrastructure Gas pipeline 	Figure 1-1 Figure 1-2 Figure 2-2	44.24 ha of disturbance within a 101.34 ha Development Envelope.
Construction elements		
Temporary construction infrastructure including: <ul style="list-style-type: none"> Construction compound and laydown areas Stockpile areas External site access Office and Utilities. Temporary power generation. Water Supply 	Figure 1-1 Figure 1-2 Figure 2-2	Land disturbance will be staged to enable temporary construction to take place within the 44.24 ha footprint for the Proposal.
Operational elements		
Thermal energy production	Figure 1-1	Approximately 140MW thermal power station
Proposal elements with greenhouse gas emissions		
Construction		
Scope 1	54,618 tCO ₂ -e	
Scope2	0 tCO ₂ -e	
Scope 3	40,874 tCO ₂ -e	
Operation		
Scope 1	2,677,323 tCO ₂ -e per year	
Scope 2	250 tCO ₂ -e per year	
Scope 3	981,316 tCO ₂ -e per year	
Rehabilitation		
Land disturbance will be rehabilitated in accordance with a Mine Closure Plan approved under the <i>Mining Act 1978</i> .		
Commissioning		
Commissioning activities are predominantly related to mechanical and electrical checks and validation to ensure that infrastructure meets design specifications and performs without technical issues. Commissioning is expected to take 6 months to complete.		

Proposal Element	Location / Description	Maximum Extent, Capacity or Range
Decommissioning		
Decommissioning will be implemented in accordance with a Mine Closure Plan approved under the <i>Mining Act 1978</i> . The closure strategy is expected to involve either decommissioning the facility permanently; or removing the old infrastructure and seeking to replace it with a new upgraded model.		
Other elements which affect extent of effects on environment		
Proposal time	Maximum project life	38 years
	Construction	12 months
	Commissioning	6 months
	Operations	25 years
	Decommissioning	18 months
	Closure	10 years



Regional Location

Figure 1-1

- Development Envelope
- Indicative Footprint





Indicative Layout

Figure 2-2

- Development Envelope
- Power Station
- Substation
- Service Corridor

