

Expression of Interest (RVS Project)

Robe Valley Sustaining Project

Project Overview: The Robe Valley Sustaining Project (Project) consists of the upgrade

and expansion of the Mesa iron ore deposits to sustain the existing Robe Valley production. The Robe Valley is approximately 120km southwest of Karratha in the Pilbara region of Western Australia.

Package Title: Pannawonica 132kV Bulk Supply Substation Expansion and 33kV

Distribution

Package Reference: RVS/E/CC/1209

Package Description: Design, procurement, construction, and commissioning of;

infrastructure, equipment and system upgrades at the Pannawonica 132kV Bulk Supply Substation (BSS); and 33kV overhead powerline

networks at Pannawonica, Mesa J, and Mesa A.

Specific Scope Requirements: Suppliers wishing to be considered must be able to demonstrate their ability to complete the following tasks:

 Design, supply, installation, construction, and commissioning of 132kV, 220kV, or similar, bulk electrical supply substations including:

- 132kV switchgear;
- power transformers;
- 33kV primary switchgear;
- Static compensators;
- 33kV cable;
- auxiliary transformers;
- standby diesel generation systems;
- prefabricated transportable switchrooms and control rooms; and
- o protection and control systems.
- Design and construction of 33kV powerline distribution infrastructure including:
 - geotechnical investigations and study reports;
 - earthing and lightning investigations and study reports;
 - arc flash assessments;
 - power pole design and installation including civil and structural design certification; and
 - o conductor stringing including optical ground wire.
- Civils and earthworks including clearing, grubbing, fencing, and concrete works.
- Communications infrastructure installations including optic fibre termination and testing.
- Site survey services.
- Multi-disciplinary engineering and design delivery.
- Development of high quality designs including detailed drawings and documents.
- Timely submission of design documentation.
- Facilitation of design review workshops and presentation of design



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solutions to key client stakeholders.

- Sub-contractor engagement, supervision, and management.
- Vendor engagement, supervision, and management.
- Equipment procurement.
- Timely submission of documentation to support high voltage work notifications.
- Demonstrable capabilities for project delivery and proven ability to delivery projects in the Pilbara region in accordance with schedule and financial requirements.
- Provide a high level of service for operational and maintenance support, including mobilization of support resources to remote site locations where required.
- Compliance with, or demonstrate capability to comply with, Rio Tinto documentation requirements, technical and standard specifications.

Invitation to Tender Date: Forecast Award Date:

16 November 2018 11 March 2019

Package-Specific Criteria:

Suppliers wishing to be considered must be able to demonstrate their capabilities in the following areas:

- Electrical engineering and design competence including:
 - detailed switchyard design layouts;
 - underground services designs;
 - detailed electrical switchroom and control room design including layouts, structural and civil design, and lightning protection and earthing system designs;
 - protection and control schemes;
 - control panel design;
 - STATCOM design; and
 - 33kv powerlines.
- Electrical substation design and construction.
- 33kV powerline design and construction.
- 3D scanning or similar technologies and techniques to provide accurate as-built information of existing installations.
- Mutli-disciplinary engineering and design including civil and structural.
- Experience in reviewing and assessing structural capacity of existing infrastructure installations.
- Earth potential rise measurements.
- Risk assessments, hazard identification, and construction experience in live, operational bulk supply substations.
- Construction of bulk supply substation facilities and 33kV powerline infrastructure.
- Capability to manage risk and minimize power system outages.
- Optic fibre splicing and testing particularly in environments that are geographically diverse, hot, and dusty.
- Capability to manage and execute works in remote locations.
- Previous experience in major project delivery with Rio Tinto is highly desirable.



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Expression of Interest:

Suppliers and contractors are invited to express an interest in this scope of work by registering on the ICN Gateway online platform. Please ensure;

- The Company profile on ICN Gateway is complete, up-to-date and accurate:
- Interest is registered as full-scope or partial-scope supplier (where applicable); and
- Responses to the generic pre-qualification criteria (questions) via the ICN Gateway, is provided.

EOI Start Date: 15 October 2018

EOI Closing Date: 29 October 2018

Contact: Industry Capability Network of Western Australia. (+618) 9365 7556

More information about Pilbara projects at Rio Tinto is available at

http://www.riotinto.com/australia/pilbara-4691.aspx

Disclaimer: This package description and target award date is indicative only and

subject to change. It is intended to provide a brief outline only of certain works that may be required for proposed Rio Tinto projects and should be read in conjunction with the Rio Tinto project description on ICN Gateway. Full scopes of work will be made available to parties invited to tender. There is no undertaking to contract or proceed to a competitive process implied by this form . Further contact with interested suppliers will be at Rio Tinto's

discretion.