

# Santos

## Dorado Development Project

<b>Project</b>	Dorado Development Project																																																													
<b>Package Title</b>	SHELL & TUBE HEAT EXCHANGERS																																																													
<b>Reference Number</b>	0D200-AKR-R-00-SA-000003-001																																																													
<b>Package Description/ Scope of Work</b>	<p>The Dorado Project is a greenfield oil development located offshore WA approximately 150km northwest of Port Hedland comprising of a Floating Production Storage and Offloading vessel (FPSO), Wellhead platform (WHP) and various subsea (SURF) equipment.</p> <p><b><u>Equipment Particulars:</u></b></p> <p>Supplier shall be responsible for the supply of six (6-off) S&amp;T Heat Exchangers, designed (thermal &amp; mechanical) to API.660, fabrication, shop assembly, inspection and testing painting, preservation, packing and delivery incl. provision of documentation for the exchanger package, spare parts, training, technical assistance, and shall provide a guarantee (mechanical &amp; process performance) for the below listed equipment:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Item</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">5</th> <th style="text-align: center;">6</th> </tr> </thead> <tbody> <tr> <td><b>Tag No</b></td> <td style="text-align: center;">20-HA-0001</td> <td style="text-align: center;">23-HA-0001</td> <td style="text-align: center;">23-HA-0002</td> <td style="text-align: center;">4-HA-0001A/B/C/D</td> <td style="text-align: center;">26-HA-0001</td> <td style="text-align: center;">41-HA-0001</td> </tr> <tr> <td><b>Description</b></td> <td style="text-align: center;">Crude Oil Heater</td> <td style="text-align: center;">LP Compressor Suction Cooler</td> <td style="text-align: center;">MP Compressor Suction Cooler</td> <td style="text-align: center;">TEG Contactor Inlet Cooler</td> <td style="text-align: center;">HP Compressor Suction Cooler</td> <td style="text-align: center;">Heating Medium Trim Cooler</td> </tr> <tr> <td><b>Design Pressure, barg</b> <b>Shellside / Tubeside,</b></td> <td style="text-align: center;">15 / 37</td> <td style="text-align: center;">10 / 6</td> <td style="text-align: center;">10 / 48</td> <td style="text-align: center;">10 / 110</td> <td style="text-align: center;">210 / 65</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td><b>Design Temperature, Deg C</b> <b>Shellside / Tubeside</b></td> <td style="text-align: center;">170 / 140</td> <td style="text-align: center;">80 / 120</td> <td style="text-align: center;">80 / 160</td> <td style="text-align: center;">80 / 170</td> <td style="text-align: center;">80 / 160</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td><b>Materials</b> <b>Shellside / Tubeside</b></td> <td style="text-align: center;">CS / Cr22</td> <td style="text-align: center;">CS / SS316</td> <td style="text-align: center;">CS / SS316</td> <td style="text-align: center;">CS / SS316</td> <td style="text-align: center;">CS / SS316</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td><b>Thermal Duty, kW</b></td> <td style="text-align: center;">8,498</td> <td style="text-align: center;">825</td> <td style="text-align: center;">8,303</td> <td style="text-align: center;">5,192</td> <td style="text-align: center;">6,612</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td><b>TEMA Configuration</b></td> <td style="text-align: center;">BEM</td> <td style="text-align: center;">BEM</td> <td style="text-align: center;">BEM</td> <td style="text-align: center;">BEM</td> <td style="text-align: center;">BEM</td> <td style="text-align: center;">TBD</td> </tr> </tbody> </table> <p>Pre-Qualification Requirements:</p>						Item	1	2	3	4	5	6	<b>Tag No</b>	20-HA-0001	23-HA-0001	23-HA-0002	4-HA-0001A/B/C/D	26-HA-0001	41-HA-0001	<b>Description</b>	Crude Oil Heater	LP Compressor Suction Cooler	MP Compressor Suction Cooler	TEG Contactor Inlet Cooler	HP Compressor Suction Cooler	Heating Medium Trim Cooler	<b>Design Pressure, barg</b> <b>Shellside / Tubeside,</b>	15 / 37	10 / 6	10 / 48	10 / 110	210 / 65	TBD	<b>Design Temperature, Deg C</b> <b>Shellside / Tubeside</b>	170 / 140	80 / 120	80 / 160	80 / 170	80 / 160	TBD	<b>Materials</b> <b>Shellside / Tubeside</b>	CS / Cr22	CS / SS316	CS / SS316	CS / SS316	CS / SS316	TBD	<b>Thermal Duty, kW</b>	8,498	825	8,303	5,192	6,612	TBD	<b>TEMA Configuration</b>	BEM	BEM	BEM	BEM	BEM	TBD
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	<ul style="list-style-type: none"> <li>• Must have minimum 5 years' experience in supply to the oil and gas industry.</li> <li>• Must have a list of past offshore project experience and preferably in delivering to offshore Projects in Australian waters.</li> <li>• Must have existing capability &amp; capacity to deliver.</li> <li>• Must have an ISO quality system and OSHAS or similar certifications.</li> <li>• Must have storage capability for the manufactured products.</li> </ul> <p>Must be able to provide after-sales services during operations in Australia</p>
<b>Specifications and Standards</b>	<p>The equipment shall be in compliance with National, International and Industry Standards, Australian and WA Regulatory requirements including, but not limited to the following;</p> <ul style="list-style-type: none"> <li>• NOPSEMA requirements to ensure regulatory compliance.</li> <li>• DNVGL-RU-OU-0102, DNV Rules for Classification of Offshore Units – Floating Production Storage and Loading Units.</li> <li>• DNVGL-OS-A101, Safety Principles and Arrangements.</li> <li>• DNVGL-OS-B101, Metallic Materials.</li> <li>• DNVGL-OS-D201, Electrical Installation (earthing)</li> <li>• DNVGL-OS-E201, Oil and Gas Processing Systems.</li> <li>• Hull Piping: DNVGL-OS-B101/D101.</li> <li>• Hull Piping fittings: marine shipyard piping construction standard (as approved by Company).</li> <li>• Hull Pressure Vessels: DNV Rules for Classification - Ships Pt 4 Ch 7 “Boilers, pressure vessels, thermal oil installations and incinerators”.</li> <li>• AS 1210-2010 Pressure Vessels, incl. amendment 1 &amp; 2</li> <li>• AS 1200-2015 Pressure Equipment.</li> <li>• AS 3788-2006 Pressure Equipment - In-service inspection.</li> <li>• ISO. 3702. Control and mitigation of fire and explosions on Offshore Prod Installations.</li> <li>• ISO.15156 Parts 1 to 3</li> <li>• ISO 13702 - Control and mitigation of fire and explosions on Offshore Prod Installations.</li> <li>• AS/NZS 3000:2018 Electrical installations design, construction and verification minimum requirements from Standards Australia.</li> </ul> <p>Compliance with Class Society rules</p>
<b>Delivery Place (if applicable)</b>	Singapore
<b>Full Scope Expression of Interest Closing Date</b>	<b>19-Nov-2021</b>
<b>Supplier Instructions</b>	<p>Supplier(s) are to express interest via <a href="#">ICN Gateway</a> where competency and previous positive experiences for similar projects can be demonstrated for equipment of a similar size and service.</p> <p>Supplier(s) will only be considered for receipt of the Tender if deemed suitably qualified by the Company's Procurement Entity.</p>
<b>Contact</b>	All initial enquiries should be made through the Industry Capability Network Western Australia.

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<b>URL</b>	For more information about Santos please refer to their website <a href="http://www.santos.com">www.santos.com</a>