Functional Evaluation Criteria for Enquiry No: 10024 The replacement of Nuclear Sampling System (REN) Verdelet type 1 control valves

	Requirements	Criteria	Deliverables	Scoring Methodology	Weighting	Rating	% Rating	% Score
1. PREVIOUS PERFORMANCE	Previous experience on Koeberg projects or any other similar projects at other Nuclear Power Stations	Lead / 2nd sub-contractor in >5 significant nuclear projects at Koeberg and/or other similar nuclear utilities (PWR).	List of significant nuclear projects at Koeberg / other similar nuclear utilities (i.e. PWR)	100% - Evidence submitted of involvement in > 5 nuclear projects 75% - Evidence submitted of involvement in > 2 nuclear projects 50% - Evidence submitted of involvement in any nuclear valve replacement project 0% - No evidence submitted	**30%**		0%	0%
	Success of previous Koeberg projects and or any other similar projects at other Nuclear Power Stations	Review of previous quality concerns, delays etc and response to these issues	List of references of similar projects	100% - Feedback from previous projects - No quality concerns or delays 75% - Feedback from previous projects - Some quality concerns or delays 50% - Feedback from previous projects - Major quality concerns or delays 0% - No feedback from previous projects	**25%**		0%	0%
	Experience with similar nuclear industry projects including piping, welding, routing and fitment.	Number of similar nuclear industry projects including piping, welding, routing and fitment.	List of similar nuclear industry projects including piping, welding, routing and fitment.	100% - List of similar nuclear industry projects including piping, welding, routing and fitment provided - involved in > 5 projects 75% - List of similar nuclear industry projects including piping, welding, routing and fitment provided - involved in > 2 projects 50% - List of similar nuclear industry projects including piping, welding, routing and fitment provided - involved in ≤ 2 projects 0% - No list of similar nuclear industry projects including piping, welding, routing and fitment provided	**20%**		0%	0%
	Experience with similar nuclear industry projects including working in electrical, C&I and relaying design and installation.	Number with similar nuclear industry projects including working in electrical, C&I and relaying design and installation.	List with similar nuclear industry projects including working in electrical, C&I and relaying design and installation.	100% - List of similar nuclear industry projects including working in electrical, C&I and relaying design and installation provided - involved in > 5 projects 75% - List of similar nuclear industry projects including working in electrical, C&I and relaying design and installation provided - involved in > 2 projects 50% - List of similar nuclear industry projects including working in electrical, C&I and relaying design and installation provided - involved in ≤ 2 projects 0% - No list of similar nuclear industry projects including working in electrical, C&I and relaying design and installation provided	**15%**		0%	0%
	Experience / qualification with fabrication to ASME NQA-1 or RCC-M equivalent	ASME NQA-1 or RCC-M compliant and demonstration of experience	Provision of ASME NQA-1 or RCC-M certification and list of previous ASME NQA-1 or RCC-M work	100% - ASME NQA-1 or RCC-M certification provided. List of previous ASME NQA-1 or RCC-M work provided - involved in > 5 projects 75% - ASME NQA-1 or RCC-M certification provided. List of previous ASME NQA-1 or RCC-M work provided - involved in > 2 projects 50% - ASME NQA-1 or RCC-M certification provided. List of previous ASME NQA-1 or RCC-M work provided - involved in ≤ 2 projects 0% - No ASME NQA-1 or RCC-M certification provided	**10%**		0%	0%

	TOTAL WEIGHTING				**100%**	**FALSE**	**0%**	0,0%
2. PROJECT TEAM STRENGTH	Design engineers qualifications & experience with similar nuclear industry piping and valve system design and installation.	Professional Engineer / Technologist. Years of experience with with similar nuclear industry piping and valve system design and installation.	Provision of brief CVs	100% - CV(s) provided. Most experienced designer > 20 years experience 75% - CV(s) provided. Most experienced designer > 10 years experience 50% - CV(s) provided. Most experienced designer ≤ 10 years experience 0% - No CV(s) provided.	**30%**		0%	0%
	Installation Phase technicians / engineers qualifications & experience with similar work.	Man-years of experience with similar nuclear industry piping and valve system design and installation projects.	Provision of brief CVs	100% - CV(s) provided. Most experienced installer > 10 years experience 75% - CV(s) provided. Most experienced installer > 5 years experience 50% - CV(s) provided. Most experienced installer ≤ 5 years experience 0% - No CV(s) provided.	**15%**		0%	0%
	Project Manager experience	Experience with similar nuclear industry nuclear sampling system pressure control valve related projects at Koeberg.	Provision of brief CVs	100% - CV provided. Project manager > 15 years experience 75% - CV provided. Project manager > 10 years experience 50% - CV provided. Project manager ≤ 10 years experience 0% - No CV provided.	**40%**		0%	0%
	Proposed pipe fitters, welders, safety and quality representastive qualification and skills.	Number, qualifications and experience of proposed pipe fitters and welders.	Provision of brief CVs	100% - CV(s) provided. Collective experience > 25 years experience 75% - CV(s) provided. Collective experience > 15 years experience 50% - CV(s) provided. Project experience ≤ 15 years experience 0% - No CV(s) provided.	**15%**		0%	0%
	TOTAL WEIGHTING				**30%**	**FALSE**	***0%***	0,0%
	Meeting TRS requirements	Contractor's technical proposal meets TRS requirements	Brief methodology statements in terms of how the tenderer is planning to meet the engineering, quality, manufacturing, installation and testing requirements specified in the TRS.	100% - All methodology statements provided - > 80% compliant 75% - Some methodology statements provided - > 50% compliant 50% - Some methodology statements provided - ≤ 50% compliant 0% - No methodology statements provided	**30%**		0%	0%
	Valve Type	The Contractor shall provide a direct operated, high pressure reducing regulator.	Valve is of a direct operated, high pressure reducing regulator type i.e. not pneumatically operated.	Yes -Valve is of a direct operated, high pressure reducing regulator type. No - Valve is not a direct operated, high pressure reducing regulator type.	**20%**		0%	0%
	Performance	Valve and installation design with Inlet pressure capability of ≥400 bar and outlet pressure range of ≤1 bar to ≥15 bar.	Valve and installation design with Inlet pressure capability of ≥400 bar and outlet pressure range of ≤1 bar to ≥15 bar.	Yes - Valve and installation design with Inlet pressure capability of ≥400 bar and outlet pressure range of ≤1 bar to ≥15 bar. No - Valve and installation design with Inlet pressure capability of ≥400 bar and outlet pressure range of ≤1 bar to ≥15 bar.	**10%**		0%	0%
	Evidence of Application	One example of successful use in the same application i.e. nuclear liquid and gas sampling of high pressure system (inlet 5 to 155 bar and outlet 5 to 9 bar at 60 deg. C).	Example, including location with description of application.	Yes - Example, including location with description of application. No - Insufficient evidence in description of successful application, or application not similar to that described in project Technical Requirement Specification.	**15%**		0%	0%

3. TECHNICAL PROPOSAL	Installability	Dimensions and mass of the valves offered are similar or smaller than the currently installed Verdelet valve and controller assembly.	Equipment data sheet and physical layout drawing of the proposed valves in their installed positions.	Yes -Size and installability clearly shown by means of physical layout drawings of the proposed valves in their installed positions. No - Size and installability clearly shown by means of physical layout drawings of the proposed valves in their installed positions.	**10%**		0%	0%
	Document Quality	Quality of contractors technical proposal (clear, concise, professional, accurate etc)	High quality technical proposal	100% - High quality technical proposal (binded hard copies, searchable soft copies, layout of information clear and concise) 75% - Good quality technical proposal (stapled hard copies, non-searchable soft copies, layout of information less clear and concise) 50% - Fair quality technical proposal (loose hard copies, non-searchable soft copies, layout of information somewhat confusing) 0% - Bad quality technical proposal (loose hard copies in random order, no soft copies, layout of information very confusing)	**5%**		0%	0%
	Operational Lifecycle Cost	Cost to own and operate less than current valve pressure regulators and in-line with industry norm.	Maintenance program and spare list with prices.	100% - Maintenance program and spare list provided. Opex < R0.05M per annum 75% - Maintenance program and spare list provided. Opex < R0.07M per annum 50% - Maintenance program and spare list provided. Opex ≥ R0.09M per annum 0% - No maintenance program and spare list provided. Opex ≥ R0.11M per annum	**10%**		0%	0%
	TOTAL WEIGHTING				**100%**	**FALSE**	***0%***	0,0%
4. PRELIMINARY PROGRAMME	Preliminary programme	Materials delivery to site	Preliminary plan	100% - Preliminary plan showing delivery to site before start date of Koeberg installation planned date. 75% - Preliminary plan showing delivery to site before start date of Koeberg installation planned date. 50% - Preliminary plan showing delivery to site on or after start date of Koeberg installation planned date. 0% - No preliminary plan.	**30%**		0%	0%
	Preliminary programme	Installation phase no impact on outage critical path (for all work in an outage)	Preliminary plan showing no impact on critical path and/or production	100% - Preliminary plan showing no impact on production or outage duration. 50% - Preliminary plan showing possible impact on production or outage duration. 0% - No preliminary plan	**70%**		0%	0%
	TOTAL WEIGHTING				**100%**	**FALSE**	**0%**	0,0%
	QUALITY MANAGEMENT SYSTEM (QMS)	Demonstrate that the supplier Quality Management System (QMS) is certified to ISO 9001:2015. Demonstrate that the supplier Quality Management System (QMS) is meeting the requirements of ASME NQA-1 or equivalent.	The returnables are copies of Management System Certification and supporting independent audit reports.		**25%**		0%	0%

5. QUALITY ASSURANCE PROGRAMME	QUALITY PLANNING	Quality Control Plan (QCP) or Inspection and Test Plan (ITP) or Quality Plan : A supplier document specifying the work or production activities to be performed throughout the execution of the product realization works inclusive of test methods, procedures and acceptance criteria. (238-102 Rev2, Section 3.5 refers)	Returnable is an example of a QCP or Quality Project Plan for a similar service or product. QCP shall have identifying sequential operations and indicating inspection and test points (hold and/or witness points) and areas where reports are required .		**25%**		0%	0%
	MANAGEMENT RESPONSIBILITY	Demonstrate management responsibility with respect to leadership: 1: organisational structure to show roles, reporting lines and authority. 2: business plan, strategic direction, objectives, performance indicators and targets to show the level of performance is accomplished.	The returnable is the retained or maintained documented information for demonstrating criteria implementation. 1: Organogram demonstrating key personnel with their roles 2: KPI's and latest management review report.		**5%**		0%	0%
		Demonstrate that change control process is managed in the organization on areas such as the company structure, staffing levels and resources that can adversely affect quality.	The returnable is the retained documented information or records demonstrating criteria implementation, e.g. Changes have been planned and risk assessment performed to determine potential consequences and impact wrt the integrity of the QMS.		**5%**		0%	0%
		Demonstrate that measures exist to control internal and external interfaces to the organisation and that adequate oversight measures are implemented.	The returnable is the maintained documented information or method statement demonstrating criteria implementation.		**5%**		0%	0%
		Demonstrate that measures exist to control externally provided processes, products and service as well as that adequate oversight measures have been implemented.	The returnable is the maintained documented information or method statement demonstrating criteria implementation, e.g. process and criteria for the evaluation, selection, monitoring of performance, and re-evaluation of external providers as well as verification of purchased products and services.		**5%**		0%	0%
		Demonstrate management commitment and accountability with respect to the achievement of QMS objectives. Provide evidence that the management review process ensures that the Quality Management System is suitable and effective with respect to quality.	The returnable is the latest management review report		**5%**		0%	0%
		Demonstrate implementation of reviews to measure process effectiveness and opportunities for improvement with respect to quality management.	The returnable is the retained (record) documented information demonstrating criteria implementation. E.g. Internal and or external audit or self assessment report.		**10%**		0%	0%

	MONITORING	Demonstrate implementation of non-conformance, deviation and concession process, including disposition with provisions for customer notification and acceptance.	The returnable is the retained (record) documented information demonstrating criteria implementation. E.g. Non-conformance and deviation reports.		**10%**		0%	0%
		Demonstrate that adequate measures are in place to ensure that audit results and corrective actions are being resolved satisfactorily and are closed out within agreed timeline.	The returnable is the retained (record) documented information demonstrating criteria implementation. E.g. A corrective action plan accomplished (closed-out) as scheduled.		**5%**		0%	0%
					100%	**FALSE**	**0%**	0,0%

Final Analysis					
1. PREVIOUS PERFORMANCE			**10%**	**0,0%**	
2. PROJECT TEAM STRENGTH			**10%**	**0,0%**	
3. TECHNICAL PROPOSAL			**35%**	**0,0%**	
4. PRELIMINARY PROGRAMME			**15%**	**0,0%**	
5. QUALITY ASSURANCE PROGRAMME			**30%**	**0,0%**	
TOTAL			**100%**	**0,0%**	

The scoring of the Quality Evaluation Criteria is conducted as follows:
A supplier is given a score in each of the sub-categories. These sub-categories are requirements detailed in the specification or contract. Scores are allocated as follows:
0 - 0% - Does not meet
1 - 50% - Partial meet (Large gap)
2 - 75% - Partial Meet (Small gap)
3- 100% - Meet
The overall score for functionality criteria is analysed as follows:
0% - 79% - Does not meet
80% - 100% - Meet

NOT MEET

COMPILER TECHNICAL : Evan Kerr

SIGNATURE: 

COMPILER QUALITY: Shandre Brown

SIGNATURE:  2022-01-25

REVIEWER: Phindiwe Xotyeni

SIGNATURE: