



## Brownfield Expansion Project (BFX)

### Olympic Dam Projects – Expression of Interest

<p><b>Project Overview:</b></p> <p><b>Package Title:</b></p>	<p>The BFX Project will deliver a brown field expansion of the Olympic Dam underground and surface operations to deliver increased throughput of the existing plant and increasing overall copper production capacity. Specification, tendering and early procurement of major items of 'electrical equipment' is required to meet the expected power demand of the BFX project.</p> <p><b>BFX SPS 101 Power Combined Engineering Services (Technical Specifications) for:</b></p> <p><b><u>Item 4&amp;7 (switch room)</u></b> Draft Technical Specifications and relevant Documentation for 132kV GIS Substations for ODW and SMA.</p> <p><b><u>Item 4&amp;7 (transformers)</u></b> Draft Technical Specification and relevant Documentation for 132/11kV Transformers for ODW and SMA.</p> <p><b><u>Item 5&amp;6 (power line / cable)</u></b> Draft Technical Specifications and relevant Documentation for a double-circuit ODW-SMA 132kV Power Line and Cable.</p> <p><b><u>Item 8&amp;9 (substations)</u></b> Draft Technical Specifications and relevant Documentation for the Smelter and Front End 11kV Substations.</p>
<p><b>Package Description:</b></p>	<p>BHP is seeking expressions of interest (EOI) from Engineering Contractors capable of drafting technical specifications and relevant documentation based on preliminary BFX Project Selection Phase Study (SPS) designs, single line diagrams, equipment lists and layouts for the following scopes or work, on an individual or combined basis.</p> <p><b><u>Item 4&amp;7 (switch room) 132kV GIS Switchgear Substations for ODW and SMA.</u></b></p> <p>Draft technical specifications for the 'design and construction' of two complete 132kV Substations for Olympic Dam West (ODW) and the Southern Mining Area (SMA) including; substation buildings, 132kV Gas Insulated Switchgear (GIS), protection, control and all auxiliary equipment. The Substations shall be specified to be built off-site, fully tested and pre-commissioned as much as practicable, before being delivered to Olympic Dam.</p> <p><b><u>Item 4&amp;7 (transformers) 132/11kV Transformers for ODW and SMA.</u></b></p> <p>Draft a technical specification for the supply of five 27/36MVA 132/11kV Transformers for Olympic Dam West (ODW) and the Southern Mining Area (SMA) Substation, including on-load tap changers, bushings, oil, neutral earthing resistors, protection, control and auxiliary equipment. The Transformers shall be specified with certain BHP preferred components such as Rheinhausen On-Load Tap Changers, and be delivered to Olympic Dam fully tested and pre-commissioned.</p> <p><b><u>Item 5&amp;6 (power line / cable) ODW-SMA 132kV Power Line and Cable</u></b></p> <p>Draft technical specifications for the detailed 'design and construction' of a ~ 6km double-circuit overhead 132kV Power Line and Cable between the Olympic Dam West (ODW) Switchyard and the Southern Mining Area (SMA) Substation.</p>

The specification shall include supply of all line components and site construction including but not limited to; poles, cross-arms and insulators, 132kV conductors and cable, cable installation components, under-road crossings, cable/line transitions, overhead fibre-optic earth wire (OPGW), a second underground fibre-optic cable, line and cable terminations, surge diverters, vibration dampers, earthing and protection, control and auxiliary equipment.

The specification shall include all civil design and works such as cable trenching and pole foundations based on available BHP supplied geotechnical data.

**Item 8&9 (substations) Smelter and Front End 11kV Substations**

Draft technical specifications for the 'design and construction' of two complete 11kV Substations including; substation buildings, 11kV switchgear, protection, control and all auxiliary equipment. The Substations shall be specified such that they are built off-site, fully tested and pre-commissioned before delivery to Olympic Dam.

Details on your organisational capacity, capability, and experience in delivering one or more of these professional engineering services promptly and safely will be used to form a shortlist for tender(s).

**Scope Overview:**

The successful Engineering Contractor(s), selected at the conclusion of this EOI and subsequent tender(s), shall be capable of allocating appropriately skilled and engineering qualified personnel including, but not limited to, the following capabilities :

- Execution of the scope of work within the approved budget and delivery schedule.
- Delivery of technical specifications and tender documentation based on the preliminary BFX Project SPS designs, single line diagrams, equipment lists and layouts.
- Delivery of tender documentation in accordance with BHP's contracting and procurement policies and guidelines.
- Engineering and technical liaison with prospective equipment suppliers and construction contractors as required.
- Project Controls (cost, estimating, scheduling)
- Maintaining client confidentiality and information security.

The contractor will be required to deliver the following:

- Development of technical specifications,
- Vendor identification, short-listing and selection for equipment design, supply and construction, including site construction and commissioning as required.
- Facilitation of tender reviews based on cost, timing, safety, capability, experience and capacity.
- Routine reports on progress, cost and schedule.
- Final reports including recommendations and tender selection justification.

At all times during the delivery of the services, the Engineering Contractor will be expected to adhere to BHP safety policies and standards including participation in BHP's field leadership program, if applicable.

**Target Award Date:**

Q1 FY 2018/19 for completion by Q2 2018/19.

<b>Expression of Interest (EOI):</b>	Engineering Contractors are invited to express an interest in one or more of the above scopes of work by registering on the ICN Gateway online platform. Please ensure that your ICN Gateway company profile is up to date before registering your EOI.
<b>Contact:</b>	Industry Capability Network of South Australia. (+618) 8429 3376
<b>Project URL's:</b>	For more information about BHP please refer to the company website <a href="http://www.bhp.com">www.bhp.com</a>  For information on specific project opportunities please visit the ICN Gateway online platform at <a href="http://www.gateway.icn.org.au">www.gateway.icn.org.au</a> .
<b>Disclaimer:</b>	These work package descriptions and the target award date is indicative only and subject to change. It is intended to provide only a brief outline of certain works that may be required for the proposed BFX Project and should be read in conjunction with the BFX project description on ICN Gateway.