Template

Proposal Content Document

Table 1: General proposal content description

Proposal title	Kemerton Power Station Increased Operation Hours			
Proponent name	RATCH-Australia Kemerton Pty Ltd			
Short description	The Proposal is to increase the Kemerton Power Station hours of operation from 2,000 hours/annum to 13,800 hours/annum.			
	The construction and operation of the Kemerton Power Station was approved under Ministerial Statement 645 (published 9 February 2004) and the facility has been operating since 2015. The Proposal represents a significant amendment to the operating quantities/descriptions currently approved under Schedule 1 (Attachment 6) of Ministerial Statement 645.			
	The Proposal is limited to increasing the hours of operation of the approved Kemerton Power Station facility and does not involve any clearing, construction, commissioning or development of new equipment or infrastructure.			

Table 2: Proposal content elements

Proposal element	Location / description	Existing Proposal extent, capacity or range	Proposed max extent, capacity or range	Combined max extent, capacity or range			
Physical elements	Physical elements						
Kemerton Power Station extent	Refer to Figure 0-1	Kemerton Power Station (KPS) is located on an approximately 27 ha site in the Kemerton Strategic Industrial Area. The full extent of the existing site represents the Development Envelope.	No change	KPS is located on an approximately 27 ha site in the Kemerton Strategic Industrial Area (KSIA). The full extent of the existing site represents the Development Envelope.			
KPS utilities, infrastructure and equipment	All within Development Envelope – refer to Figure 0-2	 Utilities, infrastructure and equipment 2 x 130.5 MW Siemens V94.2 open cycle air- cooled gas turbine generators and associated stacks 4x 1.8 MW black start generators 1x 2 ML liquid fuel (diesel) storage 	No change	 Utilities, infrastructure and equipment 2 x 130.5 MW Siemens V94.2 open cycle air- cooled gas turbine generators and associated stacks 4x 1.8 MW black start generators 1x 2 ML liquid fuel (diesel) storage 			

		topk		tank
Operational eleme Electricity production Gas supply	e nts N/A	 tank Supporting buildings and infrastructure (offices, X) Storage sheds Water treatment plant Water tanks Approximately 480 gigawatt hours (GWh) per year Approximately 6	Up to 2,108 GWh per year Up to 25.48 PJ	tank Supporting buildings and infrastructure (offices, X) Storage sheds Water treatment plant Water tanks Up to 2,108 GWh per year Up to 25.48 PJ per
(natural gas)		petajoules (PJ) per year	per year	year
Operating hours (natural gas)		Up to 1,800 hours per year	Up to 13,600 hours per year (based on 2x turbine generators running at 6,800 hours per year)	Up to 13,600 hours per year (based on 2x turbine generators running at 6,800 hours per year)
Emissions intensity		667.6 kg CO2 -e/MWh (based on approximately 1,800 hours per year operation on natural gas.)	623 kg CO2- e/MWh (based on 13,600 hours hours per year operating on natural gas).	623 kg CO2-e/MWh (based on 13,600 hours hours per year operating on natural gas).
Liquid fuel supply (diesel)		Up to 12 megalitres (ML) per year	No change	Up to 12 megalitres (ML) per year
Operating hours (diesel)		Up to 200 hours per year	No change	Up to 200 hours per year
Emissions to air (natural gas)		Oxides of nitrogen (NO _x) – 254 tonnes per annum (tpa)	NO _x – up to 1,915 tpa	NO _x – up to 1,915 tpa
		Oxides of sulphur (SOx) - 0.0 tpa	No change	SOx – 0.0 tpa
		Oxides of sulphur (SOx) - 0.0 tpa	No change	SOx - 0.0 tpa
		Particulate matter – 12.96 tpa	Particulate matter - up to 98 tpa	Particulate matter - up to 98 tpa
		Carbon monoxide (CO) - 140.6 tpa	CO - up to 1,063 tpa	CO - up to 1,063 tpa
		Polycyclic aromatic hydrocarbons (PAHs) – 0.0056 tpa	PAHs - up to 0.0426 tpa	PAHs - up to 0.0426 tpa
		Non-methane volatile organic compounds (NMVOCs) – 5.38 tpa	NMVOCs – up to 40.7 tpa	NMVOCs - up to 40.7 tpa
Emissions to air (diesel)		NO _x – 41.1 tpa	No change	NOx - 41.1 tpa
		SOx – 2.292 tpa	No change	SOx – 2.292 tpa

		SOx – 0.146 tpa	No change	SOx - 0.146 tpa			
		Particulate matter – 5.48 tpa	No change	Particulate matter – 5.48 tpa			
		CO – 15.07 tpa	No change	CO – 15.07 tpa			
		PAHs – 0.0114 tpa	No change	PAHs – 0.0114 tpa			
		NMVOCs – 0.116 tpa	No change	NMVOCs - 0.116 tpa			
Noise emissions		Sound pressure levels < 35 dB(A) at KSIA boundary	No change	Sound pressure levels < 35 dB(A) at KSIA boundary			
Greenhouse gas emissions							
Construction							
N/A – no constructio	on activities						
Operation							
Scope 1	320 kilotonnes of CO2 equivalent (kt CO2- e) per year (composition of emissions scope not stated)		Up to 1,345 kt CO_2 -e per year				
Scope 2			Up to 1.37 kt CO ₂ -e per year				
Scope 3	scope not stated)		Up to 102 kt CO_2 -e per year				
Rehabilitation							
N/A							
Commissioning							
N/A – no commissio	ning activities						
Decommissioning							
All above ground inf decommissioned and		commissioned and remove situ.	ed. Below ground i	nfrastructure to be			
Elements which af	fect extent of effe	cts on environment					
Proposal time	Expected life	2005 - 2030	+ 15 years	40 years			
	Project development	N/A	N/A	N/A			
	Operation phase	25 years	+ 15 years	40 years			
	Decommissioning	Approximately 2 years	No change	Approximately 2 years			







