Distribution and Earthing Transformers

Package Number: 25977-000-MRA-ETP0-00001
Package Title: Distribution and Earthing Transformers

General Description
Rio Tinto's Amrun project is located approximately 40 km south-west of Weipa in far North Queensland, Australia. The proposed SoE site will require Distribution and Earthing Transformers. The scope includes design, manufacture, testing and supply of Distribution and Earthing Transformers, as well as providing technical support during construction and commissioning.

Specific Scope Requirements

Part A: Distribution transformer

The total number of distribution transformers required for the project is 15. All transformers with rated power up to and including 2500 KVA are to be treated as distribution transformers. Transformers shall be suitable for parallel operation. Transformers of the same type and rating shall be totally interchangeable. Transformers should be pad or pole mounted.

The distribution transformers shall be: outdoor oil immersed, double wound, hermetically sealed, air cooled ONAN type and include off-load tap changing facilities on the winding of highest voltage.

The required rating and quantity of distribution transformers are as follows:

- 1.2500KVA, 22/0.415KV, 4%, ONAN, Dyn11 (Quantity: 4)
- 2.2000KVA, 22/0.415KV, 4%, ONAN, Dyn11 (Quantity: 3)
- 3.750KVA, 22/0.415KV, 4%, ONAN, Dyn11 (Quantity: 1)
- 4.500KVA, 22/0.415KV, 4%, ONAN, Dyn11 (Quantity: 4)
- 5.250KVA, 22/0.415KV, 4%, ONAN, Dyn11 (Quantity: 1)
- 6.200KVA, 22/0.415KV, 4%, ONAN, Dyn11 (Quantity: 1)
- 7.30KVA, 22/0.415KV, 4%, ONAN, Dyn11 (Quantity: 1)

Part B: Neutral Earthing Resistor (NER)
The total number of Neutral Earthing Resistors required for the project is 5. The NER's shall be designed, manufactured and tested in accordance with the latest applicable sections of all relevant standards, regulations, codes and statutory requirements in Australia. Metallic grid type resistors shall be enclosed in a sheet steel enclosure. Current transformers shall be fitted on the electrical system side of the resistor element.

The required rating and quantity of NERs are as follows:

- 1.100A, 10Sec, 22KV (Quantity: 2)
- 2. 25A, 10Sec, 6.9KV (Quantity: 3)

All Transformers and NERs shall be completely assembled, pre-wired and tested as a complete package prior to shipment.

The Contractor may be required to provide technical assistance and on-site services for the setup, testing and/or commissioning of the transformer and NER and/or on site.

Only designs and technology that have been proven in service for a minimum of five years in a mining environment shall be offered.

The electrical design, construction and installation shall conform to all applicable Laws and Australian Standards including, but not limited to:

- Electrical Safety Act 2002 (Qld)
- Electrical Safety Regulation 2013 (Qld)
- Work Health and Safety Act 2011 (Qld)
- Work Health and Safety Regulation 2011 (Qld)
- Mining and Quarring Safety and Health Act 1999 (Qld)
- Mining and Quarring Safety and Health Regulation 2001 (Qld)
- Workplace Health and Safety Queensland Code of Practice for Plant
- Workplace Health and Safety Queensland Code of Practice for Noise Management at Work
- AS 3000 – Wiring Rules
- AS 3007 - Electrical Equipment in Mines and Quarries – Surface Installations and Associated Processing Plant
- AS 4871 – Electrical equipment for mines and quarries - General requirements

Delivery Schedule

Forecast Award Date: 3Q, 2016

Instructions to Tenderers

If your business possesses the capability and capacity to perform the stated scope of work, please submit a registration of interest via the ICN Gateway at www.amrun.icn.org.au.

Please ensure that:
- Your company profile on ICN Gateway is complete, up-to-date and accurate
- You register your interest as a Full Scope or Partial Scope supplier (where applicable), and
- You respond to all project-specific questions via the ICN Gateway.
More Information

Please contact the Industry Capability Network Queensland on +61 (7) 3364 0676 should you have any enquiries regarding this scope of work.

More information about the Amrun Project can be found on the Rio Tinto website www.riotinto.com.

Disclaimer

Scope of Work is indicative only and is intended to be used as a summary description of work which may be required by Rio Tinto and may be subject to change. Full scopes of work will be made available to parties that are 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.