

3.3 MANDATORY TECHNICAL EVALUATION CRITERIA ON TENDER CLOSING

Table 3 defines all Mandatory Technical Evaluation Criteria to be submitted by the *Contractor* by the tender closing date. Should the *Contractor* fail to submit these criteria by the tender closing date, the *Contractor* will be disqualified.

Table 3: Mandatory Technical Evaluation Criteria on Tender Closing

	Mandatory Technical Description	Criteria	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
3.3.1	N/A		N/A	N/A

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 4 defines all Qualitative Technical Evaluation Criteria to be submitted by the *Contractor* by the tender closing date. Should the *Contractor* fail to submit these criteria by the tender closing date, the *Contractor* will score zero for the criterion not provided.

Table 4: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.4.1.	Proof of qualified WPS and WPQR as per the following:	Relevant to sections 3.4.1.1 to 3.4.1.6: Refer to Technical Specification Document 160A/111111-P3-A. WPS & WPQR to be authorised/signed off by IWE/IWT and AIA; All destructive and non-destructive test results as required by the welding code (BS EN 15614-1 or ASME IX or BS EN 15614-7 for overlays) must be submitted as proof of qualification. Multiple WPS's and WPQR's can be submitted, if necessary, by the <i>Contractor</i> to ensure the required dimensional range is covered.	60%	

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.4.1.1.	Proof of qualified WPS & WPQR for Turbine Runner • Runner Material: High-Ni 13%Cr Stainless Steel Casting • Parent Material Group (ISO 15608): 7 • Minimum Build-Up Thickness: From 3 mm • Maximum Build-Up Thickness: 10 mm	<u>Scoring for group 7 material weld repairs for sections 3.4.1.1, 3.4.1.2 & 3.4.1.3:</u> Refer to Technical Specification Document 160A/11111-P3-A. 5/5 - The Contractor provides a qualified WPS and WPQR, including the hardness test, destructive and non-destructive testing results and reports, for the required dimensional ranges, material group and welding process as required per the Technical Specification Document 160A/11111-P3-A, qualified according to BS EN 15614-1.		20%
3.4.1.2.	Proof of qualified WPS & WPQR for Top and Bottom Facing Plates Repairs • Parent Material: JIS G4304 SUS 403 • Parent Material Group (ISO 15608): 7 • Minimum Build-Up Thickness: From 3 mm • Maximum Build-Up Thickness: 10 mm	4/5 - The Contractor provides a qualified WPS and WPQR, including the hardness testing, destructive and non-destructive testing results and reports, for the required dimensional ranges, material group and welding process as required per the Technical Specification Document 160A/11111-P3-A qualified according to ASME. Additionally, any acceptable technical risks or technical exceptions noted by the TET members will result in a 4/5.		20%
3.4.1.3.	Proof of qualified WPS & WPQR for Shaft Seal Sleeve • Parent Material: JIS G4304 SUS 403 • Parent Material Group (ISO 15608): 7 • Overall Plate Thickness: 20 mm • Butt Weld Thickness: 10 mm • Outer Diameter (Ø): 1120 mm	2/5 - The Contractor provides a qualified WPS and WPQR, including destructive and non-destructive testing results but lacking hardness testing results, for the required dimensional ranges, material group and welding process as required per the Technical Specification Document 160A/11111-P3-A. Additionally, any unacceptable technical risks or technical exceptions noted by the TET members will result in a 2/5. 0/5 - The Contractor fails to provide a relevant WPS and/or WPQR; Or the provided WPS and/or WPQR is not authorised and signed by the IWE/IWT and AIA; Or the WPQR does not include any testing results.		20%

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.4.1.4.	Proof of qualified WPS & WPQR for Spiral Casing Liner, Draft Tube Liner and Turbine Pit Steel Liner • Spiral Casing Liner Material: BS 4360 Grade 50C • Draft Tube Liner Material: BS 4360 Gr 43A • Turbine Pit Steel Liner: BS 4360 Gr 43A • Parent Material Group (ISO 15608): 1 • Diameters (Ø): >500 mm • Minimum Build-Up/Butt-Weld Thickness: From 3 mm • Maximum Build-Up/Butt-Weld Thickness: 10 mm	Scoring for sections 3.4.1.4, 3.4.1.5 & 3.4.1.6: Refer to Technical Specification Document 160A/11111-P3-A. 5/5 - The Contractor provides a qualified WPS and WPQR, including the destructive, non-destructive and laboratory testing results and reports, for the required dimensional ranges, material group and welding process as required per the Technical Specification Document 160A/11111-P3-A, qualified according to BS EN 15614.	12.5%	
3.4.1.5.	Proof of qualified WPS & WPQR for Servomotor Barrel Repairs • Parent Material: JIS G3106 SM41A • Parent Material Group (ISO 15608): Group 1 • Overall Barrel Thickness: 40 mm • Internal Diameter (Ø): 720 mm • Outer Diameter (Ø): 800 mm • Minimum Build-Up Thickness: From 3 mm • Maximum Build-Up Thickness: 10 mm	4/5 - The Contractor provides a qualified WPS and WPQR, including the destructive, non-destructive and laboratory testing results and reports, for the required dimensional ranges, material group and welding process as required per the Technical Specification Document 160A/11111-P3-A, qualified according to ASME. Additionally, any acceptable technical risks or technical exceptions noted by the TET members will result in a 4/5.	12.5%	
3.4.1.6.	Proof of qualified WPS & WPQR for Bush Casing Repairs • Parent Material: JIS G3106 SM41A • Parent Material Group (ISO 15608): Group 1 • 309L Butter Layer Group (ISO 15608): Group 8 • 316L Corrosion Protection Overlay: Group 8 • Total Weld Build-Up & Overlay: 5 – 7 mm • Middle Bush Casing Diameter (Ø): 350 mm • Bottom Bush Casing Diameter (Ø): 350 mm	2/5 - Any unacceptable technical risks or technical exceptions noted by the TET members will result in a 2/5. 0/5 - The Contractor fails to provide a relevant WPS and/or WPQR; Or the provided WPS and/or WPQR is not authorised and signed by the IWE/IWT and AIA; Or the WPQR does not include the required testing results; Or the WPS & WPQR is not according to the required welding processes.	15%	

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.4.2.	Proof of Line Boring Services Capabilities The <i>Contractor</i>, or sub-<i>Contractor</i>, provides proof of the company's on-site line boring capabilities, in the form of a list of previous similar services provided. The similar services provided should cover at least 80% of the specified dimensions (diameters, distance between bores) of the components as per Sections 3.2.1.1 and 3.2.1.14 of the Technical Specification Document 160A/11111-P3-A, with the acceptance criteria for eccentricity and diametrical tolerance of 0.050 mm or less. The final dimensions with the required tolerances to be clearly indicated.	Scoring for section 3.4.1.7: Refer to Technical Specification Document 160A/11111-P3-A. A potential sub-<i>Contractor</i> will be scored as per the evaluation criteria stipulated for the <i>Contractor</i>. Scoring: 5/5 - The <i>Contractor</i> submits a list of similar services provided which covers at least 80%, inclusive, of the specified dimensions of the components as per Sections 3.2.1.1 and 3.2.1.14 of the Technical Specification Document 160A/11111-P3-A, with the acceptance criteria for the required tolerances and/or eccentricity of 0.050 mm or less. 4/5 - The <i>Contractor</i> submits a list of similar services provided which covers between 60%, inclusive, and 80% of the specified dimensions of the components as per Sections 3.2.1.1 and 3.2.1.14 of the Technical Specification Document 160A/11111-P3-A, with the acceptance criteria for the required tolerances and/or eccentricity of 0.050 mm or less. Additionally, any acceptable technical risks or technical exceptions noted by the TET members will result in a 4/5. 2/5 - The <i>Contractor</i> submits a list of similar services provided which covers between 40%, inclusive, and 60% of the specified dimensions of the components as per Sections 3.2.1.1 and 3.2.1.14 of the Technical Specification Document 160A/11111-P3-A, with the acceptance criteria for the required tolerances and/or eccentricity of 0.050 mm or less. Additionally, any unacceptable technical risks or technical exceptions noted by the TET members will result in a 2/5. 0/5 – Non-response; Or for dimension ranges provided are not within 40%; Or the tolerance and/or eccentricity data provided are not 0.050mm or less.	35%	

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.4.3.	Quality control plan. The <i>Contractor</i> submits a detailed Quality Control Plan (QCP) for the Turbine Runner Blade Repairs (Item 3.2.1.8 as per Document 160A/11111-P3-A), as part of the tender returnable documents to the <i>Employer</i> for acceptance. The QCP must include the high-level scope of work as well as intervention points (including hold and witness points) indicating the quality control planned for this project. The <i>Employer</i> reserves the right to revise the QCP after purchase order placement.	Scoring for section 3.4.2: 5/5 - The <i>Contractor</i> submits a detailed quality control plan (QCP) to the <i>Employer</i> for acceptance as part of the tender returnable documents. This QCP includes inspection, hold and witness points as listed in Document 160A/11111-P3-A. 4/5 - The <i>Contractor</i> submits a basic quality control plan (QCP) to the <i>Employer</i> for acceptance as part of the tender returnable documents. This QCP includes inspection, hold and witness points as listed in Document 160A/11111-P3-A. Additionally, any acceptable technical risks or exceptions will result in a 4/5. 2/5 - The <i>Contractor</i> submits a basic QCP without any hold, witness or inspection points as requested in Document 160A/11111-P3-A. Additionally, any unacceptable technical risks or exceptions will result in a 2/5. 0/5 - Non-response.	2.5%	
3.4.4.	Deviations. The <i>Contractor</i> lists all their technical deviations from the Technical Specification document (160A/11111-P3-A). If there are none, the <i>Contractor</i> must clearly indicate this in writing for the <i>Employer's</i> review, as a non-response will be evaluated as non-responsive (Score = 0). Should the <i>Employer</i> identify any deviations during the tender technical evaluation, which the <i>Contractor</i> did not identify, the <i>Contractor</i> will be score as deficient (Score = 0).	Scoring for section 3.4.3: Refer to Technical Specification Document 160A/11111-P3-A. Scoring: 5/5 - The <i>Contractor</i> indicates that they have no technical deviations. 4/5 - The <i>Contractor</i> lists their technical deviations, and the <i>Employer</i> identifies them to have minor impacts on the <i>Works</i>. 2/5 - The <i>Contractor</i> lists their technical deviations, and the <i>Employer</i> identifies them to have mild impacts on the <i>Works</i>. 0/5 - Non-response from the <i>Contractor</i>, Or the <i>Contractor</i> lists their technical deviations, and the <i>Employer</i> identifies them to have a major impact on the <i>Works</i>.	2.5%	
TOTAL			100%	N/A

Tenderers, please take note: Please be so kind to name the technical submitted documents according to the correlating numbering system for each of the criteria above. This is to ensure ease of evaluation and reduce the risk of missing key information during the evaluation process due to incorrect submission. There will be no positive or negative scoring associated with this friendly request.

3.5 MANDATORY TECHNICAL EVALUATION CRITERIA ON CONTRACT AWARD

Table 5 defines all Mandatory Technical Evaluation Criteria to be submitted by the Contractor before the contract award date. Any outstanding or unclear information, related to the mandatory criteria specifically, identified by the Employer during the technical evaluation, shall be requested from the Contractor by the Employer (in writing) and must be submitted by the Contractor within 5 calendar days from the request to the Employer for acceptance. If the Contractor doesn't provide the requested information within the 5 days to the Employer, the Contractor will be disqualified.

Table 5: Mandatory Technical Evaluation Criteria on Contract Award

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
3.5.1	Welding Quality Management System: ISO 3834-2 Certification The Contractor provides the following with regards to ISO 3834-2 certification: • A valid certificate. • Complete certificate comprising of all pages. • Product/Construction standards: ○ Must include ASME VIII ○ Must include at least one of the following: BS/PSD 5500 or EN 13480 or EN 13445 or EN 12952 ○ Must include AWS D1.1 • Welding Process(es) according to ISO 4063: ○ Must include MMA (111) ○ Must include TIG (141) ○ Must include at least one of the following: MIG (131) or MAG (135) • Parent Material Group(s) according to ISO/TR 15608: ○ Must include Group 1 ○ Must include Group 7 ○ Must include Group 8	Refer to the Technical Specification Document 160A/11111-P3-A. ISO 3834-2 certification due to expire within the next 6 months shall be supported by written confirmation that it shall be renewed by the Contractor to remain valid for the entire duration of the works. A labour broker shall not be used for this specialised welding service that is required. The Contractor must provide the technical services themselves.	The Contractor must adhere to this mandatory criterion to prove that the Employer's quality requirements for fusion welding of metallic materials are being complied with, and that the Contractor is committed to high-quality welding processes and competence.
		Mandatory Criteria continues next page	

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3.5.2	Machining Capabilities The <i>Contractor</i> provides a company profile and/or a signed letter on a company letterhead, clearly indicating that specialised line-boring, as per the Technical Specification Document 160A/11111-P3-A, is a capability of the company, or a competent and capable sub-<i>Contractor</i>. A sub-<i>Contractor</i> is permitted for mandatory criteria 3.5.2, for which case the <i>Contractor</i> provides the required information, as requested above, clearly indicating line-boring is a core capability of the sub-<i>Contractor</i>.	Refer to the Technical Specification Doc. 160A/11111-P3-A. A potential sub-<i>Contractor</i>, capable of the required service (thus no labour brokers), will be scored as per the evaluation criteria stipulated for the <i>Contractor</i>. The <i>Employer</i> reserves the right to visit the <i>Contractor</i>'s, or sub-<i>Contractor</i>'s, premises for evaluation purposes.
		The <i>Contractor</i>, or sub-<i>Contractor</i>, must demonstrate their capability of performing the machining requirements as per the Technical Specification (Document 160A/11111-P3-A).

3.6 TET MEMBER RESPONSIBILITIES

Table 6: TET Member Responsibilities

Qualitative Criteria Number	TET 1	TET 2	TET 3
3.4.1	X	X	X
3.4.2	X	X	X
3.4.3	X	X	X
3.4.4	X	X	X
Mandatory Criteria Number on Contract Award	TET 1	TET 2	TET 3
3.5.1	X	X	X
3.5.2	X	X	X