

Template

Proposal Content Document

Table 1: General proposal content description

Proposal title	Eureka 3D Marine Seismic Survey
Proponent name	Pilot Energy Ltd
Short description	<p>The Eureka 3D Marine Seismic Survey is a temporary (max 40-day total operations including a max 30-day acquisition window) offshore geophysical survey proposed in Commonwealth waters off the mid-west coast of Western Australia within the northern Perth Basin, including Exploration Permit WA-481-P, Production Licence WA-31-L and adjacent open acreage. The survey aims to acquire three-dimensional seismic data to improve understanding of subsurface geology and assess potential natural gas resources.</p> <p>The activity will be undertaken by a purpose-built seismic vessel towing an acoustic source array and multiple hydrophone streamers in deeper waters. In shallower areas, seabed-mounted ocean bottom nodes will be temporarily deployed and later retrieved. No drilling, seabed excavation, or permanent infrastructure is proposed.</p> <p>The survey will be vessel-based and temporary in nature, with operations progressing systematically across the survey area over a defined campaign period. The activity will occur offshore from coastal communities including Dongara and within an area currently used for commercial fishing, shipping and petroleum exploration activities.</p> <p>A regional location map is attached to this proposal content document.</p>

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity, or range
Physical elements		
Physical element 1: Operational Area (OA)	Offshore Commonwealth waters, northern Perth Basin, within WA-481-P, WA-31-L and adjacent open acreage where operations ancillary to achieving survey coverage including vessel approach, vessel line turns and necessary maintenance operations.	Operational Area: ~1,575 km ² . Acquisition to occur over 30 days within the total 40-day window.
Physical element 2: Active Source Area (ASA)	Area within OA where seismic source will be discharged (streamer acquisition and nodal acquisition).	Active Source Area: ~946 km ²

Physical element 3: Ocean bottom node survey area	An area entirely within the OA. This area covers the shallower water portion of survey area where Ocean Bottom Nodes (OBN) will be deployed.	~119 km ² ; up to ~2,500 nodes deployed on ~250 m x 250 m grid. Dependent upon the assessment of the vessel contractor regarding safe acquisition the towed streamer component may be reduced, and the nodal area may increase in size into deeper waters, limited to western boundary of the nodal area.
Physical element 4: Streamer spread footprint	Towed seismic array behind survey vessel, entirely within the OA.	Minimum 6 streamers extending up to ~7 km behind vessel; ~300 m sail line separation.
Physical element 5: Temporary vessel operational footprint	Survey vessel, support vessel, and one chase vessel operating within OA for the duration of survey. Up to 2 smaller vessels may be used for OBN operations.	Up to 40 days continuous presence within OA.
Construction elements - No seabed excavation, dredging, drilling, fixed infrastructure, or land-based construction is proposed.		
Construction element 1: Deployment of Ocean Bottom Nodes (OBN)	Nodes deployed on seabed in Node Survey Area via vessel, divers or ROVs, up to 2 additional smaller vessels may be used.	~2,500 nodes; grid spacing 250m x 250m; 119 km ² area; nodes placed at start and retrieved at end of survey. Included as part of the 10 days allowed for non-acquisition elements. Dependent upon the assessment of the vessel contractor regarding safe acquisition the towed streamer component may be reduced, and the nodal area may increase in size into deeper waters, limited to western boundary of the nodal area.
Construction element 2: Deployment of Streamer Array	Deployment of streamers and tail buoys deployed from seismic vessel within OA.	Streamers up to ~7 km long; spaced ~100 m apart behind vessel. Included as part of the 10 days allowed for non-acquisition elements.
Construction element 3: Retrieval of Ocean Bottom Nodes (OBN)	Nodes will be retrieved from seabed in Node Survey Area via vessel, divers, or ROVs, up to 2 additional smaller vessels may be used.	~2,500 nodes; grid spacing 250m x 250m; 119 km ² area; nodes placed at start and retrieved at end of survey. Included as part of the 10 days allowed for non-acquisition elements.

		Dependent upon the assessment of the vessel contractor regarding safe acquisition the towed streamer component may be reduced, and the nodal area may increase in size into deeper waters, limited to western boundary of the nodal area.
Construction element 3: Vessel mobilisation and demobilisation	Transit of survey and support vessels to and from the OA.	Single mobilisation and demobilisation per survey campaign.
Operational elements		
Operational element 1: Seismic acquisition (airgun discharge)	Within ASA across OA, source directed downward into subsurface.	Shot point interval 12.5 m (streamer mode). Acquisition to occur over 30 days within the total 40-day window.
Operational element 2: 24-hour vessel operations	Survey vessel, support vessel and one chase vessel operating continuously within OA.	Up to 40 days continuous operations
Operational element 3: Node-based acquisition (shallow waters)	Source vessel acquires data over deployed OBN grid.	Source lines ~50 m apart; nodes deployed for majority of survey duration, and acquisition occurring within the defined 30-day acquisition window.
Operational element 4: Underwater acoustic emissions	Downward directed high energy acoustic pulses from airgun array, producing short, intense, low frequency sound waves.	Maximum source volume as defined in EP; active only during survey window (up to 30 days during acquisition window).
Operational element 5: Routine marine discharges	Vessel generated discharges (e.g. treated sewage, greywater, deck drainage) managed in accordance with MARPOL and AMSA Marine Orders.	Limited to vessel operational duration; compliant with international maritime regulation.
Proposal elements with greenhouse gas emissions		
Construction elements:		
	Scope 1: Marine diesel combustion from survey vessel, support vessel, chase vessels.	
	Scope 2: Not applicable	
	Scope 3: Not applicable	
Operation elements:		

	Scope 1: <ul style="list-style-type: none"> • Marine diesel combustion from: <ul style="list-style-type: none"> - Seismic source vessel - Support vessel(s) - Chase vessel(s) - OBN deployment/recovery vessels • Combustion emissions during 24-hour operations. 	
	Scope 2: Not applicable	
	Scope 3: Not applicable	
Rehabilitation		
<ul style="list-style-type: none"> • No residual seabed structures remain. 		
Commissioning		
<ul style="list-style-type: none"> • Mobilisation of survey vessel to OA. • Deployment of streamer spread and/or OBN grid. • Equipment testing and calibration prior to acquisition. <p>No permanent facility commissioning required.</p>		
Decommissioning		
<ul style="list-style-type: none"> • Retrieval of all OBN equipment. • Recovery of streamer array. • Demobilisation of vessels from Operational Area. • No infrastructure remains in situ. <p>Nodes are placed at start and collected at end of survey timeframe</p>		
Other elements which affect extent of effects on the environment		
<ul style="list-style-type: none"> • Survey timing limited to 1 February – 31 March • Total survey duration up to 40 days • Maximum Operational Area: 1,575 km² • Node Survey Area: 119 km² 		
Proposal time*	Maximum project life	Single seismic survey up to a maximum of 40 days.
	Construction phase	Within the maximum 40-day window.
	Operations phase	Acquisition will occur over 30 days within the total 40-day window.

	Decommissioning phase	Within the maximum 40-day window.
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** 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).*