Eskom	Strategy	Engineering

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Compiled by	**Functional Responsibility**	**Authorised by**
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Boiler Engineer		
	Date: ……	Date: ……

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TABLES

1. INTRODUCTION

The Tender Technical Evaluation strategy defines the mandatory and qualitative evaluation criteria that serve as a basis for the tender evaluation process. Various tender returnable will be evaluated based on the qualitative criteria specified in this document, and the tenderers meeting the minimum threshold will be considered further.

2. SUPPORTING CLAUSES

2.1 SCOPE

Scope: North and South Stacks	
Activity	**Responsible person**
Ensure a QCP is in place and signed by engineering before any work commence	Contractor
General Scope Requirements:	
The supplier must conduct: • Dust Monitor Correlation Test (Isokinetic Sampling) • Gas Monitor Parallel Verification Test (QAL2) • Biannual Isokinetic Sampling • Spot Checks - as and when required. **NB.** All tests will be conducted by SANAS accredited labs or labs accredited by similar foreign authorities.	Contractor
Dust Monitor Correlations Test (PM):	
• Particulate emissions correlation tests shall be conducted every two years unless more frequent checks are required by the power station's AEL.The Minimum Emission Standards (MES) requires that continuous emission monitoring systems must be audited by a SANAS accredited laboratory at least once every two (2) years. While the SANAS accreditation process is still being developed, this requirement will be satisfied by the bi-annual correlation tests and spot checks conducted by independent consultants. Once the SANAS accreditation process is finalized, a SANAS accredited provider must be used to perform the correlation tests and spot checks. Frequency of test – Each dust monitor shall be correlated at least once every two years. Spot checks – a spot check will be conducted on each monitor to confirm the readings and is done as and when required. Estimating two spot checks per year.	Contractor
Parallel (QAL2) Verification Test (VT) Requirements for Gas Monitors:	Contractor

The Verification Tests is a procedure which is used to evaluate whether the measured values obtained from the AMS still meet the required uncertainty criteria – as demonstrated in the previous QAL2 test. It also determines whether the calibration function obtained during the previous QAL2 test is still valid. The validity of the measured values obtained with the AMS is checked by means of a series of functional tests as well as by the performance of a limited number of parallel measurements using an appropriate SRM. Frequency of test – Verification Test on each gas monitor shall be conducted at least once every two years. Spot checks – a spot check will be conducted on each monitor to confirm the readings and is done as and when required. Estimating two spot checks per year. Gas flows verifications- Gas flows to be verified as when required.	Contractor
Biannual Isokinetic Sampling:	
Biannual Isokinetic Sampling to be conducted as per Annexure A of GN 893 22 November 2013. This is a requirement as per Hendrina Power Station AEL No: 17/AEL/MP312/11/16. Frequency of sampling – Isokinetic sampling of pollutants (PM, SO2 and NOx) to be conducted once every two years.	Contractor
Spot Checks:	
Spot check will be conducted on each monitor to confirm the readings and is done as and when required. The Spot check comprises isokinetic traverses that will compare measured emission to that predicted by the correlation. The Spot check will be done at normal operating conditions, most experienced. If these points fall outside the 95% confidence bands, then a full correlation is required as a continuation of the Spot check tests or as soon as practically possible after the Spot check tests. Frequency of spot check – As and when required. Estimating two spot checks per year.	Contractor

2.1.1 Purpose

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and TET member responsibilities for tender technical evaluation. The technical evaluation strategy serves as basis for the tender technical evaluation process.

2.2 NORMATIVE/INFORMATIVE REFERENCES

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

[1] 240-168966153 Generation Tender Technical Evaluation Procedure
[2] ISO 9001 Quality Management Systems

2.2.2 Informative

[1] South African Air Quality Act No. 39 of 2004.

[2] ISO 9096 Stationary source emission – Manual Determination of mass concentration of particulate matter.

[3] ISO 12141 Stationary source emission – Determination of concentration of particulate matter (Dust) at low concentrations – Manual gravimetric method.

[4] ISO 10155 Stationary source emissions – Automated monitoring of mass concentrations of particles – Performance characteristics, test Methods and specifications.

[5] 20-56242363 ESKOM Standard for Emission Monitoring and Reporting – All relevant standards are in this document.

2.3 DEFINITIONS

Term	Definition
Employer	The organization (Eskom) to which the supplier will be contracted for this tender and contracts that may result therefrom
Employer's Premises	Hendrina Power Station
Industrial Storage Facility	Physical space suitable for the storage of the items specified in the scope of work

2.3.1 Classification

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary).

2.4 ABBREVIATIONS

Abbreviation	Description
ISO	International Organisation of Standardisation
NEC	New Engineering Contract
OEM	Original Equipment Manufacturer
Gx Eng.	Generation Engineering
kPa	Kilo Pascal
m	meter
m/s	Meters per second
m^2	Square meter
mg/Nm^3	Milligrams per standard cubic meter (at 0 °C, 101.3 KPa, normalised to 1% O_2, Dry)
°C	Degrees Celsius
Am^3/s	Actual cubic meter per seconds

2.5 ROLES AND RESPONSIBILITIES

As per 240- 168966153: Tender Technical Evaluation Procedure

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

N/A

3. TENDER TECHNCIAL EVALAUTION STRATEGY

3.1 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%.

3.2 TABLE 1: TECHNICAL SCORING METHODOLOGY

SCORE	PERCENTAGE (%)	DESCRIPTION
5	**100**	**COMPLIANT** • Meet the technical requirement(s) AND, • No foreseen technical risk(s) in meeting technical requirements
4	**80**	**COMPLIANT WITH ASSOCIATED QUALIFICATIONS** • Meet the technical requirement(s) with, • Acceptable technical risks AND/OR; • Acceptable exceptions AND/OR; • Acceptable conditions
2	**40**	**NON-COMPLIANT** • Does not meet the technical requirement(s) AND/OR Unacceptable technical risk(s) AND/OR; • Unacceptable exceptions AND/OR; • Unacceptable conditions
0	**0**	**TOTALLY DEFICIENT/NON-RESPONSIVE**

3.3 TET MEMBERS

Table 1: TET Members

3.4 MANDATORY TECHNICAL EVALUATION CRITERIA

Mandatory technical evaluation criteria (gatekeepers) are a meet criteria. These criteria shall not be weighted or scored but shall be assessed on a yes/no basis as to whether the criteria are not met. an assessment of 'no' against any criteria shall technically disqualify the tender and shall not be further evaluated against qualitative criteria the following table below: mandatory technical evaluation criteria.

GATE KEEPERS	**1**	**GATE KEEPERS - MANDATORY**			Total Score
	1.1	SANAS Accreditation	The service provider is SANAS accredited. The service provider is to provide proof of SANAS accreditation according to the requirements in the MES	1 point for compliance, 0 for no compliance	
	1.2	Member of Stack Testers South Africa (STSA)	The service provider is a member of Stack Testers South Africa (STSA). The service provider is to provide proof of valid membership to STSA (a sub-committee of the National Laboratory Association - South Africa NLA-SA).	1 point for compliance, 0 for no compliance	
TOTAL SCORE FOR GATE KEEPERS					

3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 2: Qualitative Technical Evaluation Criteria

TECHNICAL FUNCTIONALITY - CORRELATION TEST					**THRESHOLD SCORE 70%**	
	COMPLIANCE TO ESKOM REQUIREMENTS					
	CORRELATION PARALLEL TEST -					
			CRITERIA s DELIVERABLE	**GUIDELINE NOTES**	**SUBTOTAL**	**TOTAL SCORE**
	2	**COMPANY EXPERIENCE**			**50**	
	2.1	Traceable experience	The Stack Tester has previous experience in Stack Emission Testing in South Africa. Submit Company Profile clearly indicating years of experience with reference lists of relevant jobs completed.	More that 5 years scores 20 points; 2-5 years scores 10 point; 0 for 1 year and less.	**25**	
	2.2	Similar work experience	Number of Orders or Contracts for Stack Testing (Stack Dust Monitor Correlation Tests (Isokinetic Sampling) and Gas Monitor Parallel Verification Tests (QAL2) at similar installations, preferrably within Eskom. Submit a minimum of 3 or more orders or contracts, preferably within Eskom, for this specific scope	5 points for Eskom approved, 4 points for content satisfies Eskom requirements, 2 points for provided with insufficient content, 0 for no procedure.	**25**	
	3	**QUALITY**			**15**	

	3.1	ISO 9001 and ISO 17025	The Stack Tester must be ISO 9001 and ISO 17025 certified or compliant. Relevant certificates and/or audit reports that clearly demonstrates valid accreditation or compliance to each of the categories to be submitted.	10 points each for certification in each category (Max 20 points - all necessary proof submitted), 5 points each for compliance to each category (5 points for compliance to each category - all necessary proof submitted) 0 points for no certification nor compliance to any of the two required categories/ no proof submitted)	**15**	
	4	**KNOWLEDGE OF SCOPE**			**35**	

	4.1	Method Statement	The Stack Tester must have a statement method to demonstrate their understanding of the scope of work and ability to confirm to required standards. The method statement should indicate how the Stack Testing (Correlations/Parallel and QAL2 and Isokinetic Sampling) on a stack and what resources (personnel C equipment) will be required. Testing equipment must be capable of measuring large diameter stacks i.e. 12 m. Method Statement to be submitted containing steps involved in executing the testing of both the dust and gas monitors simultaneously, the resources required and equipment list.	20 points for full compliance to Eskom Standard 240 - 56242363 and applicable references contained therein (all points successfully covered in method statement); 10 points for partial compliance as above (points partially covered); 0 for no compliance	**15**	
	4.2	Data Pack	The Stack Tester requires to have at least one fully signed off data pack for a similar scope with completed reports containing results for a Stack Dust Monitor Correlation Tests (Isokinetic Sampling) and Gas Monitor Parallel	20 points for compliance (1 data pack submitted with all required information); 10 points for partial compliance (1 data pack submitted but not containing all required information); 0 for no compliance	**20**	

			Verification Tests (QAL2).			
DECISION BASIS			**TAKE NOTE: ONLY TECHNICAL SUITABLE IF TOTAL TECHNICAL SCORE IS ≥70% AND GATE KEEPER SCORE IS 2**			
					TOTAL SCORE	

TET MEMBER RESPONSIBILITIES

Table 3: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3
1	X	X	X
2	X	X	X
Qualitative Criteria Number	**TET 1**	**TET 2**	**TET 3**
1	X	X	X
2	X	X	X
3	X	X	X
4	X	X	X
5	X	X	X
6	X	X	X

Foreseen Acceptable / Unacceptable Qualifications

3.5.1 Risks

Table 4: Acceptable Technical Risks

Risk	Description
1.	None

Table 5: Unacceptable Technical Risks

Risk	Description
1.	Supplier not meeting client specifications and delays on conducting Correlation and Parallel test withing the required period.

3.5.2 Exceptions / Conditions

Table 6: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	None

Table 7: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	None

4. AUTHORISATION

This document has been seen and accepted by:

5. REVISIONS

6. DEVELOPMENT TEAM

The following people were involved in the development of this document:

7. ACKNOWLEDGEMENTS

N/A